FINAL
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2014 Annual Logistics Center Remedial Action Monitoring Report

Joint Base Lewis-McChord

Pierce County, Washington

Joint Base Lewis-McChord Public Works – Environmental Division
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REPLY TO ATTENTION OF

July 21, 2016

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Mr. Christopher Cora
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Dear Mr. Cora:

Attached for your files is one electronic copy of the Final 2014 Annual Logistics Center Remedial Action Monitoring Report, Joint Base Lewis-McChord, Pierce County, Washington.

If you have any questions or need clarification, please contact me at (253) 477-3742.

Sincerely,

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FINAL

2014 ANNUAL LOGISTICS CENTER REMEDIAL ACTION MONITORING REPORT

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JULY 21, 2016

JOINT BASE LEWIS-MCCHORD
PIERCE COUNTY, WASHINGTON

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ACRONYMS AND ABBREVIATIONS

ALGT	American Lake Gardens Tract
ALS-Kelso	ALS Environmental Laboratory in Kelso, Washington
ARAR	Applicable or Relevant and Appropriate Requirement
ARI	Analytical Resources, Incorporated
BRAC	Base Realignment and Closure
CERCLA	Comprehensive Environmental Response, Compensation and Liabilities Act
CMP	Compliance Monitoring Plan
DCE	dichloroethylene
Ecology	Washington State Department of Ecology
EGDY	East Gate Disposal Yard (Landfill 2 or LF-2)
EPA	Environmental Protection Agency
ERH	Electrical Resistive Heating
ESD	Explanation of Significant Difference
ESTCP	Environmental Strategic Technology Certification Program
ft	foot/feet
ft/AMSL	feet above mean sea level
ft/bgs	feet below ground surface
HVAC	Heating, Ventilation, Air Conditioning
I-5	Interstate 5
IRP	Installation Restoration Program
ISB	in-situ bioremediation
JBLM	Joint Base Lewis-McChord
kg	kilogram
Log RAM	Logistics Center Remedial Action Monitoring
MAMC	Madigan Army Medical Center
MCL	Maximum Contaminant Level
MFHA	Madigan Family Housing Area
µg/L	Micrograms per Liter
$\mu g/m^3$	Micrograms per cubic meter
MTCA	Model Toxics Control Act

ACRONYMS AND ABBREVIATIONS (continued)

NAPL	Non-Aqueous Phase Liquid
NPL	National Priorities List
O&M	Operation and Maintenance
PCE	tetrachloroethylene
PDB	Passive Diffusion Bag
PNNL	Pacific Northwest National Laboratory
PQL	Practical Quantification Limit
PW	Public Works
RCRA	Resource Conservation and Recovery Act
RI	Remedial Investigation
RI/FS	Remedial Investigation/Feasibility Study
RLSC	Regional Logistics Support Center
ROD	Record of Decision
RPD	Relative Percent Difference
SARA	Superfund Amendments and Reauthorization Act
Sealaska	Sealaska Environmental Services, LLC
SLA	Sea Level Aquifer
SLAPT	Sea Level Aquifer Pump and Treat
TCA	1,1,1-trichloroethane
TCE	trichloroethylene
TEMF	Tactical Equipment Maintenance Facility
TPCHD	Tacoma-Pierce County Health Department
TRS	Thermal Remediation Services, Inc.
URS	URS Corporation
USACE	U.S. Army Corps of Engineers
VC	Vinyl Chloride
Versar	Versar, Inc.
VOC	Volatile Organic Compound
ZVI	Zero Valent Iron

1 INTRODUCTION

This report describes groundwater monitoring activities conducted during 2014 at the United States Department of Defense's Joint Base Lewis-McChord (JBLM) located near Tacoma, Washington (Figure 1-1). The first and second quarter 2014 sampling events were conducted by Versar, Inc. (Versar) of Westminster, Colorado, and the third and fourth quarter 2014 sampling events were completed by Sealaska Environmental Services, LLC (Sealaska). JBLM is conducting remedial action monitoring at the JBLM Logistics Center Comprehensive Environmental Response, Compensation and Liabilities Act (CERCLA) Operable Unit. Included in this report are: bi-annual water level measurements (first and third quarters for wet and dry season water levels); quarterly, semi-annual, and annual water quality data; and a description of changes implemented to the groundwater program since 1993. Statistical analysis was performed on data beginning in 2005 to present for monitoring wells and sample points included in the current sampling network for this report. Statistical results of data trends that begin prior to 2003 and end in 2009 can be found in the 2009 Annual Monitoring Report for the Logistics Center (Versar 2011). Monitoring wells and sample points that had statistical analysis performed on their data but are no longer in the monitoring network are also included in the 2009 report.

This report does not include operation and maintenance (O&M) activities of the three pump and treat systems (Landfill 2, Interstate 5 [I-5], and Sea Level aquifer [SLA]) currently operating as part of the remedial action. A description of O&M activities for the Landfill 2 and I-5 pump and treat systems will be found in the 2014 Operation and Maintenance Annual Report (Sealaska 2015a, in preparation).

1.1 OBJECTIVE

The objective of the Logistics Center's remedial action monitoring (Log RAM) program is "to restore groundwater to its beneficial use" as directed by the Record of Decision (ROD) issued for the site in September 1990. The ROD states, "The beneficial water use at this site is as a drinking water source. Groundwater will be restored to levels consistent with state and federal applicable or relevant and appropriate requirements (ARARs) which will result in a cumulative excess cancer risk not to exceed 10^{-4}. Remediation levels will be attained throughout the plume." (Army, EPA, and Ecology 1990a).

The contaminants of concern identified in groundwater at the Logistics Center are:

- Trichloroethylene (TCE);
- cis-1,2-Dichloroethylene (DCE);
- Tetrachloroethylene (PCE);
- 1,1,1-Trichloroethane (TCA); and
- Vinyl Chloride (VC).

Remediation goals of 5 micrograms per liter (µg/L), 70 µg/L, and 5 µg/L were established for TCE, DCE, and PCE, respectively (Table 1-1). The ROD required monitoring of TCA and VC though no remediation goals were set for either parameter. Concentrations of TCA and VC detected in groundwater and surface water samples collected for the Log RAM project are compared to their respective Model Toxics Control Act (MTCA) Method A Maximum Contaminant Level (MCL) remediation goal levels of 200 µg/L and 2.0 µg/L, respectively (Ecology 2007).

Analytical results of groundwater samples collected during quarterly monitoring events are used to:

- Verify that the plume remains hydraulically controlled and is not migrating beyond its current boundaries (Figure 1-2);
- Verify that progress is being made toward achieving cleanup goals;
- Verify that the pump and treat systems are discharging treated groundwater in accordance with the ROD cleanup levels; and
- Verify that air emissions from the pump and treat systems are not exceeding permitted discharge rates.

1.2 BACKGROUND

In 1983, the United States Environmental Protection Agency (EPA) and Tacoma-Pierce County Health Department (TPCHD) initiated studies of potential groundwater contamination north of Fort Lewis' Logistics Center in response to public concern. Studies confirmed the presence of TCE and DCE in domestic drinking water wells in the American Lake Garden Tract (ALGT) neighborhood. Seventeen monitoring wells were installed primarily east of ALGT and confirmed that an area located on McChord Air Force Base (currently McChord Field) was the source of TCE. In 1984, a second investigation was initiated by McChord Air Force Base's Installation Restoration Program (IRP) which

included installing 26 more monitoring wells on the west side of ALGT. This investigation confirmed that another source of TCE was present in the area and most likely came from Fort Lewis' Logistics Center.

From 1984 to 1986, the United States Army Corps of Engineers (USACE) installed 47 monitoring wells throughout the Logistics Center. This investigation indicated that TCE was moving northwest under the Logistics Center. At the request of TPCHD, Fort Lewis tested three domestic wells located in Tillicum, Washington north of the Logistics Center (Figure 1-2). All three wells were found to have low concentrations of both TCE and DCE in them. Ten more groundwater monitoring wells were installed in Tillicum to investigate the extent of the TCE plume north of the Logistics Center (Envirosphere 1988).

From 1986 to 1988, a Remedial Investigation (RI) was conducted for the Logistics Center by Envirosphere. A total of 22 monitoring wells were completed in the Upper Vashon aquifer, three wells in the Lower Vashon aquifer, and five wells in the SLA below the Vashon aquifer. Results from the RI indicated that groundwater in the SLA also had TCE in it (Envirosphere 1988).

In December 1989, the Fort Lewis Logistics Center was included on the National Priorities List (NPL) under CERCLA of 1980 as amended by the Superfund Amendments and Reauthorization Act (SARA) of 1986. An installation-wide Federal Facilities Agreement between the U.S. Army, the EPA, and the State of Washington Department of Ecology (Ecology) became effective January 29, 1990 (Army, EPA, and Ecology 1990b). The agreement established the procedures for agency coordination and a schedule for all CERCLA activities at Fort Lewis.

The ROD for the Logistics Center was signed and implemented in September 1990 after a Remedial Investigation/Feasibility Study (RI/FS) was completed earlier that year. The selected remedy for groundwater cleanup in the Upper Vashon aquifer at the Logistics Center was groundwater extraction and treatment by using two pump and treat facilities. The ROD also required an additional investigation in the SLA because of high concentrations of TCE (52 µg/L to 143 µg/L) detected in samples collected from monitoring well LC-41D during the RI (Army, EPA, and Ecology 1990a).

In 1992, a second study was conducted by Ebasco in response to the investigation required by the ROD. The objective of the study was to better define the extent of contamination present in the SLA and to determine if LC-41D was the source of TCE in the SLA. It was suspected that LC-41D was allowing groundwater in the Upper Vashon aquifer to seep

along the annular space of the well into the SLA and transport TCE from the Vashon aquifer to the SLA. The study was conducted in two phases.

Phase one of the study included completion and sampling of six new SLA wells (LC-26D, LC-35D, LC-47D, LC-50D, LC-67D, and LC-68D) and sampling four existing SLA wells (LC-21c, LC-41D, LC-41e, and T-9e) for two quarterly rounds. Sampling events were conducted on July 22 and November 20, 1991.

During Phase 2 of this study, two monitoring wells were completed in the SLA (LC-69D and LC-70D), and two monitoring wells were completed in the Vashon aquifer (LC-41a and LC-41b). LC-69D was completed upgradient of LC-41D, and LC-70D was completed downgradient of LC-41D. Monitoring wells LC-41aA and LC-41b were completed within 50 feet (ft) of LC-41D. Sampling events were conducted on December 3 and 23, 1992.

TCE detected in samples collected from the two Vashon aquifer monitoring wells completed in Phase 2 of the study ranged from 110.92 µg/L (LC-41b) to 154.66 µg/L (LC-41a). TCE was detected above 5 µg/L in samples collected from four monitoring wells completed in the SLA during this study (LC-41D, LC-67D, LC-69D, and LC-70D). Concentrations ranged from 16.6 µg/L (LC-67D) to 220 µg/L (LC-69D). Locations of these wells are presented on Exhibit 1. During advancement of monitoring well LC-69D, it was noted that the formation did not contain a significant amount of silt or clay but instead was characterized by slightly silty, fine sand to course gravel.

It was concluded that LC-41D was not the source of TCE in the SLA because LC-69D, located upgradient of LC-41D, had concentrations of TCE above 5 µg/L also. In previous sampling events, TCE was not detected in samples collected from other monitoring wells completed in the SLA upgradient of both LC-41D and LC-69D indicating that TCE must be entering the SLA upgradient and within the vicinity of LC-69D through a permeable "window" between the Vashon aquifer and the SLA upgradient of LC-69D (Ebasco 1993).

Based on information provided in the I-5 Pump and Treat System Performance Assessment (PNNL 2013) and Late Pleistocene Stratigraphy in the South-Central Puget Lowlands, Pierce County Washington (DNR 2001), a window through the second nonglacial deposits (unit Qpon) that connects the upper (Vashon) and lower (Sea Level) aquifer is present in this area.

Interim groundwater monitoring, prior to construction of the pump and treat systems, began in March 1993 and continued until December 1994. A history of the changes made to the sampling network from 1994 through 2014 is provided in Table 1-2.

Construction of the Landfill 2 and I-5 pump and treat systems began in December 1994. The Landfill 2 pump and treat system originally included six wells: four in Landfill 2, formerly known as the East Gate Disposal Yard (EGDY), and two about 1,500 ft downgradient (Figure 1-3). After groundwater has been treated by the Landfill 2 pump and treat system it is re-introduced to the Vashon aquifer via infiltration galleries located southeast of the system. The I-5 pump and treat system, located south of I-5 was constructed with 15 extraction wells configured in a straight line to intercept Vashon aquifer groundwater before it flows off base (Figure 1-4). After treatment, the water is infiltrated about 1,000 ft downgradient of the extraction wells. The systems began operation in July 1995. The first quarter of data with the systems in operation was collected in December 1995. The Compliance Monitoring Plan (USACE 1994a) and the Operations & Maintenance Plan (USACE 1994b) were implemented in October 1996.

In 1998, an Explanation of Significant Difference (ESD) was issued for the Logistics Center (Army and EPA 1998). Described in the document was a requirement that innovative technologies be utilized to expedite remediation in Landfill 2, which was considered the source area of TCE. Source removal and thermal remediation were selected. Source removal was conducted in 2001. Approximately 2,272 containers, ranging in size from 5 gallons (the majority of containers) to 50 gallons, were removed from Landfill 2. Approximately 580,000 pounds of Resource Conservation and Recovery Act (RCRA) waste, including the containers, impacted soil and liquids, or sludge still in the containers, were removed. Approximately 8,500 to 46,000 pounds of TCE was removed as part of the RCRA waste stream (GSA 2001).

In 1999, low-flow sampling procedures were first implemented for monitoring wells that did not have dedicated pumps. Monitoring wells were sampled using a non-dedicated submersible pump (Table 1-3). However, it was noted in the fifth annual monitoring report for the Logistics Center, that concentrations of TCE had decreased significantly in three SLA monitoring wells (LC-40D, LC-66D, and LC-73D) during the September 1999 and subsequent sampling events when compared to sampling events prior to September 1999 (URS 2001). It was noted in the same report that TCE concentrations had decreased sharply from the December 1999 sampling event and the 2000 sampling events in monitoring wells LC-72D and LC-126. It was suspected in the 2000 annual report that the reason for the sudden drop in TCE concentrations in samples collected from these wells could be attributed to the change from purging three well volumes of water prior to sampling to low flow procedures. During purging of three well volumes, groundwater from the screened interval was drawn into the non-dedicated pump intake. During the low-flow purging method and

sampling, the water drawn into the pump was not collected from the screened interval because the dedicated Hydrostar pumps' intakes were above the screens in these wells (URS 2001). As a result, all data collected from monitoring wells LC-40D, LC-66D, LC-72D, and LC-73D from August 1999 to December 2000 were rejected as invalid concentrations of TCE. Rejected data was not used to create the linear graphs presented in this report.

Beginning in December 1999, dedicated bladder pumps were installed in SLA monitoring wells and were sampled using low-flow procedures. By December 2000, all but three SLA monitoring wells (LC-21c, LC-69D, and LC-70D) had dedicated bladder pumps in them. Vashon aquifer monitoring wells were sampled with both dedicated and non-dedicated pumps until 2006 when almost all mechanical pumps were replaced with passive diffusion bags (PDBs).

In 2002, a Remedial Action Monitoring Network Optimization Report was completed by the United States Corps of Engineers (USACE 2003). Suggestions in the report resulted in changes to the remedial action monitoring sampling locations and frequency beginning in 2003 (Table 1-2).

In 2002, in-situ thermal treatment using electrical resistive heating (ERH) was performed by Thermal Remediation Services, Inc. (TRS) of Longview, Washington. Three separate areas inside of Landfill 2 (Non-Aqueous Phase Liquid [NAPL] Areas 1 through 3) were identified as candidates for ERH treatment (Figure 1-3).

In December 2003, TCE removal in NAPL Area 1 began and was completed in August 2004. The Landfill 2 pump and treat system was shut down in fall 2004 to allow thermal remediation. An estimated 31,000 cubic yards of soil were treated and an estimated 2,500 kilograms (kg) of TCE were removed (TRS 2005a).

In November 2004, execution of the Log RAM program transferred from USACE contractor (URS) to the Fort Lewis IRP. A revised Fort Lewis Logistics Center Compliance Monitoring Plan (Army 2006) was also prepared. This plan implemented a number of changes to the original monitoring program (Woodward-Clyde 1994) and revised addendum management plan (URS 2000).

Also in 2004, 16 new SLA wells were completed to determine the downgradient extent of the TCE plume in the SLA. However, data collected in 2005 indicated that the downgradient extent of the plume was not completely characterized. Eight additional wells were installed in December 2005.

TCE removal in NAPL Area 2 began in February 2005 and was completed in August 2005. The Landfill 2 pump and treat system was shut down to allow the hydraulic grade to stabilize and to allow hydraulic control pumping in NAPL Area 2 for thermal remediation (February to August 2005). The purpose of the pumping was to flatten the hydraulic grade in NAPL Area 2 and thus keep groundwater from flowing out of the heating zone. An estimated 36,500 cubic yards of soil was treated and approximately 1,090 kg of TCE was removed (TRS 2005b).

In 2005, Fort Lewis IRP also evaluated the monitoring network to further optimize sampling efforts. Changes included sampling frequency reduction for selected wells, elimination of several wells from the monitoring program, rescheduling of the annual monitoring event from March to August/September, and the installation of new wells to fill spatial data gaps. Additional monitoring wells were installed in 2006 and 2007 to address data gaps in the Lower Vashon aquifer.

A bioremediation research project began in May 2005 in NAPL Area 3 and was completed in August 2006. Approximately 3 tons of nutrients (whey) were injected into the upgradient groundwater. Downgradient groundwater was then extracted and analyzed. Results indicated a reduction in dissolved phase TCE, and elevated quantities of DCE and VC. Sampling of downgradient wells indicated VC concentrations were limited to the immediate treatment area.

In October 2005, construction began to upgrade and re-configure the Landfill 2 pump and treat system. Construction was completed in April 2006. The upgrade consisted of construction of new extraction wells and associated piping to better contain TCE in the source area. The effluent infiltration galleries were also re-configured (Bay West 2004). Details of the hydrogeological analysis and system design were documented by Pacific Northwest National Laboratory (PNNL) in 2006. The upgraded system now contains eight production wells (PW-1 through PW-8) placed in an inverted “L” shape at the northwest edge of Landfill 2. The new infiltration galleries are located southwest of the original galleries and cross gradient of the system’s new production wells (Figure 1-3). The south end of the system (wells PW-6 through PW-8) began operation in September 2006. The north end, however, was not operated until May 2007 to allow active thermal remediation in NAPL Area 3.

In 2005, a performance assessment of the thermal treatment program was conducted. The assessment included extensive sampling and aquifer testing in Landfill 2, especially in thermal NAPL Areas 2 and 3. The thermal treatment continued through 2007.

In fall 2006, three I-5 pump and treat system extraction wells were repaired. Repair included replacement of the vertical turbine pumps with submersible pumps. This improved the reliability and longevity of the system.

In 2006, most monitoring wells, that were previously sampled using either dedicated mechanical pumps or a non-dedicated submersible pump, were sampled using disposable PDBs for the first time.

ERH began in NAPL Area 3 in October 2006 and continued until January 2007. Approximately 23,600 cubic yards of soil was treated (TRS 2007). Approximately 850 kg of TCE was removed. Cool down monitoring was also conducted. Three hydraulic control wells were used to reduce flow across the thermal treatment area. Discharge from the wells was routed through the Landfill 2 air stripper and into the infiltration galleries (TRS 2007).

In 2007, PNNL assessed the I-5 pump and treat system's effect on TCE capture in the Upper Vashon aquifer using a numerical model (PNNL 2007). A fate and transport model for the entire TCE plume under the Logistics Center had been calibrated by PNNL in 2006 and was the basis for this assessment. Model simulation suggested that the effective capture of the TCE plume could be maintained by the system even with two or possibly four of the outer most extractions wells turned off. Based on the simulation results of the model, it was suggested to discontinue pumping in wells LX-1 and LX-15 located on either end of the system well line (Figure 1-4). Extraction wells LX-1 and LX-15 were turned off in July 2007. Water samples were collected in February 2008 from LX-1 and LX-15 and a sample was collected from LX-15 in August 2008. These samples were most likely collected in error. The pump in LX-15 was replaced and began operating again the last week of January 2012.

In spring 2007, three additional Vashon aquifer wells (LC-222 through LC-224) were installed in the Madigan Family Housing Area (MFHA). The purpose of these wells was to more accurately define the extent and concentrations of the TCE plume in this area.

In June and July 2007, a vapor intrusion study was conducted. Ninety-six indoor air samples were collected from 10 housing units located in the MFHA west of Landfill 2 (designated as Madigan on Exhibits 1 and 2). Ninety samples had no TCE detected in them, four samples had TCE detected in them ranging from 0.24J micrograms per cubic meter ($\mu g/m^3$) to 1.3J $\mu g/m^3$, and two samples were rejected because it was suspected that the sampling equipment was contaminated prior to sample collection. The highest concentration of TCE detected in the indoor samples was below the no further action level of 5 $\mu g/m^3$ indicating that vapor intrusion into MFHA units did not pose an unacceptable risk or hazard to human health (Army 2007).

To ensure MFHA safety, a groundwater threshold was calculated using the average concentration of TCE detected in five monitoring wells (LC-178, LC-218, and LC-222 through LC-224) in the MFHA during the indoor air sampling event and the 1.3J µg/m^3 value for indoor air:

Groundwater threshold =
(average groundwater TCE concentration / indoor air) * no further action level
96.2 µg/L (rounded up to 100) = (25 µg/L / 1.3 µg/m^3) * 5 µg/m^3

This represents a conservative correlation value between TCE concentrations in groundwater and the 5 µg/m^3 indoor air 'no further action' value. No further investigation or action is necessary as long as TCE concentrations are not detected above the groundwater threshold of 100 µg/L in groundwater samples collected from monitoring wells located within or immediately adjacent to the MFHA. As of the writing of this report, TCE concentrations in MFHA monitoring wells have been declining and are below 100 µg/L.

In February 2007, another ESD (Army and EPA 2007) was published for the Logistics Center describing the implementation of remediating the SLA component of the 1990 ROD (Army, EPA, and Ecology 1990a). The risks of TCE in the SLA were not addressed in the original ROD because at the time TCE was detected in only one monitoring well (LC-41D at 143 µg/L) out of six wells sampled that were completed in the SLA. Construction of the Sea Level Aquifer pump and treat (SLAPT) system began later in the year and was completed in October 2009. Six extraction wells (SLAP-1 through SLAP-6) and 11 monitoring wells (LC-96D through LC-103D) were constructed in the SLA in summer and fall of 2007.

An Environmental Strategic Technology Certification Program (ESTCP) project began in October 2008 and was completed in 2010. The project was designed to demonstrate the benefits of combining low-energy ERH with in-situ bioremediation (ISB) and iron-based reduction using zero valent iron (ZVI), for the remediation of dense NAPL source zones in Landfill 2. The objectives of the demonstration included:

- Assess the extent to which contaminant degradation is enhanced during heating compared to ambient temperatures;
- Determine the relative contribution of biotic and abiotic contaminant degradation mechanisms at different temperatures; and
- Determine the cost-benefit of applying low-energy heating with in-situ treatments.

The demonstration was conducted in three phases to improve the accuracy of evaluating the effects of ERH on ISB and ZVI reduction and comparison between the two application techniques. The two application techniques were evaluated in test cells in the following three phases:

- Phase 1: Initial characterization and verification of the suitability of each test cell to meet project objectives and provide information for a "go/no-go" decision for subsequent phases.
- Phase 2: Field demonstration of ISB and ZVI without heating. This phase of the demonstration was intended to establish the reaction kinetics and mass balance factors at ambient temperature.
- Phase 3: Field demonstration of ISB and ZVI low energy heating. This phase of the demonstration was designed to establish reaction kinetics and mass balance factors at elevated temperatures of approximately 35°C for the ISB cell and 55°C for the ZVI cell. Results were compared to Phase 2.

The ISB and ZVI test cells are located immediately northeast of the fence surrounding the Landfill 2 control building and treatment tower. Groundwater monitoring wells were installed and a sampling program was designed to allow for evaluation of contaminant concentration within the test cells. The study site is not located within the boundaries of NAPL Areas 1 through 3 nor is it located in an area that has been previously treated for NAPL using other processes or technology.

In October 2009, the SLAPT system was completed and began operation (Figure 1-5). IRP personnel are responsible for monthly inspections and influent and effluent sampling of the system. Madigan Army Medical Center (MAMC) personnel are responsible for the operation and maintenance of the system.

The pump and treat system intercepts the TCE plume in the SLA and treats TCE and DCE in the water using air stripping. Treated effluent is pumped to MAMC where it is used as cooling water for the hospital's heating, ventilation, and air conditioning (HVAC) system. The SLAPT system began operating in October 2009. Prior to construction of the pump and treat system, groundwater was drawn from five production wells (MAMC-1, -3, -4, -6, and -7), circulated through the hospital's HVAC system, discharged to a cooling pond east of the building, and infiltrated in an adjacent basin. These production wells are still connected to the system and are used for backup during times when the HVAC system is being heavily used (i.e., summer months).

In April 2010, a Compliance Monitoring Plan (CMP) that updated the CMP from September 2006 was completed (Versar 2010). This plan reflected changes in the monitoring network since 2006 including:

- Installation and sampling of monitoring wells completed in the SLA;
- Installation and sampling of monitoring wells completed in the Upper Vashon aquifer in the vicinity of MFHA;
- Installation and sampling of monitoring wells completed in the Lower Vashon aquifer in Tillicum, Washington;
- Changes in monitoring frequency of monitoring wells completed in the Vashon aquifer; and
- Changes in monitoring frequency of monitoring wells completed in the SLA within the vicinity of the SLAPT system.

In October 2010, as part of a Base Realignment and Closure (BRAC) action, Fort Lewis and neighboring McChord Air Force Base merged to create Joint Base Lewis-McChord. All base services including the IRP are provided by the Army-led Joint Base.

In October 2010, the SLAPT system's stripper tower water distribution system was reconfigured after unexpectedly high concentrations of TCE were detected in the system's effluent samples. The original SLAPT system air stripper used a splash plate under a 10-inch inlet pipe to distribute water over the tower packing. Influent water poured out of the 10-inch pipe and then splashed from the splash plate to the distributor tray. The distributor tray spanned the 9.5 ft inside diameter of the tower. The distributor tray was perforated with 1.125-inch diameter holes allowing the water to pour into the stripper tower packing material. The splash plate and distributor tray were replaced with a series of polyvinyl chloride (PVC) nozzles connected to the 10-inch pipe. The nozzles disperse the water across a wider area over the distributor tray than the splash plate did and reduced channeling of water through the packing material. Performance of the air stripper tower was greatly improved decreasing the annual average concentration of TCE in effluent samples from 4.1 µg/L (before reconfiguration) to 0.62 µg/L (2011). The average concentration of TCE in effluent samples collected from the SLAPT system in 2013 was 0.56 µg/L.

In March 2012, contractors began clearing and grading the Regional Logistics Support Center (RLSC) construction site located north of the Logistics Center. The I-5 pump and treat system is located within the fenced area that defines the RLSC (Figure 1-2). In 2012, the I-5 pump and treat system's effluent line was modified to supply treated water as a

ground source heat supply for the HVAC system of two Tactical Equipment Maintenance Facilities (TEMFs) at the RLSC. Four gate valves were installed downgradient of the system's discharge pumps. Two valves direct water through each building's HVAC system and then two valves re-direct the water back to the I-5 pump and treat system's effluent line. Water is then returned back to the Vashon aquifer through the system's current infiltration galleries.

In September 2013, construction began on the TEMFs buildings mentioned above. Currently, the buildings are completed and the I-5 pump and treat system is connected to the TEMFs buildings' HVAC systems.

In March 2014, construction began on a water line connecting the Landfill 2 system effluent to an HVAC system that is part of an Army Readiness Center currently under construction. The center will be located northeast of Landfill 2. This system will be similar to the RLSC system described above when completed.

1.3 CHANGES TO THE MONITORING PROGRAM

Table 1-2 lists changes to the program and Table 1-3 lists sampling techniques used since the program's inception in 1994. In 2014, monitoring well LC-104D was added to the network and is monitored for depth to water only.

Monitoring well T-15 was developed in June 2014. Prior data suggests that the well was never properly developed at the time of installation. As such, all data collected prior to June 2014 in considered unusable.

No monitoring wells were decommissioned in 2014 under this program.

A final CMP dated April 1, 2014 was then sent to the EPA (Versar 2014). The monitoring described in this report was conducted under this 2014 CMP.

2 SAMPLING SCHEDULE

The 2014 sampling schedule and descriptions of monitoring wells currently used for water level measurements and wells sampled for volatile organic compounds (VOCs) are presented in Table 2-1. An inventory of all production and monitoring wells on JBLM with location and completion information is presented in Appendix A. Monitoring wells in which depth to water is currently being measured are presented on Exhibit 1. Monitoring, production, and extraction wells and surface water sample points currently being sampled for VOCs are presented on Exhibit 2. In 2014, sampling events were conducted on the following schedule:

- First Quarter – March 20-29, 2014
- Second Quarter – June 12-23, 2014
- Third Quarter – September 23 - October 1, 2014
- Fourth Quarter – November 24, 2014

Semi-annual sampling was conducted during the first and third quarters at which time depth to water was also measured. The annual sampling event occurred during the first quarter.

2.1 WATER LEVEL MEASUREMENTS

In 2014 water levels were measured in 71 Vashon aquifer monitoring wells and 47 SLA monitoring wells during the first quarter and 74 Vashon aquifer monitoring wells and 46 SLA monitoring wells during the third quarter. Locations are presented on Exhibit 1.

PDBs were deployed in monitoring wells scheduled for sampling when water levels were measured during the first and third quarters. On March 12 and 13, 2014 (first quarter), JBLM personnel installed 57 PDBs into the monitoring wells that needed them. Wet season water levels were measured from February 11 to 20, 2014 for both Vashon and SLA monitoring wells. Dry season water levels were measured and PDBs deployed from September 2 to 11, 2014 (third quarter). PDBs were deployed on May 22, 2014 for the second quarter and November 5, 2014 for the fourth quarter sampling events. Depth to water is not measured during the second and fourth quarters except in pump and treat system extraction wells.

2.2 MONITORING WELL SAMPLING

Groundwater samples were collected from 74 monitoring wells screened in the Upper Vashon aquifer, seven monitoring wells screened in the Lower Vashon aquifer, and 45 monitoring wells screened in the SLA. Locations are presented on Exhibit 2. Samples were collected from most of the monitoring wells using PDBs per the 2014 the revised CMP for the Logistics Center (Versar 2014). Upper Vashon aquifer monitoring wells LC-03 and LC-06 were sampled using dedicated bladder pumps because the pumps are lodged inside of the wells and cannot be removed without damaging the pumps or the well casings. Upper Vashon aquifer monitoring wells LC-178, LC-180, and LC-182 were sampled using a peristaltic pump because they have 0.75" diameter casings and PDBs will not fit inside of them. The field team noted that the PDB that was deployed in monitoring well LC-223 initially was not present on the hanger when they returned to sample so it was sampled using a peristaltic pump as well. Samples collected from monitoring wells LC-98D-1 and LC-98D-2 were not refrigerated or kept cool overnight after sampling so they were recollected using a submersible pump rather than redeploying a PDB and waiting two weeks to resample.

2.3 SURFACE WATER SAMPLING

Three surface water sampling points on Murray Creek (SW-MC-07 through SW-MC-09) sampled in 2014 are presented on Exhibit 2. SW-MC-07 through SW-MC-09 were added to the sampling program in 2010 and were sampled quarterly in 2010 through 2012 to establish data baselines. In 2014, the surface water sample points were sampled during the first quarter.

Murray Creek flows primarily east to west, from Kinsey Marsh to American Lake. Murray Creek, east of the intersection between Madigan Avenue and Jackson Avenue by MAMC, is a gaining reach, and west of this intersection, is a losing reach (Shapiro 1996). Sampling stations SW-MC-7 through SW-MC-9 are located southwest of Landfill 2 and southeast of the MFHA within the gaining reach of Murray Creek. Surface water samples were collected just below the surface of the water at all three sites using a dipper.

In June 2010, a surface water sample point (MAMC-OF-1) was established on the northeast side of the MAMC HVAC cooling ponds located in front of MAMC. This sample point was selected to confirm that the combined water being discharged from the SLAPT system and MAMC's production wells (MAMC-1, MAMC-3, MAMC-4, and MAMC-6) meets regulatory standards. In late 2011, a subsurface infiltration system was constructed to handle discharge from the cooling ponds. The construction eliminated the MAMC-OF-1 sampling point. Consequently, a new sample point, MAMC-OF-2, was established on the north side of

the existing pond approximately 375 ft south east of MAMC-OF-1. MAMC-OF-2 was sampled once in 2012, semi-annually in 2013 and 2014.

2.4 EXTRACTION AND PRODUCTION WELL SAMPLING

Groundwater samples were collected from in-line sampling ports located on the transfer piping from each extraction well. Sampling was completed only during times when the pump and treat system was running and only for pumps that were operating at the time. For MAMC HVAC production wells: MAMC-1, -3, -4, and -6, times were scheduled with MAMC maintenance personnel to gain access to the sample ports and to ensure the wells were operating.

Groundwater samples were collected semi-annually during the first and third quarter sampling events from all eight Landfill 2 pump and treat system extraction wells (PW-1 through PW-8). Groundwater samples were collected semi-annually from 14 extraction wells (LX-2 through LX-15) in the I-5 pump and treat system. Well LX-1 has not been in operation since 2007 and therefore was not sampled in 2014. Groundwater samples were collected semi-annually from all six SLA system extraction wells (SLAP-1 through SLAP-6) if they were running at the time of sampling.

Four HVAC water supply wells used by MAMC: MAMC-1, MAMC-3, MAMC-4, and MAMC-6, were sampled from spigots. MAMC-1 and MAMC-6 completed in the Lower Vashon aquifer are sampled annually during the first quarter sampling event. MAMC-3 and MAMC-4 completed in the SLA were sampled semi-annually during the first and third quarter sampling events if the pumping wells were running at the time of sampling. A production well no longer in service (Well 13) located on JBLM is scheduled to be sampled semi-annually from a spigot. A small public water supply well (BC1) located in Tillicum along American Lake was sampled semi-annually from a spigot.

2.5 TREATMENT SYSTEM SAMPLING

The objectives of treatment system monitoring are to verify that the treatment systems are discharging treated groundwater in accordance with state waste discharge permits and that air emissions are not exceeding permitted atmospheric discharge rates. Monitoring the treatment systems' influent and effluent is performed monthly to evaluate concentrations of contaminants in treated groundwater and to allow calculation of treatment system efficiency and atmospheric emissions rates for TCE. Influent and effluent samples were collected monthly from all three pump and treat systems (Landfill 2, I-5, and Sea Level) during 2014.

The results of the treatment system monitoring is included in the Operations and Maintenance Report (Sealaska 2015a).

2.6 CONTRACTED LABORATORIES

First and second quarter samples were hand delivered by Versar to Analytical Resources, Incorporated (ARI) of Tukwila, Washington for analysis, while the third and fourth quarter samples collected by Sealaska were delivered by courier (MC Delivery) to ALS Environmental Laboratory in Kelso, Washington (ALS-Kelso). Groundwater and surface water samples were analyzed for total VOCs using EPA Method 8260C. During the previous contract, the Analytical Resources, Incorporated lowered the reporting limit for TCE from 0.5 µg/L to 0.2 µg/L beginning with the fourth quarter sampling event in 2012 and ending with the second sampling event in 2014. TCE detected at or above 0.2 µg/L for the first and second quarters and at or above 0.5 µg/L for the third and fourth quarters was then recorded as a detect on the tables and figures for this report. Laboratory analytical reports are included in Appendix B and copies of completed field notes and forms are included in Appendix C.

2.7 DEVIATIONS FROM THE COMPLIANCE MONITORING PLAN

Changes implemented to the network beginning in 2014 are documented in the revised CMP for the Logistics Center (Versar 2014). Changes documented in the 2014 CMP were implemented beginning with the first quarter sampling event in 2014. Deviations from the CMP in 2014 are discussed below.

Two wells not measured for depth to water or sampled in 2014 were:

- LC-120 is within the RLSC construction site and was buried under a dirt road that services the RLSC construction site.
- LC-125 was decommissioned in 2013.

Depth to water was not measured in five monitoring wells during the first and third quarter sampling events.

- Three monitoring wells, LC- 110, LC-114, and LC-117, were not measured during the first quarter. LC-110 had a large pile of soil and debris on top of it and could not be located. LC-114 was under a car, and LC-117 was covered by a dumpster.
- Two monitoring wells, LC-89D-1 and LC-126, were not measured during the third quarter. Well LC-89D-1 was mistakenly not measured during the third quarter. Data collected from LC-126 was identified as incorrect and not used for groundwater contouring.

Sampling was not completed in one monitoring well and five production wells in accordance with their 2014 schedules. Samples were not collected from the following wells:

- Monitoring Well LC-49 was not sampled during the first and third quarter events because a PDB hanger is stuck in the well.
- Well LX-8 was not sampled during the first and third quarter events because the pump was down.
- During the first quarter, wells PW-4 and PW-6 were not sampled because neither well was running.
- During the third quarter sampling event, system extraction wells LX-8, LX-10, and SLAP-2 were not sampled because of issues with extraction pumps or related equipment.

3 GROUNDWATER ELEVATION MEASUREMENTS

This section presents trends in groundwater elevation since the three pump and treat systems (Landfill 2, I-5, and SLA) have been operating. Water levels for 2014 are presented in Table 3-1. Historical groundwater elevations measured in monitoring wells since 1996 are presented in Appendix D.

3.1 VASHON AQUIFER GROUNDWATER ELEVATIONS

In general, the regional flow direction for the Vashon aquifer is southeast to northwest. However, the hydraulic effects are localized near the extraction wells of the pump and treat systems. The I-5 pump and treat system has altered the groundwater flow regime to induce flow of groundwater toward the extraction wells (LX-2 through LX-15). After treatment by the I-5 pump and treat system, groundwater is re-introduced to the Upper Vashon aquifer downgradient of the system via four infiltration galleries located southeast of I-5 (Figure 1-4). This has also affected the localized groundwater flow near the galleries, however, the regional flow pattern remains unchanged over most of the site. Vashon aquifer groundwater iso-contours are presented on Figure 3-1.

3.2 SEA LEVEL AQUIFER GROUNDWATER ELEVATIONS

Groundwater level measurements indicate that in general the SLA groundwater flows northwest under the Logistics Center. However, in the middle of the Logistics Center is a hydrologic “window” which connects the Vashon aquifer with the SLA. Downgradient of the hydrologic window, groundwater in the SLA encounters a hydrologic barrier that directs the flow southwestward around the south end of American Lake (Figure 3-2). The SLAPT system, located west of MAMC, began operation in October 2009 (Figure 1-5). It alters the groundwater flow around pump and treat wells SLAP-1 through SLAP-6 much like the I-5 pump and treat system alters groundwater flow in the Vashon aquifer. However, after groundwater is treated by the SLAPT system it is not re-introduced back into the SLA. Instead, treated water from the SLAPT system is pumped to MAMC and used as cooling water in its HVAC system. After the water is circulated through the hospital’s HVAC system, it is then reintroduced to the Upper Vashon aquifer via a cooling pond and infiltration galleries located northeast of the hospital.

The SLAPT system has not altered the general groundwater flow toward the west however, it has drawn the water levels down in some wells approximately 25 ft from prior to startup of the system (Figures 3-3 and 3-4). Groundwater elevations measured in 2014 are

compared to groundwater elevations measured in 2009. The purpose of the comparison is to show SLA groundwater elevation changes between the last year before system startup (2009) and current groundwater levels after the system has been operating for five years. Wet season groundwater elevations were measured in early February for 2009 and early February 2014. Dry season groundwater elevations were measured in early August for 2009 and early September 2014. The SLAPT system began operation in October 2009. The difference in groundwater elevations between 2009 and 2010, 2011, 2012, 2013, and 2014 wet and dry seasons for all SLA monitoring wells are presented in Tables 3-2a through 3-2d.

Comparisons of groundwater elevations measured in monitoring wells located upgradient of the SLAPT system for both wet and dry seasons are presented in Table 3-2a. Monitoring wells were not differentiated between those that are located upgradient of the "window" and those downgradient of the "window" between the Vashon aquifer and the SLA. Groundwater elevations were higher in 2014 than 2009 in two monitoring wells (LC-35D and LC-41D) during the wet season and ten monitoring wells (LC-21c, LC-26D, LC-35D, LC-47D, LC-50D, LC-68D, LC-69D, LC-75D, LC-41D, and LC-70D) during the dry season. Differences in groundwater elevations that were higher in 2014 ranged from 0.67 ft (LC-50D) to 5.90 ft (LC-41D) during the wet season and 0.66 ft (LC-21c) to 7.98 ft (LC-70D) during the dry season. Differences in groundwater elevations that were lower in 2014 ranged from 0.30 ft (LC-21c) to 25.48 ft (LC-103D) during the wet season and 6.51 ft (LC-77D) to 20.11 ft (LC-103D) during the dry season. Monitoring well LC-103D is the closest upgradient well to the SLA system and LC-26D is the furthest upgradient well to the SLA system.

Comparisons of groundwater elevations measured in monitoring wells located cross gradient of the SLA system and the six SLA system production wells (SLAP-1 through SLAP-6) are presented in Table 3-2b. Groundwater elevations in 2014 for both seasons were lower than elevations in 2009 in all monitoring wells and production wells within this group. Differences in groundwater elevations ranged from 23.66 ft (LC-97D) to 53.34 ft (SLAP-4) during the wet season and 17.03 ft (LC-72D) to 22.35 ft (LC-99D) during the dry season.

Comparisons of groundwater elevations measured in monitoring wells located downgradient of the SLA system are presented in Table 3-2c. Groundwater elevations were lower in 2014 than 2009 during the wet season in all monitoring wells within this group which ranged from 1.7 ft (LC-93D-1) to 23.84 ft (LC-98D-1) during the wet season. Groundwater elevations were higher in 2014 than 2009 during the dry season in three monitoring wells (LC-92D-1, LC-93D-1, and LC-95D-1). Differences in elevation from this group ranged from 0.94 ft (LC-92D-1) to 2.91 ft (LC-93D-1). Differences in elevation for monitoring wells with dry

season elevation lower in 2014 than 2009 ranged from 0.14 ft (SRCMW-01b) to 18.76 ft (LC-98D-1). Monitoring well LC-98D-1 is the closest monitoring well from the SLA system in this group.

Comparisons of groundwater elevations measured in monitoring wells located in Landfill 4, located downgradient of the SLA system, are presented in Table 3-2d. Groundwater elevations in 2014 for both the wet and dry seasons were lower than elevations in 2009 in all monitoring wells within this group. Differences in groundwater elevations ranged from 3.45 ft (LF4-MW-14) to 6.7 ft (LF4-MW02c) during the wet season. Differences in groundwater elevations ranged from 0.35 ft (LF4-MW-09b) to 3.08 ft (LF4-MW-02c) during the dry season.

Changes in groundwater elevations between 2009 and 2014 are presented as contours on Figures 3-3 and 3-4. Monitoring wells with groundwater elevations higher in 2014 than 2009 were not used to create the contours. It is assumed that the SLA system did not affect the groundwater elevations in these monitoring wells in 2014. Drawdown is apparent on linear graphs of groundwater elevations measured in SLA wells presented in Appendix D.

4 ANALYTICAL RESULTS

This section presents the analytical results for the five compounds of concern: TCE, DCE, PCE, TCA, and VC detected in groundwater and surface water collected in 2014. Not all wells' data is presented in this section, but all groundwater and surface water samples collected in 2014 are presented in Table 4-1. TCE concentration contours are presented on Figures 4-1 through 4-3. For monitoring wells that were sampled multiple times in 2014 the highest value of TCE detected is displayed on the figure and was used to generate contours. Data presented in this section are from samples collected from wells located furthest away from the Landfill 2, I-5, and SLA pump and treat systems representing the conditions on the edges of the known TCE plume in the Vashon aquifer and the SLA. Forty-seven Upper Vashon, nine Lower Vashon, and twenty-one Sea Level aquifer monitoring wells had at least one sample collected in 2014 with TCE concentrations detected at or above the ROD remediation goal of 5 µg/L. Sample results including those locations that contained concentrations above the 5 µg/L remediation goal, are included on Table 4-1 and on Figures 4-1, 4-2, and 4-3.

4.1 SURFACE WATER AND UPPER VASHON AQUIFER RESULTS

TCE was the only compound of concern detected above its respective lab practical quantification limit (PQL) in samples collected from the three surface water sample points (SW-MC-7 through SW-MC-9) along Murray Creek in 2014. TCE concentrations ranged from 0.41 µg/L (SW-MC-9) to 0.6 µg/L (SW-MC-8).

TCE was detected at 0.37 µg/L in the sample collected from MAMC's cooling pond sample point (MAMC-OF-2) in September 2014. TCE was not detected in the March 2014 sample collected from MAMC-OF-2.

TCE was detected in samples collected from wells located off-base in the city of Tillicum and Washington State National Guard's Camp Murray, north of Lewis Main and East of Lewis North. The highest concentration of TCE detected in samples collected from monitoring wells located in Tillicum and Camp Murray was 8.6 µg/L collected during the third quarter from T-04. All other samples collected from Upper Vashon aquifer Tillicum and Camp Murray monitoring wells had TCE concentrations below 5 µg/L. These are the northern-most monitoring wells screened in the Upper Vashon aquifer in the sampling network.

TCE was detected in samples collected from wells: FL-03, 85-PA-381, 85-PA-382, LC-178, and LC-224 at 2.3 µg/L, 14 µg/L, 10 µg/L, 5.4 µg/L, and 19 µg/L, respectively. These wells are located on the west edge of the monitoring well network and their samples represent the

known TCE concentrations on the west extent of the plume. Monitoring well 85-PA-384, also located on the west extent of the monitoring well network, had TCE detected at 0.23 µg/L, just above the reporting limit in the sample collected during the second quarter in 2014.

TCE was detected in samples collected from wells: LC-124, LC-16, and LC-03 at 4.8 µg/L, 7.5 µg/L, and 1.2 µg/L, respectively. These wells are located on the east edge of the monitoring well network between the Landfill 2 and I-5 pump and treat systems. LC-01, also within this group of monitoring wells, did not have TCE detected in any samples collected from it in 2014.

TCE was not detected in samples collected from monitoring well LC-167 (located north and east of the I-5 pump and treat system) or monitoring wells LC-20, LC-26, and LC-182 (located south and east of the Landfill 2 pump and treat system). TCE was detected in samples collected from wells: LC-24, LC-57, and LC-180 at 1.1 µg/L, 0.56 µg/,L and 3.8 µg/L, respectively. These wells are located south and east of the Landfill 2 pump and treat system and represent the south extent of the monitoring well network.

Monitoring well LC-53, located to the southwest of the Landfill 2 pump and treat system, had the highest concentration of TCE (220 µg/L) detected in Upper Vashon aquifer samples collected in 2014. TCE concentration contours for Upper Vashon aquifer samples are presented on Figure 4-1.

Relative to the MFHA wells, it was determined after the 2007 vapor intrusion study for MFHA units that TCE concentrations below 100 µg/L in groundwater should not cause unacceptable levels of vapor intrusion into buildings. Since 2005, only one well (LC-218) had TCE detected over 100 µg/L (September 2005). The highest concentration of TCE detected in MFHA wells in 2014 was at 33 µg/L in a sample collected from monitoring well LC-218.

Monitoring well LC-108 is constructed with 88 feet of well screen. Beginning in the second quarter of 2014 (June), both Versar and Sealaska utilized multiple PDBs installed at various depths. In June, PDBs were installed at 30 and 85 feet below ground surface (ft/bgs). In September and November, PDBs were installed at 30, 60, and 85 ft/bgs. The maximum concentration of TCE shown in this well in 2014 was 8.1 µg/L at the 30 foot sample collected in September 2014. Table 4-1 presents the data collected from the well.

4.2 LOWER VASHON AQUIFER RESULTS

Monitoring wells LC-225, LC-226, and T-10 are located in Tillicum, Washington and are the northernmost monitoring wells screened in the Lower Vashon aquifer in the current monitoring network. TCE was detected at 11.0 µg/L and 5.7 µg/L in samples collected from LC-225 and LC-226, respectively. TCE was not detected at or above 0.2 µg/L in samples collected from monitoring well T-10. A sample collected from monitoring well LC-41b had the highest concentration of TCE in samples collected from Lower Vashon aquifer monitoring wells in 2014 at 69 µg/L.

Samples collected from MAMC HVAC production wells MAMC-1 and MAMC-6 screened in the Lower Vashon aquifer, had TCE detected at 1.4 µg/L and 0.84 µg/L in 2014.

No VOCs were detected in samples collected from production well BC1 located in Tillicum. TCE concentration contours for Lower Vashon aquifer samples are presented on Figure 4-2.

4.3 SEA LEVEL AQUIFER RESULTS

A sample collected from monitoring well LC-69D, located in the vicinity of the connection (window) between the Vashon and Sea Level aquifers had the highest concentration of TCE at 120 µg/L detected in SLA samples in 2014. TCE was not detected at or above 0.2 µg/L in any samples collected from SLA monitoring wells located upgradient of LC-69D in 2014.

The SLA well furthest downgradient from Landfill 2 with a TCE detection was well LC-95D-2 at 1.6 µg/L. TCE concentration contours for SLA samples collected in 2014 are presented on Figure 4-3.

5 QUALITY ASSURANCE SUMMARY

This section summarizes the quality assurance/quality control review of the analytical results for the groundwater samples collected from January through December 2014. This includes four sampling events. Versar conducted the March and June sampling and Sealaska conducted the September and December sampling.

5.1 PRECISION AND ACCURACY

Precision was assessed via the relative percent difference (RPD) for field duplicate samples and the RPD for matrix spike duplicates. The RPDs for the five key analytes between samples and their field duplicates are presented in Table 5-1. All samples and their duplicates collected during 2014 had RPDs below 50% except for Trichloroethene (52% D) in the samples collected from T-15 during the June 2014 sampling. Samples were considered valid and no further action was taken. As shown in the analytical reports found in Appendix B, all matrix spike duplicate percent recoveries are within the acceptable range (70 - 130%) indicated in the Log RAM CMP (Versar 2014).

Accuracy was assessed by analysis of laboratory methods and trip blanks. No equipment blank samples were collected in 2014 due to collection of samples mostly using disposable PDBs. No contaminants of concern were detected in any trip blanks sent to ARI or ALS-Kelso in 2014. TCE was detected in two laboratory blanks: LGC140923LC10860-1 (0.38 µg/L) and LGC140923LC10885-1 (0.32 µg/L). Accuracy was also assessed by recoveries in blank spikes, matrix spikes, and surrogates. Blank spike, matrix spike, and surrogate recoveries for all analyses were within the acceptable range specified in the Log RAM CMP (Blank Spike 80 - 120%, Matrix Spike 60 - 140%, and Surrogate Recovery 70 - 130%).

5.2 REPRESENTATIVENESS AND COMPARABILITY

Representativeness was assessed by evaluating the sample collection, sample handling, and sample analysis procedures. All samples were collected, handled, and analyzed in accordance with the Log RAM CMP (Versar 2014). Results are presented in this report as they were reported by the laboratories.

Comparability was assessed by comparing current sample collection and analysis procedures with historical procedures. The samples were collected and analyzed with standard procedures as outlined in the updated Log RAM CMP.

5.3 SENSITIVITY AND COMPLETENESS

Laboratory reporting limits and method detection limits for samples analyzed during 2014 matched the expected reporting limits in the Log RAM CMP using EPA Method 8260C. Results for the five target VOCs were reported to limits between 0.1 µg/L and 0.2 µg/L.

Completeness was assessed by calculating the percentage of acceptable sample results to all sample results. The completeness of the analytical data was 100%.

5.4 CONCLUSIONS

The 2014 calendar year set of Log RAM data is acceptable for use as presented by ARI and ALS-Kelso. Analytical reports and field notes (Appendices C and D, respectively) indicate that recoveries for blank spikes and matrix spikes were within the acceptable range specified in the Log RAM CMP (Versar 2014).

6 ANALYSIS OF DATA

Statistical analysis was performed on TCE data from monitoring wells with a minimum of eight data points. Historical data includes TCE concentrations in samples collected from February 1995 and continuing through 2014. Recent data includes TCE concentrations from 2005 through 2014. Recent data represents groundwater conditions over the last 10 years as agreed upon with the EPA and documented in their comments in regard to the 2011 Annual Monitoring Report (Versar 2013). This change has been documented in the most recent CMP for the Logistics Center (Versar 2014). Only recent data was statistically analyzed for this report. Analysis of historical data up to and including 2009 can be found in the 2009 Annual Monitoring Report dated November 2011 (Versar 2011). Linear graphs of historical TCE concentration data from all monitoring wells ever sampled are presented in Appendix D of the 2009 monitoring report mentioned above. Linear graphs of historical TCE concentration data from monitoring wells sampled in 2014 are included in Appendix E of this report.

Summary statistics were calculated using the Microsoft Excel Descriptive Statistics tool. Shapiro-Wilk test for normality, linear regression analysis, and the Mann-Kendall test for trend were performed on the data using a Microsoft Excel add-in; Analyse It. The Mann-Kendall test was performed on non-parametric TCE data. Statistical methods generally followed the guidelines presented in Methods for Evaluating the Attainment of Cleanup Standards, Volume 2: Groundwater (EPA 1992) and Statistical Methods in Water Resources (Helsel and Hirsch 2002).

All concentration measurements not known to be in error were considered valid and consistent with EPA 1992 (p. 2-27). Suspected “outliers” were not removed from the dataset and were included in the graphs. Non-detect (ND) data, which represent concentration measurements below the analytical reporting limits, were evaluated at the reporting limit value (e.g., if the reporting limit was below 0.2 µg/L, then the concentration value was set at 0.2 µg/L).

6.1 SUMMARY STATISTICS OF TCE CONCENTRATIONS

Table 6-1 presents summary descriptive statistics of TCE concentration data for each monitoring well and surface water sampling points. Descriptive statistics presented in this report were run on the current dataset for monitoring wells in the current sampling network. The summary includes the following:

- Well ID;
- First sample date;

- Last sample date;
- Number of samples in dataset;
- Number of non-detects in dataset;
- Sample mean;
- Standard deviation;
- Minimum TCE concentration in dataset;
- Maximum TCE concentration in dataset;
- Date the sample with the maximum concentration of TCE was collected; and
- Dataset normally or log-normally distributed.

6.2 SHAPIRO-WILK TEST FOR NORMALITY

Prior to analyzing TCE concentration data for trends the data was tested for normal distribution. The null and alternate hypotheses are a summary of a test's objectives which in this case is to test for the data's distribution. The null hypothesis, or what is assumed to be true before given evidence that it may be false, for all tests for normality is that a dataset is normally distributed. The alternate hypothesis then, is that a dataset is not normally distributed (Helsel and Hirsch 2002). A significance level, or alpha level, of 0.05 was used when determining whether data from monitoring wells was normally distributed or not. P values, generated using the Shapiro-Wilk test for normality, were then compared to the alpha level. The alpha level is the "cutoff" point for the test statistic in making a decision whether the data was normally distributed or not. P values show the strength of the test in determining whether the data was normally distributed or not. P values range from 0 to 1 although the closer a P value is to 1, the better the dataset is normally distributed. P values equal to or below 0.05 (alpha level) were not considered normally distributed.

Datasets that were not considered normally distributed were then transformed by taking the natural log of the original values. This is generally the most common transformation of water resources data. The Shapiro-Wilk test for normality was run on the transformed data with the same criteria as the datasets above. Results of the Shapiro-Wilk test are included in Table 6-2. Histograms are included in Appendix F.

6.3 LINEAR REGRESSION AND MANN-KENDALL TREND ANALYSIS

Linear regression trend analyses were conducted on TCE concentration data that was found to be normally or log normally distributed (Appendix E). In this instance, the null hypothesis for the test is that there is no trend in the data (Helsel and Hirsch 2002). The alpha level for the linear regression analysis was set at 0.05. P values generated by the analysis were then compared to the alpha level. P values less than the alpha value suggested a trend in the data. Results are presented in Table 6-2.

The Mann-Kendall test for trend was performed on data that was not normally or log-normally distributed (non-parametric data). No assumptions need to be made about the distribution of the data in order to perform the Mann-Kendall test (Helsel and Hirsch 2002). The null hypothesis is the same as the linear regression test above in that there is no trend in the data. The alpha level was kept the same at 0.05 although the Mann-Kendall test computes a P value for a two-tailed prediction interval. The null hypothesis was rejected for P values smaller than 0.05 or larger than 0.95. Results are presented in Table 6-3.

Upper Vashon aquifer, Lower Vashon aquifer, and SLA well locations and their current data trends (both linear regression and Mann-Kendall) are shown on Figures 6-1 through 6-3, respectively. Symbols for each monitoring well are colored depending on their data's trend and statistical significance as follows:

- Red – TCE concentrations are statistically increasing;
- Yellow – TCE concentrations are increasing, however, not statistically;
- Green – TCE concentrations are decreasing, however, not statistically;
- Blue – TCE concentrations are statistically decreasing; and
- Clear – No statistical analysis was run on the data.

Landfill 2 and I-5 pump and treat systems' production wells are presented on Figure 6-1 though statistics were not performed on their data. The SLAPT system's production wells are presented on Figure 6-3 although no statistics were performed on their data either. Pump and treat system production wells are presented with a solid black symbol. Data was not analyzed for monitoring wells with less than eight samples or where half of the results were non-detect (clear symbol).

Results of linear regression and Mann-Kendall tests for trends performed on current datasets from 2009 through 2014 were compared to each other (Table 6-4). Four Upper Vashon aquifer monitoring wells had trend changes between 2013 and 2014. Monitoring wells

LC-24, LC-61b, and LC-135 trends changed from decreasing trends in 2013 to increasing trends in 2014, however these changes were not found to be statistically significant. Monitoring well LC-57 trend changed from increasing trend in 2013 to decreasing trend in 2014, this change was also not statistically significant.

Monitoring well 85-PA-382 had at least eight data points and was trended for the first time in 2014 with an increasing trend that is not statistically significant. Monitoring well LC-108 was not trended in 2014 due to the deployment of PDBs at multiple depths. No Lower Vashon aquifer wells had trend changes between 2013 and 2014.

Three SLA monitoring wells had trend changes between 2013 and 2014. Wells LC-86D-2 and LC-102D-1 had downward trends in 2013 that changed to upward trends in 2014. Well LC-86D-2 went from a not statistically significant downward trend to a not statistically significant upward trend. Well LC-102D-1 went from a not statistically significant downward trend to a statistically significant upward trend. The trend for well LC-101D-2 changed from a not statistically significant increasing trend in 2013 to a not statistically significant decreasing trend in 2014.

7 DISCUSSION

This section presents a discussion and evaluation of the Log RAM program results for 2014. Figures 7-1 through 7-12 are linear diagrams of TCE concentrations from the beginning of 2005 through 2014 (current data) for select wells. The color scheme is the same as was used on Figures 6-1 through 6-3 and Table 6-4 as described in Section 6.3. Pump and treat system wells and monitoring wells with data not analyzed in 2014 are not presented on these graphs. Linear charts for all production and monitoring wells and surface water sample points are presented in Appendix E.

7.1 UPPER VASHON AQUIFER

Groundwater level measurements indicate that the hydraulic effects of the pumping system continue to be localized near the I-5 extraction and infiltration system (Figure 3-1). Since startup, pumping has altered the groundwater flow regime to induce flow toward the extraction wells LX-2 through LX-15.

TCE concentration trends for five monitoring wells (LC-27, LC-160, MT-2, MT-3, and MT-4) located downgradient of the Landfill 2 pump and treat system and within the boundary of Landfill 2 are presented on Figure 7-1. Monitoring well LC-64a, located upgradient of the system, concentration trend is also presented on Figure 7-1. In every case, TCE concentrations have been decreasing since at least 2005. TCE concentrations from four of the seven wells are decreasing at a statistically significant rate.

A groundwater sample collected from monitoring well LC-64a in March 2011 had TCE detected at an unusually low concentration of 1.1 µg/L and an unusually high concentration of DCE at 130 µg/L. TCE is typically detected above 100 µg/L and since 2006 DCE has been detected below 50 µg/L in samples collected from LC-64a. The significant change in concentrations of TCE and DCE were attributed to an in-situ bioremediation study PNNL conducted in 2010 immediately upgradient of LC-64a. TCE and DCE were detected at more typical concentrations at 100 µg/L and 7.5 µg/L in 2012, at 51 µg/L and 2.2 µg/L in 2013, and at 43 µg/L and 2.4 µg/L in 2014, respectively. A brief discussion of the study is included in the 2011 Annual Monitoring Report (Versar 2013).

Five monitoring wells (85-PA-381, FL-6, LC-16, LC-57, and LC-180) located along the west edge of the known TCE plume in the Upper Vashon aquifer between the Landfill 2 and I-5 pump and treat systems also show decreases in TCE concentrations since 2005 (Figure 7-2). With the exception of 85-PA-381 and LC-16, TCE concentrations detected in

samples collected in 2014 from monitoring wells in this group were below the ROD cleanup level of 5.0 µg/L. Most of the wells in this group are showing downward trends in their TCE concentration data since 2005 and most had TCE detected below 5.0 µg/L in 2014. This suggests that the TCE plume is decreasing to the northwest of Landfill 2 or at the least the plume is not expanding toward the northwest.

TCE concentration trends for nine monitoring wells (LC-06, LC-19a, LC-41a, LC-49, LC-53, LC-66b, LC-132, LC-137b, and MT-1) located in the center of the monitoring network in the Upper Vashon aquifer between the Landfill 2 and I-5 pump and treat systems are presented on Figure 7-3. In 2014, all of the monitoring wells in this group except LC-49 showed decreasing trends in TCE concentrations. LC-49 has a PDB hanger stuck in it and was not sampled in 2014. None of the wells have ever had concentrations below 5 µg/L since 2005 except in one sample collected from MT-1 in December 2010 (4.2 µg/L). It was suspected in the 2012 report that this sample was mislabeled or analyzed incorrectly since TCE concentrations ranged from 59 µg/L to 95 µg/L in the other three samples collected in 2010. No corrective action was been taken in regard to this sample. Since then, however, a sample collected in November 2012 had TCE detected in it at 7.5 µg/L. In 2007, the December sample also had the lowest concentration of TCE detected in samples collected from MT-1 during that year also. It is possible that the December 2010 sample collected from MT-1 is a valid sample. Since all of the monitoring wells in this group have shown downward trends in their TCE concentration data since 2005, it suggests that the TCE concentration in the middle of the plume is generally decreasing.

Current TCE concentration trends for seven monitoring wells (LC-178, LC-180, LC-218, LC-222, LC-223, LC-224, and FL-1) located in the vicinity of the MFHA west of Landfill 2 are presented on Figure 7-4. Of the seven wells, trends are decreasing (not statistically) in four wells (LC-178, LC-222, LC-218, and LC-224) while the remaining three wells (FL-1, LC-180, and LC-223) exhibit statistically significant downward trends.

Five monitoring wells (CM-2, FL-3, T-06, T-08, and T-11b) are located along the north edge of the monitoring network downgradient of the I-5 pump and treat system. Their current TCE concentration trends are presented on Figure 7-5. TCE concentrations in samples collected from all of these wells in 2014 were below 5 µg/L. TCE has not been detected above 5 µg/L in samples collected from this group of monitoring wells since September 2009. All of these wells' data have decreasing trends. T-11b had the highest concentration of TCE detected in any samples collected from this group of monitoring wells in 2014 at 4.2 µg/L.

Five monitoring wells (LC-14a, LC-61b, T-04, T-05, and T-13b) located downgradient of the I-5 pump and treat system and within the middle of the monitoring network have their current TCE trends presented on Figure 7-6. TCE concentration trends for 2014 suggest that TCE in the Upper Vashon aquifer are decreasing in the middle of the plume after it is intercepted by the I-5 pump and treat system.

In general, it appears that the TCE plume in the Upper Vashon aquifer is decreasing or is at least being contained by the Landfill 2 and I-5 pump and treat systems. However, three of the Upper Vashon aquifer monitoring wells with data analyzed for this report showed increasing trends in TCE concentrations for the first time although none of them are statistically significant. Wells LC-24, LC-61b, and LC-135 showed upward trends in 2014.

7.2 LOWER VASHON AQUIFER

Lower Vashon aquifer monitoring wells that were sampled in 2014 and had analyzed data are presented on Figure 6-2. TCE concentration trends for six monitoring wells: FL-04a, LC-111b, LC-122b, LC-217, LC-226 and T-10 that define the extent of the monitoring network in the Lower Vashon aquifer are presented on Figure 7-7. Concentrations were detected above 5 µg/L in samples collected from wells LC-111b and LC-226 in this group during 2014. Concentrations were below 5µg/L in samples collected from well FL-4A in this group during 2014. Downward trends in TCE data are suggested in monitoring wells FL-04a (not statistically significant) and LC-217 (statistically significant). Upward trends are suggested in monitoring wells LC-111b (not statistically significant) and LC-226 (statistically significant in 2014). No trend analysis was performed on data from monitoring wells LC-122b or T-10 in 2014 because TCE has been detected in only one sample collected from LC-122b and has never been detected in samples collected from T-10.

Current data trends for monitoring wells screened in the Lower Vashon aquifer and located within the middle of the monitoring network (LC-41b, LC-116b, LC-128, LC-137c, LC-219 and LC-225), are presented on Figure 7-8. Of the six monitoring wells included on this figure, one has an upward trend, LC-116b (not statistically significant). TCE was detected at 48 µg/L in the sample collected from LC-116b in March 2011 and 41 µg/L in the sample collected in March 2014. Typically, TCE concentrations are higher in samples collected in February and March (wet season) when groundwater levels are high than in August or September (dry season) when groundwater levels are low. The highest concentration of TCE in samples collected during the dry season from LC-116b was 42 µg/L (August 2011) and was at 41 µg/L in the sample collected during September 2014.

Of the 13 Lower Vashon aquifer monitoring wells with TCE concentrations, three were analyzed in 2014: LC-111b, LC-116b and LC-226 show increasing concentrations of TCE. LC-111b is located between I-5 pump and treat system production wells LX-2 and LX-3. LC-116b is located between I-5 pump and treat system production wells LX-7 and LX-8. Monitoring wells LC-111b and LC-116b are screened approximately 15 ft below the bottom of their adjacent I-5 pump and treat wells. LC-226 is located in Tillicum downgradient of the I-5 pump and treat system. All other trends stayed the same between 2013 and 2014 (Table 6-4).

Groundwater samples with the highest concentrations of TCE detected in Lower Vashon aquifer wells have historically been collected from monitoring well LC-41b. TCE was detected at 69 µg/L from a sample collected from LC-41b during March. This was the highest concentration of TCE detected in any samples collected from Lower Vashon aquifer monitoring wells in 2014.

In summary, concentrations of TCE detected in samples collected from monitoring wells in line with or downgradient of the I-5 pump and treat system: LC-111b, LC-116b, LC-128, LC-219, LC-225 and LC-226 are above the ROD remediation goals. Increasing trends seen in data from monitoring wells LC-116b (not statistically significant), LC-111b (not statistically significant), and LC-226 (statistically significant) suggest that TCE is not being actively removed in the Lower Vashon aquifer by the I-5 pump and treat system.

7.3 SEA LEVEL AQUIFER

Twenty-seven SLA monitoring wells had their data evaluated for this report. Eight of the monitoring wells analyzed showed upward trends. Monitoring wells LC-86D-2 (not statistically significant) and LC-102D-1 (statistically significant) trend changed from downward trend in 2013 to upward trend in 2014. No SLA monitoring well trends changed from an upward trend in 2013 to a downward trend in 2014 (Table 6-4). SLA monitoring and production wells that were sampled in 2014 and had their data analyzed are presented on Figure 6-3.

TCE concentration trends for nine SLA wells: LC-50D, LC-66D, LC-75D, LC-77D, LC-67D, LC-69D, LC-103D, LC-126, and MAMC-3 are presented on Figure 7-9. These wells are located upgradient of the SLA pump and treat system. Other wells located upgradient of the system with data not presented on Figure 7-9 include: LC-21c, LC-47D, LC-68D, and MAMC-4. TCE has not been detected in over half of the samples collected from these wells and therefore no statistics have been performed on their data. In general, TCE concentrations have been decreasing along the edges of the monitoring network

upgradient of the SLAPT system. Of the five monitoring wells located along the edge of the monitoring network (LC-50D, LC-75D, LC-66D, LC-77D, and LC-126), all show decreasing TCE concentrations trends in 2014. LC-67D located within the center of the monitoring network and downgradient of the window between the Vashon and Sea Level aquifers has an increasing TCE trend, however, not statistically.

In 2008, concentrations of TCE detected in groundwater samples collected from well MAMC-3 exceeded the ROD remediation goal of 5 µg/L at 6.28 µg/L during the March sampling event and 5.3 µg/L during the September sampling event (Figure 7-9). This well is completed in the upper portion of the SLA and is used as non-potable cooling water for the MAMC complex. TCE was not detected above 5 µg/L in samples prior to September 2006 (Figure 7-9). Concentrations of TCE have been decreasing since March 2008 in MAMC-3. MAMC-3's 10 year trend in 2014 is decreasing at a statistically significant rate. Adjacent production well MAMC-4, which is completed deeper in the SLA and is used for a backup potable water supply, has not shown detectable levels of TCE since sampling of the well began in 2001. MAMC-3's top of screen elevation is at 112.68 ft above mean sea level (ft/AMSL) and MAMC-4's top of screen elevation is at 0.62 ft/AMSL (Appendix A).

Concentrations of TCE detected in samples collected from LC-50D have been decreasing since 2002 statistically in 2011 and 2013 but not statistically in 2012 and 2014. TCE concentrations in samples collected from LC-50D have ranged from non-detect (multiple samples including 2014) to 1.35 µg/L in a sample collected in September 2008 (Table 6-1). Monitoring well LC-21c, located north of the east side of Landfill 2, had TCE detected in one sample collected in June 1999. These are the closest SLA monitoring wells to Landfill 2 that are currently being sampled.

TCE concentration trends for samples collected from SLA wells adjacent to the pump and treat system's production wells are presented on Figure 7-10. These include monitoring wells LC-74D, LC-96D, and LC-99D. Monitoring well LC-97D, located north of SLAP-1, never had TCE detected in any of its samples and, therefore, was not analyzed. LC-99D, located between SLAP-3 and SLAP-4, had a decreasing trend in 2013 and 2014, both not statistically. LC-99D is between LC-97D (north) and LC-74D and LC-96D (south). LC-74D and LC-96D's trends are also decreasing statistically. This may suggest that the pump and treat system is directing the plume toward the center and that the plume is shrinking in the immediate area around the system.

There are 15 pairs of wells located downgradient of the SLAPT system (Figures 4-3 and 6-3). In each pair, one well is designated as the "shallow" well and the other as the "deep"

well. Well ID's for these pairs of wells are designated with a "1" for the shallow wells and a "2" for the deep wells. The differences in elevation between the tops of their screens range from 22.8 ft (LC-86D-1 and -2) to 52.1 ft (LC-84D-1 and -2). TCE concentration trends for shallow SLA monitoring wells are presented on Figure 7-11 and deep SLA monitoring well TCE trends are presented on Figure 7-12.

Of the 15 "shallow" SLA monitoring wells downgradient of the SLAPT system, six have never had TCE detected in samples collected from them (LC-85D-1, LC-87D-1, LC-89D-1, LC-92D-1, LC-93D-1, and LC-94D-1). Two monitoring wells (LC-91D-1 and LC-95D-1) have had TCE detected in less than half of the samples collected from them and never above 1 µg/L. Therefore, statistical analysis has not been completed for these eight monitoring wells.

Of the seven shallow SLA monitoring wells that had their data analyzed, three wells showed increasing trends: LC-88D-1, LC-101D-1, and LC-102D-1. All three wells' increasing trends were statistically significant. However, TCE has never been detected above 5 µg/L in samples collected from any of these wells. All three of these wells are located within the center of the monitoring network. LC-88D-1 is located approximately 9,600 ft downgradient of the SLAPT system, LC-101D-1 is located approximately 2,250 ft west of the SLAPT system, and LC-102D-1 is located approximately 7,400 ft west of the SLAPT system. Since the SLAPT system has been in operation for just over five years, it is suggested that the increase in TCE seen in wells downgradient of the system is because part of the plume has not been affected by the system. These monitoring wells will be good indicators of the effectiveness of the SLAPT system in the future.

Shallow SLA monitoring wells, LC-84D-1, LC-86D-1, LC-90D-1, and LC-98D-1, showed decreasing trends of which three were significant (LC-84D-1, LC-90D-1, and LC-98D-1). LC-86D-1 is located approximately 5,800 ft west of the SLAPT system. LC-86D-1 is located along the north edge of the monitoring well network. LC-90D-1 is located on the south side of the monitoring network approximately 6,400 ft west of the SLAPT system. TCE has ranged in concentration from 1.1 µg/L (September 2007) to 2.8 µg/L (February 2005) in samples collected from LC-90D-1 (Table 6-1). Since LC-90D-1 is further downgradient from the SLAPT system than LC-84D-1 and LC-101D-1, it is unlikely that this downward trend is caused by the system. LC-98D-1 is located approximately 1,100 ft downgradient of the system. LC-98D-1 and -2 are the paired wells closest to the SLAPT system. Both monitoring wells show a significant downward trend in their data, which possibly could be attributed to the SLAPT system.

Of the 15 deep SLA monitoring wells downgradient of the SLAPT system, five have not had TCE detected in samples (LC-85D-2, LC-87D-2, LC-89D-2, LC-90D-2, and LC-92D-2). TCE was detected for the first time in samples collected from LC-93D-2 during 2013 at 0.26 µg/L and 0.24 µg/L (March and September). This is due to the laboratory recording limit being lowered from 0.5 µg/L to 0.2 µg/L beginning in October 2012. TCE has been detected in only two samples collected from LC-95D-2 and never above 1 µg/L. Statistics have not been run on data for these seven monitoring wells.

Of the eight deep SLA monitoring wells that had their data analyzed in 2014, four wells showed increasing trends (LC-84D-2, LC-86D-2, LC-88D-2, and LC-94D-2). All four of these wells are located within the center of the TCE plume. LC-84D-2 is located approximately 4,100 ft downgradient of the SLAPT system. Distances from the system to the other deep monitoring wells showing increasing trends range from 4,100 ft (LC-84D-2) to 11,200 ft (LC-94D-2). Monitoring well LC-101D-2 had an increasing trend in 2013 and a decreasing trend (not statistically) in 2014.

Deep SLA monitoring wells LC-98D-2 and LC-102D-2 showed decreasing trends of which LC-98D-2's was significant. LC-102D-2 is located approximately 7,400 ft west of the SLAPT system. LC-98D-2 is located along the north edge of the monitoring well network and LC-102D-2 is closer to the center of the plume. LC-98D-2 is the deep SLA monitoring well closest to the SLAPT system and its downward trend may be attributed to the system.

In summary, monitoring data indicate that in 2014 the edge of the plume did not advance and sentinel wells LC-93D-1 and -2, and LC-95D-1 and -2 remain downgradient of the plume (3,800 ft and 2,500 ft, respectively). Data indicate that a limited volume of TCE is downgradient of the SLAPT system and will never be captured. Continued monitoring of downgradient wells will determine if this portion of the plume is attenuating.

7.4 LANDFILL 2 AND I-5 PUMP AND TREAT SYSTEMS

A computer modeling analysis of the I-5 pump and treat system was conducted in 2007 (PNNL 2007). Based on the results of the modeling, LX-1 and LX-15 were turned off toward the end of 2007. However, TCE concentrations have been detected above 5 µg/L in three out of 16 samples collected from a monitoring well (LC-124) located northeast of LX-15. The pump in LX-15 was replaced and began operating again the last week of January 2012. In 2014, TCE was detected at 4.8 µg/L and 2.3 µg/L (March and September) in samples collected from monitoring well LC-124. TCE was detected at 3.7 µg/L and 4.8 µg/L (March and September) in samples collected from LX-15 in 2014.

7.5 SEA LEVEL AQUIFER TREATMENT SYSTEM

The SLAPT system began operating intermittently in October 2009. The system did not reliably run until March 2010.

The SLAPT system's effect on TCE concentrations in the SLA is evident in monitoring wells located in the immediate area of the system. TCE concentration trends continue to be decreasing in monitoring wells: LC-74D, LC-96D, LC-98D-1, and LC-98D-2. The TCE concentration trend for data collected from monitoring well LC-84D-1 changed from increasing in 2009 through 2011 to decreasing in 2012 through 2014. TCE was never detected in monitoring well LC-97D just north of SLAP-1.

8 CONCLUSIONS AND RECOMMENDATIONS

This section presents conclusions made for the overall effectiveness of the Landfill 2, I-5, and SLA pump and treat systems on TCE removal in the Vashon and Sea Level aquifers based on 2014 analytical results. It also presents recommendations for future monitoring.

8.1 CONCLUSIONS

Conclusions from analysis of the 2014 Logistics Center monitoring program are summarized below:

- Based on the trend data and comparing TCE plume maps, the TCE plume in the Vashon aquifer is steady or decreasing in size. TCE concentrations in the center of the plume are declining.
- The Landfill 2 pump and treat system is performing as designed. TCE concentrations are decreasing in pump and treat system extraction wells and monitoring wells immediately downgradient of the system. Decreases in TCE concentrations may also be the result of previous remediation efforts.
- The I-5 pump and treat system is performing as designed. TCE concentrations are decreasing in pump and treat system extraction wells and monitoring wells immediately downgradient of the system.
- Based on the trend data and comparing TCE plume maps, the TCE plume in the SLA is steady or decreasing in size upgradient of the hydrologic window. However, this portion of the SLA is not hydraulically connected to the portion of the SLA below the window, therefore, any decrease in TCE cannot be attributed to the SLA pump and treat system.
- The SLA pump and treat system is performing as designed and is reducing concentrations of TCE in the SLA downgradient of the system.

8.2 RECOMMENDATIONS

The following recommendations are being presented to optimize the current Logistics Center compliance monitoring program at JBLM.

Sealaska is currently working on a long-term monitoring program optimization for the Logistics Center. Optimization plans have been discussed with JBLM and EPA personnel at a team meeting and the results of the discussions and subsequent reviews by EPA have been included in the Logistics Center Compliance Monitoring Plan that is currently being prepared (Sealaska 2015b).

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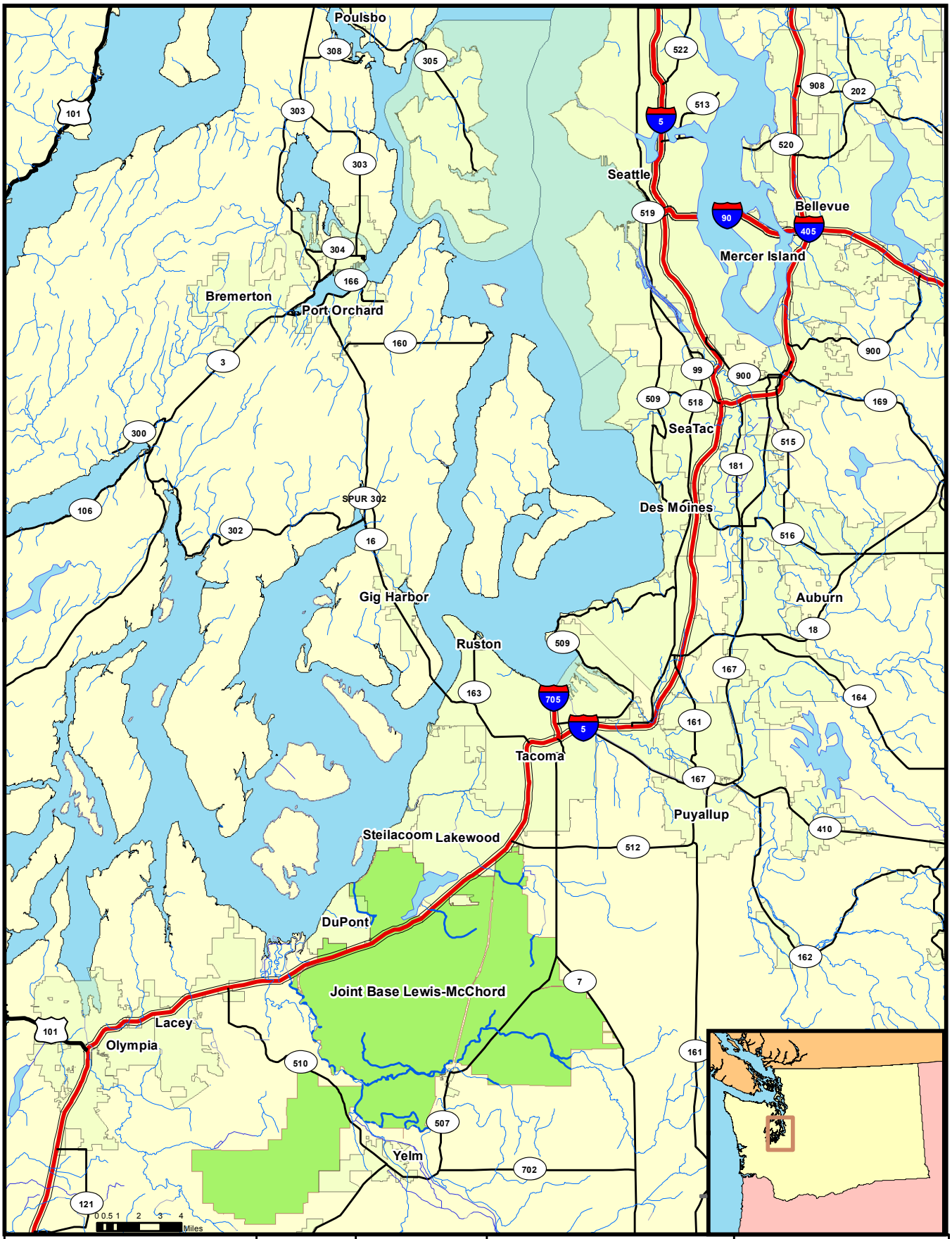

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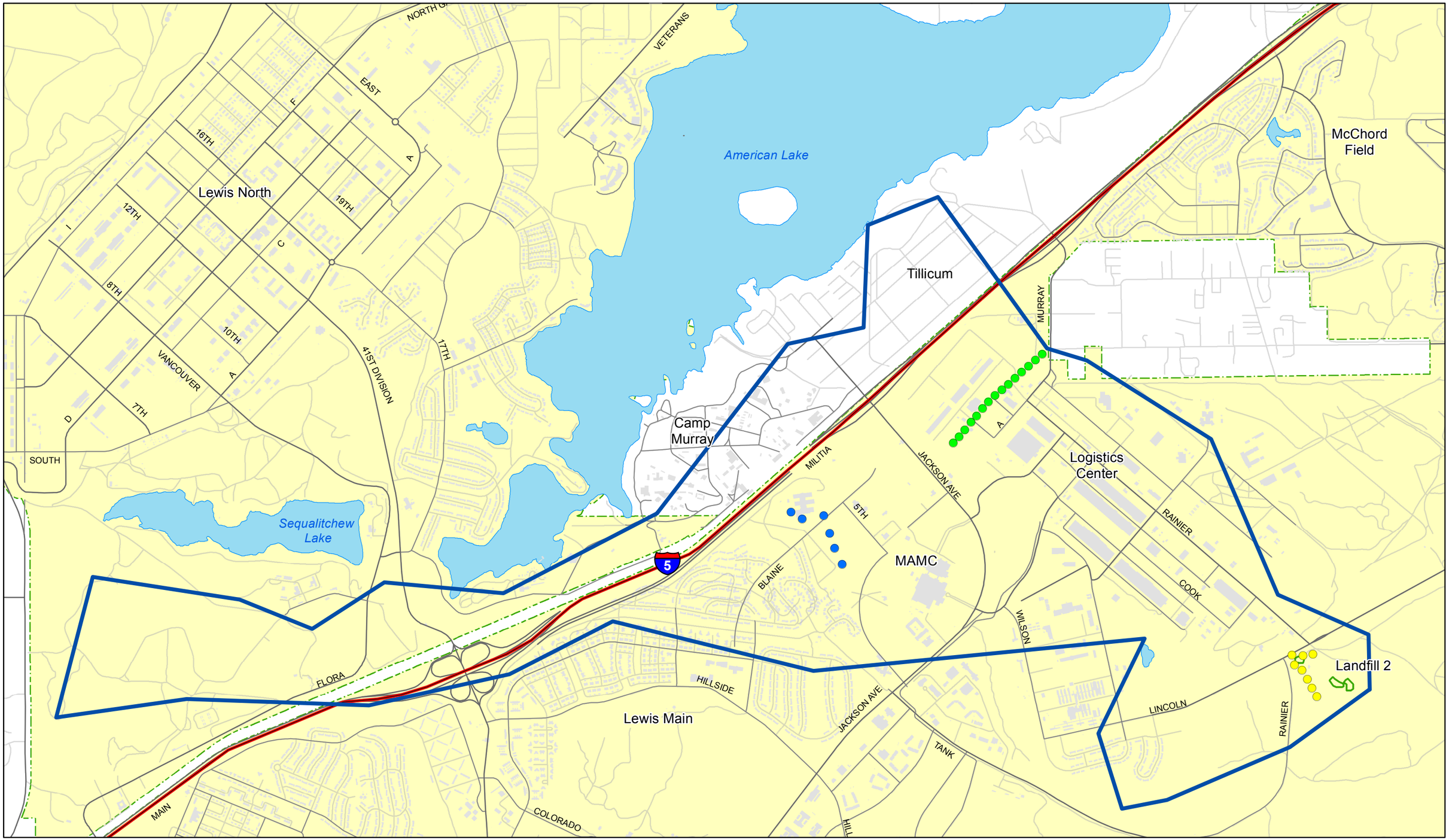
Map Data: Coordinate System: UTM Zone 10 Horizontal Datus: WGS 84	USACE	SEALASKA	**Figure 1-1** **Joint Base Lewis-McChord** **Location Map**	**Contract #** **W912DW-11-D-1031** **Task Order 0001**



Legend

- SLA P&T System Wells
- I-5 P&T System Wells
- Landfill 2 P&T System Wells
- Project Area
- Landfill 2 NAPL Areas
- JBLM Boundary

N

0 0.125 0.25 0.5

Miles

1 inch = 1,750 feet

MAP DATA:
COORDINATE SYSTEM: UTM, Zone 10
HORIZONTAL DATUM: WGS 84

USACE

SEALASKA

Figure -1-2
Log RAM
Project Location Map

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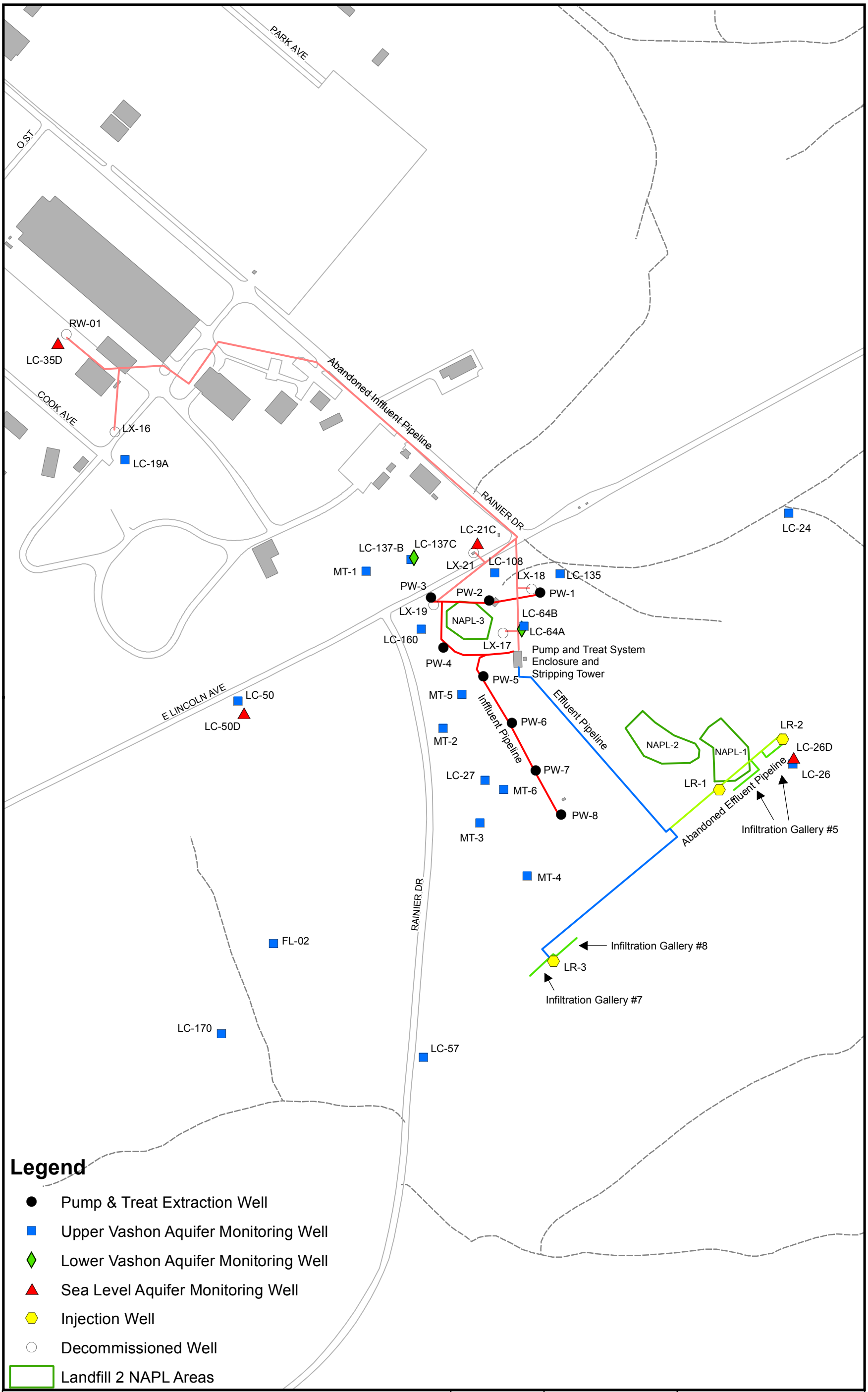

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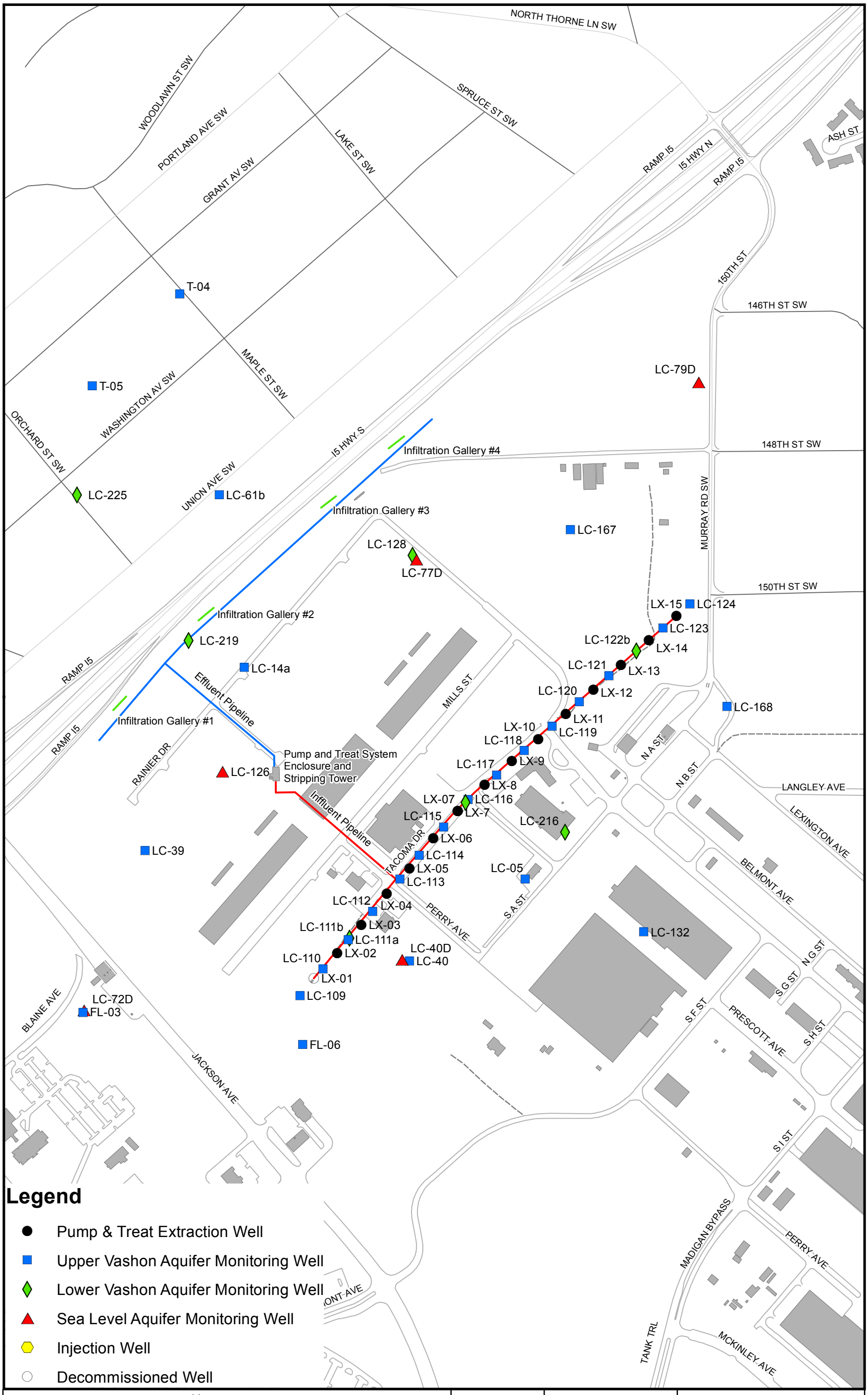

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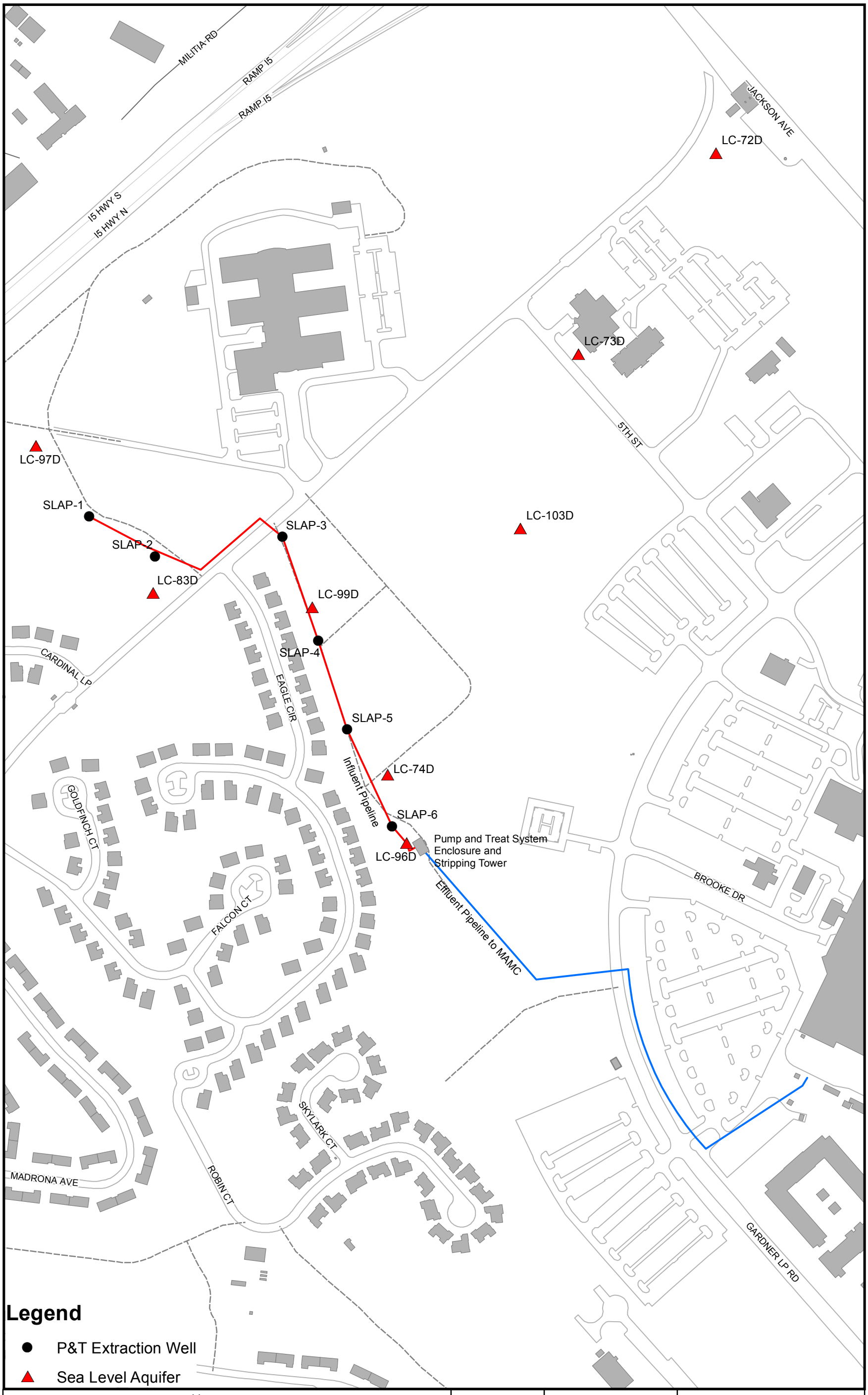

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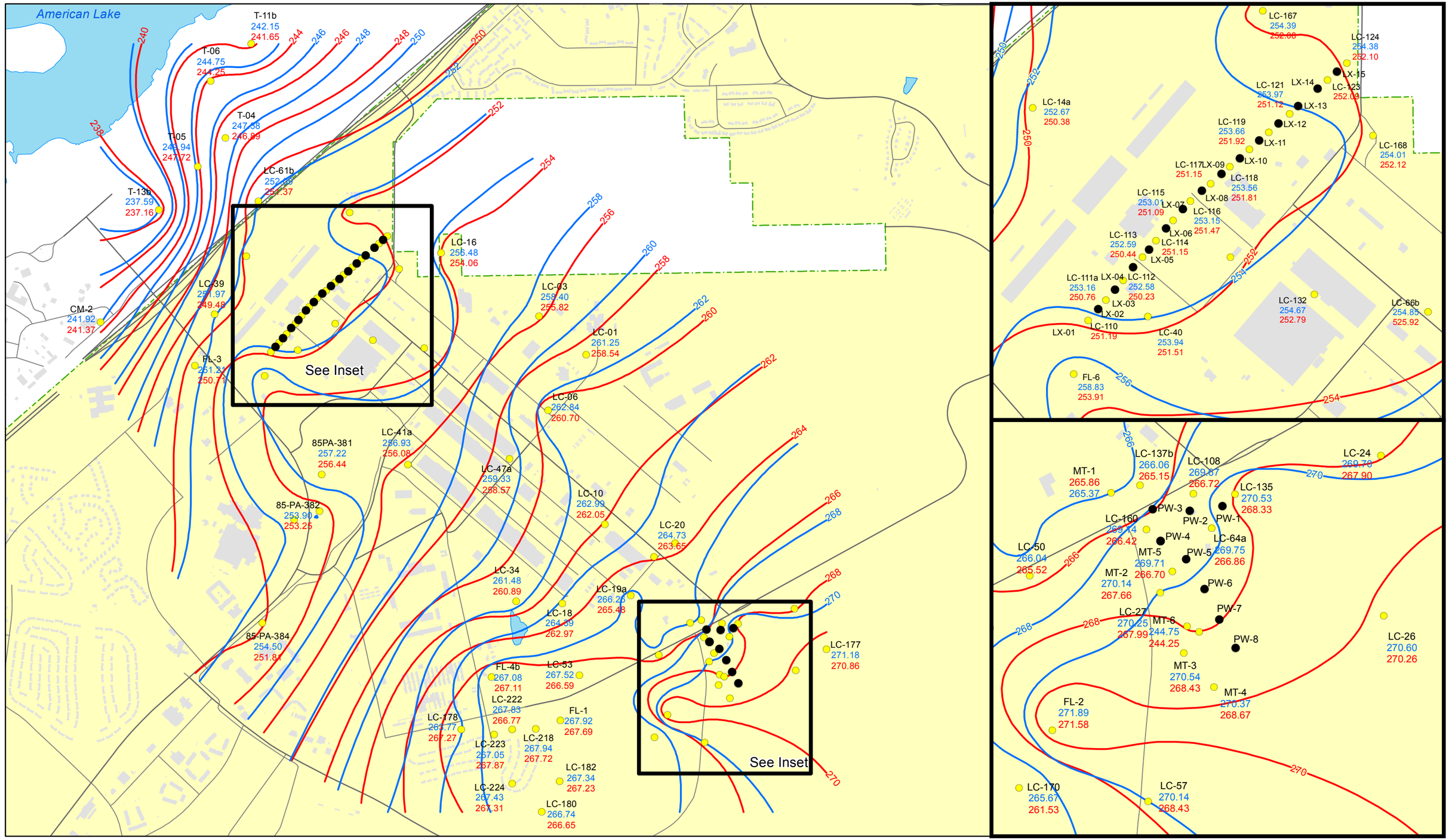

Legend

- P&T System Extraction Well
- Monitoring Well
- Wet Season (ft AMSL)
- Dry Season (ft AMSL)

Label ID
LC-06 - Well ID
262.84 - Wet Season WL
260.70 - Dry Season WL

N

0 625 1,250 2,500
Feet
1 inch = 1,350 feet

MAP DATA:
COORDINATE SYSTEM: UTM, Zone 10
HORIZONTAL DATUM: WGS 84

USACE

SEALASKA

Figure 3-1
Wet/Dry Season
Upper Vashon Aquifer
Water Table Contours 2014

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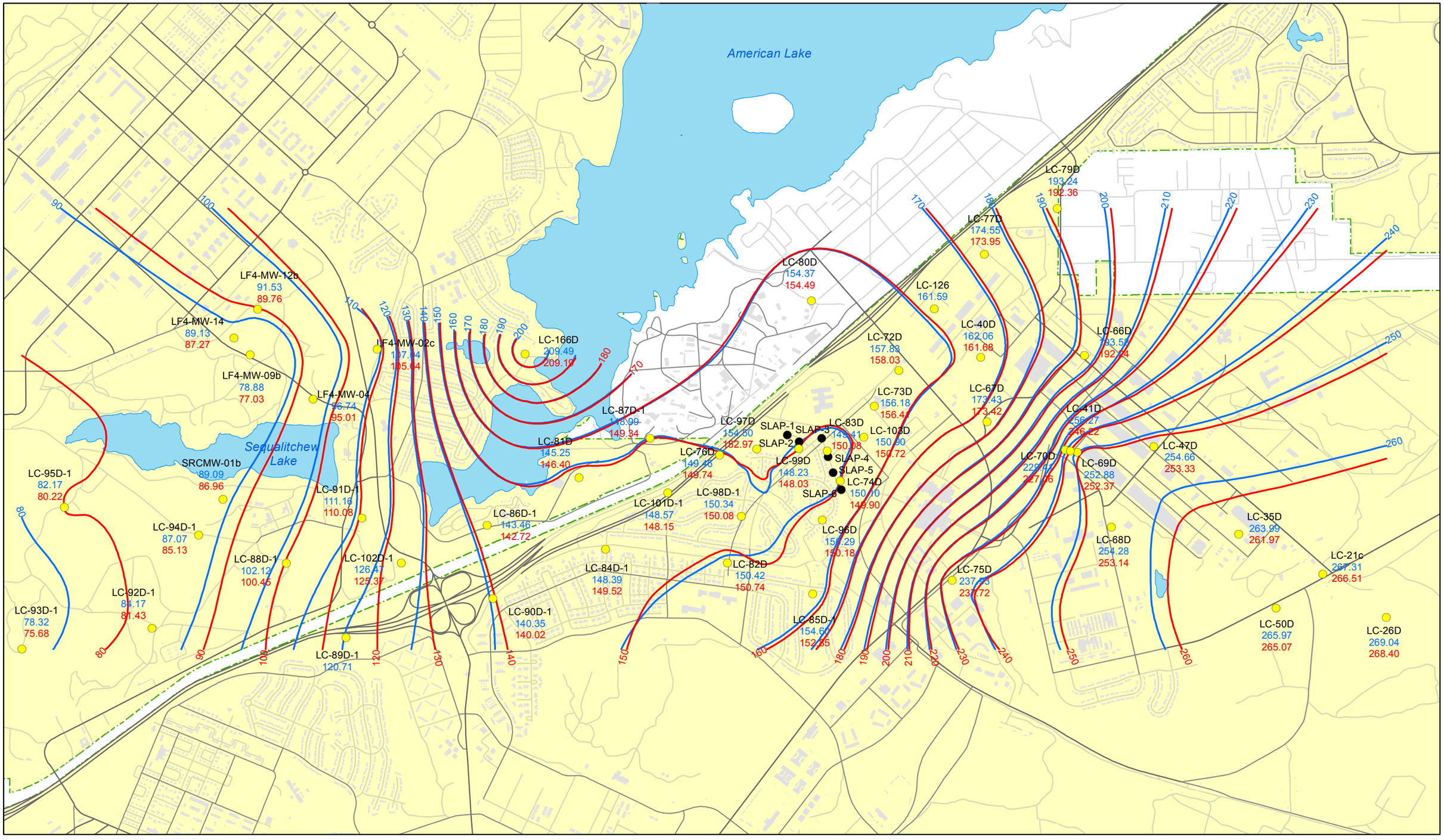

Legend

- Monitoring Well
- P&T System Extraction Well
- Dry Season (ft AMSL)
- Wet Season (ft AMSL)

Label ID
LC-40D - Well ID
162.06 - Wet Season WL
161.68 - Dry Season WL

N

0 700 1,400 2,800
Feet
1 inch = 1,660 feet

MAP DATA:
COORDINATE SYSTEM: UTM, Zone 10
HORIZONTAL DATUM: WGS 84

USACE

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Figure 3-2
Wet/Dry Season
Sea Level Aquifer
Water Table Contours 2014

Path: P:\Production\Fig\JBLM\TO 001\Logistics Center\LOGRAM_2014_GWM_Report\Maps\LOGRAM_GWMRpt-FIG_7_SLA_WetDryContour.mxd
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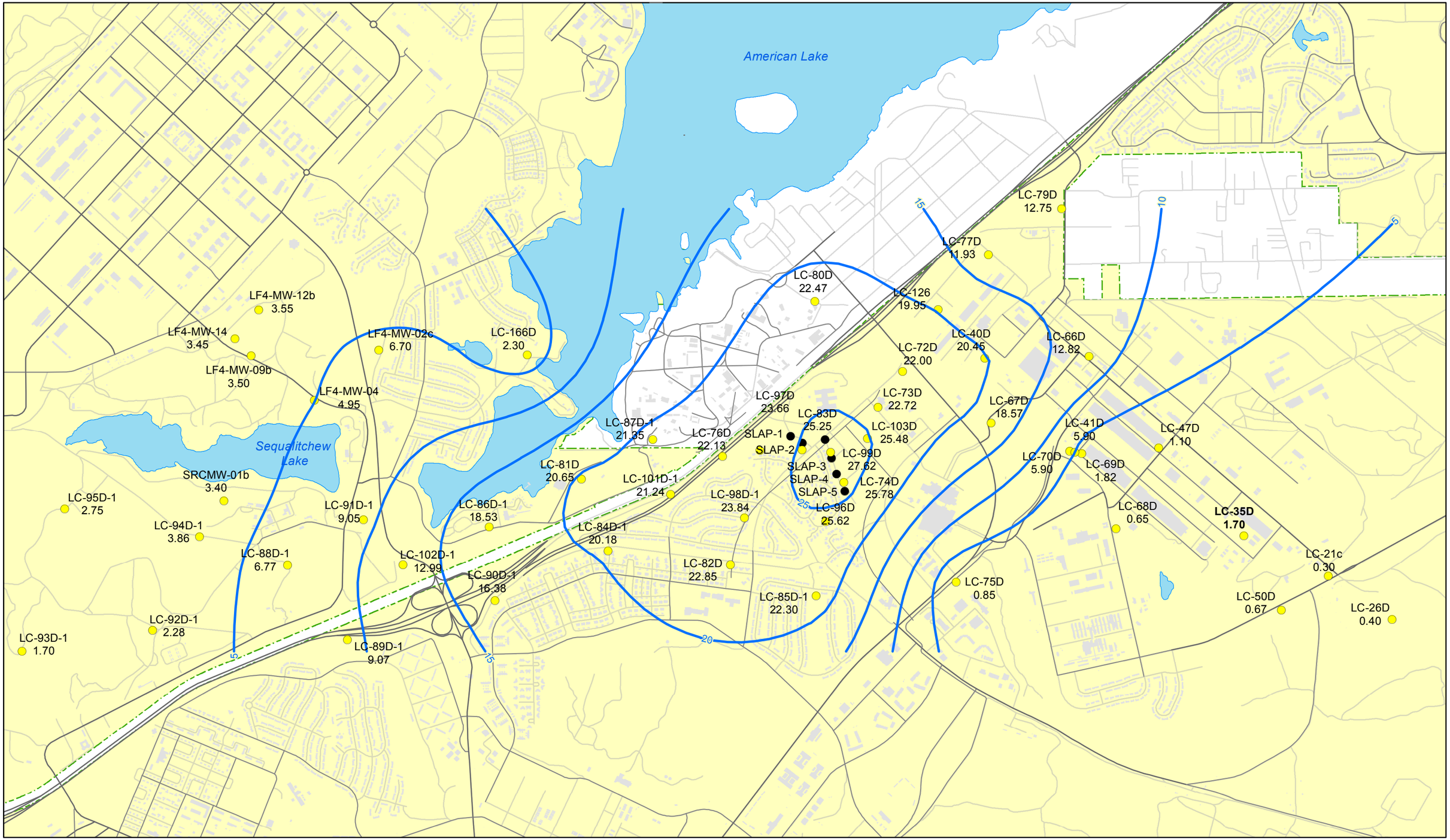

Legend

- Diff_Wet_SLA_lower_2014_Edit
- Monitoring Well
- P&T System Extraction Well

BOLD – WL higher in 2014 than 2009

Label ID
LC-89D-1 - Well ID
9.07 - Wet Season WL Change

N

0 700 1,400 2,800
Feet
1 inch = 1,660 feet

MAP DATA:
COORDINATE SYSTEM: UTM, Zone 10
HORIZONTAL DATUM: WGS 84

USACE

SEALASKA

Figure 3-3
Differences in Wet Season Sea Level Aquifer Water Table Contours 2009 & 2014

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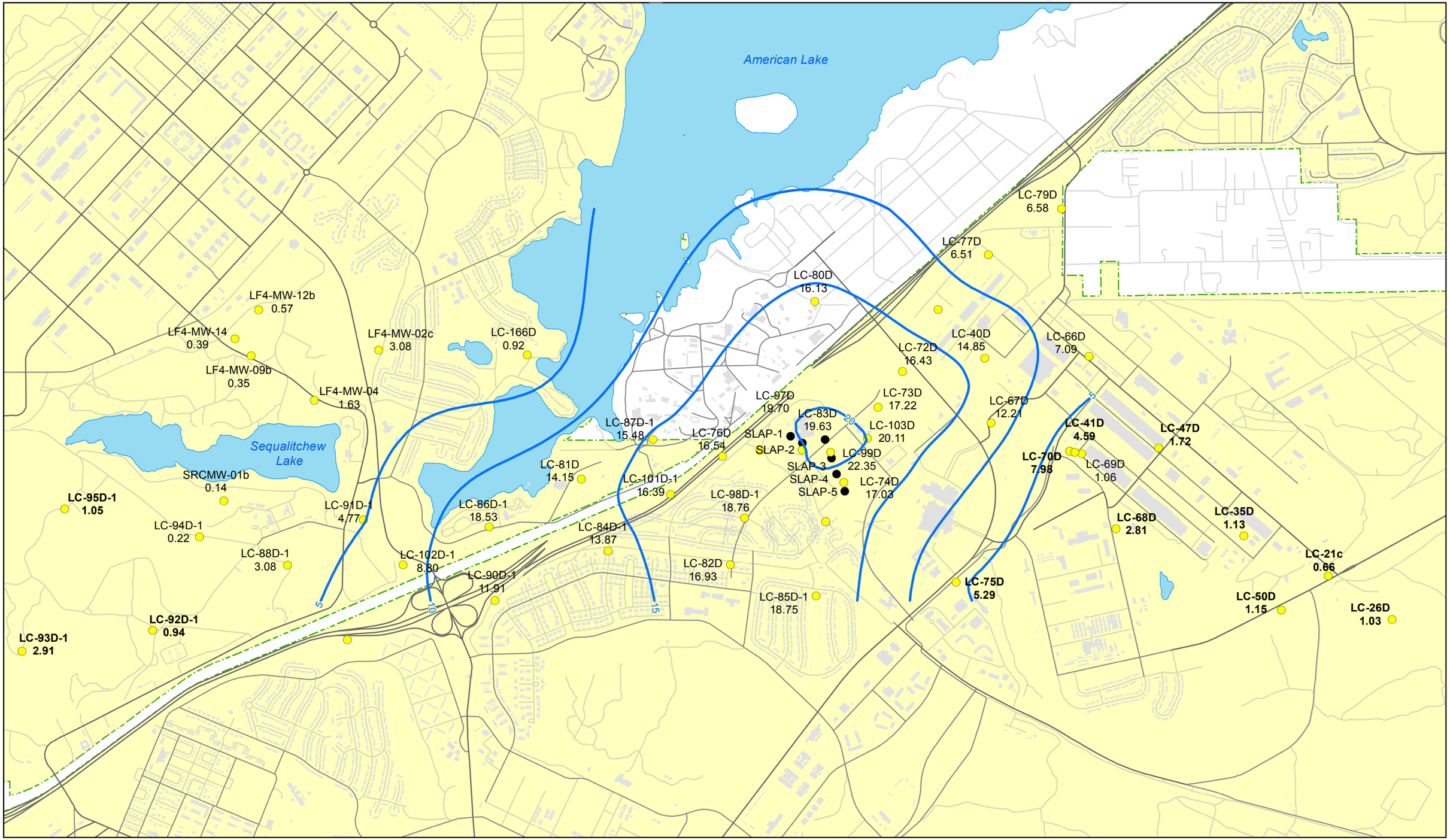

Legend

- Diff_Dry_SLA_lower_2014_Edit
- Monitoring Well
- P&T System Extraction Well

BOLD – WL higher in 2014 than 2009

Label ID
LC-92D-1 - Well ID
0.94 - Wet Season WL Change

N

0 700 1,400 2,800
Feet
1 inch = 1,660 feet

MAP DATA:
COORDINATE SYSTEM: UTM, Zone 10
HORIZONTAL DATUM: WGS 84

USACE

SEALASKA

Figure 3-4
Differences in Dry Season Sea Level Aquifer Water Table Contours 2009 & 2014

Path: P:\Production\Fig\JBLM\TO 001\Logistics Center\LOGRAM_2014_GWM_Report\Maps\LOGRAM_GWMRpt-FIG_9_SLA_DiffContour_DRY.mxd
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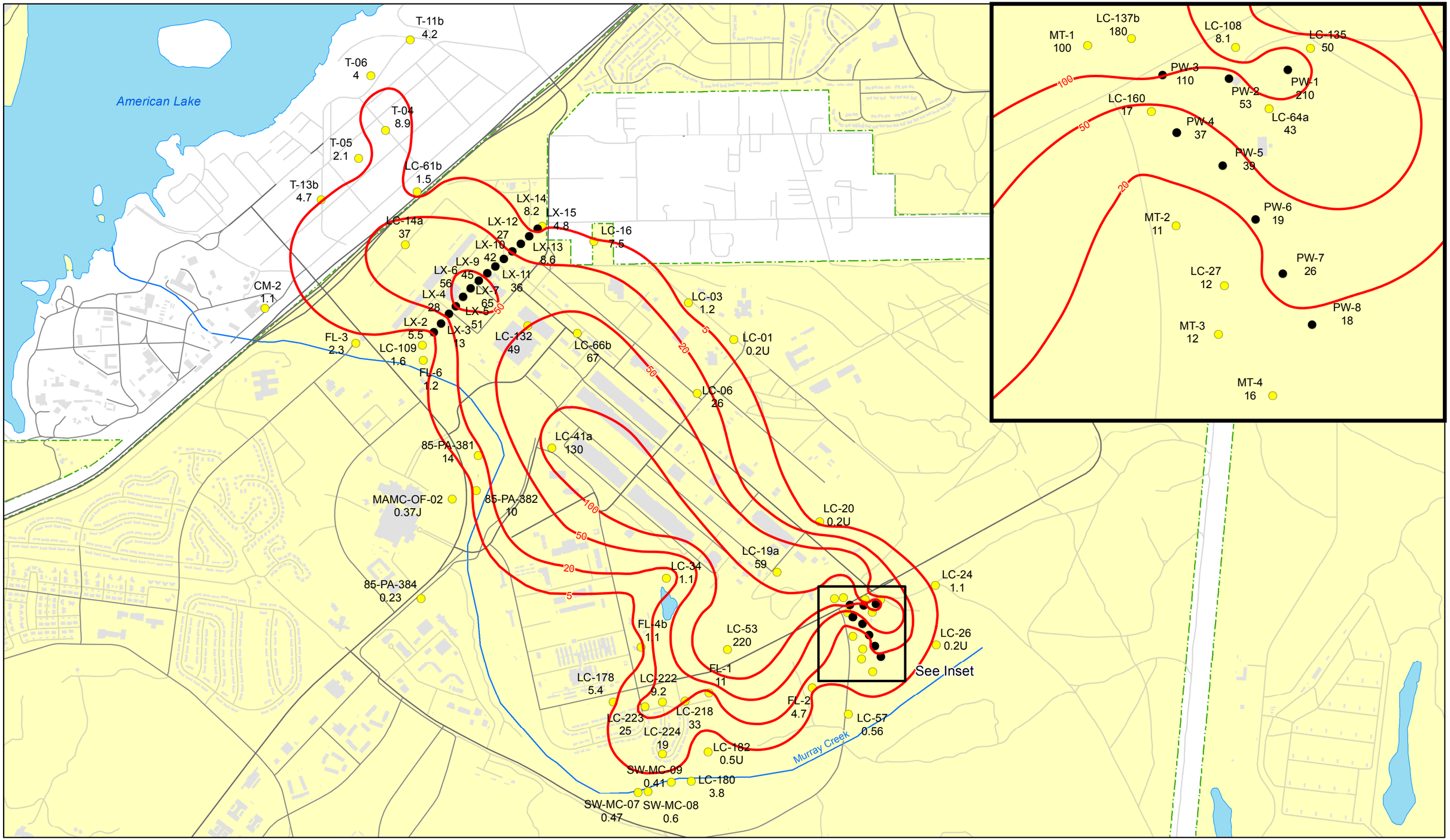

Legend

- UVA_TCE_Final5
- Monitoring Well/SW Sample Point
- P&T System Extraction Well
- AOI_STREAM_CLIP

Label ID
FL-3 - Well ID
2.3 - TCE (µg/L)

N

0 550 1,100 2,200
Feet
1 inch = 1,400 feet

MAP DATA:
COORDINATE SYSTEM: UTM, Zone 10
HORIZONTAL DATUM: WGS 84

USACE

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Figure 4-1
Upper Vashon Aquifer
TCE Plume

Path: P:\Production\Fig\JBLM\TO 001\Logistics Center\LOGRAM_2014_GWM_Report\Maps\LOGRAM_GWMRpt-FIG_4-1_UVA_TCE_Plume.mxd
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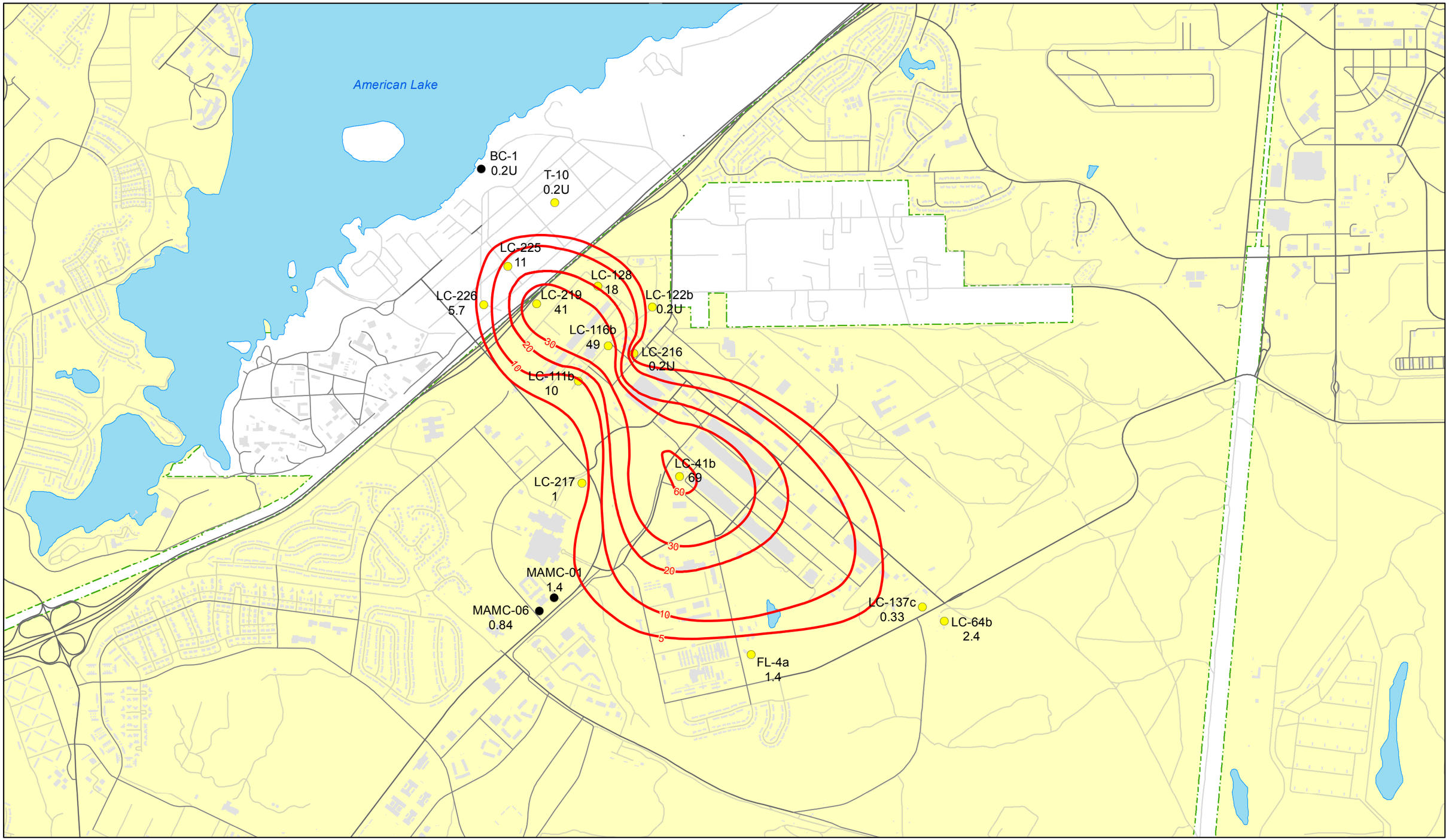

Legend

- TCE Concentration
- Monitoring Well
- Production Well

Label ID
LC-219 - Well ID
41 - TCE (µg/L)

N

0 700 1,400 2,800
Feet
1 inch = 1,660 feet

MAP DATA:
COORDINATE SYSTEM: UTM, Zone 10
HORIZONTAL DATUM: WGS 84

USACE

SEALASKA

Figure 4-2
Lower Vashon Aquifer
TCE Plume

Path: P:\Production\Fig\JBLM\TO 001\Logistics Center\LOGRAM_2014_GWM_Report\Maps\LOGRAM_GWMRpt-FIG_4-2_LVA_TCE_Plume.mxd
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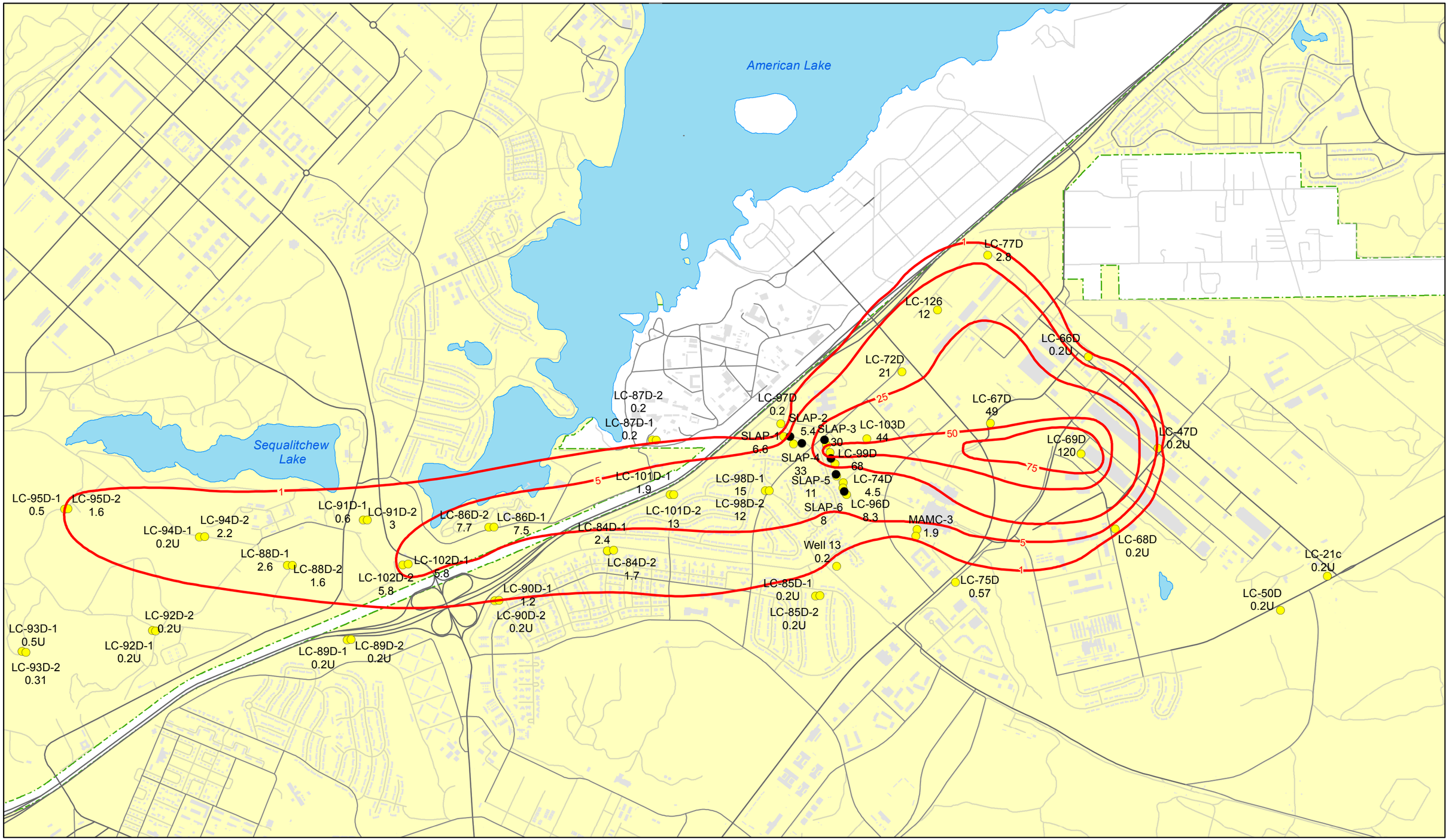

Legend

- TCE Concentration
- P&T System Extraction Well
- Monitoring Well

Label ID
LC-72D - Well ID
21 - TCE (µg/L)

N

0 700 1,400 2,800
Feet
1 inch = 1,660 feet

MAP DATA:
COORDINATE SYSTEM: UTM, Zone 10
HORIZONTAL DATUM: WGS 84

USACE

SEALASKA

Figure 4-3
Sea Level Aquifer
TCE Plume

Path: P:\Production\Fig\JBLM\TO 001\Logistics Center\LOGRAM_2014_GWM_Report\Maps\LOGRAM_GWMRpt-FIG_4-3_SLA_TCE_Plume.mxd
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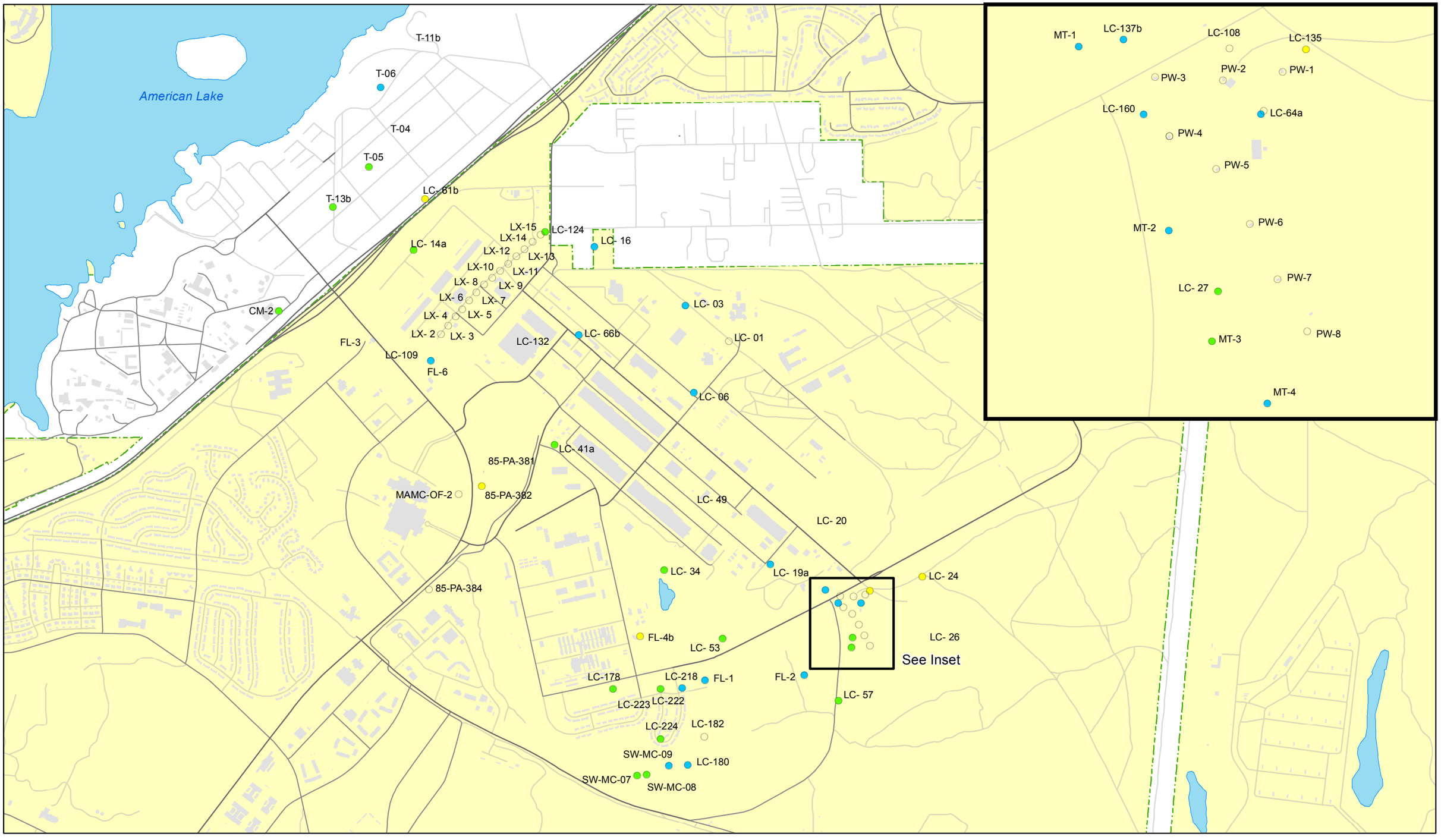

Legend

Sample Location and Trend Statistics

- Statistically Significant Upward Trend
- Not Statistically Significant Upward Trend
- Not Statistically Significant Downward Trend
- Statistically Significant Downward Trend
- Data Not Analyzed
- JBLM Boundary

N

0 600 1,200 2,400

Feet

1 inch = 1,450 feet

MAP DATA:
COORDINATE SYSTEM: UTM, Zone 10
HORIZONTAL DATUM: WGS 84

USACE

SEALASKA

Figure 6-1
Upper Vashon Aquifer TCE Concentration Current Trends 2005-2014

Path: P:\Production\Fig\JBLM\TO 001\Logistics Center\LOGRAM_2014_GWM_Report\Maps\LOGRAM_GWMRpt-FIG_13_UVA_Trend.mxd
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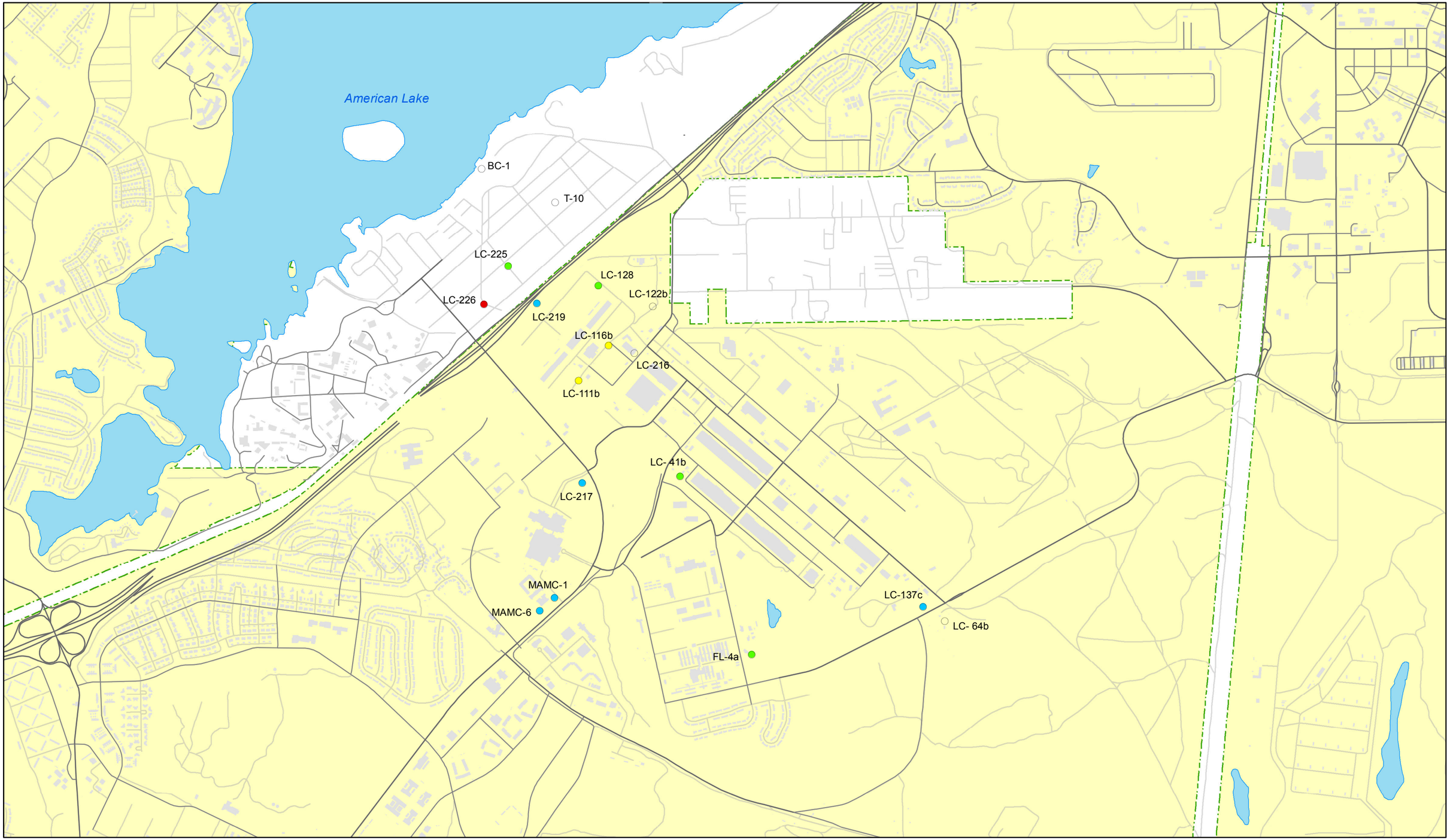

Legend

Sample Location & Trend Statistics

- Statistically Significant Upward Trend
- Not Statistically Significant Upward Trend
- Not Statisitcally Significant Downward Trend
- Statistically Significant Downward Trend
- Data Not Analyzed
- JBLM Boundary

N

0 700 1,400 2,800

Feet

1 inch = 1,660 feet

MAP DATA:
COORDINATE SYSTEM: UTM, Zone 10
HORIZONTAL DATUM: WGS 84

USACE

SEALASKA

Figure 6-2
Lower Vashon Aquifer Current TCE Concentration Trends 2005-2014

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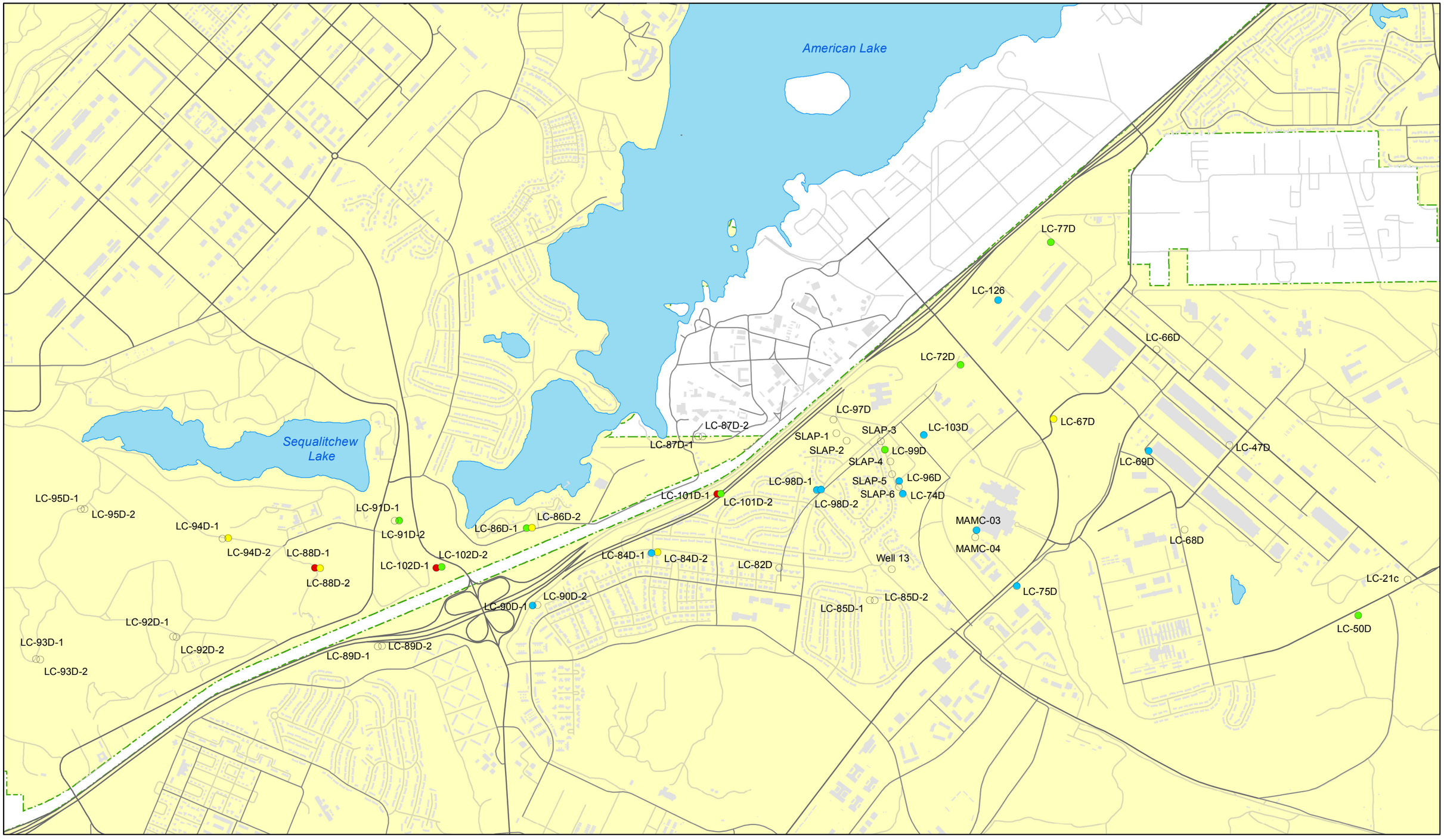

Legend

Sample Locations and Trend Statistics

- Statistically Significant Upward Trend
- Not Statistically Significant Upward Trend
- Not Statistically Significant Downward Trend
- Data Not Analyzed
- Statistically Significant Downward Trend
- JBLM Boundary

N

0 700 1,400 2,800

Feet

1 inch = 1,575 feet

MAP DATA:
COORDINATE SYSTEM: UTM, Zone 10
HORIZONTAL DATUM: WGS 84

USACE

SEALASKA

Figure 6-3
Sea Level Aquifer Current TCE Concentration Trends 2005-2014

Path: P:\Production\Fig\JBLM\LOGRAM_2014_GWM_Report\LOGRAM_GWMRpt-FIG_15_SLA_Trend.mxd
Date: 2/19/2015

Figure 7-1 - Source Area Upper Vashon Aquifer TCE Plume Current Trends - 2005 - 2014

Log RAM - Joint Base Lewis-McChord, Washington 98433

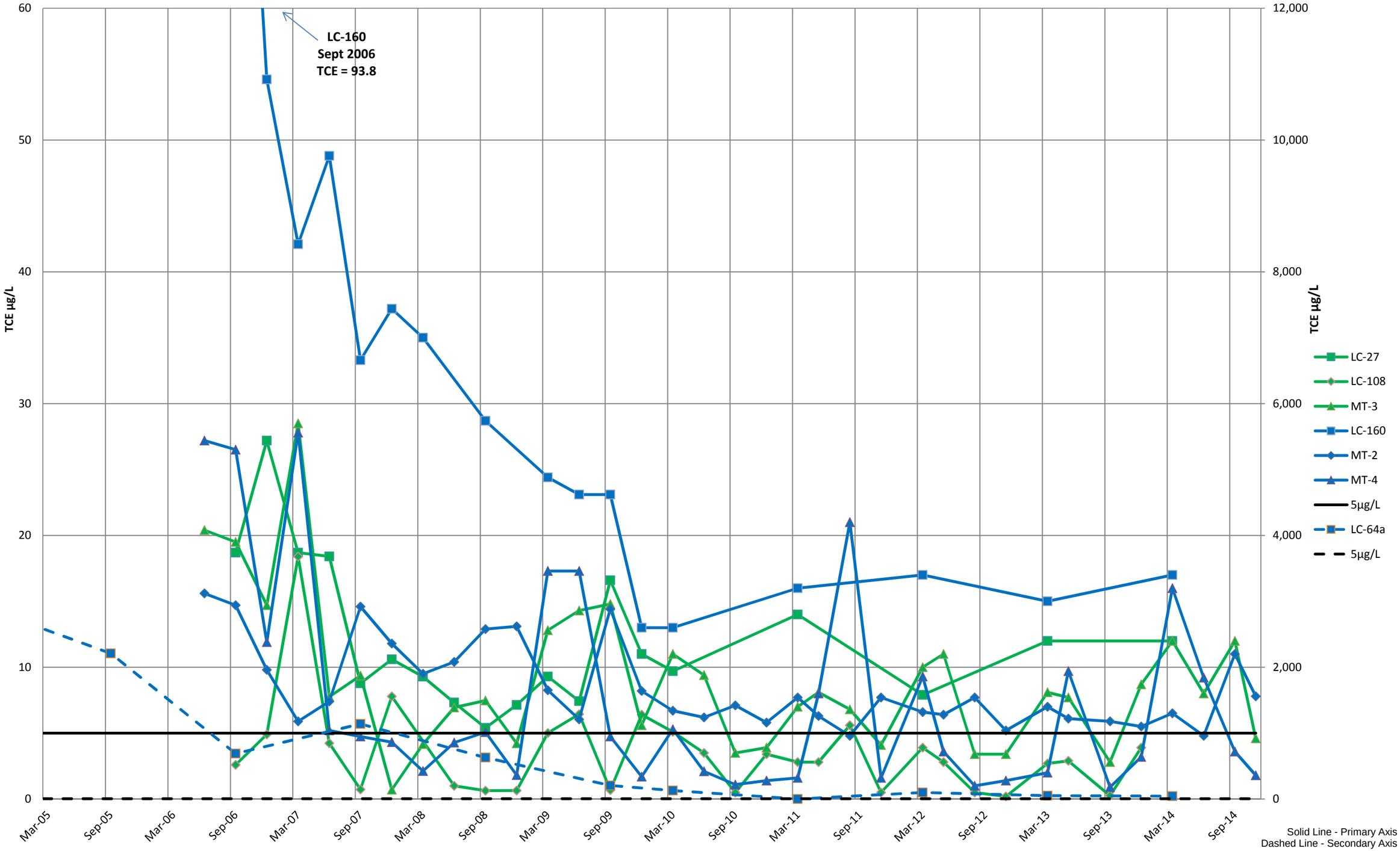

Figure 7-2 - Upper Vashon Aquifer TCE Plume "Edge" Current Trends between Landfill 2 and I-5 P and T Systems - 2005 - 2014

Log RAM - Joint Base Lewis-McChord, Washington 98433

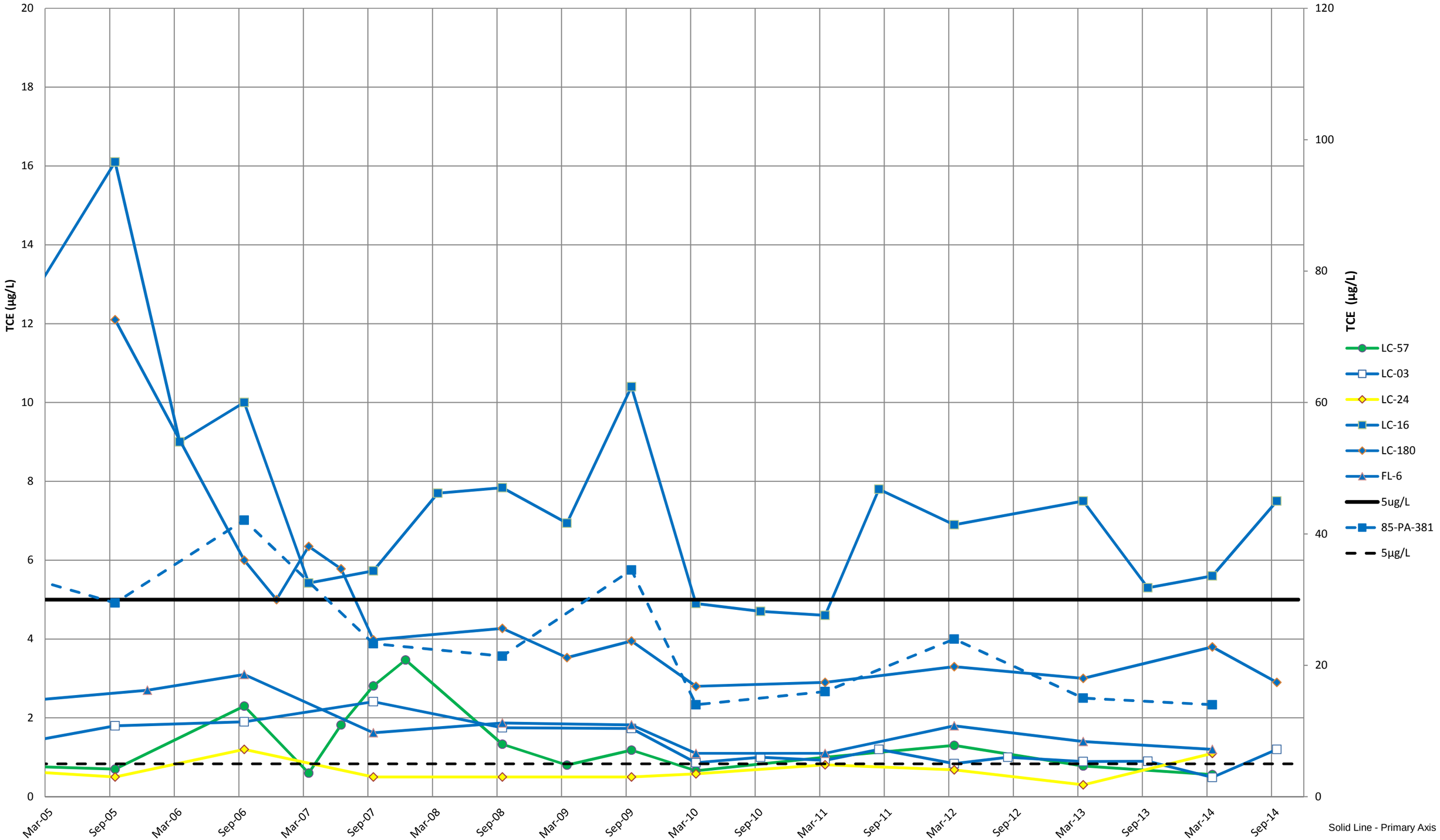

Figure 7-3 - Upper Vashon Aquifer TCE Plume "Center" Current Trends between Landfill 2 and I-5 P and T Systems - 2005 - 2014

Log RAM - Joint Base Lewis-McChord, Washington 98433

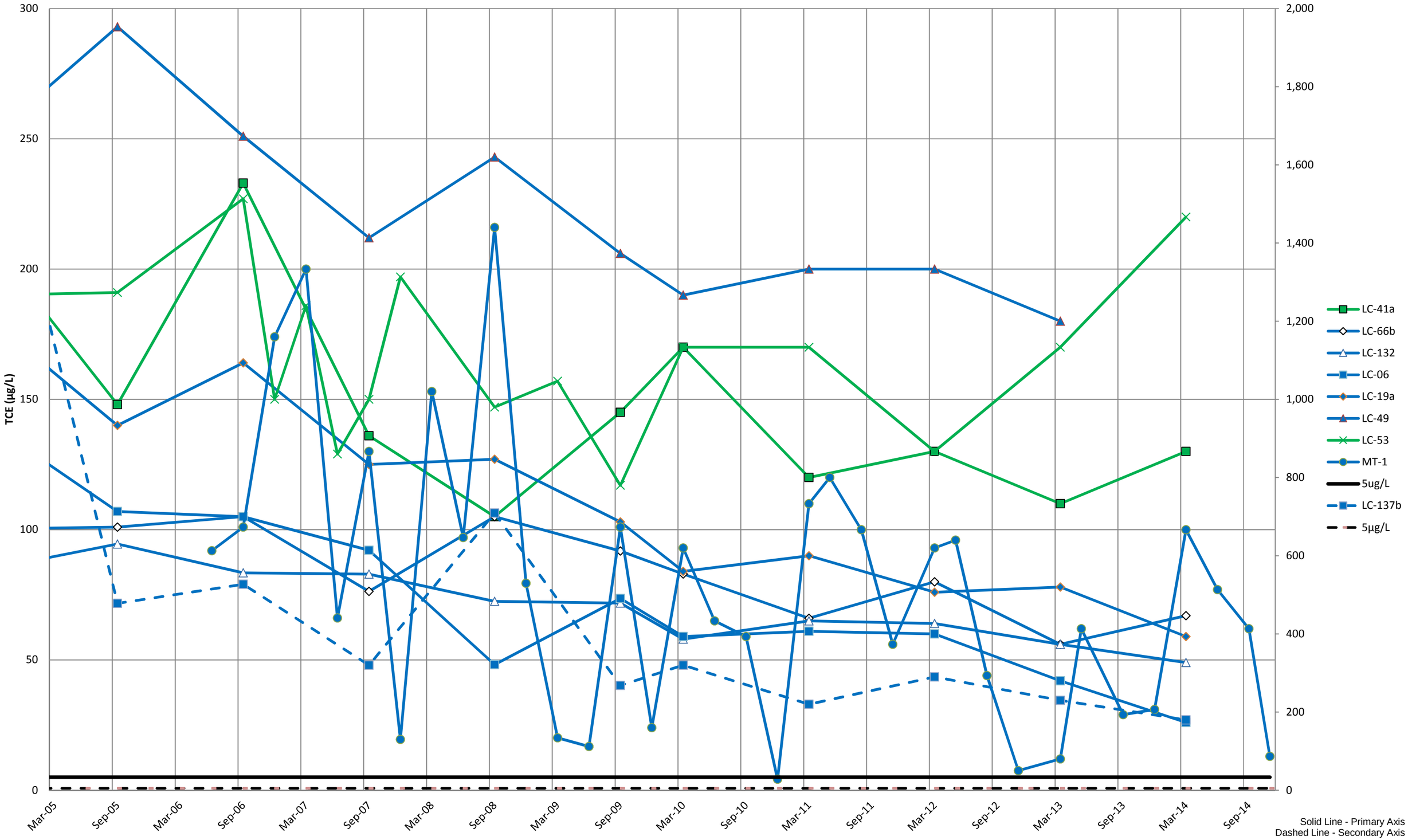

Figure 7-4 - Madigan Family Housing Area Upper Vashon Aquifer TCE Plume Current Trends - 2005 - 2014

Log RAM - Joint Base Lewis-McChord, Washington 98433

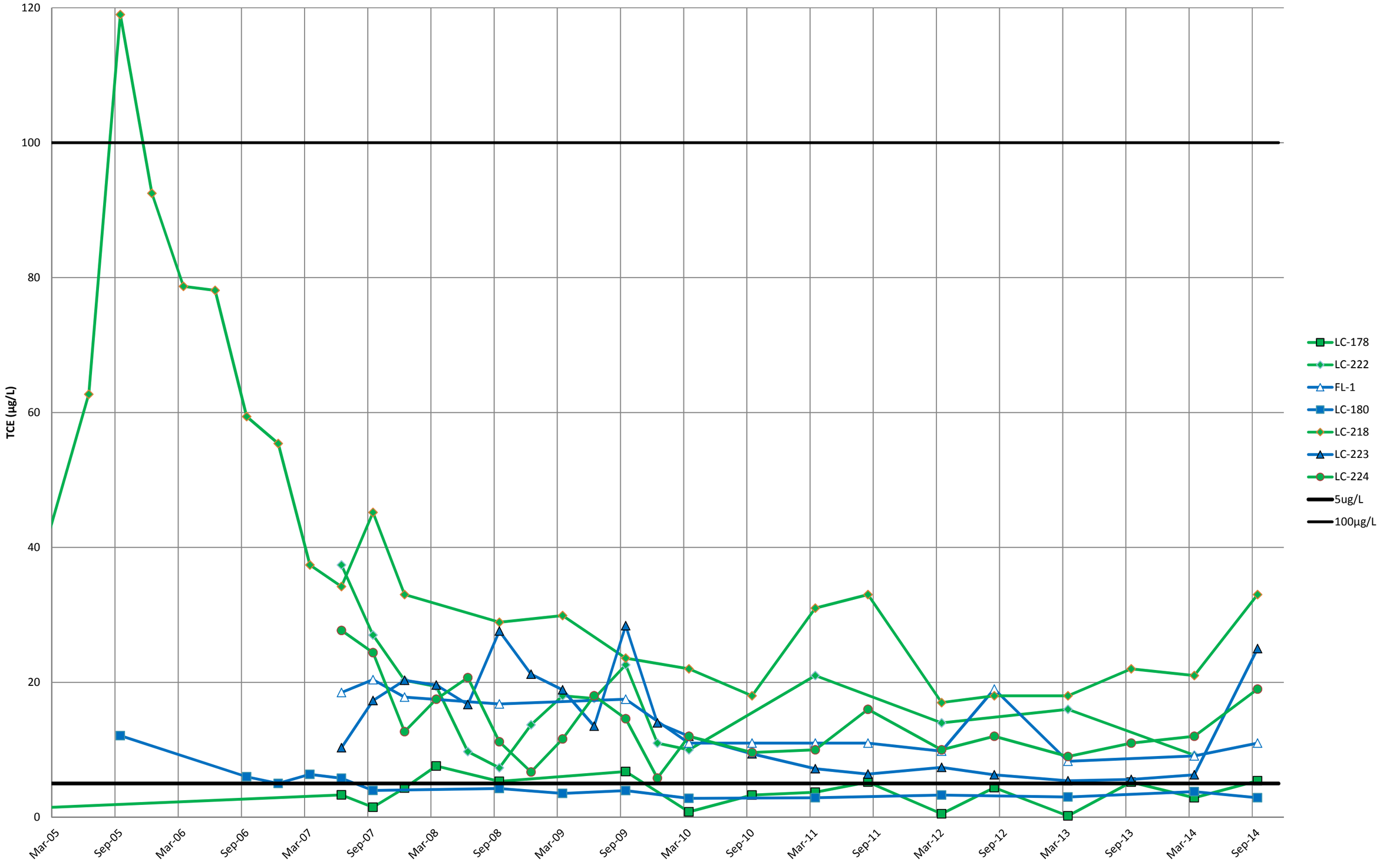

Figure 7-5 - Upper Vashon Aquifer TCE Plume "Edge" Current Trends Down-gradient of the I-5 P and T System - 2005 to 2014

Log RAM - Joint Base Lewis-McChord, Washington 98433

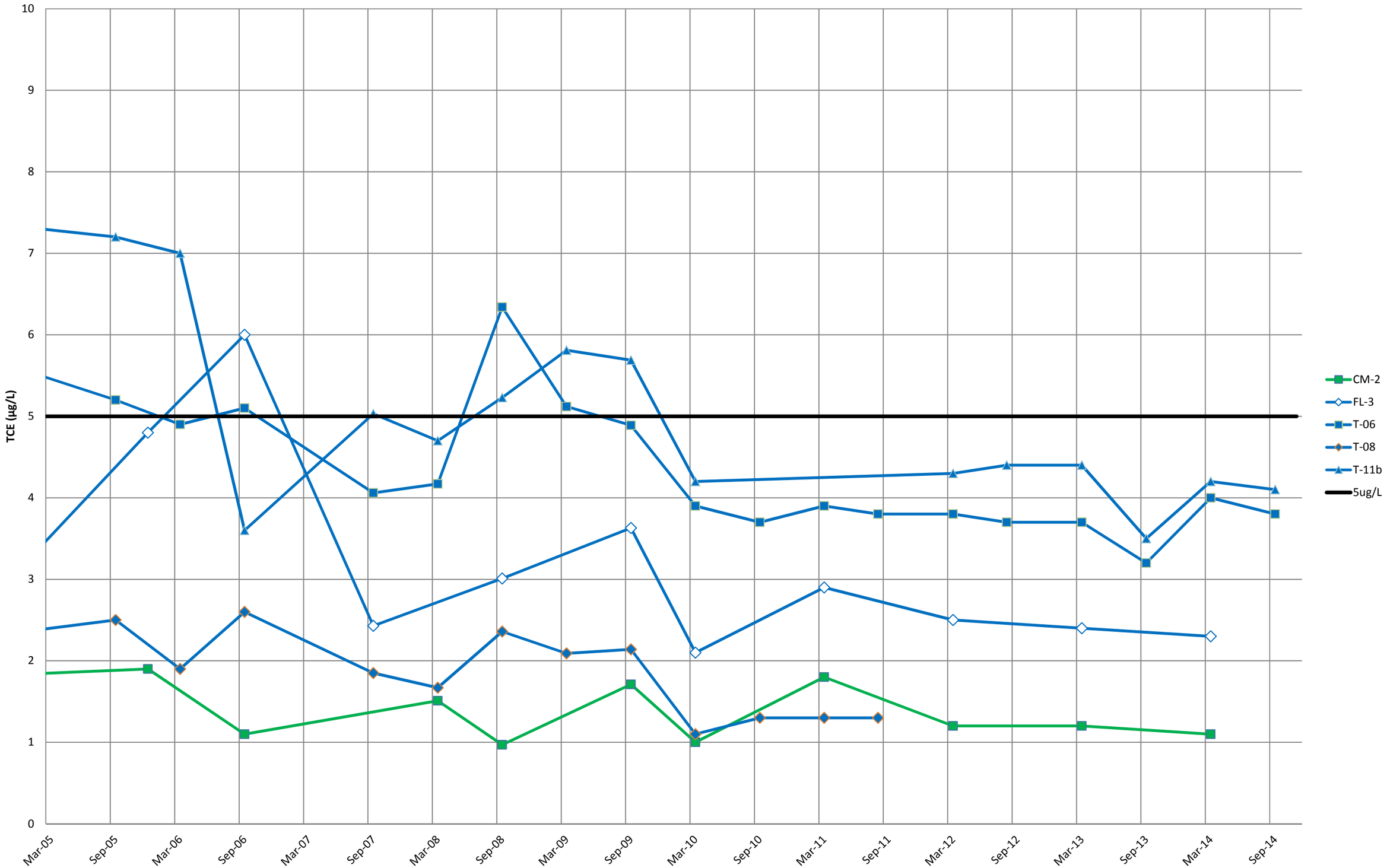

Figure 7-6 - Upper Vashon Aquifer TCE Plume "Center" Current Trends Down-gradient of the I-5 P and T System - 2005 - 2014

Log RAM - Joint Base Lewis-McChord, Washington 98433

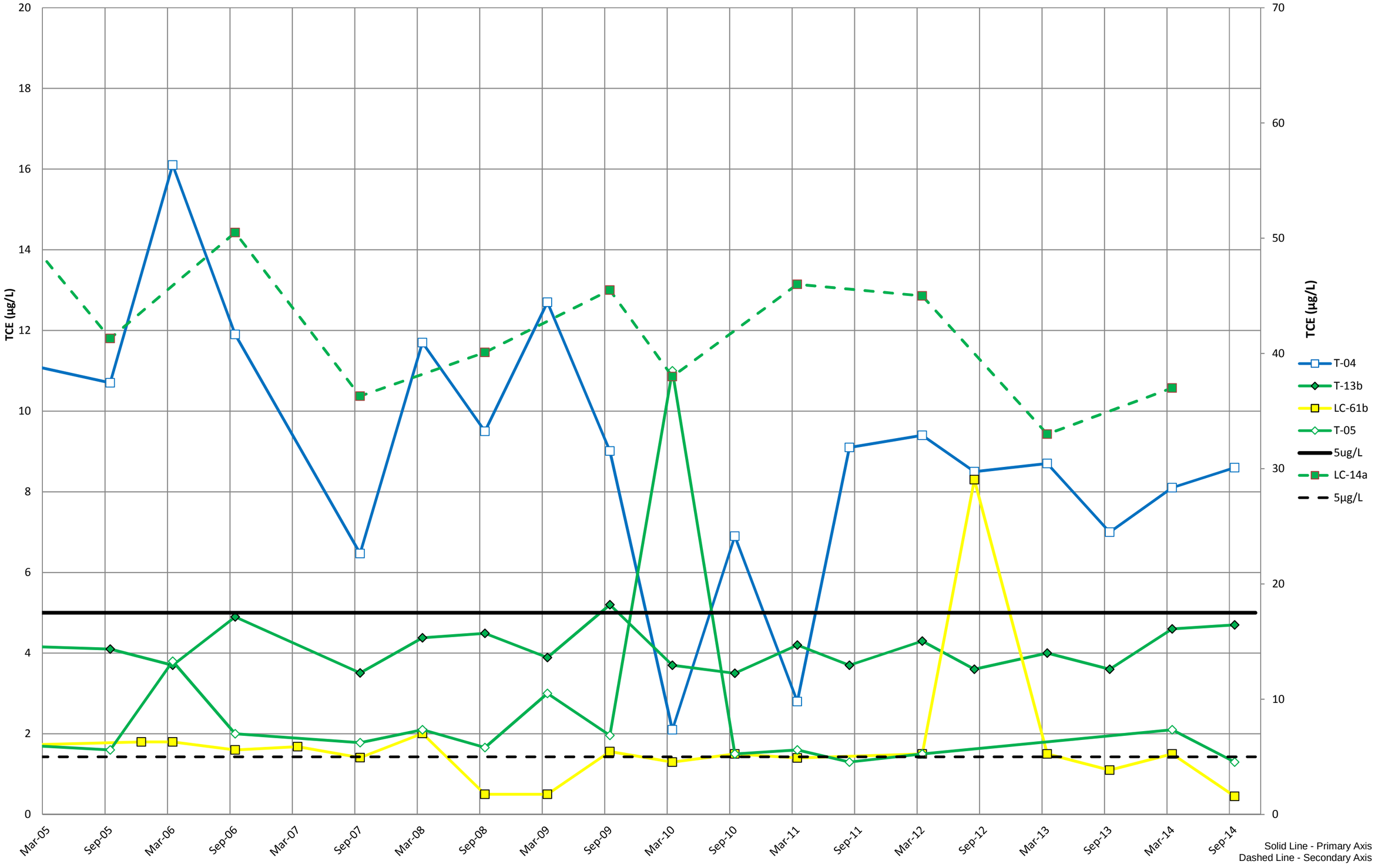

Figure 7-7 - Lower Vashon Aquifer TCE Plume "Edge" Current Trends - 2005 - 2014

Log RAM - Joint Base Lewis-McChord, Washington 98433

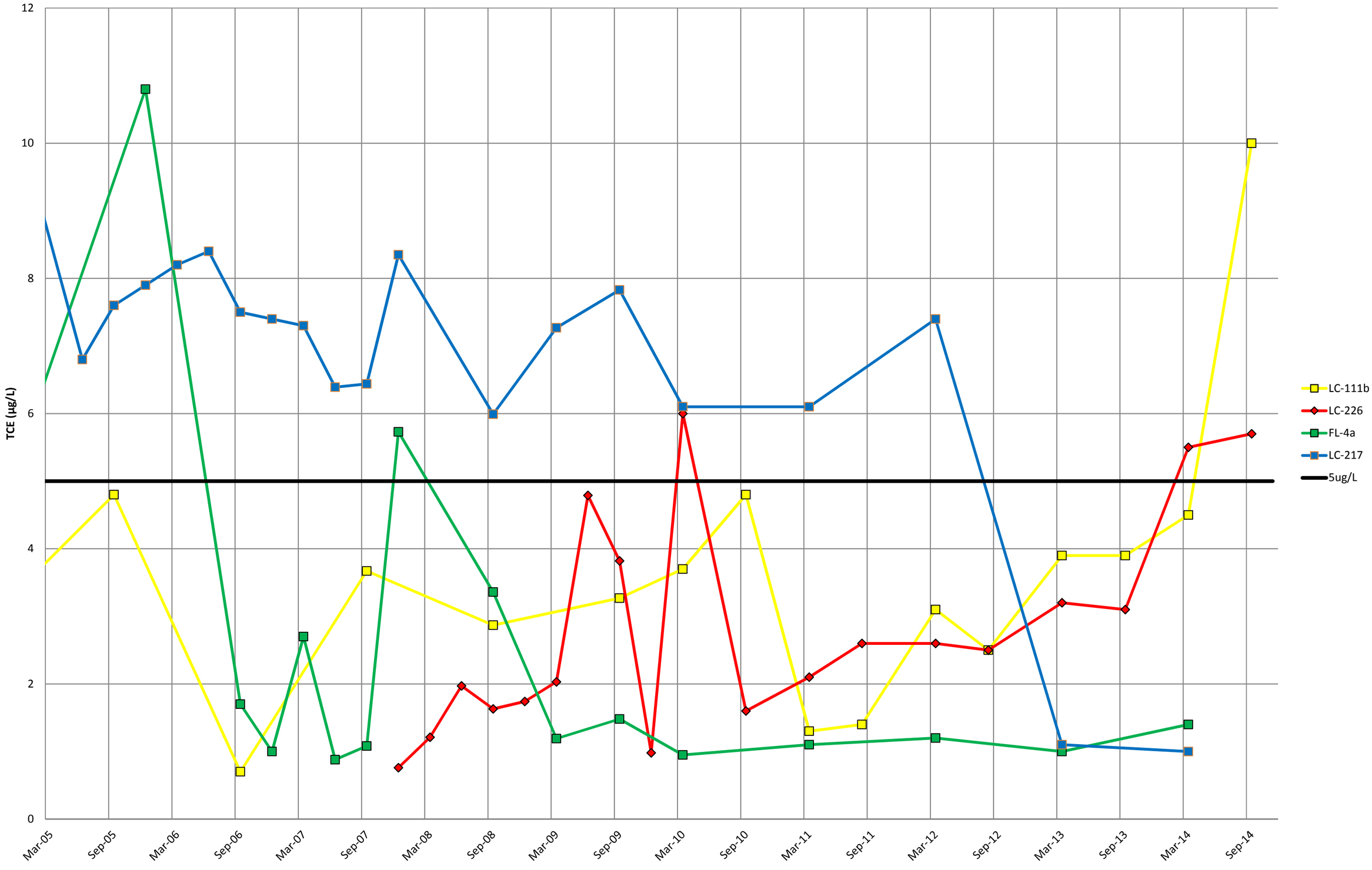

Figure 7-8 - Lower Vashon Aquifer TCE Plume "Center" Current Trends - 2005 - 2014

Log RAM - Joint Base Lewis-McChord, Washington 98433

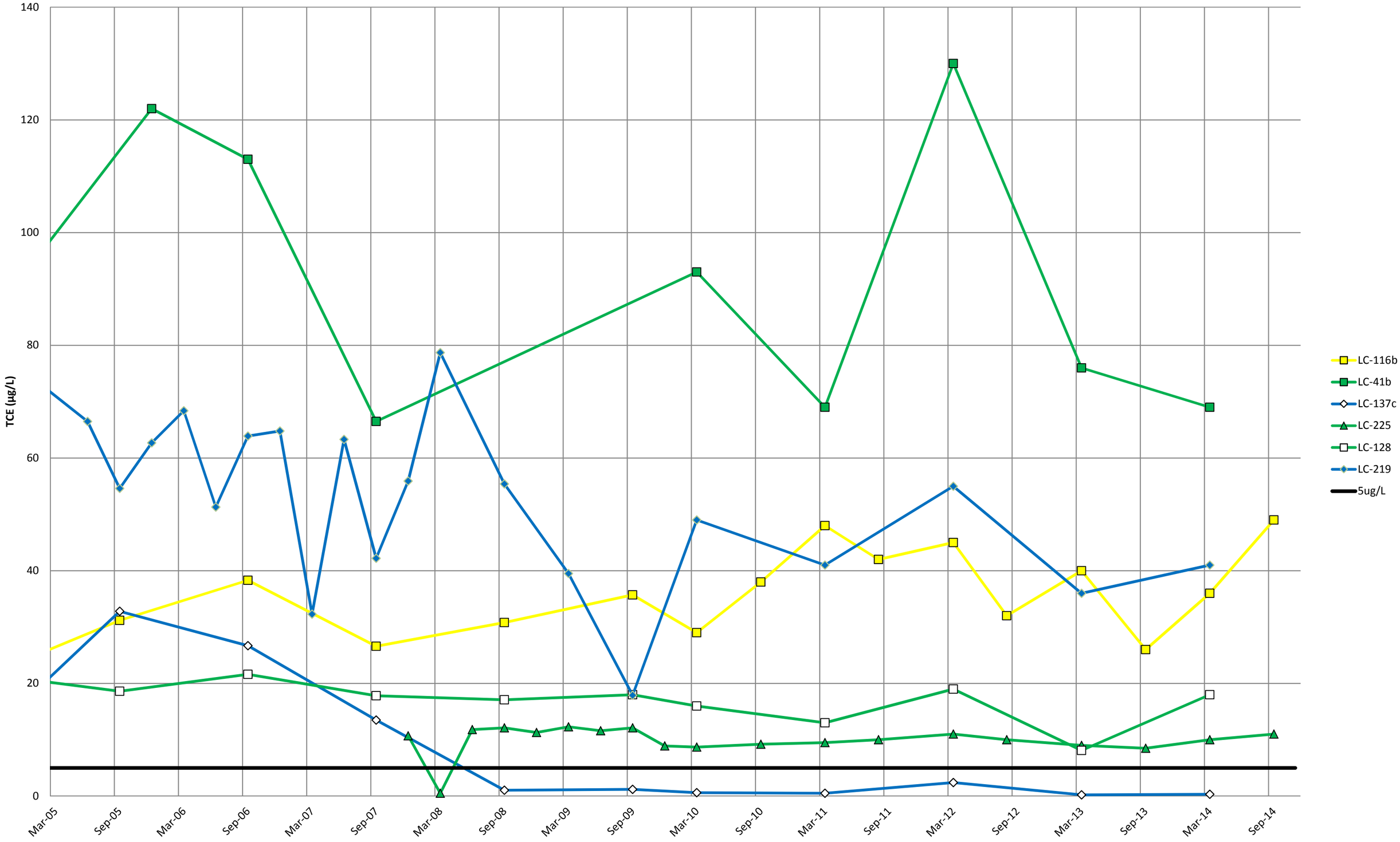

Figure 7-9 - Sea Level Aquifer TCE Plume Current Trends Up-gradient of SLA P and T System - 2005 - 2014

Log RAM - Joint Base Lewis-McChord, Washington 98433

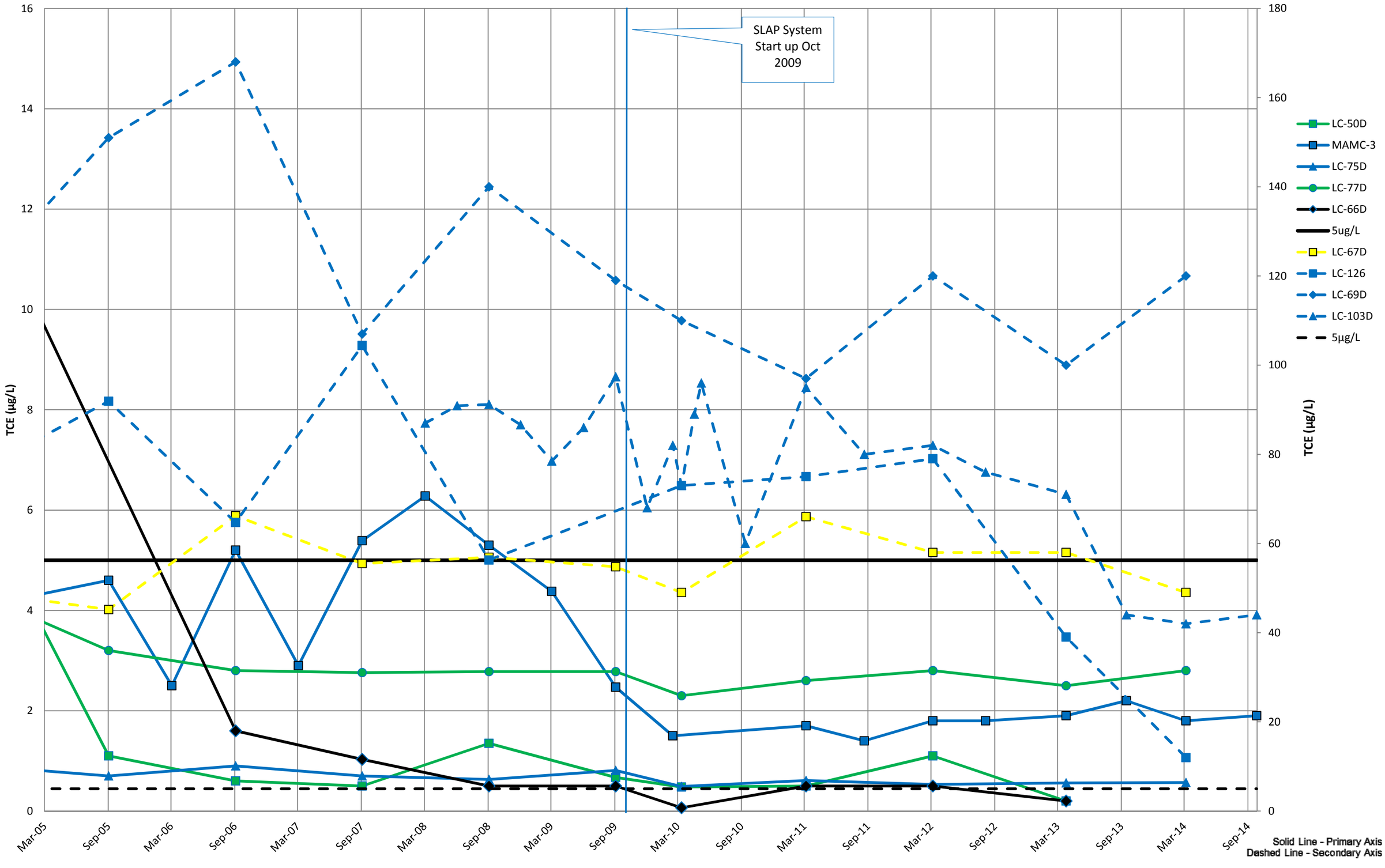

Figure 7-10 - Sea Level Aquifer TCE Plume Current Trends SLA P and T System - 2005 - 2014

Log RAM - Joint Base Lewis-McChord, Washington 98433

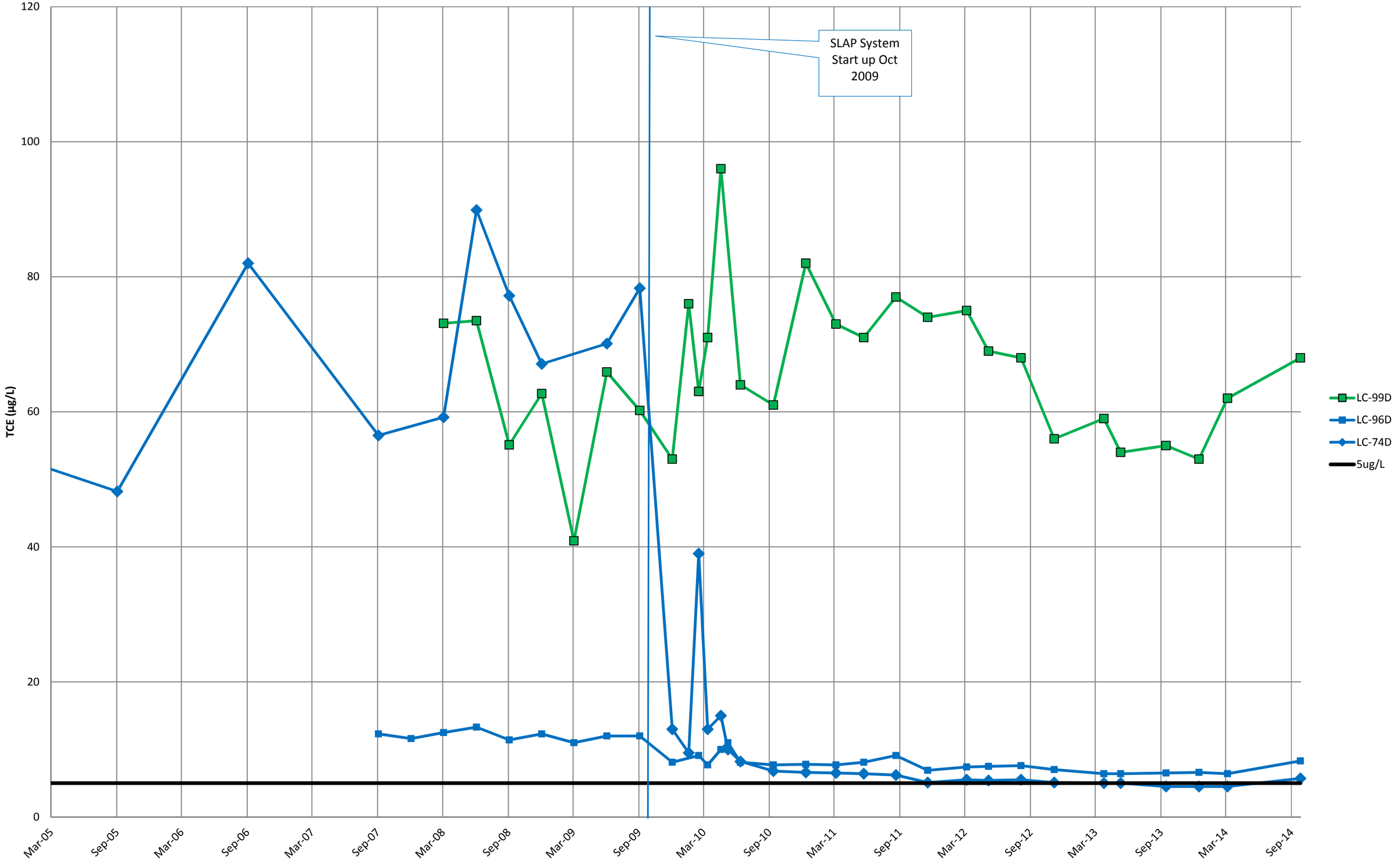

Figure 7-11 - Sea Level Aquifer TCE Plume Current Trends Shallow Wells Down-Gradient of SLA P and T System - 2005 - 2014

Log RAM - Joint Base Lewis-McChord, Washington 98433

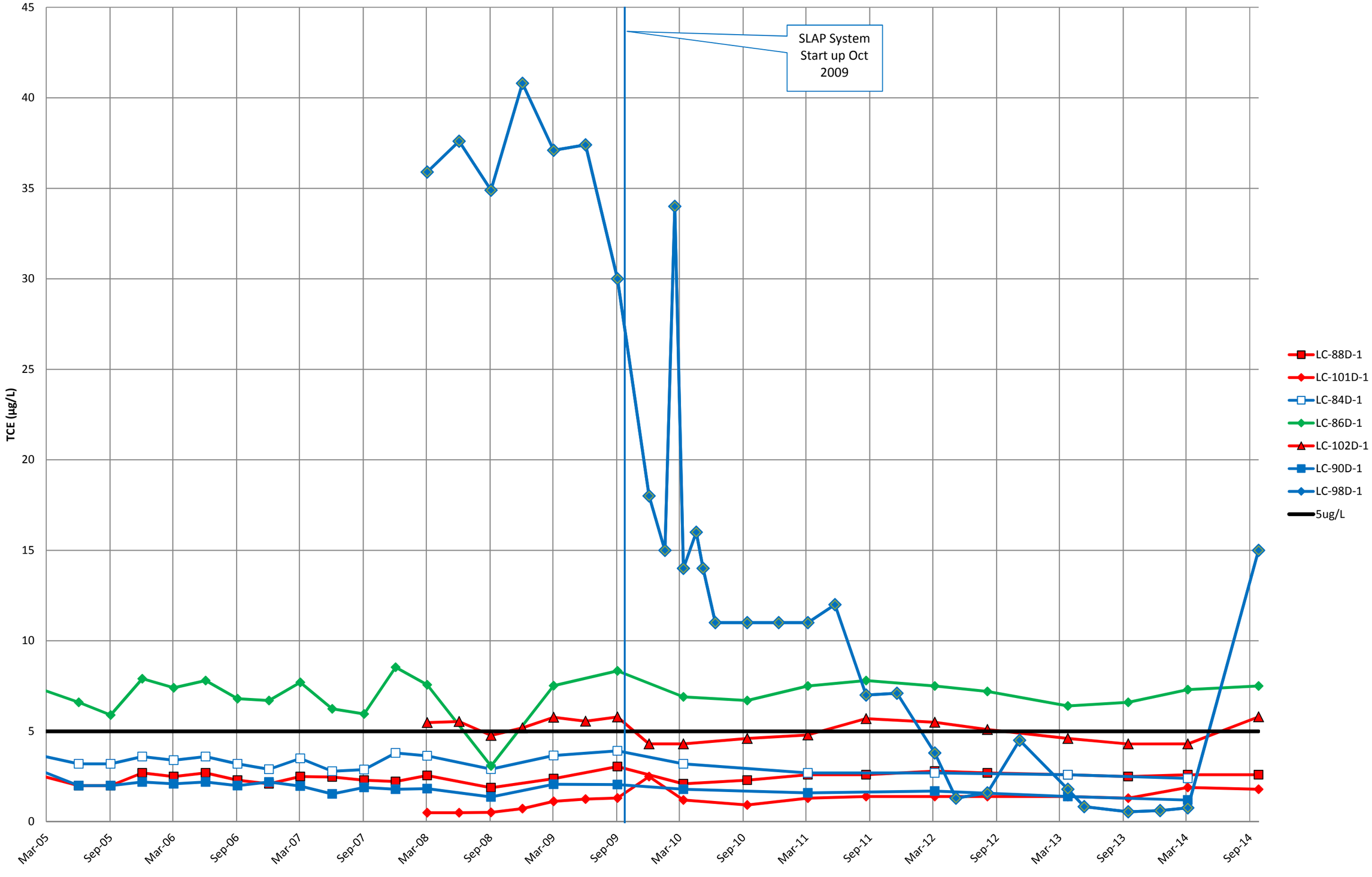

Figure 7-12 - Sea Level Aquifer TCE Plume Current Trends Deep Monitoring Wells Down-Gradient of SLA P and T System - 2004 - 2014

Log RAM - Joint Base Lewis-McChord, Washington 98433

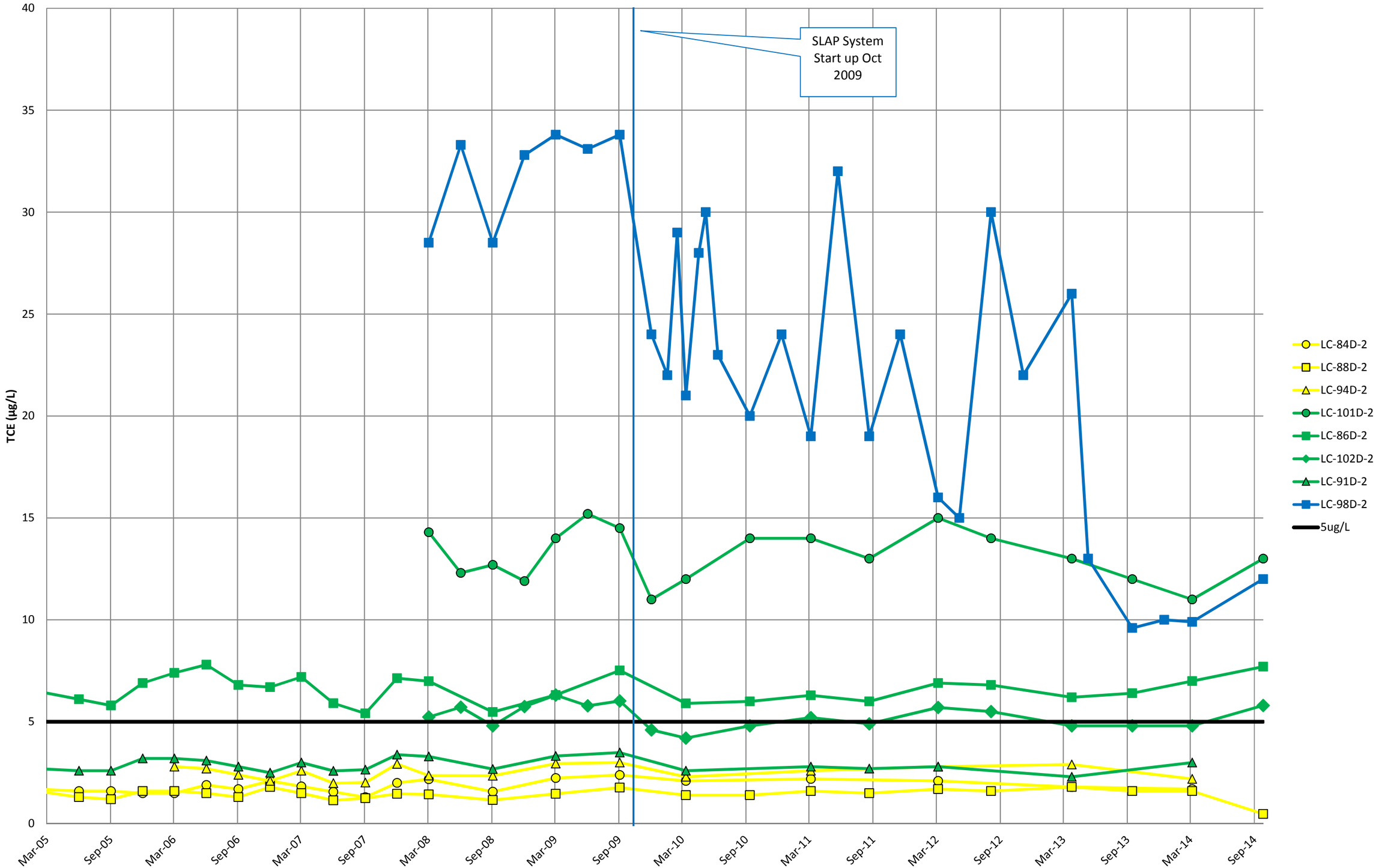

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Table 1-1 - Contaminants of Concern Remediation Goals
Log RAM, Joint Base Lewis-McChord, Washington 98433

Contaminant	Maximum Concentration from 2005 to Winter 2013 (ug/L)	Location	Date	ROD Remediation Goal (ug/L)	MTCA Method A MCL (µg/L)
Groundwater					
Trichloroethylene (TCE)	2210.0	LC-64A	17-Aug-05	5	-
cis 1,2 Dichloroethylene (DCE)	16300.0	LC-136A	17-Aug-05	70	-
Tetrachloroethylene (PCE)	0.7	PW-1	22-Mar-12	5	-
1,1,1 Trichloroethane (TCA)	12.0	LC-226	12-Sep-08	-	200
Vinyl Chloride (VC)	113.0	PW-3*	26-Jun-06	-	2.00
Surface Water					
Trichloroethylene (TCE)	0.79	SW-MC-08	24-Aug-12	80	-
cis 1,2 Dichloroethylene (DCE)	0.5U	-	-	-	-

Notes:

* = PW-3 sample was J flagged

- = Not applicable, no remediation goal established

Monitoring wells LC-136A and LC-64A, and Landfill 2 pump and treat system extraction wells PW-1 and PW-3 are located within Landfill 2 and are screened in the Upper Vashon aquifer. Monitoring well LC-226 is located off-base in Tillicum, WA and is screened in the Lower Vashon aquifer.

Table 1-2 - Changes to Sampling Network 1994 - 2014
Log RAM, Joint Base Lewis-McChord, Washington 98433

Sampling Locations	Month	Change	Aquifer or Samples	Basis/Comment
		1994		
All	1-Aug-94	Original Compliance Monitoring Plan	All samples	
	1-Dec-94	Addendum to Compliance Monitoring Plan		
		1997		
	1-Sep-97	First 5 Year Review for Log Center		
		1998		
SW-MC-2	Jun-98	Location moved and renumbered to SW-MC-4	Murray Cr	To move the location to within the trichloroethene contamination plume boundaries
All	Sep-98	Analytical method changed from SW-846 8010A to SW-846 8260	All samples	
LC-19A, (LC-144A) LC-19B, (LC-144B) LC-19C	Sep-98	LC-144A and LC-144B replaced by LC-19A, LC-19B, and LC-19C	UV	To evaluate vertical variations in contaminant concentrations for this area
LF4-MW2C	Sep-98	Removed from sampling program	SL	Not likely to be impacted by the Logistics Center plume
LC-49A	Sep-98	LC-49A removed from sampling program; adjacent well LC-49 remains in program	UV	Recharged poorly and usually contained a minimal amount of water; historically exhibited the most variation in contaminant concentrations
LC-35D, LC-47D, LC059D	Dec-98	Added to sampling program	SL	To further evaluate the Sea Level aquifer
LC-21C	Dec 98, Dec 00 forward	Added to sampling program	SL	Sampled intermittently for three quarters, then regularly starting 21st quarter (designated as a Sea Level aquifer well beginning 21st quarter)
		1999		
Most Wells	Jun – Sep 99	Initiation of low-flow purging and sampling technique	UV, LV, and SL	To obtain samples more representative of aquifer conditions
Multiple	Dec 99 through Mar 01	Installation of dedicated bladder pumps, and removal of Hydrostar pumps	UV, LV, and SL	To collect samples more representative of aquifer conditions
T-12B (T-01)	Dec-99	T-01 replaced by T-12B	UV	Vandalized
LC-75D, LC-76D, LC-77D	Dec-99	Added to water level measurement list	SL	To further evaluate the Sea Level aquifer; installed in 1999

Table 1-2 - Changes to Sampling Network 1994 - 2014
Log RAM, Joint Base Lewis-McChord, Washington 98433

Sampling Locations	Month	Change	Aquifer or Samples	Basis/Comment
		2000		
LC-75D, LC-76D, LC-77D	Mar-00	Added to sampling program	SL	To further evaluate the Sea Level aquifer; installed in 1999
	1-Oct-00	Revised Compliance Monitoring Plan		
LC-134, LC-146 LC-162, LC-161	Dec-00	Decommissioned	UV	Removed as a consequence of drum removal activities in the East Gate Disposal Yard (wells LC-146 and LC-161, used for water level measurement only, were also decommissioned)
		2001		
Selected locations as needed	1-Sep-01	Initiation of SW-846 method 8260B selected ion monitoring (SIM) for vinyl chloride	all samples	To achieve project-specific reporting limit of 0.4 µg/L for vinyl chloride
FL-2 LC-20 LC-167 FL-3 LC-24 T-06 FL-4A LC-34 T-10 FL-4B LC-41B T-11B LC-16 LC-57 MAMC-1	1-Dec-01	Added to sampling program for sampling quarterly, semiannually, or annually	UV and LV	Final Logistics Center Remedial Action Monitoring Network Optimization Report (USACE 2002)
LC-19B LC-66A LC-137A LC-19C LC-73A LC-149D LC-44A LC-108 LC-165 LC-51 LC-132	1-Dec-01	Removed from sampling program	UV	
LC-05, LC-66B, PA-383, LC-06 LC-111B, T-04, LC-14A, LC-116B T-08, LC-26, LC-122B, T-13B LC-41A, LC-128, LC-137C LC-49, LC-136B LX-1 to LX-16 LC-53, LC-149C, LC-64B PA-381, RW-1	1-Dec-01	Sampling frequency changed to annually or semiannually	UV and LV	Final Logistics Center Remedial Action Monitoring Network Optimization Report (USACE 2002)
LC-69D, LC-70D MAMC-4 MAMC-3, PS-13	1-Dec-01	Added to sampling program quarterly, semiannually, or annually	SL	
LC-41D LC-166D	1-Dec-01	Removed from sampling program	SL	
LC-21C, LC-67D,LC-74D LC-26D, LC-71D, LC-126 LC-40D, LC-72D, LC-66D LC-73D	1-Dec-01	Sampling frequency changed to annually	SL	
SW-MC-1	1-Dec-01	Sampling frequency changed to annually	Murray Cr	
SW-MC-6	1-Dec-01	Added to program for quarterly sampling	Murray Cr	
		2002		
	2-Sep-02	Second 5 Year Review		
LC-79D through LC-83D	2-Dec-02	CMT Multiport wells (four ports each) added to sampling program	SL	To further evaluate the Sea Level aquifer; installed in April-May 2002

Table 1-2 - Changes to Sampling Network 1994 - 2014
Log RAM, Joint Base Lewis-McChord, Washington 98433

Sampling Locations	Month	Change	Aquifer or Samples	Basis/Comment
2003				
LC-132 (LC-05)	1-Mar-03	LC-05 replaced by LC-132 in sampling program	UV	Richard Smith memo dated February 25, 2003, "Final 2003 Recommendations for Remedial Action Monitoring Frequency of the Logistics Center Groundwater Contamination, Fort Lewis, Washington" (USACE 2003)
LC-149C	1-Mar-03	Removed from sampling program	UV	
LC-03, LC-132, LC-19A				
T-08, LC-53, T-12B	6-Jun-03	Sampling frequency changed to annually or semiannually	UV	
LC-182	6-Jun-03	Added to sampling program	UV	
FL-2	6-Dec-03	Sampling frequency changed to quarterly	UV	Further optimization changes presented
LC-180 (LC-182)	3-Dec-03	LC-182 replaced by LC-180 (sampled quarterly)	UV	in tables and e-mails from Troy Bussey (Fort Lewis PW), Nov & Dec 2003
2004				
CM-2	1-Mar-04	Added to sampling program (sampled annually)	UV	
T-05	1-Mar-04	Added to sampling program (sampled semiannually)	UV	
T-12B	2-Mar-04	Discontinued	UV	
LC-76D	3-Mar-04	Discontinued	SL	
FL-3, T-04, T-11B	4-Mar-04	Sampling frequency changed to semiannually	UV	
LC-61B, T-06				
LC-167, T-08				
LC-41B, T-10	1-Mar-04	Sampling frequency changed to semiannually	LV	
LC-47D, LC-50D	1-Mar-04	Sampling frequency changed to semiannually	SL	
FL-4B, LC-24	1-Mar-04	Sampling frequency changed to annually	UV	
FL-6, LC-34				To further evaluate the respective
FL-4A	1-Mar-04	Sampling frequency changed to annually	LV	aquifer, and part of optimization;
LC-35D	2-Mar-04	Sampling frequency changed to annually	SL	installed March – July 2004; sampled
LC-218	1-Sep-04	Added to sampling program	UV	by USACE in September 2004 (Round
LC-216, LC-217, LC-219	2-Sep-04	Added to sampling program	LV	1) and November 2004 (Round 2)
LC-84D-1 and LC-84D-2 through	3-Sep-04	Added to sampling program	SL	
LC-91D-1 and LC-91D-2				
SW-MC-04, SW-MC-06	Nov-04	Sampling frequency changed to annual	UV	Murray Creek surface samples
LC-70D	Nov-04	Discontinued	SL	
2005				
Annual sampling event was changed from March to September				
LX-16, LX-17, LX-18, LX-19, LX-21, RW-01	Sep-05	Removed from sampling program	UV	Wells replaced during Landfill 2 P&T upgrade.

Table 1-2 - Changes to Sampling Network 1994 - 2014
Log RAM, Joint Base Lewis-McChord, Washington 98433

Sampling Locations	Month	Change	Aquifer or Samples	Basis/Comment
2006				
LC-79D through LC-83D	Mar-06	Removed from sampling program	SL	Deep multiport wells difficult to obtain representative samples, replaced with wells LC-84D and LC-85D
LC-136A, LC-136B	Mar-06	Removed from sampling program	UV	Wells removed to allow thermal treatment at Area 3 of Landfill 2
LC-85D-1, LC-85D-2, LC-87D-1, LC-87D-2, LC-89D-1, LC89D-2	Mar-06	Sampling frequency changed to semiannually	SL	Adequate database established, values less than detection limit
LC-92D-1 and LC-92D-2 through LC-95D-1 and LC-95D-2	Mar-06	Added to sampling program (quarterly sampling)	SL	To delineate downgradient extent of SLA plume, installed in Dec 06 - Jan 07
PW-1 through PW-8	Jun-06	Added to sampling program (quarterly sampling)	UV	Pumping wells for upgraded Landfill 2 P&T system.
MT-1 through MT-4	Jun-06	Added to sampling program (quarterly sampling)	UV	Monitoring wells for performance monitoring of P&T system
85-PA-383	Jun-06	Removed from sampling program	UV	Well destroyed by mowing machine
LC-27, LC-160	Sep-06	Added to sampling program(semi-annual sampling)	UV	Monitoring wells for performance monitoring of P&T system
2007				
	7-Mar-07	Revised Compliance Monitoring Plan		
LC-178, LC-222, LC-223, LC-224	Jun-07	Added to sampling program (quarterly sampling)	UV	
	Sep-07	Third 5 Year Review for Log Center		
LC-96D through LC-103D	Sep-07	Added to sampling program (quarterly sampling)	SL	
LC-109, LC-124	Sep-07	Added to sampling program (quarterly sampling)	UV	
BC1	Sep-07	Added to sampling program (annual sampling)	LV	
LC-225, LC-226	Dec-07	Added to sampling program (quarterly sampling)	LV	
2008				
SLAP-1 through SLAP-6	Jan-08	Added to sampling program (quarterly sampling)	SL	Sea Level Aquifrer Pumping wells
FL-2, FL-4A, LC-53, LC-57, LC-180, LC-216, LC-217, LC-219, MAMC-1, MAMC-6	May-08	Sampling frequency changed to annually	UV and LV	
FL-4B, LC-109, LC-124, LC-182, LC-218, LX-2 through LX-14	May-08	Sampling frequency changed to semiannually	UV and LV	
LX-1 and LX-15	May-08	Dropped from monitoring schedule	UV and LV	
LC-84D-1, LC-84D-2, LC-86D-1, LC-86D-2, LC-88D-1, LC-88D-2, LC-90D-1, LC-91D-1, LC-91D-2, LC-93D-1, LC-93D-2, LC-94D-2, LC-95D-1, LC-95D-2	May-08	Sampling frequency changed to semiannually	SL	Adequate database established, values less than detection limit

Table 1-2 - Changes to Sampling Network 1994 - 2014
Log RAM, Joint Base Lewis-McChord, Washington 98433

Sampling Locations	Month	Change	Aquifer or Samples	Basis/Comment
LC-85D-1, LC-85D-2, LC-87D-1, LC-87D-2, LC-89D-1, LC89D-2, LC-90D-2, LC-92D-1, LC-92D-2, LC-94D-1	May-08	Sampling frequency changed to annually	SL	Adequate database established, values less than detection limit
LC-74D	May-08	Sampling frequency changed to quarterly	SL	
LC-68D	Aug-08	Added to sampling program (annual sampling)	SL	Monitoring Well upgradient of Vashon / Sea Level Aquifer "Window"
LC-182	Aug-08	Added to sampling program (semi-annual sampling)	UV	
2009				
All Locations	1-Oct-09	Changed analytical lab from Anatek in Moscow, ID to Test America in Fife, WA	all samples	
SLAP-1 through SLAP-6, LC-74D, LC-103D, LC-93D, LC-98D-1, LC-98D-2	9-Oct-09	Sea Level Aquifer Pump and Treat System Start up Sampling frequency changed to monthly	SL	Establish data baseline for SLA P&T production wells and monitoring wells adjacent to system following system start up
2010				
	Apr-10	Revised Compliance Monitoring Plan		See report titled "2010 Logistics Center Remedial Action Monitoring Program Compliance Monitoring Plan" dated April 29, 2010 Table 4 for basis of changes (Versar 2010).
All Locations	Mar-10	Annual sampling event changed from third quarter (dry season) to first quarter (wet season)		
FL-1, LC-03, LC-223, LC-224, PW-1, PW-2, PW-3, PW-4, PW-5, PW-6, PW-7, PW-8		Sampling frequency changed to semiannually	UV	
SW-MC-1, SW-MC-4, SW-MC-6		Removed from sampling program	Murray Cr	
SW-MC-7, SW-MC-8, SW-MC-9		Added to sampling program (quarterly sampling)	Murray Cr	
LC-01	Mar-10	Added to sampling program (quarterly sampling)	UV	See report titled "2010 Logistics Center Remedial Action Monitoring Program Compliance Monitoring Plan" dated April 29, 2010 Table 4 for basis of changes (Versar 2010).
BC-1, LC-111B, LC-116B, LC-122B, LC-225, LC-226		Sampling frequency changed to semiannually	LV	
SLAP-1 through SLAP-6, LC-68D		Sampling frequency changed to quarterly	SL	
LC-73D		Removed from sampling program, depth to water measured only	SL	
LC- 84D-1, LC-84D-2, LC-90D-1, LC-91D-1, LC91D-2, LC-94D-2, LC-97D		Sampling frequency changed to annually	SL	
LC-222		Sampling frequency changed from semiannual to annual	UV	
LC-100D		Removed from sampling program	SL	
LC-101D-1, LC-101D-2, LC-102D-1, LC-102D-2, LC-103D		Sampling frequency changed to semiannually	SL	
MAMC-OF-1	Jun-10	Added to sampling program (quarterly sampling)	UV	MAMC outfall sample point

Table 1-2 - Changes to Sampling Network 1994 - 2014
Log RAM, Joint Base Lewis-McChord, Washington 98433

Sampling Locations	Month	Change	Aquifer or Samples	Basis/Comment
2011				
NAPL1-E07, NAPL1-L07, NAPL2-F12, NAPL2-G15, NAPL2-L15, LC-202	Sep-11	Sampled one time on 26 September	UV	Sampled at request of EPA's GWER Research Program
LC-135		Added to sampling program (quarterly sampling)		
T-08	Nov-11	Decommissioned	LV	Camp Murray Gate Realignment
2012				
85-PA-382	Mar-12	Added to sampling program (quarterly sampling)	UV	Help to define east extent of Upper Vashon aquifer plume
LC-41, LC-47A, LC-66A	Apr-12	Sampled one time on 25 April 12	UV	Shallow Upper Vashon aquifer monitoring wells located in the Log Center sampled in conjunction with a vapor intrusion into buildings study
LC-05, LC-10, LC-18, LC-19B, LC-41, LC-44A, LC-48, LC-115, LC-140, LC-141, LC-142, LC-150	Jun-12	Sampled one or two times on 21 and 25 June 12		
MAMC-OF-2	Aug-12	Added to sampling program (quarterly sampling)	UV	MAMC outfall sample point that replaces MAMC-OF-1
All	Sep-12	Fourth Fort Lewis (1st JBLM) 5 Year Review for CERCLA Sites		No changes to monitoring program were recommended
2013				
85-PA-384	Mar-13	Added to sampling program (quarterly sampling)	UV	Help to define east extent of Upper Vashon aquifer plume
T-15	Mar-13	Added to sampling program (quarterly sampling)	UV	Replaces T-08 on Camp Murray
LC-125	Aug-13	Decommissioned	UV	Was only used for WL
LC-109	Aug-13	Only used for sampling	UV	Only used for sampling, not WL
All	Oct-13	Revised Compliance Monitoring Plan		See report titled "2013 Logistics Center Remedial Action Monitoring Program Compliance Monitoring Plan" dated April 1, 2014 Table 4 for basis of changes (Versar 2014b).
2014				
LC-104D	Jan-14	Added to sampling program (semi-annual depth to water measurements)	SL	Replaces 88-O1-SS will be used to measure depth to water beginning in 2014.
T-15	Jun-15	Well was developed in June 2015.	UV	Prior data suggests that it was never properly developed at installation. Data prior to June 2015 is considered unusable.

UV = Upper Vashon aquifer
LV = Lower Vashon aquifer
SL = Sea Level aquifer
Red = Compliance Monitoring Plan, Compliance Monitoring Plan Revisions, and Five Year Reviews
P&T = pump and treat
GWER = Groundwater and Ecosystems Restoration

Table 1-3 - Sampling Methods
Log RAM, Joint Base Lewis-McChord, Washington, 98433

	Surface Water		Vashon Aquifer					Sea Level Aquifer		
Sampling Period	**Sampling Methods**	**Sampling Stations**	**Purging and Sampling Methods**	**Monitoring and Extraction Wells**				**Purging and Sampling Methods**	**Monitoring and Extraction Wells**	
Pre-startup through 14th quarters Feb 1995 through Mar 1999	Submerge (through 4th Quarter),	SW-MC-1,	Nondedicated submersible pump (3 well volumes) and Teflon bailer	LC-03, LC-05, LC-06, LC-14A, LC-26, LC-41A, LC-44A, LC-49, LC-49A, LC-51	LC-53, LC-64A, LC-64B, LC-66A, LC-66B, LC-73A, LC-108, LC-111B, LC-116B, LC-122B	LC-128, LC-132, LC-134, LC-136A, LC-136B, LC-137A, LC-137B, LC-137C, LC-144A, LC-144B	LC-149C, LC-149D, LC-162, LC-165, PA-381, PA-383, T-01, T-04, T-08, T-13B	Nondedicated submersible pump (three well volumes) and Teflon bailer	LF4-MW2-C, LC-41D	LC-126, LC-166D (1st Quarter)
	Coliwassa (5th – 14th Quarters)	SM-MC-2 (through 10th Quarter),								
		SW-MC-4 (11th – 14th Quarters)	Spigot	LX-1 – LX-15	LX-16 – LX-19	LX-21, RW-1		Dedicated Hydrostar pump (3 well volumes)	LC-26D, LC-40D, LC-66D, LC-67D	LC-71D, LC-72D, LC-73D
Low-flow sampling procedure first mentioned in 15th quarter report, used on wells with nondedicated submersible pumps.										
15th quarter Jun 1999	Coliwassa	SW-MC-1, SW-MC-4	Nondedicated submersible pump	LC-03, LC-05, LC-06, LC-14A, LC-19A, LC-19B, LC-19C, LC-26, LC-41A, LC-44A	LC-49, LC-51, LC-53, LC-64A, LC-64B, LC-66A, LC-66B, LC-73A, LC-108, LC-111B	LC-116B, LC-122B, LC-128, LC-132, LC-134, LC-136A, LC-136B, LC-137A, LC-137B, LC-137C	LC-149C, LC-149D, LC-162, LC-165, PA-381, PA-383, T-01, T-04, T-08, T-13B	Nondedicated submersible pump	LC-21C, LC-41D, LC-50D	LC-74D, LC-126, LC-166D
			Spigot	LX-1 – LX-15	LX-16 – LX-19	LX-21, RW-1		Dedicated Hydrostar pump (three well volumes)	LC-26D, LC-40D, LC-66D, LC-67D	LC-71D, LC-72D, LC-73D

Table 1-3 - Sampling Methods
Log RAM, Joint Base Lewis-McChord, Washington, 98433

	Surface Water		Vashon Aquifer					Sea Level Aquifer		
Sampling Period	**Sampling Methods**	**Sampling Stations**	**Purging and Sampling Methods**	**Monitoring and Extraction Wells**				**Purging and Sampling Methods**	**Monitoring and Extraction Wells**	
16th quarter Sep 1999	Coliwassa	SW-MC-1, SW-MC-4	Nondedicated submersible pump		LC-49, LC-51, LC-53, LC-64A, LC-64B, LC-66A, LC-66B, LC-73A, LC-108, LC-111B	LC-116B, LC-122B, LC-128, LC-132, LC-134, LC-136A, LC-136B, LC-137A, LC-137B, LC-137C	LC-149C, LC-149D, LC-162, LC-165, PA-381, PA-383, T-01, T-04, T-08, T-13B	Nondedicated submersible pump	LC-41D, LC-50D, LC-74D, LC-126, LC-166D	
			Spigot	LX-1 – LX-15	LX-16 – LX-19	LX-21, RW-1		Dedicated Hydrostar pump	LC-26D, LC-35D, LC-40D, LC-47D, LC-66D	LC-67D, LC-71D, LC-72D, LC-73D
17th and 18th quarters Dec 1999 to Mar 2000	Coliwassa	SW-MC-1, SW-MC-4	Dedicated bladder pump	LC-03, LC-05, LC-06, LC-14A, LC-19A, LC-19B, LC-19C, LC-26, LC-41A, LC-44A	LC-49, LC-51, LC-53, LC-64A, LC-64B, LC-66A, LC-66B, LC-73A, LC-108 LC-111B	LC-116B, LC-122B, LC-128, LC-132, LC-134, LC-136A, LC-136B, LC-137A LC-137B, LC-137C	LC-149C, LC-149D, LC-162, LC-165, PA-381, PA-383, T-01, T-04, T-08, T-13B	Dedicated Hydrostar pump	LC-26D, LC-35D, LC-40D, LC-47D, LC-66D	LC-67D, LC-71D, LC-72D, LC-73D
			Spigot	LX-1 – LX-15	LX-16 – LX-19	LX-21, RW-1		Dedicated bladder pump	LC-74D, LC-126, LC-166D	
								Nondedicated submersible pump	LC-41D, LC-50D	

Table 1-3 - Sampling Methods
Log RAM, Joint Base Lewis-McChord, Washington, 98433

	Surface Water		Vashon Aquifer					Sea Level Aquifer		
Sampling Period	**Sampling Methods**	**Sampling Stations**	**Purging and Sampling Methods**	**Monitoring and Extraction Wells**				**Purging and Sampling Methods**	**Monitoring and Extraction Wells**	
19th quarter Jun 2000	Coliwassa	SW-MC-1, SW-MC-4	Dedicated bladder pump	LC-03, LC-05, LC-06, LC-14A, LC-19A, LC-19B, LC-19C, LC-26, LC-41A, LC-44A	LC-49, LC-51, LC-53, LC-64A, LC-64B, LC-66A, LC-66B, LC-73A, LC-108 LC-111B	LC-116B, LC-122B, LC-128, LC-132, LC-134, LC-136A, LC-136B, LC-137A, LC-137B, LC-137C	LC-149C, LC-149D, LC-162, LC-165, PA-381, PA-383, T-01, T-04, T-08, T-13B	Dedicated Hydrostar pump	LC-26D, LC-35D, LC-40D, LC-47D, LC-66D	LC-67D, LC-71D, LC-72D, LC-73D
			Spigot	LX-1 – LX-15	LX-16 – LX-19	LX-21, RW-1		Dedicated bladder pump	LC-41D, LC-50D, LC-74D, LC-75D	LC-76D, LC-77D, LC-126, LC-166D
20th quarter Sep 2000	Coliwassa	SW-MC-1, SW-MC-4	Dedicated bladder pump	LC-03, LC-05, LC-06, LC-14A, LC-19A, LC-19B, LC-19C, LC-26, LC-41A, LC-44A	LC-49, LC-51, LC-53, LC-64A, LC-64B, LC-66A, LC-66B, LC-73A, LC-108, LC-111B	LC-116B, LC-122B, LC-128, LC-132, LC-134, LC-136A, LC-136B, LC-137A, LC-137B, LC-137C	LC-149C, LC-149D, LC-162, LC-165, PA-381, PA-383, T-01, T-04, T-08, T-13B	Dedicated Hydrostar pump	LC-26D, LC-35D, LC-40D, LC-47D, LC-66D	LC-67D, LC-71D, LC-72D, LC-73D
			Spigot	LX-1 – LX-15	LX-16 – LX-19	LX-21, RW-1		Dedicated bladder pump	LC-41D, LC-50D, LC-74D, LC-75D	LC-76D, LC-77D, LC-126, LC-166D

Table 1-3 - Sampling Methods

Log RAM, Joint Base Lewis-McChord, Washington, 98433

	Surface Water		Vashon Aquifer					Sea Level Aquifer		
Sampling Period	**Sampling Methods**	**Sampling Stations**	**Purging and Sampling Methods**	**Monitoring and Extraction Wells**				**Purging and Sampling Methods**	**Monitoring and Extraction Wells**	
21st quarter Dec 2000	Coliwassa	SW-MC-1, SW-MC-4	Dedicated bladder pump	LC-03, LC-05, LC-06, LC-14A, LC-19A, LC-19B, LC-19C, LC-26, LC-41A, LC-44A	LC-49, LC-51, LC-53, LC-64A, LC-64B, LC-66A, LC-66B, LC-73A, LC-108, LC-111B	LC-116B, LC-122B, LC-128, LC-132, LC-134, LC-136A, LC-136B, LC-137A, LC-137B, LC-137C	LC-149C, LC-149D, LC-162, LC-165, PA-381, PA-383, T-01, T-04, T-08, T-13B	Dedicated Hydrostar pump	LC-26D, LC-35D, LC-40D, LC-47D, LC-66D	LC-67D, LC-71D, LC-72D, LC-73D
			Spigot	LX-1 – LX-15	LX-16 – LX-19	LX-21, RW-1		Dedicated bladder pump	LC-41D, LC-47D, LC-50D, LC-74D, LC-75D	LC-76D, LC-77D, LC-126, LC-166D
								Nondedicated submersible pump	LC-21C	
22nd – 24th quarters Mar 2001 thru Sep 2001	Coliwassa	SW-MC-1, SW-MC-4	Dedicated bladder pump	LC-03, LC-05, LC-06, LC-14A, LC-19A, LC-19B, LC-19C, LC-26, LC-41A, LC-44A	LC-49, LC-51, LC-53, LC-64A, LC-64B, LC-66A, LC-66B, LC-73A, LC-108, LC-111B	LC-116B, LC-122B, LC-128, LC-132, LC-136A, LC-136B, LC-137A, LC-137B, LC-137C, LC-149C	LC-149C, LC-149D, LC-162, LC-165, PA-381, PA-383, T-01, T-04, T-08, T-13B	Dedicated bladder pump	LC-21C, LC-26D, LC-35D, LC-40D, LC-41D, LC-47D, LC-50D, LC-66D, LC-67D	LC-71D, LC-72D, LC-73D, LC-74D, LC-75D, LC-76D, LC-77D, LC-126, LC-166D
			Spigot	LX-1 – LX-15	LX-16 – LX-19	LX-21, RW-1				

Table 1-3 - Sampling Methods
Log RAM, Joint Base Lewis-McChord, Washington, 98433

	Surface Water		Vashon Aquifer					Sea Level Aquifer		
Sampling Period	**Sampling Methods**	**Sampling Stations**	**Purging and Sampling Methods**	**Monitoring and Extraction Wells**				**Purging and Sampling Methods**	**Monitoring and Extraction Wells**	
25th and 27th quarters (quarterly) Dec 2001 and Jun 2002	Coliwassa	SW-MC-4, SW-MC-6	Dedicated bladder pump	LC-03, LC-19A	LC-64A, LC-136A	LC-137B, T-12B		Dedicated bladder pump	LC-35D, LC-47D, LC-50D	LC-75D, LC-76D, LC-77D
			Nondedicated submersible pump	LC-16, LC-20, LC-34, LC-41B	LC-57, LC-61B, LC-167, T-06	T-10 (27th), T-11B (27th)	FL-3, FL-4A, FL-4B, FL-6	Nondedicated submersible pump	LC-69D, LC-70D	
			Peristaltic	LC-24						
			Spigot	MAMC-1-MAMC-6	LX-16 – LX-19	LX-21, RW-1		Spigot	MAMC-3, MAMC-4, PS-13	
26th quarter (annual) Mar 2002	Coliwassa	SW-MC-1, SW-MC-4, SW-MC-6	Dedicated bladder pump	LC-03, LC-05, LC-06, LC-14A, LC-19A, LC-26, LC-41A	LC-49, LC-53, LC-64A, LC-64B, LC-66B, LC-111B, LC-116B	LC-122B, LC-128, LC-136A, LC-136B, LC-137B, LC-137C, LC-149C	PA-381, PA-383, T-01, T-04, T-08, T-12B, T-13B	Dedicated bladder pump	LC-21C, LC-26D, LC-35D, LC-40D, LC-47D, LC-50D, LC-66D, LC-67D	LC-71D, LC-72D, LC-73D, LC-74D, LC-75D, LC-76D, LC-77D, LC-126
			Nondedicated submersible pump	LC-16, LC-20, LC-34, LC-41B	LC-57, LC-61B, LC-167, T-06	T-10, T-11, FL-2, FL-3	FL-4A, FL-4B, FL-6	Nondedicated submersible pump	LC-69D, LC-70D	
			Peristaltic	LC-24						
			Spigot	MAMC-1 MAMC-6	LX-1 – LX-15	LX-16 – LX-19	LX-21, RW-1	Spigot	MAMC-3, MAMC-4	PS-13

Table 1-3 - Sampling Methods
Log RAM, Joint Base Lewis-McChord, Washington, 98433

	Surface Water		Vashon Aquifer					Sea Level Aquifer		
Sampling Period	**Sampling Methods**	**Sampling Stations**	**Purging and Sampling Methods**	**Monitoring and Extraction Wells**				**Purging and Sampling Methods**	**Monitoring and Extraction Wells**	
28th quarter (semi annual) Sep 2002	Coliwassa	SW-MC-4, SW-MC-6	Dedicated bladder pump	LC-03, LC-06	LC-19A, LC-64A	LC-136A, LC-137B	T-08, T-12B, T-13B	Dedicated bladder pump	LC-35D, LC-47D, LC-50D	LC-75D, LC-76D, LC-77D
			Nondedicated submersible pump	LC-16, LC-20, LC-34, LC-41B	LC-57, LC-61B, LC-167, T-06	T-10, T-11B, FL-3	FL-4A, FL-4B, FL-6	Nondedicated submersible pump	LC-69D, LC-70D	
			Peristaltic	LC-24						
			Spigot	MAMC-1 MAMC-6	LX-1 – LX-15	LX-16 – LX-19	LX-21, RW-1	Spigot	MAMC-3, MAMC-4	PS-13
29th quarter (quarterly) Dec 2003	Coliwassa	SW-MC-4, SW-MC-6	Dedicated bladder pump	LC-03, LC-19A	LC-64A, LC-136A	LC-137B, T-12B		Dedicated bladder pump	LC-35D, LC-47D, LC-50D, LC-66D, LC-71D	LC-75D, LC-76D, LC-77D, LC-126
			Nondedicated submersible pump	LC-16, LC-20, LC-34, LC-41B	LC-57, LC-61B, LC-167, T-06	T-10, T-11B, FL-3,	FL-4A, FL-4B, FL-6	Nondedicated submersible pump	LC-69D, LC-70D	
			Peristaltic	LC-24				Spigot	MAMC-3, MAMC-4, PS-13	
			Spigot	MAMC-1-MAMC-6	LX-16 – LX-19	LX-21, RW-1		WaTerra pump (multiple well volumes)	LC-79D-1, -2, -3, -4, LC-80D-1, -2, -3, LC-81D-1, -2, -3, -4, LC-82D-1, -2, -3, -4 , LC-83D-1, -2, -3, -4	

Table 1-3 - Sampling Methods

Log RAM, Joint Base Lewis-McChord, Washington, 98433

	Surface Water		Vashon Aquifer					Sea Level Aquifer		
Sampling Period	**Sampling Methods**	**Sampling Stations**	**Purging and Sampling Methods**	**Monitoring and Extraction Wells**				**Purging and Sampling Methods**	**Monitoring and Extraction Wells**	
30th quarter (annual) Mar 2003	Coliwassa	SW-MC-1, SW-MC-4, SW-MC-6	Dedicated bladder pump	LC-03, LC-06, LC-14A, LC-19A, LC-26,. LC-41A	LC-53, LC-64A, LC-64B, LC-66B, LC-111B, LC-116B, LC-122B,	LC-128, LC-132, LC-136A, LC-136B, LC-137B, LC-137C, PA-381,	PA-381, PA-383, T-01, T-04, T-08, T-12B, T-13B	Dedicated bladder pump	LC-21C, LC-26D, LC-35D, LC-40D, LC-47D, LC-50D, LC-66D, LC-67D,	LC-71D, LC-72D, LC-73D, LC-74D, LC-75D, LC-76D, LC-77D, LC-126
			Nondedicated submersible pump	LC-16, LC-20, LC-34, LC-41B,	LC-57, LC-61B, LC-167, T-06	T-10, T-11B, FL-2, FL-3	FL-4A, FL-4B, FL-6	Nondedicated submersible pump	LC-69D, LC-70D	
			Peristaltic	LC-24				Spigot	MAMC-3, MAMC-4, PS-13	
			Spigot	MAMC-1-MAMC-6	LX-16 – LX-19	LX-21, RW-1		WaTerra pump (multiple well volumes for LC-80D; 2 well volumes for others)	LC-79D-1, LC-80D-1, -2, -3, LC-81D-2, LC-82D-1, LC-83D-2	

Table 1-3 - Sampling Methods
Log RAM, Joint Base Lewis-McChord, Washington, 98433

	Surface Water		Vashon Aquifer					Sea Level Aquifer		
Sampling Period	**Sampling Methods**	**Sampling Stations**	**Purging and Sampling Methods**	**Monitoring and Extraction Wells**				**Purging and Sampling Methods**	**Monitoring and Extraction Wells**	
31st quarter (Quarterly) Jun 2003	Coliwassa	SW-MC-4, SW-MC-6	Dedicated bladder pump	LC-64A, LC-136A, LC-137B				Dedicated bladder pump	LC-35D, LC-47D, LC-50D	LC-75D, LC-76D, LC-77D
			Nondedicated submersible pump	LC-16, LC-20, LC-24, LC-34, LC-41B	LC-57, LC-61B, LC-167, T-06,	T-10, T-11B, FL-2, FL-3	FL-4A, FL-4B, FL-6	Nondedicated submersible pump	LC-69D, LC-70D	
			Peristaltic			LC-180		Spigot	MAMC-3, MAMC-4	PS-13
			Spigot	MAMC-1 MAMC-6	LX-17 – LX-19, LX-21			WaTerra pump (two well volumes)	LC-79D-2, LC-80D-2, LC-81D-1, LC-82D-3, LC-83D-1	
32nd quarter (semiannual) Sep 2003	Coliwassa	SW-MC-4, SW-MC-6	Dedicated bladder pump	LC-06, LC-53	LC-64A, LC-132	LC-136A, LC-137B	T-13B	Dedicated bladder pump	LC-35D, LC-47D, LC-50D	LC-75D, LC-76D, LC-77D
			Nondedicated submersible pump	LC-16, LC-20, LC-34, LC-41B	LC-57, LC-61B, LC-167, T-06	T-10, T-11B, FL-2, FL-3	FL-4A, FL-4B, FL-6	Nondedicated submersible pump	LC-69D, LC-70D	
			Peristaltic		LC-24	LC-182	FL-6	Spigot	MAMC-3, MAMC-4	PS-13
			Spigot	MAMC-1 MAMC-6	LX-17 – LX-19, LX-21, RW-01			WaTerra pump (two well volumes)	LC-79D-3 (Port 3), LC-80D-3 (Port 3), LC-81D-3 (Port 3), LC-82D-3 (Port 3), LC-83D-3 (Port 3)	

Table 1-3 - Sampling Methods
Log RAM, Joint Base Lewis-McChord, Washington, 98433

	Surface Water		Vashon Aquifer					Sea Level Aquifer		
Sampling Period	**Sampling Methods**	**Sampling Stations**	**Purging and Sampling Methods**	**Monitoring and Extraction Wells**				**Purging and Sampling Methods**	**Monitoring and Extraction Wells**	
33st quarter (Quarterly) Dec 2003	Coliwassa	SW-MC-4, SW-MC-6	Dedicated bladder pump	LC-64A, LC-136A, LC-137B				Dedicated bladder pump	LC-35D	LC-75D, LC-77D
			Nondedicated submersible pump	LC-16, LC-20, LC-34, LC-41B, LC-57	LC-61B, LC-167, T-06, LC-24	T-10, T-11B, FL-2, FL-3	FL-4A, FL-4B, FL-6	Nondedicated submersible pump	LC-69D, LC-70D	
			Peristaltic			LC-182		Spigot	MAMC-3, MAMC-4	PS-13
			Spigot	MAMC-1 MAMC-6	LX-17 – LX-19, LX-21, RW-01			WaTerra pump (two well volumes)	LC-79D-4, LC-80D-4, LC-81D-4, LC-82D-4, LC-83D-4	
34th quarter (annual) Mar 2004	Coliwassa	SW-MC-1, SW-MC-4, SW-MC-6	Dedicated bladder pump	LC-03, LC-06, LC-14A, LC-19A, LC-26, LC-41A, LC-49	LC-53, LC-64A, LC-64B, LC-66B, LC-111B, LC-116B, LC-122B	LC-128, LC-132, LC-136A, LC-136B, LC-137B, LC-137C, PA-381	PA-383, T-04, T-08, T-13B	Dedicated bladder pump	LC-21C, LC-26D, LC-35D, LC-40D, LC-47D, LC-50D, LC-66D, LC-67D	LC-71D, LC-72D, LC-73D, LC-74D, LC-75D, LC-77D, LC-126
			Nondedicated submersible pump	CM-2, LC-16, LC-20, LC-34, LC-41B	LC-57, LC-61B, LC-167, T-05, T-06	T-10, T-11B, FL-2, FL-3	FL-4A, FL-4B, 9700-MW1	Nondedicated submersible pump	LC-69D, LC-70D	
			Peristaltic	LC-24				Spigot	MAMC-3, MAMC-4, PS-13	
			Spigot	MAMC-1-MAMC-6	LX-1 - LX-15	LX-16 – LX-19	LX-21, RW-1	WaTerra pump (2 well volumes)	LC-79D-1, LC-80D-1, LC-81D-2, LC-82D-1, LC-83D-1	

Table 1-3 - Sampling Methods
Log RAM, Joint Base Lewis-McChord, Washington, 98433

	Surface Water		Vashon Aquifer					Sea Level Aquifer		
Sampling Period	**Sampling Methods**	**Sampling Stations**	**Purging and Sampling Methods**	**Monitoring and Extraction Wells**				**Purging and Sampling Methods**	**Monitoring and Extraction Wells**	
35th quarter (Quarterly) Jun 2004	Coliwassa	SW-MC-4, SW-MC-6	Dedicated bladder pump	LC-64A, LC-136A, LC-137B				Dedicated bladder pump	LC-75D, LC-77D	
			Nondedicated submersible pump	LC-16, LC-20	LC-57, FL-2			Nondedicated submersible pump	LC-69D, LC-70D	
			Peristaltic			LC-180		Spigot	MAMC-3, MAMC-4	PS-13
			Spigot	MAMC-1 MAMC-6	LX-17 – LX-19	LX-21		WaTerra pump (two well volumes)	LC-79D-2, LC-80D-2, LC-81D-1, LC-82D-3, LC-83D-2	
36th quarter (semiannual) Sep 2004	Coliwassa	SW-MC-4, SW-MC-6	Dedicated bladder pump	LC-06, LC-53	LC-64A, LC-132	LC-136A, LC-137B	T-04, T-08, T-13B	Dedicated bladder pump	LC-47D, LC-50D	LC-75D, LC-77D
			Nondedicated submersible pump	LC-16, LC-20, LC-41B, LC-57	LC-61B, LC-167, T-05, T-06	T-10, T-11B, FL-2, FL-3		Nondedicated submersible pump	LC-69D, LC-70D	
			Peristaltic			LC-180		Spigot		PS-13
			Spigot	MAMC-1 MAMC-6	LX-16 – LX-19	LX-21, RW-01		WaTerra pump (two well volumes)	LC-79D-4, LC-80D-4, LC-81D-4 LC-82D-4, LC-83D-4	
Sep 2004 & Nov 2004 USACE			Dedicated bladder pump	LC-216, LC-217, LC-218, LC-219				Non-dedicated bladder pump	LC-84D-1, LC-84D-2, LC-85D-1, LC-85D-2, LC-86D-1, LC-86D-2, LC-87D-1, LC-87D-2	LC-88D-1, LC-88D-2, LC-89D-1, LC-89D-2, LC-90D-1, LC-90D-2, LC-91D-1, LC-91D-2

Table 1-3 - Sampling Methods
Log RAM, Joint Base Lewis-McChord, Washington, 98433

	Surface Water		Vashon Aquifer					Sea Level Aquifer		
Sampling Period	**Sampling Methods**	**Sampling Stations**	**Purging and Sampling Methods**	**Monitoring and Extraction Wells**				**Purging and Sampling Methods**	**Monitoring and Extraction Wells**	
2005 (all quarters)	Dipper	S2-MC-1 SW-MC-4 SW-MC-6	Dedicated bladder pump	LC-03, LC-06, LC-14A, LC-26, LC-41A, LC-49	LC-53, KC-64A, LC-64B, LC-66B, LC-111B, LC-116B, LC-122B	LC-128, LC-132, LC-136A, LC-136B, LC-137B, LC-137C, PA-381	PA-383, T-04, T-08, T-13B	Dedicated bladder pump	LC-21C, LC-26D, LC-35D, LC-40D, LC-47D, LC-50D, LC-66D, LC-67D	LC-71D, LC-72D, LC-73D, LC-74D, LC-75D, LC-76D, LC-126
			Non-dedicated submersible pump	LC-16, LC-20, LC-34, CM2, LC-216, LC-217	LC-41B, LC-57, LC-61B, LC-167, LC-218, LC-219	T-05, T-06, T-10, T-11B, FL-2	FL-3, FL-4A, FL-4B, FL-6	Non-dedicated submersible pump	LC-84D-1, LC-84D-2, LC-85D-1, LC-85D-2, LC-86D-1, LC-86D-2, LC-87D-1, LC-87D-2	LC-88D-1, LC-88D-2, LC-89D-1, LC-89D-2, LC-90D-1, LC-90D-2, LC-91D-1, LC-91D-2
			Peristaltic pump	LC-24	LC-180			Mini-double valve pump	LC-80D-3, LC-81D-1,2	LC-82D-1,4
			Spigot	MAMC-1, MAMC-3, MAMC-4, MCMC-6	LX-1 through LX-15			Spogot	Well 13 (PS-13)	
2006 (1st quarter)			Non-dedicated submersible pump	LC-216, LC-217	LC-218, LC-219			Non-dedicated submersible pump	LC-84D-1, LC-84D-2, LC-85D-1, LC-85D-2, LC-86D-1, LC-86D-2, LC-87D-1, LC-87D-2	LC-88D-1, LC-88D-2, LC-89D-1, LC-89D-2, LC-90D-1, LC-90D-2, LC-91D-1, LC-91D-2
			Spigot	MAMC-1, MAMC-3, MAMC-4, MCMC-6	LX-1 through LX-15					

Mechanical pumps (submersible, bladder, mini-double valve) used for collecting samples were replaced with disposable Passive Diffusion Bags (PDBs) in most monitoring wells.

Table 1-3 - Sampling Methods
Log RAM, Joint Base Lewis-McChord, Washington, 98433

	Surface Water		Vashon Aquifer					Sea Level Aquifer		
Sampling Period	**Sampling Methods**	**Sampling Stations**	**Purging and Sampling Methods**	**Monitoring and Extraction Wells**				**Purging and Sampling Methods**	**Monitoring and Extraction Wells**	
2006 (2nd-4th quarters)	Dipper	S2-MC-1 SW-MC-4 SW-MC-6	Passive diffision bags	CM2, FL-2, FL-3, FL-4A, FL-4B, FL-6, LC-03, LC-06, LC-14A, LC-16, LC-19A, LC-24, LC-26	LC-27, LC-34, LC-41A, LC-41B, LC-49, LC-53, LC-57, LC-61B, LC-64A, LC-64B, LC-66B, LC-108, LC-111B	LC-116B, LC-122B, LC-128, LC-132, LC-137B, LC-137C, LC-160, LC-167, LC-216, LC-217, LC-218, LC-219, MT-1	MT-2, MT-3, MT-4, PA-381, T-04, T-05, T-06, T-08, T-10, T-11B, T-13B	Passive diffision bags	LC-21C, LC-26D, LC-35D, LC-40D, LC-47D, LC-50D, LC-66D, LC-67D, LC-71D, LC-72D, LC-73D, LC-74D, LC-75D, LC-77D, LC-84D-1, LC-84D-2, LC-85D-1, LC-85D-2, LC-86D-1, LC-86D-2	LC-87D-1, LC-87D-2, LC-88D-1 LC-88D-2 LC-89D-1 LC-89D-2 LC-90D-1 LC-90D-2 LC-91D-1 LC-91D-2, LC-92D-1, LC-92D-2, LC-93D-1, LC-93D-2, LC-94D-1, LC-94D-2, LC-95D-1, LC-95D-2, LC-126
			Peristaltic pump		LC-180					
			Spigot	LX-1 through LX-15	MAMC-1, MAMC-3, MAMC-4, MAMC-6	PW-1 through PW-8		Spigot	Well 13 (PS-13)	

Table 1-3 - Sampling Methods
Log RAM, Joint Base Lewis-McChord, Washington, 98433

	Surface Water		Vashon Aquifer					Sea Level Aquifer		
Sampling Period	**Sampling Methods**	**Sampling Stations**	**Purging and Sampling Methods**	**Monitoring and Extraction Wells**				**Purging and Sampling Methods**	**Monitoring and Extraction Wells**	
2007 (all quarters)	Dipper	S2-MC-1 SW-MC-4 SW-MC-6	Passive diffision bags	BC1, CM2, FL-1, FL-2, FL-3, FL-4A, FL-4B, FL-6, LC-03, LC-06, LC-14A, LC-16, LC-19A, LC-20, LC-24	LC-26, LC-27, LC-34, LC-41A, LC-41B, LC-49, LC-53, LC-57, LC-61B, LC-64A, LC-64B, LC-66B, LC-108, LC-109 LC-111B	LC-116B, LC-122B, LC-124, LC-128, LC-132, LC-137B, LC-137C, LC-160, LC-167, LC-178, LC-182, LC-216, LC-217, LC-218, LC-219	LC-222, LC-223, LC-224, LC-225, LC-226 MT-1, MT-2, MT-3, MT-4, PA-381, T-04, T-05, T-06, T-08, T-10, T-11B, T-13B	Passive diffision bags	LC-21C, LC-47D, LC-50D, LC-66D, LC-67D, LC-69D, LC-71D, LC-72D, LC-73D, LC-74D, LC-75D, LC-77D, LC-84D-1, LC-84D-2, LC-85D-1, LC-85D-2, LC-86D-1, LC-86D-2, LC-87D-1, LC-101D-1, LC-101D-2	LC-87D-2, LC-88D-1 LC-88D-2 LC-89D-1 LC-89D-2 LC-90D-1 LC-90D-2 LC-91D-1 LC-91D-2, LC-92D-1, LC-92D-2, LC-93D-1, LC-93D-2, LC-94D-1, LC-94D-2, LC-95D-1, LC-95D-2, LC-96D, LC-126
			Peristaltic pump		LC-180					
			Spigot	LX-1 through LX-15	MAMC-1, MAMC-3, MAMC-4, MAMC-6	PW-1 through PW-8		Spigot	Well 13	

Table 1-3 - Sampling Methods
Log RAM, Joint Base Lewis-McChord, Washington, 98433

	Surface Water		Vashon Aquifer					Sea Level Aquifer		
Sampling Period	**Sampling Methods**	**Sampling Stations**	**Purging and Sampling Methods**	**Monitoring and Extraction Wells**				**Purging and Sampling Methods**	**Monitoring and Extraction Wells**	
2008 - 2009	Dipper	SW-MC-1	Passive	85-PA-381	LC-41B	LC-128	LC-226	Passive	LC-21C	LC-92D-1
All Quarters		SW-MC-4	diffusion bags	CM-2	LC-49	LC-132	MT-1	diffusion bags	LC-47D	LC-92D-2
		SW-MC-6		FL-1	LC-53	LC-137B	MT-2		LC-50D	LC-93D-1
				FL-2	LC-57	LC-137C	MT-3		LC-66D	LC-93D-2
				FL-3	LC-61B	LC-160	MT-4		LC-67D	LC-94D-1
				FL-4A	LC-64A	LC-167	T-04		LC-68D	LC-94D-2
				FL-4B	LC-64B	LC-216	T-05		LC-69D	LC-95D-1
				FL-6	LC-66B	LC-217	T-06		LC-71D	LC-95D-2
				LC-14A	LC-108	LC-218	T-08		LC-72D	LC-96D
				LC-16	LC-109	LC-219	T-10		LC-73D	LC-97D
				LC-19A	LC-111B	LC-222	T-11B		LC-74D	LC-98D-1
				LC-20	LC-116B	LC-223	T-13B		LC-75D	LC-98D-2
				LC-24	LC-122B	LC-224			LC-77D	LC-99D
				LC-26	LC-124	LC-225			LC-84D-1	LC-100D
				LC-27					LC-84D-2	LC-101D-1
				LC-34					LC-85D-1	LC-101D-2
				LC-41A					LC-85D-2	LC-102D-1
									LC-86D-1	LC-102D-2
									LC-86D-2	LC-103D
									LC-87D-1	LC-126
									LC-87D-2	SLAP-1*
									LC-88D-1	SLAP-2*
									LC-88D-2	SLAP-3*
									LC-89D-1	SLAP-4*
									LC-89D-2	SLAP-5*
									LC-90D-1	SLAP-6*
									LC-90D-2	
									LC-91D-1	
									LC-91D-2	

Table 1-3 - Sampling Methods
Log RAM, Joint Base Lewis-McChord, Washington, 98433

	Surface Water		Vashon Aquifer					Sea Level Aquifer		
Sampling Period	**Sampling Methods**	**Sampling Stations**	**Purging and Sampling Methods**	**Monitoring and Extraction Wells**				**Purging and Sampling Methods**	**Monitoring and Extraction Wells**	
			Bladder pump	LC-03	LC-06					
			Peristaltic pump	LC-178	LC-180	LC-182				
			Spigot	BC-1 LX-2 to LX-14	MAMC-1 MAMC-3 MAMC-4 MAMC-6	PW-1 to PW-8		Spigot	Well 13	
* = SLAP wells were sampled using a PDB the first quarter of 2009 and then from a spigot beginning in October 2009.										
2010 / 2014 All Quarters	Dipper	SW-MC-7 SW-MC-8 SW-MC-9 MAMC-OF-1	Passive diffusion bags	85-PA-381 CM-2 FL-1 FL-2 FL-3 FL-4A FL-4B FL-6 LC-01 LC-14A LC-16 LC-19A LC-20 LC-24 LC-26 LC-27 LC-34 LC-41A	LC-41B LC-49 LC-53 LC-57 LC-61B LC-64A LC-64B LC-66B LC-108 LC-109 LC-111B LC-116B LC-122B LC-124 LC-128 LC-132 LC-135	LC-137B LC-137C LC-160 LC-167 LC-216 LC-217 LC-218 LC-219 LC-222 LC-223 LC-224 LC-225	LC-226 MT-1 MT-2 MT-3 MT-4 T-04 T-05 T-06 T-08 T-10 T-11B T-13B	Passive diffusion bags	LC-21C LC-47D LC-50D LC-66D LC-67D LC-68D LC-69D LC-71D LC-72D LC-73D LC-74D LC-75D LC-77D LC-84D-1 LC-84D-2 LC-85D-1 LC-85D-2 LC-86D-1 LC-86D-2 LC-87D-1 LC-87D-2 LC-88D-1 LC-88D-2 LC-89D-1 LC-89D-2	LC-90D-1 LC-90D-2 LC-91D-1 LC-91D-2 LC-92D-1 LC-92D-2 LC-93D-1 LC-93D-2 LC-94D-1 LC-94D-2 LC-95D-1 LC-95D-2 LC-96D LC-97D LC-98D-1 LC-98D-2 LC-99D LC-100D LC-101D-1 LC-101D-2 LC-102D-1 LC-102D-2 LC-103D LC-126

Table 1-3 - Sampling Methods
Log RAM, Joint Base Lewis-McChord, Washington, 98433

	Surface Water		Vashon Aquifer					Sea Level Aquifer		
Sampling Period	**Sampling Methods**	**Sampling Stations**	**Purging and Sampling Methods**	**Monitoring and Extraction Wells**				**Purging and Sampling Methods**	**Monitoring and Extraction Wells**	
2010 - 2014 All Quarters			Bladder pump	LC-03	LC-06					
			Peristaltic pump	LC-178	LC-180	LC-182				
			Spigot	BC-1 LX-2 to LX-15	MAMC-1 MAMC-3 MAMC-4 MAMC-6	PW-1 to PW-8		Spigot	Well 13 SLAP-1 SLAP-2 SLAP-3	SLAP-4 SLAP-5 SLAP-6
2012 - 2014	Dipper	MAMC-OF-2	Passive diffusion bag	85-PA-382						
2013 -2014			Passive diffusion bag	85-PA-384	T-15					

TABLE 2-1 - Monitoring Well Descriptions and Water Quality Sampling Schedule - 2014
Log RAM, Joint Base Lewis-McChord, Washington, 98433

Well ID	Northing NAD27	Easting NAD27	Location	Ground Elevation (ft/AMSL)	Meas. Pt. Elevation (ft/AMSL)	Screen Top (ft/bgs)	Screen Bottom (ft/bgs)	Screen Top (ft/AMSL)	Screen Bottom (ft/AMSL)	Sample Frequency	Sample Method
Upper Vashon Aquifer											
85-PA-381	655045.0	1490584.0	East of MAMC	268.4	269.2	47.0	57.5	222.2	211.7	Annual	PDB
85-PA-382	654501	1490536	East of MAMC	263.98	265.20	52.0	62.0	213.2	203.2	Quarterly	PDB
85-PA-384	652865	1489631	East of MAMC	278.36	279.50	50.5	60.5	229	219	Quarterly	PDB
CM-2	657423.0	1487358.0	Camp Murray	-	262.5	20.0	30.0	242.5	232.5	Annual	PDB
FL-1	651255.5	1494031.3	Madigan	276.0	278.1	31.0	36.0	247.1	242.1	Semi-Annual	PDB
FL-2	651297.4	1495625.4	East of Madigan	284.0	282.3	35.0	40.0	247.3	242.3	Annual	PDB
FL-3	656717.9	1488744.5	North of MAMC	264.1	265.4	37.5	42.5	227.9	222.9	Annual	PDB
FL-4B	651940.8	1493015.6	Madigan	277.3	279.0	27.0	32.0	252.0	247.0	Semi-Annual	PDB
FL-6	656543.1	1489779.5	Logistics Center	266.3	268.0	47.0	57.0	221.0	211.0	Annual	PDB
LC-01	656710.4	1494588.5	Logistics Center	274.8	276.1	20.0	60.0	256.1	216.1	Quarterly	PDB
LC- 03	657303.0	1493904.0	Logistics Center	275.4	275.0	20.0	60.0	255.0	215.0	Semi-Annual	Bladder
LC- 05	657293.0	1490856.9	Logistics Center	276.3	278.1	19.0	59.6	259.1	218.5	Semi-Annual	WL
LC- 06	655896.0	1493994.0	Logistics Center	285.0	286.4	20.0	60.0	266.4	226.4	Annual	Bladder
LC- 10	654178.9	1494782.5	Logistics Center	286.4	288.0	20.0	40.0	268.0	248.0	Semi-Annual	WL
LC- 14A	658337.0	1489560.0	Logistics Center	263.1	265.0	42.5	52.5	222.5	212.5	Annual	PDB
LC- 16	658296.0	1492472.0	Logistics Center	265.6	267.0	18.5	58.5	248.5	208.5	Semi-Annual	PDB
LC- 18	653005.0	1494115.0	Logistics Center	282.7	283.9	32.0	40.0	251.9	243.9	Semi-Annual	WL
LC- 19A	653095.0	1495139.0	Logistics Center	289.3	290.6	65.0	75.0	225.6	215.6	Annual	PDB
LC- 20	653842.2	1495824.3	Logistics Center	290.2	290.9	37.5	47.5	253.4	243.4	Annual	PDB
LC- 24	652819.0	1497577.0	Landfill 2	285.4	286.7	26.0	46.0	260.7	240.7	Annual	PDB
LC- 26	651895.0	1497563.0	Landfill 2	276.0	276.0	11.5	36.0	264.5	240.0	Annual	PDB
LC- 27	651871.0	1496425.0	Landfill 2	278.6	279.5	20.5	30.5	259.0	249.0	Quarterly	PDB
LC- 34	653058.0	1493427.0	Logistics Center	287.9	289.1	30.0	35.0	259.1	254.1	Annual	PDB
LC- 39	657485.2	1489063.1	Logistics Center	268.6	270.2	39.0	44.0	231.2	226.2	Semi-Annual	WL
LC- 40	656912.2	1490288.8	Logistics Center	277.7	278.4	64.5	69.4	213.9	209.0	Semi-Annual	WL
LC- 41A	655151.1	1491874.5	Logistics Center	282.5	283.6	84.0	94.0	199.6	189.6	Annual	PDB
LC- 47A	655190.0	1493396.0	Logistics Center	279.9	280.7	27.0	32.0	253.7	248.7	Semi-Annual	WL
LC- 49	654135.0	1493877.0	Logistics Center	284.4	286.2	43.0	47.5	243.2	238.7	Annual	PDB
LC- 50	652181.8	1495527.8	West of Landfill 2	271.8	272.6	26.5	31.5	246.1	241.1	Semi-Annual	WL
LC- 53	651926.0	1494335.0	West of Landfill 2	276.6	277.4	26.5	31.5	250.9	245.9	Annual	PDB
LC- 57	650865.0	1496169.0	East of Madigan	284.7	286.0	29.3	34.3	256.7	251.7	Annual	PDB
LC- 61B	659151.0	1489469.0	Tillicum	277.3	277.5	55.0	60.0	222.5	217.5	Semi-Annual	PDB

TABLE 2-1 - Monitoring Well Descriptions and Water Quality Sampling Schedule - 2014
Log RAM, Joint Base Lewis-McChord, Washington, 98433

Well ID	Northing NAD27	Easting NAD27	Location	Ground Elevation (ft/AMSL)	Meas. Pt. Elevation (ft/AMSL)	Screen Top (ft/bgs)	Screen Bottom (ft/bgs)	Screen Top (ft/AMSL)	Screen Bottom (ft/AMSL)	Sample Frequency	Sample Method
LC- 64A	652433.1	1496588.3	Landfill 2	276.2	278.2	25.0	30.0	253.2	248.2	Annual	PDB
LC- 66B	656883.0	1492172.0	Logistics Center	280.5	282.2	68.0	73.0	214.2	209.2	Annual	PDB
LC-108	652634.4	1496486.6	Landfill 2	278.7	281.2	8.0	96.0	273.2	185.2	Quarterly	PDB
LC-109	656773.9	1489773.9	Logistics Center	268.2	267.8	29.5	49.5	238.3	218.3	Semi-Annual	PDB
LC-110	656896.5	1489887.1	Logistics Center	269.8	269.3	29.8	49.8	239.5	219.5	Semi-Annual	WL
LC-111A	657031.0	1490010.4	Logistics Center	270.3	270.1	24.5	44.5	245.6	225.6	Semi-Annual	WL
LC-112	657059.9	1490130.3	Logistics Center	271.8	271.1	29.0	49.0	242.1	222.1	Semi-Annual	WL
LC-113	657311.9	1490264.3	Logistics Center	271.7	271.4	28.0	47.8	243.4	223.6	Semi-Annual	WL
LC-114	657420.0	1490360.3	Logistics Center	271.0	270.5	28.0	47.6	242.5	222.9	Semi-Annual	WL
LC-115	657550.4	1490480.1	Logistics Center	270.7	270.2	29.2	49.0	241.0	221.2	Semi-Annual	WL
LC-116	657676.2	1490598.8	Logistics Center	271.3	270.5	29.0	48.6	241.5	221.9	Semi-Annual	WL
LC-117	657788.3	1490737.9	Logistics Center	272.3	271.9	29.0	49.0	242.9	222.9	Semi-Annual	WL
LC-118	657899.5	1490871.8	Logistics Center	273.7	273.3	30.0	49.6	243.3	223.7	Semi-Annual	WL
LC-119	658011.8	1491007.8	Logistics Center	272.9	272.5	29.0	48.6	243.5	223.9	Semi-Annual	WL
LC-120	658122.9	1491140.3	Logistics Center	270.1	269.5	40.0	60.0	229.5	209.5	Semi-Annual	WL
LC-121	658241.6	1491284.6	Logistics Center	269.4	269.0	20.0	40.0	249.0	229.0	Semi-Annual	WL
LC-122	658347.2	1491409.6	Logistics Center	269.5	269.3	19.5	49.5	249.8	219.8	Semi-Annual	WL
LC-123	658459.7	1491546.8	Logistics Center	275.6	274.9	30.0	50.0	244.9	224.9	Semi-Annual	WL
LC-124	658571.0	1491679.3	Logistics Center	275.3	274.9	21.0	51.0	253.9	223.9	Semi-Annual	PDB
LC-132	657023.7	1491411.0	Logistics Center	280.0	282.3	40.0	50.0	242.3	232.3	Annual	PDB
LC-135	652622.2	1496727.4	Landfill 2	280.4	282.3	24.0	34.0	258.3	248.3	Quarterly	PDB
LC-137B	652691.4	1496179.6	North of Landfill 2	289.1	291.3	40.0	60.0	251.3	231.3	Annual	PDB
LC-160	652434.5	1496210.3	Landfill 2	276.8	279.7	65.0	85.0	214.7	194.7	Quarterly	PDB
LC-167	658939.0	1491124.8	Logistics Center	280.8	281.8	40.0	50.0	241.8	231.8	Annual	PDB
LC-168	658077.7	1491836.2	Logistics Center	269.5	271.7	26.6	36.6	245.1	235.1	Semi-Annual	WL
LC-170	650968.0	1495423.0	East of Madigan	281.1	281.1	15.0	20.0	266.1	261.1	Semi-Annual	WL
LC-177	652196.0	1498032.0	Landfill 2	281.6	284.5	13.0	18.0	271.5	266.5	Semi-Annual	WL
LC-178	651168.0	1492544.0	Madigan	278.7	278.5	15.0	20.0	263.5	258.5	Semi-Annual	Peristaltic
LC-180	649906.0	1493708.0	Madigan	270.4	273.2	5.5	10.5	267.7	262.7	Annual	Peristaltic
LC-182	650345.0	1493986.0	Madigan	269.5	272.4	19.0	24.0	253.4	248.4	Semi-Annual	Peristaltic
LC-218	651148.6	1493656.5	Madigan	276.5	276.3	10.2	20.2	266.1	256.1	Semi-Annual	PDB
LC-222	651135.0	1493310.0	Madigan	279.9	279.4	9.0	19.0	270.4	260.4	Quarterly	PDB
LC-223	651082.0	1493032.0	Madigan	280.8	279.6	10.0	20.0	269.6	259.6	Semi-Annual	PDB

TABLE 2-1 - Monitoring Well Descriptions and Water Quality Sampling Schedule - 2014
Log RAM, Joint Base Lewis-McChord, Washington, 98433

Well ID	Northing NAD27	Easting NAD27	Location	Ground Elevation (ft/AMSL)	Meas. Pt. Elevation (ft/AMSL)	Screen Top (ft/bgs)	Screen Bottom (ft/bgs)	Screen Top (ft/AMSL)	Screen Bottom (ft/AMSL)	Sample Frequency	Sample Method
LC-224	650345.0	1493285.0	Madigan	277.2	276.6	9.0	19.0	267.6	257.6	Semi-Annual	PDB
LX- 2	656966.8	1489951.3	I-5 Pump & Treat Well	269.8	272.4	59.0	89.0	213.4	183.4	Semi-Annual	spigot
LX- 3	657094.9	1490070.3	I-5 Pump & Treat Well	270.9	273.6	60.5	88.5	213.1	185.1	Semi-Annual	spigot
LX- 4	657228.2	1490193.1	I-5 Pump & Treat Well	272.8	275.4	64.0	94.0	211.4	181.4	Semi-Annual	spigot
LX- 5	657353.9	1490302.5	I-5 Pump & Treat Well	270.9	274.1	54.5/80.5	72.0/93.0	-	-	Semi-Annual	spigot
LX- 6	657487.2	1490420.0	I-5 Pump & Treat Well	271.1	273.4	58.0	88.0	215.4	185.4	Semi-Annual	spigot
LX- 7	657614.6	1490539.8	I-5 Pump & Treat Well	271.6	273.8	52.0	65.0	221.8	208.8	Semi-Annual	spigot
LX- 8	657730.9	1490671.0	I-5 Pump & Treat Well	273.6	276.0	58.0	88.0	218.0	188.0	Semi-Annual	spigot
LX- 9	657843.0	1490805.0	I-5 Pump & Treat Well	272.6	275.7	58.5	88.5	217.2	187.2	Semi-Annual	spigot
LX-10	657955.1	1490939.5	I-5 Pump & Treat Well	272.8	275.4	59.0	89.0	216.4	186.4	Semi-Annual	spigot
LX-11	658067.3	1491074.1	I-5 Pump & Treat Well	271.1	274.5	67.0	78.0	207.5	196.5	Semi-Annual	spigot
LX-12	658179.1	1491207.8	I-5 Pump & Treat Well	270.0	272.6	55.0	85.0	217.6	187.6	Semi-Annual	spigot
LX-13	658291.9	1491342.9	I-5 Pump & Treat Well	267.5	270.4	68.5	99.5	201.9	170.9	Semi-Annual	spigot
LX-14	658403.4	1491478.0	I-5 Pump & Treat Well	273.8	276.5	62.0	92.0	214.5	184.5	Semi-Annual	spigot
MT-1	652654.6	1496013.3	Landfill 2	289.8	292.6	20.0	35.0	272.6	257.6	Quarterly	PDB
MT-2	652067.6	1496278.3	Landfill 2	278.6	281.5	20.0	25.0	261.5	256.5	Quarterly	PDB
MT-3	651714.9	1496403.0	Landfill 2	280.8	283.7	10.0	20.0	273.7	263.7	Quarterly	PDB
MT-4	651513.4	1496570.6	Landfill 2	280.7	283.5	10.0	20.0	273.5	263.5	Quarterly	PDB
MT-5	652189.6	1496352.1	Landfill 2	277.1	279.2	22.5	27.5	256.7	251.7	Semi-Annual	WL
MT-6	651834.7	1496494.4	Landfill 2	278.4	280.6	22.0	37.0	258.6	243.6	Semi-Annual	WL
PW-1	652555.3	1496651.8	Landfill 2 Pump and Treat Well	279.9	245.2	10.0	35.0	235.2	210.2	Semi-Annual	spigot
PW-2	652533.6	1496462.8	Landfill 2 Pump and Treat Well	276.8	232.5	8.0	53.0	224.5	179.5	Semi-Annual	spigot
PW-3	652551.4	1496250.0	Landfill 2 Pump and Treat Well	276.1	234.7	10.0	55.0	224.7	179.7	Semi-Annual	spigot
PW-4	652364.8	1496289.8	Landfill 2 Pump and Treat Well	278.3	237.1	9.5	59.5	227.6	177.6	Semi-Annual	spigot
PW-5	652255.8	1496433.6	Landfill 2 Pump and Treat Well	280.2	238.0	11.0	56.0	227.0	182.0	Semi-Annual	spigot
PW-6	652079.9	1496533.5	Landfill 2 Pump and Treat Well	278.9	238.7	10.0	60.0	228.7	178.7	Semi-Annual	spigot
PW-7	651902.9	1496614.8	Landfill 2 Pump and Treat Well	282.3	247.6	10.0	50.0	237.6	197.6	Semi-Annual	spigot
PW-8	651736.4	1496703.4	Landfill 2 Pump and Treat Well	279.2	260.0	10.0	30.0	250.0	230.0	Semi-Annual	spigot
SRCMW-02	653651.0	1476464.7	Training Area 2	233.7	234.6	17.0	32.0	217.6	202.6	Semi-Annual	WL
SW-MC-7	-	-	Murray Creek Surface Sample	-	-	-	-	-	-	Quarterly	Dipper
SW-MC-8	-	-	Murray Creek Surface Sample	-	-	-	-	-	-	Quarterly	Dipper
SW-MC-9	-	-	Murray Creek Surface Sample	-	-	-	-	-	-	Quarterly	Dipper
T-04	660114.0	1489309.0	Tilicum	276.8	276.1	55.0	65.0	221.1	211.1	Semi-Annual	PDB

TABLE 2-1 - Monitoring Well Descriptions and Water Quality Sampling Schedule - 2014
Log RAM, Joint Base Lewis-McChord, Washington, 98433

Well ID	Northing NAD27	Easting NAD27	Location	Ground Elevation (ft/AMSL)	Meas. Pt. Elevation (ft/AMSL)	Screen Top (ft/bgs)	Screen Bottom (ft/bgs)	Screen Top (ft/AMSL)	Screen Bottom (ft/AMSL)	Sample Frequency	Sample Method
T-05	659692.0	1488882.0	Tilicum	272.9	272.4	47.0	57.0	225.4	215.4	Semi-Annual	PDB
T-06	660967.0	1489113.0	Tilicum	272.9	272.2	60.0	70.0	212.2	202.2	Semi-Annual	PDB
T-08	658646.0	1486709.0	Tilicum	260.7	263.1	66.0	76.0	197.1	187.1	Semi-Annual	PDB
T-11B	661501.9	1489735.8	Tilicum	277.0	277.2	74.2	79.2	203.0	198.0	Semi-Annual	PDB
T-13B	659071.0	1488281.0	Tilicum	273.4	272.1	75.3	80.3	196.8	191.8	Semi-Annual	PDB
T-14B	658856.7	1487392.1	Tilicum	268.3	268.5	74.3	79.3	194.2	189.2	Semi-Annual	WL
T-15			Camp Murray			60.0	75.0			Quarterly	PDB
Lower Vashon Aquifer											
BC1	660972.0	1488361.0	Tillicum Private Well	-	-	-	-	-	96.0	Semi-Annual	spigot
FL-4A	651931.0	1493015.8	Madigan	277.2	279.5	123.0	133.0	156.5	146.5	Annual	PDB
LC- 41B	655159.0	1491882.3	Logistics Center	282.5	283.6	130.0	140.0	153.6	143.6	Annual	PDB
LC- 64B	652424.5	1496580.0	Logistics Center	276.6	277.9	74.0	79.0	203.9	198.9	Annual	PDB
LC-111B	657038.5	1490017.8	I-5 Pump and Treat Area	270.2	270.2	105.0	125.0	165.2	145.2	Semi-Annual	PDB
LC-116B	657662.7	1490585.6	I-5 Pump and Treat Area	270.6	271.1	107.0	127.0	164.1	144.1	Semi-Annual	PDB
LC-122B	658353.5	1491418.1	I-5 Pump and Treat Area	269.9	269.9	112.0	132.0	157.9	137.9	Semi-Annual	PDB
LC-128	658841.2	1490373.8	Logistics Center	275.8	277.9	134.0	154.0	143.9	123.9	Annual	PDB
LC-137C	652698.6	1496191.0	North of Landfill 2	289.2	291.5	105.0	125.0	186.5	166.5	Annual	PDB
LC-216	657508.1	1491053.3	Logistics Center	278.0	277.6	104.5	124.5	173.1	153.1	Annual	PDB
LC-217	655164.1	1490022.8	MAMC	272.2	271.9	89.1	109.1	182.8	162.8	Annual	PDB
LC-219	658472.6	1489299.5	Logistics Center	272.8	275.2	121.0	141.0	154.2	134.2	Annual	PDB
LC-225	659158.0	1488820.0	Tillicum	275.3	274.8	126.0	146.0	148.8	128.8	Semi-Annual	PDB
LC-226	658484.0	1488332.0	Tillicum	268.2	267.6	126.5	146.5	141.1	121.1	Semi-Annual	PDB
MAMC-1	653079.0	1489451.0	MAMC Production Well	257.9	270.6	85.0	115.0	185.6	155.6	Annual	spigot
MAMC-6	652805.0	1489193.0	MAMC Production Well	274.8	267.1	92.0	117.0	175.1	150.1	Annual	spigot
T-10	660316.0	1489689.0	Tilicum	270.5	270.1	104.0	114.0	166.1	156.1	Semi-Annual	PDB
Sea Level Aquifer											
88-O1-SS	657085	1471554	West of Landfill 4	-	220.1	185.0	195.0	35.1	25.1	Semi-Annual	WL
LC- 21C	652743.0	1496426.0	Logistics Center	279.9	282.1	138.9	143.9	143.2	138.2	Annual	PDB
LC- 26D	651918.0	1497566.0	Landfill 2	276.9	277.1	139.0	149.0	138.1	128.1	Semi-Annual	WL
LC- 35D	653530.0	1494905.0	Logistics Center	288.0	289.1	195.0	205.0	94.1	84.1	Semi-Annual	WL
LC- 40D	656927.2	1490263.0	Logistics Center	277.3	279.6	168.0	178.0	111.6	101.6	Semi-Annual	WL
LC- 41D	655153.7	1491855.6	Logistics Center	281.7	282.7	192.7	202.7	90.0	80.0	Semi-Annual	WL
LC- 47D	655176.0	1493403.0	Logistics Center	282.0	280.6	209.3	219.5	71.3	61.1	Annual	PDB

TABLE 2-1 - Monitoring Well Descriptions and Water Quality Sampling Schedule - 2014
Log RAM, Joint Base Lewis-McChord, Washington, 98433

Well ID	Northing NAD27	Easting NAD27	Location	Ground Elevation (ft/AMSL)	Meas. Pt. Elevation (ft/AMSL)	Screen Top (ft/bgs)	Screen Bottom (ft/bgs)	Screen Top (ft/AMSL)	Screen Bottom (ft/AMSL)	Sample Frequency	Sample Method
LC- 50D	652150.0	1495547.0	Logistics Center	271.7	272.9	150.3	159.3	122.6	113.6	Annual	PDB
LC- 66D	656900.2	1492176.0	Logistics Center	281.6	283.7	175.9	185.9	107.8	97.8	Annual	PDB
LC- 67D	655739.0	1490344.0	Logistics Center	264.2	264.6	148.0	152.0	116.6	112.6	Annual	PDB
LC- 68D	653737.0	1492566.0	Logistics Center	-	281.7	240.6	250.8	41.1	30.9	Quarterly	PDB
LC- 69D	655127.8	1491984.6	Logistics Center	282.2	283.4	193.0	203.0	90.4	80.4	Annual	PDB
LC- 70D	655182.3	1491765.3	Logistics Center	280.7	281.6	206.4	216.2	75.2	65.4	Semi-Annual	WL
LC- 72D	656735.7	1488748.5	North of MAMC	263.9	266.2	166.0	176.0	100.2	90.2	Annual	PDB
LC- 73D	656095.4	1488279.9	North of MAMC	269.6	271.3	164.9	174.9	106.4	96.4	Semi-Annual	WL
LC- 74D	654744.0	1487615.4	Logistics Center	274.5	276.5	210.0	220.0	66.5	56.5	Quarterly	PDB
LC- 75D	652853.5	1489606.8	South of MAMC	278.6	281.2	173.0	178.0	108.2	103.2	Annual	PDB
LC- 76D	655289.4	1485410.1	Evergreen	279.1	282.1	198.0	208.0	84.1	74.1	Semi-Annual	WL
LC- 77D	658817.8	1490387.8	Logistics Center	275.4	278.2	195.0	205.0	83.2	73.2	Annual	PDB
LC- 79D	659610.8	1491751.9	North of Logistics Center	272.8	275.7	211-214	275-278	-	-	Semi-Annual	WL
LC- 80D	658065.9	1487187.1	Tillicum	264.1	264.7	251-254	282-285	-	-	Semi-Annual	WL
LC- 81D	654951.6	1482809.3	South of American Lake	267.5	270.2	210-214	280-283	-	-	Semi-Annual	WL
LC- 82D	653293.8	1485490.2	New Hillside	274.3	276.9	235-238	287-290	-	-	Semi-Annual	WL
LC- 83D	655355.4	1486861.5	Evergreen	266.1	268.9	208-211	292-295	-	-	Semi-Annual	WL
LC- 84D-1	653623.1	1483259.1	Discovery Hill	269.6	268.8	213.5	233.5	55.3	35.3	Annual	PDB
LC- 84D-2	653630.1	1483254.1	Discovery Hill	269.5	268.9	275.7	285.7	-6.8	-16.8	Annual	PDB
LC- 85D-1	652682.2	1487038.1	New Hillside	285.3	285.2	209.0	229.0	76.2	56.2	Annual	PDB
LC- 85D-2	652693.2	1487041.1	New Hillside	285.0	284.8	242.8	252.8	42.0	32.0	Annual	PDB
LC- 86D-1	654128.1	1481094.1	South of American Lake	261.6	261.3	197.1	217.1	64.2	44.2	Semi-Annual	PDB
LC- 86D-2	654123.1	1481080.1	South of American Lake	261.2	261.1	224.7	239.7	36.4	21.4	Semi-Annual	PDB
LC- 87D-1	655636.1	1484141.0	Camp Murray	274.8	274.5	229.9	249.9	44.6	24.6	Annual	PDB
LC- 87D-2	655614.1	1484132.0	Camp Murray	275.0	274.8	254.4	274.4	20.4	0.4	Annual	PDB
LC- 88D-1	653552.1	1477386.1	Training Area 2	256.2	258.5	195.5	215.5	63.0	43.0	Semi-Annual	PDB
LC- 88D-2	653540.1	1477395.1	Training Area 2	255.9	258.0	228.8	248.8	29.2	9.2	Semi-Annual	PDB
LC- 89D-1	652148.1	1478435.1	Davis Hill	261.0	260.7	208.0	218.0	52.7	42.7	Annual	PDB
LC- 89D-2	652151.1	1478408.1	Davis Hill	260.6	260.6	231.6	251.6	29.0	9.0	Annual	PDB
LC- 90D-1	652779.1	1481158.1	Hillside	261.5	261.2	205.1	225.1	56.1	36.1	Annual	PDB
LC- 90D-2	652765.1	1481144.1	Hillside	261.0	260.9	233.8	248.8	27.1	12.1	Annual	PDB
LC- 91D-1	654335.1	1478799.1	Training Area 2	253.0	256.0	205.0	225.0	51.0	31.0	Annual	PDB
LC- 91D-2	654357.1	1478797.1	Training Area 2	253.6	256.6	238.0	258.0	18.6	-1.4	Annual	PDB

TABLE 2-1 - Monitoring Well Descriptions and Water Quality Sampling Schedule - 2014
Log RAM, Joint Base Lewis-McChord, Washington, 98433

Well ID	Northing NAD27	Easting NAD27	Location	Ground Elevation (ft/AMSL)	Meas. Pt. Elevation (ft/AMSL)	Screen Top (ft/bgs)	Screen Bottom (ft/bgs)	Screen Top (ft/AMSL)	Screen Bottom (ft/AMSL)	Sample Frequency	Sample Method
LC- 92D-1	652438.5	1474875.6	Training Area 2	250.6	253.1	192.0	212.0	61.1	41.1	Annual	PDB
LC- 92D-2	652414.3	1474868.8	Training Area 2	250.8	252.9	238.0	258.0	14.9	-5.1	Annual	PDB
LC- 93D-1	652124.8	1472474.5	Training Area 2	238.3	240.3	195.0	215.0	45.3	25.3	Semi-Annual	PDB
LC- 93D-2	652102.5	1472467.4	Training Area 2	239.2	241.0	232.0	252.0	9.0	-11.0	Semi-Annual	PDB
LC- 94D-1	654119.1	1475791.4	Training Area 2	226.5	228.5	175.0	195.0	53.5	33.5	Annual	PDB
LC- 94D-2	654115.4	1475812.6	Training Area 2	227.0	228.8	200.0	220.0	28.8	8.8	Annual	PDB
LC- 95D-1	654710.4	1473340.0	Training Area 2	227.7	230.1	210.0	230.0	20.1	0.1	Semi-Annual	PDB
LC- 95D-2	654701.1	1473319.0	Training Area 2	227.9	231.7	235.0	255.0	-3.3	-23.3	Semi-Annual	PDB
LC- 96D	654519.0	1487674.0	Evergreen	274.8	274.5	190.0	210.0	84.5	64.5	Quarterly	PDB
LC- 97D	655860.0	1486505.0	Evergreen	269.1	271.8	188.0	208.0	83.8	63.8	Annual	PDB
LC- 98D-1	654654.0	1486204.0	Evergreen	275.3	274.9	202.0	222.0	72.9	52.9	Quarterly	PDB
LC- 98D-2	654645.0	1486191.0	Evergreen	275.4	275.2	242.0	262.0	33.2	13.2	Quarterly	PDB
LC- 99D	655363.0	1487366.0	Evergreen	268.30	270.73	200	220	70.7	50.7	Quarterly	PDB
LC-101D-1	654553.0	1484228.0	New Hillside	273.9	276.4	181.0	201.0	95.4	75.4	Semi-Annual	PDB
LC-101D-2	654556.0	1484231.0	New Hillside	273.9	276.4	210.0	230.0	66.4	46.4	Semi-Annual	PDB
LC-102D-1	653566.0	1479626.0	Training Area 2	259.86	261.77	216	236	45.8	25.8	Semi-Annual	PDB
LC-102D-2	653560.0	1479622.0	Training Area 2	259.46	261.87	255	275	6.9	-13.1	Semi-Annual	PDB
LC-103D	653687.0	1495515.0	North of MAMC	268.01	270.70	200	220	70.7	50.7	Semi-Annual	PDB
LC-126	657844.3	1489440.8	Logistics Center	270.1	271.9	159.8	179.8	112.2	92.2	Annual	PDB
LC-166D	657255.3	1481894.8	Beachwood	241.9	243.9	168.0	178.0	75.9	65.9	Semi-Annual	WL
LF4-MW-02C	657433.9	1479172.0	Landfill 4	227.2	229.1	192.0	197.7	37.1	31.4	Semi-Annual	WL
LF4-MW-04	656546.7	1477961.4	Landfill 4	245.8	247.9	219.0	224.0	28.9	23.9	Semi-Annual	WL
LF4-MW-09B	657399.3	1476837.7	Landfill 4	231.6	223.8	208.0	213.0	15.8	10.8	Semi-Annual	WL
LF4-MW-12B	658234.3	1477004.9	Landfill 4	236.5	238.3	188.0	193.0	50.3	45.3	Semi-Annual	WL
LF4-MW-14	657725.2	1476549.4	Landfill 4	235.1	236.5	182.0	187.0	54.5	49.5	Semi-Annual	WL
MAMC-3	653844.0	1488936.0	MAMC Production Well	-	263.7	151.0	181.0	112.7	82.7	Semi-Annual	spigot
MAMC-4	653960.0	1488780.0	MAMC Production Well	-	261.6	261.0	292.0	0.6	-30.4	Semi-Annual	spigot
SLAP-1	655722.0	1486616.0	SLA Pump and Treat Well	268.0	270.7	210.0	250.0	60.7	20.7	Quarterly	spigot
SLAP-2	655493.0	1486888.0	SLA Pump and Treat Well	266.5	269.2	210.0	250.0	59.2	19.2	Quarterly	spigot
SLAP-3	655533.0	1487286.0	SLA Pump and Treat Well	266.8	269.7	170.0	270.0	99.7	-0.3	Quarterly	spigot
SLAP-4	655185.0	1487383.0	SLA Pump and Treat Well	268.0	271.2	170.0	270.0	101.2	1.2	Quarterly	spigot
SLAP-5	654872.0	1487505.0	SLA Pump and Treat Well	268.2	274.6	168.0	268.0	106.6	6.6	Quarterly	spigot
SLAP-6	654576.0	1487627.0	SLA Pump and Treat Well	275.0	278.0	180.0	220.0	98.0	58.0	Quarterly	spigot

TABLE 2-1 - Monitoring Well Descriptions and Water Quality Sampling Schedule - 2014
Log RAM, Joint Base Lewis-McChord, Washington, 98433

Well ID	Northing NAD27	Easting NAD27	Location	Ground Elevation (ft/AMSL)	Meas. Pt. Elevation (ft/AMSL)	Screen Top (ft/bgs)	Screen Bottom (ft/bgs)	Screen Top (ft/AMSL)	Screen Bottom (ft/AMSL)	Sample Frequency	Sample Method
SRCMW-01B	654764.4	1476256.9	Training Area 2	222.1	224.2	176.0	181.0	48.2	43.2	Semi-Annual	WL
Well 13	653213.0	1481638.0	Evergreen	274.5	274.2	190.0	200.0	84.2	74.2	Semi-Annual	spigot
						230.0	240.0	44.2	34.2		

Notes:

Meas. Pt. = Measure point elevation (top of PVC casing)
ft/AMSL = Feet above mean sea level
ft/bgs = Feet below ground surface
PDB = Passive diffusion bag
- = No data or not applicable
NAPL = Non-aqueous phase liquids
MAMC = Madigan Army Medical Center
SLA = Sea Level Aquifer

Monitoring wells and sample points are presented on Exhibits 1 and 2.

T-15 was developed on 03 June 2014. Total depth of well is 75.2 feet below ground surface. Monitoring well has not been surveyed.

TABLE 3-1 - Monitoring Well Water Levels - 2014

Log RAM, Joint Base Lewis-McChord, Washington 98433

Well ID	Date	Ref. Elev. (ft/NGVD-29)	Depth to SWL (ft)	SWL Elev. (ft)
Upper Vashon Aquifer Unit				
85-PA-381	14-Feb-14	269.17	11.95	257.22
	09-Sep-14	269.17	12.73	256.44
85-PA-382	13-Feb-14	265.20	11.30	253.90
	03-Sep-14	265.20	11.95	253.25
85-PA-384	13-Feb-14	279.50	25.00	254.50
	03-Sep-14	279.50	27.69	251.81
CM-2	12-Feb-14	262.52	20.60	241.92
	09-Sep-14	262.52	21.15	241.37
FL-01	12-Feb-14	278.12	10.20	267.92
	03-Sep-14	278.12	10.43	267.69
FL-02	14-Feb-14	285.59	13.70	271.89
	08-Sep-14	285.59	14.01	271.58
FL-03	13-Feb-14	265.36	14.15	251.21
	09-Sep-14	265.36	14.65	250.71
FL-04B	13-Feb-14	279.48	12.40	267.08
	08-Sep-14	279.48	12.37	267.11
FL-06	19-Feb-14	267.98	11.15	256.83
	05-Sep-14	267.98	14.07	253.91
LC-01	18-Feb-14	276.05	14.80	261.25
	04-Sep-14	276.05	17.51	258.54
LC- 03	18-Feb-14	274.95	16.55	258.40
	08-Sep-14	274.95	19.13	255.82
LC- 05	18-Feb-14	278.08	24.30	253.78
	08-Sep-14	278.08	26.29	251.79
LC- 06	18-Feb-14	286.44	23.60	262.84
	08-Sep-14	286.44	25.74	260.70
LC- 10	13-Feb-14	287.99	25.00	262.99
	08-Sep-14	287.99	25.94	262.05
LC- 14A	19-Feb-14	264.97	12.30	252.67
	11-Sep-14	264.97	14.59	250.38
LC- 16	19-Feb-14	266.95	10.47	256.48
	05-Sep-14	266.95	12.89	254.06
LC- 18	18-Feb-14	283.89	19.50	264.39
	08-Sep-14	283.89	20.92	262.97
LC- 19A	13-Feb-14	290.61	24.35	266.26
	10-Sep-14	290.61	25.13	265.48
LC- 20	13-Feb-14	290.88	26.15	264.73
	08-Sep-14	290.88	27.23	263.65
LC- 24	18-Feb-14	286.70	17.00	269.70
	05-Sep-14	286.70	18.80	267.90
LC- 26	15-Feb-14	276.02	5.40	270.62
	05-Sep-14	276.02	5.76	270.26
LC-27	18-Feb-14	279.45	9.20	270.25
	05-Sep-14	279.45	11.46	267.99
LC- 34	14-Feb-14	289.08	27.60	261.48
	08-Sep-14	289.08	28.19	260.89
LC- 39	19-Feb-14	270.17	18.20	251.97
	10-Sep-14	270.17	20.69	249.48
LC- 40	18-Feb-14	278.39	24.45	253.94
	10-Sep-14	278.39	26.88	251.51

TABLE 3-1 - Monitoring Well Water Levels - 2014
Log RAM, Joint Base Lewis-McChord, Washington 98433

Well ID	Date	Ref. Elev. (ft/NGVD-29)	Depth to SWL (ft)	SWL Elev. (ft)
LC- 41A	13-Feb-14	283.58	26.65	256.93
	10-Sep-14	283.58	27.50	256.08
LC- 47A	13-Feb-14	280.73	21.40	259.33
	08-Sep-14	280.73	22.16	258.57
LC- 49	NA	286.21	-	-
	08-Sep-14	286.21	-	-
LC- 50	14-Feb-14	272.64	6.60	266.04
	08-Sep-14	272.64	7.12	265.52
LC- 53	14-Feb-14	277.38	10.35	267.03
	05-Sep-14	277.38	10.79	266.59
LC- 57	18-Feb-14	286.04	15.90	270.14
	05-Sep-14	286.04	17.61	268.43
LC- 61B	12-Feb-14	277.49	25.40	252.09
	09-Sep-14	277.49	26.12	251.37
LC- 64A	18-Feb-14	278.15	8.40	269.75
	08-Sep-14	278.15	11.29	266.86
LC- 66B	18-Feb-14	282.22	27.40	254.82
	08-Sep-14	282.22	29.30	252.92
LC-108	18-Feb-14	281.22	11.55	269.67
	03-Sep-14	281.22	14.50	266.72
LC-110	NA	269.27		269.27
	10-Sep-14	269.27	18.08	251.19
LC-111A	18-Feb-14	270.06	16.90	253.16
	09-Sep-14	270.06	19.30	250.76
LC-112	18-Feb-14	271.13	18.55	252.58
	10-Sep-14	271.13	20.90	250.23
LC-113	18-Feb-14	271.39	18.80	252.59
	08-Sep-14	271.39	20.95	250.44
LC-114	NA	270.50		270.50
	08-Sep-14	270.50	20.15	250.35
LC-115	18-Feb-14	270.16	17.15	253.01
	08-Sep-14	270.16	19.07	251.09
LC-116	18-Feb-14	270.50	17.35	253.15
	03-Sep-14	270.50	19.03	251.47
LC-117	NA	271.85		271.85
	08-Sep-14	271.85	20.70	251.15
LC-118	18-Feb-15	273.31	19.75	253.56
	03-Sep-14	273.31	21.50	251.81
LC-119	18-Feb-14	272.46	18.80	253.66
	03-Sep-14	272.46	20.54	251.92
LC-120	NA	269.50		-
	NA	269.50		-
LC-121	18-Feb-14	268.97	15.00	253.97
	04-Sep-14	268.97	17.85	251.12
LC-123	NA	274.91		274.91
	04-Sep-14	274.91	22.82	252.09
LC-124	19-Feb-14	274.88	20.50	254.38
	04-Sep-14	274.88	22.78	252.10

TABLE 3-1 - Monitoring Well Water Levels - 2014

Log RAM, Joint Base Lewis-McChord, Washington 98433

Well ID	Date	Ref. Elev. (ft/NGVD-29)	Depth to SWL (ft)	SWL Elev. (ft)
LC-132	18-Feb-14	282.32	27.65	254.67
	08-Sep-14	282.32	29.53	252.79
LC-135	18-Feb-14	282.33	11.80	270.53
	03-Sep-14	282.33	14.00	268.33
LC-137B	14-Feb-14	291.26	25.20	266.06
	08-Sep-14	291.26	26.11	265.15
LC-160	18-Feb-14	279.74	10.60	269.14
	08-Sep-14	279.74	13.32	266.42
LC-167	19-Feb-14	281.79	27.40	254.39
	11-Sep-14	281.79	29.71	252.08
LC-168	18-Feb-14	271.71	17.70	254.01
	08-Sep-14	271.71	19.59	252.12
LC-170	14-Feb-14	281.12	15.45	265.67
	08-Sep-14	281.12	19.59	261.53
LC-177	14-Feb-14	284.53	13.35	271.18
	05-Sep-14	284.53	13.67	270.86
LC-178	13-Feb-14	278.52	14.75	263.77
	08-Sep-14	278.52	11.25	267.27
LC-180	14-Feb-14	273.24	6.50	266.74
	08-Sep-14	273.24	6.59	266.65
LC-182	14-Feb-14	272.44	5.10	267.34
	08-Sep-14	272.44	5.21	267.23
LC-218	13-Feb-14	276.34	8.40	267.94
	03-Sep-14	276.34	8.62	267.72
LC-222	13-Feb-14	279.43	11.60	267.83
	08-Sep-14	279.43	12.66	266.77
LC-223	13-Feb-14	279.60	12.55	267.05
	03-Sep-14	279.60	11.73	267.87
LC-224	13-Feb-14	276.63	9.20	267.43
	03-Sep-14	276.63	9.32	267.31
MT-1	14-Feb-14	292.56	26.70	265.86
	03-Sep-14	292.56	27.19	265.37
MT-2	18-Feb-14	281.54	11.40	270.14
	03-Sep-14	281.54	13.88	267.66
MT-3	18-Feb-14	283.74	13.20	270.54
	03-Sep-14	283.74	15.31	268.43
MT-4	18-Feb-14	283.52	13.15	270.37
	03-Sep-14	283.52	14.85	268.67
MT-5	18-Feb-14	279.16	9.45	269.71
	05-Sep-14	279.16	12.46	266.70
MT-6	18-Feb-14	280.64	10.20	270.44
	05-Sep-14	280.64	12.70	267.94
T-04	13-Feb-14	276.13	28.75	247.38
	04-Sep-14	276.13	29.24	246.89
T-05	20-Feb-14	272.44	22.50	249.94
	04-Sep-14	272.44	24.72	247.72
T-06	12-Feb-14	272.25	27.50	244.75
	04-Sep-14	272.25	28.00	244.25
T-11B	12-Feb-14	277.20	35.05	242.15
	04-Sep-14	277.20	35.55	241.65

TABLE 3-1 - Monitoring Well Water Levels - 2014
Log RAM, Joint Base Lewis-McChord, Washington 98433

Well ID	Date	Ref. Elev. (ft/NGVD-29)	Depth to SWL (ft)	SWL Elev. (ft)
T-13B	12-Feb-14	272.14	34.55	237.59
	04-Sep-14	272.14	34.98	237.16
T-15*	12-Feb-14	-	24.60	-
	03-Sep-14	-	25.75	-
Sea Level Aquifer Unit				
LC- 21C	14-Feb-14	282.06	14.75	267.31
	08-Sep-14	282.06	15.55	266.51
LC- 26D	14-Feb-14	277.14	8.10	269.04
	05-Sep-14	277.14	8.74	268.40
LC- 35D	18-Feb-14	289.14	25.15	263.99
	08-Sep-14	289.14	27.17	261.97
LC- 40D	18-Feb-14	279.56	117.50	162.06
	10-Sep-14	279.56	117.88	161.68
LC- 41D	13-Feb-14	282.67	26.40	256.27
	11-Sep-14	282.67	36.45	246.22
LC- 47D	13-Feb-14	280.56	25.90	254.66
	08-Sep-14	280.56	27.23	253.33
LC- 50D	14-Feb-14	272.92	6.95	265.97
	08-Sep-14	272.92	7.85	265.07
LC- 66D	18-Feb-14	283.73	90.15	193.58
	08-Sep-14	283.73	91.49	192.24
LC- 67D	13-Feb-14	264.58	91.15	173.43
	09-Sep-14	264.58	91.16	173.42
LC- 68D	13-Feb-14	281.68	27.40	254.28
	10-Sep-14	281.68	28.54	253.14
LC- 69D	13-Feb-14	283.38	30.50	252.88
	10-Sep-14	283.38	31.01	252.37
LC- 70D	13-Feb-14	281.56	52.15	229.41
	10-Sep-14	281.56	54.50	227.06
LC- 72D	13-Feb-14	266.23	108.40	157.83
	09-Sep-14	266.23	108.20	158.03
LC- 73D	13-Feb-14	271.28	115.10	156.18
	09-Sep-14	271.28	114.87	156.41
LC- 74D	13-Feb-14	276.50	126.40	150.10
	03-Sep-14	276.50	126.60	149.90
LC- 75D	13-Feb-14	281.18	43.25	237.93
	09-Sep-14	281.18	43.46	237.72
LC- 76D	12-Feb-14	282.06	132.60	149.46
	10-Sep-14	282.06	132.32	149.74
LC- 77D	19-Feb-14	278.15	103.60	174.55
	11-Sep-14	278.15	104.20	173.95
LC- 79D	18-Feb-14	275.74	82.50	193.24
	10-Sep-14	275.74	83.38	192.36
LC- 80D	12-Feb-14	264.72	110.35	154.37
	09-Sep-14	264.72	110.23	154.49
LC- 81D	11-Feb-14	270.15	124.90	145.25
	09-Sep-14	270.15	123.75	146.40

TABLE 3-1 - Monitoring Well Water Levels - 2014

Log RAM, Joint Base Lewis-McChord, Washington 98433

Well ID	Date	Ref. Elev. (ft/NGVD-29)	Depth to SWL (ft)	SWL Elev. (ft)
LC- 82D	12-Feb-14	276.87	126.45	150.42
	09-Sep-14	276.87	126.13	150.74
LC- 83D	12-Feb-14	268.91	119.50	149.41
	09-Sep-14	268.91	118.83	150.08
LC- 84D-1	12-Feb-14	269.39	121.00	148.39
	10-Sep-14	269.39	119.87	149.52
LC- 85D-1	12-Feb-14	285.15	130.55	154.60
	10-Sep-14	285.15	132.30	152.85
LC- 86D-1	11-Feb-14	261.31	117.85	143.46
	02-Sep-14	261.31	118.59	142.72
LC- 87D-1	11-Feb-14	274.54	125.55	148.99
	09-Sep-14	274.54	125.20	149.34
LC- 88D-1	11-Feb-14	258.47	156.35	102.12
	02-Sep-14	258.47	158.02	100.45
LC- 89D-1	11-Feb-14	260.71	140.00	120.71
	03-Sep-14	260.71	NA	-
LC- 90D-1	12-Feb-14	261.15	120.80	140.35
	10-Sep-14	261.15	121.13	140.02
LC- 91D-1	11-Feb-14	256.01	144.85	111.16
	09-Sep-14	256.01	145.93	110.08
LC- 92D-1	18-Feb-14	253.07	168.90	84.17
	09-Sep-14	253.07	171.64	81.43
LC- 93D-1	11-Feb-14	240.32	162.00	78.32
	02-Sep-14	240.32	164.64	75.68
LC- 94D-1	11-Feb-14	228.47	141.40	87.07
	09-Sep-14	228.47	143.34	85.13
LC- 95D-1	11-Feb-14	230.07	147.90	82.17
	02-Sep-14	230.07	149.85	80.22
LC-96D	13-Feb-14	274.64	124.35	150.29
	04-Sep-14	274.64	124.46	150.18
LC-97D	13-Feb-14	271.85	117.35	154.50
	10-Sep-14	271.85	118.88	152.97
LC-98D-1	12-Feb-14	277.84	127.50	150.34
	03-Sep-14	277.84	127.76	150.08
LC-99D	13-Feb-14	270.73	122.50	148.23
	03-Sep-14	270.73	122.70	148.03
LC-101D-1	12-Feb-14	273.67	125.10	148.57
	03-Sep-14	273.67	125.52	148.15
LC-102D-1	11-Feb-14	261.77	135.30	126.47
	02-Sep-14	261.77	136.40	125.37
LC-103D	14-Feb-14	270.70	119.80	150.90
	03-Sep-14	270.70	119.98	150.72
LC-104D	11-Feb-14		138.50	
	09-Sep-14		140.46	
LC-126	19-Feb-14	271.94	110.35	161.59
	NA	271.94	-	-
LC-166D	11-Feb-14	243.94	34.45	209.49
	09-Sep-14	243.94	34.75	209.19
LF4-MW-02C	11-Feb-14	229.14	122.10	107.04
	09-Sep-14	229.14	123.50	105.64

TABLE 3-1 - Monitoring Well Water Levels - 2014

Log RAM, Joint Base Lewis-McChord, Washington 98433

Well ID	Date	Ref. Elev. (ft/NGVD-29)	Depth to SWL (ft)	SWL Elev. (ft)
LF4-MW-04	11-Feb-14	247.94	151.20	96.74
	09-Sep-14	247.94	152.93	95.01
LF4-MW-09B	11-Feb-14	223.83	144.95	78.88
	09-Sep-14	223.83	146.80	77.03
LF4-MW-12B	11-Feb-14	238.28	146.75	91.53
	09-Sep-14	238.28	148.52	89.76
LF4-MW-14	11-Feb-14	236.53	147.40	89.13
	09-Sep-14	236.53	149.26	87.27
SRCMW-01B	19-Feb-14	224.19	135.10	89.09
	09-Sep-14	224.19	137.23	86.96

ft = Foot

NGVD-29 = National Geodetic Vertical Datum - 1929

SWL = Static water level

- = Not measured, not applicable

*= T-15 has not been surveyed.

Table 3-2a - Monitoring Wells Upgradient of System

	Groundwater Elevation (ft)																			
Date	**LC-21C**	**LC-26D**	**LC-35D**	**LC-40D**	**LC-47D**	**LC-50D**	**LC-66D**	**LC-68D**	**LC-69D**	**LC-75D**	**LC-77D**	**LC-79D**	**LC-41D**	**LC-67D**	**LC-70D**	**LC-72D**	**LC-73D**	**LC-80D**	**LC-103D**	**LC-126**
03-Feb-09	267.61	269.44	262.29	182.51	255.76	266.64	206.4	254.93	254.7	238.78	186.48	205.99	250.37	192	235.31	179.83	178.9	176.84	176.38	181.54
11-Feb-10	268.01	269.94	263.74	179.56	255.81	266.92	203.23	254.83	255.13	239.03	181.1	198.44	-	188.63	224.01	174.88	173.93	170.42	175.75	176.29
14-Feb-11	268.48	270.34	264.29	161.46	256.76	267.49	194.73	256.58	255.7	240.38	167.45	192.94	250.17	174.13	231.66	157.48	155.66	153.5	149.77	160.19
15-Feb-12	267.9	269.63	263.89	162.29	255.79	266.75	194.31	255.53	254.48	239.68	168.28	193.44	249.22	175.05	230.86	158.43	156.66	154.64	151.09	161.37
07-Feb-13	267.76	269.71	263.61	162.58	255.68	266.77	194.29	255.33	254.46	239.53	174.98	193.71	244.24	174.58	229.75	158.82	157.02	155.02	151.47	162.09
14-Feb-14	267.31	269.04	263.99	162.06	254.66	265.97	193.58	254.28	252.88	237.93	174.55	193.24	256.27	173.43	229.41	157.83	156.18	154.37	150.90	161.59
Difference 2010	**0.4**	**0.5**	**1.45**	2.95	**0.05**	**0.28**	3.17	0.1	**0.43**	**0.25**	5.38	7.55	-	3.37	11.3	4.95	4.97	6.42	0.63	5.25
Difference 2011	**0.87**	**0.9**	**2**	21.05	**1**	**0.85**	11.67	**1.65**	**1**	**1.6**	19.03	13.05	**0.2**	17.87	3.65	22.35	23.24	23.34	26.61	21.35
Difference 2012	**0.29**	**0.19**	**1.6**	20.22	**0.03**	**0.11**	12.09	**0.6**	0.22	**0.9**	18.2	12.55	**1.15**	16.95	4.45	21.4	22.24	22.2	25.29	20.17
Difference 2013	**0.15**	**0.27**	**1.32**	19.93	0.08	**0.13**	12.11	**0.4**	0.24	**0.75**	11.5	12.28	**6.13**	17.42	5.56	21.01	21.88	21.82	24.91	19.45
Difference 2014	0.30	0.40	**1.7**	20.45	1.10	0.67	12.82	0.65	1.82	0.85	11.93	12.75	**5.90**	18.57	5.90	22.00	22.72	22.47	25.48	19.95
03-Aug-09	265.85	267.37	260.84	176.53	251.61	263.92	199.33	250.33	251.31	232.43	180.46	198.94	241.63	185.63	219.08	174.46	173.63	170.62	170.83	175.72
10-Aug-10	266.53	268.51	262.17	157.51	253.98	265.36	190.68	254.03	253.18	237.51	163.65	-	247.07	170.2	227.21	152.78	150.91	-	144.85	156.39
09-Aug-11	267.39	269.29	262.79	159.61	254.2	266.07	191.93	253.93	253.03	237.48	165.43	190.2	247.39	171.98	228.06	155.68	154.03	151.82	148.35	158.39
10-Aug-12	266.86	268.81	262.44	160.06	254.24	265.12	192.03	253.73	253.18	234.49	171.61	190.78	244.05	172.35	228.43	156.29	154.64	152.18	148.81	158.64
07-Aug-13	265.96	267.94	261.39	157.96	252.36	264.42	189.28	251.73	251.18	231.18	170.85	188.94	244.07	169.48	223.56	154.18	152.48	150.54	146.9	157.94
08-Sep-14	266.51	268.40	261.97	161.68	253.33	265.07	192.24	253.14	252.37	237.72	173.95	192.36	246.22	173.42	227.06	158.03	156.41	154.49	150.72	-
Difference 2010	**0.68**	**1.14**	**1.33**	19.02	**2.37**	**1.44**	8.65	**3.7**	**1.87**	**5.08**	16.81	-	**5.44**	15.43	**8.13**	21.68	22.72	-	25.98	19.33
Difference 2011	**1.54**	**1.92**	**1.95**	16.92	**2.59**	**2.15**	7.4	**3.6**	**1.72**	**5.05**	15.03	8.74	**5.76**	13.65	**8.98**	18.78	19.6	18.8	22.48	17.33
Difference 2012	**1.01**	**1.44**	**1.6**	16.47	**2.63**	**1.2**	7.3	**3.4**	**1.87**	**2.06**	8.85	8.16	**2.42**	13.28	**9.35**	18.17	18.99	18.44	22.02	17.08
Diference 2013	**0.11**	**0.57**	**0.55**	18.57	**0.75**	**0.5**	10.05	**1.4**	**0.13**	**1.25**	9.61	10	**2.44**	16.15	**4.48**	20.28	21.15	20.08	23.93	17.78
Diference 2014	**0.66**	**1.03**	**1.13**	14.85	**1.72**	**1.15**	7.09	**2.81**	**1.06**	**5.29**	6.51	6.58	**4.59**	12.21	**7.98**	16.43	17.22	16.13	20.11	-

Table 3-2b - Monitoring Wells Cross Gradient of System and System Production Wells

Groundwater Elevation (ft)											
Date	**LC-74D**	**LC-83D**	**LC-96D**	**LC-97D**	**LC-99D**	**SLAP-1**	**SLAP-2**	**SLAP-3**	**SLAP-4**	**SLAP-5**	**SLAP-6**
03-Feb-09	175.88	174.66	175.91	178.16	175.85	175.13	175.14	175.94	175.84	175.72	176.79
11-Feb-10	175.23	174.36	175.34	172.43	175.23	-	-	-	-	-	-
14-Feb-11	149.25	144.51	149.44	152.7	147.58	133.61	145.74	140.82	148.16	146.6	147.84
14-Feb-12	150.6	149.86	150.74	154.65	148.83	129.03	145.45	144.61	143.37	147.4	149.05
07-Feb-13	151.12	150.29	151.27	155.47	149.29	151.89	123.32	126.25	122.18	128.43	129.35
30-Jan-14	150.1	149.41	150.29	154.50	148.23	143.1	123.1	126.8	122.5	128.6	129.7
Difference 2010*	0.65	0.3	0.57	5.73	0.62	-	-	-	-	-	-
Difference 2011	26.63	30.15	26.47	25.46	28.27	41.52	29.4	35.12	27.68	29.12	28.95
Difference 2012	25.28	24.8	25.17	23.51	27.02	46.1	29.69	31.33	32.47	28.32	27.74
Difference 2013	24.76	24.37	24.64	22.69	26.56	23.24	51.82	49.69	53.66	47.29	47.44
Difference 2014	25.78	25.25	25.62	23.66	27.62	32.03	52.04	49.14	53.34	47.12	47.09
03-Aug-09	166.93	169.71	-	172.67	170.38	171.3	171.11	172.14	172.01	170.7	172.21
10-Aug-10	144.3	-	144.42	149.07	142.73	131.21	141.26	140.14	143.51	142.4	143.42
09-Aug-11	147.9	147.04	148.09	151.78	146.13	129.47	143.16	136.04	146.22	144.55	145.9
09-Aug-12	148.43	147.47	148.66	152.35	146.52	118.51	143.81	142.37	147.52	145.2	146.8
07-Aug-13	146.02	145.71	146.14	151.05	144.28	152.17	125.4	127.37	123.69	129.4	131.19
03-Sep-14	149.90	150.08	150.18	152.97	148.03						
Difference 2010	22.63	-	-	23.6	27.65	40.09	29.85	32	28.5	28.3	28.79
Difference 2011	19.03	22.67	-	20.89	24.25	41.83	27.95	36.1	25.79	26.15	26.31
Difference 2012	18.5	22.24	-	20.32	23.86	52.79	27.3	29.77	24.49	25.5	25.41
Difference 2013	20.91	24	-	21.62	26.1	19.13	45.71	44.77	48.32	41.3	41.02
Difference 2014	17.03	19.63	-	19.7	22.35						

* = System did not run during most of February 2010.

Table 3-2c - Monitoring Wells Downgradient of System

Groundwater Elevation (ft)																			
Date	**LC-76D**	**LC-81D**	**LC-82D**	**LC-84D-1**	**LC-85D-1**	**LC-86D-1**	**LC-87D-1**	**LC-88D-1**	**LC-89D-1**	**LC-90D-1**	**LC-91D-1**	**LC-92D-1**	**LC-93D-1**	**LC-94D-1**	**LC-95D-1**	**LC-98D-1**	**LC-101D-1**	**LC-102D-1**	**LC-166D**	**SRCMW-01B**
03-Feb-09	171.59	165.9	173.27	168.57	176.9	161.99	170.34	108.89	129.78	156.73	120.21	86.45	80.02	90.93	84.92	174.18	169.81	139.46	211.79	92.49
11-Feb-10	166.11	158.95	167.67	163.34	171.67	155.21	163.14	105.47	126.31	152.2	116.01	84.07	78.02	88.27	82.77	173.49	164.4	134.12	211.04	89.99
14-Feb-11	148.6	145.6	149.72	147.74	153.8	142.86	148.39	102.35	120.61	139.79	111.33	83.93	78.52	87.42	82.55	149.44	147.72	126.32	211.39	89.23
14-Feb-12	149.78	146.59	158.67	148.67	154.85	143.71	149.37	102.31	120.86	140.43	111.39	83.59	78.16	87.17	82.26	152.45	148.92	126.65	210.96	92.49
07-Feb-13	150.24	146.88	151.42	149.22	155.07	144.23	149.88	102.52	121.26	141.04	111.63	83.79	78.4	87.33	82.52	151.01	149.37	127.1	211.47	89.14
12-Feb-14	149.46	145.25	150.42	148.39	154.60	143.46	148.99	102.12	120.71	140.35	111.16	84.17	78.32	87.07	82.17	150.34	148.57	126.47	209.49	89.09
Difference 2010	5.48	6.95	5.6	5.23	5.23	6.78	7.2	3.42	3.47	4.53	4.2	2.38	2	2.66	2.15	0.69	5.41	5.34	0.75	2.5
Difference 2011	22.99	20.3	23.55	20.83	23.1	19.13	21.95	6.54	9.17	16.94	8.88	2.52	1.5	3.51	2.37	24.74	22.09	13.14	0.4	3.26
Difference 2012	21.81	19.31	14.6	19.9	22.05	18.28	20.97	6.58	8.92	16.3	8.82	2.86	1.86	3.76	2.66	21.73	20.89	12.81	0.83	0
Difference 2013	21.35	19.02	21.85	19.35	21.83	17.76	20.46	6.37	8.52	15.69	8.58	2.66	1.62	3.6	2.4	23.17	20.44	12.36	0.32	3.35
Difference 2014	22.13	20.65	22.85	20.18	22.3	18.53	21.35	6.77	9.07	16.38	9.05	2.28	1.7	3.86	2.75	23.84	21.24	12.99	2.3	3.4
03-Aug-09	166.28	160.55	167.67	163.39	171.6	156.6	164.82	103.53	125.13	151.93	114.85	80.49	72.77	85.35	79.17	168.84	164.54	134.17	210.11	87.1
10-Aug-10	143.78	-	-	143.01	148.63	137.75	142.9	97.92	116.68	135.25	106.31	79.52	72.97	82.27	77.12	144.59	142.95	121.45	209.37	85.12
09-Aug-11	147.24	144.23	148.29	146.27	151.55	141.36	146.89	100.52	119.1	138.5	109.66	81.82	76.27	85.38	83.45	148.04	146.35	124.89	210.16	87.22
09-Aug-12	147.58	144.36	148.78	146.69	152.85	141.74	147.13	100.33	119.16	138.55	108.45	81.72	76	85.24	80.28	148.5	146.72	124.72	210.29	89.99
07-Aug-13	145.86	142.85	146.87	144.94	150.55	140.09	145.59	99.37	117.96	136.93	108.41	80.82	74.92	84.37	79.37	146.59	144.97	123.57	209.47	86.34
10-Sep-14	149.74	146.4	150.74	149.52	152.85	142.72	149.34	100.45	-	140.02	110.08	81.43	75.68	85.13	80.22	150.08	148.15	125.37	209.19	86.96
Difference 2010	22.5	-	-	20.38	22.97	18.85	21.92	5.61	8.45	16.68	8.54	0.97	0.2	3.08	2.05	24.25	21.59	12.72	0.74	1.98
Difference 2011	19.04	16.32	19.38	17.12	20.05	15.24	17.93	3.01	6.03	13.43	5.19	**1.33**	**3.5**	**0.03**	**4.28**	20.8	18.19	9.28	**0.05**	**0.12**
Difference 2012	18.7	16.19	18.89	16.7	18.75	14.86	17.69	3.2	5.97	13.38	6.4	**1.23**	**3.23**	0.11	**1.11**	20.34	17.82	9.45	**0.18**	**2.89**
Difference 2013	20.42	17.7	20.8	18.45	21.05	16.51	19.23	4.16	7.17	15	6.44	**0.33**	**2.15**	0.98	**0.2**	22.25	19.57	10.6	**0.64**	**0.76**
Difference 2014	16.54	14.15	16.93	13.87	18.75	13.88	15.48	3.08	-	11.91	4.77	**0.94**	**2.91**	0.22	**1.05**	18.76	16.39	8.8	0.92	0.14

Table 3-2d - Landfill 4 (Downgradient of system) Monitoring Wells

Groundwater Elevation (ft)					
Date	**LF4-MW-02C**	**LF4-MW-04**	**LF4-MW-09B**	**LF4-MW-12B**	**LF4-MW-14**
03-Feb-09	113.74	101.69	82.38	95.08	92.58
11-Feb-10	109.89	98.61	79.78	92.41	89.95
14-Feb-11	107.19	97.04	79.37	91.98	89.53
14-Feb-12	107.26	96.84	79.13	91.82	89.28
07-Feb-13	107.41	97.14	79.23	91.86	89.44
11-Feb-14	107.04	96.74	78.88	91.53	89.13
Difference 2010	3.85	3.08	2.6	2.67	2.63
Difference 2011	6.55	4.65	3.01	3.1	3.05
Difference 2012	6.48	4.85	3.25	3.26	3.3
Difference 2013	6.33	4.55	3.15	3.22	3.14
Difference 2014	6.7	4.95	3.5	3.55	3.45
03-Aug-09	108.72	96.64	77.38	90.33	87.66
10-Aug-10	103.14	91.94	75.37	88.14	85.6
09-Aug-11	105.64	95.24	77.41	90.23	87.68
09-Aug-12	105.5	95.19	77.54	89.5	88.57
07-Aug-13	104.59	94.09	76.43	89.23	86.63
09-Sep-14	105.64	95.01	77.03	89.76	87.27
Difference 2010	5.58	4.7	2.01	2.19	2.06
Difference 2011	3.08	1.4	**0.03**	0.1	**0.02**
Difference 2012	3.22	1.45	**0.16**	0.83	**0.91**
Difference 2013	4.13	2.55	**0.95**	1.1	**1.03**
Difference 2014	3.08	1.63	0.35	0.57	0.39

Notes:

SWL Elev (ft) = Groundwater elevation in feet above mean sea level

\- = Not measured, not applicable

BOLD = Static water level was higher in 2010, 2011, 2012, or 2013 than 2009

Table 4-1 - Summary of Analytical Results for Contaminants of Concern (TCE, c-DCE, PCE, TCA, VC) - 2014

Log RAM, Joint Base Lewis-McChord, Washington 98433

Location ID	Sample Collection Date	TCE (µg/L)	cDCE (µg/L)	PCE (µg/L)	TCA (µg/L)	VC (µg/L)
Upper Vashon Aquifer						
85-PA-381	26-Mar-14	**14**	0.2	0.2 U	0.2 U	0.2 U
85-PA-382	26-Mar-14	**5.6**	0.2 U	0.2 U	0.2 U	0.2 U
	12-Jun-14	**9.4**	0.31	0.2 U	0.2 U	0.2 U
	24-Sep-14	**10**	0.26 T	0.5 U	0.5 U	0.5 U
	24-Nov-14	**9.6**	0.23 T	0.5 U	0.5 U	0.5 U
85-PA-384	26-Mar-14	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Duplicate	26-Mar-14	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
	12-Jun-14	0.23	0.2 U	0.2 U	0.2 U	0.2 U
	24-Sep-14	0.2 T	0.5 U	0.5 U	0.5 U	0.5 U
	24-Nov-14	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
CM-2	20-Mar-14	**1.1**	0.2 U	0.2 U	0.2 U	0.2 U
FL-01	24-Mar-14	**9.1**	0.22	0.2 U	0.2 U	0.2 U
Duplicate	24-Mar-14	**9.4**	0.24	0.2 U	0.2 U	0.2 U
	24-Sep-14	**11**	0.31 T	0.5 U	0.5 U	0.5 U
FL-02	25-Mar-14	**4.7**	0.2 U	0.2 U	0.2 U	0.2 U
FL-03	26-Mar-14	**2.3**	0.2 U	0.2 U	0.2 U	0.2 U
FL-04B	24-Mar-14	**1.1**	0.22	0.2 U	0.2 U	0.2 U
FL-06	20-Mar-14	**1.2**	0.2 U	0.2 U	0.2 U	0.2 U
LC-01	25-Mar-14	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
	24-Sep-14	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
LC-03	26-Mar-14	0.49	0.2 U	0.2 U	0.2 U	0.2 U
	30-Sep-14	**1.2**	0.5 U	0.5 U	0.5 U	0.5 U
Duplicate	30-Sep-14	**1.1**	0.5 U	0.5 U	0.5 U	0.5 U
LC-06	26-Mar-14	**26**	0.4	0.2 U	0.2 U	0.2 U
LC-14A	28-Mar-14	**37**	**0.69**	0.2 U	0.2 U	0.2 U
LC-16	26-Mar-14	**5.6**	0.2 U	0.2 U	0.2 U	0.2 U
Duplicate	26-Mar-14	**5.9**	0.2 U	0.2 U	0.2 U	0.2 U
	30-Sep-14	**7.5**	0.11 J	0.5 U	0.5 U	0.5 U
Duplicate	30-Sep-14	**7.3**	0.13 J	0.5 U	0.5 U	0.5 U
LC-19A	24-Mar-14	**59**	**1.2**	0.2 U	0.2 U	0.2 U
LC-20	24-Mar-14	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
LC-24	26-Mar-14	**1.1**	0.2 U	0.2 U	0.2 U	0.2 U
LC-26	26-Mar-14	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
LC-27	25-Mar-14	**12**	**1.5**	0.2 U	0.2 U	0.2 U
LC-34	24-Mar-14	**1.1**	**1.7**	0.2 U	0.2 U	0.2 U
LC-41A	25-Mar-14	**130**	**1.2**	0.2 U	0.35	0.2 U
LC-53	24-Mar-14	**220**	**5.6**	0.2 U	0.2 U	0.2 U
LC-57	25-Mar-14	**0.56**	0.45	0.2 U	0.2 U	0.2 U
LC-61B	20-Mar-14	**1.5**	0.2 U	0.2 U	0.2 U	0.2 U
	24-Sep-14	0.45 T	0.5 U	0.5 U	0.5 U	0.5 U
LC-64A	25-Mar-14	**43**	**2.4**	0.2 U	0.2 U	0.2 U
LC-66B	26-Mar-14	**67**	**0.86**	0.23	0.2 U	0.2 U
LC-108	25-Mar-14	**3.2**	0.2 U	0.2 U	0.2 U	0.2 U

Table 4-1 - Summary of Analytical Results for Contaminants of Concern (TCE, c-DCE, PCE, TCA, VC) - 2014

Log RAM, Joint Base Lewis-McChord, Washington 98433

Location ID	Sample Collection Date	TCE (µg/L)	cDCE (µg/L)	PCE (µg/L)	TCA (µg/L)	VC (µg/L)
30 feet	12-Jun-14	**2.8**	0.2 U	0.2 U	0.2 U	0.2 U
85 feet	12-Jun-14	**1.8**	0.2 U	0.2 U	0.2 U	0.2 U
30 feet	23-Sep-14	8.1	0.14 T	0.5 U	0.5 U	0.5 U
60 feet	23-Sep-14	0.38 T	0.5 U	0.5 U	0.5 U	0.5 U
85 feet	23-Sep-14	0.32 T	0.5 U	0.5 U	0.5 U	0.5 U
30 feet	24-Nov-14	**4.4**	0.5 U	0.5 U	0.5 U	0.5 U
Duplicate	24-Nov-14	**4.3**	0.07 T	0.5 U	0.5 U	0.5 U
60 feet	24-Nov-14	**4.9**	0.5 U	0.5 U	0.5 U	0.5 U
85 feet	24-Nov-14	0.19 T	0.5 U	0.5 U	0.5 U	0.5 U
LC-109	20-Mar-14	**1.6**	0.2 U	0.2 U	0.2 U	0.2 U
	30-Sep-14	**1.3**	0.17 J	0.5 U	0.5 U	0.5 U
LC-124	28-Mar-14	**4.8**	0.2 U	0.2 U	0.2 U	0.2 U
	24-Sep-14	**2.3**	0.5 U	0.5 U	0.5 U	0.5 U
Duplicate	24-Sep-14	**2.6**	0.5 U	0.5 U	0.5 U	0.5 U
LC-132	26-Mar-14	49	**0.74**	0.38	0.2 U	0.2 U
LC-135	26-Mar-14	48	**0.61**	0.2 U	0.2 U	0.2 U
Duplicate	26-Mar-14	34	0.44	0.2 U	0.2 U	0.2 U
	12-Jun-14	37	0.45	0.2 U	0.2 U	0.2 U
	23-Sep-14	50	0.46 T	0.5 U	0.5 U	0.5 U
	24-Nov-14	50	0.47 T	0.5 U	0.5 U	0.5 U
LC-137B	25-Mar-14	180	**1.8**	0.2 U	0.2 U	0.2 U
LC-160	25-Mar-14	17	**0.49**	0.2 U	0.2 U	0.2 U
Duplicate	25-Mar-14	16	0.49	0.2 U	0.2 U	0.2 U
LC-167	28-Mar-14	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
LC-178	26-Mar-14	**2.9**	0.2 U	0.2 U	0.2 U	0.2 U
	1-Oct-14	5.4	0.15 J	0.5 U	0.5 U	0.5 U
LC-180	26-Mar-14	**3.8**	0.2 U	0.2 U	0.2 U	0.2 U
	30-Sep-14	**2.9**	0.11 J	0.5 U	0.5 U	0.5 U
LC-182	26-Mar-14	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
	30-Sep-14	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
LC-218	24-Mar-14	21	0.42	0.2 U	0.2 U	0.2 U
	24-Sep-14	33	**0.51**	0.5 U	0.5 U	0.5 U
LC-222	24-Mar-14	9.2	0.46	0.2 U	0.2 U	0.2 U
LC-223	24-Mar-14	6.3	0.2 U	0.2 U	0.2 U	0.2 U
	01-Oct-14	25	**0.51**	0.5 U	0.5 U	0.5 U
Duplicate	01-Oct-14	26	0.5	0.5 U	0.5 U	0.5 U
LC-224	24-Mar-14	12	0.26	0.2 U	0.2 U	0.2 U
	24-Sep-14	19	0.37 T	0.5 U	0.5 U	0.5 U
LX-02	27-Mar-14	**4.4**	0.2 U	0.2 U	0.2 U	0.2 U
	25-Sep-14	5.5	0.15 T	0.5 U	0.5 U	0.5 U
LX-03	27-Mar-14	13	**0.61**	0.2 U	0.27	0.2 U
	25-Sep-14	12	**0.53**	0.5 U	0.19 T	0.5 U
LX-04	27-Mar-14	22	**0.59**	0.2 U	0.2 U	0.2 U
	25-Sep-14	28	**0.65**	0.5 U	0.45 T	0.5 U

Table 4-1 - Summary of Analytical Results for Contaminants of Concern (TCE, c-DCE, PCE, TCA, VC) - 2014

Log RAM, Joint Base Lewis-McChord, Washington 98433

Location ID	Sample Collection Date	TCE (µg/L)	cDCE (µg/L)	PCE (µg/L)	TCA (µg/L)	VC (µg/L)
LX-05	27-Mar-14	51	1.7	0.2 U	0.54	0.2 U
	25-Sep-14	49	1.4	0.5 U	0.38 T	0.5 U
LX-06	27-Mar-14	55	1.2	0.2 U	0.71	0.2 U
	25-Sep-14	56	1.1	0.5 T	0.53	0.5 U
Duplicate	25-Sep-14	56	1	0.5 T	0.56	0.5 U
LX-07	27-Mar-14	65	1.5	0.25	0.24	0.2 U
	25-Sep-14	64	1.2	0.21 T	0.19 T	0.5 U
LX-08	28-Mar-13	-	-	-	-	-
	25-Sep-14	-	-	-	-	-
LX-09	27-Mar-14	45	1.2	0.2 U	0.2 U	0.2 U
	25-Sep-14	45	1.1	0.18 T	0.1 T	0.5 U
LX-10	27-Mar-14	42	0.8	0.2 U	0.2 U	0.2 U
	25-Sep-14	-	-	-	-	-
LX-11	27-Mar-14	26	0.71	0.2 U	0.2 U	0.2 U
	25-Sep-14	36	0.82	0.5 T	0.5 U	0.5 U
LX-12	27-Mar-14	20	0.42	0.2 U	0.2 U	0.2 U
	25-Sep-14	27	0.52	0.5 T	0.5 U	0.5 U
LX-13	27-Mar-14	6.3	0.33	0.2 U	0.2 U	0.2 U
	25-Sep-14	8.6	0.35 T	0.5 U	0.5 U	0.5 U
LX-14	27-Mar-14	7	0.2 U	0.2 U	0.2 U	0.2 U
	25-Sep-14	8.2	0.19 T	0.5 U	0.5 U	0.5 U
LX-15	27-Mar-14	3.7	0.2 U	0.2 U	0.2 U	0.2 U
	25-Sep-14	4.8	0.5 U	0.5 U	0.5 U	0.5 U
MAMC-OF-2	26-Mar-14	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
	30-Sep-14	0.37 J	0.5 U	0.5 U	0.5 U	0.5 U
MT-1	25-Mar-14	100	1.6	0.2 U	0.2 U	0.2 U
	12-Jun-14	77	1.1	0.2 U	0.2 U	0.2 U
Duplicate	12-Jun-14	77	1.2	0.2 U	0.2 U	0.2 U
	23-Sep-14	62	0.83	0.5 U	0.5 U	0.5 U
	24-Nov-14	13	0.31 T	0.5 U	0.5 U	0.5 U
MT-2	25-Mar-14	6.5	0.77	0.2 U	0.2 U	0.2 U
	12-Jun-14	4.8	0.53	0.2 U	0.2 U	0.2 U
	23-Sep-14	11	0.85	0.5 U	0.5 U	0.5 U
	24-Nov-14	7.8	0.38 T	0.5 U	0.5 U	0.5 U
MT-3	26-Mar-14	12	1.6	0.2 U	0.2 U	0.2 U
	12-Jun-14	8	1.4	0.2 U	0.2 U	0.2 U
	23-Sep-14	12	0.64	0.5 U	0.5 U	0.5 U
	24-Nov-14	4.6	0.31 T	0.5 U	0.5 U	0.5 U
MT-4	25-Mar-14	16	4.4	0.2 U	0.2 U	0.2 U
	12-Jun-14	9.2	0.64	0.2 U	0.2 U	0.2 U
	23-Sep-14	3.6	0.2 T	0.5 U	0.5 U	0.5 U
	24-Nov-14	1.8	0.14 T	0.5 U	0.5 U	0.5 U
PW-1	25-Mar-14	210	31	1.8	0.2 U	0.2 U
	25-Sep-14	150 D	24	0.21 T	0.5 U	0.23 T

Table 4-1 - Summary of Analytical Results for Contaminants of Concern (TCE, c-DCE, PCE, TCA, VC) - 2014

Log RAM, Joint Base Lewis-McChord, Washington 98433

Location ID	Sample Collection Date	TCE (µg/L)	cDCE (µg/L)	PCE (µg/L)	TCA (µg/L)	VC (µg/L)
Duplicate	25-Sep-14	150 D	26	0.2 T	0.5 U	0.3 T
PW-2	25-Mar-14	36	1.5	0.2 U	0.21	0.2 U
	25-Sep-14	53	2.1	0.5 U	0.32 T	0.5 U
PW-3	25-Mar-14	110	2.2	0.2 U	0.2 U	0.2 U
	24-Sep-14	110 D	1.7	0.5 U	0.08 T	0.5 U
PW-4	25-Sep-14	37	5.7	0.5 U	0.41 T	0.5 U
PW-5	25-Mar-14	37	5.5	0.2 U	0.53	0.2 U
	25-Sep-14	39	3.3	0.5 U	0.38 T	0.5 U
PW-6	25-Sep-14	19	0.57	0.5 U	0.5 U	0.5 U
PW-7	25-Mar-14	26	2	0.2 U	0.2 U	0.2 U
	25-Sep-14	21	0.72	0.5 U	0.5 U	0.5 U
PW-8	25-Mar-14	15	4.9	0.2 U	0.2 U	0.2 U
	25-Sep-14	18	2.1	0.5 U	0.5 U	0.5 U
SW-MC-07	26-Mar-14	0.47	0.2 U	0.2 U	0.2 U	0.2 U
SW-MC-08	26-Mar-14	0.6	0.2 U	0.2 U	0.2 U	0.2 U
SW-MC-09	26-Mar-14	0.41	0.2 U	0.2 U	0.2 U	0.2 U
T-04	28-Mar-14	8.1	0.22	0.2 U	0.2 U	0.2 U
	30-Sep-14	8.6	0.31 J	0.5 U	0.19 J	0.5 U
Duplicate	30-Sep-14	8.9	0.27 J	0.5	0.2 J	0.5 U
T-05	20-Mar-14	2.1	0.2 U	0.2 U	0.2 U	0.2 U
	29-Sep-14	1.3	0.5 U	0.1 J	0.5 U	0.5 U
T-06	20-Mar-14	4	0.2 U	0.2 U	0.2 U	0.2 U
	29-Sep-14	3.8	0.5 U	0.5 U	0.5 U	0.5 U
T-10	29-Sep-14	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
T-11B	20-Mar-14	4.2	0.2 U	0.2 U	0.2 U	0.2 U
	29-Sep-14	4.1	0.5 U	0.5 U	0.5 U	0.5 U
T-13B	20-Mar-14	4.6	0.98	0.2 U	0.39	0.2 U
	29-Sep-14	4.7	0.98	0.1 J	0.41 J	0.5 U
T-15[A]	20-Mar-14	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
	20-Jun-14	0.41	0.2 U	0.2 U	0.2 U	0.2 U
Duplicate	20-Jun-14	0.24	0.2 U	0.2 U	0.2 U	0.2 U
	29-Sep-14	0.5 U	0.5 U	0.5 U	0.16 J	0.5 U
Duplicate	29-Sep-14	0.5 U	0.5 U	0.5 U	0.16 J	0.5 U
	24-Nov-14	0.5 U	0.5 U	0.5 U	0.19 T	0.5 U
Lower Vashon Aquifer						
BC1	20-Mar-14	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
	29-Sep-14	0.5 U	0.5 U	0.5 U	0.32 J	0.5 U
FL-04A	24-Mar-14	1.4	0.2 U	0.2 U	0.2 U	0.2 U
LC-41B	20-Mar-14	69	0.76	0.2 U	0.2 U	0.2 U
Duplicate	20-Mar-14	67	0.77	0.2 U	0.2 U	0.2 U
LC-64B	25-Mar-14	2.4	0.2 U	0.2 U	0.2 U	0.2 U
LC-111B	27-Mar-14	4.5	1.4	0.2 U	0.031	0.2 U
	24-Sep-14	10	2	0.5 U	0.31 T	0.5 U
LC-116B	27-Mar-14	36	1	0.2 U	0.2 U	0.2 U

Table 4-1 - Summary of Analytical Results for Contaminants of Concern (TCE, c-DCE, PCE, TCA, VC) - 2014

Log RAM, Joint Base Lewis-McChord, Washington 98433

Location ID	Sample Collection Date	TCE (µg/L)	cDCE (µg/L)	PCE (µg/L)	TCA (µg/L)	VC (µg/L)
	24-Sep-14	**49**	**1.6**	0.5 U	0.12 T	0.5 U
LC-122B	28-Mar-14	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
	24-Sep-14	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
LC-128	28-Mar-14	**18**	**0.62**	0.2 U	0.2 U	0.2 U
LC-137C	25-Mar-14	0.33	0.2 U	0.2 U	0.2 U	0.2 U
LC-216	26-Mar-14	0.2 U	**8.3**	0.2 U	**0.84** Q	0.2 U
LC-217	26-Mar-14	**1**	0.2 U	0.2 U	0.2 U	0.2 U
LC-219	28-Mar-14	**41**	**3.1**	0.2 U	**1.5**	0.2 U
LC-225	20-Mar-14	**10**	**0.78**	0.21	0.32	0.2 U
	29-Sep-14	**11**	**0.75**	0.2 J	0.28 J	0.5 U
LC-226	20-Mar-14	**5.5**	**2**	0.2 U	**2.5**	0.2 U
Duplicate	20-Mar-14	**4.6**	**1.6**	0.2 U	**2**	0.2 U
	24-Sep-14	**5.7**	**1.8**	0.5 U	**1.8**	0.5 U
MAMC-01	20-Mar-14	**1.4**	0.2 U	0.2 U	0.2 U	0.2 U
MAMC-06	20-Mar-14	**0.84**	0.2 U	0.2 U	0.2 U	0.2 U
T-10	20-Mar-14	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
	29-Sep-14	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Sea Level Aqufier						
LC-21C	25-Mar-14	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
LC-47D	25-Mar-14	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Duplicate	25-Mar-14	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
LC-50D	25-Mar-14	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
LC-66D	26-Mar-14	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
LC-67D	26-Mar-14	**49**	**4.2**	0.2 U	0.2 U	0.2 U
LC-68D	24-Mar-14	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
LC-69D	25-Mar-14	**120**	**1.1**	0.2 U	0.2 U	0.2 U
LC-72D	26-Mar-14	**21**	**0.62**	0.2 U	0.2 U	0.2 U
LC-74D	27-Mar-14	**4.5**	0.2 U	0.2 U	0.2 U	0.2 U
	25-Sep-14	**5.7**	0.17 T	0.5 U	0.5 U	0.5 U
LC-75D	26-Mar-14	**0.57**	0.2 U	0.2 U	0.2 U	0.2 U
LC-77D	28-Mar-14	**2.8**	0.2 U	0.2 U	0.2 U	0.2 U
LC-84D-1	26-Mar-14	**2.4**	0.2 U	0.2 U	0.2 U	0.2 U
LC-84D-2	26-Mar-14	**1.7**	0.2 U	0.2 U	0.2 U	0.2 U
LC-85D-1	27-Mar-14	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
LC-85D-2	27-Mar-14	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
LC-86D-1	20-Mar-14	**7.3**	**0.53**	0.2 U	0.2 U	0.2 U
	29-Sep-14	**7.5**	0.48 J	0.5 U	0.5 U	0.5 U
LC-86D-2	20-Mar-14	**7**	**0.61**	0.2 U	0.2 U	0.2 U
	29-Sep-14	**7.7**	0.48 J	0.5 U	0.1 J	0.5 U
LC-87D-1	20-Mar-14	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
LC-87D-2	20-Mar-14	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
LC-88D-1	27-Mar-14	**2.6**	0.22	0.2 U	0.2 U	0.2 U
	29-Sep-14	**2.6**	0.21 J	0.5 U	0.5 U	0.5 U
LC-88D-2	27-Mar-14	**1.6**	0.2 U	0.2 U	0.2 U	0.2 U

Table 4-1 - Summary of Analytical Results for Contaminants of Concern (TCE, c-DCE, PCE, TCA, VC) - 2014

Log RAM, Joint Base Lewis-McChord, Washington 98433

Location ID	Sample Collection Date	TCE (µg/L)	cDCE (µg/L)	PCE (µg/L)	TCA (µg/L)	VC (µg/L)
Duplicate	27-Mar-14	**1.6**	0.2 U	0.2 U	0.2 U	0.2 U
	29-Sep-14	0.48 J	0.5 U	0.5 U	0.5 U	0.5 U
LC-89D-1	20-Mar-14	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
LC-89D-2	20-Mar-14	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
LC-90D-1	26-Mar-14	**1.2**	0.2 U	0.2 U	0.2 U	0.2 U
LC-90D-2	26-Mar-14	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
LC-91D-1	27-Mar-14	**0.6**	0.2 U	0.2 U	0.2 U	0.2 U
LC-91D-2	27-Mar-14	**3**	0.2 U	0.2 U	0.2 U	0.2 U
LC-92D-1	27-Mar-14	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
LC-92D-2	27-Mar-14	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
LC-93D-1	27-Mar-14	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
	29-Sep-14	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
LC-93D-2	27-Mar-14	0.31	0.2 U	0.2 U	0.2 U	0.2 U
	29-Sep-14	**0.29** J	0.5 U	0.5 U	0.5 U	0.5 U
LC-94D-1	27-Mar-14	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
LC-94D-2	27-Mar-14	**2.2**	0.2	0.2 U	0.2 U	0.2 U
LC-95D-1	27-Mar-14	**0.5**	0.2 U	0.2 U	0.2 U	0.2 U
	29-Sep-14	**0.5**	0.5 U	0.5 U	0.5 U	0.5 U
LC-95D-2	27-Mar-14	0.47	0.2 U	0.2 U	0.2 U	0.2 U
	29-Sep-14	**1.6**	0.18 J	0.5 U	0.5 U	0.5 U
LC-96D	27-Mar-14	**6.4**	0.2 U	0.2 U	0.2 U	0.2 U
	25-Sep-14	**8.3**	0.2 T	0.5 U	0.5 U	0.5 U
LC-97D	27-Mar-14	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Duplicate	27-Mar-14	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
LC-98D-1	27-Mar-14	**0.77**	0.2 U	0.2 U	0.2 U	0.2 U
	01-Oct-14	**15**	0.34 J	0.5 U	0.5 U	0.5 U
Duplicate	01-Oct-14	**19**	0.42 J	0.5 U	0.5 U	0.5 U
LC-98D-2	27-Mar-14	**9.9**	0.2 U	0.2 U	0.2 U	0.2 U
	01-Oct-14	**12**	0.5 U	0.5 U	0.5 U	0.5 U
LC-99D	27-Mar-14	**62**	**1.9**	0.2 U	0.2 U	0.2 U
Duplicate	27-Mar-14	**59**	**1.7**	0.2 U	0.2 U	0.2 U
	25-Sep-14	**68**	**1.5**	0.14 T	0.5 U	0.5 U
LC-101D-1	27-Mar-14	**1.9**	0.49	0.2 U	0.2 U	0.2 U
	30-Sep-14	**1.8**	**0.57**	0.5 U	0.5 U	0.5 U
LC-101D-2	27-Mar-14	**11**	**0.68**	0.2 U	0.2 U	0.2 U
Duplicate	27-Mar-14	**11**	**0.67**	0.2 U	0.2 U	0.2 U
	30-Sep-14	**13**	**0.68**	0.5 U	0.1 J	0.5 U
LC-102D-1	27-Mar-14	**4.3**	0.22	0.2 U	0.2 U	0.2 U
	29-Sep-14	**5.8**	0.34 J	0.5 U	0.5 U	0.5 U
LC-102D-2	27-Mar-14	**4.8**	0.38	0.2 U	0.2 U	0.2 U
	29-Sep-14	**5.8**	0.34 J	0.5 U	0.5 U	0.5 U
LC-103D	26-Mar-14	**42**	**1.2**	0.2 U	0.2 U	0.2 U
	30-Sep-14	**44**	**1.2**	0.5 U	0.09 J	0.5 U
LC-126	28-Mar-14	**12**	**2**	0.2 U	0.2 U	0.2 U

Table 4-1 - Summary of Analytical Results for Contaminants of Concern (TCE, c-DCE, PCE, TCA, VC) - 2014

Log RAM, Joint Base Lewis-McChord, Washington 98433

Location ID	Sample Collection Date	TCE (µg/L)	cDCE (µg/L)	PCE (µg/L)	TCA (µg/L)	VC (µg/L)
MAMC-03	20-Mar-14	**1.8**	0.2 U	0.2 U	0.2 U	0.2 U
	25-Sep-14	**1.9**	0.08 T	0.5 U	0.5 U	0.5 U
MAMC-04	25-Sep-14	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
SLAP-1	27-Mar-14	**5.4**	0.48	0.2 U	0.18	0.2 U
	25-Sep-14	**6.6**	**0.58**	0.5 U	0.18 T	0.5 U
SLAP-2	27-Mar-14	**5.4**	0.36	0.2 U	0.2 U	0.2 U
Duplicate	27-Mar-14	**5.4**	0.37	0.2 U	0.2 U	0.2 U
	25-Sep-14	-	-	-	-	-
SLAP-3	27-Mar-14	**22**	**0.81**	0.2 U	0.2 U	0.2 U
	25-Sep-14	**30**	**0.9**	0.5 U	0.23 T	0.5 U
SLAP-4	27-Mar-14	**26**	**0.57**	0.2 U	0.08	0.2 U
	25-Sep-14	**33**	**0.56**	0.5 U	0.08 T	0.5 U
SLAP-5	27-Mar-14	**8.5**	0.28	0.2 U	0.2 U	0.2 U
	24-Sep-14	**11**	0.25 T	0.5 U	0.5 U	0.5 U
SLAP-6	27-Mar-14	**5.6**	0.2 U	0.2 U	0.2 U	0.2 U
	25-Sep-14	**8**	0.19 T	0.5 U	0.5 U	0.5 U
Well 13	20-Mar-14	0.2	0.2 U	0.2 U	0.2 U	0.2 U
	01-Oct-14	0.22 J	0.5 U	0.5 U	0.5 U	0.5 U
QC_TB	31-Jan-14	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
	28-Feb-14	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
	21-Mar-14	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
	28-Mar-14	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
	22-Sep-14	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
	23-Sep-14	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
	25-Sep-14	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
	29-Sep-14	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
	24-Nov-14	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
ROD Redmediation Goal		**5.0**	**70.0**	**5.0**	-	-
MTCA Method A MCL		-	-	-	**200.0**	**2.0**

Notes:

TCE = Trichloroethene
cDCE = cis 1,2 Dichloroethylene
PCE = Perchloroethylene
TCA = 1,1,1 Trichloroethane
VC = Vinyl Chloride
µg/L = Micrograms per liter
QC_TB = Trip blank
BOLD = Analyte detected above practical quantification limit
5.4 Analyte detected above ROD Remediation Goal Value
J = Result is above the method detection limit, but below the reporting limit
U = Analyte not detected above practical quantification limit
D = The reported result is from a dilution
- = Not Applicable, no data, not sampled
MCL = Maximum contaminant level
T= J for positive results below the LOQ and above the MDL.

TABLE 5-1 - Relative Percent Differences Between Primary and Duplicate Samples - 2014

Log RAM, Joint Base Lewis-McChord, Washington, 98433

Sample ID Duplicate	TCE (µg/L)	cDCE (µg/L)	PCE (µg/L)	TCA (µg/L)	VC (µg/L)
1st Quarter 2014					
FL-01	9.1	0.22	0.2 U	0.2 U	0.2 U
Duplicate	9.4	0.24	0.2 U	0.2 U	0.2 U
RPD	3.24%	8.70%	-	-	-
85-PA-384	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Duplicate	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
RPD	-	-	-	-	-
LC-016	5.6	0.2 U	0.2 U	0.2 U	0.2 U
Duplicate	5.9	0.2 U	0.2 U	0.2 U	0.2 U
RPD	5.22%	-	-	-	-
LC-041B	69	0.76	0.2 U	0.2 U	0.2 U
Duplicate	67	0.77	0.2 U	0.2 U	0.2 U
RPD	2.94%	1.31%	-	-	-
LC-047D	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Duplicate	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
RPD	-	-	-	-	-
LC-088D-2	1.6	0.2 U	0.2 U	0.2 U	0.2 U
Duplicate	1.6	0.2 U	0.2 U	0.2 U	0.2 U
RPD	-	-	-	-	-
LC-097D	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Duplicate	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
RPD	-	-	-	-	-
LC-099D	62	1.9	0.2 U	0.2 U	0.2 U
Duplicate	59	1.7	0.2 U	0.2 U	0.2 U
RPD	4.96%	11.1%	-	-	-
LC-101D-2	11	0.68	0.2 U	0.2 U	0.2 U
Duplicate	11	0.67	0.2 U	0.2 U	0.2 U
RPD	-	1.48%	-	-	-
LC-135	48	0.61	0.2 U	0.2 U	0.2 U
Duplicate	34	0.44	0.2 U	0.2 U	0.2 U
RPD	34.1%	32.4%	-	-	-
LC-160	17	0.49	0.2 U	0.2 U	0.2 U
Duplicate	16	0.49	0.2 U	0.2 U	0.2 U
RPD	6.1%	-	-	-	-
LC-226	5.5	2	0.2 U	2.5	0.2 U
Duplicate	4.6	1.6	0.2 U	2	0.2 U
RPD	17.8%	22.2%	-	22.2%	-
2nd Quarter 2014					
MT-1	77	1.1	0.2 U	0.2 U	0.2 U
Duplicate	77	1.2	0.2 U	0.2 U	0.2 U
RPD	-	8.7%	-	-	-
T-15	0.41	0.2 U	0.2 U	0.2 U	0.2 U
Duplicate	0.24	0.2 U	0.2 U	0.2 U	0.2 U
RPD	52.3%	-	-	-	-
3rd Quarter 2014					
LC-124	2.3	0.5 U	0.5 U	0.5 U	0.5 U
Duplicate	2.6	0.5 U	0.5 U	0.5 U	0.5 U
RPD	12.2%	-	-	-	-
LC-223	25	0.51	0.5 U	0.5 U	0.5 U
Duplicate	26	0.5 U	0.5 U	0.5 U	0.5 U
RPD	3.9%	-	-	-	-

TABLE 5-1 - Relative Percent Differences Between Primary and Duplicate Samples - 2014

Log RAM, Joint Base Lewis-McChord, Washington, 98433

Sample ID Duplicate	TCE (µg/L)	cDCE (µg/L)	PCE (µg/L)	TCA (µg/L)	VC (µg/L)
LX-6	56	1.1	0.5 T	0.53	0.5 U
Duplicate	56	1	0.5 T	0.56	0.5 U
RPD	-	-	-	-	-
PW-1	150 D	24	0.21 T	0.5 U	0.23 T
Duplicate	150 D	26	0.2 T	0.5 U	0.3 T
RPD	-	-	-	-	-
T-04	8.6	0.31 J	0.5 U	0.19 J	0.5 U
Duplicate	8.9	0.27 J	0.5	0.2 J	0.5 U
RPD	3.4%	13.8%	-	5.1%	-
T-15	0.5 U	0.5 U	0.5 U	0.16 J	0.5 U
Duplicate	0.5 U	0.5 U	0.5 U	0.16 J	0.5 U
RPD	-	-.	-	-	-
LC-98D-1	15	0.34 J	0.5 U	0.5 U	0.5 U
Duplicate	19	0.42 J	0.5 U	0.5 U	0.5 U
RPD	23.5%	21.1%	-	-	-
4th Quarter 2014					
LC-108	4.4	0.5 U	0.5 U	0.5 U	0.5 U
Duplicate	4.3	0.07 T	0.5 U	0.5 U	0.5 U
RPD	2.3%	-	-	-	-

Notes:

TCE = Trichloroethene
cDCE = cis 1,2 Dichloroethylene
PCE = Perchloroethylene
TCA = 1,1,1 Trichloroethane
VC = Vinyl Chloride
µg/L = micrograms per liter
RPD = Relative percent difference
- = No difference between primary and duplicate samples
µg/L = micrograms per liter
RPD = Relative percent difference
- = No difference between primary and duplicate samples
D = The reported result is from a dilution
U = Analyte not detected above practical quantification limit
T = J for positive results below the LOQ and above the MDL.
J = Result is above the method detection limit, but below the reporting limit.

Table 6-1 - Monitoring Well Descriptive Statistics

Log RAM, Joint Base Lewis-McChord, Washington, 98433

Well ID	First Sample Date	Last Sample Date	Number of ND's	Number of Samples	Sample Mean	Standard Deviation	Minimum TCE Conc.	Maximum TCE Conc.	Date*	Normally or Log Normally Distributed?
Upper Vashon Aquifer Unit										
85-PA-381	06-Sep-05	26-Mar-14	0	10	23.38	9.52	14.00	42.10	05-Sep-06	Yes
85-PA-382	19-Mar-12	24-Nov-14	0	10	7.33	1.80	4.90	10.00	26-Mar-13	Yes
85-PA-384	26-Mar-13	24-Nov-14	4	8	-	-	-	-	-	Non-detects
CM-2	01-Nov-05	26-Mar-14	0	10	1.35	0.35	0.97	1.90	01-Nov-05	Yes
FL-01	15-Jun-07	24-Sep-14	0	14	13.73	4.29	8.30	20.40	13-Sep-07	No
FL-02	06-Sep-05	26-Mar-14	0	15	10.66	11.00	2.70	47.40	06-Sep-05	Yes
FL-03	06-Sep-05	26-Mar-14	0	10	3.21	1.27	2.10	6.00	05-Sep-06	Yes
FL-04b	06-Sep-05	26-Mar-14	6	16	0.66	0.21	0.50	1.20	27-Feb-07	No
FL-06	06-Sep-05	26-Mar-14	0	10	1.77	0.67	1.10	3.10	05-Sep-06	Yes
LC-01	02-Mar-10	24-Sep-14	15	18	-	-	-	-	-	Non-detects
LC-03	30-Aug-05	24-Sep-14	0	15	1.26	0.53	0.49	2.41	04-Oct-07	Yes
LC-06	06-Sep-05	26-Mar-14	0	10	67.39	26.92	26.00	107.00	06-Sep-05	Yes
LC-14a	06-Sep-05	26-Mar-14	0	10	41.27	5.40	33.00	50.50	05-Sep-06	Yes
LC-16	17-Mar-05	24-Sep-14	0	19	7.73	2.98	4.60	16.10	01-Nov-05	Yes
LC-19a	01-Nov-05	26-Mar-14	0	10	104.60	33.24	59.00	164.00	5-Sep-06	Yes
LC-20	30-Aug-05	26-Mar-14	6	10	-	-	-	-	-	Non-detects
LC-24	01-Nov-05	26-Mar-14	4	10	0.67	0.29	0.30	1.20	5-Sep-06	Yes
LC-26	22-Mar-04	26-Mar-14	9	9	-	-	-	-	-	Non-detects
LC-27	05-Sep-06	26-Mar-14	0	19	12.18	5.51	5.40	27.20	12-Dec-06	Yes
LC-34	01-Nov-05	26-Mar-14	0	10	1.28	0.52	0.68	2.60	5-Sep-06	Yes
LC-41a	06-Sep-05	26-Mar-14	0	10	142.70	36.98	105.00	233.00	28-Aug-06	Yes
LC-49	30-Aug-05	26-Mar-13	0	9	219.44	36.01	180.00	293.00	30-Aug-05	-
LC-53	01-Nov-05	26-Mar-14	0	15	167.40	32.36	117.00	227.00	5-Sep-06	Yes
LC-57	06-Sep-05	26-Mar-14	0	15	1.33	0.89	0.56	3.47	28-Dec-07	Yes
LC-61b	17-Mar-05	24-Sep-14	2	18	1.36	0.45	0.45	2.01	26-Mar-08	No
LC-64a	30-Aug-05	26-Mar-14	0	10	520.31	701.26	1.10	2210.00	30-Aug-05	Yes
LC-66b	06-Sep-05	26-Mar-14	0	10	83.11	17.31	56.00	105.00	28-Aug-06	Yes
LC-108	05-Sep-06	16-Dec-13	3	28	-	-	-	-	-	-
LC-109	13-Sep-07	24-Sep-14	0	15	1.56	0.30	1.10	2.31	28-Dec-07	Yes
LC-124	04-Oct-07	24-Sep-14	1	16	3.07	1.69	0.50	6.07	26-Mar-08	Yes
LC-132	06-Sep-05	26-Mar-14	0	10	69.71	14.13	49.00	94.50	6-Sep-05	Yes
LC-135	26-Sep-11	24-Nov-14	0	13	42.15	9.73	17.00	52.00	22-Aug-12	No
LC-136A	30-Aug-05	30-Aug-05	0	1	1350.00	-	1350.00	1350.00	8-Jan-03	< 8 Samples
LC-136B	30-Aug-05	30-Aug-05	0	1	149.00	-	149.00	149.00	30-Aug-05	< 8 Samples
LC-137b	30-Aug-05	26-Mar-14	0	10	354.20	166.25	180.00	709.00	25-Sep-08	Yes

Table 6-1 - Monitoring Well Descriptive Statistics
Log RAM, Joint Base Lewis-McChord, Washington, 98433

Well ID	First Sample Date	Last Sample Date	Number of ND's	Number of Samples	Sample Mean	Standard Deviation	Minimum TCE Conc.	Maximum TCE Conc.	Date*	Normally or Log Normally Distributed?
LC-160	05-Sep-06	26-Mar-14	0	18	31.63	19.85	13.00	93.80	5-Sep-06	Yes
LC-167	06-Sep-05	26-Mar-14	9	10	-	-	-	-	-	Non-detects
LC-178	15-Jun-07	24-Sep-14	1	16	4.03	2.82	0.20	11.70	26-Mar-08	Yes
LC-180	01-Nov-05	24-Sep-14	0	15	4.64	2.37	2.80	12.10	01-Nov-05	No
LC-182	15-Jun-07	24-Sep-14	11	12	-	-	-	-	-	Non-detects
LC-218	17-Mar-05	24-Sep-14	0	26	40.63	25.86	17.00	119.00	06-Sep-05	Yes
LC-222	15-Jun-07	26-Mar-14	0	16	17.14	7.72	7.32	37.40	15-Jun-07	Yes
LC-223	15-Jun-07	24-Sep-14	0	21	14.23	7.51	5.40	28.40	31-Aug-09	Yes
LC-224	15-Jun-07	24-Sep-14	0	21	13.95	5.72	5.80	27.70	15-Jun-07	Yes
MAMC-OF-2	19-Mar-12	24-Sep-14	2	4	0.39	0.14	0.20	0.50	-	< 8 Samples
MT-1	21-Jun-06	24-Nov-14	0	35	77.81	53.55	4.20	216.00	25-Sep-08	No
MT-2	21-Jun-06	24-Nov-14	0	35	8.44	3.15	4.80	15.60	21-Jun-06	No
MT-3	21-Jun-06	24-Nov-14	0	35	8.88	5.44	0.71	28.50	27-Feb-07	No
MT-4	21-Jun-06	24-Nov-14	0	34	7.54	8.15	0.90	27.80	27-Feb-07	Yes
SW-MC-7	02-Mar-10	04-Sep-13	2	16	0.56	0.16	0.20	0.78	22-Aug-12	Yes
SW-MC-8	07-Jun-10	04-Sep-13	0	15	0.60	0.15	0.22	0.81	25-May-11	Yes
SW-MC-9	07-Jun-10	04-Sep-13	1	15	0.51	0.15	0.26	0.76	07-Jun-10	Yes
T-04	17-Mar-05	24-Sep-14	0	19	9.43	2.81	2.80	16.10	30-Mar-06	Yes
T-05	06-Sep-05	24-Sep-14	0	16	2.03	0.71	1.30	3.80	30-Mar-06	Yes
T-06	17-Mar-05	24-Sep-14	0	20	4.37	0.79	3.20	6.34	25-Sep-08	Yes
T-08	17-Mar-05	24-Aug-11	0	14	-	-	-	-	-	-
T-11b	17-Mar-05	24-Sep-14	0	17	5.07	1.20	3.50	7.30	17-Mar-05	Yes
T-13b	17-Mar-05	24-Sep-14	0	20	4.13	0.49	3.50	5.20	01-Sep-09	Yes
T-15	26-Mar-13	24-Nov-14	2	8	-	-	-	-	-	Non-detects
Lower Vashon Aquifer Unit										
BC1	13-Sep-07	29-Sep-14	12	13	-	-	-	-	-	Non-detects
FL-04a	19-Sep-05	20-Mar-14	0	15	2.37	2.67	0.88	10.80	19-Sep-05	No
LC- 41b	11-Mar-04	20-Mar-14	0	8	92.31	26.05	66.50	130.00	21-Mar-12	Yes
LC- 64b	19-Sep-05	20-Mar-14	0	10	24.15	36.62	2.10	115.00	14-Sep-06	Yes
LC-111b	19-Sep-05	20-Mar-14	0	15	3.63	2.16	0.70	10.00	29-Sep-14	Yes
LC-116b	19-Sep-05	29-Sep-14	0	15	36.51	7.34	26.00	49.00	29-Sep-14	Yes
LC-122b	19-Sep-05	29-Sep-14	11	14	-	-	-	-	-	Non-detects
LC-128	19-Sep-05	20-Mar-14	0	10	16.72	3.74	8.10	21.60	14-Sep-06	Yes
LC-137c	19-Sep-05	20-Mar-14	1	10	7.93	12.25	0.23	32.80	19-Sep-05	Yes
LC-216	15-Feb-05	20-Mar-14	18	20	-	-	-	-	-	Non-detects
LC-217	15-Feb-05	20-Mar-14	0	20	6.71	2.11	1.00	9.10	15-Feb-05	No

Table 6-1 - Monitoring Well Descriptive Statistics
Log RAM, Joint Base Lewis-McChord, Washington, 98433

Well ID	First Sample Date	Last Sample Date	Number of ND's	Number of Samples	Sample Mean	Standard Deviation	Minimum TCE Conc.	Maximum TCE Conc.	Date*	Normally or Log Normally Distributed?
LC-219	15-Feb-05	20-Mar-14	0	21	53.12	15.13	17.90	78.70	19-Mar-08	Yes
LC-225	12-Dec-07	29-Sep-14	1	19	9.91	2.59	0.50	12.30	18-Mar-09	No
LC-226	12-Dec-07	29-Sep-14	0	19	2.83	1.62	0.76	6.00	18-Mar-10	Yes
MAMC-01	15-Feb-05	20-Mar-14	0	15	2.08	0.60	0.88	3.02	13-Sep-07	Yes
MAMC-06	15-Feb-05	20-Mar-14	0	15	1.04	0.45	0.64	2.30	15-Feb-05	Yes
T-10	15-Feb-05	29-Sep-14	22	22	-	-	-	-	-	Non-detects
Sea Level Aquifer Unit										
LC-21c	28-Dec-05	27-Mar-14	10	10	-	-	-	-	-	Non-detects
LC-26D	-	-	0	0	-	-	-	-	-	< 8 Samples
LC-35D	-	-	0	0	-	-	-	-	-	< 8 Samples
LC-40D	-	-	0	0	-	-	-	-	-	< 8 Samples
LC-41D	-	-	0	1	-	-	-	-	-	< 8 Samples
LC-47D	29-Aug-05	27-Mar-14	9	10	-	-	-	-	-	Non-detects
LC-50D	9-Nov-05	27-Mar-14	4	10	0.67	0.39	0.2	1.35	02-Sep-08	Yes
LC-66D	25-Sep-06	27-Mar-14	6	9	-	-	-	-	-	Non-detects
LC-67D	29-Aug-05	27-Mar-14	0	10	55.86	6.90	45.2	66.2	25-Sep-06	Yes
LC-68D	02-Sep-08	27-Mar-14	18	19	-	-	-	-	-	Non-detects
LC-69D	29-Aug-05	27-Mar-14	0	10	123.20	23.00	97	168	25-Sep-06	Yes
LC-70D	-	-	0	0	-	-	-	-	-	< 8 Samples
LC-71D	10-Feb-05	25-Sep-07	6	6	-	-	-	-	-	< 8 Samples
LC-72D	29-Aug-05	27-Mar-14	0	10	23.63	8.80	11	43.1	31-Aug-09	Yes
LC-73D	29-Aug-05	31-Aug-09	0	5	-	-	-	-	-	< 8 Samples
LC-74D	29-Aug-05	29-Sep-14	0	33	26.41	29.24	4.5	89.9	04-Jun-08	No
LC-75D	29-Aug-05	27-Mar-14	0	10	0.65	0.13	0.49	0.9	29-Aug-06	Yes
LC-77D	29-Aug-05	27-Mar-14	0	10	2.73	0.23	2.3	3.2	29-Aug-05	Yes
LC-79D	-	-	0	0	-	-	-	-	-	< 8 Samples
LC-80D	-	-	0	0	-	-	-	-	-	< 8 Samples
LC-81D	28-Dec-05	28-Dec-05	1	1	-	-	-	-	-	< 8 Samples
LC-82D	28-Dec-05	28-Dec-05	0	1	-	-	-	-	-	< 8 Samples
LC-83D	-	-	0	0	-	-	-	-	-	< 8 Samples
LC-84D-1	10-Feb-05	27-Mar-14	0	21	-	0.44	2.4	3.92	31-Aug-09	Yes
LC-84D-2	10-Feb-05	27-Mar-14	0	21	1.84	0.30	1.3	2.39	31-Aug-09	Yes
LC-85D-1	10-Feb-05	27-Mar-14	16	16	-	-	-	-	-	Non-detects
LC-85D-2	10-Feb-05	27-Mar-14	16	16	-	-	-	-	-	Non-detects
LC-86D-1	10-Feb-05	29-Sep-14	0	26	7.03	1.05	3.08	8.54	17-Dec-07	No
LC-86D-2	10-Feb-05	29-Sep-14	0	26	6.47	0.62	5.41	7.7	29-Sep-14	Yes

Table 6-1 - Monitoring Well Descriptive Statistics

Log RAM, Joint Base Lewis-McChord, Washington, 98433

Well ID	First Sample Date	Last Sample Date	Number of ND's	Number of Samples	Sample Mean	Standard Deviation	Minimum TCE Conc.	Maximum TCE Conc.	Date*	Normally or Log Normally Distributed?
LC-87D-1	10-Feb-05	27-Mar-14	16	16	-	-	-	-	-	Non-detects
LC-87D-2	10-Feb-05	27-Mar-14	16	16	-	-	-	-	-	Non-detects
LC-88D-1	10-Feb-05	29-Sep-14	0	26	2.40	0.30	1.88	3.05	31-Aug-09	Yes
LC-88D-2	10-Feb-05	29-Sep-14	0	26	1.45	0.27	0.48	1.8	28-Mar-13	No
LC-89D-1	10-Feb-05	27-Mar-14	16	16	-	-	-	-	-	Non-detects
LC-89D-2	10-Feb-05	27-Mar-14	16	16	-	-	-	-	-	Non-detects
LC-90D-1	10-Feb-05	27-Mar-14	0	21	1.84	0.39	1.1	2.8	10-Feb-05	Yes
LC-90D-2	10-Feb-05	27-Mar-14	20	20	-	-	-	-	-	Non-detects
LC-91D-1	10-Feb-05	27-Mar-14	16	22	-	-	-	-	-	Non-detects
LC-91D-2	10-Feb-05	27-Mar-14	0	22	2.87	0.34	2.3	3.49	31-Aug-09	Yes
LC-92D-1	31-Mar-06	27-Mar-14	15	16	-	-	-	-	-	Non-detects
LC-92D-2	31-Mar-06	27-Mar-14	15	16	-	-	-	-	-	Non-detects
LC-93D-1	31-Mar-06	29-Sep-14	22	22	-	-	-	-	-	Non-detects
LC-93D-2	31-Mar-06	29-Sep-14	16	20	-	-	-	-	-	Non-detects
LC-94D-1	31-Mar-06	27-Mar-14	15	16	-	-	-	-	-	Non-detects
LC-94D-2	16-Feb-06	27-Mar-14	1	17	2.39	0.59	0.5	3	31-Aug-09	No
LC-95D-1	31-Mar-06	29-Sep-14	15	21	-	-	-	-	-	Non-detects
LC-95D-2	31-Mar-06	29-Sep-14	15	21	-	-	-	-	-	Non-detects
LC-96D	25-Sep-07	29-Sep-14	0	32	9.03	2.19	6.4	13.3	04-Jun-08	No
LC-097D	17-Dec-07	27-Mar-14	18	18	-	-	-	-	-	Non-detects
LC-98D-1	17-Dec-07	29-Sep-14	0	32	16.53	13.94	0.55	40.8	10-Dec-08	No
LC-98D-2	17-Dec-07	29-Sep-14	0	32	23.68	7.58	9.6	33.8	24-Feb-09	No
LC-99D	21-Mar-08	29-Sep-14	0	30	65.61	10.86	40.9	96	21-Apr-10	Yes
LC-100D	17-Dec-07	07-Dec-09	9	9	-	-	-	-	-	Non-detects
LC-101D-1	17-Dec-07	29-Sep-14	3	19	1.21	0.53	0.5	2.5	07-Dec-09	Yes
LC-101D-2	17-Dec-07	29-Sep-14	0	19	13.12	1.26	11	15.2	02-Jun-09	Yes
LC-102D-1	21-Mar-08	29-Sep-14	0	18	5.08	0.58	4.3	5.8	29-Sep-14	Yes
LC-102D-2	21-Mar-08	29-Sep-14	0	18	5.26	0.58	4.2	6.31	24-Feb-09	No
LC-103D	21-Mar-08	29-Sep-14	0	21	77.12	17.03	42	97.4	31-Aug-09	No
LC-126	29-Aug-05	27-Mar-14	0	10	65.21	26.38	12	104.4	25-Sep-07	Yes
MAMC-03	10-Feb-05	29-Sep-14	0	21	2.95	1.59	1.4	6.28	21-Mar-08	Yes
MAMC-04	10-Feb-05	29-Sep-14	19	20	-	-	-	-	-	Non-detects
Well 13	10-Feb-05	29-Sep-14	14	16	-	-	-	-	-	Non-detects

Table 6-1 - Monitoring Well Descriptive Statistics

Log RAM, Joint Base Lewis-McChord, Washington, 98433

Well ID	First Sample Date	Last Sample Date	Number of ND's	Number of Samples	Sample Mean	Standard Deviation	Minimum TCE Conc.	Maximum TCE Conc.	Date*	Normally or Log Normally Distributed?

Notes

ND = Non detect - TCE not detected above laboratory recording limit.

TCE Conc. = Trichloroethene concentration in micrograms per liter

* = Date sample was collected from monitoring well with highest concentration of TCE

- = Not applicable

Bold = Highest concentration of TCE ever detected was in 2013

Linear concentration graphs plotted on entire data sets.

Linear concentration graphs were not plotted for sample points with three or fewer samples or if non-detects are more than half of the data set.

Linear concentration graphs are presented in Appendix F.

Statistics performed and trend graphs plotted on current data sets (January 2004 to December 2013).

Trend graphs not plotted if there are less than 8 data points or if non-detects are half or more than half of the data set.

Trend graphs are presented in Appendix G.

Table 6-2 - Test for Normality and Linear Regression Trends of TCE Data 2005 - 2014

Log RAM, Joint Base Lewis-McChord, Washington 98433

Well ID	P Value	Normally Distributed?	Log P Value	Log Normally Distributed?	Linear Regression P Value	Slope	Trend	Statistically?
Upper Vashon Aquifer Unit								
85-PA-381	0.193	Yes	-	-	0.029	-0.00634	Down	Yes
85-PA-382	0.271	Yes	-	-	0.153	0.00272	Up	No
CM-2	0.104	Yes	-	-	0.363	-0.00011	Down	No
FL-01	0.021	No	0.034	No	-	-	-	-
FL-02	<0.0001	No	0.501	Yes	0.018	-0.00710	Down	Yes
FL-03	0.017	No	0.118	Yes	0.021	-0.00088	Down	Yes
FL-04b	0.001	No	0.004	No	-	-	-	-
FL-06	0.110	Yes	-	-	0.013	-0.00049	Down	Yes
LC- 03	0.897	Yes	-	-	0.0004	-0.00042	Down	Yes
LC- 06	0.587	Yes	-	-	0.0004	-0.02353	Down	Yes
LC- 14a	0.886	Yes	-	-	0.291	-0.00195	Down	No
LC- 16	0.009	No	0.304	Yes	0.012	-0.00155	Down	Yes
LC- 19a	0.705	Yes	-	-	<0.0001	-0.03065	Down	Yes
LC- 24	0.099	Yes	-	-	0.878	0.00002	Up	No
LC- 27	0.022	No	0.698	Yes	0.166	-0.00237	Down	No
LC- 34	0.011	No	0.314	Yes	0.121	-0.00027	Down	No
LC- 41a	0.037	No	0.309	Yes	0.136	-0.01817	Down	No
LC- 49	-	-	-	-	-	-	-	-
LC- 53	0.769	Yes	-	-	0.966	-0.00042	Down	No
LC- 57	0.006	No	0.144	Yes	0.238	-0.00031	Down	No
LC- 61b	0.011	No	0.0002	No	-	-	-	-
LC- 64a	0.005	No	0.273	Yes	0.007	-0.50902	Down	Yes
LC- 66b	0.513	Yes	-	-	0.006	-0.01334	Down	Yes
LC-108	-	-	-	-	-	-	-	-
LC-109	0.314	Yes	-	-	0.047	-0.00018	Down	Yes
LC-124	0.102	Yes	-	-	0.721	-0.00019	Down	No
LC-132	0.900	Yes	-	-	<0.0001	-0.01302	Down	Yes
LC-135	0.029	No	0.001	No	-	-	-	-
LC-137b	0.100	Yes	-	-	0.0285	-0.11056	Down	Yes
LC-160	0.002	No	0.505	Yes	0.001	-0.01816	Down	Yes
LC-178	0.091	Yes	-	-	0.425	-0.00068	Down	No
LC-180	0.0004	No	0.047	No	-	-	-	-
LC-218	0.0002	No	0.092	Yes	0.0001	-0.01631	Down	Yes
LC-222	0.148	Yes	-	-	0.092	-0.00463	Down	No
LC-223	0.061	Yes	-	-	0.031	-0.00430	Down	Yes
LC-224	0.084	Yes	-	-	0.101	-0.00256	Down	No
MT-1	0.035	No	0.008	No	-	-	-	-
MT-2	0.0004	No	0.017	No	-	-	-	-

Table 6-2 - Test for Normality and Linear Regression Trends of TCE Data 2005 - 2014
Log RAM, Joint Base Lewis-McChord, Washington 98433

Well ID	P Value	Normally Distributed?	Log P Value	Log Normally Distributed?	Linear Regression P Value	Slope	Trend	Statistically?
MT-3	0.002	No	0.037	No	-	-	-	-
MT-4	<0.0001	No	0.535	Yes	0.017	-0.00351	Down	Yes
SW-MC-7	0.084	Yes	-	-	0.268	-0.00011	Down	No
SW-MC-8	0.076	Yes	-	-	0.107	-0.00016	Down	No
SW-MC-9	0.614	Yes	-	-	0.001	-0.00027	Down	Yes
T-04	0.651	Yes	-	-	0.025	-0.00132	Down	Yes
T-05	0.009	No	0.134	Yes	0.053	-0.00035	Down	No
T-06	0.046	No	0.133	Yes	0.0003	-0.00053	Down	Yes
T-11b	0.074	Yes	-	-	0.001	-0.00074	Down	Yes
T-13b	0.287	Yes	-	-	0.8499	-0.00002	Down	No
Lower Vashon Aquifer Unit								
FL-04a	<0.0001	No	0.0038	No	-	-	-	-
LC-41b	0.116	Yes	-	-	0.325	-0.00917	Down	No
LC-64b	0.0005	No	0.013	No	-	-	-	-
LC-111b	0.011	No	0.160	Yes	0.165	0.00081	Up	No
LC-116b	0.618	Yes	-	-	0.166	0.00276	Up	No
LC-128	0.074	Yes	-	-	0.120	-0.00191	Down	No
LC-137c	0.0005	No	0.156	Yes	0.005	-0.00965	Down	Yes
LC-217	0.0001	No	<0.0001	No	-	-	-	-
LC-219	0.717	Yes	-	-	0.010	-0.00875	Down	Yes
LC-225	<0.0001	No	<0.0001	No	-	-	-	-
LC-226	0.045	No	0.766	Yes	0.014	0.00114	Up	Yes
MAMC-01	0.778	Yes	-	-	0.040	-0.00033	Down	Yes
MAMC-06	0.002	No	0.095	Yes	0.023	-0.00026	Down	Yes
Sea Level Aquifer Unit								
LC-50D	0.239	Yes	-	-	0.145	-0.00019	Down	No
LC-67D	0.490	Yes	-	-	0.927	0.00022	Up	No
LC-69D	0.286	Yes	-	-	0.041	-0.01459	Down	Yes
LC-72D	0.418	Yes	-	-	0.142	-0.00425	Down	No
LC-74D	<0.0001	No	<0.0001	No	-	-	-	-
LC-75D	0.505	Yes	-	-	0.039	-0.00008	Down	Yes
LC-77D	0.151	Yes	-	-	0.142	-0.00011	Down	No
LC-84D-1	0.330	Yes	-	-	0.015	-0.00024	Down	Yes
LC-84D-2	0.426	Yes	-	-	0.083	0.00012	Up	No
LC-86D-1	0.0005	No	<0.0001	No	-	-	-	-
LC-86D-2	0.432	Yes	-	-	0.245	0.00013	Up	No
LC-88D-1	0.418	Yes	-	-	0.016	0.00013	Up	Yes
LC-88D-2	0.001	No	<0.0001	No	-	-	-	-
LC-90D-1	0.431	Yes	-	-	0.003	-0.00025	Down	Yes

Table 6-2 - Test for Normality and Linear Regression Trends of TCE Data 2005 - 2014

Log RAM, Joint Base Lewis-McChord, Washington 98433

Well ID	P Value	Normally Distributed?	Log P Value	Log Normally Distributed?	Linear Regression P Value	Slope	Trend	Statistically?
LC-91D-2	0.316	Yes	-	-	0.726	-0.00003	Down	No
LC-94D-2	0.002	No	<0.0001	No	-	-	-	-
LC-96D	0.003	No	0.011	No	-	-	-	-
LC-98D-1	0.001	No	0.001	No	-	-	-	-
LC-98D-2	0.045	No	0.002	No	-	-	-	-
LC-99D	0.557	Yes	-	-	0.603	-0.00159	Down	No
LC-101D-1	0.091	Yes	-	-	0.003	0.00043	Up	Yes
LC-101D-2	0.441	Yes	-	-	0.613	-0.00020	Down	No
LC-102D-1	0.019	No	0.016	No	-	-	-	-
LC-102D-2	0.285	Yes	-	-	0.425	-0.00015	Down	No
LC-103D	0.013	No	0.001	No	-	-	-	-
LC-126	0.867	Yes	-	-	0.031	-0.01733	Down	Yes
MAMC-03	0.002	No	0.012	No	-	-	-	-

Notes:

- = Not analyzed, not applicable

Table 6-3 - Kendall Correlation Test on Non-Parametric TCE Data 2005 - 2014
Log RAM, Joint Base Lewis-McChord, Washington, 98433

Well ID	Tau Statistic	Two Tailed P Value	Trend	Statistically?
Upper Vashon Aquifer Unit				
FL-01	-0.59	0.0042	Down	Yes
FL-04b	0.26	0.1777	Up	No
LC-61B	0.05	0.7725	Up	No
LC-135	0.05	0.8055	Up	No
LC-180	-0.69	0.0004	Down	Yes
MT-1	-0.30	0.0129	Down	Yes
MT-2	-0.42	0.0005	Down	Yes
MT-3	-0.18	0.1215	Down	No
Lower Vashon Aquifer Unit				
FL-04a	-0.19	0.322	Down	No
LC-64b	-0.63	0.012	Down	Yes
LC-217	-0.51	0.002	Down	Yes
LC-225	-0.18	0.292	Down	No
Sea Level Aquifer Unit				
LC-74D	-0.82	<0.0001	Down	Yes
LC-86D-1	-0.01	0.9648	Down	No
LC-88D-2	0.13	0.3839	Up	No
LC-94D-2	0.24	0.1737	Up	No
LC-96D	-0.72	<0.0001	Down	Yes
LC-98D-1	-0.80	<0.0001	Down	Yes
LC-98D-2	-0.56	<0.0001	Down	Yes
LC-102D-1	-0.15	0.4014	Up	Yes
LC-103D	-0.46	0.0037	Down	Yes
MAMC-03	-0.35	0.0290	Down	Yes

Table 6-4 - Trend Comparisons 2009 - 2014

Log RAM - Joint Base Lewis-McChord, Washington 98433

Well ID	2009		2010		2011		2012		2013		2014	
	Trend	Statistically?	Trend	Statistically?	Trend	Statistically?	Trend	Statistically?	Trend	Statistically?	Trend	Statistically?
Upper Vashon Aquifer Unit												
85-PA-381	Down	No	Down	No	Down	Yes	Down	No	Down	Yes	Down	Yes
85-PA-382	-	-	-	-	-	-	-	-	-	-	Up	No
CM-2	-	-	-	-	**Down**	**Yes**	Down	No	Down	No	Down	No
FL-01	-	-	-	-	**Down**	**Yes**	**Down**	**No**	Down	Yes	**Down**	**Yes**
FL-02	Down	Yes	Down	Yes	Down	Yes	Down	Yes	Down	Yes	Down	Yes
FL-03	Down	No	Down	No	Down	No	Down	No	Down	No	Down	Yes
FL-04b	-	-	-	-	-	-	-	-	**Up**	**No**	**Up**	**No**
FL-06	Down	Yes	Down	Yes	Down	Yes	Down	Yes	Down	Yes	Down	Yes
LC-03	**Up**	**No**	**Up**	**No**	**Up**	**No**	**Down**	**No**	**Down**	**Yes**	Down	Yes
LC-06	**Down**	**No**	Down	No	Down	No	Down	Yes	Down	Yes	Down	Yes
LC-14a	Down	No	Down	Yes	Down	No	Down	No	Down	No	Down	No
LC-16	Down	No	Down	No	Down	Yes	Down	Yes	Down	Yes	Down	Yes
LC-19a	**Down**	**Yes**	Down	Yes	Down	Yes	Down	Yes	Down	Yes	Down	Yes
LC-24	**Down**	**No**	**Down**	**Yes**	**Down**	**No**	**Down**	**No**	Down	No	Up	No
LC-27	Down	Yes	Down	Yes	Down	No	Down	No	Down	No	Down	No
LC-34	**Down**	**No**	**Down**	**No**	Down	No	Down	No	Down	No	Down	No
LC-41a	Up	No	Up	No	Down	No	Down	No	Down	No	Down	No
LC-49	Down	No	Down	No	Down	No	Down	Yes	Down	Yes	-	-
LC-53	Down	Yes	Down	Yes	Down	Yes	Down	Yes	Down	No	Down	No
LC-57	Down	No	Down	No	Down	No	Up	No	**Up**	**No**	Down	No
LC-61b	**Down**	**Yes**	**Down**	**Yes**	**Down**	**Yes**	**Down**	**Yes**	Down	No	**Up**	**No**
LC-64a	Down	Yes	Down	Yes	**Down**	**Yes**	**Down**	**Yes**	Down	Yes	Down	Yes
LC-66b	**Down**	**Yes**	Down	No	Down	No	Down	No	Down	Yes	Down	Yes
LC-108	Down	No	**Down**	**No**	**Down**	**No**	Down	No	Down	No	-	-
LC-109	-	-	Down	No	Down	Yes	Down	No	Down	Yes	Down	Yes
LC-124	-	-	Up	No	Up	No	Down	No	Down	No	Down	No
LC-132	Down	No	Down	No	Down	No	Down	No	Down	Yes	Down	Yes
LC-135	-	-	-	-	-	-	-	-	Down	No	**Up**	**No**
LC-136a	-	-	-	-	-	-	Down	Yes	-	-	-	-
LC-137b	Up	No	Up	No	Up	No	**Down**	**No**	**Down**	**No**	Down	Yes
LC-160	Down	Yes	Down	Yes	Down	Yes	Down	Yes	Down	Yes	Down	Yes
LC-178	Up	No	Up	No	Up	No	Up	No	Down	No	Down	No
LC-180	Down	Yes	Down	Yes	Down	Yes	Down	Yes	Down	Yes	**Down**	**Yes**
LC-218	Down	Yes	Down	Yes	Down	Yes	Down	Yes	Down	Yes	Down	Yes
LC-222	Down	No	Down	Yes	Down	No	Down	No	Down	No	Down	No
LC-223	Up	No	Down	No	Down	No	Down	Yes	Down	Yes	Down	Yes
LC-224	Down	Yes	Down	Yes	Down	Yes	Down	Yes	Down	Yes	Down	No
MT-1	Down	No	Down	Yes	Down	No	Down	Yes	Down	Yes	**Down**	**Yes**
MT-2	Down	No	Down	Yes	Down	Yes	Down	Yes	**Down**	**Yes**	**Down**	**Yes**
MT-3	Down	No	Down	No	Down	No	Down	No	Down	No	**Down**	**No**
MT-4	Down	Yes	Down	Yes	Down	Yes	**Down**	**Yes**	Down	Yes	Down	Yes
SW-MC-7	-	-	-	-	Down	No	Down	No	**Down**	**No**	Down	No

Table 6-4 - Trend Comparisons 2009 - 2014

Log RAM - Joint Base Lewis-McChord, Washington 98433

	2009		2010		2011		2012		2013		2014	
Well ID	**Trend**	**Statistically?**	**Trend**	**Statistically?**	**Trend**	**Statistically?**	**Trend**	**Statistically?**	**Trend**	**Statistically?**	**Trend**	**Statistically?**
SW-MC-8	-	-	-	-	-	-	Up	No	Down	No	Down	No
SW-MC-9	-	-	-	-	-	-	Down	Yes	Down	Yes	Down	Yes
T-04	**Down**	**No**	Up	No	Down	No	Down	No	Down	No	Down	Yes
T-05	Down	No	Down	No	Down	No	Down	Yes	-	-	Down	No
T-06	Down	Yes	Down	Yes	Down	Yes	Down	Yes	Down	Yes	Down	Yes
T-08	Down	No	Down	Yes	Down	Yes	Down	Yes	-	-	-	-
T-11b	Down	Yes	Down	Yes	Down	Yes	Down	Yes	Down	Yes	Down	Yes
T-13b	Up	No	Up	No	Down	No	Down	No	Down	No	Down	No
Lower Vashon Aquifer Unit												
FL-04a	**Up**	**No**	**None**	**Yes**	**Down**	**No**	**Down**	**No**	**Down**	**No**	**Down**	**No**
LC-41b	Up	No	Up	No	Down	No	Up	No	Down	No	Down	No
LC-64b	Down	No	Down	No	Down	Yes	Down	No	Down	Yes	Down	Yes
LC-111b	Up	No	Up	Yes	Up	No	Up	No	Up	No	Up	No
LC-116b	**Up**	**Yes**	Up	Yes	Up	Yes	Up	Yes	Up	Yes	Up	No
LC-128	Down	Yes	Down	Yes	Down	Yes	Down	Yes	Down	Yes	Down	No
LC-137c	Up	Yes	Up	No	Up	No	Down	No	Down	No	Down	Yes
LC-217	Down	Yes	Down	Yes	Down	Yes	Down	Yes	Down	Yes	**Down**	**Yes**
LC-219	Down	Yes	Down	Yes	Down	Yes	Down	Yes	Down	Yes	Down	Yes
LC-225	**Up**	**No**	**Down**	**No**	**Down**	**No**	**Down**	**No**	**Down**	**No**	**Down**	**No**
LC-226	Up	No	Up	No	Up	No	Up	No	Up	No	Up	Yes
MAMC-01	Up	No	Up	No	Down	No	Down	No	Down	No	Down	Yes
MAMC-06	Down	Yes	Down	Yes	Down	Yes	Down	No	Down	No	Down	Yes
Sea Level Aquifer Unit												
LC-50D	Down	No	Down	No	Down	Yes	**Down**	**No**	Down	Yes	Down	No
LC-66D	**Down**	**Yes**	**Down**	**Yes**	Down	Yes	-	-	-	-	-	-
LC-67D	**None**	**Yes**	Up	No	Up	No	Up	No	Up	No	Up	No
LC-69D	Up	No	Up	No	Up	No	Up	No	Down	No	Down	Yes
LC-72D	Down	No	Down	No	Down	No	Down	No	Down	No	Down	No
LC-74D	**Down**	**No**	**Down**	**Yes**	**Down**	**Yes**	**Down**	**Yes**	**Down**	**Yes**	**Down**	**Yes**
LC-75D	**Down**	**No**	**Down**	**No**	**Down**	**Yes**	**Down**	**Yes**	Down	No	Down	Yes
LC-77D	**Down**	**Yes**	**Down**	**Yes**	**Down**	**Yes**	**Down**	**Yes**	**Down**	**Yes**	Down	No
LC-81D	**-**	**-**	**-**	**-**	**-**	**-**	Down	No	**-**	**-**	-	-
LC-82D	**-**	**-**	**-**	**-**	**-**	**-**	Down	No	**-**	**-**	-	-
LC-84D-1	Up	No	Up	No	Up	No	Down	No	Down	No	Down	Yes
LC-84D-2	**Up**	**Yes**	**Up**	**Yes**	**Up**	**Yes**	**Up**	**Yes**	**Up**	**Yes**	Up	No
LC-86D-1	**Down**	**No**	**Down**	**No**	**Down**	**No**	**Down**	**No**	**Down**	**No**	**Down**	**No**
LC-86D-2	Down	No	Down	No	Down	No	Down	No	Down	No	Up	No
LC-88D-1	Up	No	Up	No	Up	No	Up	Yes	Up	Yes	Up	Yes
LC-88D-2	Up	No	Up	No	Up	No	Up	No	Up	Yes	**Up**	**No**
LC-90D-1	Down	Yes	**Down**	**No**	Down	Yes	Down	Yes	Down	Yes	Down	Yes
LC-91D-2	Up	No	Up	No	Up	No	Up	No	Down	No	Down	No
LC-94D-2	**Up**	**No**	**Up**	**No**	**Up**	**No**	**Up**	**No**	**Up**	**No**	**Up**	**No**
LC-96D	Down	Yes	**Down**	**Yes**	**Down**	**Yes**	**Down**	**Yes**	**Down**	**Yes**	**Down**	**Yes**

Table 6-4 - Trend Comparisons 2009 - 2014

Log RAM - Joint Base Lewis-McChord, Washington 98433

	2009		2010		2011		2012		2013		2014	
Well ID	**Trend**	**Statistically?**	**Trend**	**Statistically?**	**Trend**	**Statistically?**	**Trend**	**Statistically?**	**Trend**	**Statistically?**	**Trend**	**Statistically?**
LC-98D-1	**Down**	**No**	**Down**	**Yes**	**Down**	**Yes**	**Down**	**Yes**	**Down**	**Yes**	**Down**	**Yes**
LC-98D-2	Down	No	Down	Yes	Down	Yes	Down	Yes	Down	Yes	**Down**	**Yes**
LC-99D	Down	No	Up	No	Up	No	Up	No	Down	No	Down	No
LC-101D-1	Up	Yes	Up	Yes	Up	Yes	**Up**	**Yes**	**Up**	**Yes**	Up	Yes
LC-101D-2	Up	No	Up	No	Up	No	Up	No	Up	No	Down	No
LC-102D-1	Down	No	Down	No	Down	No	Down	No	Down	No	**Up**	**Yes**
LC-102D-2	Up	No	Down	No	Down	No	Down	No	Down	No	Down	No
LC-103D	Down	No	Down	No	Down	No	Down	No	Down	Yes	**Down**	**Yes**
LC-126	Down	No	Down	No	Down	No	Up	No	Down	No	Down	Yes
MAMC-03	Up	Yes	Up	No	Up	No	Down	Yes	**Down**	**Yes**	**Down**	**Yes**

Notes:

- = Not applicable

BOLD = Data is not normally or log normally distributed. Data was analyzed using the Mann-Kendall test for trend

2009, 2010 and 2011 trends were calculated on the current datasets (2002 to 2009, 2010 or 2011)

2012 trends were calculated on 10 years of data (2003 - 2012).

2013 trends were calculated on the last 10 years of data (2004 - 2013).

2014 trends were calculated on the last 10 years of data (2005 - 2014).

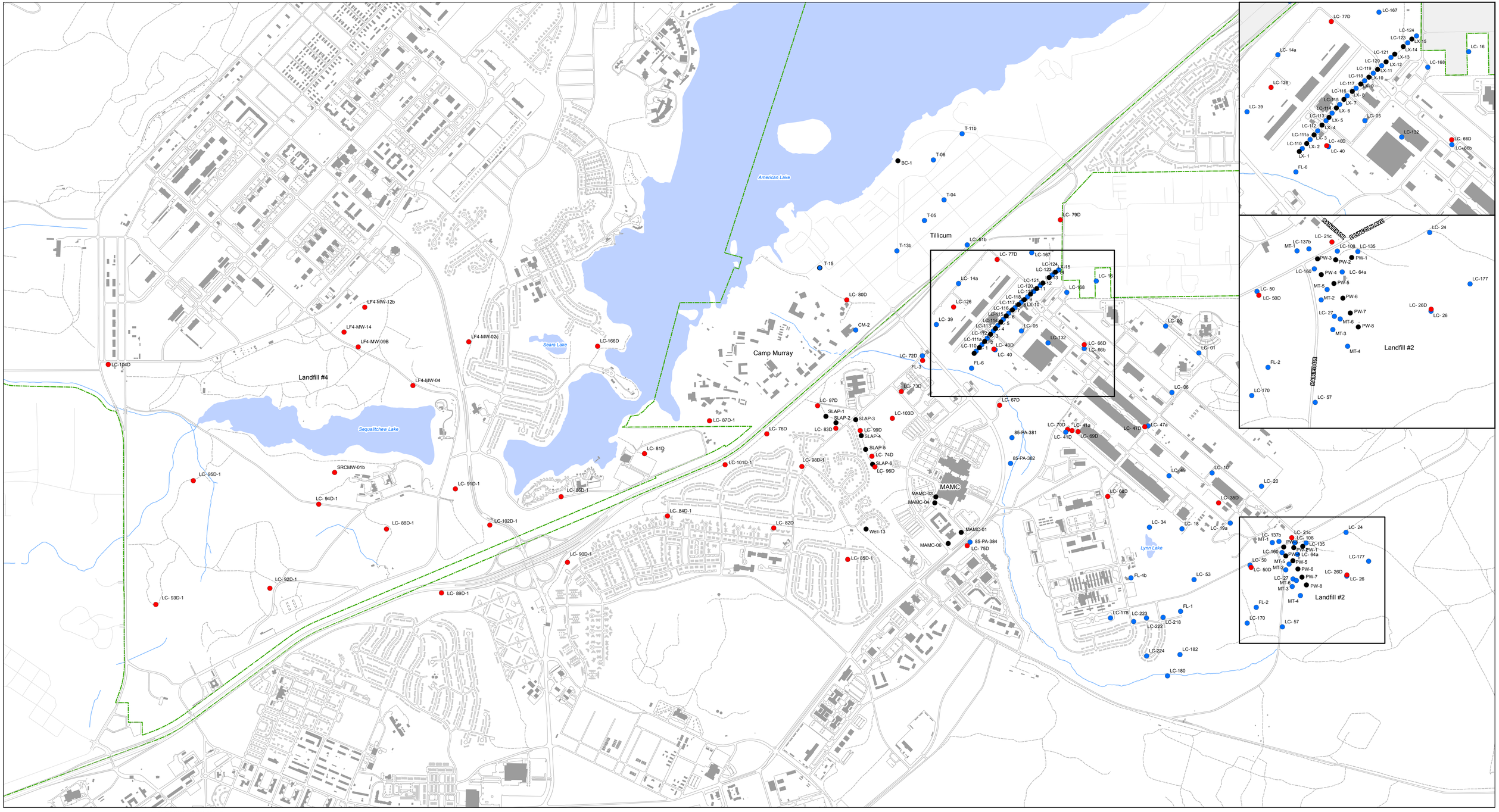
Upward trend changed to a downward trend (not statistically) between years

Upward trend changed to a downward trend (statistically) between years

Downward trend changed to an upward trend (not statistically) between years

Downward trend changed to an upward trend (statistically) between years

EXHIBITS



MAP PRODUCED BY: Tom J Lynott
GIS\CAD, DPW, JBLM, Washington
Project File: G:\Drawing_Files\a_Log_Center\a_LogRam\SAP\2012Exhibit_1.mxd
Print file: N:\MapLibrary\Monthly\201403\2012Exhibit_1.pdf
Date Published: **March 17, 2014**

- Upper Vashon Aquifer Monitoring Wells
- Sea Level Aquifer Monitoring Wells
- Production Wells

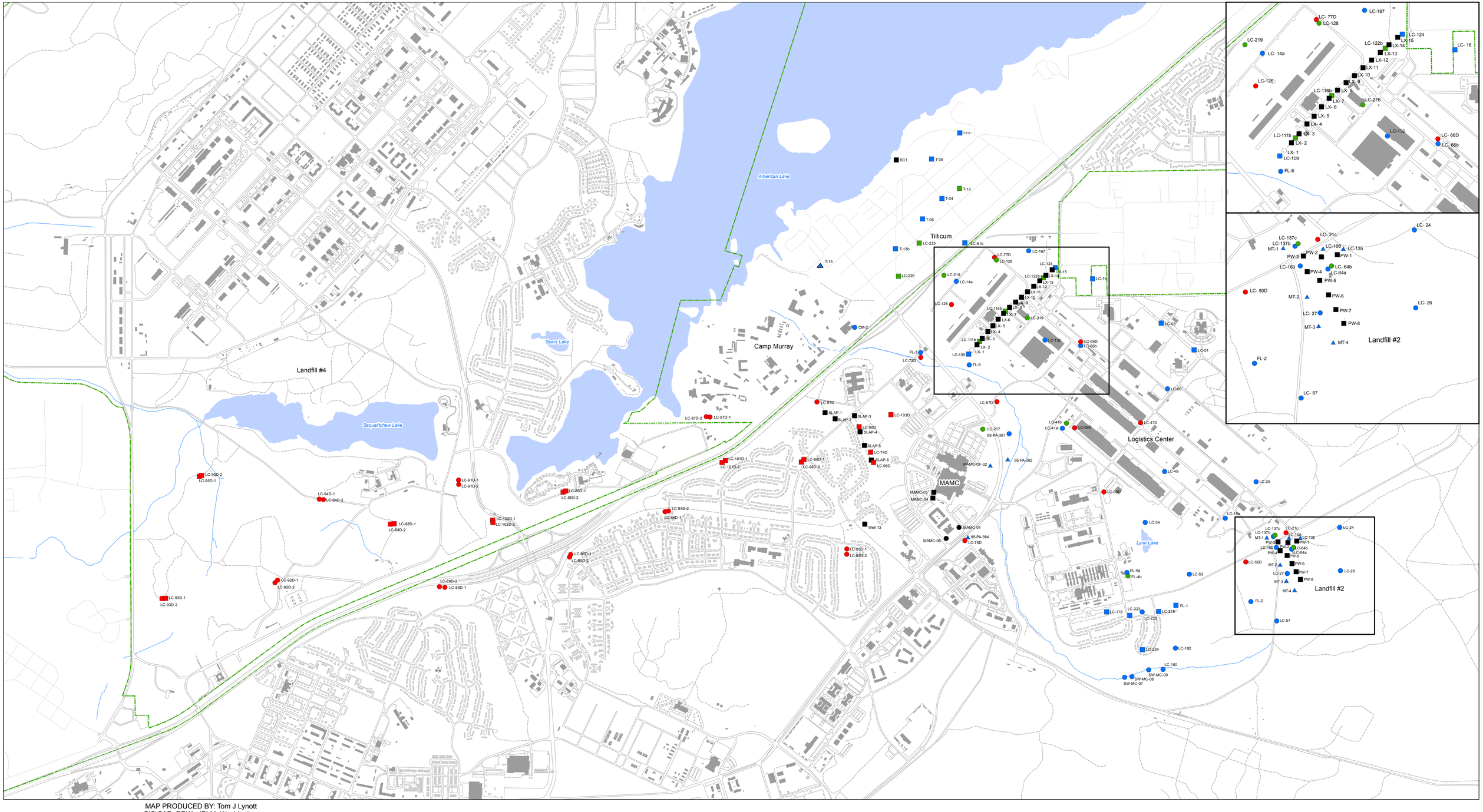
N

0 2,450 4,900 9,800
Feet

1 inch = 900 feet

MAP DATA:
ELLIPSOID: GRS 80
COORDINATE SYSTEM: UTM, Zone 10
HORIZONTAL DATUM: WGS 84

EXHIBIT 1
Logistics Center Remedial Action Monitoring Compliance Plan
WATER LEVEL MEASUREMENT LOCATION MAP



MAP PRODUCED BY: Tom J Lynott
GIS\CAD, DPW, JBLM, Washington
Project File: G:\Drawing_Files\a_Log_Center\a_LogRam\SAP\2012Exhibit_2.mxd
Print file: N:\MapLibrary\Monthly\201403\2012Exhibit_2.pdf
Date Published: **March 17, 2014**

- Upper Vashon
- Lower Vashon
- Sea Level
- Production Wells

- ○ Sampled Annually
- □ Sampled Semi-annually
- △ Sampled Quarterly

LX-1 is not running and is not sampled

N

0 2,450 4,900 9,800
Feet

1 inch = 900 feet

MAP DATA:
ELLIPSOID: GRS 80
COORDINATE SYSTEM: UTM, Zone 10
HORIZONTAL DATUM: WGS 84

EXHIBIT 2
Logistics Center Remedial Action Monitoring Compliance Plan
WATER QUALITY MONITORING LOCATION MAP

APPENDICES

(PROVIDED ON DISC)

APPENDIX A	MONITORING WELL INVENTORY
APPENDIX B	LABORATORY ANALYTICAL DATA (BY QUARTER)
APPENDIX C	FIELD NOTES AND FORMS (BY QUARTER)
APPENDIX D	HISTORICAL DEPTH TO WATER MEASUREMENTS AND SEA LEVEL AQUIFER TREND GRAPHS
APPENDIX E	HISTORICAL ANALYTICAL RESULTS AND TCE LINEAR GRAPHS
APPENDIX F	LOG RAM STATISTICS 2005 - 2014

APPENDIX A

MONITORING WELL INVENTORY

Appendix A - Monitoring Well Inventory - 04 June 2014

Joint Base Lewis - McChord, Washington 98433

WELL_ID	AREA_ID	WELL_SUBTYPE	WELL_STATUS	Ecology_ID	NORTH_NAD27	EAST_NAD27	GRND_ELEV	MEAS_PT_EL	WELL_DEPTH	WELL_DIA	SCREEN_TOP	SCRN_BOTTM	SCREEN_TOP_ELEV	SCREEN_BOTTM_ELEV	AQUIFER	WELL_MATERIAL	DRILLING_CO	DRILL_MTHD	CMPLT_DATE
01035-MW01	Bldg 01035	MW	Active	BCR075	647370.70	1473190.093	261.4	261.11	30	2	15	30	246.4	231.4	Vashon	PVC	Longyear, Inc	Sonic	3/29/2011
01035-MW02	Bldg 01035	MW	Active	BCR076	647325.95	1473199.699	261.7	261.28	25	2	10	25	251.7	236.7	Vashon	PVC	Longyear, Inc	Sonic	3/30/2011
01-IA-11	Artillery Impact Area	MW	Active				264.4	266.78	64.0	2.0	59	64	207.78	202.78	Vashon	PVC			11/1/2001
01-IA-12	Artillery Impact Area	MW	Active				287.3	289.43	52.0	2.0	47	52	242.43	237.43	Vashon	PVC			11/1/2001
01-IA-13	Artillery Impact Area	MW	Active				313.1	315.43	67.0	2.0	62	67	253.43	248.43	Vashon	PVC			11/1/2001
01-IA-14	Artillery Impact Area	MW	Active				301.8	394.39	48.0	2.0	42.5	47.5	351.89	346.89	Vashon	PVC			11/1/2001
01-IA-15	Artillery Impact Area	MW	Active				361.1	363.61	208	2.0	203	208	160.61	155.61	Sea Level	PVC			11/1/2001
01-PK-MW01	Popping Kettle Pit	MW	Decommissioned						48.0	6.0	43.0	48.0			Vashon	PVC	Explorations,	H-S Auger	
01-PK-MW02	Popping Kettle Pit	MW	Decommissioned						48.0	6.0	43.0	48.0			Vashon	PVC	Explorations,	H-S Auger	1/3/2001
01-PK-MW03	Popping Kettle Pit	MW	Decommissioned						48.0	6.0	43.0	48.0			Vashon	PVC	Explorations,	H-S Auger	1/3/2001
01-PK-MW04	Popping Kettle Pit	MW	Decommissioned						48.0	6.0	43.0	48.0			Vashon	PVC	Explorations,	H-S Auger	1/3/2001
03075-MW01	Bldg 03075	MW	Active	BCR081	644100.33	1480433.94	288.6	289.85	30	2	15	30	273.6	258.6	Vashon	PVC	Longyear, Inc	Sonic	3/31/2011
03075-MW02	Bldg 03075	MW	Active	BCR082	643985.52	1480343.446	290.3	288.04	35	2	20	35	270.3	255.3	Vashon	PVC	Longyear, Inc	Sonic	4/1/2011
03627-MW01	Bldg 03627	MW	Active	BCR077	641242.12	1480475.912	296.3	295.48	30	2	15	30	281.3	266.3	Vashon	PVC	Longyear, Inc	Sonic	3/30/2011
03627-MW02	Bldg 03627	MW	Active	BCR078	641326.81	1480560.385	296.6	296.25	30	2	15	30	281.6	266.6	Vashon	PVC	Longyear, Inc	Sonic	3/31/2011
03945-MW01	Bldg 03945	MW	Active	BCR083	640529.73	1479524.253	306.3	305.78	35	2	20	35	286.3	271.3	Vashon	PVC	Longyear, Inc	Sonic	4/4/2011
03945-MW02	Bldg 03945	MW	Active	BCR091	640578.64	1479633.994	306.0	305.29	35	2	20	35	286	271	Vashon	PVC	Longyear, Inc	Sonic	4/8/2011
04-LF03-MW01	Landfill 3	MW	Other						70	2	60	70			Vashon	PVC	Prosonic	Sonic	6/2/2004
04-LF03-MW02	Landfill 3	MW	Other						67	2	57	67			Vashon	PVC	Prosonic	Sonic	5/26/2004
06031-MW01	Bldg 06031	MW	Active	BCR085	649782.66	1481740.437	287.4	287	40	2	25	40	262.4	247.4	Vashon	PVC	Longyear, Inc	Sonic	4/5/2011
06031-MW02	Bldg 06031	MW	Active	BCR086	649647.60	1481645.707	286.1	285.98	35	2	20	35	266.1	251.1	Vashon	PVC	Longyear, Inc	Sonic	4/5/2011
06034-MW01	Bldg 06034	MW	Active	BCR080	649613.37	1482002.074	288.8	288.79	40	2	25	40	263.8	248.8	Vashon	PVC	Longyear, Inc	Sonic	4/1/2011
06202-MW01	Bldg 06202	MW	Active	BCR087	648759.49	1483602.064	297.2	296.61	40	2	25	40	272.2	257.2	Vashon	PVC	Longyear, Inc	Sonic	4/6/2011
07-A17-7	Bldg A1033 (AOC 9-2)	MW	Active				235.57	235.24	37	2	22	37			Vashon	PVC	Drilling, Inc	Sonic	6/21/2007
09001-MW01	Bldg 09001	MW	Active	BCR088	657460.55	1488508.089	268.3	267.61	30	2	15	30	253.3	238.3	Vashon	PVC	Longyear, Inc	Sonic	4/7/2011
09001-MW02	Bldg 09001	MW	Active	BCR092	657511.67	1488543.493	268.3	267.94	30	2	15	30	253.3	238.3	Vashon	PVC	Longyear, Inc	Sonic	4/11/2011
10-A17-8	Bldg A1033 (AOC 9-2)	MW	Active	BCJ 230			239.6	239.32	38.35	2	23	38			Vashon	PVC	Drilling	H-S Auger	10/09/2010
13-1-VD	Landfill 5	MW	Active	BIE 067	0.00	0	222.82	222.41	50	2	40	50	182.41	172.41	Vashon	PVC	Cascade	Sonic	12/11/2013
1BKGRN	Logistics Center	MW	Decommissioned		651994.00	1497287.75									Vashon				
2061-MW01	Bldg 2061 (AOC 9-3)	MW	Decommissioned						67	2	57	67			Vashon	PVC	Holt	H-S Auger	3/1/2005
2061-MW02	Bldg 2061 (AOC 9-3)	MW	Decommissioned						60	2	50	60			Vashon	PVC	Holt	H-S Auger	3/3/2005
2061-MW03	Bldg 2061 (AOC 9-3)	MW	Decommissioned						62	2	52	62			Vashon	PVC	Holt	H-S Auger	3/3/2005
2061-MW04	Bldg 2061 (AOC 9-3)	MW	Decommissioned						59	2	49	59			Vashon	PVC	Holt	H-S Auger	3/4/2005
4131-MW01	Bldg 4131 (AOC 8-4)	MW	Active		649039.75	1473216.47		263.97	37.5	2	27.5	37.5			Vashon	PVC	Holt	H-S Auger	2/21/2005
4131-MW02	Bldg 4131 (AOC 8-4)	MW	Active					268.53	33	2	23	33	240.42	230.42	Vashon	PVC	Holt	H-S Auger	2/23/2005
4131-MW03	Bldg 4131 (AOC 8-4)	MW	Active					262.39	34	2	24	34			Vashon	PVC	Holt	H-S Auger	2/22/2005
4131-MW04	Bldg 4131 (AOC 8-4)	MW	Active					259.74	34	2	23	33			Vashon	PVC	Holt	H-S Auger	12/22/2005
4131-MW05	Bldg 4131 (AOC 8-4)	MW	Active					259.23	34	2	23	33			Vashon	PVC	Holt	H-S Auger	12/20/2005
4131-MW06	Bldg 4131 (AOC 8-4)	MW	Active					262.08	35	2	23	33			Vashon	PVC	Holt	H-S Auger	12/20/2005
5101-MW01	Bldg 5101 (AOC 9-4)	MW	Decommissioned						41.5	2	31.5	41.5			Vashon	PVC	Holt	H-S Auger	2/16/2005
5101-MW02	Bldg 5101 (AOC 9-4)	MW	Decommissioned						43.5	2	33.5	43.5			Vashon	PVC	Holt	H-S Auger	3/23/2005
5101-MW03	Bldg 5101 (AOC 9-4)	MW	Decommissioned						43.5	2	33.5	43.5			Vashon	PVC	Holt	H-S Auger	3/23/2005
80-RD-01	Landfill 5	MW	Decommissioned		657510.00	1468740	213.03											Air Rotary	1/1/1980
80-RD-02	Landfill 5	MW	Decommissioned		658710.00	1468720	228.54											Air Rotary	1/1/1980
80-RD-03	Landfill 5	MW	Decommissioned		659970.00	1468780												Air Rotary	1/1/1980
80-RD-04	Landfill 5	MW	Decommissioned		658510.00	1471820	216.21											Air Rotary	1/1/1980
80-RD-05	Landfill 5	MW	Decommissioned		659250.00	1469310												Air Rotary	1/1/1980
80-RD-06	Landfill 5	MW	Decommissioned		659520.00	1468520												Air Rotary	1/1/1980
80-RD-07	Landfill 5	MW	Decommissioned		658150.00	1468580	210.24											Air Rotary	1/1/1980
80-RD-08	Landfill 5	OW	Decommissioned		659600.00	1468520	216.8											Air Rotary	1/1/1980
80-RD-09	Landfill 5	MW	Decommissioned		658610.00	1468410	219.57											Air Rotary	1/1/1980
80-RD-10	Landfill 5	MW	Decommissioned		658570.00	1468750												Air Rotary	1/1/1980
80-RD-11	Landfill 5	MW	Decommissioned		657430.00	1481300	214.09											Air Rotary	1/1/1980
8288-MW01	Bldg 8288 (AOC 9-5)	MW	Decommissioned						19	2	9	19			Vashon	PVC	Holt	H-S Auger	2/24/2005
8288-MW02	Bldg 8288 (AOC 9-5)	MW	Decommissioned						18.5	2	8.5	18.5			Vashon	PVC	Holt	H-S Auger	2/24/2005
82-RD-281	MAMC	OW	Likely decom, lost, or destroyed		653390.00	1489190			100.0							PVC		Rotary	
82-RD-282	MAMC	OW	Likely decom, lost, or destroyed		653350.00	1489220			99.6							PVC		Rotary	
82-RD-282a	MAMC	OW	Likely decom, lost, or destroyed		653350.00	1489220			59.0							PVC		Rotary	
82-RD-282b	MAMC	OW	Likely decom, lost, or destroyed		653350.00	1489220			99.6							PVC		Rotary	
83-PA-76	Landfill 5	MW	Decommissioned		657765.19	1468316.5	210.9		30.0									Auger	9/20/1983
83-PA-77	Landfill 5	MW	Decommissioned		658494.13	1468236.38	216.6		43.0									Auger	8/30/1983
83-PA-78	Landfill 5	MW	Decommissioned		659245.63	1468078.13	215.4		38.5									Auger	8/31/1983
83-PA-79	Landfill 5	MW	Decommissioned		658221.75	1467850.63	215.2		38.5									Auger	8/29/1983
83-PA-80	Landfill 5	MW	Decommissioned		658923.75	1467764.25	216.3		38.5									H-S Auger	8/31/1983
83-PA-81	Landfill 5	MW	Decommissioned		659375.38	1467459.25	210.9		33.5									H-S Auger	9/22/1983
83-PA-82	Landfill 5	MW	Decommissioned		659191.81	1466937.13	213.4		39.0								Corps of	H-S Auger	9/2/1983
83-PA-83	Landfill 5	MW	Decommissioned		658467.50	1467055			28.5									H-S Auger	9/21/1983
83-PA-84	Landfill 5	MW	Decommissioned		657617.50	1467152.5	212.1		43.0									H-S Auger	9/7/1983
83-PA-85	Landfill 5	MW	Decommissioned		657493.25	1467907.63	209.8		39.0									H-S Auger	9/6/1983
83-PA-86	Landfill 5	MW	Decommissioned		657001.81	1468276.75	212.7		38.5									H-S Auger	9/6/1983
83-PA-87	Landfill 5	MW	Decommissioned		658305.63	1466241.13	204.9		39.5									H-S Auger	9/7/1983

WELL_ID	AREA_ID	WELL_SUBTYPE	WELL_STATUS	Ecology_ID	NORTH_NAD27	EAST_NAD27	GRND_ELEV	MEAS_PT_EL	WELL_DEPTH	WELL_DIA	SCREEN_TOP	SCRN_BOTTM	SCREEN_TOP_ELEV	SCREEN_BOTTM_ELEV	AQUIFER	WELL_MATERIAL	DRILLING_CO	DRILL_MTHD	CMPLT_DATE
83-PA-88	Landfill 5	MW	Decommissioned		657203.63	1470037.13	216.0		38.5									H-S Auger	9/12/1983
83-PA-89	Landfill 5	MW	Decommissioned		656952.56	1470018.63	211.7		39.5									H-S Auger	9/12/1983
83-PA-90	Landfill 5	MW	Decommissioned		657711.75	1466346.75	204.5		33.5									H-S Auger	9/21/1983
83-PA-91	Landfill 5	MW	Decommissioned		657946.06	1465480.88	208.0		28.5									H-S Auger	9/13/1983
83-PA-92a	Landfill 5	MW	Decommissioned		657061.38	1467073.75	200.7		34.0									H-S Auger	9/19/1983
83-PA-93	Landfill 5	MW	Decommissioned		657035.25	1466359	217.0		39.0									H-S Auger	9/14/1983
83-PA-94	Landfill 5	MW	Decommissioned		657435.19	1465533.38	205.7		39.0									H-S Auger	9/15/1983
83-PA-95	Landfill 5	MW	Decommissioned		657088.31	1468310.5	210.9		22.0									H-S Auger	9/22/1983
84-CD-LF1-1	Landfill 1	MW	Active		640126.00	1479595		303.64	60.0	6.0	20.0	60.0			Vashon	PVC	Drilling	Churn	11/29/1984
84-CD-LF1-2	Landfill 1	MW	Active		639271.00	1479573		303.48	60.0	6.0	20.0	60.0			Vashon	PVC	Drilling	Churn	11/28/1984
84-CD-LF1-3	Landfill 1	MW	Active		638243.00	1479727		297.69	60.0	6.0	20.0	60.0			Vashon	PVC	Drilling	Churn	11/9/1984
84-CD-LF1-4	Landfill 1	MW	Active		639159.00	1480091		312.59	60.0	6.0	20.0	60.0			Vashon	PVC	Drilling	Churn	11/29/1984
84-DH-186	Landfill 5	MW	Decommissioned		658338.50	1468314.75	216.5		120.5	6.0/4.0						PVC		Rotary	8/17/1984
84-DH-187	Landfill 5	MW	Decommissioned		658357.13	1467618.25	215.0		96.5	6.0/4.0						PVC		Rotary	8/23/1984
84-DH-189	Landfill 5	MW	Decommissioned		659305.38	1465886.38	210.9		94.3							PVC		Rotary	9/25/1984
84-DH-190	Landfill 5	MW	Decommissioned		658835.69	1466409.5	208.7		96.5	6.0/4.0						PVC		Rotary	9/19/1984
84-PA-09	Illicit PCB Dump Site	MW	Likely decom, lost, or destroyed		628610.00	1526250			15.3									H-S Auger	1/19/1984
84-PA-10	Illicit PCB Dump Site	MW	Likely decom, lost, or destroyed						18.5									H-S Auger	1/20/1984
84-PA-188	Landfill 5	MW	Decommissioned		658688.19	1468177.5	216.1		45.0									H-S Auger	8/24/1984
84-PA-263	Landfill 5	MW	Decommissioned			1466141.75	208.6		38.0									H-S Auger	7/27/1984
84-PA-264	Landfill 5	MW	Decommissioned		659967.81	1466141.75	207.8		47.5									H-S Auger	7/26/1984
84-PA-265	Landfill 5	MW	Decommissioned		659371.63	1465574.5	200.7		48.0									H-S Auger	7/26/1984
84-PA-266	Landfill 5	MW	Decommissioned		659473.81	1466086.25	211.5		36.0									H-S Auger	7/30/1984
84-PA-267	Landfill 5	MW	Decommissioned		658935.94	1465604.13	206.3		42.0									H-S Auger	7/28/1984
84-PA-268	Landfill 5	MW	Decommissioned		658908.75	1465994.5	211.7		37.5									H-S Auger	7/28/1984
84-RD-90	Landfill 5?	MW	Other				279.0		40.5	6.0								Rotary	11/19/1984
84-RD-91	Landfill 5?	MW	Other				279.0		40.0	6.0								Rotary	11/17/1984
84-RD-92	Landfill 5?	MW	Other				279.0		20.5	6.0								Rotary	11/20/1984
84-RD-93	Landfill 5?	MW	Other				279.0		20.5	6.0								Rotary	11/14/1984
84-RD-94	Landfill 5?	MW	Other				279.0		20.0	6.0								Rotary	11/14/1984
84-RD-95	Landfill 5?	MW	Other				279.0		31.0	6.0								Rotary	11/15/1984
85-PA-29	Logistics Center	MW	Active						54.0									H-S Auger	12/13/1985
85-PA-30	Logistics Center	MW	Active															H-S Auger	1/7/1986
85-PA-31	Logistics Center	MW	Active						47.5									H-S Auger	1/13/1986
85-PA-32	Logistics Center	MW	Active															H-S Auger	1/14/1986
85-PA-381	Logistics Center	MW	Active		655045.00	1490584	268.43	269.17	56.8	6.0/2.0	47.0	57.5	222.17	211.67	Vashon	PVC		H-S Auger	1/15/1986
85-PA-381a	Logistics Center	MW	Active		655044.00	1490574	268.84	269.65	30.0	6.0/2.0	19.5	29.5	250.15	240.15	Vashon	PVC		H-S Auger	1/15/1986
85-PA-382	Logistics Center	MW	Active		654501.00	1490536	263.98	265.20	62.5	6.0/2.0	52.0	62.0	213.2	203.2	Vashon	PVC		H-S Auger	1/16/1986
85-PA-382a	Logistics Center	MW	Likely decom, lost, or destroyed		654503.00	1490523	264.42	265.43	31.5	6.0/2.0	21.0	31.0	244.43	234.43	Vashon	PVC		H-S Auger	1/17/1986
85-PA-383	Logistics Center	MW	Destroyed		654112.00	1490422	269.13	269.97	62.5	6.0/2.0	47.0	57.0	222.97	212.97	Vashon	PVC		H-S Auger	1/17/1986
85-PA-383a	Logistics Center	MW	Decommissioned		654120.00	1490424	266.34	267.41	31.5	6.0/2.0	20.0	30.0	247.41	237.41	Vashon	PVC		H-S Auger	1/21/1986
85-PA-384	Logistics Center	MW	Active		652865.13	1489630.63	278.36	279.50	60.5	6.0/2.0	50.5	60.5	229	219	Vashon	PVC		H-S Auger	1/24/1986
85-PA-384a	Logistics Center	MW	Active		652859.38	1489625.5	278.71	279.18	32.0	6.0/2.0	21.5	31.5	257.9	247.9	Vashon	PVC		H-S Auger	1/22/1986
85-PA-L-01	Logistics Center	OW	Active						37.5		32.5	37.5						H-S Auger	1/8/1986
85-PA-L-02	Logistics Center	OW	Active						35.0		30.0	35.0						H-S Auger	1/8/1986
85-PCB-1	Illicit PCB Dump Site	MW	Likely decom, lost, or destroyed																
85-PCB-10	Illicit PCB Dump Site	MW	Likely decom, lost, or destroyed																
85-PCB-11	Illicit PCB Dump Site	MW	Likely decom, lost, or destroyed																
85-PCB-12	Illicit PCB Dump Site	MW	Likely decom, lost, or destroyed																
85-PCB-13	Illicit PCB Dump Site	MW	Likely decom, lost, or destroyed																
85-PCB-14	Illicit PCB Dump Site	MW	Likely decom, lost, or destroyed																
85-PCB-15	Illicit PCB Dump Site	MW	Likely decom, lost, or destroyed																
85-PCB-2	Illicit PCB Dump Site	MW	Likely decom, lost, or destroyed																
85-PCB-3	Illicit PCB Dump Site	MW	Likely decom, lost, or destroyed																
85-PCB-4	Illicit PCB Dump Site	MW	Likely decom, lost, or destroyed																
85-PCB-5	Illicit PCB Dump Site	MW	Likely decom, lost, or destroyed																
85-PCB-6	Illicit PCB Dump Site	MW	Likely decom, lost, or destroyed																
85-PCB-7	Illicit PCB Dump Site	MW	Likely decom, lost, or destroyed																
85-PCB-8	Illicit PCB Dump Site	MW	Likely decom, lost, or destroyed																
85-PCB-9	Illicit PCB Dump Site	MW	Likely decom, lost, or destroyed																
88-01-SS	Landfill 5	MW	Decommissioned		657079.00	1471543		220.07	215.8	2.0	185	195	35.07	25.07		Sch80PVC	Inc.	Churn	10/21/1988
88-02-VD	Landfill 5	MW	Decommissioned		657106.00	1471545		219.50	49.0	2.0	38	48	182.03	172.03		Sch80PVC	Inc.	Churn	11/17/1988
88-03-VD	Landfill 5	MW	Decommissioned		659929.00	1467922		201.64	73.0	2.0	60	70	141.64	131.64		Sch40PVC	Inc.	Churn	11/30/1988
88-05-SS	Landfill 5	MW	Decommissioned		658349.00	1468231		215.27	183.0	2.0	170	180	45.27	35.27		Sch80PVC	Inc.	Churn	12/1/1988
88-06-VD	Landfill 5	MW	Decommissioned		657021.00	1468213		212.7	95.0		60	70	152.7	142.7		Sch40PVC	Inc.	Churn	2/12/1988
88-07-VD	Landfill 5	MW	Decommissioned		657660.00	1467229		213.32	73.0	2.0	60	70	153.32	143.32		Sch40PVC	Inc.	Churn	12/7/1988
88-09-VD	Landfill 5	MW	Decommissioned		659998.00	1466571		209.16	69.0	2.0	54.0	64.0	155.16	145.16		Sch40PVC	Inc.	Churn	12/29/1988
88-11-SS	Landfill 5	MW	Decommissioned		658546.00	1466053		205.1	180.0	2.0	168.0	178.0	37.1	27.1		Sch80PVC	Inc.	Churn	12/14/1988
88-13-VD	Landfill 5	MW	Decommissioned		658082.00	1465525		207.08	74.0	2.0	64.0	74.0	143.08	133.08		Sch40PVC	Inc.	Churn	12/30/1988
88-15-VD	Landfill 5	MW	Decommissioned		659280.00	1465704		210.67	86.0	2.0	77.25	86.0	133.42	124.67		Sch40PVC	Inc.	Churn	12/23/1988
88-16-SS	Landfill 5	MW	Decommissioned		660007.00	1466540		209.87	185.0	2.0	175.0	185.0	34.87	24.87		Sch80PVC	Inc.	Churn	11/14/1988

WELL_ID	AREA_ID	WELL_SUBTYPE	WELL_STATUS	Ecology_ID	NORTH_NAD27	EAST_NAD27	GRND_ELEV	MEAS_PT_EL	WELL_DEPTH	WELL_DIA	SCREEN_TOP	SCRN_BOTTM	SCREEN_TOP_ELEV	SCREEN_BOTTM_ELEV	AQUIFER	WELL_MATERIAL	DRILLING_CO	DRILL_MTHD	CMPLT_DATE
88-LS-AD-VD	Landfill 5	MW	Active		658230.00	1468412.63		217.12		2.0	63.6	73.6	153.52	143.52	Sea Level	Sch40PVC		Rotary	11/17/1988
88-LS-AM-VD	Landfill 5	MW	Active		658216.69	1468436.75		215.22		2.0	37.2	47.2	178.02	168.02	Vashon	Sch40PVC		Rotary	11/26/1988
88-LS-AS-VD	Landfill 5	MW	Destroyed		658236.50	1468442.75		215.63		2.0	12.7	22.7	202.93	192.93	Vashon	Sch40PVC		Rotary	11/22/1988
88-LS-CD-VD	Landfill 5	MW	Likely decom, lost, or destroyed		659006.19	1465996.38		213.44		2.0	90.0	100.0	123.44	113.44	Vashon	Sch40PVC		Rotary	11/29/1988
88-LS-CS-VD	Landfill 5	MW	Likely decom, lost, or destroyed		658995.94	1465985.63		213.74		2.0	15.9	25.9	197.84	187.84	Vashon	Sch40PVC		Rotary	11/23/1988
89-04A-VD	Landfill 5	MW	Decommissioned		658622.00	1467639		213.89	29.0	2.0	24.5	29.5	189.39	184.39		Sch40PVC	Inc.		1/25/1989
89-04B-VD	Landfill 5	MW	Decommissioned		658622.00	1467639		213.92	50.0	2.0	45.0	50.0	168.92	163.92		Sch40PVC	Inc.		1/25/1989
89-04C-VD	Landfill 5	MW	Decommissioned		658266.00	1467639		213.82	73.5	2.0	68.5	73.5	145.32	140.32		Sch40PVC	Inc.		1/25/1989
89-08-VD	Landfill 5	MW	Decommissioned		659170.00	1467131		216.55	73.5	2.0	59.5	69.5	157.05	147.05		Sch40PVC	Inc.		1/9/1989
89-10-VD	Landfill 5	MW	Decommissioned		658667.00	1466050		207.83	59.0	2.0	49.0	59.0	158.83	148.83		Sch40PVC	Inc.	Churn	1/23/1989
89-12-VD	Landfill 5	MW	Decommissioned		657699.00	1465976		205.81		2.0	50.0	60.0	155.81	145.81		Sch40PVC	Inc.	Churn	1/16/1989
89-14-VD	Landfill 5	MW	Decommissioned		659388.00	1466241		211.9	70.0	2.0	60.0	70.0	151.9	141.9		Sch40PVC	Inc.	Churn	1/17/1989
89-17-VD	Landfill 5	MW	Decommissioned		659122.00	1465101		204.81	75.0	2.0	65.0	75.0	139.81	129.81		Sch40PVC	Inc.	Churn	1/10/1989
89-18-SD	Landfill 5	MW	Decommissioned		659557.00	1465270		205.78	220.0	2.0	209.8	219.8	-4.02	-14.02		Sch80PVC	Company	Air Rotary	1/16/1989
89-20-SS	Landfill 5	MW	Decommissioned		658616.00	1467585		214.25	181.0	2.0	171.0	181.0	43.25	33.25		Sch80PVC	Brothers	Air Rotary	1/8/1990
89-21-SD	Landfill 5	MW	Decommissioned		659448.00	1462875		195.34	216.5	2.0	206.5	216.5	-11.16	-21.16		Sch40PVC	Company	Air Rotary	1/20/1989
89-22-SD	Landfill 5	MW	Decommissioned		661920.00	1464612		191.54	207.6	2.0	197.6	207.6	-6.06	-16.06		Sch80PVC	Company	Air Rotary	1/26/1989
89-PW-01a	Landfill 5	MW/Extraction	Decommissioned		658372.00	1468350		216.94	87.5	8	39	69	177.94	147.94		Sch40PVC	Company	Air Rotary	3/22/1989
90-19-SS	Landfill 5	MW	Decommissioned		658931.00	1468458		217.77	201	2.0	187.5	197.5	30.27	20.27	Sea Level	Sch80PVC	Brothers	Air Rotary	1/15/1990
90-PM-01	Park Marsh	MW	Decommissioned		662520.00	1482980	250.51		38.0	2.0	30.1	35.1	220.41	215.41		Sch80PVC	Inc.	Churn (HAS)	3/19/1990
90-PM-02	Park Marsh	MW	Decommissioned		662890.00	1482170	250.6		22.5	2.0	15.0	20.6	235.6	230		Sch80PVC	Development,	H-S Auger	3/15/1990
90-PM-03	Park Marsh	MW	Active		662410.00	1482090	237.4	249.17	30.0	2.0	23.3	30.3	214.1	207.1		PVC	Development,	H-S Auger	3/15/1990
90-PM-04	Park Marsh	MW	Decommissioned		662080.00	1481870	243.66		27.5	2.0	19.2	24.6	224.46	219.06		PVC	Development,	H-S Auger	3/13/1990
90-PM-05	Park Marsh	MW	Decommissioned		662740.00	1481830	250.61		44.0	2.0	38.4	43.9	212.21	206.71		PVC	Development,	H-S Auger	3/13/1990
92-1-VD	Landfill 5	MW	Active		659634.26	1469229.76		220.19	29.0	6.0	18.2	28.2	201.99	191.99	Drift	Sch80PVC	Environmental		9/10/1992
92-2-VD	Landfill 5	MW	Active		660085.20	1469558.62		215.09	29.0	6.0	15.5	25.5	199.59	189.59	Drift	Sch80PVC	Environmental		9/10/1992
92-3-VD	Landfill 5	MW	Active		659866.76	1469250.01		219.3	29.0	6.0	18.4	28.4	200.9	190.9		Sch80PVC	Environmental		9/10/1992
92-4-VD	Landfill 5	MW	Decommissioned		659776.32	1470236.75		218.9	31.0	6.0	16.3	31.3	202.6	187.6		Sch80PVC	Environmental		9/10/1992
93-FTP-(MW)1	Fire Training Pit	MW	Decommissioned				257.46		39.0		28.0	38.0	229.46	219.46		Sch40PVC	Environmental	Hammer	11/18/1993
93-FTP-(MW)2	Fire Training Pit	MW	Decommissioned				257.41		39.0		28.0	38.0				Sch40PVC	Environmental	Hammer	11/19/1993
93-FTP-(MW)3	Fire Training Pit	MW	Decommissioned				257.48		39.0		29.0	39.0				Sch40PVC	Environmental	Hammer	11/19/1993
93-LF5-1-VD	Landfill 5	MW	Active		657917.76	1468583.16	209.9	212.67	30.0	6.0	12.0	22.0	200.67	190.67	Vashon	Sch80PVC	Drilling Service	Air Rotary	3/1/1993
93-LF5-2-VD	Landfill 5	MW	Active		658154.69	1468563.38		210.4	25.0	6.0	12.7	22.7	197.7	187.7	Vashon	Sch80PVC	Drilling Service	Air Rotary	3/3/1993
93-LF5-3-VD	Landfill 5	MW	Active		658773.26	1468476.15		216.1	30.0	6.0	17.7	27.7	198.4	188.4	Vashon	Sch80PVC	Drilling Service	Air Rotary	2/28/1993
93-LF5-4-SS	Landfill 5	MW	Active		658132.00	1468571		210.33	172.0	6.0	160.6	170.6	49.73	39.73	Sea Level	Sch80PVC	Drilling Service	Air Rotary	3/16-17/1993
93-MFS-C5-1a	Landfill 5	MW	Active		659283.69	1470020.13		219.1	33.0	6.0	21.6	31.6	197.5	187.5		Sch80PVC	Drilling Service	Air Rotary	2/10/1993
93-MFS-C5-2	Landfill 5	MW	Active		659081.00	1469985.13		217.9	29.0	6.0	17.0	27.0	200.9	190.9		Sch80PVC	Drilling Service	Air Rotary	2/11/1993
93-MFS-C5-3	Landfill 5	MW	Active		659446.69	1468392.88		216.9	32.2	6.0	20.0	30.0	196.9	186.9		Sch80PVC	Drilling Service	Air Rotary	2/25/1993
93-MFS-C5-4	Landfill 5	MW	Active		659191.31	1471319.75		222.3	33.0	6.0	20.9	30.9	201.4	191.4		Sch80PVC	Drilling Service	Air Rotary	12/5/1993
93-PCB-1	Illicit PCB Dump Site	MW	Decommissioned						31.0	6.0	20.0	30.0				Sch80PVC	Environmental	Hammer	11/18/1993
93-PRA-1	Pesticide Rinse Area	MW	Other		649125.56	1475681.1		293.05		6.0	56.0	66.0				Sch80PVC	Environmental	Hammer	11/19/1993
94-PCB-2	Illicit PCB Dump Site	MW	Active					443.17	17.0	6.0	7.0	17.0			Vashon	Sch40PVC	Environmental	Hammer	4/13/1994
94-PCB-3	Illicit PCB Dump Site	MW	Decommissioned						17.0	6.0	7.0	17.0				Sch40PVC	Environmental	Hammer	4/13/1994
94-PCB-4	Illicit PCB Dump Site	MW	Decommissioned						17.0	6.0	7.0	17.0				Sch40PVC	Environmental	Hammer	4/13/1994
94-PCB-5	Illicit PCB Dump Site	MW	Decommissioned						18.0	6.0	8.0	18.0				Sch40PVC	Environmental	Hammer	4/13/1994
94-PCB-6	Illicit PCB Dump Site	MW	Decommissioned						19.0	6.0	8.0	18.0				Sch40PVC	Environmental	Hammer,	4/13/1994
95-A17-1	Bldg A1033 (AOC 9-2)	MW	Active		660582.11	1118058.67	237.18	236.90	42.5	2.0	27.1	42.1			Vashon	Sch40PVC	Company	H-S Auger	8/18/1995
95-A17-2	Bldg A1033 (AOC 9-2)	MW	Active		660549.31	1117848.62	236.78	236.02	42.2	2.0	27.0	42.0			Vashon	Sch40PVC	Company	H-S Auger	8/17/1995
95-A17-3a	Bldg A1033 (AOC 9-2)	MW	Active		660645.58	1117853.64	237.54	236.90	44.5	2.0	29.3	44.3			Vashon	Sch40PVC	Company	H-S Auger	8/17/1995
95-A17-4	Bldg A1033 (AOC 9-2)	MW	Active		660679.96	1117916.88	236.90	236.90	42.5	2.0	26.6	42.0			Vashon	Sch40PVC	Company	H-S Auger	8/18/1995
95-LF1-10	Landfill 1	MW	Active		639121.30	1479597.2		302.76	35.0	2.0	24.0	34.0	278.76	268.76	Vashon	Sch40PVC	Drilling Service	H-S Auger	8/11/1995
95-LF1-11	Landfill 1	MW	Active		638808.30	1479986.2		307.85	50.0		40.0	50.0	267.85	257.85	Vashon		Company	Air Rotary	11/28/1995
95-LF1-5	Landfill 1	MW	Active		639788.20	1480258.1		314.93	45.5	2.0	35.0	45.0	279.93	269.93	Vashon		Company	Air Rotary	12/6/1995
95-LF1-6	Landfill 1	MW	Likely decom, lost, or destroyed						40.0	2.0	19.0	29.0			Vashon	Sch40PVC	Drilling Service	H-S Auger	8/8/1995
95-LF1-7	Landfill 1	MW	Active		638497.10	1479296		297.13	33.5	2.0					Vashon		Company	Air Rotary	11/13/1995
95-LF1-8	Landfill 1	MW	Active		638949.60	1479513.9		295.91	34.0	2.0	23.0	33.0	272.91	262.91	Vashon	Sch40PVC	Drilling Service	Rotary	7/30/1995
95-LF1-9	Landfill 1	MW	Active		639545.80	1479197		299.8	30.0		20.0	30.0	279.8	269.8	Vashon		Company	Air Rotary	12/7/1995
96-A17-5	Bldg A1033 (AOC 9-2)	MW	Active		660778.38	1117704.45		233.92	45.0	2					Vashon				
96-A17-6	Bldg A1033 (AOC 9-2)	MW	Active		660841.92	1117817.46		235.12	45.0	2					Vashon				
9700-MW-1	Logistics Center	MW	Active		651372.81	1134130	275.37		20.08	2.0	4.83	19.33			Vashon	Sch40PVC	Company	H-S Auger	1/9/1996
9700-MW-2	Logistics Center	MW	Decommissioned		651362.31	1133996.38	275.73		20.04	2.0	4.79	19.29			Vashon	Sch40PVC	Company	H-S Auger	1/10/1996
9700-MW-3	Logistics Center	MW	Decommissioned		651419.38	1134005.63	275.98		19.89	2.0	4.64	19.14			Vashon	Sch40PVC	Company	H-S Auger	1/10/1996
97-MW-1	Bldg 3138	MW	Other		647780.90	1486341.4	293.7	293.32	29.0	2.0	13.8	28.8			Vashon	Sch40PVC	Company	H-S Auger	5/8/1997
97-MW-2	Bldg 6038	MW	Active		650427.50	1480940.2	276.5	276.03	38.0	2.0	20.0	35.2			Vashon	Sch40PVC	Company	Air Rotary	5/12/1997
97-MW-3	Bldg 6038	MW	Active		650435.30	1480888.8	277.0	276.50	35.0	2.0	19.74	34.7			Vashon	Sch40PVC	Company	Air Rotary	5/14/1997
97-MW-4	Bldg 3138	MW	Other		647776.80	1486028.1	288.9	288.70	26.0	2.0	11.0	26.0			Vashon	Sch40PVC	Company	Air Rotary	7/23/1997
98-IA-MW-01	Artillery Impact Area	MW	Active					286.7	46.0	2.0	41.0	46.0	245.7	240.7	Vashon	Sch40PVC	Drilling Service	H-S Auger	12/18/1998
98-IA-MW-02	Artillery Impact Area	MW	Active				238.0	235.4	40.2	2.0	35.2	40.2	200.2	195.2	Vashon	Sch40PVC	Drilling Service	H-S Auger	12/10/1998
98-IA-MW-03	Artillery Impact Area	MW	Active					321.9	78.0	2.0	73.0	78.0	171.2	166.2	Vashon	Sch40PVC	Drilling Service	H-S Auger	2/12/1999
98-IA-MW-04	Artillery Impact Area	MW	Active					244.2	63.0	2.0	58.0	63.0	188.9	183.9	Vashon	Sch80PVC	Drilling Service	Air Rotary	5/18/1999
98-IA-MW-05	Artillery Impact Area	MW	Active					246.9	122.0	2.0	117.0	122.0	139.8	136.1	Vashon	Sch80PVC	Drilling Service	Air Rotary	3/31/1999

WELL_ID	AREA_ID	WELL_SUBTYPE	WELL_STATUS	Ecology_ID	NORTH_NAD27	EAST_NAD27	GRND_ELEV	MEAS_PT_EL	WELL_DEPTH	WELL_DIA	SCREEN_TOP	SCRN_BOTTM	SCREEN_TOP_ELEV	SCREEN_BOTTM_ELEV	AQUIFER	WELL_MATERIAL	DRILLING_CO	DRILL_MTHD	CMPLT_DATE
98-IA-MW-06	Artillery Impact Area	MW	Active					257.1	45	2.0	39.5	44.5	282.4	277.4	Vashon	Sch80PVC	Drilling Service	Air Rotary	3/31/1999
98-IA-MW-07	Artillery Impact Area	MW	Active					291.0	55.0	2.0	50.0	55.0	241	236	Vashon	Sch40PVC	Drilling Service	Air Rotary	2/27/1999
98-IA-MW-08	Central Impact Area	MW	Active					322.8	43.0	2.0	38.0	43.0	284.8	279.8	Vashon	Sch80PVC	Drilling Service	H-S Auger	1/7/1999
98-IA-MW-09	Central Impact Area	MW	Active					333.0	50.0	2.0	44.25	49.25	288.75	283.75	Vashon	Sch40PVC	Drilling Service	H-S Auger	11/20/1998
98-IA-MW-10	Central Impact Area	MW	Active					355.0	39.0	2.0	34.0	39.0	319	314	Vashon	Sch40PVC	Drilling Service	H-S Auger	1/6/1999
98-LF5-MW-1	Landfill 5	MW	Active		658423.88	1111562.88		220.13	33.0	2.0	22.5	32.5	197.63	187.63	Vashon	Sch80PVC	Drilling Service	Air Rotary	9/16/1998
98-LF5-MW-2	Landfill 5	MW	Active		659589.63	1111604.5		219.18	38.2	2.0	17.0	27.0	202.18	192.18	Vashon	Sch80PVC	Drilling Service	Air Rotary	9/16/1998
A0111-MW01	Bldg A0111 (AOC 8-2)	MW	Decommissioned						28	2	18	28			Vashon	PVC	Holt	H-S Auger	3/11/2005
A0111-MW02	Bldg A0111 (AOC 8-2)	MW	Decommissioned						27	2	17	27			Vashon	PVC	Holt	H-S Auger	3/14/2005
A0111-MW03	Bldg A0111 (AOC 8-2)	MW	Decommissioned						27.5	2	17.5	27.5			Vashon	PVC	Holt	H-S Auger	3/14/2005
A0111-MW04	Bldg A0111 (AOC 8-2)	MW	Active		659693.20	1474810.03	227.83	227.47	28.5	2	17	27			Vashon	PVC	Holt	H-S Auger	12/19/2005
A0111-MW05	Bldg A0111 (AOC 8-2)	MW	Active		659598.16	1474712.17	227.29	226.95	29	2	17	27			Vashon	PVC	Holt	H-S Auger	12/19/2005
A0111-MW06	Bldg A0111 (AOC 8-2)	MW	Active		659485.65	1474923.47	225.43	225.21	29	2.0	19	29			Vashon	PVC	Associates	Rotary	3/5/2010
A0111-MW07	Bldg A0111 (AOC 8-2)	MW	Active		659747.78	1474896.03	228.48	227.88	30	2.0	20	30			Vashon	PVC	Associates	Rotary	3/5/2010
A0111-MW08	Bldg A0111 (AOC 8-2)	MW	Active		659619.72	1474778.33	227.95	227.7	30	2.0	20	30			Vashon	PVC	Associates	Rotary	3/5/2010
A0508-MW01	Bldg A0508 (AOC 8-5)	MW	Decommissioned						32	2	22	32			Vashon	PVC	Holt	Direct Push	5/18/2003
A0508-MW02	Bldg A0508 (AOC 8-5)	MW	Decommissioned						27	2	17	27			Vashon	PVC	Holt	H-S Auger	3/21/2005
A0508-MW03	Bldg A0508 (AOC 8-5)	MW	Decommissioned						33	2	23	33			Vashon	PVC	Holt	H-S Auger	3/22/2005
A0617-MW01	Bldg A0617	MW	Active	BCR059	659331.94	1476006.262	231.6	231.44	34.5	2	19.5	34.5	212.1	197.1	Vashon	PVC	Longyear, Inc	Sonic	3/25/2011
A1001-MW01	Bldg A1001	MW	Active	BCR057	660871.65	1476625.333	230.2	230.02	30	2	15	30	215.2	200.2	Vashon	PVC	Longyear, Inc	Sonic	3/24/2011
A1001-MW02	Bldg A1001	MW	Active	BCR058	660970.79	1476664.478	230.8	230.68	30	2	15	30	215.8	200.8	Vashon	PVC	Longyear, Inc	Sonic	3/24/2011
A-15	Landfill 2	MW	Decommissioned	ABO132	651902.19	1497340.25	278.19		15.0	2.0	5.0	15.0	273	258	Vashon	PVC	Holloway	H-S Auger	3/1998
A-30	Landfill 2	MW	Decommissioned	ABO130	651895.88	1497330.63	277.67		25.0	2.0	5.0	25.0	273	248	Vashon	PVC	Holloway	H-S Auger	3/1998
A-45	Landfill 2	MW	Decommissioned	ABO131	651905.63	1497334.63	269.53		39.0	2.0	24.0	39.0	246	231	Vashon	PVC	Holloway	H-S Auger	3/1998
AOC 10-8-B05	Bldg 3034 (AOC 10-8)	MW	Active				282.7	281.39	47.5	4	37.5	47.5			Vashon	PVC			5/1/2005
AOC 13-5 GW-2	Bldg 2687 (So Pwr Sta)	MW	Other		645066.71	1474663.23													
AOC 13-5 GW-3	Bldg 2687 (So Pwr Sta)	MW	Other																
AOC 13-5 GW-4	Bldg 2687 (So Pwr Sta)	MW	Other																
AS-1	Bldg A1033 (AOC 9-2)	Air Sparging	Active		0.00	0			62.5	2.0	60	62			Vashon	PVC	Foundation	Air Rotary	5/14/2009
AS-2	Bldg A1033 (AOC 9-2)	Air Sparging	Active		0.00	0			63.5	2.0	61	63			Vashon	PVC	Foundation	Air Rotary	5/15/2009
ASW-1	Landfill 4	Air Sparging	Active		657059.50	1117846.38			50.0	6.0	44.5	49.5			Vashon	PVC	Drilling Service	Auger	8/16/1994
ASW-2	Landfill 4	Air Sparging	Active												Vashon				
ASW-3	Landfill 4	Air Sparging	Active																
ASW-4	Landfill 4	Air Sparging	Active																
ASW-5	Landfill 4	Air Sparging	Active																
AZ-01	McChord	MW	Decommissioned		664803.00	1502827	293.6	295.99	92	2	12	92	283.99	203.99	Vashon		Subterranean	H-S Auger	12/11/1982
AZ-02	McChord	MW	Decommissioned		664642.00	1503788	302.4	307.92	102	2	32	102	275.92	205.92	Vashon		Subterranean	H-S Auger	12/9/1982
AZ-03	McChord	MW	Decommissioned		664252.00	1502837	293.6	296.84	82	2	22	82	274.84	214.84	Vashon		Subterranean	H-S Auger	1/17/1983
AZ-04	McChord	MW	Active		664924.06	1502609.91	294.92	294.51	57.5	2	7.5	57.5	287.01	237.01	Vashon		Subterranean	H-S Auger	7/20/1983
AZ-05	McChord	MW	Decommissioned				288.45	292.35	37.5	2	7.5	37.5	284.85	254.85	Vashon		Subterranean	H-S Auger	7/21/1983
AZ-06	McChord	MW	Active		664957.66	1502943.598	292.4	292.17	53	2	13	53	279.17	239.17	Vashon		Subterranean	H-S Auger	8/29/1983
AZ-07	McChord	MW	Decommissioned		662993.00	1500412	280.4	282.66	68	2	48	68	234.66	214.66	Vashon		Co.	H-S Auger	5/10/1985
AZ-08	McChord	MW	Decommissioned		664504.00	1501741	278.5	281.24	43	2	33	43	248.24	238.24	Vashon		Co.	H-S Auger	5/14/1985
AZ-09	McChord	MW	Decommissioned		663988.00	1500956	278.7	282.12	63	2	23	63	259.12	219.12	Vashon		Co.	H-S Auger	5/15/1985
B0510-MW01	Bldg B0510	MW	Active	BCR060	657705.89	1473010.144	220.6	220.42	25	2	10	25	210.6	195.6	Vashon	PVC	Longyear, Inc	Sonic	3/28/2011
B0910-MW01	Bldg B0910	MW	Active	BCR079	659545.55	1473068.278	222.2	221.95	24.5	2	9.5	24.5	212.7	197.7	Vashon	PVC	Longyear, Inc	Sonic	3/31/2011
B0912-MW01	Bldg B0912	MW	Active	BCR066	659617.16	1472967.969	222.4	222.12	27	2	12	27	210.4	195.4	Vashon	PVC	Longyear, Inc	Sonic	3/31/2011
B-15	Logistics Center	MW	Decommissioned	ABO129	651937.00	1497276.5	277.05		30.0	2.0	15.0	30.0	262	247	Vashon	PVC	Holloway	H-S Auger	3/1998
BA-01	McChord	MW	Decommissioned		669307.00	1504004	272.7		218	2	208	218			Qss/Qsst		Well Drilling	AR	1/6/1983
BA-02	McChord	MW	Decommissioned		669307.00	1504004	272.7		160	2	140	160			Vashon		Well Drilling	AR	1/6/1983
BA-03	McChord	MW	Decommissioned		669307.00	1504004	272.7		125	2	115	125			Vashon		Well Drilling	AR	1/6/1983
Beachcomber	Tillicum	Water Supply	Active		660972.00	1488361			96						Vashon				1997
Bell Hill #1	Dupont	Water Supply	Active		651952.00	1470282			298	16	248	293			Sea Level	SS	Inc.	Air Rotary	10/28/1988
Bell Hill #2	Dupont	Water Supply	Active		652015.00	1470251			508	20	362	508			Sea Level	SS	Drilling Inc.	Air Rotary	12/14/1990
Bell Hill #3	Dupont	Water Supply	Active		652257.00	1471629			266	20	197	261			Sea Level	SS	Inc.	Air Rotary	7/27/1998
BZ-01	McChord	MW	Decommissioned		669681.19	1504612.824	274.9	278.4	92	2	17	92	261.4	186.4	Vashon		Subterranean	H-S Auger	11/24/1982
BZ-02	McChord	MW	Decommissioned		667571.82	1503676.056	275.2	277.6	102	2	22	102	255.6	175.6	Vashon		Subterranean	H-S Auger	11/29/1982
BZ-03	McChord	MW	Decommissioned		666307.52	1503685.883	273.9	275.5	68	2	18	68	257.5	207.5	Vashon		Subterranean	H-S Auger	11/30/1982
BZ-04	McChord	MW	Decommissioned		665934.12	1506221.051	279.6	282.6	68	2	8	68	274.6	214.6	Vashon		Subterranean	H-S Auger	12/3/1982
BZ-05	McChord	MW	Decommissioned		666877.44	1506116.238	281.4	284.1	52	2	17	52	267.1	232.1	Vashon		Subterranean	H-S Auger	1/20/1983
C0125-MW01	Bldg C0125	MW	Active	BCR061	661105.49	1472477.419	220.4	220	27	2	12	27	208.4	193.4	Vashon	PVC	Longyear, Inc	Sonic	3/28/2011
C0204-MW01	Bldg C0204	MW	Active	BCR062	661159.83	1472956.647	216.4	216.24	25	2	10	25	206.4	191.4	Vashon	PVC	Longyear, Inc	Sonic	3/29/2011
C0214-MW01	Bldg C0214	MW	Active	BCR065	661318.99	1473144.384	217.4	216.95	25	2	10	25	207.4	192.4	Vashon	PVC	Longyear, Inc	Sonic	3/30/2011
C0401-MW01	Bldg C0401	MW	Active	BCR064	661307.46	1473260.719	218.5	218.02	25	2	10	25	208.5	193.5	Vashon	PVC	Longyear, Inc	Sonic	3/29/2011
C0401-MW02	Bldg C0401	MW	Active	BCR063	661283.69	1473235.214	218.6	218.08	23	2	10	25	208.6	193.6	Vashon	PVC	Longyear, Inc	Sonic	3/29/2011
C0908-MW01	Bldg C0908	MW	Active	BCR074	661797.45	1474715.944	223.8	223.97	30	2	15	30	208.8	193.8	Vashon	PVC	Longyear, Inc	Sonic	3/29/2011
C1008-MW01	Bldg C1008	MW	Active	BCR072	662119.44	1475053.334	226.9	226.76	30	2	15	30	211.9	196.9	Vashon	PVC	Longyear, Inc	Sonic	3/28/2011
C1008-MW02	Bldg C1008	MW	Active	BCR073	662063.20	1474993.199	226.7	226.52	30	2	15	30	211.7	196.7	Vashon	PVC	Longyear, Inc	Sonic	3/28/2011
C-25	Landfill 2	MW	Decommissioned	ABO127	651964.81	1497229.5	276.62		14.0	2.0	4.0	14.0	273	263	Vashon	PVC	Holloway	H-S Auger	2/9/1998
C-40	Landfill 2	MW	Decommissioned	ABO128	651964.63	1497235.25	276.63		44.0	2.0	29.0	44.0	247	232	Vashon	PVC	Holloway	H-S Auger	3/1998
CA-01	McChord	MW	Decommissioned		665504.00	1503555	291.5		216	2	196	216			Vashon		RWD	AR	1/21/1983

WELL_ID	AREA_ID	WELL_SUBTYPE	WELL_STATUS	Ecology_ID	NORTH_NAD27	EAST_NAD27	GRND_ELEV	MEAS_PT_EL	WELL_DEPTH	WELL_DIA	SCREEN_TOP	SCRN_BOTTM	SCREEN_TOP_ELEV	SCREEN_BOTTM_ELEV	AQUIFER	WELL_MATERIAL	DRILLING_CO	DRILL_MTHD	CMPLT_DATE
CA-02	McChord	MW	Decommissioned		665504.00	1503555	291.5		190	2	180	190			Vashon		RWD	AR	1/21/1983
CA-03	McChord	MW	Decommissioned		665504.00	1503555	291.5		168	2	148	168			Vashon		RWD	AR	1/21/1983
CA-04	McChord	MW	Decommissioned		665504.00	1503555	291.5		65	2	35	65			Vashon		RWD	AR	1/21/1983
CH-1	Logistics Center	MW	Likely decom, lost, or destroyed		653527.69	1494943	287.28												
CM Dug Well	Camp Murray	Dug Well	Decommissioned		657040.00	1486305	265.5		22.4	27.0	17.6	22.4	247.9	243.1	Vashon	Brick		Dug	1/1/59
CM-1	Camp Murray	MW	Other					262.42	22.5	2.0	10.0	20.0	252.42	242.42	Vashon	PVC	Hokkaido	H-S Auger	7/15/1987
CM-10	Camp Murray	MW	Other					256.47											
CM-11	Camp Murray	MW	Other					264.37											
CM-15	Camp Murray	MW	Other				258.72		13.0							PVC	Drilling, Inc.	H-S Auger	5/25/2000
CM-16	Camp Murray	MW	Other				255.45		10.0							PVC	Drilling, Inc.	H-S Auger	5/25/2000
CM-17	Camp Murray	MW	Other		646318.01	1485086.69	259.74	259.42	15.0	2.0	10.0	15.0	249.74	244.74	Vashon	PVC	Drilling, Inc.	H-S Auger	5/29/2000
CM-18	Camp Murray	MW	Other				261.31		17.5							PVC	Drilling, Inc.	H-S Auger	6/2/2000
CM-19	Camp Murray	MW	Other				261.81		18.0							PVC	Drilling, Inc.	H-S Auger	6/2/2000
CM-2	Camp Murray	MW	Active					265.59	33.8	2.0	20.0	30.0	245.59	235.59	Vashon	PVC	Hokkaido	H-S Auger	7/14/1987
CM-20	Camp Murray	MW	Other				262.02		19.0							PVC	Drilling, Inc.	H-S Auger	10/12/2000
CM-3	Camp Murray	MW	Other					257.59	25.0	2.0	13.0	23.0	244.59	234.59	Vashon	PVC	Hokkaido	H-S Auger	7/16/1987
CM-4	Camp Murray	MW	Likely decom, lost, or destroyed					255.33	22.0	2.0	10.0	20.0			Vashon	PVC	Hokkaido	H-S Auger	7/17/1987
CM-5	Camp Murray	MW	Likely decom, lost, or destroyed					256.57	20.0	2.0	8.0	18.0			Vashon	PVC	Hokkaido	H-S Auger	7/21/1987
CM-6	Camp Murray	MW	Other					264.31	24.0	2.0	12.0	22.0	252.31	242.31	Vashon	PVC	Hokkaido	H-S Auger	7/20/1987
CM-7	Camp Murray	MW	Decommissioned						29.0								Hokkaido	H-S Auger	7/23/1987
CO-02	McChord	MW	Decommissioned		664466.73	1505159.818									NA		Subterranean	H-S Auger	11/14/1982
CR-01	McChord	MW	Active		665914.45	1504969.16	277.16	275.73	38	6	8	38	267.73	237.73	Vashon		Hydronics, Inc.	BA	6/12/1984
CR-02	McChord	MW	Active		665905.86	1505167.172	276.6	275.73	38	6	8	38	267.73	237.73	Vashon		Hydronics, Inc.	BA	8/28/1984
CR-03	McChord	MW	Decommissioned		666200.00	1504431	276.39	279.65	38	6	8	38	271.65	241.65	Vashon		Hydronics, Inc.	BA	8/31/1984
CR-04	McChord	MW	Decommissioned		666103.00	1505753	279.13	281.85	38	6	8	38	273.85	243.85	Vashon		Hydronics, Inc.	BA	10/12/1984
CW- 1	McChord	MW	Active		663528.28	1502988.26	291.71	293.89	36	2	26	36	267.89	257.89	Vashon		Service	H-S Auger	2/3/1993
CW- 2	McChord	MW	Active		663867.20	1502341.41	273.39	275.18	49.5	2	39.5	49.5	235.68	225.68	Vashon		Service	H-S Auger	1/28/1993
CW- 3	McChord	MW	Active		664488.85	1501791.53	277.67	279.25	22.5	2	12.5	22.5	266.75	256.75	Vashon		Service	H-S Auger	1/29/1993
CW- 4	McChord	MW	Active		664934.92	1500760.2	282.71	284.29	26.9	2	16.9	26.9	267.39	257.39	Vashon		Service	H-S Auger	2/5/1993
CW- 5	McChord	MW	Decommissioned		661677.00	1508967	307.05	309.04	25	2	15	25	294.04	284.04	Vashon		Service	H-S Auger	2/1/1993
CW- 6	McChord	MW	Decommissioned		662452.00	1507976	301.61	302.44	33	2	23	33	279.44	269.44	Vashon		Service	H-S Auger	2/1/1993
CW- 7	McChord	MW	Decommissioned		668043.00	1505145	277.25	276.91	24	2	14	24	262.91	252.91	Vashon		Service	H-S Auger	2/4/1993
CW- 8	McChord	MW	Decommissioned		663203.00	1504926	307.05	306.77	29	2	19	29	287.77	277.77	Vashon		Service	H-S Auger	2/2/1993
CW- 9	McChord	MW	Active		663418.00	1504325	300.2	299.9	32	2	22	32	277.9	267.9	Vashon		Service	H-S Auger	2/5/1993
CW-10	McChord	MW	Decommissioned		663612.00	1503996.4	306.48	306.19	25	2	15	25	291.19	281.19	Vashon		Service	H-S Auger	1/28/1993
CW-11	McChord	MW	Active		667981.00	1504396	277.76	277.5	30	2	20	30	257.5	247.5	Vashon		Service	H-S Auger	1/29/1993
CW-12	McChord	MW	Active		664043.79	1511152.2	291.67	293.83	21	2	11	21	282.83	272.83	Vashon		Service	H-S Auger	2/2/1993
CW-13	McChord	MW	Active		660349.00	1504502	297.2	297.15	26	2	16	26	281.15	271.15	Vashon		Service	H-S Auger	5/3/1993
CW-14a	McChord	MW	Active		662984.00	1504389	305.5	305.49	35	2	25	35	280.49	270.49	Vashon		Service	H-S Auger	5/6/1993
CW-14b	McChord	MW	Active		662984.00	1504374	305.3	305.28	46	2	43	46	262.28	259.28	Vashon		Service	H-S Auger	5/6/1993
CW-14c	McChord	MW	Active		682970.00	1504381	306	305.69	169.5	2	159.5	169.5	146.19	136.19	Vashon		Service	AR	11/23/1993
CW-14d	McChord	MW	Active		682970.00	1504381	306	305.71	275	2	265	275	40.71	30.71	Sea Level		Service	AR	11/23/1993
CW-15	McChord	MW	Active		663945.00	1504604	292.4	292.2	27	2	17	27	275.2	265.2	Vashon		Service	H-S Auger	5/7/1993
CW-15c	McChord	MW	Active		663982.00	1504574	293	292.66	108.6	2	98.6	108.6	194.06	184.06	Vashon		Service	AR	11/5/1993
CW-15d	McChord	MW	Active		663982.00	1504574	293	292.67	265.4	2	255.4	265.4	37.27	27.27	Sea Level		Service	AR	11/5/1993
CW-16	McChord	MW	Decommissioned		667855.00	1509981	283.94	283.63	15.5	2	5.5	15.5	278.13	268.13	Vashon		Service	H-S Auger	5/2/1993
CW-17	McChord	MW	Decommissioned		662782.50	1504367.6	305.6	305.21	34	2	24	34	281.21	271.21	Vashon		and Drill	H-S Auger	10/21/1993
CW-18	McChord	MW	Decommissioned		662575.00	1504946	310.2	310.01	24.5	2	14.5	24.5	295.51	285.51	Vashon		and Drill	H-S Auger	10/19/1993
CW-18c	McChord	MW	Active		662559.00	1504919	310.2	309.51	207.4	2	197.4	207.4	112.11	102.11	Vashon		Service	AR	12/8/1993
CW-18d	McChord	MW	Active		662559.00	1504949	310.2	309.74	330	2	320	330	-10.26	-20.26			Service	AR	12/8/1993
CW-20	McChord	MW	Active		665214.00	1505366	281.2	280.75	21	2	11	21	269.75	259.75	Vashon		and Drill	H-S Auger	10/22/1993
CW-21	McChord	MW	Active		663499.00	1504592	294.8	294.46	27.5	2	17.5	27.5	276.96	266.96	Vashon		Drilling	H-S Auger	9/21/1994
CW-22	McChord	MW	Active		663641.00	1504141	302.45	301.96	31.5	2	21.5	31.5	280.46	270.46	Vashon		Drilling	H-S Auger	9/20/1994
CW-23	McChord	MW	Active		663443.00	1504008	304.8	304.08	29.5	2	19.5	29.5	284.58	274.58	Vashon		Drilling	H-S Auger	9/20/1994
CW-24	McChord	MW	Active		662980.00	1504134	305.15	304.62	33.7	2	23.7	33.7	280.92	270.92	Vashon		Drilling	H-S Auger	9/21/1994
CW-25	McChord	MW	Active		665548.00	1503521	292.72	292.26	36	2	26	36	266.26	256.26	Vashon		Drilling	H-S Auger	9/20/1994
CW-26	McChord	MW	Active		665725.00	1503445	292.9	292.73	36	2	26	36	266.73	256.73	Vashon		Drilling	H-S Auger	9/20/1994
CW-28	McChord	MW	Decommissioned		665040.00	1505797	284.37	281.61	21	2	6	21	275.61	260.61	Vashon		Service	H-S Auger	8/6/1990
CW-29a	McChord	MW	Decommissioned		665208.00	1505258	284.37	283.91	23	2	8	23	275.91	260.91	Vashon		Service	H-S Auger	8/7/1990
CW-29b	McChord	MW	Active		665207.00	1505269	284.3	284.03	23	2	18	23	266.03	261.03	Vashon		Service	H-S Auger	8/8/1990
CW-30a	McChord	MW	Decommissioned		665308.00	1506425	282.31	282.05	100	2	89.5	100	192.55	182.05	Vashon		Service	AR	7/25/1990
CW-30b	McChord	MW	Decommissioned		665308.00	1506425	282.31	282.02	203.5	2	193	203.5	89.02	78.52	Vashon		Service	AR	7/25/1990
CW-30c	McChord	MW	Decommissioned		665308.00	1506425	282.31	282.05	280.5	2	270	280.5	12.05	1.55000000	Sea Level		Service	AR	7/25/1990
CW-31a	McChord	MW	Active		664888.82	1504246.75	296.58	296.28	99.5	2	89	99.5	207.28	196.78	Vashon		Service	AR	7/18/1990
CW-31b	McChord	MW	Active		664888.82	1504246.75	296.58	296.29	196.5	2	186	196.5	110.29	99.79	Sea Level		Service	AR	7/18/1990
CW-31c	McChord	MW	Active		664888.82	1504246.75	296.58	296.33	311	2	300.5	311	-4.1700000	-14.67	Sea Level		Service	AR	7/18/1990
CW-32a	McChord	MW	Active		666768.19	1504428.52	276.86	276.58	110	2	100	110	176.58	166.58	Vashon		Service	AR	8/10/1990
CW-32b	McChord	MW	Active		666768.19	1504428.52	276.86	276.54	247	2	242	247	34.54	29.54	Sea Level		Service	AR	8/10/1990
CW-32c	McChord	MW	Active		666768.19	1504428.52	276.86	276.5	372.5	2	362	372.5	-85.5	-96	Sea Level		Service	AR	8/10/1990
CW-33c	McChord	MW	Active		660084.00	1505235	302.97	302.32	80	2	70	80	232.32	222.32	Vashon		Service	AR	9/23/1994
CW-33d	McChord	MW	Active		660076.00	1505230	303.01	301.99	217	2	207	217	94.99	84.99	Sea Level		Service	AR	9/23/1994

WELL_ID	AREA_ID	WELL_SUBTYPE	WELL_STATUS	Ecology_ID	NORTH_NAD27	EAST_NAD27	GRND_ELEV	MEAS_PT_EL	WELL_DEPTH	WELL_DIA	SCREEN_TOP	SCRN_BOTTM	SCREEN_TOP_ELEV	SCREEN_BOTTM_ELEV	AQUIFER	WELL_MATERIAL	DRILLING_CO	DRILL_MTHD	CMPLT_DATE
CW-34c	McChord	MW	Active		658775.00	1505171	311.12	310.45	105	2	95	105	215.45	205.45	Vashon		Service	AR	10/4/1994
CW-34d	McChord	MW	Active		658775.00	1505171	311.12	310.33	234	2	224	234	86.33	76.33	Sea Level		Service	AR	10/4/1994
CW-35	McChord	MW	Active		664008.00	1500738	283.13	286.52	33.5	2	23.5	33.5	263.02	253.02	Vashon		Drilling	H-S Auger	9/4/1998
CW-36	McChord	MW	Active		663214.55	1501982.48	286.42	288.63	31.5	2	21.5	31.5	267.13	257.13	Vashon		Drilling	H-S Auger	9/4/1998
CW-37	McChord	MW	Active		665577.74	1503740.203	294.18	293.77	39.5	2	29.5	39.5	264.27	254.27	Vashon		Drilling	H-S Auger	10/29/1999
CW-38	McChord	MW	Active		665802.99	1503455.116	293.3	292.92	39	2	29	39	263.92	253.92	Vashon		Drilling	H-S Auger	10/27/1999
CW-39	McChord	MW	Active		665622.18	1503439.123	293.3	292.795	51	2	31	51	261.795	241.795	Vashon		Drilling	H-S Auger	10/28/1999
CW-40	McChord	MW	Active		665517.84	1503422.976	290	289.315	33	2	23	33	266.315	256.315	Vashon		Drilling	H-S Auger	10/28/1999
CW-41	McChord	MW	Active		665412.16	1503395.226	295.61	295.09	39	2	29	39	266.09	256.09	Vashon		Drilling	H-S Auger	10/28/1999
CW-41a	McChord	MW	Active		665412.32	1503387.095	296.66	296.18	90	2	80	90	216.18	206.18	Vashon		Holt Drilling	AR	3/22/2000
CW-43	McChord	MW	Active		665316.02	1503381.479	297.09	296.73	41	2	31	41	265.73	255.73	Vashon		Drilling	H-S Auger	3/13/2000
CW-44	McChord	MW	Active		665408.22	1503528.644	292.82	292.47	37	2	27	37	265.47	255.47	Vashon		Drilling	H-S Auger	3/13/2000
CW-45	McChord	MW	Active		666099.02	1502802.881	289.46	288.99	50	2	40	50	248.99	238.99	Vashon		Drilling	H-S Auger	3/14/2000
CW-45a	McChord	MW	Active		666106.09	1502803.207	289.43	289.13	90	2	80	90	209.13	199.13	Vashon		Holt Drilling	AR	3/24/2000
CW-46	McChord	MW	Active		665915.78	1502808.78	288.9	288.44	50	2	40	50	248.44	238.44	Vashon		Drilling	H-S Auger	3/14/2000
CW-47	McChord	MW	Active		665756.92	1502806.057	288.72	288.34	50	2	40	50	248.34	238.34	Vashon		Drilling	H-S Auger	3/14/2000
CW-48	McChord	MW	Active		665587.67	1502797.647	289.93	289.31	40	2	30	40	259.31	249.31	Vashon		Drilling	H-S Auger	3/15/2000
CW-49	McChord	MW	Active		665415.30	1502793.239	293.91	293.57	40	2	30	40	263.57	253.57	Vashon		Drilling	H-S Auger	3/15/2000
CW-50	McChord	MW	Active		665353.38	1503921.084	292.08	291.37	60	2	40	60	251.37	231.37	Vashon		Drilling	H-S Auger	6/5/2001
CW-51	McChord	MW	Active		665136.16	1503770.064	298.61	298.1	32	2	22	32	276.1	266.1	Vashon		Drilling	H-S Auger	6/5/2001
CW-52	McChord	MW	Active		665186.62	1503372.15	298.32	297.79	30	2	20	30	277.79	267.79	Vashon		Drilling	H-S Auger	6/5/2001
CW-53	McChord	MW	Active		666225.36	1502804.771	289.49	289.01	50	2	30	50	259.01	239.01	Vashon		Drilling	H-S Auger	6/6/2001
CW-54	McChord	MW	Active		666528.21	1502836.345	271.5	270.98	35	2	25	35	245.98	235.98	Vashon		Drilling	H-S Auger	6/12/2001
CW-55a	McChord	MW	Active		666048.07	1502616.473	288.84	288.38	45	2	35	45	253.38	243.38	Vashon		Drilling	H-S Auger	6/8/2001
CW-55b	McChord	MW	Active		666048.29	1502622.197	288.79	288.26	80	2	70	80	218.26	208.26	Vashon		Drilling	H-S Auger	6/8/2001
CW-56	McChord	MW	Active		666058.10	1502493.892	288.91	288.48	50	2	30	50	258.48	238.48	Vashon		Drilling	H-S Auger	6/7/2001
CW-57	McChord	MW	Active		666063.95	1502331.804	287.8	287.27	50	2	40	50	247.27	237.27	Vashon		Drilling	H-S Auger	6/7/2001
CW-58	McChord	MW	Active		666076.22	1502188.899	286.33	285.67	50	2	40	50	245.67	235.67	Vashon		Drilling	H-S Auger	6/6/2001
CW-59	McChord	MW	Active		665851.69	1502179.108	285.49	285.01	35	2	25	35	260.01	250.01	Vashon		Drilling	H-S Auger	6/6/2001
CW-60	McChord	MW	Active		665646.01	1502163.849	287.19	286.68	36	2	26	36	260.68	250.68	Vashon		Drilling	H-S Auger	6/5/2001
CW-61	McChord	MW	Active		666415.29	1502159.969	286.59	286.24	50	2	40	50	246.24	236.24	Vashon		Drilling	H-S Auger	6/11/2001
CW-62	McChord	MW	Active		666729.07	1502207.164	273.5	273.06	40	2	30	40	243.06	233.06	Vashon		Drilling	H-S Auger	6/11/2001
CW-63	McChord	MW	Active		665664.07	1503843.52	276.74	276.15	25	2	15	25	261.15	251.15	Vashon		Drilling	H-S Auger	3/11/2008
CW-64	McChord	MW	Active		665749.29	1503276.7	293.09	292.6	60	2	45	60	247.6	232.6	Vashon		Drilling	H-S Auger	3/11/2008
CW-65	McChord	MW	Active		665843.11	1503220.25	291.61	291.06	60	2	45	60	246.06	231.06	Vashon		Drilling	H-S Auger	3/10/2008
CW-65a	McChord	MW	Active		666133.29	1503481.255	273.58	273.29	80	2	70	80	203.29	193.29	Vashon		Holt Drilling	AR	6/8/2001
CW-66	McChord	MW	Active		665793.15	1503089.06	290.53	290.14	44	2	29	44	261.14	246.14	Vashon		Drilling	H-S Auger	3/10/2008
CW-67	McChord	MW	Active		665813.85	1502808.89	288.7	288.3	54	2	39	54	249.3	234.3	Vashon		Drilling	H-S Auger	6/15/2009
CW-68	McChord	MW	Active		665867.04	1502807.82	288.71	288.42	55	2	40	55	248.42	233.42	Vashon		Drilling	H-S Auger	6/15/2009
CW-69	McChord	MW	Active		665966.43	1502809.94	288.56	288.26	55	2	40	55	248.26	233.26	Vashon		Drilling	H-S Auger	6/16/2009
CW-70	McChord	MW	Active		666156.91	1502801.48	289.43	289.06	55	2	40	55	249.06	234.06	Vashon		Drilling	H-S Auger	6/16/2009
CW-71	McChord	MW	Active		666023.71	1502712.2	289.07	288.72	55	2	40	55	248.72	233.72	Vashon		Drilling	H-S Auger	6/17/2009
CZ-01	McChord	MW	Decommissioned		665337.99	1504838.828	288.6	288.3	99	2	19	99	269.3	189.3	Vashon		Subterranean	H-S Auger	11/14/1982
CZ-03	McChord	MW	Decommissioned		663326.89	1506676.334	283.4	279.1	90	2	10	90	269.1	189.1	Vashon		Subterranean	H-S Auger	11/4/1982
CZ-04	McChord	MW	Decommissioned		664958.05	1504530.939	293.6	296.2	92	2	22	92	274.2	204.2	Vashon		Subterranean	H-S Auger	11/10/1982
CZ-05	McChord	MW	Decommissioned		665672.09	1504956.742	280.48	283.31	97	2	7	97	276.31	186.31	Vashon		Subterranean	H-S Auger	7/15/1983
D0210-MW01	Bldg D0210 (AOC 9-7)	MW	Decommissioned						33	2	23	33			Vashon	PVC	Holt	H-S Auger	2/15/2005
D0210-MW02	Bldg D0210 (AOC 9-7)	MW	Likely decom, lost, or destroyed						32	2	22	32			Vashon	PVC	Holt	H-S Auger	3/18/2005
D0210-MW03	Bldg D0210 (AOC 9-7)	MW	Decommissioned						31	2	21	31			Vashon	PVC	Holt	H-S Auger	3/18/2005
D0210-MW04	Bldg D0210 (AOC 9-7)	MW	Decommissioned						30	2	20	30			Vashon	PVC	Holt	H-S Auger	3/21/2005
D0219-MW01	Bldg D0219	MW	Active	BCR068	665398.60	1477046.864	232.2	231.99	35	2	20	35	212.2	197.2	Vashon	PVC	Longyear, Inc	Sonic	3/23/2011
D0303-MW01	Bldg D0303	MW	Active	BCR069	663280.01	1475397.234	223.5	223.39	30	2	15	30	208.5	193.5	Vashon	PVC	Longyear, Inc	Sonic	3/23/2011
D0312-MW01	Bldg D0312	MW	Active	BCR070	663033.70	1475825.87	222.8	222.68	30	2	15	30	207.8	192.8	Vashon	PVC	Longyear, Inc	Sonic	3/25/2011
D0334-MW01	Bldg D0334	MW	Active	BCR071	663071.00	1475978.628	223.5	223.23	30	2	15	30	208.5	193.5	Vashon	PVC	Longyear, Inc	Sonic	3/25/2011
D0606-MW01	Bldg D0606	MW	Active	BCR054	664245.04	1476643.397	228.2	228.01	30	2	15	30	213.2	198.2	Vashon	PVC	Longyear, Inc	Sonic	3/23/2011
D0613-MW01	Bldg D0613	MW	Active	BCR053	664177.46	1476988.011	231.5	231.35	35	2	20	35	211.5	196.5	Vashon	PVC	Longyear, Inc	Sonic	3/22/2011
D0622-MW01	Bldg D0622	MW	Active	BCR055	664524.03	1476637.618	229.9	229.03	30	2	15	30	214.9	199.9	Vashon	PVC	Longyear, Inc	Sonic	3/23/2011
D-1	Landfill 5	MW	Other		657875.25	1109686.5		216.9	27	2.0	17.0	27.0	199.9	189.9	Vashon		Christensen		
D1002-MW01	Bldg D1002	MW	Active	BCR056	663686.25	1476961.642	227.1	226.89	30	2	15	30	212.1	197.1	Vashon	PVC	Longyear, Inc	Sonic	3/24/2011
D1152-MW01	Bldg D1152	MW	Active	BCR052	664635.56	1477629.637	234.5	234.29	35	2	20	35	214.5	199.5	Vashon	PVC	Longyear, Inc	Sonic	3/22/2011
D1156-MW01	Bldg D1156	MW	Active	BCR051	664389.62	1477865.822	232.8	232.6	38	2	23	38	209.8	194.8	Vashon	PVC	Longyear, Inc	Sonic	3/22/2011
D-2	Landfill 5	MW	Active		657590.63	1108721.75	216.0	215.54	23.0	2.0	13.0	23.0	202.54	192.54	Vashon	Sch80PVC	Christensen	Rotary	8/14/1996
D-3	Landfill 5	MW	Active		657416.19	1108941.13	216.0	212.88	24.0	2.0	14.0	24.0	198.88	188.88	Vashon	Sch80PVC	Christensen	Rotary	8/14/1996
DA- 1a	McChord	MW	Active		657813.23	1502063.74	298.9	299.83	37.1	2	32.1	37.1	267.73	262.73	Vashon		Service	H-S Auger	6/14/1989
DA- 1b	McChord	MW	Active		657820.18	1502073.91	299.3	300.76	67.8	2	62.8	67.8	237.96	232.96	Vashon		Service	H-S Auger	6/13/1989
DA- 2a	McChord	MW	Active		659240.98	1502641.52	299.8	301.79	41.2	2	36.2	41.2	265.59	260.59	Vashon		Service	H-S Auger	3/9/1989
DA- 2b	McChord	MW	Active		659241.85	1502650.15	299.9	301.3	70	2	65	70	236.3	231.3	Vashon		Service	H-S Auger	3/9/1989
DA- 2c	McChord	MW	Active		659250.18	1502671.78	300.2	300.74	118	2	108	118	192.74	182.74	Vashon		Holt Drilling	CT	4/4/1989
DA- 2d	McChord	MW	Active		659250.18	1502671.78	300.2	300.79	202	2	192	202	108.79	98.79	Sea Level		Holt Drilling	CT	4/4/1989
DA- 3a	McChord	MW	Decommissioned		660228.00	1502544	296.8	297.37	39	2	34	39	263.37	258.37	Vashon		Service	H-S Auger	
DA- 3b	McChord	MW	Decommissioned		660227.00	1502555	296.9	298.29	66.6	2	61.6	66.6	236.69	231.69	Vashon		Service	H-S Auger	6/15/1989

Appendix A - Monitoring Well Inventory - 04 June 2014
Joint Base Lewis - McChord, Washington 98433

WELL_ID	AREA_ID	WELL_SUBTYPE	WELL_STATUS	Ecology_ID	NORTH_NAD27	EAST_NAD27	GRND_ELEV	MEAS_PT_EL	WELL_DEPTH	WELL_DIA	SCREEN_TOP	SCRN_BOTTM	SCREEN_TOP_ELEV	SCREEN_BOTTM_ELEV	AQUIFER	WELL_MATERIAL	DRILLING_CO	DRILL_MTHD	CMPLT_DATE
DA- 4a	McChord	MW	Active		658040.99	1500941.48	283.5	285.05	41.6	2	36.6	41.6	248.45	243.45	Vashon		Service	H-S Auger	3/31/1989
DA- 4b	McChord	MW	Active		658043.94	1500925.917	283	284.4	65.9	2	60.9	65.9	223.5	218.5	Vashon		Service	H-S Auger	3/15/1989
DA- 5a	McChord	MW	Decommissioned		659380.00	1501378	293.9	294.75	34	2	29	34	265.75	260.75	Vashon		Service	H-S Auger	3/22/1989
DA- 5b	McChord	MW	Decommissioned		659386.00	1501370	293.9	294.88	58	2	53	58	241.88	236.88	Vashon		Service	H-S Auger	3/20/1989
DA- 6a	McChord	MW	Active		660132.47	1501596.222	295.7	295.27	38	2	33	38	262.27	257.27	Vashon		Service	H-S Auger	3/16/1989
DA- 6b	McChord	MW	Decommissioned		660125.00	1501591	295.7	295.21	67.2	2	62.2	67.2	233.01	228.01	Vashon		Service	H-S Auger	3/16/1989
DA- 7a	McChord	MW	Decommissioned		660148.00	1500355	281.7	281.48	30.8	2	25.8	30.8	255.68	250.68	Vashon		Service	H-S Auger	3/21/1989
DA- 7b	McChord	MW	Active		660153.49	1500358.87	281.9	281.34	65.1	2	60.1	65.1	221.24	216.24	Vashon		Service	H-S Auger	3/20/1989
DA- 7e	McChord	MW	Active		660134.99	1500343.84	281.3	280.98	125	2	115	125	165.98	155.98	Vashon		Holt Drilling	CT	11/14/1989
DA- 8a	McChord	MW	Decommissioned		659101.00	1499770	276	277.03	34.8	2	29.8	34.8	247.23	242.23	Vashon		Service	H-S Auger	3/17/1989
DA- 8b	McChord	MW	Decommissioned		659091.00	1499776	275.7	276.75	74.7	2	69.7	74.7	207.05	202.05	Vashon		Service	H-S Auger	3/16/1989
DA- 9a	McChord	MW	Active		660842.65	1500144.2	284.8	286.32	35.6	2	30.6	35.6	255.72	250.72	Vashon		Service	H-S Auger	3/30/1989
DA- 9b	McChord	MW	Active		660842.62	1500150.77	284.3	285.92	65.5	2	60.5	65.5	225.42	220.42	Vashon		Service	H-S Auger	3/30/1989
DA-10b	McChord	MW	Decommissioned		659477.00	1498345	323.6	325.06	98	2	93	98	232.06	227.06	Vashon		Service	AR	7/10/1989
DA-11a	McChord	MW	Active		660907.18	1498677.45	271.2	272.79	24.7	2	19.7	24.7	253.09	248.09	Vashon		Service	H-S Auger	3/22/1989
DA-11b	McChord	MW	Active		660912.50	1498687.05	271.1	272.99	50	2	45	50	227.99	222.99	Vashon		Service	H-S Auger	3/21/1989
DA-12a	McChord	MW	Decommissioned		660609.00	1497505	273	274.45	32.8	2	27.8	32.8	246.65	241.65	Vashon		Service	H-S Auger	3/14/1989
DA-12b	McChord	MW	Decommissioned		660607.00	1497512	273	274.38	68	2	63	68	211.38	206.38	Vashon		Service	H-S Auger	3/13/1989
DA-12c	McChord	MW	Active		660599.77	1497486.34	273.4	274.19	230	2	220	230	54.19	44.19	Sea Level		Holt Drilling	CT	4/4/1989
DA-12d	McChord	MW	Active		660599.77	1497486.34	273.4	274.19	305	2	295	305	-20.81	-30.81	Sea Level		Holt Drilling	CT	4/4/1989
DA-12e	McChord	MW	Active		660550.12	1497151.43	272	273.11	133	2	123	133	150.11	140.11	Vashon		Holt Drilling	CT	10/13/1989
DA-13a	McChord	MW	Active		661371.08	1497409.91	272.1	273.65	30.9	2	25.9	30.9	247.75	242.75	Vashon		Service	H-S Auger	3/13/1989
DA-13b	McChord	MW	Decommissioned		661372.00	1497417	272.3	273.47	58.6	2	53.6	58.6	219.87	214.87	Vashon		Service	H-S Auger	3/10/1989
DA-14a	McChord	MW	Decommissioned		662816.00	1497973	292.5	292.98	34.1	2	29.1	34.1	263.88	258.88	Vashon		Service	H-S Auger	3/10/1989
DA-14b	McChord	MW	Decommissioned		662806.00	1497977	292.5	294.19	69.9	2	64.9	69.9	229.29	224.29	Vashon		Service	H-S Auger	3/8/1989
DA-15a	McChord	MW	Decommissioned		664291.80	1497677.367	268.8	268.4	39.6	2	34.6	39.6	233.8	228.8	Vashon		Service	H-S Auger	3/8/1989
DA-15b	McChord	MW	Decommissioned		664277.00	1497675	268.8	268.07	67.5	2	62.5	67.5	205.57	200.57	Vashon		Service	H-S Auger	3/7/1989
DA-15c	McChord	MW	Decommissioned		664272.00	1497688	268.5	268.62	209.3	2	199.3	209.3	69.32	59.32	Sea Level		Holt Drilling	CT	4/12/1989
DA-15d	McChord	MW	Decommissioned		664272.00	1497688	268.5	268.62	287	2	277	287	-8.38	-18.38	Sea Level		Holt Drilling	CT	4/12/1989
DA-16a	McChord	MW	Decommissioned		659942.00	1495547	272	271.37	34.7	2	29.7	34.7	241.67	236.67	Vashon		Service	H-S Auger	6/20/1989
DA-16b	McChord	MW	Decommissioned		659951.00	1495545	271.9	271.59	69	2	64	69	207.59	202.59	Vashon		Service	H-S Auger	6/19/1989
DA-16e	McChord	MW	Decommissioned		659968.00	1495541	271.8	271.3	115	2	105	115	166.3	156.3	Vashon		Holt Drilling	CT	10/25/1989
DA-17a	McChord	MW	Decommissioned		661933.00	1495584	272.7	273.69	33.4	2	28.4	33.4	245.29	240.29	Vashon		Service	H-S Auger	3/14/1989
DA-17b	McChord	MW	Decommissioned		661745.00	1495585	272	273.93	68.3	2	63.3	68.3	210.63	205.63	Vashon		Service	H-S Auger	3/10/1989
DA-17c	McChord	MW	Decommissioned		661732.07	1495594.67	272.5	273.81	182	2	172	182	101.81	91.81	Sea Level		Holt Drilling	CT	4/12/1989
DA-17d	McChord	MW	Decommissioned		661732.07	1495594.67	272.5	273.88	308	2	298	308	-24.12	-34.12	Sea Level		Holt Drilling	CT	4/12/1989
DA-18a	McChord	MW	Decommissioned		658572.00	1497143	280.4	281.23	35.2	2	30.2	35.2	251.03	246.03	Vashon		Service	H-S Auger	6/22/1989
DA-18b	McChord	MW	Decommissioned		658562.00	1497141	278.7	279.99	71.5	2	66.5	71.5	213.49	208.49	Vashon		Service	H-S Auger	6/21/1989
DA-19a	McChord	MW	Decommissioned		658540.00	1494597	279.5	279.06	30.7	2	25.7	30.7	253.36	248.36	Vashon		Service	H-S Auger	4/3/1989
DA-19b	McChord	MW	Decommissioned		658534.00	1494604	279.6	279.16	65.9	2	60.9	65.9	218.26	213.26	Vashon		Service	H-S Auger	4/3/1989
DA-20c	McChord	MW	Decommissioned		659706.00	1492972	271.8	272.67	260	2	250	260	22.67	12.67	Sea Level		Holt Drilling	CT	7/10/1989
DA-20d	McChord	MW	Decommissioned		659706.00	1492975	271.8	272.73	298	2	288	298	-15.27	-25.27	Sea Level		Holt Drilling	CT	7/10/1989
DA-21a	McChord	MW	Active		660537.71	1500254.8	281.4	283.55	32.6	2	27.6	32.6	255.95	250.95	Vashon		Service	H-S Auger	10/30/1989
DA-21b	McChord	MW	Active		660545.83	1500252.89	281.6	283.24	63	2	58	63	225.24	220.24	Vashon		Service	H-S Auger	10/27/1989
DA-22a	McChord	MW	Active						33.5	2	28.5	33.5	-28.5	-33.5	Vashon		Service	H-S Auger	
DA-22b	McChord	MW	Decommissioned		662855.00	1498775	293.5	294.88	78	2	73	78	221.88	216.88	Vashon		Service	H-S Auger	10/23/1989
DA-23a	McChord	MW	Decommissioned		662822.00	1497235	278.1	279.68	42.5	2	37.5	42.5	242.18	237.18	Vashon		Service	H-S Auger	10/18/1989
DA-23b	McChord	MW	Decommissioned		662809.00	1497236	278.2	280.34	70.5	2	65.5	70.5	214.84	209.84	Vashon		Service	H-S Auger	10/18/1989
DA-24a	McChord	MW	Decommissioned		661324.00	1496691	270.2	271.36	25	2	20	25	251.36	246.36	Vashon		Service	H-S Auger	10/26/1989
DA-24b	McChord	MW	Decommissioned		661312.00	1496692	270.1	271.08	60.4	2	55.4	60.4	215.68	210.68	Vashon		Service	H-S Auger	10/26/1989
DA-25a	McChord	MW	Active				275.4		32.5	2	27.5	32.5	-27.5	-32.5	Vashon		Service	H-S Auger	
DA-25b	McChord	MW	Active		660323.69	1499246.47	275.2	276.9	70	2	65	70	211.9	206.9	Vashon		Service	H-S Auger	10/13/1989
DA-26e	McChord	MW	Decommissioned		663535.00	1497677	271.4	272.1	123	2	113	123	159.1	149.1	Vashon		Holt Drilling	CT	11/3/1989
DA-28	McChord	MW	Active		661151.00	1498191	262.9	266.19	31.2	2	21.2	31.2	244.99	234.99	Vashon		Service	H-S Auger	5/11/1993
DA-29	McChord	MW	Active		660731.00	1499446	269	268.63	48.2	2	38.2	48.2	230.43	220.43	Vashon		Service	H-S Auger	5/12/1993
DA-30a	McChord	MW	Active		660565.00	1498800	271.1	270.63	33	2	23	33	247.63	237.63	Vashon		Service	H-S Auger	5/11/1993
DA-30b	McChord	MW	Active		660562.00	1498790	270.7	270.36	59	2	49	59	221.36	211.36	Vashon		Service	H-S Auger	5/10/1993
DA-31	McChord	MW	Active		659947.00	1500659	278.2	277.64	64	2.0	54	64	214	224	Vashon	PVC			04/26/2010
DA-32	McChord	MW	Active		660125.00	1500401	282.6	282.2	64	2.0	54	64	218	228	Vashon	PVC			04/27/2010
DB- 1	McChord	MW	Decommissioned		659484.00	1502297	285.4	285.08	28.4	2	23.4	28.4	261.68	256.68	Vashon		Service	H-S Auger	3/29/1989
DB- 2	McChord	MW	Decommissioned		659922.80	1501975	282.4	283.74	25.6	2	20.6	25.6	263.14	258.14	Vashon		Service	H-S Auger	4/3/1989
DB- 3	McChord	MW	Active		657783.96	1501150.95	289.62	289.24	35.1	2	30.1	35.1	259.14	254.14	Vashon		Service	H-S Auger	3/23/1989
DB- 4	McChord	MW	Decommissioned		659544.00	1500809	280.8	280.66	23.4	2	18.4	23.4	262.26	257.26	Vashon		Service	H-S Auger	4/5/1989
DB- 5	McChord	MW	Decommissioned		659936.00	1501002	280.8	280.56	23.4	2	18.4	23.4	262.16	257.16	Vashon		Service	H-S Auger	4/4/1989
DB- 6	McChord	MW	Active		660741.14	1499440.41	269.7	269.29	14.4	2	9.4	14.4	259.89	254.89	Vashon		Service	H-S Auger	3/29/1989
DB- 7	McChord	MW	Decommissioned		661297.00	1499185	267.6	267.24	12.7	2	7.7	12.7	259.54	254.54	Vashon		Service	H-S Auger	3/28/1989
DB- 8	McChord	MW	Decommissioned		661582.00	1498861	272.6	272.28	18.4	2	13.4	18.4	258.88	253.88	Vashon		Service	H-S Auger	3/27/1989
DB- 9	McChord	MW	Decommissioned		660833.00	1498111	267.4	267.11	12.7	2	7.7	12.7	259.41	254.41	Vashon		Service	H-S Auger	3/28/1989
DB-10	McChord	MW	Decommissioned		664071.00	1498061	269.15	268.8	25.1	2	20.1	25.1	248.7	243.7	Vashon		Service	H-S Auger	3/24/1989
DB-11	McChord	MW	Active		659463.00	1501680	292.5	293.61	33	2	28	33	265.61	260.61	Vashon		Service	H-S Auger	4/6/1989
DM-01	McChord	MW	Decommissioned		665027.00	1502879	294.8	294.59	31	2	16	31	278.59	263.59	Vashon		Holt Drilling	CT	5/21/1986

WELL_ID	AREA_ID	WELL_SUBTYPE	WELL_STATUS	Ecology_ID	NORTH_NAD27	EAST_NAD27	GRND_ELEV	MEAS_PT_EL	WELL_DEPTH	WELL_DIA	SCREEN_TOP	SCRN_BOTTM	SCREEN_TOP_ELEV	SCREEN_BOTTM_ELEV	AQUIFER	WELL_MATERIAL	DRILLING_CO	DRILL_MTHD	CMPLT_DATE
DM-02	McChord	MW	Decommissioned		664916.00	1503104	293.3	293.36	39	2	19	39	274.36	254.36	Vashon		Holt Drilling	CT	5/23/1986
DM-03	McChord	MW	Decommissioned		664748.00	1503181	293.2	292.89	37	2	17	37	275.89	255.89	Vashon		Holt Drilling	CT	5/28/1986
DM-04	McChord	MW	Active				293.1		35.5	2	15.8	35.5	-15.8	-35.5	Vashon		Holt Drilling	CT	
DM-05	McChord	MW	Decommissioned		664555.00	1503049	293.2	292.99	36	2	16	36	276.99	256.99	Vashon		Holt Drilling	CT	6/5/1986
DM-06	McChord	MW	Active		664549.05	1502545.1	292.3	293.96	35	2	15	35	278.96	258.96	Vashon		Holt Drilling	CT	6/6/1986
DM-07	McChord	MW	Decommissioned		665125.00	1503253	289.8	289.8	34.5	2	14.5	34.5	275.3	255.3	Vashon		Holt Drilling	CT	6/10/1986
DO-1	McChord	MW	Decommissioned		660387.00	1497969		273.3	75.6	2	21.4	75.6	251.9	197.7	Vashon		Company	H-S Auger	3/17/1992
DO-1a	McChord	MW	Active		660451.27	1497987.56		270.9	48.2	2	18.2	48.2	252.7	222.7	Vashon		Holt Drilling	H-S Auger	3/22/1992
DO-2	McChord	MW	Active		661103.00	1498942		274.1	70	2	40	70	234.1	204.1	Vashon		Company	H-S Auger	1/27/1992
DO-3	McChord	MW	Active		660763.00	1500015		282.2	94.6	2	64.6	94.6	217.6	187.6	Vashon		Company	H-S Auger	2/17/1992
DO-4	McChord	MW	Decommissioned				260.5								NA		Subterranean	H-S Auger	8/24/1983
DO-4	McChord	MW	Decommissioned		660696.00	1498211			48.2	2	18.2	48.2	-18.2	-48.2	Vashon				
DO-5	McChord	MW	Decommissioned												NA		Subterranean	H-S Auger	8/26/1983
DO-5a	McChord	MW	Active		661294.00	1497825	270.8	270.4	9	2	4	9	266.4	261.4	Vashon		Service	H-S Auger	5/12/1993
DO-5b	McChord	MW	Active		661294.00	1497825	270.8	270.5	18	2	13	18	257.5	252.5	Vashon		Service	H-S Auger	5/12/1993
DOS-1	Landfill 4	MW	Active		657054.31	1117868.13			38.0	6.0	27.5	37.5			Vashon	PVC	Drilling Service	Auger	7/12/1994
DOS-2	Landfill 4	MW	Active		657062.69	1117891.25			38.5	6.0	28.0	38.0			Vashon	PVC	Drilling Service	Auger	8/13/1994
DR-01	McChord	MW	Decommissioned		660467.00	1498300	273.18	274.81	58	6	8	58	266.81	216.81	Vashon		Hydronics, Inc.	BA	5/25/1984
DR-02	McChord	MW	Decommissioned		660039.00	1499877	283.6	285.97	58	6	8	58	277.97	227.97	Vashon		Hydronics, Inc.	BA	6/21/1984
DR-03	McChord	MW	Decommissioned		660110.00	1500054	281.5	283.52	58	6	8	58	275.52	225.52	Vashon		Hydronics, Inc.	BA	5/31/1984
DR-04	McChord	MW	Decommissioned		658578.00	1502738	301.8	303.54	58	6	18	58	285.54	245.54	Vashon		Hydronics, Inc.	BA	6/27/1984
DR-05	McChord	MW	Active		661336.37	1499132.249	269.12	270.77	48	6	8	48	262.77	222.77	Vashon		Hydronics, Inc.	BA	12/14/1984
DS-01	McChord	MW	Decommissioned		660727.00	1497813				3					NA		NA	NA	
DT-1	McChord	MW	Active		660459.75	1498225.65	272.15	271.77	28	2	18	28	253.77	243.77	Vashon		Drilling	H-S Auger	9/3/1998
DT-2	McChord	MW	Active		661023.91	1499086.53	274.88	274.37	40	2	30	40	244.37	234.37	Vashon		Drilling	H-S Auger	9/3/1998
Dug Well		Water Supply	Decommissioned																
DX-1	McChord	ction	Active		660358.44	1497957.04	274.3	270.54	70.7	8	38.7	70.7	231.84	199.84	Vashon	Steel	and Drilling	AR	2/29/1992
DX-2	McChord	ction	Active		661123.55	1498965.33	273.4	269.91	72.2	8	39.4	72.2	230.51	197.71	Vashon	Steel	and Drilling	AR	1/19/1992
DX-3	McChord	ction	Active		660751.21	1499988	281.2	277.68	97.2	8	69.2	97.2	208.48	180.48	Vashon	Steel	and Drilling	AR	2/13/1992
DZ-01	McChord	MW	Decommissioned		661521.00	1501278	285.4	287.17	98	2	18	98	269.17	189.17	Vashon		Subterranean	H-S Auger	11/19/1982
DZ-02	McChord	MW	Decommissioned		661603.00	1499950	275.5	276.78	42	2	12	42	264.78	234.78	Vashon		Subterranean	H-S Auger	11/23/1983
DZ-03	McChord	MW	Decommissioned		660836.00	1497869	266.9	270.07	53	2	3	53	267.07	217.07	Vashon		Subterranean	H-S Auger	8/12/1983
DZ-06	McChord	MW	Decommissioned		660491.00	1498243	271.8	274.12	45	2	5	45	269.12	229.12	Vashon		Subterranean	H-S Auger	8/29/1983
DZ-07	McChord	MW	Decommissioned		660348.00	1498202	270.6	273.84	37.5	2	0	37.5	273.84	236.34	Vashon		Subterranean	H-S Auger	8/30/1983
DZ-08	McChord	MW	Decommissioned		661769.00	1498245	270.7	272.72	32	2	12	32	260.72	240.72	Vashon		Co.	H-S Auger	5/8/1985
DZ-09a	McChord	MW	Decommissioned		660824.00	1499879	271.1	275.74	23	2	12	23	263.74	252.74	Vashon		Co.	H-S Auger	5/9/1985
DZ-09b	McChord	MW	Decommissioned		660824.00	1499879	271.1	275.74	63	2	53	63	222.74	212.74	Vashon		Co.	H-S Auger	5/9/1985
DZ-10a	McChord	MW	Decommissioned		661820.00	1498799	265.9	268.66	18	2	8	18	260.66	250.66	Vashon		Co.	H-S Auger	5/13/1985
DZ-10b	McChord	MW	Decommissioned		661820.00	1498799	265.9	268.66	68	2	58	68	210.66	200.66	Vashon		Co.	H-S Auger	5/13/1985
DZ-11	McChord	MW	Decommissioned		662270.00	1498984	276.9	279.1	43	2	23	43	256.1	236.1	Vashon		Co.	H-S Auger	5/16/1985
DZ-12	McChord	MW	Decommissioned		660310.59	1497979.808			78	2	68	78			Vashon		Co.	H-S Auger	5/17/1985
DZ-13	McChord	MW	Active		660321.40	1497985.852	273.7	272.61	28	2	18	28	254.61	244.61	Vashon		Co.	H-S Auger	5/20/1985
DZ-14	McChord	MW	Decommissioned		658742.00	1500421	279.8	282.83	68	2	58	68	224.83	214.83	Vashon		Co.	H-S Auger	6/17/1985
E0147-MW01	Bldg E0147 (AOC 8-7)	MW	Decommissioned						31	2	21	31			Vashon	PVC	Holt	H-S Auger	2/25/2005
E0147-MW02	Bldg E0147 (AOC 8-7)	MW	Decommissioned						31	2	21	31			Vashon	PVC	Holt	H-S Auger	2/25/2005
E0147-MW03	Bldg E0147 (AOC 8-7)	MW	Decommissioned						32	2	22	32			Vashon	PVC	Holt	H-S Auger	2/28/2005
E0205-MW01	Bldg E0205	MW	Active	BCR089	662678.40	1477788.649	231.9	231.58	30	2	15	30	216.9	201.9	Vashon	PVC	Longyear, Inc	Sonic	4/13/2011
E0205-MW02	Bldg E0205	MW	Active	BCR090	662766.94	1477816.09	232.2	231.87	35	2	20	35	212.2	197.2	Vashon	PVC	Longyear, Inc	Sonic	4/8/2011
E0730-MW01	Bldg E0730 (AOC 8-8)	MW	Decommissioned						34	2	24	34			Vashon	PVC	Holt	H-S Auger	3/7/2005
E0730-MW02	Bldg E0730 (AOC 8-8)	MW	Decommissioned						34	2	24	34			Vashon	PVC	Holt	H-S Auger	3/8/2005
E0730-MW03	Bldg E0730 (AOC 8-8)	MW	Decommissioned						34	2	24	34			Vashon	PVC	Holt	H-S Auger	3/10/2005
E1110-MW01	Bldg E1110 (AOC 9-8)	MW	Decommissioned						32.5	2	22.5	32.5			Vashon	PVC	Holt	H-S Auger	3/15/2005
E1110-MW02	Bldg E1110 (AOC 9-8)	MW	Decommissioned						34.5	2	24.5	34.5			Vashon	PVC	Holt	H-S Auger	3/15/2005
E1110-MW03	Bldg E1110 (AOC 9-8)	MW	Decommissioned						32	2	22	32			Vashon	PVC	Holt	H-S Auger	3/16/2005
EH-1a	McChord	MW	Decommissioned		658379.00	1507312	319.7	319.41	37.6	2	32.6	37.6	286.81	281.81	Vashon		Service	H-S Auger	5/16/1990
EH-1b	McChord	MW	Decommissioned		658377.00	1507301	319.69	319.45	57.8	2	52.8	57.8	266.65	261.65	Vashon		Service	H-S Auger	5/16/1990
EH-1c	McChord	MW	Decommissioned		658382.00	1507322	319.78	319.43	99.6	2	89.6	99.6	229.83	219.83	Vashon		Holt Drilling	CT	5/16/1990
EH-2a	McChord	MW	Decommissioned		660839.00	1507170	310.98	310.71	38.6	2	33.6	38.6	277.11	272.11	Vashon		Service	H-S Auger	6/18/1990
EH-3a	McChord	MW	Decommissioned		659813.00	1506021	313	314.66	37	2	32	37	282.66	277.66	Vashon		Service	H-S Auger	5/23/1990
EH-4a	McChord	MW	Decommissioned		661035.00	1506531	298.7	300.71	27.6	2	22.6	27.6	278.11	273.11	Vashon		Service	H-S Auger	5/21/1990
EH-4b	McChord	MW	Active		661034.98	1506530.14	298.9	301.2	57.6	2	52.6	57.6	248.6	243.6	Vashon		Service	H-S Auger	5/21/1990
EH-4c	McChord	MW	Decommissioned		660931.00	1506538	296.8	296.37	109	2	104	109	192.37	187.37	Vashon		Holt Drilling	CT	5/21/1990
EM-3	Edward Marsh	MW	Active						20		15	20			Vashon	PVC	Holt	H-S Auger	3/11/2004
EPA-W-1a	McChord	MW	Decommissioned		660451.00	1497905	269.8	271.6	105	4	95	105	176.6	166.6	Vashon		and Drill	CT	6/28/1983
EPA-W-1b	McChord	MW	Decommissioned		660451.00	1497905	269.8	271.27	83	2	73	83	198.27	188.27	Vashon		and Drill	CT	6/28/1983
EPA-W-1c	McChord	MW	Decommissioned		660451.00	1497905	269.8	271.62	45	2	35	45	236.62	226.62	Vashon		and Drill	CT	6/28/1983
EPA-W-2a	McChord	MW	Decommissioned		660136.00	1497878	268.2	269.86	43	2	33	43	236.86	226.86	Vashon		and Drill	CT	7/12/1983
EPA-W-2b	McChord	MW	Decommissioned		660136.00	1497878	268.2	269.83	24	2	14	24	255.83	245.83	Vashon		and Drill	CT	7/12/1983
EPA-W-3a	McChord	MW	Decommissioned		660406.00	1497130	269.3	270.58	46	4	41	46	229.58	224.58	Vashon		and Drill	CT	7/20/1983
EPA-W-3b	McChord	MW	Decommissioned		660406.00	1497130	269.3	270.35	17	2	12	17	258.35	253.35	Vashon		and Drill	CT	7/20/1983
EPA-W-4a	McChord	MW	Decommissioned		659961.00	1497137	266.2	267.76	120	4	115	120	152.76	147.76	Vashon		and Drill	CT	8/3/1983

Appendix A - Monitoring Well Inventory - 04 June 2014
Joint Base Lewis - McChord, Washington 98433

WELL_ID	AREA_ID	WELL_SUBTYPE	WELL_STATUS	Ecology_ID	NORTH_NAD27	EAST_NAD27	GRND_ELEV	MEAS_PT_EL	WELL_DEPTH	WELL_DIA	SCREEN_TOP	SCRN_BOTTM	SCREEN_TOP_ELEV	SCREEN_BOTTM_ELEV	AQUIFER	WELL_MATERIAL	DRILLING_CO	DRILL_MTHD	CMPLT_DATE
EPA-W-4b	McChord	MW	Decommissioned		659961.00	1497137	266.2	267.33	79	2	69	79	198.33	188.33	Vashon		and Drill	CT	8/3/1983
EPA-W-4c	McChord	MW	Decommissioned		659961.00	1497137	266.2	267.65	40	2	30	40	237.65	227.65	Vashon		and Drill	CT	8/3/1983
EPA-W-5	McChord	MW	Active		659816.94	1496604.37	265.9	266.84	45	4	40	45	226.84	221.84	Vashon		and Drill	CT	8/11/1983
EPA-W-6a	McChord	MW	Decommissioned		659242.00	1495174	262	263.63	57	4	47	57	216.63	206.63	Vashon		and Drill	CT	8/18/1983
EPA-W-6b	McChord	MW	Decommissioned		659242.00	1495174	262	263.88	40	2	35	40	228.88	223.88	Vashon		and Drill	CT	8/18/1983
EPA-W-7a	McChord	MW	Decommissioned		659382.00	1494179	260.3	261.51	65	4	55	65	206.51	196.51	Vashon		and Drill	CT	8/25/1983
EPA-W-7b	McChord	MW	Decommissioned		659382.00	1494179	260.3	261.87	37	2	27	37	234.87	224.87	Vashon		and Drill	CT	8/25/1983
EPA-W-8a	McChord	MW	Decommissioned		659545.00	1495185	263.9	266.79	51	4	41	51	225.79	215.79	Vashon		and Drill	CT	9/2/1983
EPA-W-8b	McChord	MW	Decommissioned		659545.00	1495185	263.9	266.68	34	2	51	34	215.68	232.68	Vashon		and Drill	CT	9/2/1983
ESTCP LF4 Project 1	Landfill 4	OW	Active																
ESTCP LF4 Project 2	Landfill 4	OW	Active																
ESTCP LF4 Project 3	Landfill 4	OW	Active																
ESTCP LF4 Project 4	Landfill 4	OW	Active																
ESTCP LF4 Project 5	Landfill 4	OW	Active																
ESTCP LF4 Project 6	Landfill 4	OW	Active																
EZ-01	McChord	MW	Decommissioned		661393.00	1506705	306.78	308.01	78	2	18	78	290.01	230.01	Vashon		Subterranean	H-S Auger	12/10/1982
EZ-02	McChord	MW	Decommissioned		658118.00	1506866	312.58	314.04	78	2	28	78	286.04	236.04	Vashon		Subterranean	H-S Auger	10/27/1982
EZ-03	McChord	MW	Decommissioned		658963.00	1506146	307.3	307.04	48	2	28	48	279.04	259.04	Vashon		Subterranean	H-S Auger	11/28/1982
EZ-04	McChord	MW	Decommissioned				306.7		63	2	13	63			Vashon		Subterranean	H-S Auger	1/19/1983
EZ-05	McChord	MW	Decommissioned		658864.00	1506183	301.4	304.07	62	2	12	62	292.07	242.07	Vashon		Subterranean	H-S Auger	1/21/1983
FL-1	Logistics Center	MW	Active		651255.55	1494031.19	276.02	278.12	37.3	6.0	31.0	36.0	247.12	242.12	Vashon	PVC	Geological	Odex	3/20/1998
FL-2	Logistics Center	MW	Active		651297.38	1495625.38	283.97	282.27	45.1	6.0	35.0	40.0	247.27	242.27	Vashon	PVC	Geological	Odex	3/24/1998
FL-3	Logistics Center	MW	Active		656717.88	1488744.5	264.12	265.36	46.0	6.0	37.5	42.5	227.86	222.86	Vashon	PVC	Geological	Odex	3/25/1998
FL-4a	Logistics Center	MW	Active		651931.00	1493015.75	277.24	279.48	136.6	6.0	123.0	133.0	156.48	164.48	Vashon	PVC	Geological	Odex	4/4/1998
FL-4b	Logistics Center	MW	Active		651940.81	1493015.63	277.26	279.00	38.4	6.0	27.0	32.0	252	247	Vashon	PVC	Geological	Odex	4/5/1998
FL-5	Logistics Center	MW	Active		655970.31	1490653.5	287.38	289.55	67.0	6.0	57.0	62.0	232.55	227.55	Vashon	PVC	Geological	Odex	4/6/1998
FL-6	Logistics Center	MW	Active		656543.13	1489779.5	266.3	267.98	57.3	6.0	47.0	57.0	220.98	210.98	Vashon	PVC	Geological	Odex	4/8/1998
FM-1	Logistics Center	MW/Flow Monitor	Decommissioned		653507.50	1494955.38	287.23		83.0						Vashon				
FM-2	Logistics Center	MW/Flow Monitor	Decommissioned		653528.13	1494924.75	287.29		80.0						Vashon				
FM-3	Logistics Center	MW/Flow Monitor	Decommissioned		653534.81	1494927.5	287.2		75.2						Vashon				
FM-4	Logistics Center	MW/Flow Monitor	Decommissioned		653515.31	1494931	287.05		75.0						Vashon				
FTA-1a	McChord	MW	Active		661123.95	1510007.98	310.79	310.4	24	2	14	24	296.4	286.4	Vashon		Drilling	H-S Auger	3/20/1997
FTA-2a	McChord	MW	Active		661166.87	1509541.23	308.57	311.05	26	2	16	26	295.05	285.05	Vashon		Drilling	H-S Auger	3/20/1997
FTA-3a	McChord	MW	Active		661430.24	1509713.38	311.63	313.61	24.6	2	14.6	24.6	299.01	289.01	Vashon		Drilling	H-S Auger	3/20/1997
FTA-4a	McChord	MW	Active		661322.08	1509564.1	309.54	311.83	26	2	16	26	295.83	285.83	Vashon		Drilling	H-S Auger	3/20/1997
FTA-4b	McChord	MW	Active		661322.08	1509564.1	309.54	311.84	78	2	68	78	243.84	233.84	Vashon		Drilling	H-S Auger	3/20/1997
FTA-5a	McChord	MW	Active		661000.20	1509718.862	309.24	311.79	22	2	12	22	299.79	289.79	Vashon		Drilling	H-S Auger	3/5/1998
FTA-6a	McChord	MW	Active		661406.62	1509853.403	310.31	312.84	25	2	15	25	297.84	287.84	Vashon		Drilling	H-S Auger	3/5/1998
FX-01	Landfill 2	Test Well	Active		652545.63	1496557	277.188	279.86	36.0	6	9.0	34.0	270.86	245.86	Vashon	PVC	ProSonic	Sonic	10/2005
FX-02	Landfill 2	Test Well	Active		652548.31	1496360.63	276.648	279.418	56.0	6	10.0	55.0	269.42	224.42	Vashon	PVC	ProSonic	Sonic	10/2005
FX-03	Landfill 2	Test Well	Active		652458.94	1496273.25	277.628	280.658	58.0	6	7.7	57.7	272.96	222.96	Vashon	PVC	ProSonic	Sonic	10/2005
FX-04	Landfill 2	Test Well	Active		652322.63	1496352.75	276.638	279.628	56.0	6	7.7	57.7	271.93	221.93	Vashon	PVC	ProSonic	Sonic	10/2005
FX-05	Landfill 2	Test Well	Active		652166.63	1496480.5	278.468	281.608	55.0	6	10.0	54.0	271.61	227.61	Vashon	PVC	ProSonic	Sonic	10/2005
FX-06	Landfill 2	Test Well	Active		651991.31	1496575	282.288	285.55	56.0	6	10.0	50.0	275.55	235.55	Vashon	PVC	ProSonic	Sonic	10/2005
FX-07	Landfill 2	Test Well	Active		651814.63	1496651.25	281.448	284.578	48.0	6	7.2	55.0	277.38	229.58	Vashon	PVC	ProSonic	Sonic	10/2005
FX3-01	Landfill 2		Active		652508.06	1496288.88	276.558	276.348	41.0	2	5.0	47.2	271.35	229.35	Vashon	SS	ProSonic	Sonic	10/2005
FX3-02	Landfill 2	MW	Active		652531.69	1496307.25	277.178	276.968	41.0	2	5.0	40.0	271.97	236.97	Vashon	SS	ProSonic	Sonic	10/2005
FX3-03	Landfill 2	MW	Active		652556.94	1496326.38	277.588	277.418	41.0	2	5.0	40.0	272.42	237.42	Vashon	SS	ProSonic	Sonic	10/2005
FX3-04	Landfill 2	MW	Active		652485.75	1496272	276.778	276.738	41.0	2	5.0	40.0	271.74	236.74	Vashon	SS	ProSonic	Sonic	10/2005
FX3-05	Landfill 2	MW	Active		652580.19	1496345.5	277.658	277.708	40.0	2	5.0	40.0			Vashon	SS	ProSonic	Sonic	10/2005
FX3-06	Landfill 2	MW	Active		652461.81	1496255.63	277.098	276.878	40.0	2	5.0	40.0			Vashon	SS	ProSonic	Sonic	10/2005
FX3-07	Landfill 2	MW	Active		652437.81	1496237.25	277.148	276.938	41.0	2	5.0	40.0			Vashon	SS	ProSonic	Sonic	10/2005
FX3-08	Landfill 2	MW	Active		652414.88	1496220	277.128	277.178	40.0	2	5.0	40.0			Vashon	SS	ProSonic	Sonic	10/2005
FX3-09	Landfill 2	MW	Active		652317.06	1496460.88	277.428	277.298	46.0	2	6.0	36.0			Vashon	SS	ProSonic	Sonic	10/2005
FX3-10	Landfill 2	MW	Active		652343.81	1496471.63	276.398	276.328	46.0	2	6.0	36.0			Vashon	SS	ProSonic	Sonic	10/2005
FX3-11	Landfill 2	MW	Active		652372.13	1496479.38	276.498	276.558	46.0	2	4.0	29.0			Vashon	SS	ProSonic	Sonic	10/2005
FX3-12	Landfill 2	MW	Active		652399.94	1496487.75	276.248	276.198	47.0	2	4.0	39.0			Vashon	SS	ProSonic	Sonic	10/2005
FX3-13	Landfill 2	MW	Active		652427.31	1496496.75	276.778	276.648	50.0	2	6.0	46.0			Vashon	SS	ProSonic	Sonic	10/2005
FX3-14	Landfill 2	MW	Active		652454.38	1496504.13	277.068	277.068	42.0	2	4.0	39.0			Vashon	SS	ProSonic	Sonic	10/2005
FX3-15	Landfill 2	MW	Active		652483.25	1496511.63	277.188	276.938	46.0	2	6.0	36.0			Vashon	SS	ProSonic	Sonic	10/2005
FX3-16	Landfill 2	MW	Active		652516.25	1496521.5	277.018	276.818	48.0	2	6.0	36.0			Vashon	SS	ProSonic	Sonic	10/2005
FX3-17	Landfill 2	MW	Active		652510.81	1496285.13	276.438	276.298	80.0	2	40.0	60.0			Vashon	SS	ProSonic	Sonic	10/2005
FX3-18	Landfill 2	MW	Active		652535.63	1496304	277.118	277.048	80.0	2	40.0	60.0			Vashon	SS	ProSonic	Sonic	10/2005
FX3-19	Landfill 2	MW	Active		652486.63	1496266.25	277.018	276.888	81.0	2	40.0	60.0			Vashon	SS	ProSonic	Sonic	10/2005
FX3-20	Landfill 2	MW	Active		652603.06	1496361.63	277.348	277.548	41.0	2	5.0	40.0			Vashon	SS	ProSonic	Sonic	10/2005
FX3-21	Landfill 2	MW	Active		652390.13	1496200.88	276.145	276.095	41.0	2	5.0	40.0			Vashon	SS	ProSonic	Sonic	10/2005
FX3-22	Landfill 2	MW	Active		652392.75	1496196.5	276.045	275.935	61.0	2	40.0	60.0			Vashon	SS	ProSonic	Sonic	10/2005
FX3-23	Landfill 2	MW	Active		652418.19	1496216	276.998	277.028	61.0	2	40.0	60.0			Vashon	SS	ProSonic	Sonic	10/2005
FX3-24	Landfill 2	MW	Active		652441.25	1496233.63	276.988	276.938	61.0	2	40.0	60.0			Vashon	SS	ProSonic	Sonic	10/2005
FX3-25	Landfill 2	MW	Active		652464.81	1496251.25	276.818	276.888	61.0	2	40.0	60.0			Vashon	SS	ProSonic	Sonic	10/2005
FX3-26	Landfill 2	MW	Active		652561.19	1496322.63	277.588	277.558	61.0	2	40.0	60.0			Vashon	SS	ProSonic	Sonic	10/2005

WELL_ID	AREA_ID	WELL_SUBTYPE	WELL_STATUS	Ecology_ID	NORTH_NAD27	EAST_NAD27	GRND_ELEV	MEAS_PT_EL	WELL_DEPTH	WELL_DIA	SCREEN_TOP	SCRN_BOTTM	SCREEN_TOP_ELEV	SCREEN_BOTTM_ELEV	AQUIFER	WELL_MATERIAL	DRILLING_CO	DRILL_MTHD	CMPLT_DATE
FX3-27	Landfill 2	MW	Active		652583.13	1496341.5	277.658	277.598	61.0	2	40.0	60.0			Vashon	SS	ProSonic	Sonic	10/2005
FX3-28	Landfill 2	MW	Active		652606.88	1496358.25	277.898	277.628	61.0	2	40.0	60.0			Vashon	SS	ProSonic	Sonic	10/2005
FZ-01	McChord	MW	Decommissioned		662935.00	1509024	279.5	288.9	102	2	22	102	266.9	186.9	Vashon		Subterranean	H-S Auger	12/7/1982
G- 1	Landfill 5	Gas Probe	Other												None				
G- 2	Landfill 5	Gas Probe	Other												None				
G- 3a	Landfill 5	Gas Probe	Other				212.3				7.4				None	Sch80PVC	Sons	H-S Auger	3/21/1988
G- 4	Landfill 5	Gas Probe	Other												None				
G- 8	Landfill 5	Gas Probe	Other				220.5				6.9				None	Sch80PVC	Sons	H-S Auger	3/23/1988
G- 9	Landfill 5	Gas Probe	Other				217.0				4.9				None	Sch80PVC	Sons	H-S Auger	3/22/1988
G-10	Landfill 5	Gas Probe	Other				216.0				6.0				None	Sch80PVC	Sons	H-S Auger	3/24/1988
G-11	Landfill 5	Gas Probe	Other				212.0				6.0				None	Sch80PVC	Sons	H-S Auger	3/18/1988
G-12	Landfill 5	Gas Probe	Other				210.4				60.0				None	Sch80PVC	Sons	H-S Auger	3/17/1988
G-13	Landfill 5	Gas Probe	Other												None				
G-14	Landfill 5	Gas Probe	Other												None				
G-15	Landfill 5	Gas Probe	Other												None				
G-16	Landfill 5	Gas Probe	Other												None				
G-17	Landfill 5	Gas Probe	Other												None				
G-18	Landfill 5	Gas Probe	Other												None				
G-19	Landfill 5	Gas Probe	Other												None				
G-20	Landfill 5	Gas Probe	Other												None				
G-21	Landfill 5	Gas Probe	Other												None				
GD-6		MW	Likely decom, lost, or destroyed		651914.81	1497366.13									Vashon				
HCW-01	Landfill 2	Extraction	Decommissioned		652072.07	1497349.43		277.41	32.0	6	11.4	31.4			Vashon	Steel		Sonic	7-Aug-03
HCW-02	Landfill 2	Extraction	Decommissioned		651962.56	1497448.21		277.23	31.5	6	11.5	31.5			Vashon	Steel		Sonic	8-Aug-03
HCW-03	Landfill 2	Extraction	Decommissioned		651819.53	1497446.7		276.59	31.5	6	11.2	31.2			Vashon	Steel		Sonic	8-Aug-03
HCW-04	Landfill 2	Extraction	Decommissioned		652079.02	1497180.62		276.67	35.0	6	21.3	31.3			Vashon	CPVC		Sonic	25-Jun-05
HCW-05	Landfill 2	Extraction	Decommissioned		651932.25	1497213.5		276.97	34.0	6	21.4	31.4			Vashon	CPVC		Sonic	9-Aug-03
HCW-06	Landfill 2	Extraction	Decommissioned		651798.82	1497192.56		281.98	34.0	6	21.4	31.4			Vashon	CPVC		Sonic	9-Aug-03
HCW-07	Landfill 2	Extraction	Decommissioned		652093.77	1497304.12									Vashon				
HCW-08	Landfill 2	Extraction	Decommissioned		652078.07	1497243.95		278.43							Vashon				
HCW-09	Landfill 2	Extraction	Decommissioned		651857.50	1497143.82		280.57			4.0	34.0			Vashon				
HCW-10	Landfill 2	Extraction	Decommissioned		651892.78	1496988.3		279.63			5.0	35.0			Vashon				
HCW-11	Landfill 2	Extraction	Decommissioned		651974.06	1496931.37		279.94			5.0	35.0			Vashon				
HCW-12	Landfill 2	Extraction	Decommissioned		652116.96	1497078.63		277.59			4.0	24.0			Vashon				
HCW-13	Landfill 2	Extraction	Decommissioned		652146.51	1497040.79		277.68			4.5	24.5			Vashon				
HCW-14	Landfill 2	Extraction	Decommissioned		651884.14	1497202.19		279.69			4.5	34.5			Vashon				
HCW-15	Landfill 2	Extraction	Decommissioned		651866.42	1497171.06		281.48			4.5	34.5			Vashon				
HCW-J12	Landfill 2	Extraction	Decommissioned		652346.61	1496405.63			30.0	6	5.0	30.0			Vashon	SS		Air Rotary	13-Jun-06
HCW-R10	Landfill 2	Extraction	Decommissioned		652350.03	1496470.06			30.0	6	5.0	30.0			Vashon	SS		Air Rotary	12-Jun-06
HCW-S2	Landfill 2	Extraction	Decommissioned		652453.07	1496510.82			30.0	6	5.0	30.0			Vashon	SS		Air Rotary	8-Jun-06
HCW-S5	Landfill 2	Extraction	Decommissioned		652399.18	1496498.19			30.0	6	5.0	30.0			Vashon	SS		Air Rotary	12-Jun-06
HM-1	Hammer Marsh	MW	Active						20		10	20			Vashon	PVC	Holt	H-S Auger	8/2/2004
HZ-01	McChord	MW	Decommissioned		670538.00	1509214	286.6	289.26	102.5	2	2.5	102.5	286.76	186.76	Vashon		Subterranean	H-S Auger	7/19/1983
IH-1a	McChord	MW	Active		658724.58	1511278.96	330	332.43	37.8	2	32.8	37.8	299.63	294.63	Vashon		Service	H-S Auger	5/10/1990
IH-1b	McChord	MW	Active		658733.67	1511277.51	329.8	331.8	56.8	2	51.8	56.8	280	275	Vashon		Service	H-S Auger	5/9/1990
IH-1c	McChord	MW	Active		658675.40	1511307.46	330.7	332.45	99.4	2	84.9	99.4	247.55	233.05	Vashon		Holt Drilling	CT	6/19/1990
IH-2a	McChord	MW	Active		659602.77	1509376.26	327.4	329.52	44.8	2	39.8	44.8	289.72	284.72	Vashon		Service	H-S Auger	5/7/1990
IH-2b	McChord	MW	Active		659611.15	1509376.99	327.5	329.44	57.3	2	52.3	57.3	277.14	272.14	Vashon		Service	H-S Auger	5/14/1990
IH-3a	McChord	MW	Active		659856.96	1509664.64	326	327.69	42.8	2	37.8	42.8	289.89	284.89	Vashon		Service	H-S Auger	5/7/1990
IH-3b	McChord	MW	Active		659854.28	1509683.01	326.1	328.13	57.8	2	52.8	57.8	275.33	270.33	Vashon		Service	H-S Auger	5/4/1990
IH-3c	McChord	MW	Active		659844.90	1509683	326.1	327.64	89.2	2	79.2	89.2	248.44	238.44	Vashon		Holt Drilling	CT	6/15/1990
IH-4a	McChord	MW	Decommissioned		660082.00	1509946	325.7	326.85	42.3	2	37.3	42.3	289.55	284.55	Vashon		Service	H-S Auger	5/3/1990
IH-4b	McChord	MW	Decommissioned		660075.00	1509951	325.3	327.06	57.8	2	52.8	57.8	274.26	269.26	Vashon		Service	H-S Auger	5/2/1990
IW- 1	McChord	MW	Active		665570.94	1503817.99	293.63	295.06	40	2	30	40	265.06	255.06	Vashon		Drilling	H-S Auger	9/18/2002
IW- 2	McChord	MW	Active		665510.04	1503819.67	292.56	294.28	45	2	35	45	259.28	249.28	Vashon		Drilling	H-S Auger	9/18/2002
IW- 3	McChord	MW	Active		665459.31	1503819.11	291.78	293.04	37	2	27	37	266.04	256.04	Vashon		Drilling	H-S Auger	9/18/2002
IW- 4	McChord	MW	Active		665409.84	1503819.25	291.04	292.92	25	2	15	25	277.92	267.92	Vashon		Drilling	H-S Auger	9/19/2002
IW- 5	McChord	MW	Active		665516.95	1503770.69	292.78	294.79	25	2	15	25	279.79	269.79	Vashon		Drilling	H-S Auger	9/19/2002
IW- 6	McChord	MW	Active		665522.07	1503720.57	292.47	294.32	25	2	15	25	279.32	269.32	Vashon		Drilling	H-S Auger	9/19/2002
IW- 7	McChord	MW	Active		665528.94	1503671.64	292.34	294.43	25	2	15	25	279.43	269.43	Vashon		Drilling	H-S Auger	9/19/2002
IW- 8	McChord	MW	Active		665426.73	1503670.51	289.25	291.06	20	2	10	20	281.06	271.06	Vashon		Drilling	H-S Auger	9/19/2002
IW- 9	McChord	MW	Active		665496.39	1503522.29	289.8	291.36	30	2	20	30	271.36	261.36	Vashon		Drilling	H-S Auger	9/19/2002
IW-1 (Lewis)	Landfill 2	MW	Likely decom, lost, or destroyed		651971.88	1497185.63									Vashon				
IW-10	McChord	MW	Active		665445.19	1503522.5	290.31	292.02	25	2	15	25	277.02	267.02	Vashon		Drilling	H-S Auger	9/20/2002
IW-11	McChord	MW	Active		665344.30	1503520.45	297.95	299.56	30	2	20	30	279.56	269.56	Vashon		Drilling	H-S Auger	9/20/2002
IW-12	McChord	MW	Active		665472.94	1503479.96	289.24	290.93	25	2	15	25	275.93	265.93	Vashon		Drilling	H-S Auger	9/20/2002
IW-13	McChord	MW	Active		665340.37	1503464.01	297.96	299.6	30	2	20	30	279.6	269.6	Vashon		Drilling	H-S Auger	9/20/2002
IW-14	McChord	MW	Active		665580.94	1503671.57	293.62	293.27	25	2	15	25	278.27	268.27	Vashon		Drilling	H-S Auger	9/23/2002
IW-15	McChord	MW	Active		665479.90	1503671.67	291.07	292.96	25	2	15	25	277.96	267.96	Vashon		Drilling	H-S Auger	9/23/2002
IW-16	McChord	MW	Active		665467.30	1503767.28	291.67	293.72	25	2	15	25	278.72	268.72	Vashon		Drilling	H-S Auger	9/23/2002
IW-17	McChord	MW	Active		665563.21	1503596.56	293.51	293.09	30	2	15	30	278.09	263.09	Vashon		Drilling	H-S Auger	4/5/2004

WELL_ID	AREA_ID	WELL_SUBTYPE	WELL_STATUS	Ecology_ID	NORTH_NAD27	EAST_NAD27	GRND_ELEV	MEAS_PT_EL	WELL_DEPTH	WELL_DIA	SCREEN_TOP	SCRN_BOTTM	SCREEN_TOP_ELEV	SCREEN_BOTTM_ELEV	AQUIFER	WELL_MATERIAL	DRILLING_CO	DRILL_MTHD	CMPLT_DATE
IW-18	McChord	MW	Active		665512.91	1503597.97	291.89		30	2	15	30	-15	-30	Vashon		Drilling	H-S Auger	4/5/2004
IW-19	McChord	MW	Active		665459.54	1503605.37	289.74		30	2	15	30	-15	-30	Vashon		Drilling	H-S Auger	4/5/2004
IW-2 (Lewis)	Landfill 2	MW	Likely decom, lost, or destroyed		651973.00	1497184.25									Vashon				
IW-20	McChord	MW	Active		665415.01	1503591.79	290.32		30	2	15	30	-15	-30	Vashon		Drilling	H-S Auger	4/8/2004
IW-21	McChord	MW	Active		665632.82	1503671.34	294.21		35	2	20	35	-20	-35	Vashon		Drilling	H-S Auger	4/6/2004
IW-22	McChord	MW	Active		665365.46	1503603.36	296.04		35	2	20	35	-20	-35	Vashon		Drilling	H-S Auger	4/6/2004
IW-24	McChord	MW	Active		665598.66	1503520.38	293.23		40	2	25	40	-25	-40	Vashon		Drilling	H-S Auger	4/7/2004
IW-25	McChord	MW	Active		665294.31	1503519.51	299.61		35	2	20	35	-20	-35	Vashon		Drilling	H-S Auger	4/8/2004
IW-28	McChord	MW	Active		665666.57	1503442.3	293.38		40	2	25	40	-25	-40	Vashon		Drilling	H-S Auger	4/7/2004
IW-29	McChord	MW	Active		665569.69	1503431.05	291.99		45	2	30	45	-30	-45	Vashon		Drilling	H-S Auger	4/6/2004
IW-3 (Lewis)	Landfill 2	MW	Likely decom, lost, or destroyed		651974.38	1497183.75									Vashon				
IW-30	McChord	MW	Active		665485.52	1503413.29	288.99		30	2	15	30	-15	-30	Vashon		Drilling	H-S Auger	4/6/2004
IW-31	McChord	MW	Active		665364.49	1503386.85	296.94		37	2	22	37	-22	-37	Vashon		Drilling	H-S Auger	4/7/2004
JP-MW-01	Bldg 3034 (AOC 10-8)	MW	Active		644767.30	1478704.2	282.0	281.56	51.7	6.0	39.6	49.6	242.4	232.4	Vashon	Sch80PVC	Environmental	Rotary	5/27/1993
JP-MW-02	Bldg 3034 (AOC 10-8)	MW	Active		644986.40	1478598.2	279.0	277.88	50.0	8.0	39.2	49.2	239.8	229.8	Vashon	Sch80PVC	Environmental	Rotary	5/27/1993
JP-MW-03	Bldg 3034 (AOC 10-8)	MW	Active		644994.90	1478775.1	281.0	280.63	50.3	8.0	39.6	49.6	240.4	230.4	Vashon	Sch80PVC	Environmental	Rotary	5/25/1993
JP-MW-04	Bldg 3034 (AOC 10-8)	MW	Active		644918.30	1478720.7	281.0	281.12	51.3	8.0	40.8	50.8	240.2	230.2	Vashon	Sch80PVC	Environmental	Rotary	5/27/1993
JZ-01	McChord	MW	Active		659666.00	1504693	295.5	297.61	72.5	2	12.5	72.5	285.11	225.11	Vashon		Subterranean	H-S Auger	7/19/1983
LC- 01	Logistics Center	MW	Active		656710.44	1494588.47	274.82	276.05	60.0		20.0	60.0	256.05	216.05	Vashon	Sch40PVC	Drilling	Churn	11/29/1984
LC- 02	Logistics Center	MW	Decommissioned		657230.34	1494504.58	275.18	276.02	60.0		20.0	60.0	256.02	216.02	Vashon	Sch40PVC	Drilling	Churn	1/11/1985
LC- 03	Logistics Center	MW	Active		657303.04	1493903.83	275.42	274.95	60.0	6.0	20.0	60.0	254.95	214.95	Vashon	Sch40PVC	Drilling	Churn	12/6/1984
LC- 04	Logistics Center	MW	Decommissioned		657705.95	1492727.99	267.84	269.64	60.0	6.0	20.0	60.0	247.84	207.84	Vashon	Sch40PVC	Drilling	Churn	12/17/1984
LC- 05	Logistics Center	MW	Active		657293.02	1490856.94	276.29	278.08	60.0	6.0	19.0	59.6	259.08	218.48	Vashon	Sch40PVC	Drilling	Churn	12/28/1994
LC- 06	Logistics Center	MW	Active		655904.54	1493991.41	284.99	286.44	60.0	6.0	20.0	60.0	266.44	226.44	Vashon	Sch40PVC	Drilling	Churn	1/7/1984
LC- 06a	Logistics Center	MW	Decommissioned		655910.00	1493996	285.05	286.16	37.6	6.0/2.0	27.6	37.6	258.56	248.56	Vashon	PVC		H-S Auger	4/19/1985
LC- 07	Logistics Center	MW	Decommissioned		654122.58	1492794.98	287.19	289.19	40.0	6.0/4.0	20.0	40.0	267.19	247.19	Vashon	PVC	Drilling	Churn	1/17/1985
LC- 08	Logistics Center	MW	Likely decom, lost, or destroyed		654118.11	1492800.02	287.16	289.46	60.0	6.0/4.0	40.0	60.0	247.16	227.16	Vashon	Sch40PVC	Drilling	Churn	1/22/1985
LC- 09	Logistics Center	MW	Active		654183.71	1494778.19	286.4	287.92	60.0	6.0/4.0	54.8	60.0	233.12	227.92	Vashon	Sch40PVC	Drilling	Churn	1/28/1985
LC- 10	Logistics Center	MW	Active		654178.85	1494782.46	286.4	287.99	40.0	6.0/4.0	20.0	40.0	267.99	247.99	Vashon	Sch40PVC	Drilling	Churn	1/30/1985
LC- 11	Logistics Center	MW	Active		654752.00	1495289	287.53	288.73	60.0	6.0/4.0	20.0	60.0	268.73	228.73	Vashon	Sch40PVC	Drilling	Churn	2/11/1985
LC- 12	Logistics Center	MW	Decommissioned		659054.00	1490087	276.6	278.15	60.0	6.0/4.0	20.0	60.0	258.15	218.15	Vashon	Sch40PVC	Drilling	Churn	2/26/1985
LC- 13	Logistics Center	MW	Active		658940.00	1491704	277.59	278.98	60.0	6.0/4.0	19.0	59.0	259.98	218.98	Vashon	Sch40PVC	Drilling	Churn	3/4/1985
LC- 14	Logistics Center	MW	Decommissioned		658352.00	1489556			58.0	2.0	34.0	59.0			Vashon	Sch40PVC		H-S Auger	3/25/1985
LC- 14a	Logistics Center	MW	Active		658337.00	1489560	263.14	264.97	52.5	6.0/2.0	42.5	52.5	222.47	212.47	Vashon	PVC	Corps of	H-S Auger	9/6/1985
LC- 15	Logistics Center	MW	Active		659038.00	1491098	271.51		59.0	6.0/2.0	25.0	59.0	246.51	212.51	Vashon	Sch40PVC	Corps of	H-S Auger	3/25/1985
LC- 16	Logistics Center	MW	Active		658296.00	1492472	265.55	266.95	58.5	6.0/2.0	18.5	58.5	248.45	208.45	Vashon	Sch40PVC	Corps of	H-S Auger	4/3/1985
LC- 17	Logistics Center	MW	Destroyed		653475.00	1494544	289.97	292.52	40.0	2.0	20.0	40.0	272.52	252.52	Vashon	Sch40PVc	Corps of	H-S Auger	4/4/1985
LC- 18	Logistics Center	MW	Active		653005.00	1494115	282.69	283.89	40	2.0	32.0	40.0	251.89	243.89	Vashon	Sch40PVC	Corps of	H-S Auger	4/2/1985
LC- 19	Logistics Center	MW	Active		652940.00	1495130			75.0	60./2.0	64.6	75.0			Vashon	PVC	Corps of	H-S Auger	4/8/1985
LC- 19a	Logistics Center	MW	Active		653095.00	1495139	289.34	290.61	78.7	6.0/2.0	65.0	75.0	225.61	215.61	Vashon	Sch40PVC	Corps of	H-S Auger	4/8/1985
LC- 19b	Logistics Center	MW	Active		653093.00	1495135	289.11	290.42	56.5	6.0/2.0	45.0	55.0	265.42	255.42	Vashon	Sch40PVC	Corps of	H-S Auger	4/9/1985
LC- 19c	Logistics Center	MW	Active		653099.00	1495138	288.39	290.42	36.0	6.0/2.0	25.0	35.0	225.42	215.42	Vashon	Sch40PVC	Corps of	H-S Auger	4/12/1985
LC- 20	Logistics Center	MW	Active		653842.19	1495824.25	290.22	290.88	43.1	6.0/2.0	37.5	47.5	253.38	243.38	Vashon	Sch40PVC	Corps of	H-S Auger	4/15/1985
LC- 21	Logistics Center	MW	Decommissioned		652756.00	1496445	279.53	278.20	42.2	2.0	27.2	42.2	251	236	Vashon	Sch40PVC	Corps of	H-S Auger	4/16/1985
LC- 21-1	Logistics Center	MW	Active		652742.00	1496443	279.62	281.95	66.3	6.0/2.0	60.0	65.5	221.95	216.45	Vashon	PVC	Company	H-S Auger	1/24/1986
LC- 21b	Logistics Center	MW	Active		652728.00	1496420	279.77	281.75	116.0	6.0/2.0	110.5	115.5	171.25	166.25	Vashon	Sch80PVC	Company	Air Rotary	4/23/1987
LC- 21c	Logistics Center	MW	Active		652743.00	1496426	279.89	282.06	146.1	6.0/2.0	138.9	143.9	143.16	138.16	Sea Level	Sch80PVC	Drilling	Churn	3/30/1987
LC- 22	Logistics Center	MW	Active		655282.00	1497011	296.42	297.54	46.0	6.0/2.0	33.0	52.5	264.54	245.04	Vashon	Sch40PVC	Corps of	H-S Auger	4/22/1985
LC- 23	Logistics Center	MW	Active		652462.00	1496851	277.77	280.00	45.0	6.0/2.0	20.0	45.0	260	235	Vashon	Sch40PVC	Corps of	H-S Auger	4/23/1985
LC- 24	Logistics Center	MW	Active		652819.00	1497577	285.43	286.70	49.6	6.0/2.0	26.0	46.0	260.7	240.7	Vashon	Sch40PVC	Corps of	H-S Auger	4/24/1985
LC- 25	Logistics Center	MW	Decommissioned		652026.13	1494913.13	275.02	276.01	26.5	6.0/2.0	12.0	26.5	264.01	249.51	Vashon	Sch40PVC	Corps of	H-S Auger	4/25/1985
LC- 26	Logistics Center	MW	Active		651895.00	1497563	276.0	276.02	38.7	6.0/2.0	11.5	36.0	264.52	240.02	Vashon	Sch40PVC	Corps of	H-S Auger	4/26/1985
LC- 26D	Logistics Center	MW	Active		651917.00	1497564	276.89	277.14	149.0	6.0	139.0	149.0	138.14	128.14	Sea Level	PVC		Air Rotary	7/3/1991
LC- 27	Logistics Center	MW	Active		651871.00	1496425	278.61	279.45	27.5	6.0/2.0	20.5	30.5	258.95	248.95	Vashon	Sch40PVC	Corps of	H-S Auger	5/2/1985
LC- 28	Logistics Center	MW	Likely decom, lost, or destroyed		654888.00	1494188	284.29	286.45	21.95	6.0/2.0	19.0	24.0	267.45	262.45	Vashon	Sch40PVC	Corps of	H-S Auger	5/6/1985
LC- 29	Logistics Center	MW	Active		656471.00	1489826	265.48	266.52	54.0	6.0/2.0	14.0	54.0	252.52	212.52	Vashon	PVC	Corps of	H-S Auger	12/13/1985
LC- 30	Logistics Center	MW	Active		656692.00	1489872	270.9	272.21	51.0	6.0/2.0	15.0	51.0	257.21	221.21	Vashon	PVC	Corps of	H-S Auger	1/7/1986
LC- 31	Logistics Center	MW	Decommissioned		656559.00	1489941	271.5	272.41	47.5	6.0/2.0	12.5	47.5	259.91	224.91	Vashon	PVC	Corps of	H-S Auger	1/13/1986
LC- 32	Logistics Center	MW	Active		656661.00	1489700	267.52	268.85	35.0	6.0/2.0	15.0	35.0	253.85	233.95	Vashon	PVC	Corps of	H-S Auger	1/14/1986
LC- 33	Logistics Center	MW	Active		652910.00	1493237	287.44	288.06	37.5	2.0	32.0	37.0	256.06	251.06	Vashon	PVC	Corps of	H-S Auger	1/8/1986
LC- 34	Logistics Center	MW	Active		653058.00	1493427	287.9	289.08	40.8	2.0	30.0	35.0	259.08	254.08	Vashon	PVC	Corps of	H-S Auger	1/8/1986
LC- 35	Logistics Center	MW	Active		653531.00	1494911	286.82	287.76	63.0	2.0	57.6	62.6	230.16	225.16	Vashon	PVC	Corps of	H-S Auger	1/10/1986
LC- 35D	Logistics Center	MW	Active		653530.00	1494905	288.0	289.14	205.0	6.0	195.0	205.0	94.14	84.14	Sea Level	Sch40PVC	Company	Air Rotary	7/19/1991
LC- 36	Logistics Center	MW	Active		659794.00	1491748	271.64	271.83	44.0	2.0	39.0	44.0	232.83	227.83	Vashon	PVC	Corps of	H-S Auger	3/28/1986
LC- 37	Logistics Center	MW	Active		659309.00	1490348	279.26	281.27	58.7	6.0	53.4	58.2	227.87	223.07	Vashon	PVC	Company	H-S Auger	1/30/1986
LC- 38	Logistics Center	MW	Decommissioned		657970.00	1490375	270.92	274.30	83.0	6.0/2.0	78.0	82.6	196.3	191.7	Vashon	PVC	Company	H-S Auger	1/28/1986
LC- 38a	Logistics Center	MW	Decommissioned		657963.00	1490386	271.11	273.52	28.7	6.0/2.0	23.3	28.3	250.22	245.22	Vashon	PVC	Company	H-S Auger	2/8/1986
LC- 39	Logistics Center	MW	Active		657485.00	1489063	268.6	270.17	44.0	2.0	39.0	44.0	231.17	226.17	Vashon	PVC	Corps of	H-S Auger	3/25/1986
LC- 40	Logistics Center	MW	Active		656912.00	1490289	277.67	278.39	69.8	6.0/2.0	64.5	69.4	213.89	208.99	Vashon	PVC	Company	H-S Auger	1/24/1986
LC- 40a	Logistics Center	MW	Decommissioned		656921.00	1490298	277.33	278.77	35.0	6.0/2.0	29.6	34.6	249.17	244.17	Vashon	PVC	Company	H-S Auger	1/31/1986
LC- 40b	Logistics Center	MW	Active		656900.00	1490275	277.86	280.20	125.0	6.0/2.0	120.0	125.0	160.2	155.2	Vashon	PVC	Company	Air Rotary	4/17/1987

WELL_ID	AREA_ID	WELL_SUBTYPE	WELL_STATUS	Ecology_ID	NORTH_NAD27	EAST_NAD27	GRND_ELEV	MEAS_PT_EL	WELL_DEPTH	WELL_DIA	SCREEN_TOP	SCRN_BOTTM	SCREEN_TOP_ELEV	SCREEN_BOTTM_ELEV	AQUIFER	WELL_MATERIAL	DRILLING_CO	DRILL_MTHD	CMPLT_DATE
LC- 40c	Logistics Center	MW	Decommissioned		656905.00	1490281	277.68	279.71	152.3	6.0/2.0	147.3	152.3	132.41	127.41	Aquitard	Sch80PVC	Drilling	Churn	3/5/1987
LC- 40D	Logistics Center	MW	Active		656927.19	1490263	277.3	279.56	179.0	6.0/2.0	168.0	178.0	111.56	101.56	Sea Level	Sch40SS	Company	Air Rotary	10/12/1993
LC- 41	Logistics Center	MW	Active		655144.00	1491866	282.11	284.16	31.6	6.0/2.0	26.6	31.2	257.56	252.96	Vashon	PVC	Company	H-S Auger	1/31/1986
LC- 41a	Logistics Center	MW	Active		655151.13	1491874.5	282.5	283.58	95.3	2.0	84.0	94.0	199.58	189.58	Vashon	Sch80PVC	Company	Air Rotary	11/11/1992
LC- 41b	Logistics Center	MW	Active		655159.00	1491882.25	282.54	283.60	140.0	2.0	130.0	140.0	153.6	143.6	Vashon	PVC	Company	Air Rotary	11/16/1992
LC- 41D	Logistics Center	MW	Active		655154.00	1491859	281.69	282.67	204	6.0/2.0	192.7	202.70	89.97	79.97	Sea Level	Sch80PVC	Inc.	Churn	2/17/1988
LC- 41e	Logistics Center	MW	Active		655154.00	1491859	281.69	282.71	290.2	6.0/2.0	280.2	290.2	2.51	-7.49		Sch80PVC	Inc.	Churn	2/17/1988
LC- 42	Logistics Center	MW	Decommissioned		657662.00	1492070	272.4	272.34	42.3	6.0/2.0	36.9	42.3	235.44	230.04	Vashon	PVC	Company	H-S Auger	2/8/1986
LC- 43	Logistics Center	MW	Likely decom, lost, or destroyed		655244.00	1494753	285.16	285.89	31.0	6.0/2.0	25.5	30.5	260.39	255.39	Vashon	PVC	Corps of	H-S Auger	1/30/1986
LC- 44	Logistics Center	MW	Active		656882.00	1493259	271.04	272.32	68.9	6.0/2.0	63.2	68.2	209.12	204.12	Vashon	PVC	Company	H-S Auger	1/29/1986
LC- 44a	Logistics Center	MW	Decommissioned		656872.00	1493248	270.92	271.51	32.0	6.0/2.0	17.0	32.0	254.51	239.51	Vashon	PVC	Corps of	H-S Auger	2/4/1986
LC- 44b	Logistics Center	MW	Active		656854.00	1493263	271.14	272.58	97.0	6.0/2.0	87.0	92.0	178.58	180.58	Vashon	Sch80PVC	Company	Air Rotary	4/10/1987
LC- 44c	Logistics Center	MW	Decommissioned		656849.00	1493259	271.24	263.64	148.2	6.0/2.0	143.0	148.0	120.64	115.64	Aquitard	Sch80PVC	Drilling	Churn	3/16/1987
LC- 45	Logistics Center	MW	Likely decom, lost, or destroyed		655882.00	1495534	277.80	278.68	32.0	6.0/2.0	21.5	31.5	257.18	247.18	Vashon	PVC	Corps of	H-S Auger	1/31/1986
LC- 46	Logistics Center	MW	Active		656344.00	1492182	280.09	282.73	61.3	6.0/2.0	55.6	60.6	227.13	222.13	Vashon	PVC	Company	H-S Auger	1/31/1986
LC- 46a	Logistics Center	MW	Decommissioned		656336.00	1492175	280.87	282.48	38.2	6.0/2.0	32.8	37.8	249.68	244.68	Vashon	PVC	Company	H-S Auger	2/1/1986
LC- 47	Logistics Center	MW	Active		655185.00	1493391	279.81	282.41	51.00	6.0/2.0	45.3	50.3	237.11	232.11	Vashon	PVC	Company	H-S Auger	1/30/1986
LC- 47a	Logistics Center	MW	Active		655190.00	1493396	279.94	280.73	32.0	6.0/2.0	27.0	32.0	253.73	248.73	Vashon	PVC	Corps of	H-S Auger	2/3/1986
LC- 47D	Logistics Center	MW	Active		655176.00	1493403	282.03	280.56	220.2	7.0/2.0	209.25	219.45	71.31	61.11	Sea Level	Sch80PVC	Company	Air Rotary	8/8/1991
LC- 48	Logistics Center	MW	Active		653189.00	1495469.5	289.95	290.03	33.0	6.0/2.0	27.3	32.3	262.73	257.73	Vashon	PVC	Company	H-S Auger	2/3/1986
LC- 49	Logistics Center	MW	Active		654135.00	1493877	284.43	286.21	49.3	6.0/2.0	43.0	47.5	243.21	238.71	Vashon	PVC	Company	H-S Auger	1/28/1986
LC- 49a	Logistics Center	MW	Active		654135.00	1493887	284.6	285.30	28.0	6.0/2.0	23.0	28.0	262.3	257.3	Vashon	PVC	Corps of	H-S Auger	2/1/1986
LC- 50	Logistics Center	MW	Active		652181.81	1495527.75	271.76	272.64	32.0	6.0/2.0	26.5	31.5	246.14	241.14	Vashon	PVC	Corps of	H-S Auger	1/30/1986
LC- 50a	Logistics Center	MW	Likely decom, lost, or destroyed		651980.00	1495570			32.0	6.0/2.0	26.0	31.0			Vashon	PVC	Corps of	H-S Auger	1/30/1986
LC- 50d	Logistics Center	MW	Active		652150.00	1495547	271.68	272.92	161.8	7.0/2.0	150.3	159.3	122.62	113.62	Sea Level	Sch80PVC	Company	H-S Auger	8/1991
LC- 51	Logistics Center	MW	Active		651777.00	1495357	273.22	274.02	32.0	6.0/2.0	26.5	32.0	247.52	242.02	Vashon	PVC	Corps of	H-S Auger	1/25/1986
LC- 52	Logistics Center	MW	Decommissioned		650532.00	1496018	274.98	275.85	31.5	2.0	26.0	31.0	249.85	244.85	Vashon	PVC	Corps of	H-S Auger	1/24/1986
LC- 53	Logistics Center	MW	Active		651926.00	1494335	276.61	277.38	32.1	2.0	26.5	31.5	250.88	245.88	Vashon	PVC	Corps of	H-S Auger	1/28/1986
LC- 54	Logistics Center	MW	Destroyed		650601.00	1491326	268.90	268.80	31.0	2.0	26.0	31.0	242.8	237.8	Vashon	PVC	Corps of	H-S Auger	1/29/1986
LC- 55	Logistics Center	MW	Likely decom, lost, or destroyed		653779.00	1497171	288.90	289.93	30.5	6.0/2.0	25.5	30.5	264.43	259.43	Vashon	PVC	Corps of	H-S Auger	1/30/1986
LC- 55D	Logistics Center	MW	Active		653766.00	1497114	289.84	292.06	278.0	6.0/2.0	220.0	230.0	72.06	62.06	Sea Level	Sch80PVC	Inc.	Churn	2/12/1988
LC- 55e	Logistics Center	MW	Active		653766.00	1497114	289.6		278.0	6.0/2.0	268.0	278.0			Sea Level	Sch80PVC	Inc.	Churn	2/12/1988
LC- 56	Logistics Center	MW	Active		652740.00	1497236	286.35	288.22	32.0	6.0/2.0	22.0	32.0	266.22	256.22	Vashon	PVC	Corps of	H-S Auger	1/31/1986
LC- 57	Logistics Center	MW	Active		650865.00	1496169	284.74	286.04	44.3	6.0/2.0	29.3	34.3	256.74	251.74	Vashon	PVC	Company	H-S Auger	2/6/1986
LC- 58	Logistics Center	MW	Likely decom, lost, or destroyed		657265.00	1488960			44.0	2.0	39.0	44.0			Vashon	PVC	Corps of	H-S Auger	3/26/1986
LC- 59	Logistics Center	MW	Active		656636.00	1487630	269.9	270.78	63.0	2.0	57.6	63.0	213.18	207.78	Vashon	Sch40PVC	Corps of	H-S Auger	3/26/1986
LC- 60a	Logistics Center	MW	Active		658740.00	1489532	276.81	278.48	38.5	6.0/2.0	33.5	38.5	244.98	239.98	Vashon	Sch80PVC	Company	H-S Auger	2/11/1987
LC- 60b	Logistics Center	MW	Active		658736.00	1489536	276.46	278.21	66.0	6.0/2.0	61.0	66.0	217.21	212.21	Vashon	Sch80PVC	Company	H-S Auger	2/13/1987
LC- 61a	Logistics Center	MW	Active		659144.00	1489760	277.26	277.24	33.0	6.0/2.0	28.0	33.0	249.24	244.24	Vashon	Sch80PVC	Company	H-S Auger	3/2/1987
LC- 61b	Logistics Center	MW	Active		659151.00	1489469	277.34	277.49	57.4	6.0/2.0	55.0	60.0	222.49	217.49	Vashon	Sch80PVC	Company	H-S Auger	2/26/1987
LC- 62a	Logistics Center	MW	Active		658008.00	1488828	263.34	264.76	40.0	6.0/2.0	35.0	40.0	229.76	224.76	Vashon	Sch80PVC	Company	H-S Auger	2/18/1987
LC- 62b	Logistics Center	MW	Active		658012.00	1488833	263.59	264.81	78.5	6.0/2.0	73.5	78.5	191.31	186.31	Vashon	Sch80PVC	Company	H-S Auger	2/19/1987
LC- 63a	Logistics Center	MW	Active		658532.00	1489011	271.55	271.60	40.0	6.0/2.0	35.0	40.0	236.6	231.6	Vashon	Sch80PVC	Company	H-S Auger	2/27/1987
LC- 63b	Logistics Center	MW	Likely decom, lost, or destroyed		658533.00	1489020	271.1	271.04	48.0	6.0/2.0	43.0	48.0	228.04	223.04	Vashon	Sch80PVC	Company	H-S Auger	3/3/1997
LC- 64a	Logistics Center	MW	Active		652433.13	1496588.25	276.19	278.15	30.0	6.0/2.0	25.0	30.0	253.15	248.15	Vashon	Sch80PVC	Company	H-S Auger	3/4/1987
LC- 64b	Logistics Center	MW	Active		652424.50	1496580	276.63	277.89	80.5	6.0/2.0	74.0	79.0	203.89	198.89	Vashon	Sch80PVC	Company	Odex	5/1/1987
LC- 65a	Logistics Center	MW	Active		654400.00	1494216	286.44	288.96	40.0	6.0/2.0	35.0	40.0	253.96	248.96	Vashon	Sch80PVC	Company	H-S Auger	2/25/1987
LC- 65b	Logistics Center	MW	Active		654393.00	1494223	286.44	288.94	79.0	6.0/2.0	74.0	79.0	214.94	209.94	Vashon	20slotPVC	Company	H-S Auger	2/24/1987
LC- 66a	Logistics Center	MW	Active		656886.00	1492166	280.7	282.24	39.5	6.0/2.0	34.5	39.5	247.74	242.74	Vashon	Sch80PVC	Company	H-S Auger	2/17/1987
LC- 66b	Logistics Center	MW	Active		656883.00	1492172	280.54	282.22	74.4	6.0/2.0	68.0	73.0	214.22	209.22	Vashon	Sch80PVC	Company	H-S Auger	2/17/1987
LC- 66D	Logistics Center	MW	Active		656900.19	1492176	281.56	283.73	190.0	6.0	175.9	185.9	107.83	97.83	Sea Level	Sch40SS	Company	Air Rotary	10/20/1993
LC- 67D	Logistics Center	MW	Active		655739.00	1490344	264.18	264.58	159.4	6.0	148.0	152.0	116.58	112.58	Sea Level	Sch40PVC	Company	Air Rotary	7/19/1991
LC- 68D	Logistics Center	MW	Active		653737.00	1492566	280.5	281.68	257	7.0/2.0	240.6	250.8	41.08	30.88	Sea Level	Sch80PVC	Company	Air Rotary	8/13/1991
LC- 69D	Logistics Center	MW	Active		655127.81	1491984.63	282.2	283.38	205.0	2.0	193.0	203.0	90.38	80.38	Sea Level	Sch80PVC	Company	Air Rotary	11/10/1992
LC- 70D	Logistics Center	MW	Active		655182.31	1491765.25	280.7	281.56	219.0	2.0	206.4	216.2	75.16	65.36	Sea Level	PVC	Company	Air Rotary	11/9/1992
LC- 71D	Logistics Center	MW	Decommissioned		657746.19	1489354.88	269.5	271.65	233.7	6.0	221.6	230.0	50.05	41.65	Sea Level	Sch40SS	Company	Air Rotary	10/29/1993
LC- 72D	Logistics Center	MW	Active		656735.69	1488748.5	263.9	266.23	179.0	6.0	166.0	176.0	100.23	90.23	Sea Level	Sch40SS	Company	Air Rotary	11/13/1993
LC- 73a	Logistics Center	MW	Active		656103.69	1488270.38	269.91	271.72	45.0	2.0	40.0	45.0	231.72	226.72	Vashon	PVC	Company ?	Air Rotary	10/07/1995
LC- 73D	Logistics Center	MW	Active		656095.38	1488279.88	269.6	271.28	177.0	6.0	164.9	174.9	106.38	96.38	Sea Level	Sch40SS	Company	Air Rotary	11/15/1993
LC- 74D	Logistics Center	MW	Active	ACA 249	654744.00	1487615.38	274.49	276.50	226.0	2.0	210.0	220.0	66.5	56.5	Sea Level	PVC	Service	Air Rotary	11/15/1993
LC- 75D	Logistics Center	MW	Active		652853.50	1489606.75	278.6	281.18	180.3	6.0	173.0	178.0	108.18	103.18	Sea Level	PVC	Drilling Service	hammer drill,	6/30/1999
LC- 76D	Logistics Center	MW	Active		655289.38	1485410.13	279.14	282.06	210.0	6.0	198.0	208.0	84.06	74.06	Sea Level	PVC	Drilling Service	hammer drill,	7/16/1999
LC- 77D	Logistics Center	MW	Active		658817.81	1490387.75	275.42	278.15	209.5	10.0/8.0	195.0	205.0	83.15	73.15	Sea Level	Sch80PVC	Drilling Service	Air Rotary	12/8/1999
LC- 79D	Logistics Center	MW	Active		659440.00	1491720	272.79	275.74	300.0	1.7	214	278			Sea Level	PE	Longyear	Sonic	4/20/2002
LC- 80D	Logistics Center	MW	Active		658160.00	1487040	264.06	264.72	300.0	1.7	254	285			Sea Level	PE	Longyear	Sonic	4/30/2002
LC- 81D	Logistics Center	MW	Active		655000.00	1482800	267.54	270.15	300.0	1.7	214	283			Sea Level	PE	Longyear	Sonic	5/6/2002
LC- 82D	Logistics Center	MW	Active	AGR 659	653520.00	1485440	274.33	276.87	300.0	1.7	238	290			Sea Level	PE	Longyear	Sonic	5/17/2002
LC- 83D	Logistics Center	MW	Active	AGR 660	655320.00	1486720	266.11	268.91	300.0	1.7	211	295			Sea Level	PE	Longyear	Sonic	5/21/2002
LC- 84D-1	Logistics Center	MW	Active		653623.13	1483259.13	269.61	268.77	236.0	6.0/2.0	213.5	233.5	55.27	35.27	Sea Level	PVC	Drilling	Air Rotary	4/8/2004
LC- 84D-2	Logistics Center	MW	Active		653630.13	1483254.13	269.46	268.88	292.0	6.0/2.0	275.7	285.7	-6.82	-16.82	Sea Level	PVC	ProSonic	Sonic	5/26/2004
LC- 85D-1	Logistics Center	MW	Active		652682.19	1487038.13	285.29	285.15	231.0	6.0/2.0	209.0	229.0	76.15	56.15	Sea Level	PVC	Drilling	Air Rotary	4/4/2004

WELL_ID	AREA_ID	WELL_SUBTYPE	WELL_STATUS	Ecology_ID	NORTH_NAD27	EAST_NAD27	GRND_ELEV	MEAS_PT_EL	WELL_DEPTH	WELL_DIA	SCREEN_TOP	SCRN_BOTTM	SCREEN_TOP_ELEV	SCREEN_BOTTM_ELEV	AQUIFER	WELL_MATERIAL	DRILLING_CO	DRILL_MTHD	CMPLT_DATE
LC- 85D-2	Logistics Center	MW	Active		652693.19	1487041.13	284.98	284.79	286.0	6.0/2.0	242.8	252.8	41.99	31.99	Sea Level	PVC	ProSonic	Sonic	3/31/2004
LC- 86D-1	Logistics Center	MW	Active		654128.13	1481094.13	261.59	261.31	218.0	6.0/2.0	197.1	217.1	64.21	44.21	Sea Level	PVC	Drilling	Air Rotary	4/14/2004
LC- 86D-2	Logistics Center	MW	Active		654123.13	1481080.13	261.23	261.08	286.0	6.0/2.0	224.7	239.7	36.38	21.38	Sea Level	PVC	Prosonic	Sonic	4/4/2004
LC- 87D-1	Logistics Center	MW	Active		655636.13	1484141	274.76	274.54	250.0	6.0/2.0	229.9	249.9	44.64	24.64	Sea Level	PVC	Drilling	Air Rotary	4/20/2004
LC- 87D-2	Logistics Center	MW	Active		655614.13	1484132	274.95	274.79	278.0	6.0/2.0	254.4	274.4	20.39	0.39	Sea Level	PVC	ProSonic	Sonic	4/15/2004
LC- 88D-1	Logistics Center	MW	Active		653552.13	1477386.13	256.22	258.47	217.5	6.0/2.0	195.5	215.5	62.97	42.97	Sea Level	PVC	Drilling	Air Rotary	4/28/2004
LC- 88D-2	Logistics Center	MW	Active		653540.13	1477395.13	255.89	257.97	254.4	6.0/2.0	228.8	248.8	29.17	9.17	Sea Level	PVC	Prosonic	Sonic	4/19/2004
LC- 89D-1	Logistics Center	MW	Active		652148.13	1478435.13	260.96	260.71	217.5	6.0/2.0	208.0	218.0	52.71	42.71	Sea Level	PVC	Drilling	Air Rotary	4/30/2004
LC- 89D-2	Logistics Center	MW	Active		652151.13	1478408.13	260.63	260.55	253.9	6.0/2.0	231.6	251.6	28.95	8.95	Sea Level	PVC	ProSonic	Sonic	4/28/2004
LC- 90D-1	Logistics Center	MW	Active		652779.13	1481158.13	261.51	261.15	229.0	6.0/2.0	205.1	225.1	56.05	36.05	Sea Level	PVC	Drilling	Air Rotary	5/7/2004
LC- 90D-2	Logistics Center	MW	Active		652765.13	1481144.13	260.99	260.85	273.0	6.0/2.0	233.8	248.8	27.05	12.05	Sea Level	PVC	ProSonic	Sonic	5/3/2004
LC- 91D-1	Logistics Center	MW	Active		654335.13	1478799.13	252.98	256.01	232.0	6.0/2.0	205.0	225.0	51.01	31.01	Sea Level	PVC	Drilling	Air Rotary	2004
LC- 91D-2	Logistics Center	MW	Active		654357.13	1478797.13	253.55	256.62	261.25	6.0/2.0	238.0	258.0	18.62	-1.38	Sea Level	PVC	ProSonic	Sonic	2004
LC- 92D-1	Logistics Center	MW	Active		652438.50	1474875.63	250.6	253.07	213.6	6.0/2.0	192	212	61.07	41.07	Sea Level	PVC	ProSonic	Sonic	2005
LC- 92D-2	Logistics Center	MW	Active		652414.31	1474868.75	250.8	252.91	199.9	6.0/2.0	238	258	14.91	-5.09	Sea Level	PVC	ProSonic	Sonic	2005
LC- 93D-1	Logistics Center	MW	Active		652124.75	1472474.5	238.3	240.32	215.9	6.0/2.0	195	215	45.32	25.32	Sea Level	PVC	ProSonic	Sonic	2005
LC- 93D-2	Logistics Center	MW	Active		652102.50	1472467.38	239.2	240.99	255.5	6.0/2.0	232	252	8.99	-11.01	Sea Level	PVC	ProSonic	Sonic	2005
LC- 94D-1	Logistics Center	MW	Active		654119.13	1475791.38	226.5	228.47	196.9	6.0/2.0	175	195	53.47	33.47	Sea Level	PVC	ProSonic	Sonic	2005
LC- 94D-2	Logistics Center	MW	Active		654115.38	1475812.63	227.0	228.78	219.8	6.0/2.0	200	220	28.78	8.78	Sea Level	PVC	ProSonic	Sonic	2005
LC- 95D-1	Logistics Center	MW	Active		654710.38	1473340	227.7	230.07	234.9	6.0/2.0	210	230	20.07	0.07	Sea Level	PVC	ProSonic	Sonic	2005
LC- 95D-2	Logistics Center	MW	Active		654701.06	1473319	227.9	231.73	255.4	6.0/2.0	235	255	-3.27	-23.27	Sea Level	PVC	ProSonic	Sonic	2005
LC- 96D	Logistics Center	MW	Active		654519.72	1487669.34	274.86	274.64	211	2.0	190	210	84.64	64.64	Sea Level	PVC	Drilling Co.	Sonic	7/8/2007
LC- 97D	Logistics Center	MW	Active	BAT 015	655853.03	1486502.91	269.10	271.85	208	2.0	188	208	83.85	63.85	Sea Level	PVC	Drilling Co.	Sonic	7/19/2007
LC- 98D-1	Logistics Center	MW	Active		654638.35	1486187.55	278.10	277.84	219	2.0	202	222	75.84	55.84	Sea Level	PVC	Drilling Co.	Sonic	7/29/2007
LC- 98D-2	Logistics Center	MW	Active		654633.66	1487386.45	278.20	277.97	264	2.0	242	262	35.97	15.97	Sea Level	PVC	Drilling Co.	Sonic	7/23/2007
LC- 99D	Logistics Center	MW	Active	BAT 025	655297.39	1487386.45	268.30	270.73	222.5	6.0/2.0	200	220	70.73	50.73	Sea Level	PVC	Drilling Co.	Sonic	10/27/2007
LC-100	Logistics Center	MW	Decommissioned		657935.31	1490344.75	271.09	231.73	81.8	2.0	21.8	81.8	209.93	149.93	Vashon	Sch80PVC		Pneumatic	6/29/1991
LC-100D	Logistics Center	MW	Decommissioned		654990.42	1488470.51	269.41	269.00	218.5	6.0/2.0	200	220	69	49	Sea Level	PVC	Drilling Co.	Sonic	9/4/2007
LC-101	Logistics Center	MW	Decommissioned		657961.69	1490315.38	270.94	272.62	82.45	6.0/2.0	22.5	82.1	250.12	190.52	Vashon	Sch80PVC		Pneumatic	6/26/1991
LC-101D-1	Logistics Center	MW	Active		654619.44	1484438.27	271.17	273.67	203.0	6.0/2.0	181	201	92.67	72.67	Sea Level	PVC	Drilling Co.	Sonic	8/09/2007
LC-101D-2	Logistics Center	MW	Active		654625.27	1484436.26	271.00	273.50	233.0	6.0/2.0	210	230	63.5	43.5	Sea Level	PVC	Drilling Co.	Sonic	8/14/2007
LC-102	Logistics Center	MW	Decommissioned		657878.31	1490411.25	271.61	274.92	100.0	2.0	20.0	100.0	254.92	174.92	Vashon	Sch80PVC		Pneumatic	6/23/1991
LC-102D-1	Logistics Center	MW	Active		653488.30	1479497.9	259.86	261.77	236	6.0/2.0	216	236	45.77	25.77	Sea Level	PVC	Drilling Co.	Sonic	10/25/2007
LC-102D-2	Logistics Center	MW	Active		653496.60	1479505.8	259.46	261.87	275	6.0/2.0	255	275	6.87	-13.13	Sea Level	PVC	Drilling Co.	Sonic	10/17/2007
LC-103	Logistics Center	MW	Likely decom, lost, or destroyed		653687.50	1495514.75		291.62	58.22	2.0	27.27/45.47	37.27/55.47			Vashon	Sch80PVC		Pneumatic	7/15/1991
LC-103D	Logistics Center	MW	Active		655533.49	1488073.23	268.01	270.70	221.5	6.0/2.0	200	220	70.7	50.7	Sea Level	PVC	Drilling Co.	Sonic	11/8/2007
LC-104	Logistics Center	MW	Likely decom, lost, or destroyed		653659.00	1495502.13		291.18	95.0	2.0	26.7	36.7	264.48	254.48	Vashon	PVC		Air Rotary	
LC-104D	Logistics Center	MW	Active	BIE 068	0.00	0	222.82	222.43	197	2	187	197	35.43	45.43	Sea Level	PVC	Cascade	Sonic	12/11/2013
LC-105	Logistics Center	MW	Likely decom, lost, or destroyed		653611.63	1495595.13		292.86	98.0	2.0	26.5	46.5	266.36	246.36	Vashon	PVC		Air Rotary	
LC-106	Logistics Center	MW	Decommissioned		652716.50	1496403.25		281.85	100.0	2.0	93.0	103.0	188.85	178.85	Vashon	PVC	Supply	Air Rotary	7/29/1991
LC-107	Logistics Center	MW	Likely decom, lost, or destroyed		652729.88	1496388.88		283.34	99.0	2.0	11.0	96.9	272.34	186.44	Vashon	PVC	Supply	Air Rotary	7/24/1991
LC-108	Logistics Center	MW	Active		652634.38	1496486.63	278.67	281.22	99.5	2.0	8.0	96.0	273.22	185.22	Vashon	PVC	Supply	Pneumatic	7/25/1991
LC-109	Logistics Center	OW	Active		656773.94	1489773.88	268.21	267.78	48.8	2.0	29.5	49.5	238.28	218.28	Vashon	Sch80PVC	Company	H-S Auger	8/7/1992
LC-110	Logistics Center	OW	Active		656896.50	1489887	269.8	269.27	50.0	2.0	29.8	49.8	239.47	219.47	Vashon	Sch80PVC	Company	H-S Auger	8/6/1992
LC-111a	Logistics Center	OW	Active		657031.00	1490010.38	270.25	270.06	50.0	2.0	24.5	44.5	245.56	225.56	Vashon	Sch80PVC	Company	H-S Auger	8/4/1992
LC-111b	Logistics Center	MW	Active		657038.50	1490017.75	270.22	270.20	125.7	6.0	105.0	125.0	165.2	145.2	Vashon	PVC	Company	Air Rotary	4/29/1993
LC-112	Logistics Center	OW	Active		657059.94	1490130.25	271.76	271.13	50.0	2.0	29.0	49.0	242.13	222.13	Vashon	Sch80PVC	Company	H-S Auger	8/5/1992
LC-113	Logistics Center	OW	Active		657311.88	1490264.25	271.73	271.39	50.0	2.0	28.0	47.8	243.39	223.59	Vashon	PVC	Company	H-S Auger	8/5/1992
LC-114	Logistics Center	OW	Active		657420.00	1490360.25	271.01	270.50	50.0	2.0	28.0	47.6	242.5	222.9	Vashon	Sch80PVC	Service	H-S Auger	8.3/1992
LC-115	Logistics Center	OW	Active		657550.38	1490480.13	270.73	270.16	50.0	2.0	29.2	49.0	240.96	221.16	Vashon	Sch80PVC	Company	H-S Auger	8/4/1992
LC-116	Logistics Center	OW	Active		657676.19	1490598.75	271.31	270.50	53.0	2.0	29.0	48.6	241.5	221.9	Vashon	Sch80PVC	Company	H-S Auger	7/31/1992
LC-116b	Logistics Center	MW	Active		657662.69	1490585.63	270.56	271.05	125.2	6.0	107.0	127.0	164.05	144.05	Vashon	PVC	Company	Air Rotary	5/4/1993
LC-117	Logistics Center	OW	Active		657788.31	1490737.88	272.28	271.85	50.0	2.0	29.0	49.0	242.85	222.85	Vashon	Sch80PVC	Company	H-S Auger	7/30/1992
LC-118	Logistics Center	OW	Active		657899.50	1490871.75	273.73	273.31	50.0	2.0	30.0	49.6	243.31	223.71	Vashon	Sch80PVC	Company	H-S Auger	7/30/1992
LC-119	Logistics Center	OW	Active		658011.75	1491007.75	272.93	272.46	50.0	2.0	29.0	48.6	243.46	223.86	Vashon	Sch80PVC	Company	H-S Auger	7/29/1992
LC-120	Logistics Center	OW	Active		658122.88	1491140.25	270.06	269.50	60.0	2.0	41.0		228.5		Vashon	Sch80PVC	Company	H-S Auger	7/29/1992
LC-121	Logistics Center	OW	Active		658241.63	1491284.63	269.4	268.97	40.0	2.0	20.0	40.0	248.97	228.97	Vashon	Sch80PVC	Company	H-S Auger	7/16/1992
LC-122	Logistics Center	OW	Likely lost, decom or destroyed		658347.19	1491409.63	269.51	269.32	49.5	2.0	19.5	49.5	249.82	219.82	Vashon	Sch80PVC	Company	H-S Auger	7/17/1992
LC-122b	Logistics Center	MW	Active		658353.50	1491418.13	269.91	269.91	126.0	6.0	112.0	132.0	157.91	137.91	Vashon	PVC		Air Rotary	
LC-123	Logistics Center	OW	Active		658459.69	1491546.75	275.62	274.91	50.0	2.0	30.0	50.0	244.91	224.91	Vashon	Sch80PVC	Company	H-S Auger	7/20/1992
LC-124	Logistics Center	OW	Active		658571.00	1491679.25	275.34	274.88	48	2.0	21.0	51.0	253.88	223.88	Vashon	Sch80PVC	Company	H-S Auger	7/17/1992
LC-125	Logistics Center	MW	Decommissioned		657195.94	1489465.88	269.58	271.57	50.0	6.0	35.0	45.0	236.57	226.57	Vashon	Sch80PVC	Company	H-S Auger	8/18/1992
LC-126	Logistics Center	MW	Active		657844.25	1489440.75	270.06	271.94	178.5	6.0	159.75	179.75	113.19	92.19	Sea Level	Sch80PVC	Company	Air Rotary	12/10/1992
LC-127	Logistics Center	MW	Active		658361.31	1489919.63	264.63	266.63	50.0	6.0	40.0	50.0	226.63	216.63	Vashon	Sch80PVC	Company	H-S Auger	9/17/1992
LC-128	Logistics Center	MW	Active		658841.19	1490373.75	275.82	277.92	158.7	6.0	134.0	154.0	143.92	123.92	Vashon	Sch80PVC	Company	Air Rotary	12/10/1992
LC-129	Logistics Center	MW	Active		659268.38	1490763	277.94	279.68	50.0	6.0	40.0	50.0	239.68	229.68	Vashon	Sch80PVC	Company	H-S Auger	9/16/1992
LC-130	Logistics Center	MW	Active		658760.13	1491469	276.49	278.45	50.0	6.0	40.0	59.75	238.45	218.7	Vashon	Sch80PVC	Company	H-S Auger	9/21/1992
LC-131	Logistics Center	MW	Active		656418.31	1490517.75	273.43	275.91	50.0	6.0	40.0	50.0	235.91	225.91	Vashon	Sch80PVC	Company	H-S Auger	8/14/1992
LC-132	Logistics Center	MW	Active		657023.69	1491411	279.98	282.32	52.1	6.0	40.0	50.0	242.32	232.32	Vashon	Sch80PVC	Company	H-S Auger	9/22/1992
LC-133	Logistics Center	MW	Decommissioned		652243.00	1496450.88	280.07	281.77	38.5	6.0	18.7	38.3	263.07	243.47	Vashon	Sch80PVC	Company	H-S Auger	8/13/1992
LC-134	Logistics Center	MW	Decommissioned		652374.06	1496669	276.12	277.74	28.0	6.0	16.5	27.5	261.24	250.24	Vashon	Sch80PVC	Company	H-S Auger	8/21/1992

Appendix A - Monitoring Well Inventory - 04 June 2014
Joint Base Lewis - McChord, Washington 98433

WELL_ID	AREA_ID	WELL_SUBTYPE	WELL_STATUS	Ecology_ID	NORTH_NAD27	EAST_NAD27	GRND_ELEV	MEAS_PT_EL	WELL_DEPTH	WELL_DIA	SCREEN_TOP	SCRN_BOTTM	SCREEN_TOP_ELEV	SCREEN_BOTTM_ELEV	AQUIFER	WELL_MATERIAL	DRILLING_CO	DRILL_MTHD	CMPLT_DATE
LC-135	Logistics Center	MW	Active		652622.19	1496727.38	280.37	282.33	37.5	6.0	24.0	34.0	258.33	248.33	Vashon	Sch80PVC	Company	H-S Auger	8/26/1992
LC-136a	Logistics Center	MW	Decommissioned		652476.19	1496351.88	277.75	279.62	43.0	6.0	31.0	41.0	248.62	238.62	Vashon	Sch80PVC	Company	H-S Auger	8/29/1992
LC-136b	Logistics Center	MW	Decommissioned		652485.88	1496354.88	277.6	279.20	75.0	6.0	55.0	75.0	224.2	204.2	Vashon	Sch80PVC	Company	H-S Auger	9/14/1992
LC-137a	Logistics Center	MW	Active		652684.69	1496167.88	289.33	291.50	45.0	6.0	35.0	45.0	256.5	246.5	Vashon	Sch80PVC	Company	H-S Auger	8/20/1992
LC-137b	Logistics Center	MW	Active		652691.63	1496179.63	289.08	291.26	53	6.0	40.0	60.0	251.26	231.26	Vashon	Sch80PVC	Company	Air Rotary	12/10/1992
LC-137c	Logistics Center	MW	Active		652698.56	1496191	289.21	291.50	125.0	6.0	105.0	125.0	186.5	166.5	Vashon	Sch80PVC	Company	Air Rotary	12/10/1992
LC-138	Logistics Center	OW	Active		652383.88	1496553	276.96	279.48	32.0	2.0	11.0	31.0	268.48	248.48	Vashon	Sch80PVC	Company	H-S Auger	8/24/1992
LC-139	Logistics Center	OW	Active		652480.38	1496623.38	276.45	278.24	35.0	2.0	15.0	34.6	263.24	243.64	Vashon	Sch80PVC	Company	H-S Auger	8/12/1992
LC-140	Logistics Center	OW	Decommissioned		653361.25	1494816.88	288.89	290.40	45.0	2.0	25.0	44.5	265.4	245.9	Vashon	Sch80PVC	Company	H-S Auger	8/10/1992
LC-141	Logistics Center	OW	Active		653492.56	1494932.63	287.83	289.80	50.0	2.0	28.0	47.5	261.8	242.3	Vashon	Sch80PVC	Company	H-S Auger	8/7/1992
LC-142	Logistics Center	OW	Likely decom, lost, or destroyed		653623.75	1495048	287.25	286.89	50.0	6.0/2.0	27.0	46.5	259.89	240.89	Vashon	Sch80PVC	Company	H-S Auger	8/11/1992
LC-143	Logistics Center	MW	Active		653700.31	1494653.75	286.24	288.29	50.0	8.0	40.0	49.5	248.29	238.79	Vashon	Sch80PVC	Company	H-S Auger	9/8/1992
LC-144a	Logistics Center	MW	Active		653031.31	1495392.5	290.02	291.96	55.0	8.0	41.0	51.0	250.96	240.96	Vashon	Sch80PVC	Company	H-S Auger	8/31/1992
LC-144b	Logistics Center	MW	Likely decom, lost, or destroyed		653044.06	1495404.25	290.44	292.95	85.0	8.0	64.5	84.5	228.45	208.45	Vashon	Sch80PVC	Company	Air Rotary	11/25/1992
LC-144D	Logistics Center	MW	Active						80.0	8.0	60.0	80.0			Vashon	Sch80PVC	Company	Air Rotary	10/27/1992
LC-145	Logistics Center	OW	Active		651831.25	1497306.75	280.12	281.79	50.0	6.0/2.0	29.0	48.6	252.79	233.19	Vashon	Sch80PVC	Company	H-S Auger	7/24/1992
LC-146	Logistics Center	OW	Decommissioned		651898.31	1497408.25	277.62	279.64	50.0	6.0/2.0	29.5	49.1	250.14	230.54	Vashon	Sch80PVC	Company	H-S Auger	7/27/1992
LC-147	Logistics Center	OW	Active		651963.06	1497495.63	278.23	279.69	50.0	6.0/2.0	29.0	49.0	250.69	230.69	Vashon	Sch80PVC	Company	H-S Auger	7/27/1992
LC-148	Logistics Center	OW	Active		652045.63	1497478.5	279.37	281.83	50.0	6.0/2.0	29.0	49.0	252.83	232.83	Vashon	Sch80PVC	Company	H-S Auger	7/28/1992
LC-149a	Logistics Center	MW	Active		651050.94	1498330.38	305.97	307.74	40.0	6.0/2.0	30.0	40.0	277.74	267.74	Vashon	Sch80PVC	Company	H-S Auger	9/9/1992
LC-149b	Logistics Center	MW	Decommissioned						80.0						Vashon	Sch80PVC	Company	Air Rotary	12/15/1992
LC-149c	Logistics Center	MW	Active		651059.19	1498352.88	306.12	307.96	50.0	8.0	38.0	47.93	269.96	260.03	Vashon	Sch80PVC	Company	H-S Auger	11/6/1992
LC-149D	Logistics Center	MW	Active		651072.25	1498334.38	306.0	308.29	80.0	8.0	60.0	80.0	248.29	228.29	Vashon	Sch80PVC	Company	Air Rotary	12/22/1992
LC-150	Logistics Center	OW	Decommissioned		652559.06	1496626.13	279.51	280.79	37.0	6.0	16.0	36.0	264.79	244.79	Vashon	Sch80PVC	Company	H-S Auger	8/24/1992
LC-151	Logistics Center	OW	Decommissioned		653205.63	1495110.88	287.87	289.44	68.0	6.0/2.0	43.0	63.0	246.44	226.44	Vashon	Sch80PVC	Company	H-S Auger	9/3/1992
LC-152	Logistics Center	OW	Decommissioned		653428.88	1494869.75	287.17	289.40	77.0	16.0/12.0	55.0	75.0	234.4	214.4	Vashon	Sch80PVC	Company	Air Rotary	11/25/1992
LC-153	Logistics Center	OW	Active		652513.75	1496647.38	279.29	280.83	38.0	16.0/12.0	27.5	37.5	253.33	243.33	Vashon	Sch80PVC	Company	Air Rotary	9/14/1992
LC-154	Logistics Center	OW	Decommissioned		653154.38	1495062	288.78	290.54	50.0	6.0/2.0	30.0	49.5	260.54	241.04	Vashon	Sch80PVC	Company	H-S Auger	9/23/1992
LC-155	Logistics Center	OW	Active		652400.00	1496509.75	277.1	278.98	48.0	6.0/2.0	28.0	48.0	250.98	230.98	Vashon	Sch80PVC	Company	H-S Auger	9/30/1992
LC-156	Logistics Center	MW	Decommissioned		652357.06	1496547.13	277.48	278.76	35.0	8.0	25.0	35.0	253.76	243.76	Vashon	Sch80PVC	Company	Air Rotary	11/3/1992
LC-157	Logistics Center	OW	Decommissioned		653307.63	1495207	288.25	290.08	47.5	6.0/2.0	27.88	47.48	262.2	242.6	Vashon	Sch80PVC	Company	H-S Auger	11/9/1992
LC-158	Logistics Center	MW	Decommissioned		652492.63	1496560.75	276.28	278.10	33.0	8.0	21.0	31.0	257.1	247.1	Vashon	Sch80PVC	Company	H-S Auger	11/5/1992
LC-159	Logistics Center	MW	Active		652493.88	1496260.63	277.42	280.03	87.5	8.0	65.0	85.0	215.03	195.03	Vashon	PVC		Air Rotary	
LC-160	Logistics Center	MW	Active		652434.50	1496210.25	276.78	279.74	88.0	8.0	65.0	85.0	214.74	194.74	Vashon	PVC	Company	Air Rotary	4/1/1993
LC-161	Logistics Center	MW	Decommissioned		652298.69	1497065	280.36	282.62	34.0	8.0	23.5	33.5	259.12	249.12	Vashon	Sch40PVC		Rotary	7/2/1993
LC-162	Logistics Center	MW	Decommissioned		652337.63	1496881.75	277.32	279.45	33.0	8.0	22.4	32.4	257.05	247.05	Vashon	Sch40PVC		Rotary	7/3/1993
LC-163	Logistics Center	MW	Decommissioned		656562.88	1490104.25	272.1	273.68	44.0	6.0/2.0	38.0	43.0	235.68	230.68	Vashon	PVC			
LC-164	Logistics Center	MW	Active						42.5	6.0	31.0	41.0			Vashon	PVC	Inc.	Air Rotary	6/28/1994
LC-165	Logistics Center	MW	Active		659713.00	1491769.63	272.41	273.52	45.0	6.0/2.0	40.0	45.0	233.52	228.52	Vashon	PVC			
LC-166D	Logistics Center	MW	Active		657255.31	1481894.75	241.88	243.94	188.0	8.0	168.0	178.0	75.94	65.94	Sea Level	PVC			
LC-167	Logistics Center	MW	Active		658884.81	1131247.88	280.84	281.79	52.0	6.0/2.0	40.0	50.0	241.79	231.79	Vashon	PVC			
LC-168	Logistics Center	MW	Active		658023.50	1131959.25	269.47	271.71	37.0	6.0/2.0	26.6	36.6	245.11	235.11	Vashon	PVC			
LC-169	Logistics Center	MW	Active		651489.00	1496144	280.9	281.16	20.0	0.75	14.0	19.0	267.16	262.16	Vashon	Sch40PVC, SS		push	8/20/2001
LC-170	Logistics Center	MW	Active		650968.00	1495423	281.14	281.12	21.0	0.75	15.0	20.0	266.12	261.12	Vashon	Sch40PVC, SS		push	8/21/2001
LC-171	Logistics Center	MW	Decommissioned		650470.00	1494813	277.01	280.00	23.5	0.75	18.0	23.0	262	257	Vashon	Sch40PVC, SS		push	8/21/2001
LC-172	Logistics Center	MW	Decommissioned		651139.00	1496538	284.19	287.17	24.0	0.75	18.0	23.0	269.17	264.17	Vashon	Sch40PVC, SS		push	8/22/2001
LC-173	Logistics Center	MW	Active		651370.00	1496863	280.78	283.83	25.0	0.75	19.0	24.0	264.83	259.83	Vashon	Sch40PVC, SS		push	8/22/2001
LC-174	Logistics Center	MW	Active		651589.00	1497298	280.73	283.52	26.0	0.75	20.0	25.0	263.52	258.52	Vashon	Sch40PVC, SS		push	8/22/2001
LC-175	Logistics Center	MW	Active		651871.00	1496567	281.19	284.18	21.0	0.75	15.0	20.0	269.18	264.18	Vashon	Sch40PVC, SS		push	8/24/2001
LC-176	Logistics Center	MW	Decommissioned		652465.00	1497762	282.1	285.05	20.0	0.75	14.0	19.0	271.05	266.05	Vashon	Sch40PVC, SS		push	8/24/2001
LC-177	Logistics Center	MW	Active		652196.00	1498032	281.56	284.53	19.0	0.75	13.0	18.0	271.53	266.53	Vashon	Sch40PVC, SS		push	8/25/2001
LC-178	Logistics Center	MW	Active		651168.00	1492544	278.65	278.52	20.4	0.75	15.0	20.0	263.52	258.52	Vashon	Sch40PVC, SS		push	9/11/2001
LC-179	Logistics Center	MW	Active		650191.00	1495879	273.67	276.66	24.0	0.75	18.0	23.0	258.66	253.66	Vashon	Sch40PVC, SS		push	8/28/2001
LC-180	Logistics Center	MW	Active		649906.00	1493708	270.36	273.24	11.0	0.75	5.5	10.5	267.74	262.74	Vashon	Sch40PVC, SS		push	9/5/2001
LC-181	Logistics Center	MW	Decommissioned		650422.00	1495500	278.11	281.27	19.0	0.75	13.0	18.0	268.27	263.27	Vashon	Sch40PVC, SS		push	9/5/2001
LC-182	Logistics Center	MW	Active		650345.00	1493986	269.47	272.44	25.0	0.75	19.0	24.0	253.44	248.44	Vashon	Sch40PVC, SS		push	9/6/2001
LC-183	Logistics Center	MW	Active		650621.00	1497125	303.67	306.63	38.0	0.75	32.6	37.6	274.03	269.03	Vashon	Sch40PVC, SS		push	9/8/2001
LC-184	Logistics Center	MW	Active		652170.00	1496788	277.93	280.82	94.0	1.7	52, 64, 72, 88				Vashon	PE		Sonic	11/5/2001
LC-185	Logistics Center	MW	Decommissioned		652465.00	1496386	276.9	279.57	105.0	1.7	56, 70, 78, 100				Vahson	PE		Sonic	11/4/2001
LC-186	Logistics Center	MW	Active		651940.00	1497330	277.52	280.22	30.0	2.0	20.0	30.0	260.22	250.22	Vashon	PVC		Sonic	11/6/2001
LC-187	Logistics Center	MW	Active		652219.00	1497054	279.03	281.42	110.0	1.7	67, 75, 85, 95				Vashon	PE		Sonic	11/13/2001
LC-188	Logistics Center	MW	Active		651969.00	1497029	277.7	280.49	109.0	1.7	64, 72, 85, 98				Vashon	PE		Sonic	11/17/2001
LC-189	Logistics Center	MW	Active		651916.00	1497285	278.14	280.81	107.0	1.7	45, 67, 78, 98				Vashon	PE		Sonic	11/30/2001
LC-190	Logistics Center	MW	Active		652009.00	1496717	279.42	282.28	110.0	1.7	23,34, 50,63,	83, 96			Vashon	PE		Sonic	3/20/2002
LC-191	Logistics Center	MW	Active		651816.00	1496728	282.62	285.19	117.0	1.7	25.5,34.5, 50.5	65.5, 80.5, 97.5			Vashon	PE		Sonic	3/25/2002
LC-192	Logistics Center	MW	Active		651751.00	1496963	283.13	285.66	112.0	1.7	26.2, 35.2, 51.2	103.2			Vashon	PE		Sonic	3/24/2002
LC-193	Logistics Center	MW	Active		651730.00	1497126	283.79	286.77	117.0	1.7	25, 36, 54, 70,	82, 106			Lower	PE		Sonic	3/28/2002
LC-194	Logistics Center	MW	Active		652401.00	1496204	276.73	279.23	117.0	1.7	21, 34, 53	blank, 71, 98			Vashon	PE		Sonic	3/28/2002
LC-195	Logistics Center	MW	Active		652594.00	1496333	278.23	280.89	117.0	1.7	22, 35, 55, 70,	83, 105			Vashon	PE		Sonic	4/3/2002
LC-196	Logistics Center	MW	Active		652622.00	1496620	279.25	282.56	112.0	1.7	23, 34, 53, 67,	80, 98			Vashon	PE		Sonic	4/4/2002
LC-201	Logistics Center	MW	Active		651831.69	1497241.25		281.01	34.0	6.0	8.5	33.5	272.51	247.51	Vashon	SS		Sonic	8/23/2003

WELL_ID	AREA_ID	WELL_SUBTYPE	WELL_STATUS	Ecology_ID	NORTH_NAD27	EAST_NAD27	GRND_ELEV	MEAS_PT_EL	WELL_DEPTH	WELL_DIA	SCREEN_TOP	SCRN_BOTTM	SCREEN_TOP_ELEV	SCREEN_BOTTM_ELEV	AQUIFER	WELL_MATERIAL	DRILLING_CO	DRILL_MTHD	CMPLT_DATE
LC-202	Logistics Center	MW	Active		658851.31	1497240		278.92	34.0	6.0	8.5	33.5	270.42	245.42	Vashon	SS		Sonic	8/23/2003
LC-203	Logistics Center	MW	Active		651872.19	1497240.25		280.09	34.0	6.0	8.5	33.5	271.59	246.59	Vashon	SS		Sonic	8/24/2003
LC-204	Logistics Center	MW	Active		651891.00	1497240.63		379.41	34.0	6.0	8.5	33.5	370.91	345.91	Vashon	SS		Sonic	8/24/2003
LC-205	Logistics Center	MW	Active		651910.00	1497239.75		278.66	34.0	6.0	8.5	33.5	270.16	245.16	Vashon	SS		Sonic	8/24/2003
LC-206	Logistics Center	MW	Active		651931.13	1497240.38		278.62	34.0	6.0	8.5	33.5	270.12	245.12	Vashon	SS		Sonic	8/24/2003
LC-207	Logistics Center	MW	Active		651952.19	1497239.13		278.48	34.0	6.0	8.5	33.5	269.98	244.98	Vashon	SS		Sonic	8/25/2003
LC-208	Logistics Center	MW	Active		651882.31	1497234.13	280.20	279.98	64.0	6.0/2.0	50.0	60.0	229.98	219.98	Vashon	SS		Air Rotary	10/10/2003
LC-209	Logistics Center	MW	Active		651942.38	1497234.25	278.95	278.65	58.5	6.0/2.0	43.5	58.5	235.15	220.15	Vashon			Air Rotary	
LC-210	Logistics Center	MW	Active		651911.63	1497233.75	280.39	280.11	60	6.0/2.0	45.0	60.0	235.11	220.11	Vashon			Air Rotary	
LC-211	Logistics Center	MW	Active		651969.69	1497230.13	278.29	278.59	33.3	2.0	8.0	33.0	270.56	245.59	Vashon	SS		Air Rotary	10/16/2003
LC-212	Logistics Center	MW	Active		652007.50	1497230.25	278.12	279.11	33.3	2.0	8.0	33.0	271.11	246.11	Vashon	SS		Air Rotary	10/16/2003
LC-213	Logistics Center	MW	Active		652026.88	1497231.5	277.95	277.35	37.8	2.0	8.0	33.0	269.35	244.35	Vashon	SS		Air Rotary	10/17/2003
LC-214	Logistics Center	MW	Active		652020.38	1497233.75	278.02	277.70	60	6.0/2.0	40.0	60.0	237.7	217.7	Vashon			Air Rotary	
LC-215	Logistics Center	MW	Active		651836.50	1497234.25	281.69	281.43	66	6.0/2.0	45.3	65.3	236.16	216.13	Vashon			Air Rotary	
LC-216	Logistics Center	MW	Active		657508.13	1491053.25	277.96	277.57	124.0	6.0/2.0	104.5	124.5	173.07	153.07	Vashon	PVC		Air Rotary	5/10/2004
LC-217	Logistics Center	MW	Active		655164.13	1490022.75	272.23	271.94	108.2	6.0/2.0	89.1	109.1	182.84	162.84	Vashon	PVC		Air Rotary	5/12/2004
LC-218	Logistics Center	MW	Active		651148.63	1493656.5	276.51	276.34	19.9	6.0/2.0	10.2	20.2	266.14	256.14	Vashon	PVC		Air Rotary	5/13/2004
LC-219	Logistics Center	MW	Active		658472.63	1489299.5	272.80	275.23	143.0	6.0/2.0	121.0	141.0	154.23	234.23	Vashon	PVC		Air Rotary	5/17/2004
LC-220	Logistics Center	MW	Active		651980.38	1497007.38	278.37	280.06	65	6.0/2.0	53	63	227.06	217.06	Vashon	SS	Drilling Co.	Air Rotary	12/21/2004
LC-221	Logistics Center	MW	Active		651989.25	1496969.25	277.67	279.50	65	6.0/2.0	48	58	231.5	221.5	Vashon	SS	Drilling Co.	Air Rotary	12/22/2004
LC-222	Logistics Center	MW	Active		651146.80	1493305.2	279.87	279.43	20	2.0	9	19	270.43	260.43	Vashon	PVC	Drilling	Direct Push	05/03/2007
LC-223	Logistics Center	MW	Active		651081.90	1493033.4	280.81	279.6	20	2.0	10	20	269.6	259.6	Vashon	PVC	Drilling	Direct Push	05/03/2007
LC-224	Logistics Center	MW	Active		650341.78	1493282.75	277.23	276.63	20	2.0	9	19	267.63	257.63	Vashon	PVC	Drilling	Direct Push	05/03/2007
LC-225	Logistics Center	MW	Active		659178.22	1488792.97	275.31	274.79	146	6.0/2.0	126	146	148.79	128.79	Vashon	PVC	Drilling, Inc.	Air Rotary	9/24/2007
LC-226	Logistics Center	MW	Active		658485.89	1488328.93	268.19	267.57	147	6.0/2.0	126.6	146.6	140.97	120.97	Vashon	PVC	Drilling, Inc.	Air Rotary	9/28/2007
LCX-05	Logistics Center	Test Well	Decommissioned		657942.38	1490338.25	270.87		85.0	16.0	50.7	81.1			Vashon	SS	Drilling, Inc.	Churn/AirRota	7/15/1991
LCX-18	Logistics Center	Test Well	Active		653680.63	1495521.75	288.94		73.2	12.0	39.3	49.4			Vashon	SS	Drilling, Inc.	(Cable/AirRot	7/13/1991
Leschi Town	Leschi Town	Non-Potable	Active				314.0		229.0	6.0	210.0/220.0	220.0/225.0			Sea Level		Drilling, Inc.	Rotary	6/11/2003
LF1-PNL1	Landfill 1	MW	Active		640371.00	1480403		308.66	48.0	6.0	33.1	48.4	204.72	189.42	Vashon	PVC	Northwest Lab	H-S Auger	8/19/1984
LF1-PNL2	Landfill 1	MW	Active		638285.00	1479185		298.37	32.5	6.0	17.0	32.0	223.48	208.48	Vashon	PVC		H-S Auger	8/19/1988
LF1-PNL3	Landfill 1	MW	Active		638634.00	1478888		307.74	40.5	6.0	24.0	39.0	222.59	207.59	Vashon	PVC		H-S Auger	8/25/1988
LF1-PNL4	Landfill 1	MW	Active		640612.00	1481457		305.00	44.0	6.0	29.0	44.0	206.72	191.72	Vashon	PVC		H-S Auger	9/1/1988
LF4-01	Landfill 4	MW	Active		656697.00	1476795	225.4	225.37	39.9	4.0	22.0	28.0	203.37	197.37	Vashon	PVC		Rotary	4/28/1981
LF4-02	Landfill 4	MW	Active		656697.00	1475243	218.27	218.27	36.0	4.0	20.0	36.0	198.27	182.27	Vashon	PVC		Rotary	4/29/1981
LF4-03	Landfill 4	MW	Decommissioned		657932.00	1476792	238.7	238.79	60.0	4.0	42.0	58.0	196.7	180.7	Vashon	PVC		Rotary	4/30/1981
LF4-04	Landfill 4	MW	Active		658202.00	1478294	235.41	235.41	47.8	4.0	39.0	55.00	196.41	180.41	Vashon	PVC		Rotary	5/1/1981
LF4-11	Landfill 4	MW	Active		657397.00	1476814	218.3	234.05	35.8	4.0	30.0	46.0	204.05	188.05	Vashon	PVC		Rotary	5/12/1981
LF4-GP-11	Landfill 4	Gas Probe	Active												None				
LF4-GP-15	Landfill 4	Gas Probe	Active												None				
LF4-GP-16	Landfill 4	Gas Probe	Active												None				
LF4-GP-17	Landfill 4	Gas Probe	Active												None				
LF4-GP-18	Landfill 4	Gas Probe	Active												None				
LF4-GP-19	Landfill 4	Gas Probe	Active												None				
LF4-GP-2	Landfill 4	Gas Probe	Active												None				
LF4-GP-20	Landfill 4	Gas Probe	Active												None				
LF4-GP-3	Landfill 4	Gas Probe	Active												None				
LF4-GP-4	Landfill 4	Gas Probe	Active												None				
LF4-GP-8	Landfill 4	Gas Probe	Active												None				
LF4-GP-9	Landfill 4	Gas Probe	Active												None				
LF4-MW-01a	Landfill 4	MW	Active		655970.00	1479280	255.31	256.85	55.0		36.7	51.7	220.15	205.15	Vashon	PVC		H-S Auger	
LF4-MW-01b	Landfill 4	MW	Active		655970.00	1479280	255.59	257.06	166.5		118.5	123.5	138.56	133.56	Vashon	PVC		Air Rotary	
LF4-MW-02a	Landfill 4	MW	Active		657810.00	1479380	228.40	229.95	30.0		10.5	25.5	219.45	204.45	Vashon	PVC		H-S Auger	
LF4-MW-02b	Landfill 4	MW	Active		657810.00	1479380	227.39	229.32	126.0		104.7	109.7	124.62	119.62	Vashon	PVC		Air Rotary	
LF4-MW-02c	Landfill 4	MW	Active		657810.00	1479380	227.20	229.14	211.0		192.0	197.7	37.14	31.44	Sea Level	PVC			
LF4-MW-03a	Landfill 4	MW	Active		656690.00	1478420	241.44	243.13	45.0		26.0	41.1	217.13	202.03	Vashon	PVC		H-S Auger	
LF4-MW-03b	Landfill 4	MW	Active		656690.00	1478420	241.04	242.85	99.8		93.0	98.0	149.85	144.85	Vashon	PVC		22-W	
LF4-MW-04	Landfill 4	MW	Active		656710.00	1477920	245.83	247.94	231.0		219.0	224.0	28.94	23.94	Sea Level	PVC		Air Rotary	
LF4-MW-05	Landfill 4	MW	Active		656950.00	1476910	217.97	219.43	21.1		9.0	19.0	210.43	200.43	Vashon	PVC		H-S Auger	
LF4-MW-06	Landfill 4	MW	Active		656480.00	1477450	223.17	225.15	25.0		9.5	19.5	215.65	205.65	Vashon	PVC		H-S Auger	
LF4-MW-07	Landfill 4	MW	Active		656450.00	1476250	224.31	226.23	25.0		10.0	20.0	216.23	206.23	Vashon	PVC		H-S Auger	
LF4-MW-07b	Landfill 4	MW	Active		655997.90	1476007.8	255.1		156.0		146.5	148.5			Vashon	PVC		Air Rotary	2/17/1992
LF4-MW-07PZ	Landfill 4	MW	Active		655997.88	1476007.75	223.51	225.50	77.0		69.3	74.3	156.2	151.2	Vashon	PVC		Air Rotary	
LF4-MW-08a	Landfill 4	MW	Active		657380.00	1477810	240.90	242.41	43.3		27.0	42.0	215.41	200.41	Vashon	PVC		H-S Auger	
LF4-MW-08b	Landfill 4	MW	Active		657399.00	1476838	240.58	242.16	103		98.0	103.0	144.16	139.16	Vashon	PVC		22-W	
LF4-MW-08PZ	Landfill 4	MW	Active		657399.00	1476838	240.2		160.0		98.0	103.0			Vashon	PVC		22-W	
LF4-MW-09a	Landfill 4	MW	Active		657426.00	1476828	231.97	233.95	125		120.0	125.0	113.95	108.95	Vashon	PVC		Air Rotary	
LF4-MW-09b	Landfill 4	MW	Active		657710.00	1476550	231.63	223.83	281.0		208.0	213.0	15.83	10.83	Sea Level	PVC		22-W	
LF4-MW-10	Landfill 4	MW	Active		657633.13	1477332.64	239.49	240.93	38.6		22.0	37.0	218.93	203.93	Vashon	PVC		H-S Auger	
LF4-MW-11	Landfill 4	MW	Other		658680.00	1477480	242.98	244.32	43.0		26.8	41.8	217.52	202.52	Vashon	PVC		H-S Auger	
LF4-MW-12a	Landfill 4	MW	Active		658214.00	1477015	236.3	238.25	44.0		32.0	42.0	206.25	196.25	Vashon	PVC		H-S Auger	
LF4-MW-12b	Landfill 4	MW	Active		658234.00	1477005	236.49	238.28	208.0	2.0	188.0	193.0	50.28	45.28	Sea Level	PVC		22-W	

WELL_ID	AREA_ID	WELL_SUBTYPE	WELL_STATUS	Ecology_ID	NORTH_NAD27	EAST_NAD27	GRND_ELEV	MEAS_PT_EL	WELL_DEPTH	WELL_DIA	SCREEN_TOP	SCRN_BOTTM	SCREEN_TOP_ELEV	SCREEN_BOTTM_ELEV	AQUIFER	WELL_MATERIAL	DRILLING_CO	DRILL_MTHD	CMPLT_DATE
LF4-MW-13a	Landfill 4	MW	Active		658067.00	1476738	236.4	238.89	42.7		20.0	35.0	218.89	203.89	Vashon	PVC		H-S Auger	
LF4-MW-13b	Landfill 4	MW	Active		658054.00	1476735	236.5	238.21	132		127.8	132.0	110.41	106.21	Vashon	PVC		22-W	
LF4-MW-14	Landfill 4	MW	Active		658180.00	1476450	235.12	236.53	200	2.0	182.0	187.0	54.53	49.53	Sea Level	PVC		22-W	
LF4-MW-15a	Landfill 4	MW	Active		657673.00	1476222	235.42	237.31	35.7		17.8	32.8	219.51	204.51	Vashon	PVC		H-S Auger	
LF4-MW-15b	Landfill 4	MW	Active		657639.00	1476212	235.55	237.62	139.4		132.0	137.0	105.62	100.62	Vashon	PVC		H-S Auger	2/7/1992
LF4-MW-15PZ	Landfill 4	MW	Active		657639.00	1476212	235.55		163.5		144.5	147.5			Vashon	PVC			2/7/1992
LF4-MW-16a	Landfill 4	MW	Active		657375.60	1475399.43	232.07	233.58	32.1		15.5	30.5	218.08	203.08	Vashon	PVC		H-S Auger	
LF4-MW-16b	Landfill 4	MW	Active		657237.86	1475179.64	232.62	234.54	267		261.0	266.5	-26.46	-31.96	Sea Level	PVC		Air Rotary	
LF4-MW-1PZ	Landfill 4	MW	Active		655691.00	1478996									Vashon	PVC			
LF4-PNL1	Landfill 4	MW	Active		657439.00	1476136	237.82	237.82	47.0		22.0	37.0	215.82	200.82	Vashon	PVC	Northwest Lab		8/9/1988
LF4-PNL2	Landfill 4	MW	Active		658639.00	1477139	240.5	240.48	39.7		23.0	38.0	217.48	202.48	Vashon	PVC	Northwest Lab	H-S Auger	8/9/1988
LF4-PNL3	Landfill 4	MW	Active		656576.00	1477955	246.6	246.59	47.4		28.0	43.0	218.59	203.59	Vashon	PVC	Northwest Lab	H-S Auger	8/9/1988
LF4-PNL4	Landfill 4	MW	Active				235.7	235.72	35.1		23.5	33.5	212.22	202.22	Vashon	PVC		H-S Auger	10/5/1988
LF4-PNL5	Landfill 4	MW	Active		657661.00	1475355	237.5	237.46	35.7	6.0	20.5	35.5	216.96	201.96	Vashon	PVC	Northwest Lab	H-S Auger	10/14/1988
LF4-PNL6	Landfill 4	MW	Decommissioned		656714.00	1478619	232.2		30.1		15.0	30.0	217.2	202.2	Vashon	PVC	Northwest Lab	H-S Auger	10/21/1988
LF9-MW-1	Landfill 9	MW	Decommissioned		0.00	0		264.56							Vashon				
LF9-MW-2	Landfill 9	MW	Decommissioned		0.00	0		273.15							Vashon				
LF9-MW-3	Landfill 9	MW	Decommissioned		0.00	0		283.88							Vashon				
LF9-MW-4	Landfill 9	MW	Decommissioned		0.00	0		275.82											
LR-1	Logistics Center	arge	Active		651808.25	1497288.5	281.87	284.28	110	12.0	78.0	108.0	206.28	176.28	Vashon	SS	Company	Air Rotary	9/11/1992
LR-2	Logistics Center	arge	Active		651987.69	1497528.38	278.58	280.63	100	12.0	38.0	98.0	242.63	182.63	Vashon	SS	Company	Air Rotary	8/26/1992
LR-3	Logistics Center	arge	Active		651196.70	1496657.4	284.64	286.94	119	12.0	49.1	99.25	237.84	187.69	Vashon	SS	Drilling	Air Rotary	1/14/2004
LT- 1	McChord	MW	Decommissioned		665745.00	1504209	276.9	276.48	18	2	8	18	268.48	258.48	Vashon		Drilling	H-S Auger	8/18/1993
LT- 2	McChord	MW	Decommissioned		670681.00	1509089	284.6	286.55	21.6	2	11.6	21.6	274.95	264.95	Vashon		Drilling	H-S Auger	8/17/1993
LT- 3	McChord	MW	Active		670734.00	1506793	276.4	275.89	31	2	11	31	264.89	244.89	Vashon		Drilling	H-S Auger	8/17/1993
LT- 4	McChord	MW	Active		670852.00	1505537	281.6	283.25	26.3	2	16.3	26.3	266.95	256.95	Vashon		Drilling	H-S Auger	8/17/1993
LT- 5	McChord	MW	Active		670140.00	1504739	278.6	279.79	30.5	2	20.5	30.5	259.29	249.29	Vashon		Drilling	H-S Auger	8/17/1993
LT- 6	McChord	MW	Active		668440.00	1503819	275	274.63	25	2	15	25	259.63	249.63	Vashon		Drilling	H-S Auger	8/18/1993
LT- 7	McChord	MW	Active		666017.00	1503734	274	273.53	19	2	9	19	264.53	254.53	Vashon		Drilling	H-S Auger	8/17/1993
LT- 8	McChord	MW	Active		660734.00	1509297	325.3	324.89	44.5	2	34.5	44.5	290.39	280.39	Vashon		Drilling	H-S Auger	8/18/1993
LT- 9	McChord	MW	Active		661940.00	1507958	311.7	313.27	140	2	130	140	183.27	173.27	Vashon		Service	AR	9/17/1993
LT-10	McChord	MW	Active		669713.00	1504250	274.9	274.39	24.5	2	14.5	24.5	259.89	249.89	Vashon		Drilling	H-S Auger	9/20/1994
LT-11	McChord	MW	Active		667648.00	1503719	273.5	273.37	27.5	2	17.5	27.5	255.87	245.87	Vashon		Drilling	H-S Auger	9/20/1994
LX- 1	Logistics Center	ction	Active		656841.56	1489833.13	268.85	271.43	94.5	10.0	72.5	92.5	198.93	178.93	Vashon	SS	Company	Air Rotary	9/1/1992
LX- 2	Logistics Center	ction	Active		656966.81	1489951.25	269.8	272.39	91	10.0	59.0	89.0	213.39	183.39	Vashon	SS	Company	Air Rotary	8/29/1992
LX- 3	Logistics Center	ction	Active		657094.94	1490070.25	270.89	273.64	91	10.0	60.5	88.5	213.14	185.14	Vashon	SS	Company	Air Rotary	8/27/1992
LX- 4	Logistics Center	ction	Active		657228.19	1490193.13	272.81	275.35	96	10.0	64.0	94.0	211.35	181.35	Vashon	SS	Company	Air Rotary	8/27/1992
LX- 5	Logistics Center	ction	Active		657353.94	1490302.5	270.93	274.10	95	10.0	54.5/80.5	72.0/93.0			Vashon	SS	Company	Air Rotary	8/24/1992
LX- 6	Logistics Center	ction	Active		657487.19	1490420	271.08	273.43	92	10.0	58.0	88.0	215.43	185.43	Vashon	SS	Company	Air Rotary	8/19/1992
LX- 7	Logistics Center	ction	Active		657614.56	1490539.75	271.6	273.84	92	10.0	52.0	65.0	221.84	208.84	Vashon	SS	Company	Air Rotary	7/29/1992
LX- 8	Logistics Center	ction	Active		657730.88	1490671	273.56	275.96	91	10.0	58.0	88.0	217.96	187.96	Vashon	SS	Company	Air Rotary	8/21/1992
LX- 9	Logistics Center	ction	Active		657843.00	1490805	272.57	275.74	90.5	10.0	58.5	88.5	217.24	187.24	Vashon	SS	Company	Air Rotary	8/3/1992
LX-10	Logistics Center	ction	Active		657955.13	1490939.5	272.79	275.44	91	10.0	59.0	89.0	216.44	186.44	Vashon	SS	Company	Air Rotary	8/17/1992
LX-11	Logistics Center	ction	Active		658067.25	1491074.13	271.09	274.51	111	10.0	67.0	78.0	207.51	196.51	Vashon	SS	Company	Air Rotary	8/12/1992
LX-12	Logistics Center	ction	Active		658179.13	1491207.75	269.98	272.62	87	10.0	55.0	85.0	217.62	187.62	Vashon	SS	Company	Air Rotary	8/14/1992
LX-13	Logistics Center	ction	Active		658291.94	1491342.88	267.5	270.35	102	10.0	68.5	99.5	201.85	170.85	Vashon	SS	Company	Air Rotary	8/18/1992
LX-14	Logistics Center	ction	Active		658403.63	1491478	273.75	276.52	94	10.0	62.0	92.0	214.52	184.52	Vashon	SS	Company	Air Rotary	7/27/1992
LX-15	Logistics Center	ction	Active		658515.00	1491612	275.99	278.33	98	10.0	66.0	96.0	212.33	182.33	Vashon	SS	Company	Air Rotary	8/13/1992
LX-16	Logistics Center	ction	Decommissioned		653197.25	1495104.88	287.33	290.08	75	10.0	42.0	72.0	248.08	218.08	Vashon	SS	Company	Air Rotary	10/14/1992
LX-17	Logistics Center	ction	Decommissioned		652409.81	1496504.63	276.81	279.34	56.6	10.0	34.5	54.50	244.84	224.84	Vashon	SS	Company	Air Rotary	10/28/1992
LX-18	Logistics Center	ction	Decommissioned		652569.63	1496621.38	279.09	281.61	44	10.0	31.0	41.0	250.61	240.61	Vashon	SS	Company	Air Rotary	9/15/1992
LX-19	Logistics Center	ction	Decommissioned		652525.50	1496252.75	275.78	278.72	87	10.0	53.0	85.0	225.72	193.72	Vashon	SS	Company	Air Rotary	3/31/1993
LX-21	Logistics Center	ction	Decommissioned		652710.00	1496411	278.94	282.02	108	12.0	51.6	81.8	230.42	200.22	Vashon	SS	Drilling, Inc.	Cable/Rotary	7/26/1991
LZ-01	McChord	MW	Decommissioned		658188.00	1491917	268.8	272.21	48	2	38	48	234.21	224.21	Vashon		Co.	H-S Auger	6/26/1985
LZ-02	McChord	MW	Decommissioned		658197.00	1491905	268.6	271.12	28	2	18	28	253.12	243.12	Vashon		Co.	H-S Auger	6/27/1985
LZ-03	McChord	MW	Decommissioned		657747.00	1498727	275.6	278.84	49	2	29	49	249.84	229.84	Vashon		Co.	H-S Auger	6/28/1985
LZ-04	McChord	MW	Decommissioned		657753.00	1496752	277.7	279.69	63	2	53	63	226.69	216.69	Vashon		Co.	H-S Auger	7/1/1985
LZ-04c	McChord	MW	Decommissioned		657756.00	1496741	277.4	278.53	225	2	215	225	63.53	53.53	Sea Level		Holt Drilling	CT	6/5/1989
LZ-04d	McChord	MW	Decommissioned		657756.00	1496741	277.4	278.53	294.5	2	284.5	294.5	-5.9700000	-15.97	Sea Level		Holt Drilling	CT	6/5/1989
MAMC-1	MAMC	Geothermal	Active		653070.00	1489465	257.9	270.59	121		85	115	185.59	155.59	Vashon	SS			
MAMC-2	MAMC	Test Well	Other		653290.00	1489928	274.0	274	120.3	20.0/16.0	89	120	185	154	Vashon	100slotPVC	Drilling, Inc.	Churn	1/6/1987
MAMC-3	MAMC	Geothermal	Active					263.68	181.0		151	181	112.68	82.68	Sea Level	SS	Noble Drilling		
MAMC-4	MAMC	Water Supply	Active		653960.00	1488780		261.62	292.0		261	292	0.62	-30.38	Sea Level	SS	Noble Drilling	Churn	
MAMC-5	MAMC	Test Well	Other		652230.00	1488600		278	70.0		45	65	233	213	Vashon	SS	Noble Drilling	Churn	
MAMC-6	MAMC	Geothermal	Active		652805.00	1489193	274.8	267.11	118.0		92	117	175.11	150.11	Vashon	SS	Noble Drilling	Rotary	3/15/1988
MAMC-6a	MAMC	Test Well	Other		652845.00	1489220	272.4										Noble Drilling		3/14/1988
MAMC-6test	MAMC	Test Well	Other														Noble Drilling		
MAMC-7	MAMC	Geothermal	Other		652700.00	1490500	272.99	272.99	90.5		60	90	212.99	182.99	Vashon	SS	Noble Drilling	Churn	
MAMC-8	MAMC	Test Well	Likely decom, lost, or destroyed		653350.00	1489752	278.0		135.0								Corps of	Rotary	3/8/1988
MAMC-8a	MAMC	Test Well	Likely decom, lost, or destroyed		653505.00	1489845	274.2												
MAMC-8b	MAMC	Test Well	Likely decom, lost, or destroyed		653845.00	1490045	277.9												

WELL_ID	AREA_ID	WELL_SUBTYPE	WELL_STATUS	Ecology_ID	NORTH_NAD27	EAST_NAD27	GRND_ELEV	MEAS_PT_EL	WELL_DEPTH	WELL_DIA	SCREEN_TOP	SCRN_BOTTM	SCREEN_TOP_ELEV	SCREEN_BOTTM_ELEV	AQUIFER	WELL_MATERIAL	DRILLING_CO	DRILL_MTHD	CMPLT_DATE
MAMC-8c	MAMC	Test Well	Likely decom, lost, or destroyed		653320.00	1489725	279.3												
MAMC-9	MAMC	Test Well	Other		652760.00	1489895	280.0		139.0								Corps of	Rotary	3/25/1988
MF-1	McChord	MW	Active		664418.35	1505134.83	280.11	279.62	19.5	2	4.5	19.5	275.12	260.12	Vashon		Drilling	H-S Auger	12/18/2000
MF-2	McChord	MW	Active		664413.83	1505197.73	279.79	279.29	19.5	2	4.5	19.5	274.79	259.79	Vashon		Drilling	H-S Auger	12/18/2000
MF-3	McChord	MW	Active		664485.87	1505135.34	280.32	279.99	19.5	2	4.5	19.5	275.49	260.49	Vashon		Drilling	H-S Auger	12/18/2000
MF-4	McChord	MW	Active		664523.94	1505200.69	280.6	280.25	19.5	2	4.5	19.5	275.75	260.75	Vashon		Drilling	H-S Auger	12/18/2000
MP-10	MAMC	Piezometer/OW	Likely decom, lost, or destroyed		653910.00	1489810			41.0		20.5	40.5			Vashon			H-S Auger	2/23/1989
MP-11	MAMC	Piezometer/OW	Likely decom, lost, or destroyed		653710.00	1489760			41.0		20.5	40.5			Vashon			H-S Auger	2/23/1989
MP-12	MAMC	Piezometer/OW	Likely decom, lost, or destroyed		653350.00	1489950			41.0		20.5	40.5			Vashon			H-S Auger	2/23/1989
MP-13	MAMC	Piezometer/OW	Likely decom, lost, or destroyed		653357.00	1489720			40.5		15.0	40.0			Vashon			H-S Auger	2/22/1989
MP-14	MAMC	Piezometer/OW	Likely decom, lost, or destroyed		653278.00	1489540			41.0		21.0	41.0			Vashon			H-S Auger	2/21/1989
MT-1	Logistics Center	MW	Active	AKN 053	652654.56	1496013.25	289.825	292.555	37	2.0	20.0	35.0	272.56	257.56	Vashon	SS	ProSonic	Sonic	10/2005
MT-2	Logistics Center	MW	Active	AKN 052	652067.56	1496278.25	278.585	281.535	27.5	2.0	20.0	25.0	261.54	265.54	Vashon	SS	ProSonic	Sonic	10/2005
MT-3	Logistics Center	MW	Active	AKN 051	651714.94	1496403	280.758	283.738	23.5	2.0	10.0	20.0	273.74	263.74	Vashon	SS	ProSonic	Sonic	10/2005
MT-4	Logistics Center	MW	Active	AKN 054	651513.63	1496570.63	280.708	283.518	22.5	2.0	10.0	20.0	273.52	263.52	Vashon	SS	ProSonic	Sonic	10/2005
MT-5	Logistics Center	MW	Active		652189.56	1496352.13	277.108	279.158	45	6.0	22.5	27.5	256.66	251.66	Vashon	SS	ProSonic	Sonic	10/2005
MT-6	Logistics Center	MW	Active		651834.69	1496494.38	278.378	280.638	45	6.0	22.0	37.0	258.64	243.64	Vashon	SS	ProSonic	Sonic	10/2005
MW-01(SB-03)	Logistics Center	MW	Active						34.0	6.0	23.5	33.5			Vashon	Sch40PVC	Environmental	Air Hammer	7/2/1993
MW-02(SB-04)	Logistics Center	MW	Active						33.0	6.0	22.4	32.4			Vashon	Sch40PVC	Environmental	Air Hammer	7/3/1993
MW-1(1C251)	Bldg C0125	MW	Decommissioned		660980.45	1472396.82													
MW-1(4290)	Bldg 4290	MW	Other		650241.07	1474898.17	286.20	285.80											
MW-1(6038)	Bldg 6038	MW	Active		650225.30	1481034.7	278.5	277.98	38.0	2.0	22.0	37.0	255	240	Vashon	Sch40PVC	Company	Air Rotary	5/9/1997
MW-1(CM)	Camp Murray	MW	Other				264.64		27.0	2.0					Vashon	PVC	Drilling	H-S Auger	5/12/1997
MW-1(CmpMurray)	Camp Murray	MW	Other						24.0	2.0	14.0	24.0			Vashon	SS	Drilling	H-S Auger	1/24/1991
MW-1(Old EOD)	Old EOD	MW	Decommissioned																
MW-2(1C251)	Bldg C0125	MW	Active						30.0	2.0	15.0	30.0			Vashon		Inc.	H-S Auger	7/18/1995
MW-2(3034)	Bldg 3034	MW	Likely decom, lost, or destroyed				241.84		25.0	2.0	14.2	24.2			Vashon	Sch40PVC	Development,	H-S Auger	1/31/1990
MW-2(3138)	Bldg 3138	MW	Active		647657.80	1485879.8	289.3	288.84	28.0	2.0	11.35	26.35			Vashon	Sch40PVC	Company	H-S Auger	5/7/1997
MW-2(CM)	Camp Murray	MW	Other				263.48		24.0	2.0					Vashon	PVC	Drilling	H-S Auger	5/12/1997
MW-2(Old EOD)	Old EOD	MW	Decommissioned																
MW-2008-1	Landfill 5	MW	Active		657804.75	1470554.72	219.11	222.1	28.8	2.0	16.8	26.8			Vashon	PVC	Longyear	Sonic	11/19/2008
MW-2008-2	Landfill 5	MW	Active		658180.81	1470852.18	227.68	230.91	37.2	2.0	24	34			Vashon	PVC	Boart longyear	Sonic	11/20/2008
MW-2008-3	Landfill 5	MW	Active		658529.55	1470716.21	230.70	234.48	36	2.0	23	33			Vashon	PVC	Longyear	Sonic	11/20/2008
MW-2008-4	Landfill 5	MW	Active		659045.74	1470677.87	222.47	225.86	31	2.0	18	28			Vashon	PVC	Longyear	Sonic	11/19/2008
MW-3(1C251)	Bldg C0125	MW	Decommissioned						23.0	2.0	8.0	23.0			Vashon	Wire Wrap PVC	Inc.	H-S Auger	7/1/1995
MW-3(3138)	Bldg 3138	MW	Other		647580.30	1485842.9	288.9	288.29	24.0	2.0	7.9	23.1	281.04	265.84	Vashon	Sch40PVC	Company	Air Rotary	5/7/1997
MW-3(CM)	Camp Murray	MW	Other				263.0		30.0	2.0					Vashon	PVC	Drilling	H-S Auger	5/12/1997
MW-3(Old EOD)	Old EOD	MW	Decommissioned																
MW-4(Old EOD)	Old EOD	MW	Decommissioned																
MW-40	McChord	MW	Active		665329.00	1502172	291.98	294.04	70	2	60	70	234.04	224.04	Vashon		Well Drilling	AR	1/29/1987
MW-5(Old EOD)	Old EOD	MW	Decommissioned																
MW-6(Old EOD)	Old EOD	MW	Other																
MW-DG1	Landfill 4	MW	Active		657047.38	1117845.63	237.46	244.96	42.3	2	25	40	219.96	204.96	Vashon	PVC			
MW-DG2	Landfill 4	MW	Active		657047.38	1117843.88	244.98	244.98	40	2	24.6	39.6	220.38	205.38	Vashon	PVC			
MW-UG1	Landfill 4	MW	Active		657084.63	1117849.25	244.43	244.43	41.4	2	25	40	219.43	204.43	Vashon				
NAPL1-B09	Landfill 2	MW	Decommissioned		651961.28	1497214.59	277.77	280.25	35.0	2	18.0	23.0	262.25	257.25	Vashon	SS		Sonic	12-Aug-03
NAPL1-C08	Landfill 2	MW	Decommissioned		651978.48	1497238.62	278.35	277.89	49.0	2	44.5	49.5	233.39	228.39	Vashon	SS		Sonic	24-Aug-03
NAPL1-D03	Landfill 2	MW	Decommissioned		652047.99	1497236.36	278.15	277.36	35.0	2	21.0	26.0	256.36	251.36	Vashon	SS		Sonic	7-Sep-03
NAPL1-D14	Landfill 2	MW	Decommissioned		651875.62	1497244.92	279.49	279.74	35.0	2	19.0	24.0	260.74	255.74	Vashon	SS		Sonic	11-Aug-03
NAPL1-E07	Landfill 2	MW	Active		651979.05	1497268.23	278.59	278.59	40.0	2	20.0	25.0	258.59	253.59	Vashon	SS	Drilling, Inc.	Sonic	5-Sep-03
NAPL1-F03	Landfill 2	MW	Decommissioned		652037.50	1497283.21	278.51	278.73	35.0	2	21.0	26.0	257.73	252.73	Vashon	SS		Sonic	7-Sep-03
NAPL1-F11	Landfill 2	MW	Active		651903.07	1497270.27	279.00	279.62	58.3	2	39.5	54.5	240.12	225.12	Vashon	SS	Drilling, Inc	Air Rotary	26-Sep-03
NAPL1-F12	Landfill 2	MW	Decommissioned		651885.24	1497282.9	279.20	280.10	50.0	2	43.0	48.0	237.1	232.1	Vashon	SS		Sonic	20-Aug-03
NAPL1-F14	Landfill 2	MW	Active		651852.10	1497283.6	279.59	280.02	33.0	2	20.0	25.0	260.02	255.02	Vashon	SS	Drilling, Inc	Sonic	20-Aug-03
NAPL1-H06	Landfill 2	MW	Decommissioned		651968.53	1497312.69	279.08	279.24	35.0	2	20.0	25.0	259.24	254.24	Vashon	SS		Sonic	25-Aug-03
NAPL1-H15	Landfill 2	MW	Decommissioned		651813.48	1497308.91	278.73	279.22	34.0	2	19.0	24.0	260.22	255.22	Vashon	SS		Sonic	13-Aug-03
NAPL1-I07	Landfill 2	MW	Active		651943.92	1497328.92	279.03	278.61	51.2	2	44.0	49.0	234.61	229.61	Vashon	SS	Drilling, Inc	Sonic	26-Aug-03
NAPL1-I08	Landfill 2	MW	Active		651925.96	1497328.67	279.11	279.23	35.0	2	20.0	25.0	259.23	254.23	Vashon	SS	Drilling, Inc	Sonic	25-Aug-03
NAPL1-J01	Landfill 2	MW	Decommissioned		652045.98	1497331.7	278.21	278.36	34.0	2	19.0	24.0	259.36	254.36	Vashon	SS		Sonic	19-Aug-03
NAPL1-J04	Landfill 2	MW	Decommissioned		651985.73	1497344.49	278.53	278.44	35.0	2	19.5	24.5	258.94	253.94	Vashon	SS		Sonic	24-Aug-03
NAPL1-J10	Landfill 2	MW	Decommissioned		651883.62	1497344.07	279.05	279.64	34.0	2	19.0	24.0	260.64	255.64	Vashon	SS		Sonic	21-Aug-03
NAPL1-L07	Landfill 2	MW	Active		651918.42	1497372.12	278.55	278.46	35.0	2	20.5	25.5	257.96	252.96	Vashon	SS	Drilling, Inc	Sonic	24-Aug-03
NAPL1-L10	Landfill 2	MW	Decommissioned		651866.20	1497374.3	278.78	279.41	34.0	2	19.0	24.0	260.41	255.41	Vashon	SS		Sonic	21-Aug-03
NAPL1-M12	Landfill 2	MW	Decommissioned		651822.20	1497378.27	278.90	279.97	34.0	2	19.0	24.0	260.97	255.97	Vashon	SS		Sonic	13-Aug-03
NAPL1-N02	Landfill 2	MW	Decommissioned		651982.33	1497391.88	277.86	278.72	35.0	2	19.0	24.0	259.72	254.72	Vashon	SS		Sonic	12-Aug-03
NAPL1-P07	Landfill 2	MW	Decommissioned		651897.80	1497415.97	277.84	278.14	33.0	2	20.0	25.0	258.14	253.14	Vashon	SS		Sonic	12-Aug-03
NAPL2-A16	Landfill 2	MW	Active		652019.30	1496945.83	277.02	280.45	33.0	2	8.0	33.0	272.45	247.45	Vashon	SS	Drilling, Inc		2005
NAPL2-C11	Landfill 2	MW	Decommissioned		652084.19	1496973.65	277.54	281.47	27.5	2	7.5	27.5	273.97	253.97	Vashon	SS			2005
NAPL2-D19	Landfill 2	MW	Decommissioned		651946.25	1496982.43	276.81	281.28	33.0	2	8.0	33.0	273.28	248.28	Vashon	SS			2005
NAPL2-F10	Landfill 2	MW	Decommissioned		652076.81	1497016.5	279.14	280.90	33.0	2	8.0	33.0	272.9	247.9	Vashon	SS			2005
NAPL2-F12	Landfill 2	MW	Active		652041.03	1497014	278.70	280.22	33.0	2	8.0	33.0	272.22	247.22	Vashon	SS	Drilling, Inc		2005

WELL_ID	AREA_ID	WELL_SUBTYPE	WELL_STATUS	Ecology_ID	NORTH_NAD27	EAST_NAD27	GRND_ELEV	MEAS_PT_EL	WELL_DEPTH	WELL_DIA	SCREEN_TOP	SCRN_BOTTM	SCREEN_TOP_ELEV	SCREEN_BOTTM_ELEV	AQUIFER	WELL_MATERIAL	DRILLING_CO	DRILL_MTHD	CMPLT_DATE
NAPL2-F17	Landfill 2	MW	Decommissioned		651955.90	1497014.68	278.08	279.08	62.0	2	57.0	62.0	222.08	217.08	Vashon	SS			2005
NAPL2-G13	Landfill 2	MW	Active		652017.13	1497030.34	278.74	279.91	33.5	2	8.5	33.5	271.41	246.41	Vashon	SS	Drilling, Inc		2005
NAPL2-G15	Landfill 2	MW	Active		651981.64	1497029.49	278.42	279.91	33.0	2	8.0	33.0	271.91	246.91	Vashon	SS	Drilling, Inc		2005
NAPL2-G20	Landfill 2	MW	Active		651899.29	1497027.75	276.92	280.56	31.5	2	7.0	31.5	273.56	249.06	Vashon	SS	Drilling, Inc		2005
NAPL2-J08	Landfill 2	MW	Decommissioned		652110.86	1497066.13	278.12	279.40	25.0	2	5.0	25.0	274.4	254.4	Vashon	SS			2005
NAPL2-L12	Landfill 2	MW	Decommissioned		651997.03	1497089.71	278.92	280.01	62.0	2	57.0	62.0	223.01	218.01	Vashon	SS			2005
NAPL2-L15	Landfill 2	MW	Active		651947.96	1497089.08	278.61	280.34	33.0	2	8.0	33.0	272.34	247.34	Vashon	SS	Drilling, Inc		2005
NAPL2-L16	Landfill 2	MW	Active		651924.47	1497086.94	278.45	280.28	62.0	2	57.0	62.0	223.28	218.28	Vashon	SS	Drilling, Inc		2005
NAPL2-M18	Landfill 2	MW	Decommissioned		651894.98	1497103.73	277.35	281.19	31.7	2	7.3	31.7	273.89	249.49	Vashon	SS			2005
NAPL2-N12	Landfill 2	MW	Decommissioned		651979.55	1497118.75	278.92	280.37	33.0	2	8.0	33.0	272.37	247.37	Vashon	SS			2005
NAPL2-Q08	Landfill 2	MW	Decommissioned		651995.40	1497161.01	277.62	281.11	32.0	2	7.0	32.0	274.11	249.11	Vashon	SS			2005
NAPL2-Q13	Landfill 2	MW	Decommissioned		651944.89	1497148.65	278.84	279.52	33.0	2	8.0	33.0	271.52	246.52	Vashon	SS			2005
NAPL2-S13	Landfill 2	MW	Decommissioned		651927.98	1497177.81	278.87	280.55	33.3	2	8.0	33.3	272.55	247.25	Vashon	SS			2005
NAPL2-S15	Landfill 2	MW	Decommissioned		651896.67	1497173.73	278.60	280.92	32.0	2	6.0	32.0	274.92	248.92	Vashon	SS			2005
NAPL3-A12	Landfill 2	MW	Decommissioned		652411.82	1496290.5		279.16	32.7	2	7.7	32.7	271.46	246.46	Vashon			Air Rotary	14-Jun-06
NAPL3-C07	Landfill 2	MW	Active		652474.26	1496329.56		278.83	33.0	2	8.0	33.0	270.83	245.83	Vashon	SS	Drilling, Inc	Air Rotary	8-Jun-06
NAPL3-D08	Landfill 2	MW	Active		652445.20	1496346.23		278.72	38.0	2	33.0	38.0	245.72	240.72	Vashon	SS	Drilling, Inc	Air Rotary	13-Jun-06
NAPL3-E03	Landfill 2	MW	Active		652511.55	1496361.54		279.92	33.0	2	8.0	33.0	271.92	246.92	Vashon	SS	Drilling, Inc	Air Rotary	15-Jun-06
NAPL3-E10	Landfill 2	MW	Active		652412.73	1496354.14		278.94	34.0	2	9.0	34.0	269.94	244.94	Vashon	SS	Drilling, Inc	Air Rotary	20-Jun-06
NAPL3-F06	Landfill 2	MW	Active		652465.52	1496368.46		279.99	33.5	2	8.5	33.5	271.49	246.49	Vashon	SS	Drilling, Inc	Air Rotary	16-Jun-06
NAPL3-G04	Landfill 2	MW	Active		652488.36	1496383.23		280.59	38.0	2	33.0	38.0	247.59	242.59	Vashon	SS	Drilling, Inc	Air Rotary	26-Jun-06
NAPL3-G12	Landfill 2	MW	Decommissioned		652361.55	1496376.94		277.22	32.7	2	8.3	32.7	268.92	244.52	Vashon	SS		Air Rotary	14-Jun-06
NAPL3-H01	Landfill 2	MW	Decommissioned		652532.01	1496396.39		276.98	33.2	2	8.2	33.2	268.78	243.78	Vashon	SS	Drilling, Inc	Air Rotary	15-Jun-06
NAPL3-H06	Landfill 2	MW	Active		652442.77	1496397.79		278.55	33.0	2	8.0	33.0	270.55	245.55	Vashon	SS	Drilling, Inc	Air Rotary	5-Jul-06
NAPL3-J08	Logistics Center	MW	Active		652411.50	1496406.59		277.72	40.0	2	35.0	40.0	242.72	237.72	Vashon	SS	Drilling, Inc	Air Rotary	7-Jul-06
NAPL3-K02	Logistics Center	MW	Active		652486.48	1496424.97		282.19	33.0	2	8.0	33.0	274.19	242.19	Vashon	SS	Drilling, Inc	Air Rotary	10/7/2006
NAPL3-M04	Logistics Center	MW	Active		652448.84	1496437.07		278.81	40.0	2	35.0	40.0	243.81	238.81	Vashon	SS	Drilling, Inc	Air Rotary	12-Jul-06
NAPL3-M08	Logistics Center	MW	Active		652396.34	1496431.49		277.69	34.0	2	9.0	34.0	268.69	243.69	Vashon	SS	Drilling, Inc	Air Rotary	13-Jul-06
NAPL3-P01	Logistics Center	MW	Decommissioned		652498.37	1496456.05		280.28	33.0	2	8.0	33.0	272.28	247.28	Vashon	SS		Air Rotary	16-Jun-06
NAPL3-P05	Logistics Center	MW	Active		652425.00	1496458.22		278.20	33.0	2	8.0	33.0	270.2	245.2	Vashon	SS	Drilling, Inc	Air Rotary	29-Jun-06
NW EW-1	Landfill 2	ction	Decommissioned		652503.54	1496393.76			30.0	4	14.5	29.5			Vashon	PVC		H-S Auger	15-Mar-03
NW EW-1a	Landfill 2	MW	Decommissioned		652505.63	1496391.05									Vashon				
NW EW-2	Landfill 2	ction	Decommissioned		652437.42	1496363.69			30.0	4	15.0	30.0			Vashon	PVC		H-S Auger	15-Mar-03
NW EW-2a	Landfill 2	MW	Decommissioned		652436.48	1496360.9									Vashon				
NW IW-1	Landfill 2	arge	Decommissioned						30.0	6.0					Vashon	PVC			3/15/2003
NW IW-2	Landfill 2	arge	Decommissioned						30.0	6.0					Vashon	PVC			3/15/2003
NW MW-1a	Landfill 2	MW	Decommissioned						30.0						Vashon				3/23/2003
NW MW-1b	Landfill 2	MW	Decommissioned						30.0						Vashon				3/23/2003
NW MW-1c	Landfill 2	MW	Decommissioned						30.0						Vashon				3/23/2003
NW MW-1d	Landfill 2	MW	Decommissioned						30.0						Vashon				3/23/2003
NW MW-2a	Landfill 2	MW	Decommissioned						30.0						Vashon				3/23/2003
NW MW-2b	Landfill 2	MW	Decommissioned						30.0						Vashon				3/23/2003
NW MW-2c	Landfill 2	MW	Decommissioned						30.0						Vashon				3/23/2003
NW MW-2d	Landfill 2	MW	Decommissioned						30.0						Vashon				3/23/2003
NW-MW-2 (LF4)	Landfill 4	MW	Active		657313.38	1117660.25	243.90		38.3	6.0	27.5	37.5	216.4	206.4	Vashon	PVC	Drilling Service	Auger	6/26/1994
PIW-1	Landfill 4	ction	Likely decom, lost, or destroyed																
PIW-2	Landfill 4	ction	Likely decom, lost, or destroyed																
PIW-3	Landfill 4	ction	Likely decom, lost, or destroyed																
PIW-4	Landfill 4	ction	Likely decom, lost, or destroyed																
PK-MW01	Popping Kettle Pit	MW	Other																
PW-1	Logistics Center	ction	Active		652555.31	1496651.75	279.9	245.2	37	8	10.0	35.0	235.2	210.2	Vashon	SS	ProSonic	Rotary	10/2005
PW-2	Logistics Center	ction	Active		652533.56	1496462.75	276.8	232.5	55	8	8.0	53.0	224.5	179.5	Vashon	SS	ProSonic	Rotary	10/2005
PW-3	Logistics Center	ction	Active		652551.63	1496250	276.1	234.7	57	8	10.0	55.0	224.7	179.7	Vashon	SS	ProSonic	Rotary	10/2005
PW-4	Logistics Center	ction	Active		652364.75	1496289.75	278.3	237.1	62	8	9.5	59.5	227.6	177.6	Vashon	SS	ProSonic	Rotary	10/2005
PW-5	Logistics Center	ction	Active		652255.75	1496433.63	280.2	238.0	58	8	11.0	56.0	227	182	Vashon	SS	ProSonic	Rotary	10/2005
PW-6	Logistics Center	ction	Active		652079.94	1496533.5	278.9	238.7	62	8	10.0	60.0	228.7	178.7	Vashon	SS	ProSonic	Rotary	10/2005
PW-7	Logistics Center	ction	Active		651902.88	1496614.75	282.3	247.6	52	8	10.0	50.0	237.6	197.6	Vashon	SS	ProSonic	Rotary	10/2005
PW-8	Logistics Center	ction	Active		651736.63	1496703.38	279.2	260.0	32	8	10.0	30.0	250	230	Vashon	SS	ProSonic	Rotary	10/2005
PZ-01-D	Logistics Center	MW	Likely decom, lost, or destroyed		651976.50	1497189									Vashon				
PZ-01-S	Logistics Center	MW	Likely decom, lost, or destroyed		651976.38	1497189									Vashon				
PZ-02-D	Logistics Center	MW	Active		651985.81	1497142.75									Vashon				
PZ-02-S	Logistics Center	MW	Active		651985.63	1497142.63									Vashon				
PZ-03-D	Logistics Center	MW	Active		652031.13	1497117.63									Vashon				
PZ-03-S	Logistics Center	MW	Active		652031.19	1497117.25									Vashon				
PZ-04	Logistics Center	MW	Active		652062.50	1497079.75									Vashon				
PZ-05	Logistics Center	MW	Likely decom, lost, or destroyed		652067.81	1497107.5									Vashon				
PZ-06-D	Logistics Center	MW	Likely decom, lost, or destroyed		652055.69	1497165									Vashon				
PZ-06-S	Logistics Center	MW	Likely decom, lost, or destroyed		652055.81	1497164.75									Vashon				
PZ-1A	Landfill 2	MW	Decommissioned		652374.56	1496266.5	277.578	279.658		2	12	17			Vashon	SS	ProSonic	Sonic	10/2005
PZ-1B	Landfill 2	MW	Decommissioned		652380.94	1496272.63	277.648	279.838		2	29	34			Vashon	SS	ProSonic	Sonic	10/2005
PZ-1C	Landfill 2	MW	Decommissioned		652377.25	1496269.75	277.588	279.458		2	45	50			Vashon	SS	ProSonic	Sonic	10/2005

WELL_ID	AREA_ID	WELL_SUBTYPE	WELL_STATUS	Ecology_ID	NORTH_NAD27	EAST_NAD27	GRND_ELEV	MEAS_PT_EL	WELL_DEPTH	WELL_DIA	SCREEN_TOP	SCRN_BOTTM	SCREEN_TOP_ELEV	SCREEN_BOTTM_ELEV	AQUIFER	WELL_MATERIAL	DRILLING_CO	DRILL_MTHD	CMPLT_DATE
PZ-2A	Landfill 2	MW	Decommissioned		652055.94	1496541.38	279.938	279.918		2	13	18			Vashon	SS	ProSonic	Sonic	10/2005
PZ-2B	Landfill 2	MW	Decommissioned		652057.69	1496545	280.018	279.888		2	25	30			Vashon	SS	ProSonic	Sonic	10/2005
PZ-2C	Landfill 2	MW	Decommissioned		652059.63	1496548.63	279.928	279.908		2	50	55			Vashon	SS	ProSonic	Sonic	10/2005
PZ-3A	Landfill 2	MW	Decommissioned		652008.25	1496814.88	277.548	279.928		2	15	20			Vashon	SS	ProSonic	Sonic	10/2005
PZ-3B	Landfill 2	MW	Decommissioned		652012.81	1496818	277.738	280.058		2	39	44			Vashon	SS	ProSonic	Sonic	10/2005
PZ-3C	Landfill 2	MW	Decommissioned		652018.00	1496820.75	278.098	280.288		2	55	60			Vashon	SS	ProSonic	Sonic	10/2005
PZ-4A	Landfill 2	MW	Decommissioned		652571.50	1496311.13	277.398	277.378		2	15	20			Vashon	SS	ProSonic	Sonic	10/2005
PZ-4B	Landfill 2	MW	Decommissioned		652573.19	1496314	277.488	277.488		2	35	40			Vashon	SS	ProSonic	Sonic	10/2005
PZ-4C	Landfill 2	MW	Decommissioned		652575.56	1496309.75	277.528	277.348		2	55	60			Vashon	SS	ProSonic	Sonic	10/2005
PZ-5A	Landfill 2	MW	Decommissioned		652368.19	1496457.75	276.368	276.308		2	15	20			Vashon	SS	ProSonic	Sonic	10/2005
PZ-5B	Landfill 2	MW	Decommissioned		652364.38	1496455.63	276.188	276.008		2	38	33			Vashon	SS	ProSonic	Sonic	10/2005
PZ-5C	Landfill 2	MW	Decommissioned		652360.50	1496454.13	276.208	276.158		2	50	55			Vashon	SS	ProSonic	Sonic	10/2005
PZ-6A	Landfill 2	MW	Decommissioned		652512.63	1496267.63	276.038	276.198		2	15	20			Vashon	SS	ProSonic	Sonic	10/2005
PZ-6B	Landfill 2	MW	Decommissioned		652509.19	1496266	276.128	275.958		2	35	40			Vashon	SS	ProSonic	Sonic	10/2005
PZ-6C	Landfill 2	MW	Decommissioned		652514.06	1496263.5	276.018	276.088		2	54	59			Vashon	SS	ProSonic	Sonic	10/2005
PZ-7A	Landfill 2	MW	Decommissioned		652459.75	1496228.25	276.478	278.498		2	16	21			Vashon	SS	ProSonic	Sonic	10/2005
PZ-7B	Landfill 2	MW	Decommissioned		652463.00	1496231.38	276.308	278.358		2	36	41			Vashon	SS	ProSonic	Sonic	10/2005
PZ-7C	Landfill 2	MW	Decommissioned		652463.94	1496226.25	276.148	277.978		2	55	60			Vashon	SS	ProSonic	Sonic	10/2005
PZ-8A	Landfill 2	MW	Decommissioned		652425.81	1496475.38	276.658	278.658		2	15	20			Vashon	SS	ProSonic	Sonic	10/2005
PZ-8B	Landfill 2	MW	Decommissioned		652430.56	1496476.13	276.708	278.768		2	36	41			Vashon	SS	ProSonic	Sonic	10/2005
PZ-9A	Landfill 2	MW	Decommissioned		652484.06	1496491.75	276.828	278.648		2	15	20			Vashon	SS	ProSonic	Sonic	10/2005
PZ-9B	Landfill 2	MW	Decommissioned		652480.06	1496490.5	276.808	278.398		2	28	33			Vashon	SS	ProSonic	Sonic	10/2005
RD-1	Logistics Center	MW	Likely decom, lost, or destroyed		655799.00	1489009	272.3		206.9	3.0		210.0				PVC		Rotary	1/18/1982
RD-17	Logistics Center	MW	Other		656458.00	1489040	263.42		49.5	2.0		22.0			Vashon	PVC		Rotary	2/26/1982
RM-10	Logistics Center	MW	Decommissioned		653519.11	1494943.7	287.22	287.78	62.0	4	54.4	58.8	233.38	228.98	Vashon	PVC	Longyear	Sonic	16-May-99
RM-11	Logistics Center	MW	Decommissioned		653513.91	1494919.55	287.03	287.64	80.0	4	53.0	64.9	234.64	222.74	Vashon	PVC	Longyear	Sonic	15-May-99
RM-12	Logistics Center	MW	Decommissioned		653509.51	1494942.43	287.39	287.??	85	4	69.6	79.6			Vashon	PVC	Longyear	Sonic	18-May-99
RM-13	Logistics Center	MW	Decommissioned		653536.02	1494939.6	287.42	287.87	80.0	4	55.5	67.4	232.37	220.47	Vashon	PVC	Longyear	Sonic	19-May-99
RM-14	Logistics Center	MW	Decommissioned		653543.38	1494932.91	287.32	287.61	75.2	2	62.0	71.5	225.61	216.11	Vashon	PVC	Longyear	Sonic	11-Jun-00
RM-15	Logistics Center	MW	Decommissioned		653550.41	1494923.88	287.27	287.57	75.0	2	57.1	69.2	230.47	218.37	Vashon	PVC	Longyear	Sonic	11-Jun-00
RM-1a	Logistics Center	MW	Decommissioned		653515.26	1494940.5	287.33	288.85	92.0	4	60.2	64.2	228.65	224.65	Vashon	PVC	Longyear	Sonic	28-Aug-98
RM-1b	Logistics Center	MW	Decommissioned		653511.23	1494936.61	287.22	289.62	57.0	4	49.2	53.2	240.42	236.42	Vashon	PVC	Longyear	Sonic	3-Sep-98
RM-2	Logistics Center	MW	Decommissioned		653528.49	1494933.76	287.31	289.73	80.0	4	75.5	77.0	214.23	212.73	Vashon	PVC	Longyear	Sonic	28-Aug-98
RM-3	Logistics Center	MW	Decommissioned		653473.78	1494991.09	387.81	289.80	72.0	4	49.6	68.6	240.2	221.2	Vashon	PVC	Longyear	Sonic	9/10/1998
RM-4	Logistics Center	MW	Decommissioned		653509.51	1494942.44	287.36	289.62	85.0	4	43.5	62.5	246.12	227.12	Vashon	PVC	Longyear	Sonic	9-Sep-98
RM-5	Logistics Center	MW	Decommissioned		653541.25	1494920.65	287.22	289.70	80.0	4	61.3	70.3	228.4	219.4	Vashon	PVC	Longyear	Sonic	1-Sep-98
RM-6	Logistics Center	MW	Decommissioned		653557.72	1494899.4	286.96	289.59	80.0	4	56.3	65.3	233.29	224.29	Vashon	PVC	Longyear	Sonic	30-Aug-98
RM-7	Logistics Center	MW	Decommissioned		652543.06	1494913.37	287.07	289.32	74.0	4	53.6	62.6	235.72	226.72	Vashon	PVC	Longyear	Sonic	30-Aug-98
RM-8	Logistics Center	MW	Decommissioned		653531.02	1494921.02	287.07	289.44	80.0	4	58.6	65.1	230.84	224.34	Vashon	PVC	Longyear	Sonic	3-Sep-98
RM-9	Logistics Center	MW	Decommissioned		653525.17	1494929.64	287.29	288.69	85.5	8	57.6	66.9	231.09	221.79	Vashon	PVC	Longyear	Sonic	14-Sep-98
RMW-1		MW	Likely decom, lost, or destroyed		651965.63	1497177.25									Vashon				
RMW-2		MW	Likely decom, lost, or destroyed		651966.00	1497174.75									Vashon				
RMW-3		MW	Likely decom, lost, or destroyed		651969.00	1497175.25									Vashon				
RMW-4		MW	Likely decom, lost, or destroyed		651960.31	1497169									Vashon				
RMW-5		MW	Likely decom, lost, or destroyed		651960.31	1497164.25									Vashon				
RMW-6		MW	Likely decom, lost, or destroyed		651963.69	1497166.88									Vashon				
RMW-7		MW	Likely decom, lost, or destroyed		651954.81	1497160.88									Vashon				
RMW-8		MW	Likely decom, lost, or destroyed		651956.50	1497159.5									Vashon				
RMW-9		MW	Likely decom, lost, or destroyed		651958.50	1497158.25									Vashon				
RW-01	Logistics Center	ction	Decommissioned		653561.00	1494938	287.71		66.2	12.0	41.6/61.2	50.9/66.2			Vashon	SS	Charon	Churn	1/20/1986
S-1	Logistics Center	MW	Likely decom, lost, or destroyed																
S-2		MW	Likely decom, lost, or destroyed		652364.88	1496860.25									Vashon				
S-3		MW	Other		652059.88	1496820									Vashon				
SCRFLD-MW01	AOC 8-9	MW	Decommissioned						28	2	18	28			Vashon	PVC	Holt	H-S Auger	2/14/2005
SL-1	Sequalitchew	MW	Active						20		15	20			Vashon	PVC	Holt	H-S Auger	3/11/2004
SLAP-1	Logistics Center	ction	Active	BAL 230	655616.96	1486668.15	268	270.68	257	8.0	210.0	250.0	60.68	20.68	Sea Level	Steel	Drilling	Air Rotary	1/23/2008
SLAP-2	Logistics Center	ction	Active	BAL 229	655480.02	1486879.72	266.5	269.21	251	8.0	210.0	250.0	59.21	19.21	Sea Level	Steel	Drilling	Air Rotary	2007
SLAP-3	Logistics Center	ction	Active	BAL 885	655531.57	1487296.37	266.8	269.74	272	8.0	170.0	270.0	99.74	-0.26	Sea Level	Steel	Drilling	Air Rotary	2007
SLAP-4	Logistics Center	ction	Active	BAL 284	655188.95	1487402.45	268	271.21	295	8.0	170.0	270.0	101.21	1.21	Sea Level	Steel	Drilling	Air Rotary	12/03/2007
SLAP-5	Logistics Center	ction	Active	BAL 886	654896.40	1487486.96	268.2	274.60	271	8.0	168.0	268.0	106.6	6.6	Sea Level	Steel	Drilling	Air Rotary	12/14/2007
SLAP-6	Logistics Center	ction	Active	BAL 234	654577.00	1487623.75	275	277.99	230	8.0	180.0	220.0	97.99	57.99	Sea Level	Steel	Drilling	Air Rotary	02/02/2008
SP-01	Landfill 5	MW	Decommissioned		651955.88	1497169.25									Vashon				
SP-02	Landfill 5	MW	Decommissioned		651992.00	1497083.13									Vashon				
SP-03	Landfill 5	MW	Decommissioned		652020.81	1496997.63									Vashon				
SP-04	Landfill 5	MW	Decommissioned		652028.50	1496987.88									Vashon				
SP-05	Landfill 5	MW	Decommissioned		651984.50	1497121.63									Vashon				
SP-06	Landfill 5	MW	Decommissioned		652049.63	1497030.25									Vashon				
SP-07	Landfill 5	MW	Decommissioned		652023.63	1497057.25									Vashon				
SP-08	Landfill 5	MW	Decommissioned		652064.63	1496986									Vashon				
SP-09	Landfill 5	MW	Decommissioned		651996.69	1497152.75									Vashon				
SP-10	Landfill 5	MW	Decommissioned		651936.00	1497183.13									Vashon				

WELL_ID	AREA_ID	WELL_SUBTYPE	WELL_STATUS	Ecology_ID	NORTH_NAD27	EAST_NAD27	GRND_ELEV	MEAS_PT_EL	WELL_DEPTH	WELL_DIA	SCREEN_TOP	SCRN_BOTTM	SCREEN_TOP_ELEV	SCREEN_BOTTM_ELEV	AQUIFER	WELL_MATERIAL	DRILLING_CO	DRILL_MTHD	CMPLT_DATE
SP-10 (LC)	Logistics Center		Active																
SP-11	Landfill 5	MW	Decommissioned																
SQ_SPRNG	Sequalitchew Springs	Water Supply	Active		656150.00	1478590												covered	1918
SRC-01	SRCPP	MW	Decommissioned		654640.00	1476120	239.4				32.5	42.5	206.9	196.9	Vashon	PVC			
SRC-02	SRCPP	MW	Likely decom, lost, or destroyed		654480.00	1475890	224.5				32.5	42.5	192	182	Vashon	PVC			
SRC-03	SRCPP	MW	Likely decom, lost, or destroyed		654720.00	1476090	226.5				25.0	35.0	201.5	191.5	Vashon	PVC			
SRC-04	SRCPP	MW	Decommissioned		654490.00	1476180										PVC			
SRC-05	SRCPP	MW	Decommissioned		654380.00	1476410										PVC			
SRC-06	SRCPP	MW	Decommissioned		654180.00	1476290	240.1	241.09			39.0	49.0	202.09	192.09	Vashon	PVC			
SRC-07	SRCPP	MW	Decommissioned		654680.00	1476060	238.0				34.0	44.0	204	194	Vashon	PVC			
SRC-08	SRCPP	MW	Decommissioned		654530.00	1476090	236.1				20.0	40.0	216.1	196.1	Vashon	PVC			
SRC-09	SRCPP	MW	Decommissioned		654240.00	1476140	230.1				16.0	36.0	214.1	194.1	Vashon	PVC			
SRC-10	SRCPP	MW	Likely decom, lost, or destroyed		654890.00	1476220	239.9				14.5	34.5	225.4	205.4	Vashon	PVC			
SRC-11	SRCPP	MW	Likely decom, lost, or destroyed		654660.00	1476590										SS			
SRC-17	SRCPP	MW	Decommissioned													GALV			
SRC-18	SRCPP	MW	Likely decom, lost, or destroyed					244.86								GALV			
SRC-19	SRCPP	MW	Likely decom, lost, or destroyed		654680.00	1476280	250.4				37.0	42.0	213.4	208.4	Vashon	GALV			
SRC-20	SRCPP	MW	Likely decom, lost, or destroyed		654610.00	1476090	237.6	238.61			26.0	41.0	212.61	197.61	Vashon	SS			
SRC-21	SRCPP	MW	Decommissioned		654580.00	1476190	243.7				43.5	45.0	200.2	198.7	Vashon	SS			
SRC-22	SRCPP	MW	Decommissioned		654490.00	1476150	243.4				37.0	38.5	206.4	204.9	Vashon	SS			
SRC-23	SRCPP	MW	Decommissioned		654550.00	1476200	244.1				31.5	33.0	212.6	211.1	Vashon	SS			
SRC-24	SRCPP	MW	Decommissioned		654240.00	1477490	252.1	253.35			44.0	54.0	209.35	199.35	Vashon	SS			
SRC-25	SRCPP	MW	Decommissioned		654870.00	1476030	221.8	222.83			33.5	38.5	189.33	184.33	Vashon	SS			
SRC-26	SRCPP	MW	Decommissioned		654410.00	1476450	251.0				38.0	41.0	213	210	Vashon	GALV			
SRC-27	SRCPP	MW	Decommissioned		654660.00	1476670	252.7				37.5	40.0	215.2	212.7	Vashon	GALV			
SRC-28	SRCPP	MW	Decommissioned		654320.00	1476710	250.9				38.0	40.5	212.9	210.4	Vashon	NS			
SRC-29	SRCPP	MW	Decommissioned		654310.00	1477050	244.7				31.0	33.5	213.7	211.2	Vashon	NS			
SRC-30	SRCPP	MW	Decommissioned		654620.00	1477040	254.4				42.5	45.0	211.9	209.4	Vashon	NS			
SRC-31	SRCPP	MW	Decommissioned		654330.00	1476490	248.6	249.46			43.0	40.0	206.46	209.46	Vashon	GALV			
SRC-34	SRCPP	MW	Likely decom, lost, or destroyed		654820.00	1476630										NS			
SRC-35	SRCPP	MW	Decommissioned													NS			
SRC-37	SRCPP	MW	Decommissioned													NS			
SRC-38	SRCPP	MW	Decommissioned		654710.00	1476820	253.8				42.0	44.0	211.8	209.8	Vashon	GALV			
SRC-39	SRCPP	MW	Decommissioned		654250.00	1477410	255.1				43.0	45.0	212.1	210.1	Vashon	GALV			
SRC-40	SRCPP	MW	Decommissioned		655130.00	1477490	250.7	251.59			42.5	45.0	209.09	206.59	Vashon	GALV			
SRC-41	SRCPP	MW	Decommissioned		654250.00	1478210	250.8	251.73			43.5	48.5	208.23	203.23	Vashon	SS			
SRC-42	SRCPP	MW	Decommissioned		654720.00	1476710	249.5	250.44			39.0	44.0	211.44	206.44	Vashon	SS			
SRC-43	SRCPP	MW	Decommissioned		654560.00	1476060	235.3	236.34			24.5	29.5	211.84	206.84	Vashon	SS			
SRC-44	SRCPP	MW	Likely decom, lost, or destroyed		654520.00	1479550	249.1	250.07			39.0	44.0	211.07	206.07	Vashon	SS			
SRC-45	SRCPP	MW	Decommissioned		654890.00	1476900	247.7	248.59			36.0	41.0	212.59	207.59	Vashon	SS			
SRC-46	SRCPP	MW	Decommissioned		655070.00	1476520	228.2	229.19			23.0	28.0	206.19	201.19	Vashon	SS			
SRC-47	SRCPP	MW	Decommissioned		651920.00	1476490	235.8				28.0	30.5	207.8	205.3	Vashon	SS			
SRC-48	SRCPP	MW	Decommissioned		654930.00	1476820	230.6	231.53			33.0	38.0	198.53	193.53	Vashon	SS			
SRCMW-01a	SRCPP	MW	Decommissioned		654749.87	1476253.56	222.18	223.84	18.5		6.0	16.0	217.84	207.84	Vashon			H-S Auger	3/21/1992
SRCMW-01b	SRCPP	MW	Active		654764.38	1476256.86	222.14	224.19			176.0	181.0	48.19	43.19	Sea Level			Air Rotary	1/29/1992
SRCMW-02	SRCPP	MW	Other		653650.98	1476464.67	233.74	234.62			17.0	32.0	217.62	202.62	Vashon			H-S Auger	3/25/1992
SRCMW-03	SRCPP	MW	Decommissioned		654099.10	1475801.78	226.26	227.71			8.0	23.0	219.71	204.71	Vashon			H-S Auger	3/21/1992
SRCMW-04	SRCPP	MW	Decommissioned		654340.71	1476038.2	228.84	230.61			10.0	25.0	220.61	205.61	Vashon			H-S Auger	3/21/1992
SRCMW-05	SRCPP	MW	Likely decom, lost, or destroyed		654378.56	1476271.47	245.23	247.92											
SRCMW-06	SRCPP	MW	Likely decom, lost, or destroyed		654453.54	1476650.68	249.07	251.34			31.5	46.5	219.84	204.84	Vashon			H-S Auger	3/26/1992
SRCMW-07	SRCPP	MW	Decommissioned		654286.70	1476915.7	250.58	252.15			31.0	46.0	221.15	206.15	Vashon			H-S Auger	3/23/1992
SRCMW-08	SRCPP	MW	Decommissioned		654186.32	1477232.96	244.68	246.51			27.0	42.0	219.51	204.51	Vashon			H-S Auger	3/28/1992
SRCMW-09	SRCPP	MW	Decommissioned		654651.79	1475997.28	215.99	218.16			4.0	14.0	214.16	204.16	Vashon			H-S Auger	3/23/1992
SRCMW-10	SRCPP	MW	Other		654876.74	1476758.07	227.79	229.89			11.0	26.0	218.89	203.89	Vashon			H-S Auger	3/23/1992
SRCMW-11	SRCPP	MW	Decommissioned		654785.31	1477071.04	227.40	229.20			12.0	27.0	217.2	202.2	Vashon			H-S Auger	3/21/1992
SRCMW-12	SRCPP	MW	Decommissioned		654573.91	1477300.01	253.28	255.17			57.0	62.0	198.17	193.17	Vashon			H-S Auger	3/31/1992
SRCMW-13	SRCPP	MW	Decommissioned		654667.82	1477604.45	245.90	248.33			21.5	36.5	226.83	211.83	Vashon			H-S Auger	3/26/1992
SRCMW-14	SRCPP	MW	Decommissioned		653742.17	1476981.84	253.78	255.80			36.5	51.5	219.3	204.3	Vashon			H-S Auger	3/25/1992
ST- 1	Logistics Center	MW	Likely decom, lost, or destroyed		652222.63	1497594.25	282.46		28	2.0	25	30	257.46	252.46	Vashon				
ST- 2	Logistics Center	MW	Active		650645.81	1495287.25	277.71		28	2.0	24	29	253.71	248.71	Vashon				
ST- 3	Logistics Center	MW	Decommissioned		652072.50	1496817.75	277.34		28	2.0	25	28	252.34	249.34	Vashon				
ST- 4	Logistics Center	MW	Likely decom, lost, or destroyed		652425.00	1496218.88	276.91		28	2.0	25	28	251.91	248.91	Vashon				
ST- 5	Logistics Center	MW	Likely decom, lost, or destroyed		652274.19	1497278	279.58	279.44	28	2.0	25	28	254.44	241.44	Vashon				
ST- 6	Logistics Center	MW	Likely decom, lost, or destroyed		652118.81	1497307.75	278.29		28	2.0	25	28	253.29	250.29	Vashon				
ST- 7	Logistics Center	MW	Likely decom, lost, or destroyed		651947.19	1497002.88	277.23		28	2.0	25	28	252.23	249.23	Vashon				
ST- 8	Logistics Center	MW	Decommissioned		651839.31	1497016.75	283.23		28	2.0	25	28	258.23	255.23	Vashon				
ST- 9	Logistics Center	MW	Likely decom, lost, or destroyed		651968.88	1497179.75	277.32		28	2.0	25	28	252.32	249.32	Vashon				
ST-10	Logistics Center	MW	Decommissioned		652107.63	1496248.75	278.64		28	2.0	25	28	253.64	250.64	Vashon				
SVE-1	Landfill 4	extraction	Active		656997.13	1117389.88			18.5		8.0	18.0			None	PVC	Drilling Service	Auger	6/28/1994
SVE-2	Landfill 4	extraction	Active		657316.50	1117665.13			28.0		17.5	27.5			None	PVC	Drilling Service	Auger	6/27/1994
SVE-3	Landfill 4	extraction	Likely decom, lost, or destroyed		657055.63	1117824			27.0	2.0	16.5	26.5			None	PVC	Drilling Service	Auger	7/7/1994

WELL_ID	AREA_ID	WELL_SUBTYPE	WELL_STATUS	Ecology_ID	NORTH_NAD27	EAST_NAD27	GRND_ELEV	MEAS_PT_EL	WELL_DEPTH	WELL_DIA	SCREEN_TOP	SCRN_BOTTM	SCREEN_TOP_ELEV	SCREEN_BOTTM_ELEV	AQUIFER	WELL_MATERIAL	DRILLING_CO	DRILL_MTHD	CMPLT_DATE
SVE-4	Landfill 4	extraction	Likely decom, lost, or destroyed		657061.31	1117853.63			28.0		17.5	27.5			None	PVC	Drilling Service	Auger	8/10/1994
SVE-5	Landfill 4	extraction	Likely decom, lost, or destroyed												None				
SVE-6	Landfill 4	extraction	Likely decom, lost, or destroyed												None				
SW-MC-1	Logistics Center	Surface Water	Decommissioned		650272.70	1495848.1									Vashon				
SW-MC-2/4	Logistics Center	Surface Water	Decommissioned		655950.50	140941.3									Vashon				
SW-MC-6	Logsitics Center	Surface Water	Decommissioned		649899.10	1493736.9									Vashon				
SW-MC-7	Logistics Center	Surface Water	Active		649763.70	1492884.7									Vashon				03/01/2010
SW-MW-1	Landfill 4	MW	Active		656990.69	1117393.63	236.50	236.50	32.5	6.0	19.5	29.5	217	207	Vashon	PVC	Drilling Service	Auger	6/24/1994
T-01	Tillicum	MW	Active		660701.00	1490023	272.80	274.40	79.0	6.0	61.0	66.0	213.4	208.4	Vashon	Sch40PVC		Air Rotary	5/6/1986
T-02	Tillicum	MW	Active		660410.00	1489711	273.09	272.40	80.0	6.0	59.0	69.0	213.4	203.4	Vashon	Sch40PVC		Air Rotary	5/15/1986
T-03	Tillicum	MW	Likely decom, lost, or destroyed		659211.00	1489148	274.1	273.75	73.0	6.0	60.0	70.0	213.75	203.75	Vashon	Sch40PVC		Air Rotary	5/23/1986
T-04	Tillicum	MW	Active		660114.00	1489309	276.77	276.13	64.3	6.0	55.0	65.0	221.13	211.13	Vashon	Sch40PVC		Air Rotary	7/24/1986
T-05	Tillicum	MW	Active		659692.00	1488882	272.94	272.44	56.2	6.0	47.0	57.0	225.44	215.44	Vashon	Sch40PVC		Air Rotary	6/3/1986
T-06	Tillicum	MW	Active		660967.00	1489113	272.85	272.21	78.0	6.0	60.0	70.0	212.21	202.21	Vashon	Sch40PVC		Air Rotary	7/9/1986
T-07	Tillicum	MW	Likely decom, lost, or destroyed		661857.00	1490704	259.5	259.05	55.0	6.0	43.0	53.0	216.05	206.05	Vashon	PVC		Air Rotary	7/6/1986
T-08	Tillicum	MW	Decommissioned		658646.00	1486709	260.7	263.13	77.9	6.0	66.0	76.0	197.13	187.13	Vashon	Sch40PVC		Air Rotary	7/20/1986
T-09	Tillicum	MW	Likely decom, lost, or destroyed		660683.00	1490000	272.10	273.95	212.0	6.0	197.0	207.0	76.95	66.95	Aquitard	Sch80PVC		Air Rotary	7/14/1986
T-09e	Tillicum	MW	Decommissioned		660709.00	1490036	272.10	273.83	304.0	2.0	294.0	304.0	-20.17	-30.17	Sea Level	Sch80PVC	Inc.	Churn	3/7/1988
T-10	Tillicum	MW	Active		660316.00	1489689	270.50	270.13	118.0	6.0	104.0	114.0	166.13	153.13	Vashon	Sch40PVC		Air Rotary	7/18/1986
T-11a	Tillicum	MW	Active		661500.00	1489746.13	277.21	276.86	42.8	6.0	37.8	42.8	239.06	234.06	Vashon	Sch80PVC	Lab	H-S Auger	2/24/1988
T-11b	Tillicum	MW	Active		661501.88	1489735.75	277.04	277.17	80.0	6.0	74.2	79.2	202.97	197.97	Vashon	Sch80PVC	Lab	H-S Auger	2/24/1988
T-12a	Tillicum	MW	Active		660197.63	1490611	274.27	273.71	39.7	6.0	34.7	39.7	239.01	234.01	Vashon	Sch80PVC	Lab	H-S Auger	3/1/1988
T-12b	Tillicum	MW	Active		660206.38	1490605	273.58	273.55	64.1	6.0	59.1	64.1	214.45	209.45	Vashon	Sch80PVC	Lab	H-S Auger	2/26/1988
T-13a	Tillicum	MW	Active		659081.88	1488281	273.49	272.96	37.6	6.0	32.6	37.6	240.36	235.36	Vashon	Sch80PVC	Lab	H-S Auger	3/8/1988
T-13b	Tillicum	MW	Active		659071.00	1488281	273.42	272.13	78.6	6.0	75.3	80.3	196.83	191.83	Vashon	Sch80PVC	Lab	H-S Auger	3/4/1988
T-14a	Tillicum	MW	Active		658864.69	1487400	268.12	268.44	37.6	6.0	32.6	37.6	235.84	230.84	Vashon	Sch80PVC	Lab	H-S Auger	3/2/1988
T-14b	Tillicum	MW	Active		658856.69	1487392	268.29	268.51	79.3	6.0	74.3	79.3	194.21	189.21	Vashon	Sch80PVC	Lab	H-S Auger	3/2/1988
T-15	Tillicum	MW	Active	BHK-959	0.00	0			75.2	2.0	60	75			Vashon	PVC	Helen's Pumps		9/2012
TB-01	Landfill 5	MW	Decommissioned		663080.00	1466730												?Auger	10/5/77
TB-02	Landfill 5	MW	Decommissioned		663160.00	1467680												?Auger	10/7/77
TB-03	Landfill 5	MW	Decommissioned		662020.00	1467810												?Auger	10/11/77
Test Well	Landfill 4	Test Well	Active																
TRP-1	Logistics Center	Access Port	Decommissioned		651835.63	1497367.13									Vashon				
TRP-2	Logistics Center	Access Port	Decommissioned		651862.63	1497396.25													
TRP-3	Logistics Center	Access Port	Inactive		651946.00	1497459.25													
TRP-4	Logistics Center	Access Port	Inactive		651971.19	1497493.88													
TW-01	McChord	MW	Decommissioned		665275.00	1505573	281.27	281.25	27.6	2	3.2	27.6	278.05	253.65	Vashon		Co.	H-S Auger	12/13/1985
TW-02	McChord	MW	Decommissioned		665503.00	1505280	282.73	282.81	29.7	2	5.2	29.7	277.61	253.11	Vashon		Co.	H-S Auger	12/17/1985
TW-03	McChord	MW	Decommissioned		664859.00	1505387	282.05	282.03	28.5	2	3.6	28.5	278.43	253.53	Vashon		Co.	H-S Auger	12/18/1985
TW-04	McChord	MW	Decommissioned		665453.00	1505526	280.6	280.63	30.2	2	5.2	30.2	275.43	250.43	Vashon		Co.	H-S Auger	12/18/1985
TW-05	McChord	MW	Decommissioned		665732.00	1505797	279.39	279.39	17.5	2	2.5	17.5	276.89	261.89	Vashon		Co.	H-S Auger	12/19/1985
TW-06	McChord	MW	Decommissioned		665488.30	1504850	283.82	283.86	19.5	2	4.5	19.5	279.36	264.36	Vashon		Co.	H-S Auger	12/12/1985
TW-07	McChord	MW	Decommissioned		665609.00	1504723	281.13	281.1	15.2	2	5.2	15.2	275.9	265.9	Vashon		Co.	H-S Auger	12/16/1985
TW-08	McChord	MW	Decommissioned		665977.00	1504654	276.13	276.24	10.2	2	5.2	10.2	271.04	266.04	Vashon		Co.	H-S Auger	12/16/1985
TW-09	McChord	MW	Active		666225.66	1505092.889	276.62	276.62	24.5	2	4.5	24.5	272.12	252.12	Vashon		Co.	H-S Auger	1/15/1996
TW-1	Illicit PCB Dump Site	MW	Decommissioned																
TW-10	McChord	MW	Decommissioned		665258.00	1505186	281.27	285.09	20	2	10.4	20	274.69	265.09	Vashon		Co.	H-S Auger	1/15/1986
TW-2	Illicit PCB Dump Site	MW	Decommissioned																
TW-3a	Illicit PCB Dump Site	MW	Decommissioned																
TW-3b	Illicit PCB Dump Site	MW	Decommissioned																
TZ-01	McChord	MW	Decommissioned						73.0		58.0	73.0			Vashon	PVC		H-S Auger	
TZ-02	McChord	MW	Decommissioned						68.0		58.0	68.0			Vashon	PVC		H-S Auger	
TZ-03	McChord	MW	Decommissioned		657999.00	1493099			63.0		53.0	63.0			Vashon	PVC		H-S Auger	
TZ-04	McChord	MW	Decommissioned		658011.00	1493100			33.0		23.0	33.0			Vashon	PVC		H-S Auger	
TZ-05	McChord	MW	Decommissioned		658671.00	1492358			43.0		33.0	43.0			Vashon	PVC		H-S Auger	
TZ-06	McChord	MW	Decommissioned						68.0		53.0	68.0			Vashon	PVC		H-S Auger	
TZ-07	McChord	MW	Decommissioned		660297.00	1494189			48.0		38.0	48.0			Vashon	PVC		H-S Auger	
TZ-08	McChord	MW	Decommissioned						43.0		33.0	43.0			Vashon	PVC		H-S Auger	
TZ-09	McChord	MW	Decommissioned						43.0		33.0	43.0			Vashon	PVC		H-S Auger	
TZ-10	McChord	MW	Decommissioned						53.0		43.0	53.0			Vashon	PVC		H-S Auger	
TZ-11	McChord	MW	Decommissioned						44.0		28.0	38.0			Vashon	PVC		H-S Auger	
TZ-12	McChord	MW	Decommissioned						58.0		48.0	58.0			Vashon	PVC		H-S Auger	
UA-01	McChord	MW	Decommissioned		665006.20	1502726.3	293.6	292.77	37.5	4	17.5	37.5	275.27	255.27	Vashon		Holt Drilling	CT	3/17/1988
UA-02	McChord	MW	Active		664750.37	1502512.89	292.2	293.56	37.7	4	17.7	37.7	275.86	255.86	Vashon		Holt Drilling	CT	3/8/1988
UA-03	McChord	MW	Decommissioned		665317.00	1502784	295.2	294.37	37.5	4	15.5	37.5	278.87	256.87	Vashon		Holt Drilling	CT	3/18/1988
UA-04	McChord	MW	Decommissioned		665337.50	1502410.2	294.5	293.82	37.5	4	17.5	37.5	276.32	256.32	Vashon		Holt Drilling	CT	3/14/1988
VA-04-LF-MW01	VA Hospital	MW	Active						55	4	42	52			Vashon	PVC		Sonic	6/2004
VA-04-LF-MW02	VA Hospital	MW	Decommissioned						49	4	37	47			Vashon	PVC		Sonic	6/2004
VA-04-LF-MW03	VA Hospital	MW	Decommissioned						41	4	30	40			Vashon	PVC		Sonic	6/2004
VA-04-LF-MW04	VA Hospital	MW	Decommissioned						46	4	33	43			Vashon	PVC		Sonic	6/2004
VMD-002MW	Camp Murray	MW	Other				85.0		47.0	2.0	36.5	46.5				PVC	Company	Air Rotary	8/22/1994

WELL_ID	AREA_ID	WELL_SUBTYPE	WELL_STATUS	Ecology_ID	NORTH_NAD27	EAST_NAD27	GRND_ELEV	MEAS_PT_EL	WELL_DEPTH	WELL_DIA	SCREEN_TOP	SCRN_BOTTM	SCREEN_TOP_ELEV	SCREEN_BOTTM_ELEV	AQUIFER	WELL_MATERIAL	DRILLING_CO	DRILL_MTHD	CMPLT_DATE
VMD-003MW	Camp Murray	MW	Other				85.0		46.5	2.0	35.5					PVC	Company	Air Rotary	8/25/1994
VMD-004MW	Camp Murray	MW	Other				85.0		47.0	2.0	36.5					PVC	Company	Air Rotary	8/26/1994
VZP-E-10	Landfill 4	piezometer	Likely decom, lost, or destroyed		657055.63	1118003.25			30.0	6.0	19.5	29.5			None	PVC	Drilling Service	Auger	7/22/1994
VZP-E-6	Landfill 4	piezometer	Likely decom, lost, or destroyed		657055.69	1117864.25			27.5	6.0	17.0	27.0			None	PVC	Drilling Service	Auger	7/11/1994
VZP-E-7	Landfill 4	piezometer	Likely decom, lost, or destroyed		657054.13	1117877.75			28.5	6.0	18.0	28.0			None	PVC	Drilling Service	Auger	8/12/1994
VZP-E-8	Landfill 4	piezometer	Decommissioned		657054.69	1117902.5			29.0	6.0	18.5	28.5			None	PVC	Drilling Service	Auger	7/28/1994
VZP-E-9	Landfill 4	piezometer	Likely decom, lost, or destroyed		657059.81	1117952.75			30.5	6.0	20.0	30.0			None	PVC	Drilling Service	Auger	7/23/1994
VZP-S-1a	Landfill 4	piezometer	Likely decom, lost, or destroyed		657042.88	1117843.75			20.0	6.0	14.5	19.5			None	PVC	Drilling Service	Auger	8/11/1994
VZP-S-1b	Landfill 4	piezometer	Likely decom, lost, or destroyed		657042.81	1117846.75			28.0	6.0	22.5	28.0			None	PVC	Drilling Service	Auger	8/11/1994
VZP-S-2	Landfill 4	piezometer	Likely decom, lost, or destroyed		657027.19	1117848.25			28.0	6.0	17.5	27.5			None	PVC	Drilling Service	Auger	7/27/1994
VZP-S-3	Landfill 4	piezometer	Likely decom, lost, or destroyed		657002.38	1117855.25			28.0	6.0	17.5	27.5			None	PVC	Drilling Service	Auger	7/24/1994
VZP-S-4	Landfill 4	piezometer	Likely decom, lost, or destroyed		656952.81	1117857			28.0	6.0	17.5	27.5			None	PVC	Drilling Service	Auger	7/24/1994
VZP-S-5	Landfill 4	piezometer	Likely decom, lost, or destroyed		656902.13	1117857.5			25.0	6.0	14.5	24.5			None	PVC	Drilling Service	Auger	7/6/1994
Well 01	North Fort	Water Supply	Decommissioned		660545.00	1477722	234		222.0	18.0	197	200-214	41	16		Steel			11/1940
Well 02	North Fort	Water Supply	Decommissioned		661920.00	1478490	234		239.0	18.0	216	230				Steel			1/1941
Well 03	North Fort	Water Supply	Decommissioned				229.0		229.0	18.0	185-195	197-219	44	10		Steel			2/41
Well 04	North Fort	Water Supply	Decommissioned		663910.00	1479790	236		1464	38 -16	300,320-330	1130,1340-				Steel			1942
Well 04b	North Fort	Water Supply	Decommissioned		664170.00	1480160	233.4		580.0										
Well 05	GAAF	Water Supply	Decommissioned		646430.00	1480350	282.0		990.0										8/42
Well 06R	GAAF	Water Supply	Active		648201.00	1483820	291.0		1353.0	26	216,340-348	990,1240-1270			Sea Level				11/1943
Well 07	Logistics Center	Water Supply	Decommissioned		656280.00	1491130	280.0		1505.0		104.0	110.0	176	170					1941
Well 08	Logistics Center	Water Supply	Decommissioned		653210.00	1493810	287.0		1008.0		235.0	787.0	52	-500		SS		Churn	1944
Well 09	Golf Course	Water Supply	Decommissioned		647510.00	1461790	240.0		304.0	16.0		304.0		-18					1949
Well 09B	Golf Course	Water Supply	Active																
Well 10	ASP	Water Supply	Active		649664.00	1502044	336		116	8.0								Churn drill	1957
Well 11	Golf Course	Water Supply	Likely decom, lost, or destroyed		645740.00	1460180	240.0		141.0		115-127	131-141					Co		7/25/60
Well 12A	Sequalitchew	Water Supply	Active		653780.00	1478350			17.0						Vashon				1962
Well 12B	Sequalitchew	Water Supply	Active		653970.00	1478270			17.0						Vashon	Concrete			9/62
Well 13	MAMC	Water Supply	Active		653213.00	1481638		274.24	275.0		217	230-240			Sea Level				1/1965
Well 14	GAAF	Water Supply	Active						445		405	435			Sea Level				1/1965
Well 15	Golf Course	Irrigation	Active		645410.00	1459980	240.0		304.0		253.0	258.0	-13	-18		8"SS			1/1/68
Well 16	Logistics Center	Water Supply	Decommissioned		657210.00	1488830	268.0		360.0	20.0/16.0	298.5	338.5	-30.5	-70.5		Steel	Drilling	Churn	9/12/1969
Well 17	Bldg 4178	Water Supply	Active		649260.00	1419510			550.0	20.0	460.0	480.0				Steel			1969
Well 18	Golf Course	Irrigation	Active		647260.00	1464020			231	16.0					Vashon	Steel		Churn	
Well 19a	Sequalitchew	Water Supply	Decommissioned		655440.00	1478420	253.5	255.5	710.0		678	704				Steel			1992
Well 19b	Sequalitchew	Water Supply	Decommissioned		655440.00	1478410	253.5	255.5	280.0		245	275				Steel			1988
Well 20	GAAF	Water Supply	Active		641190.00	1485750			700.0		520	600				Steel		60L	1992
Well 22	Golf Course	Water Supply	Active		648570.00	1461579			295	8 5/8	256.0	271.0			Sea Level	Steel	Drilling Service	Rotary	1/19/1994
Well 23	ASP	Water Supply	Active	AHM290	0.00	0			180	6.0	120	125			Vashon	Steel	Holt	Air Rotary	12/7/2002
Well 24	Range 17	Water Supply	Active				302.0		175.0	6.0	152.0	172.0	150	130			Drilling, Inc.	Rotary	5/23/2003
WTA-1	Madigan	Geothermal	Active	APF-967	652953.00	1489347			234.5	8.0	210	230			Sea Level	Steel	Holt Services	Cable Tool	3/20/2012
WTA-2	Madigan	Geothermal	Active	APF-968		0			330	8.0	280	330			Sea Level	Steel	Holt Services	Cable Tool	5/21/2012
WTA-3	Madigan	Recharge	Active	APF-965		0			230	8.0	190	230			Sea Level	Steel	Holt Services	Cable Tool	9/14/2012
WTA-4	Madigan	Recharge	Active	APF-966		0			330	8.0	270	320			Sea Level	Steel	Holt Services	Cable Tool	6/20/2012

APPENDIX B

LABORATORY ANALYTICAL DATA (BY QUARTER)

FIRST QUARTER

Analytical Resources, Incorporated
Analytical Chemists and Consultants

March 11, 2014

Thomas Lynott
Department of the Army
Directorate of Public Works
Attn Environmental Division (T. Lynott)
2012 Liggett Ave Box 339500 MS 17
Joint Base Lewis-McChord, Washington 98433-9500
Official Business

RE: Client Project: Logram
ARI Job No.: YB77

Dear Mr. Lynott:

Please find enclosed the original Chain-of-Custody record (COC), sample receipt documentation, and the final data for the project referenced above. Analytical Resources, Inc. (ARI) accepted seven water samples on March 7, 2014. For further details regarding sample receipt please refer to the enclosed Cooler Receipt Form.

The samples were analyzed for VOCs as requested on the COCs.

The 3/10/14 CCAL is out of control high for all associated FORM III "Q" flagged analytes. All associated samples that contain analyte have been flagged with a "Q" qualifier.

The VOCs LCSD is out of control high for acetone and 2-Butanone. The LCS is in control and no further action was taken.

An electronic copy of this report and all supporting raw data will remain on file with ARI. Should you have any questions or problems, please feel free to contact me at your convenience.

Respectfully,
ANALYTICAL RESOURCES, INC.

Kelly Bottem
Client Services Manager
(206) 695-6211
kellyb@arilabs.com
www.arilabs.com

eFile: YB77

4611 South 134th Place, Suite 100 • Tukwila WA 98168 • **206-695-6200** • **206-695-6201** fax

Chain of Custody Record & Laboratory Analysis Request

TO 0021

Analytical Resources, Incorporated
Analytical Chemists and Consultants
4611 South 134th Place, Suite 100
Tukwila, WA 98168
206-695-6200 206-695-6201 (fax)

ARI Assigned Number:	Turn-around Requested: STANDARD TAT
ARI Client Company: JOINT BASE LEWIS McCHORD PUBLIC WORKS IMLM-PWE	Phone: 253 966 1802
Client Contact: TOM LYNOTT	
Client Project Name: LOGRAM	
Client Project #:	Samplers: B THOMAS T LYNOTT

Page: 1 of 1
Date: 07MAR14 Ice Present?
No. of Coolers: Cooler Temps: 3.9

Sample ID	Date	Time	Matrix	No Containers	Analysis Requested: 1006A	Notes/Comments
LGC140228E-1	28FEB14	1058	WATER	2	X	VOCs
LGC140228I5I-1	28FEB14	1057	WATER	2	X	EPA 8260C
LGC140228EGDYE-1	28FEB14	1153	WATER	2	X	
LGC140228EGDYI-1	28FEB14	1152	WATER	2	X	
LGC140228SLAPE-1	28FEB14	1250	WATER	2	X	
LGC140228SLAPI-1	28FEB14	1245	WATER	2	X	
LGC140307TB-1	07MAR14	1000	WATER	2	X	

Comments/Special Instructions	Relinquished by (Signature)	Received by (Signature)	Relinquished by (Signature)	Received by (Signature)
	Printed Name: TOM J LYNOTT	Printed Name:	Printed Name	Printed Name
	Company: VERSAR	Company: ARI	Company	Company
	Date & Time: 07MAR14 1005	Date & Time: 1005	Date & Time	Date & Time

07MAR14

Limits of Liability: *ARI will perform all requested services in accordance with appropriate methodology following ARI Standard Operating Procedures and the ARI Quality Assurance Program. This program meets standards for the industry. The total liability of ARI, its officers, agents, employees, or successors, arising out of or in connection with the requested services, shall not exceed the Invoiced amount for said services. The acceptance by the client of a proposal for services by ARI release ARI from any liability in excess thereof, not withstanding any provision to the contrary in any contract, purchase order or co-signed agreement between ARI and the Client.*

Sample Retention Policy: All samples submitted to ARI will be appropriately discarded no sooner than 90 days after receipt or 60 days after submission of hardcopy data, whichever is longer, unless alternate retention schedules have been established by work-order or contract.

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Cooler Receipt Form

ARI Client: TBLM

Project Name: Log Ram

COC No(s): _____ NA

Delivered by: Fed-Ex UPS Courier Hand Delivered Other: _____

Assigned ARI Job No: XB77

Tracking No. _____ NA

Preliminary Examination Phase:

Were intact, properly signed and dated custody seals attached to the outside of to cooler? YES (NO)

Were custody papers included with the cooler? (YES) NO

Were custody papers properly filled out (ink, signed, etc.) (YES) NO

Temperature of Cooler(s) (°C) (recommended 2 0-6.0 °C for chemistry) 3.9

Time: _____

If cooler temperature is out of compliance fill out form 00070F

Temp Gun ID#: 90377952

Cooler Accepted by: TS Date: 3-7-14 Time: 1625

Complete custody forms and attach all shipping documents

Log-In Phase:

Was a temperature blank included in the cooler? YES (NO)

What kind of packing material was used? Bubble Wrap Wet Ice (Gel Packs) Baggies Foam Block Paper Other: _____

Was sufficient ice used (if appropriate)? NA (YES) NO

Were all bottles sealed in individual plastic bags? YES (NO)

Did all bottles arrive in good condition (unbroken)? (YES) NO

Were all bottle labels complete and legible? (YES) NO

Did the number of containers listed on COC match with the number of containers received? (YES) NO

Did all bottle labels and tags agree with custody papers? (YES) NO

Were all bottles used correct for the requested analyses? (YES) NO

Do any of the analyses (bottles) require preservation? (attach preservation sheet, excluding VOCs) (NA) YES NO

Were all VOC vials free of air bubbles? (NA) YES NO

Was sufficient amount of sample sent in each bottle? (YES) NO

Date VOC Trip Blank was made at ARI. (NA) _____

Was Sample Split by ARI: (NA) YES Date/Time: _____ Equipment: _____ Split by: _____

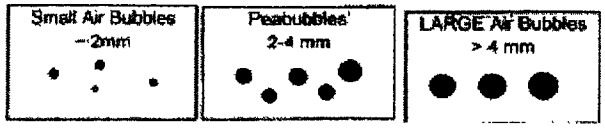
Samples Logged by: TS Date: 3-7-14 Time: 1322

*** Notify Project Manager of discrepancies or concerns ***

Sample ID on Bottle	Sample ID on COC	Sample ID on Bottle	Sample ID on COC

Additional Notes, Discrepancies, & Resolutions:

By: Date:



Small → "sm" (< 2 mm)
Peabubbles → "pb" (2 to < 4 mm)
Large → "lg" (4 to < 6 mm)
Headspace → "hs" (> 6 mm)

XB77:00003

Sample ID Cross Reference Report

ANALYTICAL RESOURCES INCORPORATED

ARI Job No: YB77
Client: Joint Base Lewis McChord
Project Event: N/A
Project Name: Logram

	Sample ID	ARI Lab ID	ARI LIMS ID	Matrix	Sample Date/Time	VTSR
1.	LGC140228E-1	YB77A	14-3804	Water	02/28/14 10:58	03/07/14 10:05
2.	LGC140228I5I-1	YB77B	14-3805	Water	02/28/14 10:57	03/07/14 10:05
3.	LGC140228EGDYE-1	YB77C	14-3806	Water	02/28/14 11:53	03/07/14 10:05
4.	LGC140228EGDYI-1	YB77D	14-3807	Water	02/28/14 11:52	03/07/14 10:05
5.	LGC140228SLAPE-1	YB77E	14-3808	Water	02/28/14 12:50	03/07/14 10:05
6.	LGC140228SLAPI-1	YB77F	14-3809	Water	02/28/14 12:45	03/07/14 10:05
7.	LGC140228TB-1	YB77G	14-3810	Water	02/28/14 10:00	03/07/14 10:05

YB77:080804

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140228E-1**
 SAMPLE

Lab Sample ID: YB77A
LIMS ID: 14-3804
Matrix: Water
Data Release Authorized:
Reported: 03/11/14

QC Report No: YB77-Joint Base Lewis McChord
Project: Logram

Date Sampled: 02/28/14
Date Received: 03/07/14

Instrument/Analyst: NT3/PKC
Date Analyzed: 03/10/14 13:29

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	LOQ	Result	Q
74-87-3	Chloromethane	0.50	< 0.50	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.20	< 0.20	U
75-00-3	Chloroethane	0.20	< 0.20	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	Acetone	5.0	< 5.0	U
75-15-0	Carbon Disulfide	0.20	< 0.20	U
75-35-4	1,1-Dichloroethene	0.20	< 0.20	U
75-34-3	1,1-Dichloroethane	0.20	< 0.20	U
156-60-5	trans-1,2-Dichloroethene	0.20	< 0.20	U
156-59-2	cis-1,2-Dichloroethene	0.20	< 0.20	U
67-66-3	Chloroform	0.20	< 0.20	U
107-06-2	1,2-Dichloroethane	0.20	< 0.20	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	0.20	< 0.20	U
56-23-5	Carbon Tetrachloride	0.20	< 0.20	U
108-05-4	Vinyl Acetate	0.20	< 0.20	U
75-27-4	Bromodichloromethane	0.20	< 0.20	U
78-87-5	1,2-Dichloropropane	0.20	< 0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	< 0.20	U
79-01-6	**Trichloroethene**	**0.20**	**0.29**	
124-48-1	Dibromochloromethane	0.20	< 0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	< 0.20	U
71-43-2	Benzene	0.20	< 0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	< 0.20	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.20	< 0.20	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.20	< 0.20	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	< 0.20	U
108-88-3	Toluene	0.20	< 0.20	U
108-90-7	Chlorobenzene	0.20	< 0.20	U
100-41-4	Ethylbenzene	0.20	< 0.20	U
100-42-5	Styrene	0.20	< 0.20	U
75-69-4	Trichlorofluoromethane	0.20	< 0.20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.20	< 0.20	U
179601-23-1	m,p-Xylene	0.40	< 0.40	U
95-47-6	o-Xylene	0.20	< 0.20	U
95-50-1	1,2-Dichlorobenzene	0.20	< 0.20	U
541-73-1	1,3-Dichlorobenzene	0.20	< 0.20	U
106-46-7	1,4-Dichlorobenzene	0.20	< 0.20	U

Lab Sample ID: YB77A
LIMS ID: 14-3804
Matrix: Water
Date Analyzed: 03/10/14 13:29

QC Report No: YB77-Joint Base Lewis McChord
Project: Logram

CAS Number	Analyte	LOQ	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Iodomethane	1.0	< 1.0	U
74-96-4	Bromoethane	0.20	< 0.20	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.20	< 0.20	U
74-95-3	Dibromomethane	0.20	< 0.20	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	< 0.20	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	< 0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	< 0.50	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.20	< 0.20	U
95-63-6	1,2,4-Trimethylbenzene	0.20	< 0.20	U
87-68-3	Hexachlorobutadiene	0.50	< 0.50	U
106-93-4	1,2-Dibromoethane	0.20	< 0.20	U
74-97-5	Bromochloromethane	0.20	< 0.20	U
594-20-7	2,2-Dichloropropane	0.20	< 0.20	U
142-28-9	1,3-Dichloropropane	0.20	< 0.20	U
98-82-8	Isopropylbenzene	0.20	< 0.20	U
103-65-1	n-Propylbenzene	0.20	< 0.20	U
108-86-1	Bromobenzene	0.20	< 0.20	U
95-49-8	2-Chlorotoluene	0.20	< 0.20	U
106-43-4	4-Chlorotoluene	0.20	< 0.20	U
98-06-6	tert-Butylbenzene	0.20	< 0.20	U
135-98-8	sec-Butylbenzene	0.20	< 0.20	U
99-87-6	4-Isopropyltoluene	0.20	< 0.20	U
104-51-8	n-Butylbenzene	0.20	< 0.20	U
120-82-1	1,2,4-Trichlorobenzene	0.50	< 0.50	U
91-20-3	Naphthalene	0.50	< 0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	< 0.50	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	102%
d8-Toluene	101%
Bromofluorobenzene	96.2%
d4-1,2-Dichlorobenzene	103%

2-Chloroethylvinylether is an acid labile compound and may not be recovered from an acid preserved sample.

EPA SW-846 indicates that vinyl chloride and styrene may degrade in the presence of acid preservative.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140228I5I-1**
Page 1 of 2 **SAMPLE**

Lab Sample ID: YB77B
LIMS ID: 14-3805
Matrix: Water
Data Release Authorized:
Reported: 03/11/14

QC Report No: YB77-Joint Base Lewis McChord
Project: Logram

Date Sampled: 02/28/14
Date Received: 03/07/14

Instrument/Analyst: NT3/PKC
Date Analyzed: 03/10/14 13:58

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	LOQ	Result	Q
74-87-3	Chloromethane	0.50	< 0.50	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.20	< 0.20	U
75-00-3	Chloroethane	0.20	< 0.20	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	Acetone	5.0	< 5.0	U
75-15-0	Carbon Disulfide	0.20	< 0.20	U
75-35-4	1,1-Dichloroethene	0.20	< 0.20	U
75-34-3	1,1-Dichloroethane	0.20	< 0.20	U
156-60-5	trans-1,2-Dichloroethene	0.20	< 0.20	U
156-59-2	**cis-1,2-Dichloroethene**	**0.20**	**0.60**	
67-66-3	**Chloroform**	**0.20**	**0.28**	
107-06-2	1,2-Dichloroethane	0.20	< 0.20	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	0.20	< 0.20	U
56-23-5	Carbon Tetrachloride	0.20	< 0.20	U
108-05-4	Vinyl Acetate	0.20	< 0.20	U
75-27-4	Bromodichloromethane	0.20	< 0.20	U
78-87-5	1,2-Dichloropropane	0.20	< 0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	< 0.20	U
79-01-6	**Trichloroethene**	**0.20**	**29**	
124-48-1	Dibromochloromethane	0.20	< 0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	< 0.20	U
71-43-2	Benzene	0.20	< 0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	< 0.20	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.20	< 0.20	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.20	< 0.20	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	< 0.20	U
108-88-3	Toluene	0.20	< 0.20	U
108-90-7	Chlorobenzene	0.20	< 0.20	U
100-41-4	Ethylbenzene	0.20	< 0.20	U
100-42-5	Styrene	0.20	< 0.20	U
75-69-4	Trichlorofluoromethane	0.20	< 0.20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.20	< 0.20	U
179601-23-1	m,p-Xylene	0.40	< 0.40	U
95-47-6	o-Xylene	0.20	< 0.20	U
95-50-1	1,2-Dichlorobenzene	0.20	< 0.20	U
541-73-1	1,3-Dichlorobenzene	0.20	< 0.20	U
106-46-7	1,4-Dichlorobenzene	0.20	< 0.20	U

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140228I5I-1**
 SAMPLE

Lab Sample ID: YB77B
LIMS ID: 14-3805
Matrix: Water
Date Analyzed: 03/10/14 13:58

QC Report No: YB77-Joint Base Lewis McChord
Project: Logram

CAS Number	Analyte	LOQ	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Iodomethane	1.0	< 1.0	U
74-96-4	Bromoethane	0.20	< 0.20	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.20	< 0.20	U
74-95-3	Dibromomethane	0.20	< 0.20	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	< 0.20	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	< 0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	< 0.50	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.20	< 0.20	U
95-63-6	1,2,4-Trimethylbenzene	0.20	< 0.20	U
87-68-3	Hexachlorobutadiene	0.50	< 0.50	U
106-93-4	1,2-Dibromoethane	0.20	< 0.20	U
74-97-5	Bromochloromethane	0.20	< 0.20	U
594-20-7	2,2-Dichloropropane	0.20	< 0.20	U
142-28-9	1,3-Dichloropropane	0.20	< 0.20	U
98-82-8	Isopropylbenzene	0.20	< 0.20	U
103-65-1	n-Propylbenzene	0.20	< 0.20	U
108-86-1	Bromobenzene	0.20	< 0.20	U
95-49-8	2-Chlorotoluene	0.20	< 0.20	U
106-43-4	4-Chlorotoluene	0.20	< 0.20	U
98-06-6	tert-Butylbenzene	0.20	< 0.20	U
135-98-8	sec-Butylbenzene	0.20	< 0.20	U
99-87-6	4-Isopropyltoluene	0.20	< 0.20	U
104-51-8	n-Butylbenzene	0.20	< 0.20	U
120-82-1	1,2,4-Trichlorobenzene	0.50	< 0.50	U
91-20-3	Naphthalene	0.50	< 0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	< 0.50	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	102%
d8-Toluene	103%
Bromofluorobenzene	99.1%
d4-1,2-Dichlorobenzene	104%

2-Chloroethylvinylether is an acid labile compound and may not be recovered from an acid preserved sample.

EPA SW-846 indicates that vinyl chloride and styrene may degrade in the presence of acid preservative.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140228EGDYE-1**
Page 1 of 2 **SAMPLE**

Lab Sample ID: YB77C
LIMS ID: 14-3806
Matrix: Water
Data Release Authorized:
Reported: 03/11/14

QC Report No: YB77-Joint Base Lewis McChord
Project: Logram

Date Sampled: 02/28/14
Date Received: 03/07/14

Instrument/Analyst: NT3/PKC
Date Analyzed: 03/10/14 14:27

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	LOQ	Result	Q
74-87-3	Chloromethane	0.50	< 0.50	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.20	< 0.20	U
75-00-3	Chloroethane	0.20	< 0.20	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	Acetone	5.0	< 5.0	U
75-15-0	Carbon Disulfide	0.20	< 0.20	U
75-35-4	1,1-Dichloroethene	0.20	< 0.20	U
75-34-3	1,1-Dichloroethane	0.20	< 0.20	U
156-60-5	trans-1,2-Dichloroethene	0.20	< 0.20	U
156-59-2	**cis-1,2-Dichloroethene**	**0.20**	**0.52**	
67-66-3	Chloroform	0.20	< 0.20	U
107-06-2	1,2-Dichloroethane	0.20	< 0.20	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	0.20	< 0.20	U
56-23-5	Carbon Tetrachloride	0.20	< 0.20	U
108-05-4	Vinyl Acetate	0.20	< 0.20	U
75-27-4	Bromodichloromethane	0.20	< 0.20	U
78-87-5	1,2-Dichloropropane	0.20	< 0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	< 0.20	U
79-01-6	**Trichloroethene**	**0.20**	**0.36**	
124-48-1	Dibromochloromethane	0.20	< 0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	< 0.20	U
71-43-2	Benzene	0.20	< 0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	< 0.20	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.20	< 0.20	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.20	< 0.20	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	< 0.20	U
108-88-3	Toluene	0.20	< 0.20	U
108-90-7	Chlorobenzene	0.20	< 0.20	U
100-41-4	Ethylbenzene	0.20	< 0.20	U
100-42-5	Styrene	0.20	< 0.20	U
75-69-4	Trichlorofluoromethane	0.20	< 0.20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.20	< 0.20	U
179601-23-1	m,p-Xylene	0.40	< 0.40	U
95-47-6	o-Xylene	0.20	< 0.20	U
95-50-1	1,2-Dichlorobenzene	0.20	< 0.20	U
541-73-1	1,3-Dichlorobenzene	0.20	< 0.20	U
106-46-7	1,4-Dichlorobenzene	0.20	< 0.20	U

Lab Sample ID: YB77C
LIMS ID: 14-3806
Matrix: Water
Date Analyzed: 03/10/14 14:27

QC Report No: YB77-Joint Base Lewis McChord
Project: Logram

CAS Number	Analyte	LOQ	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Iodomethane	1.0	< 1.0	U
74-96-4	Bromoethane	0.20	< 0.20	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.20	< 0.20	U
74-95-3	Dibromomethane	0.20	< 0.20	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	< 0.20	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	< 0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	< 0.50	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.20	< 0.20	U
95-63-6	1,2,4-Trimethylbenzene	0.20	< 0.20	U
87-68-3	Hexachlorobutadiene	0.50	< 0.50	U
106-93-4	1,2-Dibromoethane	0.20	< 0.20	U
74-97-5	Bromochloromethane	0.20	< 0.20	U
594-20-7	2,2-Dichloropropane	0.20	< 0.20	U
142-28-9	1,3-Dichloropropane	0.20	< 0.20	U
98-82-8	Isopropylbenzene	0.20	< 0.20	U
103-65-1	n-Propylbenzene	0.20	< 0.20	U
108-86-1	Bromobenzene	0.20	< 0.20	U
95-49-8	2-Chlorotoluene	0.20	< 0.20	U
106-43-4	4-Chlorotoluene	0.20	< 0.20	U
98-06-6	tert-Butylbenzene	0.20	< 0.20	U
135-98-8	sec-Butylbenzene	0.20	< 0.20	U
99-87-6	4-Isopropyltoluene	0.20	< 0.20	U
104-51-8	n-Butylbenzene	0.20	< 0.20	U
120-82-1	1,2,4-Trichlorobenzene	0.50	< 0.50	U
91-20-3	Naphthalene	0.50	< 0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	< 0.50	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	99.1%
d8-Toluene	99.3%
Bromofluorobenzene	96.4%
d4-1,2-Dichlorobenzene	100%

2-Chloroethylvinylether is an acid labile compound and may not be recovered from an acid preserved sample.

EPA SW-846 indicates that vinyl chloride and styrene may degrade in the presence of acid preservative.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140228EGDYI-1**
 SAMPLE

Lab Sample ID: YB77D
LIMS ID: 14-3807
Matrix: Water
Data Release Authorized:
Reported: 03/11/14

QC Report No: YB77-Joint Base Lewis McChord
Project: Logram

Date Sampled: 02/28/14
Date Received: 03/07/14

Instrument/Analyst: NT3/PKC
Date Analyzed: 03/10/14 14:56

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	LOQ	Result	Q
74-87-3	Chloromethane	0.50	< 0.50	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.20	< 0.20	U
75-00-3	Chloroethane	0.20	< 0.20	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	Acetone	5.0	< 5.0	U
75-15-0	Carbon Disulfide	0.20	< 0.20	U
75-35-4	1,1-Dichloroethene	0.20	< 0.20	U
75-34-3	1,1-Dichloroethane	0.20	< 0.20	U
156-60-5	trans-1,2-Dichloroethene	0.20	< 0.20	U
156-59-2	**cis-1,2-Dichloroethene**	**0.20**	**8.0**	
67-66-3	Chloroform	0.20	< 0.20	U
107-06-2	1,2-Dichloroethane	0.20	< 0.20	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	0.20	< 0.20	U
56-23-5	Carbon Tetrachloride	0.20	< 0.20	U
108-05-4	Vinyl Acetate	0.20	< 0.20	U
75-27-4	Bromodichloromethane	0.20	< 0.20	U
78-87-5	1,2-Dichloropropane	0.20	< 0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	< 0.20	U
79-01-6	**Trichloroethene**	**0.20**	**42**	
124-48-1	Dibromochloromethane	0.20	< 0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	< 0.20	U
71-43-2	Benzene	0.20	< 0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	< 0.20	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.20	< 0.20	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.20	< 0.20	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	< 0.20	U
108-88-3	Toluene	0.20	< 0.20	U
108-90-7	Chlorobenzene	0.20	< 0.20	U
100-41-4	Ethylbenzene	0.20	< 0.20	U
100-42-5	Styrene	0.20	< 0.20	U
75-69-4	Trichlorofluoromethane	0.20	< 0.20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.20	< 0.20	U
179601-23-1	m,p-Xylene	0.40	< 0.40	U
95-47-6	o-Xylene	0.20	< 0.20	U
95-50-1	1,2-Dichlorobenzene	0.20	< 0.20	U
541-73-1	1,3-Dichlorobenzene	0.20	< 0.20	U
106-46-7	1,4-Dichlorobenzene	0.20	< 0.20	U

Lab Sample ID: YB77D
LIMS ID: 14-3807
Matrix: Water
Date Analyzed: 03/10/14 14:56

QC Report No: YB77-Joint Base Lewis McChord
Project: Logram

CAS Number	Analyte	LOQ	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Iodomethane	1.0	< 1.0	U
74-96-4	Bromoethane	0.20	< 0.20	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.20	< 0.20	U
74-95-3	Dibromomethane	0.20	< 0.20	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	< 0.20	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	< 0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	< 0.50	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.20	< 0.20	U
95-63-6	1,2,4-Trimethylbenzene	0.20	< 0.20	U
87-68-3	Hexachlorobutadiene	0.50	< 0.50	U
106-93-4	1,2-Dibromoethane	0.20	< 0.20	U
74-97-5	Bromochloromethane	0.20	< 0.20	U
594-20-7	2,2-Dichloropropane	0.20	< 0.20	U
142-28-9	1,3-Dichloropropane	0.20	< 0.20	U
98-82-8	Isopropylbenzene	0.20	< 0.20	U
103-65-1	n-Propylbenzene	0.20	< 0.20	U
108-86-1	Bromobenzene	0.20	< 0.20	U
95-49-8	2-Chlorotoluene	0.20	< 0.20	U
106-43-4	4-Chlorotoluene	0.20	< 0.20	U
98-06-6	tert-Butylbenzene	0.20	< 0.20	U
135-98-8	sec-Butylbenzene	0.20	< 0.20	U
99-87-6	4-Isopropyltoluene	0.20	< 0.20	U
104-51-8	n-Butylbenzene	0.20	< 0.20	U
120-82-1	1,2,4-Trichlorobenzene	0.50	< 0.50	U
91-20-3	Naphthalene	0.50	< 0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	< 0.50	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	102%
d8-Toluene	97.8%
Bromofluorobenzene	95.6%
d4-1,2-Dichlorobenzene	100%

2-Chloroethylvinylether is an acid labile compound and may not be recovered from an acid preserved sample.

EPA SW-846 indicates that vinyl chloride and styrene may degrade in the presence of acid preservative.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140228SLAPE-1**
Page 1 of 2 **SAMPLE**

Lab Sample ID: YB77E
LIMS ID: 14-3808
Matrix: Water
Data Release Authorized:
Reported: 03/11/14

QC Report No: YB77-Joint Base Lewis McChord
Project: Logram

Date Sampled: 02/28/14
Date Received: 03/07/14

Instrument/Analyst: NT3/PKC
Date Analyzed: 03/10/14 15:26

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	LOQ	Result	Q
74-87-3	Chloromethane	0.50	< 0.50	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.20	< 0.20	U
75-00-3	Chloroethane	0.20	< 0.20	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	Acetone	5.0	< 5.0	U
75-15-0	Carbon Disulfide	0.20	< 0.20	U
75-35-4	1,1-Dichloroethene	0.20	< 0.20	U
75-34-3	1,1-Dichloroethane	0.20	< 0.20	U
156-60-5	trans-1,2-Dichloroethene	0.20	< 0.20	U
156-59-2	cis-1,2-Dichloroethene	0.20	< 0.20	U
67-66-3	Chloroform	0.20	< 0.20	U
107-06-2	1,2-Dichloroethane	0.20	< 0.20	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	0.20	< 0.20	U
56-23-5	Carbon Tetrachloride	0.20	< 0.20	U
108-05-4	Vinyl Acetate	0.20	< 0.20	U
75-27-4	Bromodichloromethane	0.20	< 0.20	U
78-87-5	1,2-Dichloropropane	0.20	< 0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	< 0.20	U
79-01-6	**Trichloroethene**	**0.20**	**0.61**	
124-48-1	Dibromochloromethane	0.20	< 0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	< 0.20	U
71-43-2	Benzene	0.20	< 0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	< 0.20	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.20	< 0.20	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.20	< 0.20	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	< 0.20	U
108-88-3	Toluene	0.20	< 0.20	U
108-90-7	Chlorobenzene	0.20	< 0.20	U
100-41-4	Ethylbenzene	0.20	< 0.20	U
100-42-5	Styrene	0.20	< 0.20	U
75-69-4	Trichlorofluoromethane	0.20	< 0.20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.20	< 0.20	U
179601-23-1	m,p-Xylene	0.40	< 0.40	U
95-47-6	o-Xylene	0.20	< 0.20	U
95-50-1	1,2-Dichlorobenzene	0.20	< 0.20	U
541-73-1	1,3-Dichlorobenzene	0.20	< 0.20	U
106-46-7	1,4-Dichlorobenzene	0.20	< 0.20	U

Lab Sample ID: YB77E
LIMS ID: 14-3808
Matrix: Water
Date Analyzed: 03/10/14 15:26

QC Report No: YB77-Joint Base Lewis McChord
Project: Logram

CAS Number	Analyte	LOQ	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Iodomethane	1.0	< 1.0	U
74-96-4	Bromoethane	0.20	< 0.20	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.20	< 0.20	U
74-95-3	Dibromomethane	0.20	< 0.20	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	< 0.20	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	< 0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	< 0.50	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.20	< 0.20	U
95-63-6	1,2,4-Trimethylbenzene	0.20	< 0.20	U
87-68-3	Hexachlorobutadiene	0.50	< 0.50	U
106-93-4	1,2-Dibromoethane	0.20	< 0.20	U
74-97-5	Bromochloromethane	0.20	< 0.20	U
594-20-7	2,2-Dichloropropane	0.20	< 0.20	U
142-28-9	1,3-Dichloropropane	0.20	< 0.20	U
98-82-8	Isopropylbenzene	0.20	< 0.20	U
103-65-1	n-Propylbenzene	0.20	< 0.20	U
108-86-1	Bromobenzene	0.20	< 0.20	U
95-49-8	2-Chlorotoluene	0.20	< 0.20	U
106-43-4	4-Chlorotoluene	0.20	< 0.20	U
98-06-6	tert-Butylbenzene	0.20	< 0.20	U
135-98-8	sec-Butylbenzene	0.20	< 0.20	U
99-87-6	4-Isopropyltoluene	0.20	< 0.20	U
104-51-8	n-Butylbenzene	0.20	< 0.20	U
120-82-1	1,2,4-Trichlorobenzene	0.50	< 0.50	U
91-20-3	Naphthalene	0.50	< 0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	< 0.50	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	98.9%
d8-Toluene	99.2%
Bromofluorobenzene	95.8%
d4-1,2-Dichlorobenzene	103%

2-Chloroethylvinylether is an acid labile compound and may not be recovered from an acid preserved sample.

EPA SW-846 indicates that vinyl chloride and styrene may degrade in the presence of acid preservative.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140228SLAPI-1**
 SAMPLE

Lab Sample ID: YB77F
LIMS ID: 14-3809
Matrix: Water
Data Release Authorized:
Reported: 03/11/14

QC Report No: YB77-Joint Base Lewis McChord
Project: Logram

Date Sampled: 02/28/14
Date Received: 03/07/14

Instrument/Analyst: NT3/PKC
Date Analyzed: 03/10/14 15:55

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	LOQ	Result	Q
74-87-3	Chloromethane	0.50	< 0.50	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.20	< 0.20	U
75-00-3	Chloroethane	0.20	< 0.20	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	Acetone	5.0	< 5.0	U
75-15-0	Carbon Disulfide	0.20	< 0.20	U
75-35-4	1,1-Dichloroethene	0.20	< 0.20	U
75-34-3	1,1-Dichloroethane	0.20	< 0.20	U
156-60-5	trans-1,2-Dichloroethene	0.20	< 0.20	U
156-59-2	**cis-1,2-Dichloroethene**	**0.20**	**0.40**	
67-66-3	Chloroform	0.20	< 0.20	U
107-06-2	1,2-Dichloroethane	0.20	< 0.20	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	0.20	< 0.20	U
56-23-5	Carbon Tetrachloride	0.20	< 0.20	U
108-05-4	Vinyl Acetate	0.20	< 0.20	U
75-27-4	Bromodichloromethane	0.20	< 0.20	U
78-87-5	1,2-Dichloropropane	0.20	< 0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	< 0.20	U
79-01-6	**Trichloroethene**	**0.20**	**14**	
124-48-1	Dibromochloromethane	0.20	< 0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	< 0.20	U
71-43-2	Benzene	0.20	< 0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	< 0.20	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.20	< 0.20	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.20	< 0.20	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	< 0.20	U
108-88-3	Toluene	0.20	< 0.20	U
108-90-7	Chlorobenzene	0.20	< 0.20	U
100-41-4	Ethylbenzene	0.20	< 0.20	U
100-42-5	Styrene	0.20	< 0.20	U
75-69-4	Trichlorofluoromethane	0.20	< 0.20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.20	< 0.20	U
179601-23-1	m,p-Xylene	0.40	< 0.40	U
95-47-6	o-Xylene	0.20	< 0.20	U
95-50-1	1,2-Dichlorobenzene	0.20	< 0.20	U
541-73-1	1,3-Dichlorobenzene	0.20	< 0.20	U
106-46-7	1,4-Dichlorobenzene	0.20	< 0.20	U

Lab Sample ID: YB77F
LIMS ID: 14-3809
Matrix: Water
Date Analyzed: 03/10/14 15:55

QC Report No: YB77-Joint Base Lewis McChord
Project: Logram

CAS Number	Analyte	LOQ	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Iodomethane	1.0	< 1.0	U
74-96-4	Bromoethane	0.20	< 0.20	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.20	< 0.20	U
74-95-3	Dibromomethane	0.20	< 0.20	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	< 0.20	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	< 0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	< 0.50	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.20	< 0.20	U
95-63-6	1,2,4-Trimethylbenzene	0.20	< 0.20	U
87-68-3	Hexachlorobutadiene	0.50	< 0.50	U
106-93-4	1,2-Dibromoethane	0.20	< 0.20	U
74-97-5	Bromochloromethane	0.20	< 0.20	U
594-20-7	2,2-Dichloropropane	0.20	< 0.20	U
142-28-9	1,3-Dichloropropane	0.20	< 0.20	U
98-82-8	Isopropylbenzene	0.20	< 0.20	U
103-65-1	n-Propylbenzene	0.20	< 0.20	U
108-86-1	Bromobenzene	0.20	< 0.20	U
95-49-8	2-Chlorotoluene	0.20	< 0.20	U
106-43-4	4-Chlorotoluene	0.20	< 0.20	U
98-06-6	tert-Butylbenzene	0.20	< 0.20	U
135-98-8	sec-Butylbenzene	0.20	< 0.20	U
99-87-6	4-Isopropyltoluene	0.20	< 0.20	U
104-51-8	n-Butylbenzene	0.20	< 0.20	U
120-82-1	1,2,4-Trichlorobenzene	0.50	< 0.50	U
91-20-3	Naphthalene	0.50	< 0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	< 0.50	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	102%
d8-Toluene	99.6%
Bromofluorobenzene	95.1%
d4-1,2-Dichlorobenzene	102%

2-Chloroethylvinylether is an acid labile compound and may not be recovered from an acid preserved sample.

EPA SW-846 indicates that vinyl chloride and styrene may degrade in the presence of acid preservative.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140228TB-1**
Page 1 of 2 **SAMPLE**

Lab Sample ID: YB77G
LIMS ID: 14-3810
Matrix: Water
Data Release Authorized:
Reported: 03/11/14

QC Report No: YB77-Joint Base Lewis McChord
Project: Logram

Date Sampled: 02/28/14
Date Received: 03/07/14

Instrument/Analyst: NT3/PKC
Date Analyzed: 03/10/14 12:31

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	LOQ	Result	Q
74-87-3	Chloromethane	0.50	< 0.50	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.20	< 0.20	U
75-00-3	Chloroethane	0.20	< 0.20	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	Acetone	5.0	< 5.0	U
75-15-0	Carbon Disulfide	0.20	< 0.20	U
75-35-4	1,1-Dichloroethene	0.20	< 0.20	U
75-34-3	1,1-Dichloroethane	0.20	< 0.20	U
156-60-5	trans-1,2-Dichloroethene	0.20	< 0.20	U
156-59-2	cis-1,2-Dichloroethene	0.20	< 0.20	U
67-66-3	Chloroform	0.20	< 0.20	U
107-06-2	1,2-Dichloroethane	0.20	< 0.20	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	0.20	< 0.20	U
56-23-5	Carbon Tetrachloride	0.20	< 0.20	U
108-05-4	Vinyl Acetate	0.20	< 0.20	U
75-27-4	Bromodichloromethane	0.20	< 0.20	U
78-87-5	1,2-Dichloropropane	0.20	< 0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	< 0.20	U
79-01-6	Trichloroethene	0.20	< 0.20	U
124-48-1	Dibromochloromethane	0.20	< 0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	< 0.20	U
71-43-2	Benzene	0.20	< 0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	< 0.20	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.20	< 0.20	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.20	< 0.20	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	< 0.20	U
108-88-3	Toluene	0.20	< 0.20	U
108-90-7	Chlorobenzene	0.20	< 0.20	U
100-41-4	Ethylbenzene	0.20	< 0.20	U
100-42-5	Styrene	0.20	< 0.20	U
75-69-4	Trichlorofluoromethane	0.20	< 0.20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.20	< 0.20	U
179601-23-1	m,p-Xylene	0.40	< 0.40	U
95-47-6	o-Xylene	0.20	< 0.20	U
95-50-1	1,2-Dichlorobenzene	0.20	< 0.20	U
541-73-1	1,3-Dichlorobenzene	0.20	< 0.20	U
106-46-7	1,4-Dichlorobenzene	0.20	< 0.20	U

Lab Sample ID: YB77G
LIMS ID: 14-3810
Matrix: Water
Date Analyzed: 03/10/14 12:31

QC Report No: YB77-Joint Base Lewis McChord
Project: Logram

CAS Number	Analyte	LOQ	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Iodomethane	1.0	< 1.0	U
74-96-4	Bromoethane	0.20	< 0.20	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.20	< 0.20	U
74-95-3	Dibromomethane	0.20	< 0.20	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	< 0.20	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	< 0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	< 0.50	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.20	< 0.20	U
95-63-6	1,2,4-Trimethylbenzene	0.20	< 0.20	U
87-68-3	Hexachlorobutadiene	0.50	< 0.50	U
106-93-4	1,2-Dibromoethane	0.20	< 0.20	U
74-97-5	Bromochloromethane	0.20	< 0.20	U
594-20-7	2,2-Dichloropropane	0.20	< 0.20	U
142-28-9	1,3-Dichloropropane	0.20	< 0.20	U
98-82-8	Isopropylbenzene	0.20	< 0.20	U
103-65-1	n-Propylbenzene	0.20	< 0.20	U
108-86-1	Bromobenzene	0.20	< 0.20	U
95-49-8	2-Chlorotoluene	0.20	< 0.20	U
106-43-4	4-Chlorotoluene	0.20	< 0.20	U
98-06-6	tert-Butylbenzene	0.20	< 0.20	U
135-98-8	sec-Butylbenzene	0.20	< 0.20	U
99-87-6	4-Isopropyltoluene	0.20	< 0.20	U
104-51-8	n-Butylbenzene	0.20	< 0.20	U
120-82-1	1,2,4-Trichlorobenzene	0.50	< 0.50	U
91-20-3	Naphthalene	0.50	< 0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	< 0.50	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	99.2%
d8-Toluene	99.4%
Bromofluorobenzene	98.1%
d4-1,2-Dichlorobenzene	101%

2-Chloroethylvinylether is an acid labile compound and may not be recovered from an acid preserved sample.

EPA SW-846 indicates that vinyl chloride and styrene may degrade in the presence of acid preservative.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: MB-031014A**
 METHOD BLANK

Lab Sample ID: MB-031014A
LIMS ID: 14-3804
Matrix: Water
Data Release Authorized:
Reported: 03/11/14

QC Report No: YB77-Joint Base Lewis McChord
Project: Logram

Date Sampled: NA
Date Received: NA

Instrument/Analyst: NT3/PKC
Date Analyzed: 03/10/14 11:32

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	LOQ	Result	Q
74-87-3	Chloromethane	0.50	< 0.50	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.20	< 0.20	U
75-00-3	Chloroethane	0.20	< 0.20	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	Acetone	5.0	< 5.0	U
75-15-0	Carbon Disulfide	0.20	< 0.20	U
75-35-4	1,1-Dichloroethene	0.20	< 0.20	U
75-34-3	1,1-Dichloroethane	0.20	< 0.20	U
156-60-5	trans-1,2-Dichloroethene	0.20	< 0.20	U
156-59-2	cis-1,2-Dichloroethene	0.20	< 0.20	U
67-66-3	Chloroform	0.20	< 0.20	U
107-06-2	1,2-Dichloroethane	0.20	< 0.20	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	0.20	< 0.20	U
56-23-5	Carbon Tetrachloride	0.20	< 0.20	U
108-05-4	Vinyl Acetate	0.20	< 0.20	U
75-27-4	Bromodichloromethane	0.20	< 0.20	U
78-87-5	1,2-Dichloropropane	0.20	< 0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	< 0.20	U
79-01-6	Trichloroethene	0.20	< 0.20	U
124-48-1	Dibromochloromethane	0.20	< 0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	< 0.20	U
71-43-2	Benzene	0.20	< 0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	< 0.20	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.20	< 0.20	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.20	< 0.20	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	< 0.20	U
108-88-3	Toluene	0.20	< 0.20	U
108-90-7	Chlorobenzene	0.20	< 0.20	U
100-41-4	Ethylbenzene	0.20	< 0.20	U
100-42-5	Styrene	0.20	< 0.20	U
75-69-4	Trichlorofluoromethane	0.20	< 0.20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.20	< 0.20	U
179601-23-1	m,p-Xylene	0.40	< 0.40	U
95-47-6	o-Xylene	0.20	< 0.20	U
95-50-1	1,2-Dichlorobenzene	0.20	< 0.20	U
541-73-1	1,3-Dichlorobenzene	0.20	< 0.20	U
106-46-7	1,4-Dichlorobenzene	0.20	< 0.20	U

Lab Sample ID: MB-031014A QC Report No: YB77-Joint Base Lewis McChord
LIMS ID: 14-3804 Project: Logram
Matrix: Water
Date Analyzed: 03/10/14 11:32

CAS Number	Analyte	LOQ	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Iodomethane	1.0	< 1.0	U
74-96-4	Bromoethane	0.20	< 0.20	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.20	< 0.20	U
74-95-3	Dibromomethane	0.20	< 0.20	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	< 0.20	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	< 0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	< 0.50	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.20	< 0.20	U
95-63-6	1,2,4-Trimethylbenzene	0.20	< 0.20	U
87-68-3	Hexachlorobutadiene	0.50	< 0.50	U
106-93-4	1,2-Dibromoethane	0.20	< 0.20	U
74-97-5	Bromochloromethane	0.20	< 0.20	U
594-20-7	2,2-Dichloropropane	0.20	< 0.20	U
142-28-9	1,3-Dichloropropane	0.20	< 0.20	U
98-82-8	Isopropylbenzene	0.20	< 0.20	U
103-65-1	n-Propylbenzene	0.20	< 0.20	U
108-86-1	Bromobenzene	0.20	< 0.20	U
95-49-8	2-Chlorotoluene	0.20	< 0.20	U
106-43-4	4-Chlorotoluene	0.20	< 0.20	U
98-06-6	tert-Butylbenzene	0.20	< 0.20	U
135-98-8	sec-Butylbenzene	0.20	< 0.20	U
99-87-6	4-Isopropyltoluene	0.20	< 0.20	U
104-51-8	n-Butylbenzene	0.20	< 0.20	U
120-82-1	1,2,4-Trichlorobenzene	0.50	< 0.50	U
91-20-3	Naphthalene	0.50	< 0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	< 0.50	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	102%
d8-Toluene	98.8%
Bromofluorobenzene	98.7%
d4-1,2-Dichlorobenzene	101%

ANALYTICAL RESOURCES INCORPORATED

VOA SURROGATE RECOVERY SUMMARY

Matrix: Water

QC Report No: YB77-Joint Base Lewis McChord
Project: Logram

ARI ID	Client ID	PV	DCE	TOL	BFB	DCB	TOT OUT
MB-031014A	Method Blank	10	102%	98.8%	98.7%	101%	0
LCS-031014A	Lab Control	10	98.3%	101%	97.7%	102%	0
LCSD-031014A	Lab Control Dup	10	99.5%	99.5%	99.2%	98.5%	0
YB77A	LGC140228E-1	10	102%	101%	96.2%	103%	0
YB77B	LGC140228I5I-1	10	102%	103%	99.1%	104%	0
YB77C	LGC140228EGDYE-1	10	99.1%	99.3%	96.4%	100%	0
YB77D	LGC140228EGDYI-1	10	102%	97.8%	95.6%	100%	0
YB77E	LGC140228SLAPE-1	10	98.9%	99.2%	95.8%	103%	0
YB77F	LGC140228SLAPI-1	10	102%	99.6%	95.1%	102%	0
YB77G	LGC140228TB-1	10	99.2%	99.4%	98.1%	101%	0

	LCS/MB LIMITS	QC LIMITS
SW8260C		
(DCE) = d4-1,2-Dichloroethane	(80-120)	(80-130)
(TOL) = d8-Toluene	(80-120)	(80-120)
(BFB) = Bromofluorobenzene	(80-120)	(80-120)
(DCB) = d4-1,2-Dichlorobenzene	(80-120)	(80-120)

Prep Method: SW5030B
Log Number Range: 14-3804 to 14-3810

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LCS-031014A**
 LAB CONTROL SAMPLE

Lab Sample ID: LCS-031014A QC Report No: YB77-Joint Base Lewis McChord
LIMS ID: 14-3804 Project: Logram
Matrix: Water
Data Release Authorized: B
Reported: 03/11/14 Date Sampled: NA
Date Received: NA

Instrument/Analyst LCS: NT3/PKC Sample Amount LCS: 10.0 mL
LCSD: NT3/PKC LCSD: 10.0 mL
Date Analyzed LCS: 03/10/14 10:34 Purge Volume LCS: 10.0 mL
LCSD: 03/10/14 11:04 LCSD: 10.0 mL

Analyte	LCS	Spike Added-LCS	LCS Recovery	LCSD	Spike Added-LCSD	LCSD Recovery	RPD
Chloromethane	10.2	10.0	102%	10.5	10.0	105%	2.9%
Bromomethane	9.80	10.0	98.0%	10.1	10.0	101%	3.0%
Vinyl Chloride	8.89	10.0	88.9%	10.2	10.0	102%	13.7%
Chloroethane	9.99	10.0	99.9%	10.0	10.0	100%	0.1%
Methylene Chloride	9.27	10.0	92.7%	9.73	10.0	97.3%	4.8%
Acetone	61.9 Q	50.0	124%	63.4 Q	50.0	127%	2.4%
Carbon Disulfide	9.66	10.0	96.6%	9.81	10.0	98.1%	1.5%
1,1-Dichloroethene	9.57	10.0	95.7%	10.0	10.0	100%	4.4%
1,1-Dichloroethane	10.0	10.0	100%	10.1	10.0	101%	1.0%
trans-1,2-Dichloroethene	9.81	10.0	98.1%	10.2	10.0	102%	3.9%
cis-1,2-Dichloroethene	9.49	10.0	94.9%	9.93	10.0	99.3%	4.5%
Chloroform	9.84	10.0	98.4%	10.2	10.0	102%	3.6%
1,2-Dichloroethane	10.2	10.0	102%	10.5	10.0	105%	2.9%
2-Butanone	59.1 Q	50.0	118%	62.0 Q	50.0	124%	4.8%
1,1,1-Trichloroethane	9.81	10.0	98.1%	10.1	10.0	101%	2.9%
Carbon Tetrachloride	9.98	10.0	99.8%	10.4	10.0	104%	4.1%
Vinyl Acetate	9.63	10.0	96.3%	10.1	10.0	101%	4.8%
Bromodichloromethane	10.5	10.0	105%	10.5	10.0	105%	0.0%
1,2-Dichloropropane	10.1	10.0	101%	10.3	10.0	103%	2.0%
cis-1,3-Dichloropropene	9.87	10.0	98.7%	10.1	10.0	101%	2.3%
Trichloroethene	10.1	10.0	101%	10.2	10.0	102%	1.0%
Dibromochloromethane	11.0	10.0	110%	11.6	10.0	116%	5.3%
1,1,2-Trichloroethane	10.7	10.0	107%	11.0	10.0	110%	2.8%
Benzene	10.5	10.0	105%	10.5	10.0	105%	0.0%
trans-1,3-Dichloropropene	9.87	10.0	98.7%	9.87	10.0	98.7%	0.0%
2-Chloroethylvinylether	10.9	10.0	109%	11.1	10.0	111%	1.8%
Bromoform	11.4	10.0	114%	12.0	10.0	120%	5.1%
4-Methyl-2-Pentanone (MIBK)	59.0	50.0	118%	60.8	50.0	122%	3.0%
2-Hexanone	57.8	50.0	116%	62.0	50.0	124%	7.0%
Tetrachloroethene	10.0	10.0	100%	10.3	10.0	103%	3.0%
1,1,2,2-Tetrachloroethane	11.1	10.0	111%	11.3	10.0	113%	1.8%
Toluene	10.3	10.0	103%	10.3	10.0	103%	0.0%
Chlorobenzene	10.1	10.0	101%	10.7	10.0	107%	5.8%
Ethylbenzene	9.80	10.0	98.0%	10.1	10.0	101%	3.0%
Styrene	10.6	10.0	106%	10.9	10.0	109%	2.8%
Trichlorofluoromethane	9.66	10.0	96.6%	9.53	10.0	95.3%	1.4%
1,1,2-Trichloro-1,2,2-trifluoroetha	9.81	10.0	98.1%	9.98	10.0	99.8%	1.7%
m,p-Xylene	21.0	20.0	105%	21.9	20.0	110%	4.2%

Lab Sample ID: LCS-031014A QC Report No: YB77-Joint Base Lewis McChord
LIMS ID: 14-3804 Project: Logram
Matrix: Water

Analyte	LCS	Spike Added-LCS	LCS Recovery	LCSD	Spike Added-LCSD	LCSD Recovery	RPD
o-Xylene	10.1	10.0	101%	10.4	10.0	104%	2.9%
1,2-Dichlorobenzene	9.76	10.0	97.6%	10.2	10.0	102%	4.4%
1,3-Dichlorobenzene	10.3	10.0	103%	10.6	10.0	106%	2.9%
1,4-Dichlorobenzene	9.93	10.0	99.3%	10.1	10.0	101%	1.7%
Acrolein	58.3	50.0	117%	60.7	50.0	121%	4.0%
Iodomethane	9.72	10.0	97.2%	10.5	10.0	105%	7.7%
Bromoethane	8.72	10.0	87.2%	9.07	10.0	90.7%	3.9%
Acrylonitrile	11.8	10.0	118%	12.1	10.0	121%	2.5%
1,1-Dichloropropene	9.94	10.0	99.4%	10.1	10.0	101%	1.6%
Dibromomethane	10.8	10.0	108%	10.8	10.0	108%	0.0%
1,1,1,2-Tetrachloroethane	10.1	10.0	101%	10.6	10.0	106%	4.8%
1,2-Dibromo-3-chloropropane	11.3	10.0	113%	11.8	10.0	118%	4.3%
1,2,3-Trichloropropane	10.8	10.0	108%	11.0	10.0	110%	1.8%
trans-1,4-Dichloro-2-butene	9.87	10.0	98.7%	10.5	10.0	105%	6.2%
1,3,5-Trimethylbenzene	9.75	10.0	97.5%	9.92	10.0	99.2%	1.7%
1,2,4-Trimethylbenzene	9.49	10.0	94.9%	9.84	10.0	98.4%	3.6%
Hexachlorobutadiene	10.8	10.0	108%	10.8	10.0	108%	0.0%
1,2-Dibromoethane	10.7	10.0	107%	11.3	10.0	113%	5.5%
Bromochloromethane	9.63	10.0	96.3%	9.98	10.0	99.8%	3.6%
2,2-Dichloropropane	9.03	10.0	90.3%	9.19	10.0	91.9%	1.8%
1,3-Dichloropropane	10.3	10.0	103%	10.7	10.0	107%	3.8%
Isopropylbenzene	9.77	10.0	97.7%	9.93	10.0	99.3%	1.6%
n-Propylbenzene	9.66	10.0	96.6%	9.89	10.0	98.9%	2.4%
Bromobenzene	9.54	10.0	95.4%	9.91	10.0	99.1%	3.8%
2-Chlorotoluene	8.94	10.0	89.4%	9.87	10.0	98.7%	9.9%
4-Chlorotoluene	9.33	10.0	93.3%	9.58	10.0	95.8%	2.6%
tert-Butylbenzene	9.49	10.0	94.9%	9.53	10.0	95.3%	0.4%
sec-Butylbenzene	9.90	10.0	99.0%	10.0	10.0	100%	1.0%
4-Isopropyltoluene	9.95	10.0	99.5%	10.1	10.0	101%	1.5%
n-Butylbenzene	9.92	10.0	99.2%	10.1	10.0	101%	1.8%
1,2,4-Trichlorobenzene	10.6	10.0	106%	10.7	10.0	107%	0.9%
Naphthalene	12.5 Q	10.0	125%	12.9 Q	10.0	129%	3.1%
1,2,3-Trichlorobenzene	10.8	10.0	108%	11.2	10.0	112%	3.6%

Reported in µg/L (ppb)

RPD calculated using sample concentrations per SW846.

Volatile Surrogate Recovery

	LCS	LCSD
d4-1,2-Dichloroethane	98.3%	99.5%
d8-Toluene	101%	99.5%
Bromofluorobenzene	97.7%	99.2%
d4-1,2-Dichlorobenzene	102%	98.5%

Analytical Resources, Incorporated
Analytical Chemists and Consultants

April 4, 2014

Thomas Lynott
Department of the Army
Directorate of Public Works
Attn Environmental Division (T. Lynott)
2012 Liggett Ave Box 339500 MS 17
Joint Base Lewis-McChord, Washington 98433-9500
Official Business

RE: Client Project: LogRam
ARI Job No.: YD79

Dear Mr. Lynott:

Please find enclosed the original Chain-of-Custody record (COC), sample receipt documentation, and the final data for the project referenced above. Analytical Resources, Inc. (ARI) accepted ten water samples on March 21, 2014. For further details regarding sample receipt please refer to the enclosed Cooler Receipt Form.

The samples were analyzed for VOCs, as requested on the COCs.

The VOCs 3/31/14 CCAL on NT2 is out of control high for all associated FORM III "Q" flagged analytes. All associated samples that contain analyte have been flagged with a "Q" qualifier.

The 3/31/14 LCS on NT2 is out of control high for several analytes. The LCSD is in control.

The 3/31/14 method blank on NT2 contained hexachlorobutadiene and n-Butylbenzene. All associated samples that contain analyte have been flagged with a "B" qualifier.

The 3/28/14 CCAL is out of control high for all associated FORM III "Q" flagged analytes with the exception of bromomethane and Iodomethane which are out of control low. All associated samples that contain analyte have been flagged with a "Q" qualifier.

The 3/28/14 LCS and/or LCSD are out of control low for several analytes.

An electronic copy of this report and all supporting raw data will remain on file with ARI. Should you have any questions or problems, please feel free to contact me at your convenience.

Respectfully,
ANALYTICAL RESOURCES, INC.

Kelly Bottem
Client Services Manager
(206) 695-6211
kellyb@arilabs.com
www.arilabs.com

eFile: YD79

4611 South 134th Place, Suite 100 • Tukwila WA 98168 • **206-695-6200** • **206-695-6201** fax

Chain of Custody Record & Laboratory Analysis Request

TO 0021

Analytical Resources, Incorporated
Analytical Chemists and Consultants
4611 South 134th Place, Suite 100
Tukwila, WA 98168
206-695-6200 206-695-6201 (fax)
www.arilabs.com

ARI Assigned Number: YD79	Turn-around Requested: STANDARD TAT	Page: 1 of 3	
ARI Client Company: JOINT BASE LEWIS MCCHORD PUBLIC WORKS IMLM-PWE	Phone: 2534661802	Date: 21MAR14	Ice Present? Y
Client Contact: TOM J LYNOTT		No. of Coolers: 1	Cooler Temps: 4.8
Client Project Name: LOG RAM			
Client Project #:	Samplers: T LYNOTT J BECKER		

Sample ID	Date	Time	Matrix	No Containers	Analysis Requested: 1006A	Notes/Comments
L6C140320BC1-1	20MAR14	1205	WATER	2	X	TOTAL
L6C140320CM2-1	20MAR14	1250	WATER	2	X	VOCs
L6C140320DUP1-1	20MAR14	0800	WATER	2	X	
L6C140320DUP2-1	20MAR14	0805	WATER	2	X	
L6C140320FL6-1	20MAR14	1040	WATER	2	X	
L6C140320LC41B-1	20MAR14	1025	WATER	2	X	
L6C140320LC61B-1	20MAR14	1320	WATER	2	X	
L6C140320LC86D1-1	20MAR14	1350	WATER	2	X	
L6C140320LC86D2-1	20MAR14	1355	WATER	2	X	
L6C140320LC87D1-1	20MAR14	1330	WATER	2	X	

Comments/Special Instructions	Relinquished by (Signature)	Received by: (Signature)	Relinquished by (Signature)	Received by (Signature)
	Printed Name: TOM J LYNOTT	Printed Name: Jennifer Mitchell	Printed Name:	Printed Name.
	Company: VERSAR	Company: ARI	Company:	Company
	Date & Time: 21MAR14 1055	Date & Time: 3/21/14 1055	Date & Time	Date & Time

YD79 00002

Limits of Liability: *ARI will perform all requested services in accordance with appropriate methodology following ARI Standard Operating Procedures and the ARI Quality Assurance Program. This program meets standards for the industry. The total liability of ARI, its officers, agents, employees, or successors, arising out of or in connection with the requested services, shall not exceed the Invoiced amount for said services. The acceptance by the client of a proposal for services by ARI release ARI from any liability in excess thereof, not withstanding any provision to the contrary in any contract, purchase order or co-signed agreement between ARI and the Client.*

Sample Retention Policy: All samples submitted to ARI will be appropriately discarded no sooner than 90 days after receipt or 60 days after submission of hardcopy data, whichever is longer, unless alternate retention schedules have been established by work-order or contract.

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Cooler Receipt Form

ARI Client: JBLM

Project Name: Log Ram

COC No(s): _____ (NA)

Delivered by: Fed-Ex UPS Courier Hand Delivered Other: _____

Assigned ARI Job No: YD79

Tracking No: _____ (NA)

Preliminary Examination Phase:

Were intact, properly signed and dated custody seals attached to the outside of to cooler?	YES	(NO)
Were custody papers included with the cooler?	(YES)	NO
Were custody papers properly filled out (ink, signed, etc)	(YES)	NO

Temperature of Cooler(s) (°C) (recommended 2.0-6.0 °C for chemistry) 4.8

Time. _____

If cooler temperature is out of compliance fill out form 00070F

Temp Gun ID#: 90577852

Cooler Accepted by: JM Date. 3/21/14 Time. 1055

Complete custody forms and attach all shipping documents

Log-In Phase:

Was a temperature blank included in the cooler?		YES	(NO)
What kind of packing material was used? .. Bubble Wrap Wet Ice (Gel Packs) Baggies (Foam Block) Paper Other: _____			
Was sufficient ice used (if appropriate)?	NA	(YES)	NO
Were all bottles sealed in individual plastic bags?		YES	(NO)
Did all bottles arrive in good condition (unbroken)?		(YES)	NO
Were all bottle labels complete and legible?		(YES)	NO
Did the number of containers listed on COC match with the number of containers received?		(YES)	NO
Did all bottle labels and tags agree with custody papers?		(YES)	NO
Were all bottles used correct for the requested analyses?		(YES)	NO
Do any of the analyses (bottles) require preservation? (attach preservation sheet, excluding VOCs) ..	(NA)	YES	NO
Were all VOC vials free of air bubbles?	NA	(YES)	NO
Was sufficient amount of sample sent in each bottle?		(YES)	NO
Date VOC Trip Blank was made at ARI	NA	3/5/14	

Was Sample Split by ARI : (NA) YES Date/Time: _____ Equipment: _____ Split by: _____

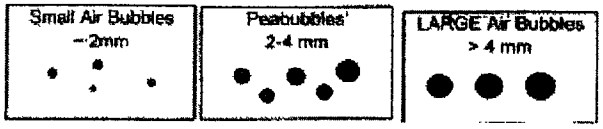
Samples Logged by: JM Date: 3/21/14 Time 1130

***** Notify Project Manager of discrepancies or concerns *****

Sample ID on Bottle	Sample ID on COC	Sample ID on Bottle	Sample ID on COC

Additional Notes, Discrepancies, & Resolutions:

By: Date:



Small → "sm" (< 2 mm)
Peabubbles → "pb" (2 to < 4 mm)
Large → "lg" (4 to < 6 mm)
Headspace → "hs" (> 6 mm)

Sample ID Cross Reference Report

ANALYTICAL RESOURCES INCORPORATED

ARI Job No: YD79
Client: Joint Base Lewis McChord
Project Event: N/A
Project Name: LOG RAM

	Sample ID	ARI Lab ID	ARI LIMS ID	Matrix	Sample Date/Time	VTSR
1.	LGC140320BC1-1	YD79A	14-4997	Water	03/20/14 12:05	03/21/14 10:55
2.	LGC1470320CM2-1	YD79B	14-4998	Water	03/20/14 12:50	03/21/14 10:55
3.	LGC140320DUP1-1	YD79C	14-4999	Water	03/20/14 08:00	03/21/14 10:55
4.	LGC140320DUP2-1	YD79D	14-5000	Water	03/20/14 08:05	03/21/14 10:55
5.	LGC140320FL6-1	YD79E	14-5001	Water	03/20/14 10:40	03/21/14 10:55
6.	LGC140320LC41B-1	YD79F	14-5002	Water	03/20/14 10:25	03/21/14 10:55
7.	LGC140320LC61B-1	YD79G	14-5003	Water	03/20/14 13:20	03/21/14 10:55
8.	LGC140320LC86D1-1	YD79H	14-5004	Water	03/20/14 13:50	03/21/14 10:55
9.	LGC140320LC86D2-1	YD79I	14-5005	Water	03/20/14 13:55	03/21/14 10:55
10.	LGC140320LC87D1-1	YD79J	14-5006	Water	03/20/14 13:30	03/21/14 10:55

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140320BC1-1**
 SAMPLE

Lab Sample ID: YD79A
LIMS ID: 14-4997
Matrix: Water
Data Release Authorized:
Reported: 04/03/14

QC Report No: YD79-Joint Base Lewis McChord
Project: LOG RAM

Date Sampled: 03/20/14
Date Received: 03/21/14

Instrument/Analyst: NT3/PAB
Date Analyzed: 03/28/14 14:33

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	LOQ	Result	Q
74-87-3	Chloromethane	0.50	< 0.50	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.20	< 0.20	U
75-00-3	Chloroethane	0.20	< 0.20	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	Acetone	5.0	< 5.0	U
75-15-0	Carbon Disulfide	0.20	< 0.20	U
75-35-4	1,1-Dichloroethene	0.20	< 0.20	U
75-34-3	1,1-Dichloroethane	0.20	< 0.20	U
156-60-5	trans-1,2-Dichloroethene	0.20	< 0.20	U
156-59-2	cis-1,2-Dichloroethene	0.20	< 0.20	U
67-66-3	Chloroform	0.20	< 0.20	U
107-06-2	1,2-Dichloroethane	0.20	< 0.20	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	0.20	< 0.20	U
56-23-5	Carbon Tetrachloride	0.20	< 0.20	U
108-05-4	Vinyl Acetate	0.20	< 0.20	U
75-27-4	Bromodichloromethane	0.20	< 0.20	U
78-87-5	1,2-Dichloropropane	0.20	< 0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	< 0.20	U
79-01-6	Trichloroethene	0.20	< 0.20	U
124-48-1	Dibromochloromethane	0.20	< 0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	< 0.20	U
71-43-2	Benzene	0.20	< 0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	< 0.20	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.20	< 0.20	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.20	< 0.20	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	< 0.20	U
108-88-3	Toluene	0.20	< 0.20	U
108-90-7	Chlorobenzene	0.20	< 0.20	U
100-41-4	Ethylbenzene	0.20	< 0.20	U
100-42-5	Styrene	0.20	< 0.20	U
75-69-4	Trichlorofluoromethane	0.20	< 0.20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.20	< 0.20	U
179601-23-1	m,p-Xylene	0.40	< 0.40	U
95-47-6	o-Xylene	0.20	< 0.20	U
95-50-1	1,2-Dichlorobenzene	0.20	< 0.20	U
541-73-1	1,3-Dichlorobenzene	0.20	< 0.20	U
106-46-7	1,4-Dichlorobenzene	0.20	< 0.20	U

Lab Sample ID: YD79A
LIMS ID: 14-4997
Matrix: Water
Date Analyzed: 03/28/14 14:33

QC Report No: YD79-Joint Base Lewis McChord
Project: LOG RAM

CAS Number	Analyte	LOQ	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Iodomethane	1.0	< 1.0	U
74-96-4	Bromoethane	0.20	< 0.20	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.20	< 0.20	U
74-95-3	Dibromomethane	0.20	< 0.20	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	< 0.20	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	< 0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	< 0.50	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.20	< 0.20	U
95-63-6	1,2,4-Trimethylbenzene	0.20	< 0.20	U
87-68-3	Hexachlorobutadiene	0.50	< 0.50	U
106-93-4	1,2-Dibromoethane	0.20	< 0.20	U
74-97-5	Bromochloromethane	0.20	< 0.20	U
594-20-7	2,2-Dichloropropane	0.20	< 0.20	U
142-28-9	1,3-Dichloropropane	0.20	< 0.20	U
98-82-8	Isopropylbenzene	0.20	< 0.20	U
103-65-1	n-Propylbenzene	0.20	< 0.20	U
108-86-1	Bromobenzene	0.20	< 0.20	U
95-49-8	2-Chlorotoluene	0.20	< 0.20	U
106-43-4	4-Chlorotoluene	0.20	< 0.20	U
98-06-6	tert-Butylbenzene	0.20	< 0.20	U
135-98-8	sec-Butylbenzene	0.20	< 0.20	U
99-87-6	4-Isopropyltoluene	0.20	< 0.20	U
104-51-8	n-Butylbenzene	0.20	< 0.20	U
120-82-1	1,2,4-Trichlorobenzene	0.50	< 0.50	U
91-20-3	Naphthalene	0.50	< 0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	< 0.50	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	104%
d8-Toluene	96.3%
Bromofluorobenzene	94.2%
d4-1,2-Dichlorobenzene	100%

2-Chloroethylvinylether is an acid labile compound and may not be recovered from an acid preserved sample.

EPA SW-846 indicates that vinyl chloride and styrene may degrade in the presence of acid preservative.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC1470320CM2-1**
Page 1 of 2 **SAMPLE**

Lab Sample ID: YD79B
LIMS ID: 14-4998
Matrix: Water
Data Release Authorized:
Reported: 04/03/14

QC Report No: YD79-Joint Base Lewis McChord
Project: LOG RAM

Date Sampled: 03/20/14
Date Received: 03/21/14

Instrument/Analyst: NT3/PAB
Date Analyzed: 03/28/14 15:03

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	LOQ	Result	Q
74-87-3	Chloromethane	0.50	< 0.50	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.20	< 0.20	U
75-00-3	Chloroethane	0.20	< 0.20	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	Acetone	5.0	< 5.0	U
75-15-0	Carbon Disulfide	0.20	< 0.20	U
75-35-4	1,1-Dichloroethene	0.20	< 0.20	U
75-34-3	1,1-Dichloroethane	0.20	< 0.20	U
156-60-5	trans-1,2-Dichloroethene	0.20	< 0.20	U
156-59-2	cis-1,2-Dichloroethene	0.20	< 0.20	U
67-66-3	Chloroform	0.20	< 0.20	U
107-06-2	1,2-Dichloroethane	0.20	< 0.20	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	0.20	< 0.20	U
56-23-5	Carbon Tetrachloride	0.20	< 0.20	U
108-05-4	Vinyl Acetate	0.20	< 0.20	U
75-27-4	Bromodichloromethane	0.20	< 0.20	U
78-87-5	1,2-Dichloropropane	0.20	< 0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	< 0.20	U
79-01-6	**Trichloroethene**	**0.20**	**1.1**	
124-48-1	Dibromochloromethane	0.20	< 0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	< 0.20	U
71-43-2	Benzene	0.20	< 0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	< 0.20	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.20	< 0.20	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.20	< 0.20	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	< 0.20	U
108-88-3	Toluene	0.20	< 0.20	U
108-90-7	Chlorobenzene	0.20	< 0.20	U
100-41-4	Ethylbenzene	0.20	< 0.20	U
100-42-5	Styrene	0.20	< 0.20	U
75-69-4	Trichlorofluoromethane	0.20	< 0.20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.20	< 0.20	U
179601-23-1	m,p-Xylene	0.40	< 0.40	U
95-47-6	o-Xylene	0.20	< 0.20	U
95-50-1	1,2-Dichlorobenzene	0.20	< 0.20	U
541-73-1	1,3-Dichlorobenzene	0.20	< 0.20	U
106-46-7	1,4-Dichlorobenzene	0.20	< 0.20	U

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC1470320CM2-1**
 SAMPLE

Lab Sample ID: YD79B
LIMS ID: 14-4998
Matrix: Water
Date Analyzed: 03/28/14 15:03

QC Report No: YD79-Joint Base Lewis McChord
Project: LOG RAM

CAS Number	Analyte	LOQ	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Iodomethane	1.0	< 1.0	U
74-96-4	Bromoethane	0.20	< 0.20	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.20	< 0.20	U
74-95-3	Dibromomethane	0.20	< 0.20	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	< 0.20	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	< 0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	< 0.50	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.20	< 0.20	U
95-63-6	1,2,4-Trimethylbenzene	0.20	< 0.20	U
87-68-3	Hexachlorobutadiene	0.50	< 0.50	U
106-93-4	1,2-Dibromoethane	0.20	< 0.20	U
74-97-5	Bromochloromethane	0.20	< 0.20	U
594-20-7	2,2-Dichloropropane	0.20	< 0.20	U
142-28-9	1,3-Dichloropropane	0.20	< 0.20	U
98-82-8	Isopropylbenzene	0.20	< 0.20	U
103-65-1	n-Propylbenzene	0.20	< 0.20	U
108-86-1	Bromobenzene	0.20	< 0.20	U
95-49-8	2-Chlorotoluene	0.20	< 0.20	U
106-43-4	4-Chlorotoluene	0.20	< 0.20	U
98-06-6	tert-Butylbenzene	0.20	< 0.20	U
135-98-8	sec-Butylbenzene	0.20	< 0.20	U
99-87-6	4-Isopropyltoluene	0.20	< 0.20	U
104-51-8	n-Butylbenzene	0.20	< 0.20	U
120-82-1	1,2,4-Trichlorobenzene	0.50	< 0.50	U
91-20-3	Naphthalene	0.50	< 0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	< 0.50	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	103%
d8-Toluene	96.2%
Bromofluorobenzene	91.6%
d4-1,2-Dichlorobenzene	101%

2-Chloroethylvinylether is an acid labile compound and may not be recovered from an acid preserved sample.

EPA SW-846 indicates that vinyl chloride and styrene may degrade in the presence of acid preservative.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140320DUP1-1**
 SAMPLE

Lab Sample ID: YD79C
LIMS ID: 14-4999
Matrix: Water
Data Release Authorized:
Reported: 04/03/14

QC Report No: YD79-Joint Base Lewis McChord
Project: LOG RAM

Date Sampled: 03/20/14
Date Received: 03/21/14

Instrument/Analyst: NT3/PAB
Date Analyzed: 03/28/14 15:32

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	LOQ	Result	Q
74-87-3	Chloromethane	0.50	< 0.50	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.20	< 0.20	U
75-00-3	Chloroethane	0.20	< 0.20	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	**Acetone**	**5.0**	**5.6**	**Q**
75-15-0	Carbon Disulfide	0.20	< 0.20	U
75-35-4	1,1-Dichloroethene	0.20	< 0.20	U
75-34-3	1,1-Dichloroethane	0.20	< 0.20	U
156-60-5	trans-1,2-Dichloroethene	0.20	< 0.20	U
156-59-2	**cis-1,2-Dichloroethene**	**0.20**	**0.77**	
67-66-3	Chloroform	0.20	< 0.20	U
107-06-2	1,2-Dichloroethane	0.20	< 0.20	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	0.20	< 0.20	U
56-23-5	Carbon Tetrachloride	0.20	< 0.20	U
108-05-4	Vinyl Acetate	0.20	< 0.20	U
75-27-4	Bromodichloromethane	0.20	< 0.20	U
78-87-5	1,2-Dichloropropane	0.20	< 0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	< 0.20	U
79-01-6	**Trichloroethene**	**0.20**	**67**	
124-48-1	Dibromochloromethane	0.20	< 0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	< 0.20	U
71-43-2	Benzene	0.20	< 0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	< 0.20	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.20	< 0.20	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.20	< 0.20	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	< 0.20	U
108-88-3	Toluene	0.20	< 0.20	U
108-90-7	Chlorobenzene	0.20	< 0.20	U
100-41-4	Ethylbenzene	0.20	< 0.20	U
100-42-5	Styrene	0.20	< 0.20	U
75-69-4	Trichlorofluoromethane	0.20	< 0.20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.20	< 0.20	U
179601-23-1	m,p-Xylene	0.40	< 0.40	U
95-47-6	o-Xylene	0.20	< 0.20	U
95-50-1	1,2-Dichlorobenzene	0.20	< 0.20	U
541-73-1	1,3-Dichlorobenzene	0.20	< 0.20	U
106-46-7	1,4-Dichlorobenzene	0.20	< 0.20	U

Lab Sample ID: YD79C QC Report No: YD79-Joint Base Lewis McChord
LIMS ID: 14-4999 Project: LOG RAM
Matrix: Water
Date Analyzed: 03/28/14 15:32

CAS Number	Analyte	LOQ	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Iodomethane	1.0	< 1.0	U
74-96-4	Bromoethane	0.20	< 0.20	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.20	< 0.20	U
74-95-3	Dibromomethane	0.20	< 0.20	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	< 0.20	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	< 0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	< 0.50	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.20	< 0.20	U
95-63-6	1,2,4-Trimethylbenzene	0.20	< 0.20	U
87-68-3	Hexachlorobutadiene	0.50	< 0.50	U
106-93-4	1,2-Dibromoethane	0.20	< 0.20	U
74-97-5	Bromochloromethane	0.20	< 0.20	U
594-20-7	2,2-Dichloropropane	0.20	< 0.20	U
142-28-9	1,3-Dichloropropane	0.20	< 0.20	U
98-82-8	Isopropylbenzene	0.20	< 0.20	U
103-65-1	n-Propylbenzene	0.20	< 0.20	U
108-86-1	Bromobenzene	0.20	< 0.20	U
95-49-8	2-Chlorotoluene	0.20	< 0.20	U
106-43-4	4-Chlorotoluene	0.20	< 0.20	U
98-06-6	tert-Butylbenzene	0.20	< 0.20	U
135-98-8	sec-Butylbenzene	0.20	< 0.20	U
99-87-6	4-Isopropyltoluene	0.20	< 0.20	U
104-51-8	n-Butylbenzene	0.20	< 0.20	U
120-82-1	1,2,4-Trichlorobenzene	0.50	< 0.50	U
91-20-3	Naphthalene	0.50	< 0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	< 0.50	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	104%
d8-Toluene	92.3%
Bromofluorobenzene	91.3%
d4-1,2-Dichlorobenzene	98.1%

2-Chloroethylvinylether is an acid labile compound and may not be recovered from an acid preserved sample.

EPA SW-846 indicates that vinyl chloride and styrene may degrade in the presence of acid preservative.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140320DUP2-1**
 SAMPLE

Lab Sample ID: YD79D
LIMS ID: 14-5000
Matrix: Water
Data Release Authorized:
Reported: 04/03/14

QC Report No: YD79-Joint Base Lewis McChord
Project: LOG RAM
Date Sampled: 03/20/14
Date Received: 03/21/14

Instrument/Analyst: NT3/PAB
Date Analyzed: 03/28/14 16:01

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	LOQ	Result	Q
74-87-3	Chloromethane	0.50	< 0.50	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.20	< 0.20	U
75-00-3	Chloroethane	0.20	< 0.20	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	Acetone	5.0	< 5.0	U
75-15-0	Carbon Disulfide	0.20	< 0.20	U
75-35-4	**1,1-Dichloroethene**	**0.20**	**0.26**	
75-34-3	1,1-Dichloroethane	0.20	< 0.20	U
156-60-5	trans-1,2-Dichloroethene	0.20	< 0.20	U
156-59-2	**cis-1,2-Dichloroethene**	**0.20**	**1.6**	
67-66-3	**Chloroform**	**0.20**	**0.28**	
107-06-2	1,2-Dichloroethane	0.20	< 0.20	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	**1,1,1-Trichloroethane**	**0.20**	**2.0**	
56-23-5	Carbon Tetrachloride	0.20	< 0.20	U
108-05-4	Vinyl Acetate	0.20	< 0.20	U
75-27-4	Bromodichloromethane	0.20	< 0.20	U
78-87-5	1,2-Dichloropropane	0.20	< 0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	< 0.20	U
79-01-6	**Trichloroethene**	**0.20**	**4.6**	
124-48-1	Dibromochloromethane	0.20	< 0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	< 0.20	U
71-43-2	Benzene	0.20	< 0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	< 0.20	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.20	< 0.20	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.20	< 0.20	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	< 0.20	U
108-88-3	Toluene	0.20	< 0.20	U
108-90-7	Chlorobenzene	0.20	< 0.20	U
100-41-4	Ethylbenzene	0.20	< 0.20	U
100-42-5	Styrene	0.20	< 0.20	U
75-69-4	Trichlorofluoromethane	0.20	< 0.20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.20	< 0.20	U
179601-23-1	m,p-Xylene	0.40	< 0.40	U
95-47-6	o-Xylene	0.20	< 0.20	U
95-50-1	1,2-Dichlorobenzene	0.20	< 0.20	U
541-73-1	1,3-Dichlorobenzene	0.20	< 0.20	U
106-46-7	1,4-Dichlorobenzene	0.20	< 0.20	U

Lab Sample ID: YD79D
LIMS ID: 14-5000
Matrix: Water
Date Analyzed: 03/28/14 16:01

QC Report No: YD79-Joint Base Lewis McChord
Project: LOG RAM

CAS Number	Analyte	LOQ	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Iodomethane	1.0	< 1.0	U
74-96-4	Bromoethane	0.20	< 0.20	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.20	< 0.20	U
74-95-3	Dibromomethane	0.20	< 0.20	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	< 0.20	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	< 0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	< 0.50	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.20	< 0.20	U
95-63-6	1,2,4-Trimethylbenzene	0.20	< 0.20	U
87-68-3	Hexachlorobutadiene	0.50	< 0.50	U
106-93-4	1,2-Dibromoethane	0.20	< 0.20	U
74-97-5	Bromochloromethane	0.20	< 0.20	U
594-20-7	2,2-Dichloropropane	0.20	< 0.20	U
142-28-9	1,3-Dichloropropane	0.20	< 0.20	U
98-82-8	Isopropylbenzene	0.20	< 0.20	U
103-65-1	n-Propylbenzene	0.20	< 0.20	U
108-86-1	Bromobenzene	0.20	< 0.20	U
95-49-8	2-Chlorotoluene	0.20	< 0.20	U
106-43-4	4-Chlorotoluene	0.20	< 0.20	U
98-06-6	tert-Butylbenzene	0.20	< 0.20	U
135-98-8	sec-Butylbenzene	0.20	< 0.20	U
99-87-6	4-Isopropyltoluene	0.20	< 0.20	U
104-51-8	n-Butylbenzene	0.20	< 0.20	U
120-82-1	1,2,4-Trichlorobenzene	0.50	< 0.50	U
91-20-3	Naphthalene	0.50	< 0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	< 0.50	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	106%
d8-Toluene	96.7%
Bromofluorobenzene	93.0%
d4-1,2-Dichlorobenzene	101%

2-Chloroethylvinylether is an acid labile compound and may not be recovered from an acid preserved sample.

EPA SW-846 indicates that vinyl chloride and styrene may degrade in the presence of acid preservative.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140320FL6-1**
 SAMPLE

Lab Sample ID: YD79E
LIMS ID: 14-5001
Matrix: Water
Data Release Authorized:
Reported: 04/03/14

QC Report No: YD79-Joint Base Lewis_McChord
Project: LOG RAM

Date Sampled: 03/20/14
Date Received: 03/21/14

Instrument/Analyst: NT3/PAB
Date Analyzed: 03/28/14 16:30

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	LOQ	Result	Q
74-87-3	Chloromethane	0.50	< 0.50	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.20	< 0.20	U
75-00-3	Chloroethane	0.20	< 0.20	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	**Acetone**	**5.0**	**6.1**	**Q**
75-15-0	Carbon Disulfide	0.20	< 0.20	U
75-35-4	1,1-Dichloroethene	0.20	< 0.20	U
75-34-3	1,1-Dichloroethane	0.20	< 0.20	U
156-60-5	trans-1,2-Dichloroethene	0.20	< 0.20	U
156-59-2	cis-1,2-Dichloroethene	0.20	< 0.20	U
67-66-3	Chloroform	0.20	< 0.20	U
107-06-2	1,2-Dichloroethane	0.20	< 0.20	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	0.20	< 0.20	U
56-23-5	Carbon Tetrachloride	0.20	< 0.20	U
108-05-4	Vinyl Acetate	0.20	< 0.20	U
75-27-4	Bromodichloromethane	0.20	< 0.20	U
78-87-5	1,2-Dichloropropane	0.20	< 0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	< 0.20	U
79-01-6	**Trichloroethene**	**0.20**	**1.2**	
124-48-1	Dibromochloromethane	0.20	< 0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	< 0.20	U
71-43-2	Benzene	0.20	< 0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	< 0.20	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.20	< 0.20	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.20	< 0.20	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	< 0.20	U
108-88-3	Toluene	0.20	< 0.20	U
108-90-7	Chlorobenzene	0.20	< 0.20	U
100-41-4	Ethylbenzene	0.20	< 0.20	U
100-42-5	Styrene	0.20	< 0.20	U
75-69-4	Trichlorofluoromethane	0.20	< 0.20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.20	< 0.20	U
179601-23-1	m,p-Xylene	0.40	< 0.40	U
95-47-6	o-Xylene	0.20	< 0.20	U
95-50-1	1,2-Dichlorobenzene	0.20	< 0.20	U
541-73-1	1,3-Dichlorobenzene	0.20	< 0.20	U
106-46-7	1,4-Dichlorobenzene	0.20	< 0.20	U

Lab Sample ID: YD79E
LIMS ID: 14-5001
Matrix: Water
Date Analyzed: 03/28/14 16:30

QC Report No: YD79-Joint Base Lewis McChord
Project: LOG RAM

CAS Number	Analyte	LOQ	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Iodomethane	1.0	< 1.0	U
74-96-4	Bromoethane	0.20	< 0.20	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.20	< 0.20	U
74-95-3	Dibromomethane	0.20	< 0.20	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	< 0.20	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	< 0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	< 0.50	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.20	< 0.20	U
95-63-6	1,2,4-Trimethylbenzene	0.20	< 0.20	U
87-68-3	Hexachlorobutadiene	0.50	< 0.50	U
106-93-4	1,2-Dibromoethane	0.20	< 0.20	U
74-97-5	Bromochloromethane	0.20	< 0.20	U
594-20-7	2,2-Dichloropropane	0.20	< 0.20	U
142-28-9	1,3-Dichloropropane	0.20	< 0.20	U
98-82-8	Isopropylbenzene	0.20	< 0.20	U
103-65-1	n-Propylbenzene	0.20	< 0.20	U
108-86-1	Bromobenzene	0.20	< 0.20	U
95-49-8	2-Chlorotoluene	0.20	< 0.20	U
106-43-4	4-Chlorotoluene	0.20	< 0.20	U
98-06-6	tert-Butylbenzene	0.20	< 0.20	U
135-98-8	sec-Butylbenzene	0.20	< 0.20	U
99-87-6	4-Isopropyltoluene	0.20	< 0.20	U
104-51-8	n-Butylbenzene	0.20	< 0.20	U
120-82-1	1,2,4-Trichlorobenzene	0.50	< 0.50	U
91-20-3	Naphthalene	0.50	< 0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	< 0.50	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	105%
d8-Toluene	97.3%
Bromofluorobenzene	90.4%
d4-1,2-Dichlorobenzene	100%

2-Chloroethylvinylether is an acid labile compound and may not be recovered from an acid preserved sample.

EPA SW-846 indicates that vinyl chloride and styrene may degrade in the presence of acid preservative.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140320LC41B-1**
 SAMPLE

Lab Sample ID: YD79F
LIMS ID: 14-5002
Matrix: Water
Data Release Authorized:
Reported: 04/03/14

QC Report No: YD79-Joint Base Lewis McChord
Project: LOG RAM
Date Sampled: 03/20/14
Date Received: 03/21/14

Instrument/Analyst: NT3/PAB
Date Analyzed: 03/28/14 16:59

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	LOQ	Result	Q
74-87-3	Chloromethane	0.50	< 0.50	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.20	< 0.20	U
75-00-3	Chloroethane	0.20	< 0.20	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	**Acetone**	**5.0**	**5.2**	**Q**
75-15-0	Carbon Disulfide	0.20	< 0.20	U
75-35-4	1,1-Dichloroethene	0.20	< 0.20	U
75-34-3	1,1-Dichloroethane	0.20	< 0.20	U
156-60-5	trans-1,2-Dichloroethene	0.20	< 0.20	U
156-59-2	**cis-1,2-Dichloroethene**	**0.20**	**0.76**	
67-66-3	Chloroform	0.20	< 0.20	U
107-06-2	1,2-Dichloroethane	0.20	< 0.20	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	0.20	< 0.20	U
56-23-5	Carbon Tetrachloride	0.20	< 0.20	U
108-05-4	Vinyl Acetate	0.20	< 0.20	U
75-27-4	Bromodichloromethane	0.20	< 0.20	U
78-87-5	1,2-Dichloropropane	0.20	< 0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	< 0.20	U
79-01-6	**Trichloroethene**	**0.20**	**69**	
124-48-1	Dibromochloromethane	0.20	< 0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	< 0.20	U
71-43-2	Benzene	0.20	< 0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	< 0.20	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.20	< 0.20	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.20	< 0.20	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	< 0.20	U
108-88-3	Toluene	0.20	< 0.20	U
108-90-7	Chlorobenzene	0.20	< 0.20	U
100-41-4	Ethylbenzene	0.20	< 0.20	U
100-42-5	Styrene	0.20	< 0.20	U
75-69-4	Trichlorofluoromethane	0.20	< 0.20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.20	< 0.20	U
179601-23-1	m,p-Xylene	0.40	< 0.40	U
95-47-6	o-Xylene	0.20	< 0.20	U
95-50-1	1,2-Dichlorobenzene	0.20	< 0.20	U
541-73-1	1,3-Dichlorobenzene	0.20	< 0.20	U
106-46-7	1,4-Dichlorobenzene	0.20	< 0.20	U

Lab Sample ID: YD79F
LIMS ID: 14-5002
Matrix: Water
Date Analyzed: 03/28/14 16:59

QC Report No: YD79-Joint Base Lewis McChord
Project: LOG RAM

CAS Number	Analyte	LOQ	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Iodomethane	1.0	< 1.0	U
74-96-4	Bromoethane	0.20	< 0.20	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.20	< 0.20	U
74-95-3	Dibromomethane	0.20	< 0.20	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	< 0.20	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	< 0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	< 0.50	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.20	< 0.20	U
95-63-6	1,2,4-Trimethylbenzene	0.20	< 0.20	U
87-68-3	Hexachlorobutadiene	0.50	< 0.50	U
106-93-4	1,2-Dibromoethane	0.20	< 0.20	U
74-97-5	Bromochloromethane	0.20	< 0.20	U
594-20-7	2,2-Dichloropropane	0.20	< 0.20	U
142-28-9	1,3-Dichloropropane	0.20	< 0.20	U
98-82-8	Isopropylbenzene	0.20	< 0.20	U
103-65-1	n-Propylbenzene	0.20	< 0.20	U
108-86-1	Bromobenzene	0.20	< 0.20	U
95-49-8	2-Chlorotoluene	0.20	< 0.20	U
106-43-4	4-Chlorotoluene	0.20	< 0.20	U
98-06-6	tert-Butylbenzene	0.20	< 0.20	U
135-98-8	sec-Butylbenzene	0.20	< 0.20	U
99-87-6	4-Isopropyltoluene	0.20	< 0.20	U
104-51-8	n-Butylbenzene	0.20	< 0.20	U
120-82-1	1,2,4-Trichlorobenzene	0.50	< 0.50	U
91-20-3	Naphthalene	0.50	< 0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	< 0.50	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	104%
d8-Toluene	96.0%
Bromofluorobenzene	92.6%
d4-1,2-Dichlorobenzene	100%

2-Chloroethylvinylether is an acid labile compound and may not be recovered from an acid preserved sample.

EPA SW-846 indicates that vinyl chloride and styrene may degrade in the presence of acid preservative.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140320LC61B-1**
Page 1 of 2 **SAMPLE**

Lab Sample ID: YD79G
LIMS ID: 14-5003
Matrix: Water
Data Release Authorized:
Reported: 04/03/14

QC Report No: YD79-Joint Base Lewis McChord
Project: LOG RAM

Date Sampled: 03/20/14
Date Received: 03/21/14

Instrument/Analyst: NT2/PAB
Date Analyzed: 04/01/14 05:09

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	LOQ	Result	Q
74-87-3	Chloromethane	0.50	< 0.50	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.20	< 0.20	U
75-00-3	Chloroethane	0.20	< 0.20	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	**Acetone**	**5.0**	**5.4**	
75-15-0	Carbon Disulfide	0.20	< 0.20	U
75-35-4	1,1-Dichloroethene	0.20	< 0.20	U
75-34-3	1,1-Dichloroethane	0.20	< 0.20	U
156-60-5	trans-1,2-Dichloroethene	0.20	< 0.20	U
156-59-2	cis-1,2-Dichloroethene	0.20	< 0.20	U
67-66-3	Chloroform	0.20	< 0.20	U
107-06-2	1,2-Dichloroethane	0.20	< 0.20	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	0.20	< 0.20	U
56-23-5	Carbon Tetrachloride	0.20	< 0.20	U
108-05-4	Vinyl Acetate	0.20	< 0.20	U
75-27-4	Bromodichloromethane	0.20	< 0.20	U
78-87-5	1,2-Dichloropropane	0.20	< 0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	< 0.20	U
79-01-6	**Trichloroethene**	**0.20**	**1.5**	
124-48-1	Dibromochloromethane	0.20	< 0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	< 0.20	U
71-43-2	Benzene	0.20	< 0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	< 0.20	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.20	< 0.20	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.20	< 0.20	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	< 0.20	U
108-88-3	Toluene	0.20	< 0.20	U
108-90-7	Chlorobenzene	0.20	< 0.20	U
100-41-4	Ethylbenzene	0.20	< 0.20	U
100-42-5	Styrene	0.20	< 0.20	U
75-69-4	Trichlorofluoromethane	0.20	< 0.20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.20	< 0.20	U
179601-23-1	m,p-Xylene	0.40	< 0.40	U
95-47-6	o-Xylene	0.20	< 0.20	U
95-50-1	1,2-Dichlorobenzene	0.20	< 0.20	U
541-73-1	1,3-Dichlorobenzene	0.20	< 0.20	U
106-46-7	1,4-Dichlorobenzene	0.20	< 0.20	U

Lab Sample ID: YD79G
LIMS ID: 14-5003
Matrix: Water
Date Analyzed: 04/01/14 05:09

QC Report No: YD79-Joint Base Lewis McChord
Project: LOG RAM

CAS Number	Analyte	LOQ	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Iodomethane	1.0	< 1.0	U
74-96-4	Bromoethane	0.20	< 0.20	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.20	< 0.20	U
74-95-3	Dibromomethane	0.20	< 0.20	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	< 0.20	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	< 0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	< 0.50	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.20	< 0.20	U
95-63-6	1,2,4-Trimethylbenzene	0.20	< 0.20	U
87-68-3	Hexachlorobutadiene	0.50	< 0.50	U
106-93-4	1,2-Dibromoethane	0.20	< 0.20	U
74-97-5	Bromochloromethane	0.20	< 0.20	U
594-20-7	2,2-Dichloropropane	0.20	< 0.20	U
142-28-9	1,3-Dichloropropane	0.20	< 0.20	U
98-82-8	Isopropylbenzene	0.20	< 0.20	U
103-65-1	n-Propylbenzene	0.20	< 0.20	U
108-86-1	Bromobenzene	0.20	< 0.20	U
95-49-8	2-Chlorotoluene	0.20	< 0.20	U
106-43-4	4-Chlorotoluene	0.20	< 0.20	U
98-06-6	tert-Butylbenzene	0.20	< 0.20	U
135-98-8	sec-Butylbenzene	0.20	< 0.20	U
99-87-6	4-Isopropyltoluene	0.20	< 0.20	U
104-51-8	n-Butylbenzene	0.20	< 0.20	U
120-82-1	1,2,4-Trichlorobenzene	0.50	< 0.50	U
91-20-3	Naphthalene	0.50	< 0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	< 0.50	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	97.9%
d8-Toluene	97.5%
Bromofluorobenzene	102%
d4-1,2-Dichlorobenzene	99.6%

2-Chloroethylvinylether is an acid labile compound and may not be recovered from an acid preserved sample.

EPA SW-846 indicates that vinyl chloride and styrene may degrade in the presence of acid preservative.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140320LC86D1-1**
Page 1 of 2 **SAMPLE**

Lab Sample ID: YD79H
LIMS ID: 14-5004
Matrix: Water
Data Release Authorized:
Reported: 04/03/14

QC Report No: YD79-Joint Base Lewis McChord
Project: LOG RAM

Date Sampled: 03/20/14
Date Received: 03/21/14

Instrument/Analyst: NT2/PAB
Date Analyzed: 04/01/14 05:36

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	LOQ	Result	Q
74-87-3	Chloromethane	0.50	< 0.50	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.20	< 0.20	U
75-00-3	Chloroethane	0.20	< 0.20	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	**Acetone**	**5.0**	**9.4**	
75-15-0	Carbon Disulfide	0.20	< 0.20	U
75-35-4	1,1-Dichloroethene	0.20	< 0.20	U
75-34-3	1,1-Dichloroethane	0.20	< 0.20	U
156-60-5	trans-1,2-Dichloroethene	0.20	< 0.20	U
156-59-2	**cis-1,2-Dichloroethene**	**0.20**	**0.53**	
67-66-3	Chloroform	0.20	< 0.20	U
107-06-2	1,2-Dichloroethane	0.20	< 0.20	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	0.20	< 0.20	U
56-23-5	Carbon Tetrachloride	0.20	< 0.20	U
108-05-4	Vinyl Acetate	0.20	< 0.20	U
75-27-4	Bromodichloromethane	0.20	< 0.20	U
78-87-5	1,2-Dichloropropane	0.20	< 0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	< 0.20	U
79-01-6	**Trichloroethene**	**0.20**	**7.3**	
124-48-1	Dibromochloromethane	0.20	< 0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	< 0.20	U
71-43-2	Benzene	0.20	< 0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	< 0.20	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.20	< 0.20	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.20	< 0.20	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	< 0.20	U
108-88-3	Toluene	0.20	< 0.20	U
108-90-7	Chlorobenzene	0.20	< 0.20	U
100-41-4	Ethylbenzene	0.20	< 0.20	U
100-42-5	Styrene	0.20	< 0.20	U
75-69-4	Trichlorofluoromethane	0.20	< 0.20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.20	< 0.20	U
179601-23-1	m,p-Xylene	0.40	< 0.40	U
95-47-6	o-Xylene	0.20	< 0.20	U
95-50-1	1,2-Dichlorobenzene	0.20	< 0.20	U
541-73-1	1,3-Dichlorobenzene	0.20	< 0.20	U
106-46-7	1,4-Dichlorobenzene	0.20	< 0.20	U

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140320LC86D1-1**
 SAMPLE

Lab Sample ID: YD79H
LIMS ID: 14-5004
Matrix: Water
Date Analyzed: 04/01/14 05:36

QC Report No: YD79-Joint Base Lewis McChord
Project: LOG RAM

CAS Number	Analyte	LOQ	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Iodomethane	1.0	< 1.0	U
74-96-4	Bromoethane	0.20	< 0.20	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.20	< 0.20	U
74-95-3	Dibromomethane	0.20	< 0.20	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	< 0.20	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	< 0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	< 0.50	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.20	< 0.20	U
95-63-6	1,2,4-Trimethylbenzene	0.20	< 0.20	U
87-68-3	Hexachlorobutadiene	0.50	< 0.50	U
106-93-4	1,2-Dibromoethane	0.20	< 0.20	U
74-97-5	Bromochloromethane	0.20	< 0.20	U
594-20-7	2,2-Dichloropropane	0.20	< 0.20	U
142-28-9	1,3-Dichloropropane	0.20	< 0.20	U
98-82-8	Isopropylbenzene	0.20	< 0.20	U
103-65-1	n-Propylbenzene	0.20	< 0.20	U
108-86-1	Bromobenzene	0.20	< 0.20	U
95-49-8	2-Chlorotoluene	0.20	< 0.20	U
106-43-4	4-Chlorotoluene	0.20	< 0.20	U
98-06-6	tert-Butylbenzene	0.20	< 0.20	U
135-98-8	sec-Butylbenzene	0.20	< 0.20	U
99-87-6	4-Isopropyltoluene	0.20	< 0.20	U
104-51-8	n-Butylbenzene	0.20	< 0.20	U
120-82-1	1,2,4-Trichlorobenzene	0.50	< 0.50	U
91-20-3	Naphthalene	0.50	< 0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	< 0.50	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	104%
d8-Toluene	100%
Bromofluorobenzene	99.1%
d4-1,2-Dichlorobenzene	96.2%

2-Chloroethylvinylether is an acid labile compound and may not be recovered from an acid preserved sample.

EPA SW-846 indicates that vinyl chloride and styrene may degrade in the presence of acid preservative.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140320LC86D2-1**
 SAMPLE

Lab Sample ID: YD79I
LIMS ID: 14-5005
Matrix: Water
Data Release Authorized:
Reported: 04/03/14

QC Report No: YD79-Joint Base Lewis McChord
Project: LOG RAM

Date Sampled: 03/20/14
Date Received: 03/21/14

Instrument/Analyst: NT2/PAB
Date Analyzed: 04/01/14 06:03

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	LOQ	Result	Q
74-87-3	Chloromethane	0.50	< 0.50	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.20	< 0.20	U
75-00-3	Chloroethane	0.20	< 0.20	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	**Acetone**	**5.0**	**8.9**	
75-15-0	Carbon Disulfide	0.20	< 0.20	U
75-35-4	1,1-Dichloroethene	0.20	< 0.20	U
75-34-3	1,1-Dichloroethane	0.20	< 0.20	U
156-60-5	trans-1,2-Dichloroethene	0.20	< 0.20	U
156-59-2	**cis-1,2-Dichloroethene**	**0.20**	**0.61**	
67-66-3	Chloroform	0.20	< 0.20	U
107-06-2	1,2-Dichloroethane	0.20	< 0.20	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	0.20	< 0.20	U
56-23-5	Carbon Tetrachloride	0.20	< 0.20	U
108-05-4	Vinyl Acetate	0.20	< 0.20	U
75-27-4	Bromodichloromethane	0.20	< 0.20	U
78-87-5	1,2-Dichloropropane	0.20	< 0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	< 0.20	U
79-01-6	**Trichloroethene**	**0.20**	**7.0**	
124-48-1	Dibromochloromethane	0.20	< 0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	< 0.20	U
71-43-2	Benzene	0.20	< 0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	< 0.20	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.20	< 0.20	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.20	< 0.20	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	< 0.20	U
108-88-3	Toluene	0.20	< 0.20	U
108-90-7	Chlorobenzene	0.20	< 0.20	U
100-41-4	Ethylbenzene	0.20	< 0.20	U
100-42-5	Styrene	0.20	< 0.20	U
75-69-4	Trichlorofluoromethane	0.20	< 0.20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.20	< 0.20	U
179601-23-1	m,p-Xylene	0.40	< 0.40	U
95-47-6	o-Xylene	0.20	< 0.20	U
95-50-1	1,2-Dichlorobenzene	0.20	< 0.20	U
541-73-1	1,3-Dichlorobenzene	0.20	< 0.20	U
106-46-7	1,4-Dichlorobenzene	0.20	< 0.20	U

Lab Sample ID: YD79I
LIMS ID: 14-5005
Matrix: Water
Date Analyzed: 04/01/14 06:03

QC Report No: YD79-Joint Base Lewis McChord
Project: LOG RAM

CAS Number	Analyte	LOQ	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Iodomethane	1.0	< 1.0	U
74-96-4	Bromoethane	0.20	< 0.20	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.20	< 0.20	U
74-95-3	Dibromomethane	0.20	< 0.20	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	< 0.20	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	< 0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	< 0.50	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.20	< 0.20	U
95-63-6	1,2,4-Trimethylbenzene	0.20	< 0.20	U
87-68-3	Hexachlorobutadiene	0.50	< 0.50	U
106-93-4	1,2-Dibromoethane	0.20	< 0.20	U
74-97-5	Bromochloromethane	0.20	< 0.20	U
594-20-7	2,2-Dichloropropane	0.20	< 0.20	U
142-28-9	1,3-Dichloropropane	0.20	< 0.20	U
98-82-8	Isopropylbenzene	0.20	< 0.20	U
103-65-1	n-Propylbenzene	0.20	< 0.20	U
108-86-1	Bromobenzene	0.20	< 0.20	U
95-49-8	2-Chlorotoluene	0.20	< 0.20	U
106-43-4	4-Chlorotoluene	0.20	< 0.20	U
98-06-6	tert-Butylbenzene	0.20	< 0.20	U
135-98-8	sec-Butylbenzene	0.20	< 0.20	U
99-87-6	4-Isopropyltoluene	0.20	< 0.20	U
104-51-8	n-Butylbenzene	0.20	< 0.20	U
120-82-1	1,2,4-Trichlorobenzene	0.50	< 0.50	U
91-20-3	Naphthalene	0.50	< 0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	< 0.50	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	104%
d8-Toluene	98.6%
Bromofluorobenzene	94.8%
d4-1,2-Dichlorobenzene	100%

2-Chloroethylvinylether is an acid labile compound and may not be recovered from an acid preserved sample.

EPA SW-846 indicates that vinyl chloride and styrene may degrade in the presence of acid preservative.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140320LC87D1-1**
 SAMPLE

Lab Sample ID: YD79J
LIMS ID: 14-5006
Matrix: Water
Data Release Authorized:
Reported: 04/03/14

QC Report No: YD79-Joint Base Lewis McChord
Project: LOG RAM

Date Sampled: 03/20/14
Date Received: 03/21/14

Instrument/Analyst: NT2/PAB
Date Analyzed: 04/01/14 06:29

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	LOQ	Result	Q
74-87-3	Chloromethane	0.50	< 0.50	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.20	< 0.20	U
75-00-3	Chloroethane	0.20	< 0.20	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	**Acetone**	**5.0**	**8.4**	
75-15-0	Carbon Disulfide	0.20	< 0.20	U
75-35-4	1,1-Dichloroethene	0.20	< 0.20	U
75-34-3	1,1-Dichloroethane	0.20	< 0.20	U
156-60-5	trans-1,2-Dichloroethene	0.20	< 0.20	U
156-59-2	cis-1,2-Dichloroethene	0.20	< 0.20	U
67-66-3	Chloroform	0.20	< 0.20	U
107-06-2	1,2-Dichloroethane	0.20	< 0.20	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	0.20	< 0.20	U
56-23-5	Carbon Tetrachloride	0.20	< 0.20	U
108-05-4	Vinyl Acetate	0.20	< 0.20	U
75-27-4	Bromodichloromethane	0.20	< 0.20	U
78-87-5	1,2-Dichloropropane	0.20	< 0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	< 0.20	U
79-01-6	Trichloroethene	0.20	< 0.20	U
124-48-1	Dibromochloromethane	0.20	< 0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	< 0.20	U
71-43-2	Benzene	0.20	< 0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	< 0.20	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.20	< 0.20	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.20	< 0.20	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	< 0.20	U
108-88-3	Toluene	0.20	< 0.20	U
108-90-7	Chlorobenzene	0.20	< 0.20	U
100-41-4	Ethylbenzene	0.20	< 0.20	U
100-42-5	Styrene	0.20	< 0.20	U
75-69-4	Trichlorofluoromethane	0.20	< 0.20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.20	< 0.20	U
179601-23-1	m,p-Xylene	0.40	< 0.40	U
95-47-6	o-Xylene	0.20	< 0.20	U
95-50-1	1,2-Dichlorobenzene	0.20	< 0.20	U
541-73-1	1,3-Dichlorobenzene	0.20	< 0.20	U
106-46-7	1,4-Dichlorobenzene	0.20	< 0.20	U

Lab Sample ID: YD79J
LIMS ID: 14-5006
Matrix: Water
Date Analyzed: 04/01/14 06:29

QC Report No: YD79-Joint Base Lewis McChord
Project: LOG RAM

CAS Number	Analyte	LOQ	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Iodomethane	1.0	< 1.0	U
74-96-4	Bromoethane	0.20	< 0.20	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.20	< 0.20	U
74-95-3	Dibromomethane	0.20	< 0.20	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	< 0.20	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	< 0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	< 0.50	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.20	< 0.20	U
95-63-6	1,2,4-Trimethylbenzene	0.20	< 0.20	U
87-68-3	Hexachlorobutadiene	0.50	< 0.50	U
106-93-4	1,2-Dibromoethane	0.20	< 0.20	U
74-97-5	Bromochloromethane	0.20	< 0.20	U
594-20-7	2,2-Dichloropropane	0.20	< 0.20	U
142-28-9	1,3-Dichloropropane	0.20	< 0.20	U
98-82-8	Isopropylbenzene	0.20	< 0.20	U
103-65-1	n-Propylbenzene	0.20	< 0.20	U
108-86-1	Bromobenzene	0.20	< 0.20	U
95-49-8	2-Chlorotoluene	0.20	< 0.20	U
106-43-4	4-Chlorotoluene	0.20	< 0.20	U
98-06-6	tert-Butylbenzene	0.20	< 0.20	U
135-98-8	sec-Butylbenzene	0.20	< 0.20	U
99-87-6	4-Isopropyltoluene	0.20	< 0.20	U
104-51-8	n-Butylbenzene	0.20	< 0.20	U
120-82-1	1,2,4-Trichlorobenzene	0.50	< 0.50	U
91-20-3	Naphthalene	0.50	< 0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	< 0.50	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	101%
d8-Toluene	95.5%
Bromofluorobenzene	95.8%
d4-1,2-Dichlorobenzene	101%

2-Chloroethylvinylether is an acid labile compound and may not be recovered from an acid preserved sample.

EPA SW-846 indicates that vinyl chloride and styrene may degrade in the presence of acid preservative.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: MB-032814A**
 METHOD BLANK

Lab Sample ID: MB-032814A
LIMS ID: 14-4997
Matrix: Water
Data Release Authorized:
Reported: 04/03/14

QC Report No: YD79-Joint Base Lewis McChord
Project: LOG RAM

Date Sampled: NA
Date Received: NA

Instrument/Analyst: NT3/PAB
Date Analyzed: 03/28/14 10:40

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	LOQ	Result	Q
74-87-3	Chloromethane	0.50	< 0.50	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.20	< 0.20	U
75-00-3	Chloroethane	0.20	< 0.20	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	Acetone	5.0	< 5.0	U
75-15-0	Carbon Disulfide	0.20	< 0.20	U
75-35-4	1,1-Dichloroethene	0.20	< 0.20	U
75-34-3	1,1-Dichloroethane	0.20	< 0.20	U
156-60-5	trans-1,2-Dichloroethene	0.20	< 0.20	U
156-59-2	cis-1,2-Dichloroethene	0.20	< 0.20	U
67-66-3	Chloroform	0.20	< 0.20	U
107-06-2	1,2-Dichloroethane	0.20	< 0.20	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	0.20	< 0.20	U
56-23-5	Carbon Tetrachloride	0.20	< 0.20	U
108-05-4	Vinyl Acetate	0.20	< 0.20	U
75-27-4	Bromodichloromethane	0.20	< 0.20	U
78-87-5	1,2-Dichloropropane	0.20	< 0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	< 0.20	U
79-01-6	Trichloroethene	0.20	< 0.20	U
124-48-1	Dibromochloromethane	0.20	< 0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	< 0.20	U
71-43-2	Benzene	0.20	< 0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	< 0.20	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.20	< 0.20	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.20	< 0.20	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	< 0.20	U
108-88-3	Toluene	0.20	< 0.20	U
108-90-7	Chlorobenzene	0.20	< 0.20	U
100-41-4	Ethylbenzene	0.20	< 0.20	U
100-42-5	Styrene	0.20	< 0.20	U
75-69-4	Trichlorofluoromethane	0.20	< 0.20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.20	< 0.20	U
179601-23-1	m,p-Xylene	0.40	< 0.40	U
95-47-6	o-Xylene	0.20	< 0.20	U
95-50-1	1,2-Dichlorobenzene	0.20	< 0.20	U
541-73-1	1,3-Dichlorobenzene	0.20	< 0.20	U
106-46-7	1,4-Dichlorobenzene	0.20	< 0.20	U

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: MB-032814A**
 METHOD BLANK

Lab Sample ID: MB-032814A
LIMS ID: 14-4997
Matrix: Water
Date Analyzed: 03/28/14 10:40

QC Report No: YD79-Joint Base Lewis McChord
Project: LOG RAM

CAS Number	Analyte	LOQ	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Iodomethane	1.0	< 1.0	U
74-96-4	Bromoethane	0.20	< 0.20	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.20	< 0.20	U
74-95-3	Dibromomethane	0.20	< 0.20	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	< 0.20	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	< 0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	< 0.50	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.20	< 0.20	U
95-63-6	1,2,4-Trimethylbenzene	0.20	< 0.20	U
87-68-3	Hexachlorobutadiene	0.50	< 0.50	U
106-93-4	1,2-Dibromoethane	0.20	< 0.20	U
74-97-5	Bromochloromethane	0.20	< 0.20	U
594-20-7	2,2-Dichloropropane	0.20	< 0.20	U
142-28-9	1,3-Dichloropropane	0.20	< 0.20	U
98-82-8	Isopropylbenzene	0.20	< 0.20	U
103-65-1	n-Propylbenzene	0.20	< 0.20	U
108-86-1	Bromobenzene	0.20	< 0.20	U
95-49-8	2-Chlorotoluene	0.20	< 0.20	U
106-43-4	4-Chlorotoluene	0.20	< 0.20	U
98-06-6	tert-Butylbenzene	0.20	< 0.20	U
135-98-8	sec-Butylbenzene	0.20	< 0.20	U
99-87-6	4-Isopropyltoluene	0.20	< 0.20	U
104-51-8	n-Butylbenzene	0.20	< 0.20	U
120-82-1	1,2,4-Trichlorobenzene	0.50	< 0.50	U
91-20-3	Naphthalene	0.50	< 0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	< 0.50	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	104%
d8-Toluene	97.0%
Bromofluorobenzene	92.2%
d4-1,2-Dichlorobenzene	101%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: MB-033114A**
 METHOD BLANK

Lab Sample ID: MB-033114A
LIMS ID: 14-5003
Matrix: Water
Data Release Authorized:
Reported: 04/03/14

QC Report No: YD79-Joint Base Lewis McChord
Project: LOG RAM

Date Sampled: NA
Date Received: NA

Instrument/Analyst: NT2/PAB
Date Analyzed: 03/31/14 22:32

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	LOQ	Result	Q
74-87-3	Chloromethane	0.50	< 0.50	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.20	< 0.20	U
75-00-3	Chloroethane	0.20	< 0.20	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	Acetone	5.0	< 5.0	U
75-15-0	Carbon Disulfide	0.20	< 0.20	U
75-35-4	1,1-Dichloroethene	0.20	< 0.20	U
75-34-3	1,1-Dichloroethane	0.20	< 0.20	U
156-60-5	trans-1,2-Dichloroethene	0.20	< 0.20	U
156-59-2	cis-1,2-Dichloroethene	0.20	< 0.20	U
67-66-3	Chloroform	0.20	< 0.20	U
107-06-2	1,2-Dichloroethane	0.20	< 0.20	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	0.20	< 0.20	U
56-23-5	Carbon Tetrachloride	0.20	< 0.20	U
108-05-4	Vinyl Acetate	0.20	< 0.20	U
75-27-4	Bromodichloromethane	0.20	< 0.20	U
78-87-5	1,2-Dichloropropane	0.20	< 0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	< 0.20	U
79-01-6	Trichloroethene	0.20	< 0.20	U
124-48-1	Dibromochloromethane	0.20	< 0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	< 0.20	U
71-43-2	Benzene	0.20	< 0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	< 0.20	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.20	< 0.20	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.20	< 0.20	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	< 0.20	U
108-88-3	Toluene	0.20	< 0.20	U
108-90-7	Chlorobenzene	0.20	< 0.20	U
100-41-4	Ethylbenzene	0.20	< 0.20	U
100-42-5	Styrene	0.20	< 0.20	U
75-69-4	Trichlorofluoromethane	0.20	< 0.20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.20	< 0.20	U
179601-23-1	m,p-Xylene	0.40	< 0.40	U
95-47-6	o-Xylene	0.20	< 0.20	U
95-50-1	1,2-Dichlorobenzene	0.20	< 0.20	U
541-73-1	1,3-Dichlorobenzene	0.20	< 0.20	U
106-46-7	1,4-Dichlorobenzene	0.20	< 0.20	U

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: MB-033114A**
 METHOD BLANK

Lab Sample ID: MB-033114A QC Report No: YD79-Joint Base Lewis McChord
LIMS ID: 14-5003 Project: LOG RAM
Matrix: Water
Date Analyzed: 03/31/14 22:32

CAS Number	Analyte	LOQ	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Iodomethane	1.0	< 1.0	U
74-96-4	Bromoethane	0.20	< 0.20	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.20	< 0.20	U
74-95-3	Dibromomethane	0.20	< 0.20	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	< 0.20	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	< 0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	< 0.50	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.20	< 0.20	U
95-63-6	1,2,4-Trimethylbenzene	0.20	< 0.20	U
87-68-3	**Hexachlorobutadiene**	**0.50**	**0.50**	
106-93-4	1,2-Dibromoethane	0.20	< 0.20	U
74-97-5	Bromochloromethane	0.20	< 0.20	U
594-20-7	2,2-Dichloropropane	0.20	< 0.20	U
142-28-9	1,3-Dichloropropane	0.20	< 0.20	U
98-82-8	Isopropylbenzene	0.20	< 0.20	U
103-65-1	n-Propylbenzene	0.20	< 0.20	U
108-86-1	Bromobenzene	0.20	< 0.20	U
95-49-8	2-Chlorotoluene	0.20	< 0.20	U
106-43-4	4-Chlorotoluene	0.20	< 0.20	U
98-06-6	tert-Butylbenzene	0.20	< 0.20	U
135-98-8	sec-Butylbenzene	0.20	< 0.20	U
99-87-6	4-Isopropyltoluene	0.20	< 0.20	U
104-51-8	**n-Butylbenzene**	**0.20**	**0.24**	
120-82-1	1,2,4-Trichlorobenzene	0.50	< 0.50	U
91-20-3	Naphthalene	0.50	< 0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	< 0.50	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	98.3%
d8-Toluene	101%
Bromofluorobenzene	97.9%
d4-1,2-Dichlorobenzene	97.4%

ANALYTICAL RESOURCES INCORPORATED

VOA SURROGATE RECOVERY SUMMARY

Matrix: Water

QC Report No: YD79-Joint Base Lewis McChord
Project: LOG RAM

ARI ID	Client ID	PV	DCE	TOL	BFB	DCB	TOT OUT
MB-032814A	Method Blank	10	104%	97.0%	92.2%	101%	0
LCS-032814A	Lab Control	10	103%	98.3%	92.9%	99.6%	0
LCSD-032814A	Lab Control Dup	10	103%	97.7%	94.2%	101%	0
YD79A	LGC140320BC1-1	10	104%	96.3%	94.2%	100%	0
YD79B	LGC1470320CM2-1	10	103%	96.2%	91.6%	101%	0
YD79C	LGC140320DUP1-1	10	104%	92.3%	91.3%	98.1%	0
YD79D	LGC140320DUP2-1	10	106%	96.7%	93.0%	101%	0
YD79E	LGC140320FL6-1	10	105%	97.3%	90.4%	100%	0
YD79F	LGC140320LC41B-1	10	104%	96.0%	92.6%	100%	0
MB-033114A	Method Blank	10	98.3%	101%	97.9%	97.4%	0
LCS-033114A	Lab Control	10	100%	99.1%	105%	101%	0
LCSD-033114A	Lab Control Dup	10	101%	98.9%	101%	102%	0
YD79G	LGC140320LC61B-1	10	97.9%	97.5%	102%	99.6%	0
YD79H	LGC140320LC86D1-1	10	104%	100%	99.1%	96.2%	0
YD79I	LGC140320LC86D2-1	10	104%	98.6%	94.8%	100%	0
YD79J	LGC140320LC87D1-1	10	101%	95.5%	95.8%	101%	0

	LCS/MB LIMITS	QC LIMITS
SW8260C		
(DCE) = d4-1,2-Dichloroethane	(80-120)	(80-130)
(TOL) = d8-Toluene	(80-120)	(80-120)
(BFB) = Bromofluorobenzene	(80-120)	(80-120)
(DCB) = d4-1,2-Dichlorobenzene	(80-120)	(80-120)

Prep Method: SW5030B
Log Number Range: 14-4997 to 14-5006

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LCS-032814A**
 LAB CONTROL SAMPLE

Lab Sample ID: LCS-032814A
LIMS ID: 14-4997
Matrix: Water
Data Release Authorized:
Reported: 04/03/14

QC Report No: YD79-Joint Base Lewis McChord
Project: LOG RAM

Date Sampled: NA
Date Received: NA

Instrument/Analyst LCS: NT3/PAB
LCSD: NT3/PAB
Date Analyzed LCS: 03/28/14 09:42
LCSD: 03/28/14 10:11

Sample Amount LCS: 10.0 mL
LCSD: 10.0 mL
Purge Volume LCS: 10.0 mL
LCSD: 10.0 mL

Analyte	LCS		Spike Added-LCS	LCS Recovery	LCSD		Spike Added-LCSD	LCSD Recovery	RPD
Chloromethane	8.23		10.0	82.3%	8.11		10.0	81.1%	1.5%
Bromomethane	4.75	Q	10.0	47.5%	4.70	Q	10.0	47.0%	1.1%
Vinyl Chloride	7.52		10.0	75.2%	8.50		10.0	85.0%	12.2%
Chloroethane	8.00		10.0	80.0%	7.63		10.0	76.3%	4.7%
Methylene Chloride	8.65		10.0	86.5%	8.87		10.0	88.7%	2.5%
Acetone	60.4	Q	50.0	121%	60.9	Q	50.0	122%	0.8%
Carbon Disulfide	8.94		10.0	89.4%	8.66		10.0	86.6%	3.2%
1,1-Dichloroethene	9.04		10.0	90.4%	8.77		10.0	87.7%	3.0%
1,1-Dichloroethane	9.11		10.0	91.1%	9.19		10.0	91.9%	0.9%
trans-1,2-Dichloroethene	9.13		10.0	91.3%	9.34		10.0	93.4%	2.3%
cis-1,2-Dichloroethene	9.11		10.0	91.1%	9.26		10.0	92.6%	1.6%
Chloroform	9.17		10.0	91.7%	9.07		10.0	90.7%	1.1%
1,2-Dichloroethane	9.72		10.0	97.2%	9.66		10.0	96.6%	0.6%
2-Butanone	57.4		50.0	115%	58.7		50.0	117%	2.2%
1,1,1-Trichloroethane	9.24		10.0	92.4%	9.18		10.0	91.8%	0.7%
Carbon Tetrachloride	9.31		10.0	93.1%	9.57		10.0	95.7%	2.8%
Vinyl Acetate	10.1		10.0	101%	10.4		10.0	104%	2.9%
Bromodichloromethane	9.45		10.0	94.5%	9.62		10.0	96.2%	1.8%
1,2-Dichloropropane	9.16		10.0	91.6%	9.53		10.0	95.3%	4.0%
cis-1,3-Dichloropropene	9.28		10.0	92.8%	9.45		10.0	94.5%	1.8%
Trichloroethene	9.15		10.0	91.5%	9.55		10.0	95.5%	4.3%
Dibromochloromethane	10.5		10.0	105%	10.9		10.0	109%	3.7%
1,1,2-Trichloroethane	9.67		10.0	96.7%	10.3		10.0	103%	6.3%
Benzene	9.68		10.0	96.8%	9.67		10.0	96.7%	0.1%
trans-1,3-Dichloropropene	9.25		10.0	92.5%	9.46		10.0	94.6%	2.2%
2-Chloroethylvinylether	9.73		10.0	97.3%	9.88		10.0	98.8%	1.5%
Bromoform	11.3		10.0	113%	11.4		10.0	114%	0.9%
4-Methyl-2-Pentanone (MIBK)	54.8		50.0	110%	57.9		50.0	116%	5.5%
2-Hexanone	58.0		50.0	116%	61.2		50.0	122%	5.4%
Tetrachloroethene	9.86		10.0	98.6%	9.91		10.0	99.1%	0.5%
1,1,2,2-Tetrachloroethane	10.7		10.0	107%	11.1		10.0	111%	3.7%
Toluene	9.40		10.0	94.0%	9.66		10.0	96.6%	2.7%
Chlorobenzene	10.2		10.0	102%	10.3		10.0	103%	1.0%
Ethylbenzene	9.61		10.0	96.1%	9.99		10.0	99.9%	3.9%
Styrene	10.5		10.0	105%	10.6		10.0	106%	0.9%
Trichlorofluoromethane	9.21		10.0	92.1%	8.81		10.0	88.1%	4.4%
1,1,2-Trichloro-1,2,2-trifluoroetha	9.35		10.0	93.5%	9.35		10.0	93.5%	0.0%
m,p-Xylene	21.0		20.0	105%	21.4		20.0	107%	1.9%

Lab Sample ID: LCS-032814A QC Report No: YD79-Joint Base Lewis McChord
LIMS ID: 14-4997 Project: LOG RAM
Matrix: Water

Analyte	LCS	Spike Added-LCS	LCS Recovery	LCSD	Spike Added-LCSD	LCSD Recovery	RPD
o-Xylene	9.82	10.0	98.2%	10.0	10.0	100%	1.8%
1,2-Dichlorobenzene	10.1	10.0	101%	10.6	10.0	106%	4.8%
1,3-Dichlorobenzene	10.5	10.0	105%	10.9	10.0	109%	3.7%
1,4-Dichlorobenzene	10.3	10.0	103%	10.6	10.0	106%	2.9%
Acrolein	51.1	50.0	102%	51.5	50.0	103%	0.8%
Iodomethane	4.98 Q	10.0	49.8%	5.32 Q	10.0	53.2%	6.6%
Bromoethane	7.51	10.0	75.1%	7.96	10.0	79.6%	5.8%
Acrylonitrile	10.9	10.0	109%	11.2	10.0	112%	2.7%
1,1-Dichloropropene	9.14	10.0	91.4%	9.38	10.0	93.8%	2.6%
Dibromomethane	9.81	10.0	98.1%	10.1	10.0	101%	2.9%
1,1,1,2-Tetrachloroethane	9.62	10.0	96.2%	9.87	10.0	98.7%	2.6%
1,2-Dibromo-3-chloropropane	11.2	10.0	112%	11.5	10.0	115%	2.6%
1,2,3-Trichloropropane	10.9	10.0	109%	11.3	10.0	113%	3.6%
trans-1,4-Dichloro-2-butene	10.8	10.0	108%	11.0	10.0	110%	1.8%
1,3,5-Trimethylbenzene	10.0	10.0	100%	10.4	10.0	104%	3.9%
1,2,4-Trimethylbenzene	9.98	10.0	99.8%	10.2	10.0	102%	2.2%
Hexachlorobutadiene	10.6	10.0	106%	10.7	10.0	107%	0.9%
1,2-Dibromoethane	9.73	10.0	97.3%	10.2	10.0	102%	4.7%
Bromochloromethane	9.18	10.0	91.8%	9.17	10.0	91.7%	0.1%
2,2-Dichloropropane	8.78	10.0	87.8%	8.53	10.0	85.3%	2.9%
1,3-Dichloropropane	10.2	10.0	102%	10.4	10.0	104%	1.9%
Isopropylbenzene	10.1	10.0	101%	10.3	10.0	103%	2.0%
n-Propylbenzene	10.2	10.0	102%	10.4	10.0	104%	1.9%
Bromobenzene	9.64	10.0	96.4%	9.97	10.0	99.7%	3.4%
2-Chlorotoluene	10.0	10.0	100%	10.2	10.0	102%	2.0%
4-Chlorotoluene	9.66	10.0	96.6%	10.0	10.0	100%	3.5%
tert-Butylbenzene	9.90	10.0	99.0%	9.92	10.0	99.2%	0.2%
sec-Butylbenzene	10.2	10.0	102%	10.4	10.0	104%	1.9%
4-Isopropyltoluene	10.3	10.0	103%	10.5	10.0	105%	1.9%
n-Butylbenzene	10.4	10.0	104%	10.7	10.0	107%	2.8%
1,2,4-Trichlorobenzene	10.5	10.0	105%	10.8	10.0	108%	2.8%
Naphthalene	12.4 Q	10.0	124%	13.2 Q	10.0	132%	6.2%
1,2,3-Trichlorobenzene	10.9	10.0	109%	11.4	10.0	114%	4.5%

Reported in µg/L (ppb)

RPD calculated using sample concentrations per SW846.

Volatile Surrogate Recovery

	LCS	LCSD
d4-1,2-Dichloroethane	103%	103%
d8-Toluene	98.3%	97.7%
Bromofluorobenzene	92.9%	94.2%
d4-1,2-Dichlorobenzene	99.6%	101%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LCS-033114A**
 LAB CONTROL SAMPLE

Lab Sample ID: LCS-033114A
LIMS ID: 14-5003
Matrix: Water
Data Release Authorized:
Reported: 04/03/14

QC Report No: YD79-Joint Base Lewis McChord
Project: LOG RAM
Date Sampled: NA
Date Received: NA

Instrument/Analyst LCS: NT2/PAB
LCSD: NT2/PAB
Date Analyzed LCS: 03/31/14 21:12
LCSD: 03/31/14 21:39

Sample Amount LCS: 10.0 mL
LCSD: 10.0 mL
Purge Volume LCS: 10.0 mL
LCSD: 10.0 mL

Analyte	LCS	Spike Added-LCS	LCS Recovery	LCSD	Spike Added-LCSD	LCSD Recovery	RPD
Chloromethane	12.2	10.0	122%	11.6	10.0	116%	5.0%
Bromomethane	10.3	10.0	103%	9.15	10.0	91.5%	11.8%
Vinyl Chloride	12.6	10.0	126%	11.4	10.0	114%	10.0%
Chloroethane	11.1	10.0	111%	10.7	10.0	107%	3.7%
Methylene Chloride	10.7	10.0	107%	9.91	10.0	99.1%	7.7%
Acetone	54.5	50.0	109%	50.0	50.0	100%	8.6%
Carbon Disulfide	11.7	10.0	117%	11.1	10.0	111%	5.3%
1,1-Dichloroethene	11.5	10.0	115%	11.0	10.0	110%	4.4%
1,1-Dichloroethane	11.2	10.0	112%	10.9	10.0	109%	2.7%
trans-1,2-Dichloroethene	9.81	10.0	98.1%	9.79	10.0	97.9%	0.2%
cis-1,2-Dichloroethene	11.1	10.0	111%	10.9	10.0	109%	1.8%
Chloroform	11.2	10.0	112%	10.8	10.0	108%	3.6%
1,2-Dichloroethane	10.9	10.0	109%	10.7	10.0	107%	1.9%
2-Butanone	53.2	50.0	106%	51.7	50.0	103%	2.9%
1,1,1-Trichloroethane	11.2	10.0	112%	10.7	10.0	107%	4.6%
Carbon Tetrachloride	11.1	10.0	111%	10.6	10.0	106%	4.6%
Vinyl Acetate	10.8	10.0	108%	10.4	10.0	104%	3.8%
Bromodichloromethane	11.0	10.0	110%	10.5	10.0	105%	4.7%
1,2-Dichloropropane	11.1	10.0	111%	10.2	10.0	102%	8.5%
cis-1,3-Dichloropropene	10.7	10.0	107%	10.5	10.0	105%	1.9%
Trichloroethene	10.4	10.0	104%	10.1	10.0	101%	2.9%
Dibromochloromethane	11.2	10.0	112%	10.7	10.0	107%	4.6%
1,1,2-Trichloroethane	10.9	10.0	109%	10.7	10.0	107%	1.9%
Benzene	10.4	10.0	104%	10.3	10.0	103%	1.0%
trans-1,3-Dichloropropene	11.5	10.0	115%	10.7	10.0	107%	7.2%
2-Chloroethylvinylether	9.46	10.0	94.6%	9.96	10.0	99.6%	5.1%
Bromoform	10.6	10.0	106%	11.0	10.0	110%	3.7%
4-Methyl-2-Pentanone (MIBK)	56.7	50.0	113%	53.1	50.0	106%	6.6%
2-Hexanone	57.3	50.0	115%	55.2	50.0	110%	3.7%
Tetrachloroethene	9.00	10.0	90.0%	8.93	10.0	89.3%	0.8%
1,1,2,2-Tetrachloroethane	10.9	10.0	109%	11.0	10.0	110%	0.9%
Toluene	10.6	10.0	106%	10.2	10.0	102%	3.8%
Chlorobenzene	11.6	10.0	116%	11.0	10.0	110%	5.3%
Ethylbenzene	11.1	10.0	111%	10.9	10.0	109%	1.8%
Styrene	12.0 Q	10.0	120%	11.4 Q	10.0	114%	5.1%
Trichlorofluoromethane	11.8	10.0	118%	11.3	10.0	113%	4.3%
1,1,2-Trichloro-1,2,2-trifluoroetha	13.3	10.0	133%	11.6	10.0	116%	13.7%
m,p-Xylene	22.5	20.0	112%	22.3	20.0	112%	0.9%

Lab Sample ID: LCS-033114A QC Report No: YD79-Joint Base Lewis McChord
LIMS ID: 14-5003 Project: LOG RAM
Matrix: Water

Analyte	LCS	Spike Added-LCS	LCS Recovery	LCSD	Spike Added-LCSD	LCSD Recovery	RPD
o-Xylene	11.8 Q	10.0	118%	11.1 Q	10.0	111%	6.1%
1,2-Dichlorobenzene	10.7	10.0	107%	10.8	10.0	108%	0.9%
1,3-Dichlorobenzene	11.4	10.0	114%	11.2	10.0	112%	1.8%
1,4-Dichlorobenzene	11.0	10.0	110%	10.9	10.0	109%	0.9%
Acrolein	54.1	50.0	108%	51.2	50.0	102%	5.5%
Iodomethane	11.2	10.0	112%	10.6	10.0	106%	5.5%
Bromoethane	11.3	10.0	113%	11.0	10.0	110%	2.7%
Acrylonitrile	10.7	10.0	107%	9.70	10.0	97.0%	9.8%
1,1-Dichloropropene	11.2	10.0	112%	10.7	10.0	107%	4.6%
Dibromomethane	10.7	10.0	107%	10.6	10.0	106%	0.9%
1,1,1,2-Tetrachloroethane	11.6	10.0	116%	11.1	10.0	111%	4.4%
1,2-Dibromo-3-chloropropane	10.7	10.0	107%	10.4	10.0	104%	2.8%
1,2,3-Trichloropropane	10.8	10.0	108%	10.4	10.0	104%	3.8%
trans-1,4-Dichloro-2-butene	8.95	10.0	89.5%	9.19	10.0	91.9%	2.6%
1,3,5-Trimethylbenzene	11.3	10.0	113%	11.5	10.0	115%	1.8%
1,2,4-Trimethylbenzene	11.3	10.0	113%	11.1	10.0	111%	1.8%
Hexachlorobutadiene	11.4 B	10.0	114%	11.6 B	10.0	116%	1.7%
1,2-Dibromoethane	11.2	10.0	112%	10.4	10.0	104%	7.4%
Bromochloromethane	11.4	10.0	114%	10.8	10.0	108%	5.4%
2,2-Dichloropropane	11.6	10.0	116%	11.0	10.0	110%	5.3%
1,3-Dichloropropane	10.9	10.0	109%	10.7	10.0	107%	1.9%
Isopropylbenzene	11.1 Q	10.0	111%	11.1 Q	10.0	111%	0.0%
n-Propylbenzene	11.0	10.0	110%	11.1	10.0	111%	0.9%
Bromobenzene	10.4	10.0	104%	10.4	10.0	104%	0.0%
2-Chlorotoluene	10.8	10.0	108%	10.6	10.0	106%	1.9%
4-Chlorotoluene	10.9	10.0	109%	10.9	10.0	109%	0.0%
tert-Butylbenzene	10.9	10.0	109%	10.8	10.0	108%	0.9%
sec-Butylbenzene	11.8 Q	10.0	118%	11.8 Q	10.0	118%	0.0%
4-Isopropyltoluene	11.6	10.0	116%	11.5	10.0	115%	0.9%
n-Butylbenzene	11.7 B	10.0	117%	11.4 B	10.0	114%	2.6%
1,2,4-Trichlorobenzene	8.18	10.0	81.8%	7.94	10.0	79.4%	3.0%
Naphthalene	7.91	10.0	79.1%	7.84	10.0	78.4%	0.9%
1,2,3-Trichlorobenzene	8.50	10.0	85.0%	7.75	10.0	77.5%	9.2%

Reported in µg/L (ppb)

RPD calculated using sample concentrations per SW846.

Volatile Surrogate Recovery

	LCS	LCSD
d4-1,2-Dichloroethane	100%	101%
d8-Toluene	99.1%	98.9%
Bromofluorobenzene	105%	101%
d4-1,2-Dichlorobenzene	101%	102%

Analytical Resources, Incorporated
Analytical Chemists and Consultants

April 2, 2014

Thomas Lynott
Department of the Army
Directorate of Public Works
Attn Environmental Division (T. Lynott)
2012 Liggett Ave Box 339500 MS 17
Joint Base Lewis-McChord, Washington 98433-9500
Official Business

RE: Client Project: LogRam
ARI Job No.: YD80

Dear Mr. Lynott:

Please find enclosed the original Chain-of-Custody record (COC), sample receipt documentation, and the final data for the project referenced above. Analytical Resources, Inc. (ARI) accepted seventeen water samples on March 21, 2014. For further details regarding sample receipt please refer to the enclosed Cooler Receipt Form.

The samples were analyzed for VOCs, as requested on the COCs.

The VOCs 3/31/14 CCAL on NT2 is out of control high for all associated FORM III "Q" flagged analytes. All associated samples that contain analyte have been flagged with a "Q" qualifier.

The VOCs 3/31/14 CCAL on NT3 is out of control high for all associated FORM III "Q" flagged analytes with the exception of Bromomethane and Iodomethane which are out of control low. All associated samples that contain analyte have been flagged with a "Q" qualifier.

The 3/31/14 LCS on NT2 is out of control high for several analytes. The LCSD is in control.

The 3/31/14 LCS and/or LCSD on NT3 is out of control low and/or high for several analytes.

The 3/31/14 method blank on NT2 contained hexachlorobutadiene and n-Butylbenzene. All associated samples that contain analyte have been flagged with a "B" qualifier.

An electronic copy of this report and all supporting raw data will remain on file with ARI. Should you have any questions or problems, please feel free to contact me at your convenience.

Respectfully,
ANALYTICAL RESOURCES, INC.

Kelly Bottem
Client Services Manager
(206) 695-6211
kellyb@arilabs.com
www.arilabs.com

eFile: YD80

4611 South 134th Place, Suite 100 • Tukwila WA 98168 • **206-695-6200** • **206-695-6201** fax

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Cooler Receipt Form

ARI Client: JBLM

Project Name: Log Rain

COC No(s): _____ (NA)

Delivered by: Fed-Ex UPS Courier (Hand Delivered) Other: _____

Assigned ARI Job No: YO8C

Tracking No: _____ (NA)

Preliminary Examination Phase:

Were intact, properly signed and dated custody seals attached to the outside of to cooler? YES (NO)

Were custody papers included with the cooler? (YES) NO

Were custody papers properly filled out (ink, signed, etc.) (YES) NO

Temperature of Cooler(s) (°C) (recommended 2.0-6.0 °C for chemistry): 4.8

Time: _____

If cooler temperature is out of compliance fill out form 00070F

Temp Gun ID#: 90577452

Cooler Accepted by: JM Date: 3/21/14 Time: 1055

Complete custody forms and attach all shipping documents

Log-In Phase:

Was a temperature blank included in the cooler? YES (NO)

What kind of packing material was used? Bubble Wrap Wet Ice (Gel Packs) Baggies (Foam Block) Paper Other: _____

Was sufficient ice used (if appropriate)? NA (YES) NO

Were all bottles sealed in individual plastic bags? YES (NO)

Did all bottles arrive in good condition (unbroken)? (YES) NO

Were all bottle labels complete and legible? (YES) NO

Did the number of containers listed on COC match with the number of containers received? (YES) NO

Did all bottle labels and tags agree with custody papers? (YES) NO

Were all bottles used correct for the requested analyses? (YES) NO

Do any of the analyses (bottles) require preservation? (attach preservation sheet, excluding VOCs). (NA) YES NO

Were all VOC vials free of air bubbles? NA (YES) NO

Was sufficient amount of sample sent in each bottle? (YES) NO

Date VOC Trip Blank was made at ARI: NA 3/5/14

Was Sample Split by ARI: (NA) YES Date/Time: _____ Equipment: _____ Split by: _____

Samples Logged by: JM Date: 3/21/14 Time: 1130

***** Notify Project Manager of discrepancies or concerns *****

Sample ID on Bottle	Sample ID on COC	Sample ID on Bottle	Sample ID on COC

Additional Notes, Discrepancies, & Resolutions:

By: Date:

Small Air Bubbles ~2mm	Peabubbles 2-4 mm	LARGE Air Bubbles > 4 mm
• • •	• • •	● ● ●

Small → "sm" (< 2 mm)
Peabubbles → "pb" (2 to < 4 mm)
Large → "lg" (4 to < 6 mm)
Headspace → "hs" (> 6 mm)

Chain of Custody Record & Laboratory Analysis Request

TO 0021

Analytical Resources, Incorporated
Analytical Chemists and Consultants
4611 South 134th Place, Suite 100
Tukwila, WA 98168
206-695-6200 206-695-6201 (fax)

ARI Assigned Number: 4080	Turn-around Requested: STANDARD TAT	Page: 2 of 3	
ARI Client Company: JOINT BASE LEWIS MCCHORD PUBLIC WORKS IMLM-PWE	Phone: 253 466 1802	Date: 21MAR14	Ice Present? Y
Client Contact: TOM J LYNOTT		No. of Coolers: 1	Cooler Temps: 4.8
Client Project Name: LOG RAM			
Client Project #:	Samplers: T LYNOTT J BECKER		

Sample ID	Date	Time	Matrix	No. Containers	Analysis Requested: 1006A								Notes/Comments
L6C140320LC87D2-1	20MAR14	1335	WATER	2	X								TOTAL VOCs
L6C140320LC89D1-1	20MAR14	1405	WATER	2	X								
L6C140320LC89D2-1	20MAR14	1410	WATER	2	X								
L6C140320LC109-1	20MAR14	1050	WATER	2	X								
L6C140320LC225-1	20MAR14	1140	WATER	2	X								
L6C140320LC226-1	20MAR14	1230	WATER	2	X								
L6C140320[illegible]MAMC1-1	20MAR14	1005	WATER	2	X								
L6C140320MAMC3-1	20MAR14	0950	WATER	2	X								
L6C140320MAMC6-1	20MAR14	1000	WATER	2	X								
L6C140320TO5-1	20MAR14	1130	WATER	2	X								

Comments/Special Instructions	Relinquished by (Signature)	Received by (Signature)	Relinquished by (Signature)	Received by (Signature)
	Printed Name: TOM J LYNOTT	Printed Name: Jennifer Millsap	Printed Name:	Printed Name.
	Company. VERSAR	Company ARI	Company	Company.
	Date & Time 21MAR14 1055	Date & Time 3/21/14 1055	Date & Time.	Date & Time

Limits of Liability: *ARI will perform all requested services in accordance with appropriate methodology following ARI Standard Operating Procedures and the ARI Quality Assurance Program. This program meets standards for the industry. The total liability of ARI, its officers, agents, employees, or successors, arising out of or in connection with the requested services, shall not exceed the Invoiced amount for said services. The acceptance by the client of a proposal for services by ARI release ARI from any liability in excess thereof, not withstanding any provision to the contrary in any contract, purchase order or co-signed agreement between ARI and the Client.*

Sample Retention Policy: All samples submitted to ARI will be appropriately discarded no sooner than 90 days after receipt or 60 days after submission of hardcopy data, whichever is longer, unless alternate retention schedules have been established by work-order or contract.

SOP 6.6 Rev. 6.0 11/08/2011

TO 0021

Chain of Custody Record & Laboratory Analysis Request

Analytical Resources, Incorporated
Analytical Chemists and Consultants
4611 South 134th Place, Suite 100
Tukwila, WA 98168
206-695-6200 206-695-6201 (fax)
www.arilabs.com

ARI Assigned Number: YD80	Turn-around Requested: STANDARD	Page: 3 of 3	
ARI Client Company: JOINT BASE LEWIS McCHORD PUBLICS WORKS IMLM-PWE	Phone: 253 966 1802	Date: 20 MAR 14	Ice Present? Y
Client Contact: TOM J LYNOTT		No. of Coolers: 1	Cooler Temps: 4.8
Client Project Name: LOG RAM			
Client Project #:	Samplers: T LYNOTT J BECKER		

Sample ID	Date	Time	Matrix	No Containers	1006A								Notes/Comments
L6C140320T06-1	20MAR14	1200	WATER	2	X								TOTAL VOCs
L6C140320T10-1	20MAR14	1145	WATER	2	X								
L6C140320T11B-1	20MAR14	1155	WATER	2	X								
L6C140320T13B-1	20MAR14	1215	WATER	2	X								
L6C140320T15-1	20MAR14	1245	WATER	2	X								
L6C140320WELL13-1	20MAR14	0905	WATER	2	X								
L6C140321TB-1	21MAR14	1000	WATER	2	X								

21 MAR 14

Comments/Special Instructions	Relinquished by: (Signature)	Received by: (Signature)	Relinquished by: (Signature)	Received by (Signature)
	Printed Name: TOM J LYNOTT	Printed Name: Jennifer Millsap	Printed Name:	Printed Name:
	Company: VERSAR	Company: ARI	Company:	Company
	Date & Time: 21MAR14 1055	Date & Time: 3/21/14 1055	Date & Time	Date & Time:

Limits of Liability: *ARI will perform all requested services in accordance with appropriate methodology following ARI Standard Operating Procedures and the ARI Quality Assurance Program. This program meets standards for the industry. The total liability of ARI, its officers, agents, employees, or successors, arising out of or in connection with the requested services, shall not exceed the Invoiced amount for said services. The acceptance by the client of a proposal for services by ARI release ARI from any liability in excess thereof, not withstanding any provision to the contrary in any contract, purchase order or co-signed agreement between ARI and the Client.*

Sample Retention Policy: All samples submitted to ARI will be appropriately discarded no sooner than 90 days after receipt or 60 days after submission of hardcopy data, whichever is longer, unless alternate retention schedules have been established by work-order or contract.

Sample ID Cross Reference Report

ANALYTICAL RESOURCES INCORPORATED

ARI Job No: YD80
Client: Joint Base Lewis McChord
Project Event: N/A
Project Name: LOG RAM

	Sample ID	ARI Lab ID	ARI LIMS ID	Matrix	Sample Date/Time	VTSR
1.	LGC140320LC87D2-1	YD80A	14-5007	Water	03/20/14 13:35	03/21/14 10:55
2.	LGC140320LC89D1-1	YD80B	14-5008	Water	03/20/14 14:05	03/21/14 10:55
3.	LGC140320LC89D2-1	YD80C	14-5009	Water	03/20/14 14:10	03/21/14 10:55
4.	LGC140320LC109-1	YD80D	14-5010	Water	03/20/14 10:50	03/21/14 10:55
5.	LGC140320LC225-1	YD80E	14-5011	Water	03/20/14 11:40	03/21/14 10:55
6.	LGC140320LC226-1	YD80F	14-5012	Water	03/20/14 12:30	03/21/14 10:55
7.	LGC140320MAMC1-1	YD80G	14-5013	Water	03/20/14 10:05	03/21/14 10:55
8.	LGC140320MAMC3-1	YD80H	14-5014	Water	03/20/14 09:50	03/21/14 10:55
9.	LGC140320MAMC6-1	YD80I	14-5015	Water	03/20/14 10:00	03/21/14 10:55
10.	LGC140320T058-1	YD80J	14-5016	Water	03/20/14 11:30	03/21/14 10:55
11.	LGC140320T06-1	YD80K	14-5017	Water	03/20/14 12:00	03/21/14 10:55
12.	LGC140320T10-1	YD80L	14-5018	Water	03/20/14 11:45	03/21/14 10:55
13.	LGC140320T11B-1	YD80M	14-5019	Water	03/20/14 11:55	03/21/14 10:55
14.	LGC140320T13B-1	YD80N	14-5020	Water	03/20/14 12:15	03/21/14 10:55
15.	LGC140320T15-1	YD80O	14-5021	Water	03/20/14 12:45	03/21/14 10:55
16.	LGC140320WELL13-1	YD80P	14-5022	Water	03/20/14 09:05	03/21/14 10:55
17.	LGC140321TB-1	YD80Q	14-5023	Water	03/20/14 10:00	03/21/14 10:55

YD80:00065

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140320LC87D2-1**
Page 1 of 2 **SAMPLE**

Lab Sample ID: YD80A
LIMS ID: 14-5007
Matrix: Water
Data Release Authorized:
Reported: 04/02/14

QC Report No: YD80-Joint Base Lewis McChord
Project: LOG RAM
Date Sampled: 03/20/14
Date Received: 03/21/14

Instrument/Analyst: NT3/PAB
Date Analyzed: 03/31/14 19:25

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	LOQ	Result	Q
74-87-3	Chloromethane	0.50	< 0.50	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.20	< 0.20	U
75-00-3	Chloroethane	0.20	< 0.20	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	**Acetone**	**5.0**	**7.5**	
75-15-0	Carbon Disulfide	0.20	< 0.20	U
75-35-4	1,1-Dichloroethene	0.20	< 0.20	U
75-34-3	1,1-Dichloroethane	0.20	< 0.20	U
156-60-5	trans-1,2-Dichloroethene	0.20	< 0.20	U
156-59-2	cis-1,2-Dichloroethene	0.20	< 0.20	U
67-66-3	Chloroform	0.20	< 0.20	U
107-06-2	1,2-Dichloroethane	0.20	< 0.20	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	0.20	< 0.20	U
56-23-5	Carbon Tetrachloride	0.20	< 0.20	U
108-05-4	Vinyl Acetate	0.20	< 0.20	U
75-27-4	Bromodichloromethane	0.20	< 0.20	U
78-87-5	1,2-Dichloropropane	0.20	< 0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	< 0.20	U
79-01-6	Trichloroethene	0.20	< 0.20	U
124-48-1	Dibromochloromethane	0.20	< 0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	< 0.20	U
71-43-2	Benzene	0.20	< 0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	< 0.20	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.20	< 0.20	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.20	< 0.20	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	< 0.20	U
108-88-3	Toluene	0.20	< 0.20	U
108-90-7	Chlorobenzene	0.20	< 0.20	U
100-41-4	Ethylbenzene	0.20	< 0.20	U
100-42-5	Styrene	0.20	< 0.20	U
75-69-4	Trichlorofluoromethane	0.20	< 0.20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.20	< 0.20	U
179601-23-1	m,p-Xylene	0.40	< 0.40	U
95-47-6	o-Xylene	0.20	< 0.20	U
95-50-1	1,2-Dichlorobenzene	0.20	< 0.20	U
541-73-1	1,3-Dichlorobenzene	0.20	< 0.20	U
106-46-7	1,4-Dichlorobenzene	0.20	< 0.20	U

Lab Sample ID: YD80A
LIMS ID: 14-5007
Matrix: Water
Date Analyzed: 03/31/14 19:25

QC Report No: YD80-Joint Base Lewis McChord
Project: LOG RAM

CAS Number	Analyte	LOQ	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Iodomethane	1.0	< 1.0	U
74-96-4	Bromoethane	0.20	< 0.20	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.20	< 0.20	U
74-95-3	Dibromomethane	0.20	< 0.20	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	< 0.20	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	< 0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	< 0.50	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.20	< 0.20	U
95-63-6	1,2,4-Trimethylbenzene	0.20	< 0.20	U
87-68-3	Hexachlorobutadiene	0.50	< 0.50	U
106-93-4	1,2-Dibromoethane	0.20	< 0.20	U
74-97-5	Bromochloromethane	0.20	< 0.20	U
594-20-7	2,2-Dichloropropane	0.20	< 0.20	U
142-28-9	1,3-Dichloropropane	0.20	< 0.20	U
98-82-8	Isopropylbenzene	0.20	< 0.20	U
103-65-1	n-Propylbenzene	0.20	< 0.20	U
108-86-1	Bromobenzene	0.20	< 0.20	U
95-49-8	2-Chlorotoluene	0.20	< 0.20	U
106-43-4	4-Chlorotoluene	0.20	< 0.20	U
98-06-6	tert-Butylbenzene	0.20	< 0.20	U
135-98-8	sec-Butylbenzene	0.20	< 0.20	U
99-87-6	4-Isopropyltoluene	0.20	< 0.20	U
104-51-8	n-Butylbenzene	0.20	< 0.20	U
120-82-1	1,2,4-Trichlorobenzene	0.50	< 0.50	U
91-20-3	Naphthalene	0.50	< 0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	< 0.50	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	103%
d8-Toluene	97.0%
Bromofluorobenzene	90.6%
d4-1,2-Dichlorobenzene	98.8%

2-Chloroethylvinylether is an acid labile compound and may not be recovered from an acid preserved sample.

EPA SW-846 indicates that vinyl chloride and styrene may degrade in the presence of acid preservative.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140320LC89D1-1**
 SAMPLE

Lab Sample ID: YD80B
LIMS ID: 14-5008
Matrix: Water
Data Release Authorized:
Reported: 04/02/14

QC Report No: YD80-Joint Base Lewis McChord
Project: LOG RAM

Date Sampled: 03/20/14
Date Received: 03/21/14

Instrument/Analyst: NT3/PAB
Date Analyzed: 03/31/14 19:55

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	LOQ	Result	Q
74-87-3	Chloromethane	0.50	< 0.50	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.20	< 0.20	U
75-00-3	Chloroethane	0.20	< 0.20	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	**Acetone**	**5.0**	**6.9**	
75-15-0	Carbon Disulfide	0.20	< 0.20	U
75-35-4	1,1-Dichloroethene	0.20	< 0.20	U
75-34-3	1,1-Dichloroethane	0.20	< 0.20	U
156-60-5	trans-1,2-Dichloroethene	0.20	< 0.20	U
156-59-2	cis-1,2-Dichloroethene	0.20	< 0.20	U
67-66-3	Chloroform	0.20	< 0.20	U
107-06-2	1,2-Dichloroethane	0.20	< 0.20	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	0.20	< 0.20	U
56-23-5	Carbon Tetrachloride	0.20	< 0.20	U
108-05-4	Vinyl Acetate	0.20	< 0.20	U
75-27-4	Bromodichloromethane	0.20	< 0.20	U
78-87-5	1,2-Dichloropropane	0.20	< 0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	< 0.20	U
79-01-6	Trichloroethene	0.20	< 0.20	U
124-48-1	Dibromochloromethane	0.20	< 0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	< 0.20	U
71-43-2	Benzene	0.20	< 0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	< 0.20	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.20	< 0.20	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.20	< 0.20	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	< 0.20	U
108-88-3	Toluene	0.20	< 0.20	U
108-90-7	Chlorobenzene	0.20	< 0.20	U
100-41-4	Ethylbenzene	0.20	< 0.20	U
100-42-5	Styrene	0.20	< 0.20	U
75-69-4	Trichlorofluoromethane	0.20	< 0.20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.20	< 0.20	U
179601-23-1	m,p-Xylene	0.40	< 0.40	U
95-47-6	o-Xylene	0.20	< 0.20	U
95-50-1	1,2-Dichlorobenzene	0.20	< 0.20	U
541-73-1	1,3-Dichlorobenzene	0.20	< 0.20	U
106-46-7	1,4-Dichlorobenzene	0.20	< 0.20	U

Lab Sample ID: YD80B
LIMS ID: 14-5008
Matrix: Water
Date Analyzed: 03/31/14 19:55

QC Report No: YD80-Joint Base Lewis McChord
Project: LOG RAM

CAS Number	Analyte	LOQ	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Iodomethane	1.0	< 1.0	U
74-96-4	Bromoethane	0.20	< 0.20	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.20	< 0.20	U
74-95-3	Dibromomethane	0.20	< 0.20	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	< 0.20	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	< 0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	< 0.50	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.20	< 0.20	U
95-63-6	1,2,4-Trimethylbenzene	0.20	< 0.20	U
87-68-3	Hexachlorobutadiene	0.50	< 0.50	U
106-93-4	1,2-Dibromoethane	0.20	< 0.20	U
74-97-5	Bromochloromethane	0.20	< 0.20	U
594-20-7	2,2-Dichloropropane	0.20	< 0.20	U
142-28-9	1,3-Dichloropropane	0.20	< 0.20	U
98-82-8	Isopropylbenzene	0.20	< 0.20	U
103-65-1	n-Propylbenzene	0.20	< 0.20	U
108-86-1	Bromobenzene	0.20	< 0.20	U
95-49-8	2-Chlorotoluene	0.20	< 0.20	U
106-43-4	4-Chlorotoluene	0.20	< 0.20	U
98-06-6	tert-Butylbenzene	0.20	< 0.20	U
135-98-8	sec-Butylbenzene	0.20	< 0.20	U
99-87-6	4-Isopropyltoluene	0.20	< 0.20	U
104-51-8	n-Butylbenzene	0.20	< 0.20	U
120-82-1	1,2,4-Trichlorobenzene	0.50	< 0.50	U
91-20-3	Naphthalene	0.50	< 0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	< 0.50	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	102%
d8-Toluene	97.1%
Bromofluorobenzene	93.0%
d4-1,2-Dichlorobenzene	104%

2-Chloroethylvinylether is an acid labile compound and may not be recovered from an acid preserved sample.

EPA SW-846 indicates that vinyl chloride and styrene may degrade in the presence of acid preservative.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140320LC89D2-1**
Page 1 of 2 **SAMPLE**

Lab Sample ID: YD80C
LIMS ID: 14-5009
Matrix: Water
Data Release Authorized:
Reported: 04/02/14

QC Report No: YD80-Joint Base Lewis McChord
Project: LOG RAM

Date Sampled: 03/20/14
Date Received: 03/21/14

Instrument/Analyst: NT3/PAB
Date Analyzed: 03/31/14 20:24

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	LOQ	Result	Q
74-87-3	Chloromethane	0.50	< 0.50	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.20	< 0.20	U
75-00-3	Chloroethane	0.20	< 0.20	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	**Acetone**	**5.0**	**6.8**	
75-15-0	Carbon Disulfide	0.20	< 0.20	U
75-35-4	1,1-Dichloroethene	0.20	< 0.20	U
75-34-3	1,1-Dichloroethane	0.20	< 0.20	U
156-60-5	trans-1,2-Dichloroethene	0.20	< 0.20	U
156-59-2	cis-1,2-Dichloroethene	0.20	< 0.20	U
67-66-3	Chloroform	0.20	< 0.20	U
107-06-2	1,2-Dichloroethane	0.20	< 0.20	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	0.20	< 0.20	U
56-23-5	Carbon Tetrachloride	0.20	< 0.20	U
108-05-4	Vinyl Acetate	0.20	< 0.20	U
75-27-4	Bromodichloromethane	0.20	< 0.20	U
78-87-5	1,2-Dichloropropane	0.20	< 0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	< 0.20	U
79-01-6	Trichloroethene	0.20	< 0.20	U
124-48-1	Dibromochloromethane	0.20	< 0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	< 0.20	U
71-43-2	Benzene	0.20	< 0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	< 0.20	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.20	< 0.20	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.20	< 0.20	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	< 0.20	U
108-88-3	Toluene	0.20	< 0.20	U
108-90-7	Chlorobenzene	0.20	< 0.20	U
100-41-4	Ethylbenzene	0.20	< 0.20	U
100-42-5	Styrene	0.20	< 0.20	U
75-69-4	Trichlorofluoromethane	0.20	< 0.20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.20	< 0.20	U
179601-23-1	m,p-Xylene	0.40	< 0.40	U
95-47-6	o-Xylene	0.20	< 0.20	U
95-50-1	1,2-Dichlorobenzene	0.20	< 0.20	U
541-73-1	1,3-Dichlorobenzene	0.20	< 0.20	U
106-46-7	1,4-Dichlorobenzene	0.20	< 0.20	U

Lab Sample ID: YD80C
LIMS ID: 14-5009
Matrix: Water
Date Analyzed: 03/31/14 20:24

QC Report No: YD80-Joint Base Lewis McChord
Project: LOG RAM

CAS Number	Analyte	LOQ	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Iodomethane	1.0	< 1.0	U
74-96-4	Bromoethane	0.20	< 0.20	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.20	< 0.20	U
74-95-3	Dibromomethane	0.20	< 0.20	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	< 0.20	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	< 0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	< 0.50	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.20	< 0.20	U
95-63-6	1,2,4-Trimethylbenzene	0.20	< 0.20	U
87-68-3	Hexachlorobutadiene	0.50	< 0.50	U
106-93-4	1,2-Dibromoethane	0.20	< 0.20	U
74-97-5	Bromochloromethane	0.20	< 0.20	U
594-20-7	2,2-Dichloropropane	0.20	< 0.20	U
142-28-9	1,3-Dichloropropane	0.20	< 0.20	U
98-82-8	Isopropylbenzene	0.20	< 0.20	U
103-65-1	n-Propylbenzene	0.20	< 0.20	U
108-86-1	Bromobenzene	0.20	< 0.20	U
95-49-8	2-Chlorotoluene	0.20	< 0.20	U
106-43-4	4-Chlorotoluene	0.20	< 0.20	U
98-06-6	tert-Butylbenzene	0.20	< 0.20	U
135-98-8	sec-Butylbenzene	0.20	< 0.20	U
99-87-6	4-Isopropyltoluene	0.20	< 0.20	U
104-51-8	n-Butylbenzene	0.20	< 0.20	U
120-82-1	1,2,4-Trichlorobenzene	0.50	< 0.50	U
91-20-3	Naphthalene	0.50	< 0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	< 0.50	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	105%
d8-Toluene	96.5%
Bromofluorobenzene	93.4%
d4-1,2-Dichlorobenzene	102%

2-Chloroethylvinylether is an acid labile compound and may not be recovered from an acid preserved sample.

EPA SW-846 indicates that vinyl chloride and styrene may degrade in the presence of acid preservative.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140320LC109-1**
 SAMPLE

Lab Sample ID: YD80D
LIMS ID: 14-5010
Matrix: Water
Data Release Authorized:
Reported: 04/02/14

QC Report No: YD80-Joint Base Lewis McChord
Project: LOG RAM

Date Sampled: 03/20/14
Date Received: 03/21/14

Instrument/Analyst: NT2/PAB
Date Analyzed: 03/31/14 23:25

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	LOQ	Result	Q
74-87-3	Chloromethane	0.50	< 0.50	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.20	< 0.20	U
75-00-3	Chloroethane	0.20	< 0.20	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	**Acetone**	**5.0**	**5.5**	
75-15-0	Carbon Disulfide	0.20	< 0.20	U
75-35-4	1,1-Dichloroethene	0.20	< 0.20	U
75-34-3	1,1-Dichloroethane	0.20	< 0.20	U
156-60-5	trans-1,2-Dichloroethene	0.20	< 0.20	U
156-59-2	cis-1,2-Dichloroethene	0.20	< 0.20	U
67-66-3	Chloroform	0.20	< 0.20	U
107-06-2	1,2-Dichloroethane	0.20	< 0.20	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	0.20	< 0.20	U
56-23-5	Carbon Tetrachloride	0.20	< 0.20	U
108-05-4	Vinyl Acetate	0.20	< 0.20	U
75-27-4	Bromodichloromethane	0.20	< 0.20	U
78-87-5	1,2-Dichloropropane	0.20	< 0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	< 0.20	U
79-01-6	**Trichloroethene**	**0.20**	**1.6**	
124-48-1	Dibromochloromethane	0.20	< 0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	< 0.20	U
71-43-2	Benzene	0.20	< 0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	< 0.20	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.20	< 0.20	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.20	< 0.20	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	< 0.20	U
108-88-3	Toluene	0.20	< 0.20	U
108-90-7	Chlorobenzene	0.20	< 0.20	U
100-41-4	Ethylbenzene	0.20	< 0.20	U
100-42-5	Styrene	0.20	< 0.20	U
75-69-4	Trichlorofluoromethane	0.20	< 0.20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.20	< 0.20	U
179601-23-1	m,p-Xylene	0.40	< 0.40	U
95-47-6	o-Xylene	0.20	< 0.20	U
95-50-1	1,2-Dichlorobenzene	0.20	< 0.20	U
541-73-1	1,3-Dichlorobenzene	0.20	< 0.20	U
106-46-7	1,4-Dichlorobenzene	0.20	< 0.20	U

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140320LC109-1**
 SAMPLE

Lab Sample ID: YD80D QC Report No: YD80-Joint Base Lewis McChord
LIMS ID: 14-5010 Project: LOG RAM
Matrix: Water
Date Analyzed: 03/31/14 23:25

CAS Number	Analyte	LOQ	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Iodomethane	1.0	< 1.0	U
74-96-4	Bromoethane	0.20	< 0.20	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.20	< 0.20	U
74-95-3	Dibromomethane	0.20	< 0.20	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	< 0.20	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	< 0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	< 0.50	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.20	< 0.20	U
95-63-6	1,2,4-Trimethylbenzene	0.20	< 0.20	U
87-68-3	Hexachlorobutadiene	0.50	< 0.50	U
106-93-4	1,2-Dibromoethane	0.20	< 0.20	U
74-97-5	Bromochloromethane	0.20	< 0.20	U
594-20-7	2,2-Dichloropropane	0.20	< 0.20	U
142-28-9	1,3-Dichloropropane	0.20	< 0.20	U
98-82-8	Isopropylbenzene	0.20	< 0.20	U
103-65-1	n-Propylbenzene	0.20	< 0.20	U
108-86-1	Bromobenzene	0.20	< 0.20	U
95-49-8	2-Chlorotoluene	0.20	< 0.20	U
106-43-4	4-Chlorotoluene	0.20	< 0.20	U
98-06-6	tert-Butylbenzene	0.20	< 0.20	U
135-98-8	sec-Butylbenzene	0.20	< 0.20	U
99-87-6	4-Isopropyltoluene	0.20	< 0.20	U
104-51-8	n-Butylbenzene	0.20	< 0.20	U
120-82-1	1,2,4-Trichlorobenzene	0.50	< 0.50	U
91-20-3	Naphthalene	0.50	< 0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	< 0.50	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	98.8%
d8-Toluene	98.6%
Bromofluorobenzene	106%
d4-1,2-Dichlorobenzene	104%

2-Chloroethylvinylether is an acid labile compound and may not be recovered from an acid preserved sample.

EPA SW-846 indicates that vinyl chloride and styrene may degrade in the presence of acid preservative.

YD80:00013

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140320LC225-1**
 SAMPLE

Lab Sample ID: YD80E
LIMS ID: 14-5011
Matrix: Water
Data Release Authorized:
Reported: 04/02/14

QC Report No: YD80-Joint Base Lewis McChord
Project: LOG RAM

Date Sampled: 03/20/14
Date Received: 03/21/14

Instrument/Analyst: NT2/PAB
Date Analyzed: 03/31/14 23:51

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	LOQ	Result	Q
74-87-3	Chloromethane	0.50	< 0.50	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.20	< 0.20	U
75-00-3	Chloroethane	0.20	< 0.20	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	**Acetone**	**5.0**	**12**	
75-15-0	Carbon Disulfide	0.20	< 0.20	U
75-35-4	1,1-Dichloroethene	0.20	< 0.20	U
75-34-3	1,1-Dichloroethane	0.20	< 0.20	U
156-60-5	trans-1,2-Dichloroethene	0.20	< 0.20	U
156-59-2	**cis-1,2-Dichloroethene**	**0.20**	**0.78**	
67-66-3	Chloroform	0.20	< 0.20	U
107-06-2	1,2-Dichloroethane	0.20	< 0.20	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	**1,1,1-Trichloroethane**	**0.20**	**0.32**	
56-23-5	Carbon Tetrachloride	0.20	< 0.20	U
108-05-4	Vinyl Acetate	0.20	< 0.20	U
75-27-4	Bromodichloromethane	0.20	< 0.20	U
78-87-5	1,2-Dichloropropane	0.20	< 0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	< 0.20	U
79-01-6	**Trichloroethene**	**0.20**	**10**	
124-48-1	Dibromochloromethane	0.20	< 0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	< 0.20	U
71-43-2	Benzene	0.20	< 0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	< 0.20	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.20	< 0.20	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	**Tetrachloroethene**	**0.20**	**0.21**	
79-34-5	1,1,2,2-Tetrachloroethane	0.20	< 0.20	U
108-88-3	Toluene	0.20	< 0.20	U
108-90-7	Chlorobenzene	0.20	< 0.20	U
100-41-4	Ethylbenzene	0.20	< 0.20	U
100-42-5	Styrene	0.20	< 0.20	U
75-69-4	Trichlorofluoromethane	0.20	< 0.20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.20	< 0.20	U
179601-23-1	m,p-Xylene	0.40	< 0.40	U
95-47-6	o-Xylene	0.20	< 0.20	U
95-50-1	1,2-Dichlorobenzene	0.20	< 0.20	U
541-73-1	1,3-Dichlorobenzene	0.20	< 0.20	U
106-46-7	1,4-Dichlorobenzene	0.20	< 0.20	U

Lab Sample ID: YD80E
LIMS ID: 14-5011
Matrix: Water
Date Analyzed: 03/31/14 23:51

QC Report No: YD80-Joint Base Lewis McChord
Project: LOG RAM

CAS Number	Analyte	LOQ	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Iodomethane	1.0	< 1.0	U
74-96-4	Bromoethane	0.20	< 0.20	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.20	< 0.20	U
74-95-3	Dibromomethane	0.20	< 0.20	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	< 0.20	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	< 0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	< 0.50	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.20	< 0.20	U
95-63-6	1,2,4-Trimethylbenzene	0.20	< 0.20	U
87-68-3	Hexachlorobutadiene	0.50	< 0.50	U
106-93-4	1,2-Dibromoethane	0.20	< 0.20	U
74-97-5	Bromochloromethane	0.20	< 0.20	U
594-20-7	2,2-Dichloropropane	0.20	< 0.20	U
142-28-9	1,3-Dichloropropane	0.20	< 0.20	U
98-82-8	Isopropylbenzene	0.20	< 0.20	U
103-65-1	n-Propylbenzene	0.20	< 0.20	U
108-86-1	Bromobenzene	0.20	< 0.20	U
95-49-8	2-Chlorotoluene	0.20	< 0.20	U
106-43-4	4-Chlorotoluene	0.20	< 0.20	U
98-06-6	tert-Butylbenzene	0.20	< 0.20	U
135-98-8	sec-Butylbenzene	0.20	< 0.20	U
99-87-6	4-Isopropyltoluene	0.20	< 0.20	U
104-51-8	n-Butylbenzene	0.20	< 0.20	U
120-82-1	1,2,4-Trichlorobenzene	0.50	< 0.50	U
91-20-3	Naphthalene	0.50	< 0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	< 0.50	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	96.0%
d8-Toluene	97.9%
Bromofluorobenzene	102%
d4-1,2-Dichlorobenzene	96.9%

2-Chloroethylvinylether is an acid labile compound and may not be recovered from an acid preserved sample.

EPA SW-846 indicates that vinyl chloride and styrene may degrade in the presence of acid preservative.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140320LC226-1**
Page 1 of 2 **SAMPLE**

Lab Sample ID: YD80F
LIMS ID: 14-5012
Matrix: Water
Data Release Authorized:
Reported: 04/02/14

QC Report No: YD80-Joint Base Lewis McChord
Project: LOG RAM

Date Sampled: 03/20/14
Date Received: 03/21/14

Instrument/Analyst: NT2/PAB
Date Analyzed: 04/01/14 00:18

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	LOQ	Result	Q
74-87-3	Chloromethane	0.50	< 0.50	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.20	< 0.20	U
75-00-3	Chloroethane	0.20	< 0.20	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	Acetone	5.0	< 5.0	U
75-15-0	Carbon Disulfide	0.20	< 0.20	U
75-35-4	**1,1-Dichloroethene**	**0.20**	**0.30**	
75-34-3	1,1-Dichloroethane	0.20	< 0.20	U
156-60-5	trans-1,2-Dichloroethene	0.20	< 0.20	U
156-59-2	**cis-1,2-Dichloroethene**	**0.20**	**2.0**	
67-66-3	**Chloroform**	**0.20**	**0.33**	
107-06-2	1,2-Dichloroethane	0.20	< 0.20	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	**1,1,1-Trichloroethane**	**0.20**	**2.5**	
56-23-5	Carbon Tetrachloride	0.20	< 0.20	U
108-05-4	Vinyl Acetate	0.20	< 0.20	U
75-27-4	Bromodichloromethane	0.20	< 0.20	U
78-87-5	1,2-Dichloropropane	0.20	< 0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	< 0.20	U
79-01-6	**Trichloroethene**	**0.20**	**5.5**	
124-48-1	Dibromochloromethane	0.20	< 0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	< 0.20	U
71-43-2	Benzene	0.20	< 0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	< 0.20	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.20	< 0.20	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.20	< 0.20	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	< 0.20	U
108-88-3	Toluene	0.20	< 0.20	U
108-90-7	Chlorobenzene	0.20	< 0.20	U
100-41-4	Ethylbenzene	0.20	< 0.20	U
100-42-5	Styrene	0.20	< 0.20	U
75-69-4	Trichlorofluoromethane	0.20	< 0.20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.20	< 0.20	U
179601-23-1	m,p-Xylene	0.40	< 0.40	U
95-47-6	o-Xylene	0.20	< 0.20	U
95-50-1	1,2-Dichlorobenzene	0.20	< 0.20	U
541-73-1	1,3-Dichlorobenzene	0.20	< 0.20	U
106-46-7	1,4-Dichlorobenzene	0.20	< 0.20	U

Lab Sample ID: YD80F
LIMS ID: 14-5012
Matrix: Water
Date Analyzed: 04/01/14 00:18

QC Report No: YD80-Joint Base Lewis McChord
Project: LOG RAM

CAS Number	Analyte	LOQ	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Iodomethane	1.0	< 1.0	U
74-96-4	Bromoethane	0.20	< 0.20	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.20	< 0.20	U
74-95-3	Dibromomethane	0.20	< 0.20	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	< 0.20	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	< 0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	< 0.50	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.20	< 0.20	U
95-63-6	1,2,4-Trimethylbenzene	0.20	< 0.20	U
87-68-3	Hexachlorobutadiene	0.50	< 0.50	U
106-93-4	1,2-Dibromoethane	0.20	< 0.20	U
74-97-5	Bromochloromethane	0.20	< 0.20	U
594-20-7	2,2-Dichloropropane	0.20	< 0.20	U
142-28-9	1,3-Dichloropropane	0.20	< 0.20	U
98-82-8	Isopropylbenzene	0.20	< 0.20	U
103-65-1	n-Propylbenzene	0.20	< 0.20	U
108-86-1	Bromobenzene	0.20	< 0.20	U
95-49-8	2-Chlorotoluene	0.20	< 0.20	U
106-43-4	4-Chlorotoluene	0.20	< 0.20	U
98-06-6	tert-Butylbenzene	0.20	< 0.20	U
135-98-8	sec-Butylbenzene	0.20	< 0.20	U
99-87-6	4-Isopropyltoluene	0.20	< 0.20	U
104-51-8	n-Butylbenzene	0.20	< 0.20	U
120-82-1	1,2,4-Trichlorobenzene	0.50	< 0.50	U
91-20-3	Naphthalene	0.50	< 0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	< 0.50	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	104%
d8-Toluene	99.9%
Bromofluorobenzene	98.1%
d4-1,2-Dichlorobenzene	97.7%

2-Chloroethylvinylether is an acid labile compound and may not be recovered from an acid preserved sample.

EPA SW-846 indicates that vinyl chloride and styrene may degrade in the presence of acid preservative.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140320MAMC1-1**
 SAMPLE

Lab Sample ID: YD80G
LIMS ID: 14-5013
Matrix: Water
Data Release Authorized:
Reported: 04/02/14

QC Report No: YD80-Joint Base Lewis McChord
Project: LOG RAM
Date Sampled: 03/20/14
Date Received: 03/21/14

Instrument/Analyst: NT2/PAB
Date Analyzed: 04/01/14 00:44

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	LOQ	Result	Q
74-87-3	Chloromethane	0.50	< 0.50	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.20	< 0.20	U
75-00-3	Chloroethane	0.20	< 0.20	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	Acetone	5.0	< 5.0	U
75-15-0	Carbon Disulfide	0.20	< 0.20	U
75-35-4	1,1-Dichloroethene	0.20	< 0.20	U
75-34-3	1,1-Dichloroethane	0.20	< 0.20	U
156-60-5	trans-1,2-Dichloroethene	0.20	< 0.20	U
156-59-2	cis-1,2-Dichloroethene	0.20	< 0.20	U
67-66-3	Chloroform	0.20	< 0.20	U
107-06-2	1,2-Dichloroethane	0.20	< 0.20	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	0.20	< 0.20	U
56-23-5	Carbon Tetrachloride	0.20	< 0.20	U
108-05-4	Vinyl Acetate	0.20	< 0.20	U
75-27-4	Bromodichloromethane	0.20	< 0.20	U
78-87-5	1,2-Dichloropropane	0.20	< 0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	< 0.20	U
79-01-6	**Trichloroethene**	**0.20**	**1.4**	
124-48-1	Dibromochloromethane	0.20	< 0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	< 0.20	U
71-43-2	Benzene	0.20	< 0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	< 0.20	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.20	< 0.20	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.20	< 0.20	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	< 0.20	U
108-88-3	Toluene	0.20	< 0.20	U
108-90-7	Chlorobenzene	0.20	< 0.20	U
100-41-4	Ethylbenzene	0.20	< 0.20	U
100-42-5	Styrene	0.20	< 0.20	U
75-69-4	Trichlorofluoromethane	0.20	< 0.20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.20	< 0.20	U
179601-23-1	m,p-Xylene	0.40	< 0.40	U
95-47-6	o-Xylene	0.20	< 0.20	U
95-50-1	1,2-Dichlorobenzene	0.20	< 0.20	U
541-73-1	1,3-Dichlorobenzene	0.20	< 0.20	U
106-46-7	1,4-Dichlorobenzene	0.20	< 0.20	U

Lab Sample ID: YD80G
LIMS ID: 14-5013
Matrix: Water
Date Analyzed: 04/01/14 00:44

QC Report No: YD80-Joint Base Lewis McChord
Project: LOG RAM

CAS Number	Analyte	LOQ	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Iodomethane	1.0	< 1.0	U
74-96-4	Bromoethane	0.20	< 0.20	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.20	< 0.20	U
74-95-3	Dibromomethane	0.20	< 0.20	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	< 0.20	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	< 0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	< 0.50	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.20	< 0.20	U
95-63-6	1,2,4-Trimethylbenzene	0.20	< 0.20	U
87-68-3	Hexachlorobutadiene	0.50	< 0.50	U
106-93-4	1,2-Dibromoethane	0.20	< 0.20	U
74-97-5	Bromochloromethane	0.20	< 0.20	U
594-20-7	2,2-Dichloropropane	0.20	< 0.20	U
142-28-9	1,3-Dichloropropane	0.20	< 0.20	U
98-82-8	Isopropylbenzene	0.20	< 0.20	U
103-65-1	n-Propylbenzene	0.20	< 0.20	U
108-86-1	Bromobenzene	0.20	< 0.20	U
95-49-8	2-Chlorotoluene	0.20	< 0.20	U
106-43-4	4-Chlorotoluene	0.20	< 0.20	U
98-06-6	tert-Butylbenzene	0.20	< 0.20	U
135-98-8	sec-Butylbenzene	0.20	< 0.20	U
99-87-6	4-Isopropyltoluene	0.20	< 0.20	U
104-51-8	n-Butylbenzene	0.20	< 0.20	U
120-82-1	1,2,4-Trichlorobenzene	0.50	< 0.50	U
91-20-3	Naphthalene	0.50	< 0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	< 0.50	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	99.8%
d8-Toluene	98.9%
Bromofluorobenzene	101%
d4-1,2-Dichlorobenzene	97.9%

2-Chloroethylvinylether is an acid labile compound and may not be recovered from an acid preserved sample.

EPA SW-846 indicates that vinyl chloride and styrene may degrade in the presence of acid preservative.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140320MAMC3-1**
Page 1 of 2 **SAMPLE**

Lab Sample ID: YD80H
LIMS ID: 14-5014
Matrix: Water
Data Release Authorized:
Reported: 04/02/14

QC Report No: YD80-Joint Base Lewis McChord
Project: LOG RAM

Date Sampled: 03/20/14
Date Received: 03/21/14

Instrument/Analyst: NT2/PAB
Date Analyzed: 04/01/14 01:11

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	LOQ	Result	Q
74-87-3	Chloromethane	0.50	< 0.50	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.20	< 0.20	U
75-00-3	Chloroethane	0.20	< 0.20	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	Acetone	5.0	< 5.0	U
75-15-0	Carbon Disulfide	0.20	< 0.20	U
75-35-4	1,1-Dichloroethene	0.20	< 0.20	U
75-34-3	1,1-Dichloroethane	0.20	< 0.20	U
156-60-5	trans-1,2-Dichloroethene	0.20	< 0.20	U
156-59-2	cis-1,2-Dichloroethene	0.20	< 0.20	U
67-66-3	Chloroform	0.20	< 0.20	U
107-06-2	1,2-Dichloroethane	0.20	< 0.20	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	0.20	< 0.20	U
56-23-5	Carbon Tetrachloride	0.20	< 0.20	U
108-05-4	Vinyl Acetate	0.20	< 0.20	U
75-27-4	Bromodichloromethane	0.20	< 0.20	U
78-87-5	1,2-Dichloropropane	0.20	< 0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	< 0.20	U
79-01-6	**Trichloroethene**	**0.20**	**1.8**	
124-48-1	Dibromochloromethane	0.20	< 0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	< 0.20	U
71-43-2	Benzene	0.20	< 0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	< 0.20	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.20	< 0.20	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.20	< 0.20	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	< 0.20	U
108-88-3	Toluene	0.20	< 0.20	U
108-90-7	Chlorobenzene	0.20	< 0.20	U
100-41-4	Ethylbenzene	0.20	< 0.20	U
100-42-5	Styrene	0.20	< 0.20	U
75-69-4	Trichlorofluoromethane	0.20	< 0.20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.20	< 0.20	U
179601-23-1	m,p-Xylene	0.40	< 0.40	U
95-47-6	o-Xylene	0.20	< 0.20	U
95-50-1	1,2-Dichlorobenzene	0.20	< 0.20	U
541-73-1	1,3-Dichlorobenzene	0.20	< 0.20	U
106-46-7	1,4-Dichlorobenzene	0.20	< 0.20	U

Lab Sample ID: YD80H
LIMS ID: 14-5014
Matrix: Water
Date Analyzed: 04/01/14 01:11

QC Report No: YD80-Joint Base Lewis McChord
Project: LOG RAM

CAS Number	Analyte	LOQ	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Iodomethane	1.0	< 1.0	U
74-96-4	Bromoethane	0.20	< 0.20	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.20	< 0.20	U
74-95-3	Dibromomethane	0.20	< 0.20	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	< 0.20	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	< 0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	< 0.50	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.20	< 0.20	U
95-63-6	1,2,4-Trimethylbenzene	0.20	< 0.20	U
87-68-3	Hexachlorobutadiene	0.50	< 0.50	U
106-93-4	1,2-Dibromoethane	0.20	< 0.20	U
74-97-5	Bromochloromethane	0.20	< 0.20	U
594-20-7	2,2-Dichloropropane	0.20	< 0.20	U
142-28-9	1,3-Dichloropropane	0.20	< 0.20	U
98-82-8	Isopropylbenzene	0.20	< 0.20	U
103-65-1	n-Propylbenzene	0.20	< 0.20	U
108-86-1	Bromobenzene	0.20	< 0.20	U
95-49-8	2-Chlorotoluene	0.20	< 0.20	U
106-43-4	4-Chlorotoluene	0.20	< 0.20	U
98-06-6	tert-Butylbenzene	0.20	< 0.20	U
135-98-8	sec-Butylbenzene	0.20	< 0.20	U
99-87-6	4-Isopropyltoluene	0.20	< 0.20	U
104-51-8	n-Butylbenzene	0.20	< 0.20	U
120-82-1	1,2,4-Trichlorobenzene	0.50	< 0.50	U
91-20-3	Naphthalene	0.50	< 0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	< 0.50	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	99.3%
d8-Toluene	96.8%
Bromofluorobenzene	101%
d4-1,2-Dichlorobenzene	101%

2-Chloroethylvinylether is an acid labile compound and may not be recovered from an acid preserved sample.

EPA SW-846 indicates that vinyl chloride and styrene may degrade in the presence of acid preservative.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140320MAMC6-1**
 SAMPLE

Lab Sample ID: YD80I
LIMS ID: 14-5015
Matrix: Water
Data Release Authorized:
Reported: 04/02/14

QC Report No: YD80-Joint Base Lewis McChord
Project: LOG RAM

Date Sampled: 03/20/14
Date Received: 03/21/14

Instrument/Analyst: NT2/PAB
Date Analyzed: 04/01/14 01:37

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	LOQ	Result	Q
74-87-3	Chloromethane	0.50	< 0.50	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.20	< 0.20	U
75-00-3	Chloroethane	0.20	< 0.20	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	Acetone	5.0	< 5.0	U
75-15-0	Carbon Disulfide	0.20	< 0.20	U
75-35-4	1,1-Dichloroethene	0.20	< 0.20	U
75-34-3	1,1-Dichloroethane	0.20	< 0.20	U
156-60-5	trans-1,2-Dichloroethene	0.20	< 0.20	U
156-59-2	cis-1,2-Dichloroethene	0.20	< 0.20	U
67-66-3	Chloroform	0.20	< 0.20	U
107-06-2	1,2-Dichloroethane	0.20	< 0.20	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	0.20	< 0.20	U
56-23-5	Carbon Tetrachloride	0.20	< 0.20	U
108-05-4	Vinyl Acetate	0.20	< 0.20	U
75-27-4	Bromodichloromethane	0.20	< 0.20	U
78-87-5	1,2-Dichloropropane	0.20	< 0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	< 0.20	U
79-01-6	**Trichloroethene**	**0.20**	**0.84**	
124-48-1	Dibromochloromethane	0.20	< 0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	< 0.20	U
71-43-2	Benzene	0.20	< 0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	< 0.20	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.20	< 0.20	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.20	< 0.20	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	< 0.20	U
108-88-3	Toluene	0.20	< 0.20	U
108-90-7	Chlorobenzene	0.20	< 0.20	U
100-41-4	Ethylbenzene	0.20	< 0.20	U
100-42-5	Styrene	0.20	< 0.20	U
75-69-4	Trichlorofluoromethane	0.20	< 0.20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.20	< 0.20	U
179601-23-1	m,p-Xylene	0.40	< 0.40	U
95-47-6	o-Xylene	0.20	< 0.20	U
95-50-1	1,2-Dichlorobenzene	0.20	< 0.20	U
541-73-1	1,3-Dichlorobenzene	0.20	< 0.20	U
106-46-7	1,4-Dichlorobenzene	0.20	< 0.20	U

YD80-00022

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140320MAMC6-1**
 SAMPLE

Lab Sample ID: YD80I QC Report No: YD80-Joint Base Lewis McChord
LIMS ID: 14-5015 Project: LOG RAM
Matrix: Water
Date Analyzed: 04/01/14 01:37

CAS Number	Analyte	LOQ	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Iodomethane	1.0	< 1.0	U
74-96-4	Bromoethane	0.20	< 0.20	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.20	< 0.20	U
74-95-3	Dibromomethane	0.20	< 0.20	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	< 0.20	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	< 0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	< 0.50	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.20	< 0.20	U
95-63-6	1,2,4-Trimethylbenzene	0.20	< 0.20	U
87-68-3	Hexachlorobutadiene	0.50	< 0.50	U
106-93-4	1,2-Dibromoethane	0.20	< 0.20	U
74-97-5	Bromochloromethane	0.20	< 0.20	U
594-20-7	2,2-Dichloropropane	0.20	< 0.20	U
142-28-9	1,3-Dichloropropane	0.20	< 0.20	U
98-82-8	Isopropylbenzene	0.20	< 0.20	U
103-65-1	n-Propylbenzene	0.20	< 0.20	U
108-86-1	Bromobenzene	0.20	< 0.20	U
95-49-8	2-Chlorotoluene	0.20	< 0.20	U
106-43-4	4-Chlorotoluene	0.20	< 0.20	U
98-06-6	tert-Butylbenzene	0.20	< 0.20	U
135-98-8	sec-Butylbenzene	0.20	< 0.20	U
99-87-6	4-Isopropyltoluene	0.20	< 0.20	U
104-51-8	n-Butylbenzene	0.20	< 0.20	U
120-82-1	1,2,4-Trichlorobenzene	0.50	< 0.50	U
91-20-3	Naphthalene	0.50	< 0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	< 0.50	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	100%
d8-Toluene	98.0%
Bromofluorobenzene	102%
d4-1,2-Dichlorobenzene	99.8%

2-Chloroethylvinylether is an acid labile compound and may not be recovered from an acid preserved sample.

EPA SW-846 indicates that vinyl chloride and styrene may degrade in the presence of acid preservative.

TD80.00023

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140320T058-1**
 SAMPLE

Lab Sample ID: YD80J
LIMS ID: 14-5016
Matrix: Water
Data Release Authorized:
Reported: 04/02/14

QC Report No: YD80-Joint Base Lewis McChord
Project: LOG RAM
Date Sampled: 03/20/14
Date Received: 03/21/14

Instrument/Analyst: NT2/PAB
Date Analyzed: 04/01/14 02:04

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	LOQ	Result	Q
74-87-3	Chloromethane	0.50	< 0.50	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.20	< 0.20	U
75-00-3	Chloroethane	0.20	< 0.20	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	Acetone	5.0	< 5.0	U
75-15-0	Carbon Disulfide	0.20	< 0.20	U
75-35-4	1,1-Dichloroethene	0.20	< 0.20	U
75-34-3	1,1-Dichloroethane	0.20	< 0.20	U
156-60-5	trans-1,2-Dichloroethene	0.20	< 0.20	U
156-59-2	cis-1,2-Dichloroethene	0.20	< 0.20	U
67-66-3	Chloroform	0.20	< 0.20	U
107-06-2	1,2-Dichloroethane	0.20	< 0.20	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	0.20	< 0.20	U
56-23-5	Carbon Tetrachloride	0.20	< 0.20	U
108-05-4	Vinyl Acetate	0.20	< 0.20	U
75-27-4	Bromodichloromethane	0.20	< 0.20	U
78-87-5	1,2-Dichloropropane	0.20	< 0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	< 0.20	U
79-01-6	**Trichloroethene**	**0.20**	**2.1**	
124-48-1	Dibromochloromethane	0.20	< 0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	< 0.20	U
71-43-2	Benzene	0.20	< 0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	< 0.20	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.20	< 0.20	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.20	< 0.20	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	< 0.20	U
108-88-3	Toluene	0.20	< 0.20	U
108-90-7	Chlorobenzene	0.20	< 0.20	U
100-41-4	Ethylbenzene	0.20	< 0.20	U
100-42-5	Styrene	0.20	< 0.20	U
75-69-4	Trichlorofluoromethane	0.20	< 0.20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.20	< 0.20	U
179601-23-1	m,p-Xylene	0.40	< 0.40	U
95-47-6	o-Xylene	0.20	< 0.20	U
95-50-1	1,2-Dichlorobenzene	0.20	< 0.20	U
541-73-1	1,3-Dichlorobenzene	0.20	< 0.20	U
106-46-7	1,4-Dichlorobenzene	0.20	< 0.20	U

YD80:0024

Lab Sample ID: YD80J
LIMS ID: 14-5016
Matrix: Water
Date Analyzed: 04/01/14 02:04

QC Report No: YD80-Joint Base Lewis McChord
Project: LOG RAM

CAS Number	Analyte	LOQ	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Iodomethane	1.0	< 1.0	U
74-96-4	Bromoethane	0.20	< 0.20	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.20	< 0.20	U
74-95-3	Dibromomethane	0.20	< 0.20	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	< 0.20	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	< 0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	< 0.50	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.20	< 0.20	U
95-63-6	1,2,4-Trimethylbenzene	0.20	< 0.20	U
87-68-3	Hexachlorobutadiene	0.50	< 0.50	U
106-93-4	1,2-Dibromoethane	0.20	< 0.20	U
74-97-5	Bromochloromethane	0.20	< 0.20	U
594-20-7	2,2-Dichloropropane	0.20	< 0.20	U
142-28-9	1,3-Dichloropropane	0.20	< 0.20	U
98-82-8	Isopropylbenzene	0.20	< 0.20	U
103-65-1	n-Propylbenzene	0.20	< 0.20	U
108-86-1	Bromobenzene	0.20	< 0.20	U
95-49-8	2-Chlorotoluene	0.20	< 0.20	U
106-43-4	4-Chlorotoluene	0.20	< 0.20	U
98-06-6	tert-Butylbenzene	0.20	< 0.20	U
135-98-8	sec-Butylbenzene	0.20	< 0.20	U
99-87-6	4-Isopropyltoluene	0.20	< 0.20	U
104-51-8	n-Butylbenzene	0.20	< 0.20	U
120-82-1	1,2,4-Trichlorobenzene	0.50	< 0.50	U
91-20-3	Naphthalene	0.50	< 0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	< 0.50	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	100%
d8-Toluene	99.7%
Bromofluorobenzene	104%
d4-1,2-Dichlorobenzene	103%

2-Chloroethylvinylether is an acid labile compound and may not be recovered from an acid preserved sample.

EPA SW-846 indicates that vinyl chloride and styrene may degrade in the presence of acid preservative.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140320T06-1**
 SAMPLE

Lab Sample ID: YD80K
LIMS ID: 14-5017
Matrix: Water
Data Release Authorized:
Reported: 04/02/14

QC Report No: YD80-Joint Base Lewis McChord
Project: LOG RAM
Date Sampled: 03/20/14
Date Received: 03/21/14

Instrument/Analyst: NT2/PAB
Date Analyzed: 04/01/14 02:30

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	LOQ	Result	Q
74-87-3	Chloromethane	0.50	< 0.50	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.20	< 0.20	U
75-00-3	Chloroethane	0.20	< 0.20	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	**Acetone**	**5.0**	**6.8**	
75-15-0	Carbon Disulfide	0.20	< 0.20	U
75-35-4	1,1-Dichloroethene	0.20	< 0.20	U
75-34-3	1,1-Dichloroethane	0.20	< 0.20	U
156-60-5	trans-1,2-Dichloroethene	0.20	< 0.20	U
156-59-2	cis-1,2-Dichloroethene	0.20	< 0.20	U
67-66-3	Chloroform	0.20	< 0.20	U
107-06-2	1,2-Dichloroethane	0.20	< 0.20	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	0.20	< 0.20	U
56-23-5	Carbon Tetrachloride	0.20	< 0.20	U
108-05-4	Vinyl Acetate	0.20	< 0.20	U
75-27-4	Bromodichloromethane	0.20	< 0.20	U
78-87-5	1,2-Dichloropropane	0.20	< 0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	< 0.20	U
79-01-6	**Trichloroethene**	**0.20**	**4.0**	
124-48-1	Dibromochloromethane	0.20	< 0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	< 0.20	U
71-43-2	Benzene	0.20	< 0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	< 0.20	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.20	< 0.20	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.20	< 0.20	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	< 0.20	U
108-88-3	Toluene	0.20	< 0.20	U
108-90-7	Chlorobenzene	0.20	< 0.20	U
100-41-4	Ethylbenzene	0.20	< 0.20	U
100-42-5	Styrene	0.20	< 0.20	U
75-69-4	Trichlorofluoromethane	0.20	< 0.20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.20	< 0.20	U
179601-23-1	m,p-Xylene	0.40	< 0.40	U
95-47-6	o-Xylene	0.20	< 0.20	U
95-50-1	1,2-Dichlorobenzene	0.20	< 0.20	U
541-73-1	1,3-Dichlorobenzene	0.20	< 0.20	U
106-46-7	1,4-Dichlorobenzene	0.20	< 0.20	U

Lab Sample ID: YD80K QC Report No: YD80-Joint Base Lewis McChord
LIMS ID: 14-5017 Project: LOG RAM
Matrix: Water
Date Analyzed: 04/01/14 02:30

CAS Number	Analyte	LOQ	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Iodomethane	1.0	< 1.0	U
74-96-4	Bromoethane	0.20	< 0.20	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.20	< 0.20	U
74-95-3	Dibromomethane	0.20	< 0.20	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	< 0.20	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	< 0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	< 0.50	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.20	< 0.20	U
95-63-6	1,2,4-Trimethylbenzene	0.20	< 0.20	U
87-68-3	Hexachlorobutadiene	0.50	< 0.50	U
106-93-4	1,2-Dibromoethane	0.20	< 0.20	U
74-97-5	Bromochloromethane	0.20	< 0.20	U
594-20-7	2,2-Dichloropropane	0.20	< 0.20	U
142-28-9	1,3-Dichloropropane	0.20	< 0.20	U
98-82-8	Isopropylbenzene	0.20	< 0.20	U
103-65-1	n-Propylbenzene	0.20	< 0.20	U
108-86-1	Bromobenzene	0.20	< 0.20	U
95-49-8	2-Chlorotoluene	0.20	< 0.20	U
106-43-4	4-Chlorotoluene	0.20	< 0.20	U
98-06-6	tert-Butylbenzene	0.20	< 0.20	U
135-98-8	sec-Butylbenzene	0.20	< 0.20	U
99-87-6	4-Isopropyltoluene	0.20	< 0.20	U
104-51-8	n-Butylbenzene	0.20	< 0.20	U
120-82-1	1,2,4-Trichlorobenzene	0.50	< 0.50	U
91-20-3	Naphthalene	0.50	< 0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	< 0.50	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	101%
d8-Toluene	96.7%
Bromofluorobenzene	101%
d4-1,2-Dichlorobenzene	101%

2-Chloroethylvinylether is an acid labile compound and may not be recovered from an acid preserved sample.

EPA SW-846 indicates that vinyl chloride and styrene may degrade in the presence of acid preservative.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140320T10-1**
 SAMPLE

Lab Sample ID: YD80L
LIMS ID: 14-5018
Matrix: Water
Data Release Authorized:
Reported: 04/02/14

QC Report No: YD80-Joint Base Lewis McChord
Project: LOG RAM
Date Sampled: 03/20/14
Date Received: 03/21/14

Instrument/Analyst: NT2/PAB
Date Analyzed: 04/01/14 02:56

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	LOQ	Result	Q
74-87-3	Chloromethane	0.50	< 0.50	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.20	< 0.20	U
75-00-3	Chloroethane	0.20	< 0.20	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	**Acetone**	**5.0**	**13**	
75-15-0	Carbon Disulfide	0.20	< 0.20	U
75-35-4	1,1-Dichloroethene	0.20	< 0.20	U
75-34-3	1,1-Dichloroethane	0.20	< 0.20	U
156-60-5	trans-1,2-Dichloroethene	0.20	< 0.20	U
156-59-2	cis-1,2-Dichloroethene	0.20	< 0.20	U
67-66-3	Chloroform	0.20	< 0.20	U
107-06-2	1,2-Dichloroethane	0.20	< 0.20	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	0.20	< 0.20	U
56-23-5	Carbon Tetrachloride	0.20	< 0.20	U
108-05-4	Vinyl Acetate	0.20	< 0.20	U
75-27-4	Bromodichloromethane	0.20	< 0.20	U
78-87-5	1,2-Dichloropropane	0.20	< 0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	< 0.20	U
79-01-6	Trichloroethene	0.20	< 0.20	U
124-48-1	Dibromochloromethane	0.20	< 0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	< 0.20	U
71-43-2	Benzene	0.20	< 0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	< 0.20	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.20	< 0.20	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.20	< 0.20	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	< 0.20	U
108-88-3	Toluene	0.20	< 0.20	U
108-90-7	Chlorobenzene	0.20	< 0.20	U
100-41-4	Ethylbenzene	0.20	< 0.20	U
100-42-5	Styrene	0.20	< 0.20	U
75-69-4	Trichlorofluoromethane	0.20	< 0.20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.20	< 0.20	U
179601-23-1	m,p-Xylene	0.40	< 0.40	U
95-47-6	o-Xylene	0.20	< 0.20	U
95-50-1	1,2-Dichlorobenzene	0.20	< 0.20	U
541-73-1	1,3-Dichlorobenzene	0.20	< 0.20	U
106-46-7	1,4-Dichlorobenzene	0.20	< 0.20	U

Lab Sample ID: YD80L
LIMS ID: 14-5018
Matrix: Water
Date Analyzed: 04/01/14 02:56

QC Report No: YD80-Joint Base Lewis McChord
Project: LOG RAM

CAS Number	Analyte	LOQ	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Iodomethane	1.0	< 1.0	U
74-96-4	Bromoethane	0.20	< 0.20	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.20	< 0.20	U
74-95-3	Dibromomethane	0.20	< 0.20	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	< 0.20	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	< 0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	< 0.50	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.20	< 0.20	U
95-63-6	1,2,4-Trimethylbenzene	0.20	< 0.20	U
87-68-3	Hexachlorobutadiene	0.50	< 0.50	U
106-93-4	1,2-Dibromoethane	0.20	< 0.20	U
74-97-5	Bromochloromethane	0.20	< 0.20	U
594-20-7	2,2-Dichloropropane	0.20	< 0.20	U
142-28-9	1,3-Dichloropropane	0.20	< 0.20	U
98-82-8	Isopropylbenzene	0.20	< 0.20	U
103-65-1	n-Propylbenzene	0.20	< 0.20	U
108-86-1	Bromobenzene	0.20	< 0.20	U
95-49-8	2-Chlorotoluene	0.20	< 0.20	U
106-43-4	4-Chlorotoluene	0.20	< 0.20	U
98-06-6	tert-Butylbenzene	0.20	< 0.20	U
135-98-8	sec-Butylbenzene	0.20	< 0.20	U
99-87-6	4-Isopropyltoluene	0.20	< 0.20	U
104-51-8	n-Butylbenzene	0.20	< 0.20	U
120-82-1	1,2,4-Trichlorobenzene	0.50	< 0.50	U
91-20-3	Naphthalene	0.50	< 0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	< 0.50	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	104%
d8-Toluene	97.8%
Bromofluorobenzene	102%
d4-1,2-Dichlorobenzene	99.4%

2-Chloroethylvinylether is an acid labile compound and may not be recovered from an acid preserved sample.

EPA SW-846 indicates that vinyl chloride and styrene may degrade in the presence of acid preservative.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140320T11B-1**
 SAMPLE

Lab Sample ID: YD80M
LIMS ID: 14-5019
Matrix: Water
Data Release Authorized:
Reported: 04/02/14

QC Report No: YD80-Joint Base Lewis McChord
Project: LOG RAM

Date Sampled: 03/20/14
Date Received: 03/21/14

Instrument/Analyst: NT2/PAB
Date Analyzed: 04/01/14 03:23

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	LOQ	Result	Q
74-87-3	Chloromethane	0.50	< 0.50	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.20	< 0.20	U
75-00-3	Chloroethane	0.20	< 0.20	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	**Acetone**	**5.0**	**7.4**	
75-15-0	Carbon Disulfide	0.20	< 0.20	U
75-35-4	1,1-Dichloroethene	0.20	< 0.20	U
75-34-3	1,1-Dichloroethane	0.20	< 0.20	U
156-60-5	trans-1,2-Dichloroethene	0.20	< 0.20	U
156-59-2	cis-1,2-Dichloroethene	0.20	< 0.20	U
67-66-3	Chloroform	0.20	< 0.20	U
107-06-2	1,2-Dichloroethane	0.20	< 0.20	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	0.20	< 0.20	U
56-23-5	Carbon Tetrachloride	0.20	< 0.20	U
108-05-4	Vinyl Acetate	0.20	< 0.20	U
75-27-4	Bromodichloromethane	0.20	< 0.20	U
78-87-5	1,2-Dichloropropane	0.20	< 0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	< 0.20	U
79-01-6	**Trichloroethene**	**0.20**	**4.2**	
124-48-1	Dibromochloromethane	0.20	< 0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	< 0.20	U
71-43-2	Benzene	0.20	< 0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	< 0.20	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.20	< 0.20	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.20	< 0.20	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	< 0.20	U
108-88-3	Toluene	0.20	< 0.20	U
108-90-7	Chlorobenzene	0.20	< 0.20	U
100-41-4	Ethylbenzene	0.20	< 0.20	U
100-42-5	Styrene	0.20	< 0.20	U
75-69-4	Trichlorofluoromethane	0.20	< 0.20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.20	< 0.20	U
179601-23-1	m,p-Xylene	0.40	< 0.40	U
95-47-6	o-Xylene	0.20	< 0.20	U
95-50-1	1,2-Dichlorobenzene	0.20	< 0.20	U
541-73-1	1,3-Dichlorobenzene	0.20	< 0.20	U
106-46-7	1,4-Dichlorobenzene	0.20	< 0.20	U

Lab Sample ID: YD80M
LIMS ID: 14-5019
Matrix: Water
Date Analyzed: 04/01/14 03:23

QC Report No: YD80-Joint Base Lewis McChord
Project: LOG RAM

CAS Number	Analyte	LOQ	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Iodomethane	1.0	< 1.0	U
74-96-4	Bromoethane	0.20	< 0.20	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.20	< 0.20	U
74-95-3	Dibromomethane	0.20	< 0.20	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	< 0.20	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	< 0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	< 0.50	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.20	< 0.20	U
95-63-6	1,2,4-Trimethylbenzene	0.20	< 0.20	U
87-68-3	Hexachlorobutadiene	0.50	< 0.50	U
106-93-4	1,2-Dibromoethane	0.20	< 0.20	U
74-97-5	Bromochloromethane	0.20	< 0.20	U
594-20-7	2,2-Dichloropropane	0.20	< 0.20	U
142-28-9	1,3-Dichloropropane	0.20	< 0.20	U
98-82-8	Isopropylbenzene	0.20	< 0.20	U
103-65-1	n-Propylbenzene	0.20	< 0.20	U
108-86-1	Bromobenzene	0.20	< 0.20	U
95-49-8	2-Chlorotoluene	0.20	< 0.20	U
106-43-4	4-Chlorotoluene	0.20	< 0.20	U
98-06-6	tert-Butylbenzene	0.20	< 0.20	U
135-98-8	sec-Butylbenzene	0.20	< 0.20	U
99-87-6	4-Isopropyltoluene	0.20	< 0.20	U
104-51-8	n-Butylbenzene	0.20	< 0.20	U
120-82-1	1,2,4-Trichlorobenzene	0.50	< 0.50	U
91-20-3	Naphthalene	0.50	< 0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	< 0.50	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	104%
d8-Toluene	98.1%
Bromofluorobenzene	101%
d4-1,2-Dichlorobenzene	98.3%

2-Chloroethylvinylether is an acid labile compound and may not be recovered from an acid preserved sample.

EPA SW-846 indicates that vinyl chloride and styrene may degrade in the presence of acid preservative.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140320T13B-1**
Page 1 of 2 **SAMPLE**

Lab Sample ID: YD80N
LIMS ID: 14-5020
Matrix: Water
Data Release Authorized:
Reported: 04/02/14

QC Report No: YD80-Joint Base Lewis McChord
Project: LOG RAM

Date Sampled: 03/20/14
Date Received: 03/21/14

Instrument/Analyst: NT2/PAB
Date Analyzed: 04/01/14 03:50

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	LOQ	Result	Q
74-87-3	Chloromethane	0.50	< 0.50	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.20	< 0.20	U
75-00-3	Chloroethane	0.20	< 0.20	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	**Acetone**	**5.0**	**13**	
75-15-0	Carbon Disulfide	0.20	< 0.20	U
75-35-4	1,1-Dichloroethene	0.20	< 0.20	U
75-34-3	1,1-Dichloroethane	0.20	< 0.20	U
156-60-5	trans-1,2-Dichloroethene	0.20	< 0.20	U
156-59-2	**cis-1,2-Dichloroethene**	**0.20**	**0.98**	
67-66-3	Chloroform	0.20	< 0.20	U
107-06-2	1,2-Dichloroethane	0.20	< 0.20	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	**1,1,1-Trichloroethane**	**0.20**	**0.39**	
56-23-5	Carbon Tetrachloride	0.20	< 0.20	U
108-05-4	Vinyl Acetate	0.20	< 0.20	U
75-27-4	Bromodichloromethane	0.20	< 0.20	U
78-87-5	1,2-Dichloropropane	0.20	< 0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	< 0.20	U
79-01-6	**Trichloroethene**	**0.20**	**4.6**	
124-48-1	Dibromochloromethane	0.20	< 0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	< 0.20	U
71-43-2	Benzene	0.20	< 0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	< 0.20	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.20	< 0.20	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.20	< 0.20	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	< 0.20	U
108-88-3	Toluene	0.20	< 0.20	U
108-90-7	Chlorobenzene	0.20	< 0.20	U
100-41-4	Ethylbenzene	0.20	< 0.20	U
100-42-5	Styrene	0.20	< 0.20	U
75-69-4	Trichlorofluoromethane	0.20	< 0.20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.20	< 0.20	U
179601-23-1	m,p-Xylene	0.40	< 0.40	U
95-47-6	o-Xylene	0.20	< 0.20	U
95-50-1	1,2-Dichlorobenzene	0.20	< 0.20	U
541-73-1	1,3-Dichlorobenzene	0.20	< 0.20	U
106-46-7	1,4-Dichlorobenzene	0.20	< 0.20	U

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140320T13B-1**
 SAMPLE

Lab Sample ID: YD80N QC Report No: YD80-Joint Base Lewis McChord
LIMS ID: 14-5020 Project: LOG RAM
Matrix: Water
Date Analyzed: 04/01/14 03:50

CAS Number	Analyte	LOQ	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Iodomethane	1.0	< 1.0	U
74-96-4	Bromoethane	0.20	< 0.20	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.20	< 0.20	U
74-95-3	Dibromomethane	0.20	< 0.20	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	< 0.20	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	< 0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	< 0.50	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.20	< 0.20	U
95-63-6	1,2,4-Trimethylbenzene	0.20	< 0.20	U
87-68-3	Hexachlorobutadiene	0.50	< 0.50	U
106-93-4	1,2-Dibromoethane	0.20	< 0.20	U
74-97-5	Bromochloromethane	0.20	< 0.20	U
594-20-7	2,2-Dichloropropane	0.20	< 0.20	U
142-28-9	1,3-Dichloropropane	0.20	< 0.20	U
98-82-8	Isopropylbenzene	0.20	< 0.20	U
103-65-1	n-Propylbenzene	0.20	< 0.20	U
108-86-1	Bromobenzene	0.20	< 0.20	U
95-49-8	2-Chlorotoluene	0.20	< 0.20	U
106-43-4	4-Chlorotoluene	0.20	< 0.20	U
98-06-6	tert-Butylbenzene	0.20	< 0.20	U
135-98-8	sec-Butylbenzene	0.20	< 0.20	U
99-87-6	4-Isopropyltoluene	0.20	< 0.20	U
104-51-8	n-Butylbenzene	0.20	< 0.20	U
120-82-1	1,2,4-Trichlorobenzene	0.50	< 0.50	U
91-20-3	Naphthalene	0.50	< 0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	< 0.50	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	99.4%
d8-Toluene	98.3%
Bromofluorobenzene	96.8%
d4-1,2-Dichlorobenzene	99.5%

2-Chloroethylvinylether is an acid labile compound and may not be recovered from an acid preserved sample.

EPA SW-846 indicates that vinyl chloride and styrene may degrade in the presence of acid preservative.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140320T15-1**
Page 1 of 2 **SAMPLE**

Lab Sample ID: YD80O
LIMS ID: 14-5021
Matrix: Water
Data Release Authorized:
Reported: 04/02/14

QC Report No: YD80-Joint Base Lewis McChord
Project: LOG RAM

Date Sampled: 03/20/14
Date Received: 03/21/14

Instrument/Analyst: NT2/PAB
Date Analyzed: 04/01/14 04:16

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	LOQ	Result	Q
74-87-3	Chloromethane	0.50	< 0.50	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.20	< 0.20	U
75-00-3	Chloroethane	0.20	< 0.20	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	**Acetone**	**5.0**	**6.0**	
75-15-0	**Carbon Disulfide**	**0.20**	**16**	
75-35-4	1,1-Dichloroethene	0.20	< 0.20	U
75-34-3	1,1-Dichloroethane	0.20	< 0.20	U
156-60-5	trans-1,2-Dichloroethene	0.20	< 0.20	U
156-59-2	cis-1,2-Dichloroethene	0.20	< 0.20	U
67-66-3	Chloroform	0.20	< 0.20	U
107-06-2	1,2-Dichloroethane	0.20	< 0.20	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	0.20	< 0.20	U
56-23-5	Carbon Tetrachloride	0.20	< 0.20	U
108-05-4	Vinyl Acetate	0.20	< 0.20	U
75-27-4	Bromodichloromethane	0.20	< 0.20	U
78-87-5	1,2-Dichloropropane	0.20	< 0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	< 0.20	U
79-01-6	Trichloroethene	0.20	< 0.20	U
124-48-1	Dibromochloromethane	0.20	< 0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	< 0.20	U
71-43-2	Benzene	0.20	< 0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	< 0.20	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.20	< 0.20	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.20	< 0.20	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	< 0.20	U
108-88-3	Toluene	0.20	< 0.20	U
108-90-7	Chlorobenzene	0.20	< 0.20	U
100-41-4	Ethylbenzene	0.20	< 0.20	U
100-42-5	Styrene	0.20	< 0.20	U
75-69-4	Trichlorofluoromethane	0.20	< 0.20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.20	< 0.20	U
179601-23-1	m,p-Xylene	0.40	< 0.40	U
95-47-6	o-Xylene	0.20	< 0.20	U
95-50-1	1,2-Dichlorobenzene	0.20	< 0.20	U
541-73-1	1,3-Dichlorobenzene	0.20	< 0.20	U
106-46-7	1,4-Dichlorobenzene	0.20	< 0.20	U

Lab Sample ID: YD80O
LIMS ID: 14-5021
Matrix: Water
Date Analyzed: 04/01/14 04:16

QC Report No: YD80-Joint Base Lewis McChord
Project: LOG RAM

CAS Number	Analyte	LOQ	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Iodomethane	1.0	< 1.0	U
74-96-4	Bromoethane	0.20	< 0.20	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.20	< 0.20	U
74-95-3	Dibromomethane	0.20	< 0.20	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	< 0.20	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	< 0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	< 0.50	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.20	< 0.20	U
95-63-6	1,2,4-Trimethylbenzene	0.20	< 0.20	U
87-68-3	Hexachlorobutadiene	0.50	< 0.50	U
106-93-4	1,2-Dibromoethane	0.20	< 0.20	U
74-97-5	Bromochloromethane	0.20	< 0.20	U
594-20-7	2,2-Dichloropropane	0.20	< 0.20	U
142-28-9	1,3-Dichloropropane	0.20	< 0.20	U
98-82-8	Isopropylbenzene	0.20	< 0.20	U
103-65-1	n-Propylbenzene	0.20	< 0.20	U
108-86-1	Bromobenzene	0.20	< 0.20	U
95-49-8	2-Chlorotoluene	0.20	< 0.20	U
106-43-4	4-Chlorotoluene	0.20	< 0.20	U
98-06-6	tert-Butylbenzene	0.20	< 0.20	U
135-98-8	sec-Butylbenzene	0.20	< 0.20	U
99-87-6	4-Isopropyltoluene	0.20	< 0.20	U
104-51-8	n-Butylbenzene	0.20	< 0.20	U
120-82-1	1,2,4-Trichlorobenzene	0.50	< 0.50	U
91-20-3	Naphthalene	0.50	< 0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	< 0.50	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	101%
d8-Toluene	99.8%
Bromofluorobenzene	100%
d4-1,2-Dichlorobenzene	102%

2-Chloroethylvinylether is an acid labile compound and may not be recovered from an acid preserved sample.

EPA SW-846 indicates that vinyl chloride and styrene may degrade in the presence of acid preservative.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140320WELL13-1**
Page 1 of 2 **SAMPLE**

Lab Sample ID: YD80P
LIMS ID: 14-5022
Matrix: Water
Data Release Authorized:
Reported: 04/02/14

QC Report No: YD80-Joint Base Lewis McChord
Project: LOG RAM

Date Sampled: 03/20/14
Date Received: 03/21/14

Instrument/Analyst: NT2/PAB
Date Analyzed: 04/01/14 04:43

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	LOQ	Result	Q
74-87-3	Chloromethane	0.50	< 0.50	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.20	< 0.20	U
75-00-3	Chloroethane	0.20	< 0.20	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	Acetone	5.0	< 5.0	U
75-15-0	Carbon Disulfide	0.20	< 0.20	U
75-35-4	1,1-Dichloroethene	0.20	< 0.20	U
75-34-3	1,1-Dichloroethane	0.20	< 0.20	U
156-60-5	trans-1,2-Dichloroethene	0.20	< 0.20	U
156-59-2	cis-1,2-Dichloroethene	0.20	< 0.20	U
67-66-3	Chloroform	0.20	< 0.20	U
107-06-2	1,2-Dichloroethane	0.20	< 0.20	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	0.20	< 0.20	U
56-23-5	Carbon Tetrachloride	0.20	< 0.20	U
108-05-4	Vinyl Acetate	0.20	< 0.20	U
75-27-4	Bromodichloromethane	0.20	< 0.20	U
78-87-5	1,2-Dichloropropane	0.20	< 0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	< 0.20	U
79-01-6	**Trichloroethene**	**0.20**	**0.20**	
124-48-1	Dibromochloromethane	0.20	< 0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	< 0.20	U
71-43-2	Benzene	0.20	< 0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	< 0.20	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.20	< 0.20	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.20	< 0.20	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	< 0.20	U
108-88-3	Toluene	0.20	< 0.20	U
108-90-7	Chlorobenzene	0.20	< 0.20	U
100-41-4	Ethylbenzene	0.20	< 0.20	U
100-42-5	Styrene	0.20	< 0.20	U
75-69-4	Trichlorofluoromethane	0.20	< 0.20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.20	< 0.20	U
179601-23-1	m,p-Xylene	0.40	< 0.40	U
95-47-6	o-Xylene	0.20	< 0.20	U
95-50-1	1,2-Dichlorobenzene	0.20	< 0.20	U
541-73-1	1,3-Dichlorobenzene	0.20	< 0.20	U
106-46-7	1,4-Dichlorobenzene	0.20	< 0.20	U

Lab Sample ID: YD80P QC Report No: YD80-Joint Base Lewis McChord
LIMS ID: 14-5022 Project: LOG RAM
Matrix: Water
Date Analyzed: 04/01/14 04:43

CAS Number	Analyte	LOQ	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Iodomethane	1.0	< 1.0	U
74-96-4	Bromoethane	0.20	< 0.20	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.20	< 0.20	U
74-95-3	Dibromomethane	0.20	< 0.20	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	< 0.20	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	< 0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	< 0.50	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.20	< 0.20	U
95-63-6	1,2,4-Trimethylbenzene	0.20	< 0.20	U
87-68-3	Hexachlorobutadiene	0.50	< 0.50	U
106-93-4	1,2-Dibromoethane	0.20	< 0.20	U
74-97-5	Bromochloromethane	0.20	< 0.20	U
594-20-7	2,2-Dichloropropane	0.20	< 0.20	U
142-28-9	1,3-Dichloropropane	0.20	< 0.20	U
98-82-8	Isopropylbenzene	0.20	< 0.20	U
103-65-1	n-Propylbenzene	0.20	< 0.20	U
108-86-1	Bromobenzene	0.20	< 0.20	U
95-49-8	2-Chlorotoluene	0.20	< 0.20	U
106-43-4	4-Chlorotoluene	0.20	< 0.20	U
98-06-6	tert-Butylbenzene	0.20	< 0.20	U
135-98-8	sec-Butylbenzene	0.20	< 0.20	U
99-87-6	4-Isopropyltoluene	0.20	< 0.20	U
104-51-8	n-Butylbenzene	0.20	< 0.20	U
120-82-1	1,2,4-Trichlorobenzene	0.50	< 0.50	U
91-20-3	Naphthalene	0.50	< 0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	< 0.50	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	104%
d8-Toluene	97.7%
Bromofluorobenzene	99.1%
d4-1,2-Dichlorobenzene	98.4%

2-Chloroethylvinylether is an acid labile compound and may not be recovered from an acid preserved sample.

EPA SW-846 indicates that vinyl chloride and styrene may degrade in the presence of acid preservative.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140321TB-1**
 SAMPLE

Lab Sample ID: YD80Q
LIMS ID: 14-5023
Matrix: Water
Data Release Authorized:
Reported: 04/02/14

QC Report No: YD80-Joint Base Lewis McChord
Project: LOG RAM
Date Sampled: 03/20/14
Date Received: 03/21/14

Instrument/Analyst: NT2/PAB
Date Analyzed: 03/31/14 22:58

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	LOQ	Result	Q
74-87-3	Chloromethane	0.50	< 0.50	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.20	< 0.20	U
75-00-3	Chloroethane	0.20	< 0.20	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	Acetone	5.0	< 5.0	U
75-15-0	Carbon Disulfide	0.20	< 0.20	U
75-35-4	1,1-Dichloroethene	0.20	< 0.20	U
75-34-3	1,1-Dichloroethane	0.20	< 0.20	U
156-60-5	trans-1,2-Dichloroethene	0.20	< 0.20	U
156-59-2	cis-1,2-Dichloroethene	0.20	< 0.20	U
67-66-3	Chloroform	0.20	< 0.20	U
107-06-2	1,2-Dichloroethane	0.20	< 0.20	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	0.20	< 0.20	U
56-23-5	Carbon Tetrachloride	0.20	< 0.20	U
108-05-4	Vinyl Acetate	0.20	< 0.20	U
75-27-4	Bromodichloromethane	0.20	< 0.20	U
78-87-5	1,2-Dichloropropane	0.20	< 0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	< 0.20	U
79-01-6	Trichloroethene	0.20	< 0.20	U
124-48-1	Dibromochloromethane	0.20	< 0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	< 0.20	U
71-43-2	Benzene	0.20	< 0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	< 0.20	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.20	< 0.20	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.20	< 0.20	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	< 0.20	U
108-88-3	Toluene	0.20	< 0.20	U
108-90-7	Chlorobenzene	0.20	< 0.20	U
100-41-4	Ethylbenzene	0.20	< 0.20	U
100-42-5	Styrene	0.20	< 0.20	U
75-69-4	Trichlorofluoromethane	0.20	< 0.20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.20	< 0.20	U
179601-23-1	m,p-Xylene	0.40	< 0.40	U
95-47-6	o-Xylene	0.20	< 0.20	U
95-50-1	1,2-Dichlorobenzene	0.20	< 0.20	U
541-73-1	1,3-Dichlorobenzene	0.20	< 0.20	U
106-46-7	1,4-Dichlorobenzene	0.20	< 0.20	U

Lab Sample ID: YD80Q
LIMS ID: 14-5023
Matrix: Water
Date Analyzed: 03/31/14 22:58

QC Report No: YD80-Joint Base Lewis McChord
Project: LOG RAM

CAS Number	Analyte	LOQ	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Iodomethane	1.0	< 1.0	U
74-96-4	Bromoethane	0.20	< 0.20	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.20	< 0.20	U
74-95-3	Dibromomethane	0.20	< 0.20	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	< 0.20	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	< 0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	< 0.50	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.20	< 0.20	U
95-63-6	1,2,4-Trimethylbenzene	0.20	< 0.20	U
87-68-3	Hexachlorobutadiene	0.50	< 0.50	U
106-93-4	1,2-Dibromoethane	0.20	< 0.20	U
74-97-5	Bromochloromethane	0.20	< 0.20	U
594-20-7	2,2-Dichloropropane	0.20	< 0.20	U
142-28-9	1,3-Dichloropropane	0.20	< 0.20	U
98-82-8	Isopropylbenzene	0.20	< 0.20	U
103-65-1	n-Propylbenzene	0.20	< 0.20	U
108-86-1	Bromobenzene	0.20	< 0.20	U
95-49-8	2-Chlorotoluene	0.20	< 0.20	U
106-43-4	4-Chlorotoluene	0.20	< 0.20	U
98-06-6	tert-Butylbenzene	0.20	< 0.20	U
135-98-8	sec-Butylbenzene	0.20	< 0.20	U
99-87-6	4-Isopropyltoluene	0.20	< 0.20	U
104-51-8	n-Butylbenzene	0.20	< 0.20	U
120-82-1	1,2,4-Trichlorobenzene	0.50	< 0.50	U
91-20-3	Naphthalene	0.50	< 0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	< 0.50	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	98.9%
d8-Toluene	97.4%
Bromofluorobenzene	100%
d4-1,2-Dichlorobenzene	100%

2-Chloroethylvinylether is an acid labile compound and may not be recovered from an acid preserved sample.

EPA SW-846 indicates that vinyl chloride and styrene may degrade in the presence of acid preservative.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: MB-033114A**
 METHOD BLANK

Lab Sample ID: MB-033114A
LIMS ID: 14-5007
Matrix: Water
Data Release Authorized:
Reported: 04/02/14

QC Report No: YD80-Joint Base Lewis McChord
Project: LOG RAM

Date Sampled: NA
Date Received: NA

Instrument/Analyst: NT3/PAB
Date Analyzed: 03/31/14 12:00

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	LOQ	Result	Q
74-87-3	Chloromethane	0.50	< 0.50	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.20	< 0.20	U
75-00-3	Chloroethane	0.20	< 0.20	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	Acetone	5.0	< 5.0	U
75-15-0	Carbon Disulfide	0.20	< 0.20	U
75-35-4	1,1-Dichloroethene	0.20	< 0.20	U
75-34-3	1,1-Dichloroethane	0.20	< 0.20	U
156-60-5	trans-1,2-Dichloroethene	0.20	< 0.20	U
156-59-2	cis-1,2-Dichloroethene	0.20	< 0.20	U
67-66-3	Chloroform	0.20	< 0.20	U
107-06-2	1,2-Dichloroethane	0.20	< 0.20	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	0.20	< 0.20	U
56-23-5	Carbon Tetrachloride	0.20	< 0.20	U
108-05-4	Vinyl Acetate	0.20	< 0.20	U
75-27-4	Bromodichloromethane	0.20	< 0.20	U
78-87-5	1,2-Dichloropropane	0.20	< 0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	< 0.20	U
79-01-6	Trichloroethene	0.20	< 0.20	U
124-48-1	Dibromochloromethane	0.20	< 0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	< 0.20	U
71-43-2	Benzene	0.20	< 0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	< 0.20	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.20	< 0.20	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.20	< 0.20	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	< 0.20	U
108-88-3	Toluene	0.20	< 0.20	U
108-90-7	Chlorobenzene	0.20	< 0.20	U
100-41-4	Ethylbenzene	0.20	< 0.20	U
100-42-5	Styrene	0.20	< 0.20	U
75-69-4	Trichlorofluoromethane	0.20	< 0.20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.20	< 0.20	U
179601-23-1	m,p-Xylene	0.40	< 0.40	U
95-47-6	o-Xylene	0.20	< 0.20	U
95-50-1	1,2-Dichlorobenzene	0.20	< 0.20	U
541-73-1	1,3-Dichlorobenzene	0.20	< 0.20	U
106-46-7	1,4-Dichlorobenzene	0.20	< 0.20	U

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: MB-033114A**
 METHOD BLANK

Lab Sample ID: MB-033114A QC Report No: YD80-Joint Base Lewis McChord
LIMS ID: 14-5007 Project: LOG RAM
Matrix: Water
Date Analyzed: 03/31/14 12:00

CAS Number	Analyte	LOQ	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Iodomethane	1.0	< 1.0	U
74-96-4	Bromoethane	0.20	< 0.20	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.20	< 0.20	U
74-95-3	Dibromomethane	0.20	< 0.20	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	< 0.20	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	< 0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	< 0.50	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.20	< 0.20	U
95-63-6	1,2,4-Trimethylbenzene	0.20	< 0.20	U
87-68-3	Hexachlorobutadiene	0.50	< 0.50	U
106-93-4	1,2-Dibromoethane	0.20	< 0.20	U
74-97-5	Bromochloromethane	0.20	< 0.20	U
594-20-7	2,2-Dichloropropane	0.20	< 0.20	U
142-28-9	1,3-Dichloropropane	0.20	< 0.20	U
98-82-8	Isopropylbenzene	0.20	< 0.20	U
103-65-1	n-Propylbenzene	0.20	< 0.20	U
108-86-1	Bromobenzene	0.20	< 0.20	U
95-49-8	2-Chlorotoluene	0.20	< 0.20	U
106-43-4	4-Chlorotoluene	0.20	< 0.20	U
98-06-6	tert-Butylbenzene	0.20	< 0.20	U
135-98-8	sec-Butylbenzene	0.20	< 0.20	U
99-87-6	4-Isopropyltoluene	0.20	< 0.20	U
104-51-8	n-Butylbenzene	0.20	< 0.20	U
120-82-1	1,2,4-Trichlorobenzene	0.50	< 0.50	U
91-20-3	Naphthalene	0.50	< 0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	< 0.50	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	103%
d8-Toluene	94.6%
Bromofluorobenzene	92.6%
d4-1,2-Dichlorobenzene	101%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: MB-033114A**
 METHOD BLANK

Lab Sample ID: MB-033114A
LIMS ID: 14-5010
Matrix: Water
Data Release Authorized:
Reported: 04/02/14

QC Report No: YD80-Joint Base Lewis McChord
Project: LOG RAM
Date Sampled: NA
Date Received: NA

Instrument/Analyst: NT2/PAB
Date Analyzed: 03/31/14 22:32

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	LOQ	Result	Q
74-87-3	Chloromethane	0.50	< 0.50	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.20	< 0.20	U
75-00-3	Chloroethane	0.20	< 0.20	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	Acetone	5.0	< 5.0	U
75-15-0	Carbon Disulfide	0.20	< 0.20	U
75-35-4	1,1-Dichloroethene	0.20	< 0.20	U
75-34-3	1,1-Dichloroethane	0.20	< 0.20	U
156-60-5	trans-1,2-Dichloroethene	0.20	< 0.20	U
156-59-2	cis-1,2-Dichloroethene	0.20	< 0.20	U
67-66-3	Chloroform	0.20	< 0.20	U
107-06-2	1,2-Dichloroethane	0.20	< 0.20	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	0.20	< 0.20	U
56-23-5	Carbon Tetrachloride	0.20	< 0.20	U
108-05-4	Vinyl Acetate	0.20	< 0.20	U
75-27-4	Bromodichloromethane	0.20	< 0.20	U
78-87-5	1,2-Dichloropropane	0.20	< 0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	< 0.20	U
79-01-6	Trichloroethene	0.20	< 0.20	U
124-48-1	Dibromochloromethane	0.20	< 0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	< 0.20	U
71-43-2	Benzene	0.20	< 0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	< 0.20	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.20	< 0.20	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.20	< 0.20	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	< 0.20	U
108-88-3	Toluene	0.20	< 0.20	U
108-90-7	Chlorobenzene	0.20	< 0.20	U
100-41-4	Ethylbenzene	0.20	< 0.20	U
100-42-5	Styrene	0.20	< 0.20	U
75-69-4	Trichlorofluoromethane	0.20	< 0.20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.20	< 0.20	U
179601-23-1	m,p-Xylene	0.40	< 0.40	U
95-47-6	o-Xylene	0.20	< 0.20	U
95-50-1	1,2-Dichlorobenzene	0.20	< 0.20	U
541-73-1	1,3-Dichlorobenzene	0.20	< 0.20	U
106-46-7	1,4-Dichlorobenzene	0.20	< 0.20	U

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: MB-033114A**
 METHOD BLANK

Lab Sample ID: MB-033114A QC Report No: YD80-Joint Base Lewis McChord
LIMS ID: 14-5010 Project: LOG RAM
Matrix: Water
Date Analyzed: 03/31/14 22:32

CAS Number	Analyte	LOQ	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Iodomethane	1.0	< 1.0	U
74-96-4	Bromoethane	0.20	< 0.20	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.20	< 0.20	U
74-95-3	Dibromomethane	0.20	< 0.20	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	< 0.20	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	< 0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	< 0.50	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.20	< 0.20	U
95-63-6	1,2,4-Trimethylbenzene	0.20	< 0.20	U
87-68-3	**Hexachlorobutadiene**	**0.50**	**0.50**	
106-93-4	1,2-Dibromoethane	0.20	< 0.20	U
74-97-5	Bromochloromethane	0.20	< 0.20	U
594-20-7	2,2-Dichloropropane	0.20	< 0.20	U
142-28-9	1,3-Dichloropropane	0.20	< 0.20	U
98-82-8	Isopropylbenzene	0.20	< 0.20	U
103-65-1	n-Propylbenzene	0.20	< 0.20	U
108-86-1	Bromobenzene	0.20	< 0.20	U
95-49-8	2-Chlorotoluene	0.20	< 0.20	U
106-43-4	4-Chlorotoluene	0.20	< 0.20	U
98-06-6	tert-Butylbenzene	0.20	< 0.20	U
135-98-8	sec-Butylbenzene	0.20	< 0.20	U
99-87-6	4-Isopropyltoluene	0.20	< 0.20	U
104-51-8	**n-Butylbenzene**	**0.20**	**0.24**	
120-82-1	1,2,4-Trichlorobenzene	0.50	< 0.50	U
91-20-3	Naphthalene	0.50	< 0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	< 0.50	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	98.3%
d8-Toluene	101%
Bromofluorobenzene	97.9%
d4-1,2-Dichlorobenzene	97.4%

ANALYTICAL RESOURCES INCORPORATED

VOA SURROGATE RECOVERY SUMMARY

Matrix: Water

QC Report No: YD80-Joint Base Lewis McChord
Project: LOG RAM

ARI ID	Client ID	PV	DCE	TOL	BFB	DCB	TOT OUT
MB-033114A	Method Blank	10	103%	94.6%	92.6%	101%	0
LCS-033114A	Lab Control	10	103%	97.2%	90.6%	99.8%	0
LCSD-033114A	Lab Control Dup	10	103%	94.6%	92.5%	101%	0
YD80A	LGC140320LC87D2-1	10	103%	97.0%	90.6%	98.8%	0
YD80B	LGC140320LC89D1-1	10	102%	97.1%	93.0%	104%	0
YD80C	LGC140320LC89D2-1	10	105%	96.5%	93.4%	102%	0
MB-033114A	Method Blank	10	98.3%	101%	97.9%	97.4%	0
LCS-033114A	Lab Control	10	100%	99.1%	105%	101%	0
LCSD-033114A	Lab Control Dup	10	101%	98.9%	101%	102%	0
YD80D	LGC140320LC109-1	10	98.8%	98.6%	106%	104%	0
YD80E	LGC140320LC225-1	10	96.0%	97.9%	102%	96.9%	0
YD80F	LGC140320LC226-1	10	104%	99.9%	98.1%	97.7%	0
YD80G	LGC140320MAMC1-1	10	99.8%	98.9%	101%	97.9%	0
YD80H	LGC140320MAMC3-1	10	99.3%	96.8%	101%	101%	0
YD80I	LGC140320MAMC6-1	10	100%	98.0%	102%	99.8%	0
YD80J	LGC140320T058-1	10	100%	99.7%	104%	103%	0
YD80K	LGC140320T06-1	10	101%	96.7%	101%	101%	0
YD80L	LGC140320T10-1	10	104%	97.8%	102%	99.4%	0
YD80M	LGC140320T11B-1	10	104%	98.1%	101%	98.3%	0
YD80N	LGC140320T13B-1	10	99.4%	98.3%	96.8%	99.5%	0
YD80O	LGC140320T15-1	10	101%	99.8%	100%	102%	0
YD80P	LGC140320WELL13-1	10	104%	97.7%	99.1%	98.4%	0
YD80Q	LGC140321TB-1	10	98.9%	97.4%	100%	100%	0

	LCS/MB LIMITS	QC LIMITS
SW8260C		
(DCE) = d4-1,2-Dichloroethane	(80-120)	(80-130)
(TOL) = d8-Toluene	(80-120)	(80-120)
(BFB) = Bromofluorobenzene	(80-120)	(80-120)
(DCB) = d4-1,2-Dichlorobenzene	(80-120)	(80-120)

Prep Method: SW5030B
Log Number Range: 14-5007 to 14-5023

YD80.08014

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LCS-033114A**
 LAB CONTROL SAMPLE

Lab Sample ID: LCS-033114A QC Report No: YD80-Joint Base Lewis McChord
LIMS ID: 14-5007 Project: LOG RAM
Matrix: Water
Data Release Authorized:
Reported: 04/02/14 Date Sampled: NA
Date Received: NA

Instrument/Analyst LCS: NT3/PAB Sample Amount LCS: 10.0 mL
LCSD: NT3/PAB LCSD: 10.0 mL
Date Analyzed LCS: 03/31/14 11:02 Purge Volume LCS: 10.0 mL
LCSD: 03/31/14 11:31 LCSD: 10.0 mL

Analyte	LCS	Spike Added-LCS	LCS Recovery	LCSD	Spike Added-LCSD	LCSD Recovery	RPD
Chloromethane	7.88	10.0	78.8%	8.19	10.0	81.9%	3.9%
Bromomethane	5.26 Q	10.0	52.6%	5.59 Q	10.0	55.9%	6.1%
Vinyl Chloride	7.48	10.0	74.8%	8.01	10.0	80.1%	6.8%
Chloroethane	8.12	10.0	81.2%	8.04	10.0	80.4%	1.0%
Methylene Chloride	8.14	10.0	81.4%	9.13	10.0	91.3%	11.5%
Acetone	61.8 Q	50.0	124%	61.8 Q	50.0	124%	0.0%
Carbon Disulfide	8.45	10.0	84.5%	8.91	10.0	89.1%	5.3%
1,1-Dichloroethene	8.89	10.0	88.9%	9.19	10.0	91.9%	3.3%
1,1-Dichloroethane	8.99	10.0	89.9%	9.67	10.0	96.7%	7.3%
trans-1,2-Dichloroethene	8.90	10.0	89.0%	9.60	10.0	96.0%	7.6%
cis-1,2-Dichloroethene	9.00	10.0	90.0%	9.57	10.0	95.7%	6.1%
Chloroform	9.01	10.0	90.1%	9.59	10.0	95.9%	6.2%
1,2-Dichloroethane	9.34	10.0	93.4%	10.0	10.0	100%	6.8%
2-Butanone	57.8	50.0	116%	59.9	50.0	120%	3.6%
1,1,1-Trichloroethane	9.03	10.0	90.3%	9.51	10.0	95.1%	5.2%
Carbon Tetrachloride	9.28	10.0	92.8%	9.71	10.0	97.1%	4.5%
Vinyl Acetate	9.32	10.0	93.2%	9.96	10.0	99.6%	6.6%
Bromodichloromethane	9.53	10.0	95.3%	9.87	10.0	98.7%	3.5%
1,2-Dichloropropane	9.14	10.0	91.4%	9.60	10.0	96.0%	4.9%
cis-1,3-Dichloropropene	9.26	10.0	92.6%	9.51	10.0	95.1%	2.7%
Trichloroethene	9.19	10.0	91.9%	9.55	10.0	95.5%	3.8%
Dibromochloromethane	11.0	10.0	110%	11.7	10.0	117%	6.2%
1,1,2-Trichloroethane	9.70	10.0	97.0%	9.81	10.0	98.1%	1.1%
Benzene	9.29	10.0	92.9%	9.84	10.0	98.4%	5.8%
trans-1,3-Dichloropropene	9.27	10.0	92.7%	9.42	10.0	94.2%	1.6%
2-Chloroethylvinylether	9.70	10.0	97.0%	10.3	10.0	103%	6.0%
Bromoform	12.4 Q	10.0	124%	12.6 Q	10.0	126%	1.6%
4-Methyl-2-Pentanone (MIBK)	54.7	50.0	109%	57.0	50.0	114%	4.1%
2-Hexanone	57.5	50.0	115%	61.7	50.0	123%	7.0%
Tetrachloroethene	9.68	10.0	96.8%	10.2	10.0	102%	5.2%
1,1,2,2-Tetrachloroethane	10.9	10.0	109%	11.8	10.0	118%	7.9%
Toluene	9.29	10.0	92.9%	9.55	10.0	95.5%	2.8%
Chlorobenzene	9.96	10.0	99.6%	10.4	10.0	104%	4.3%
Ethylbenzene	9.49	10.0	94.9%	9.97	10.0	99.7%	4.9%
Styrene	10.0	10.0	100%	10.6	10.0	106%	5.8%
Trichlorofluoromethane	8.57	10.0	85.7%	9.09	10.0	90.9%	5.9%
1,1,2-Trichloro-1,2,2-trifluoroetha	9.13	10.0	91.3%	9.50	10.0	95.0%	4.0%
m,p-Xylene	20.4	20.0	102%	21.5	20.0	108%	5.3%

YD80.00645

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LCS-033114A**
 LAB CONTROL SAMPLE

Lab Sample ID: LCS-033114A QC Report No: YD80-Joint Base Lewis McChord
LIMS ID: 14-5007 Project: LOG RAM
Matrix: Water

Analyte	LCS	Spike Added-LCS	LCS Recovery	LCSD	Spike Added-LCSD	LCSD Recovery	RPD
o-Xylene	9.58	10.0	95.8%	9.85	10.0	98.5%	2.8%
1,2-Dichlorobenzene	10.3	10.0	103%	10.8	10.0	108%	4.7%
1,3-Dichlorobenzene	10.3	10.0	103%	11.0	10.0	110%	6.6%
1,4-Dichlorobenzene	10.2	10.0	102%	10.5	10.0	105%	2.9%
Acrolein	48.3	50.0	96.6%	50.0	50.0	100%	3.5%
Iodomethane	5.59 Q	10.0	55.9%	5.96 Q	10.0	59.6%	6.4%
Bromoethane	8.02	10.0	80.2%	8.34	10.0	83.4%	3.9%
Acrylonitrile	10.9	10.0	109%	11.0	10.0	110%	0.9%
1,1-Dichloropropene	8.93	10.0	89.3%	9.23	10.0	92.3%	3.3%
Dibromomethane	9.64	10.0	96.4%	10.1	10.0	101%	4.7%
1,1,1,2-Tetrachloroethane	9.66	10.0	96.6%	10.3	10.0	103%	6.4%
1,2-Dibromo-3-chloropropane	11.6	10.0	116%	12.4	10.0	124%	6.7%
1,2,3-Trichloropropane	11.1	10.0	111%	12.1	10.0	121%	8.6%
trans-1,4-Dichloro-2-butene	10.9	10.0	109%	11.9	10.0	119%	8.8%
1,3,5-Trimethylbenzene	9.85	10.0	98.5%	10.5	10.0	105%	6.4%
1,2,4-Trimethylbenzene	9.80	10.0	98.0%	10.5	10.0	105%	6.9%
Hexachlorobutadiene	10.5	10.0	105%	11.4	10.0	114%	8.2%
1,2-Dibromoethane	9.80	10.0	98.0%	10.3	10.0	103%	5.0%
Bromochloromethane	9.06	10.0	90.6%	9.03	10.0	90.3%	0.3%
2,2-Dichloropropane	8.41	10.0	84.1%	8.97	10.0	89.7%	6.4%
1,3-Dichloropropane	10.0	10.0	100%	10.5	10.0	105%	4.9%
Isopropylbenzene	10.3	10.0	103%	10.5	10.0	105%	1.9%
n-Propylbenzene	10.2	10.0	102%	10.6	10.0	106%	3.8%
Bromobenzene	9.91	10.0	99.1%	10.1	10.0	101%	1.9%
2-Chlorotoluene	9.88	10.0	98.8%	10.4	10.0	104%	5.1%
4-Chlorotoluene	9.55	10.0	95.5%	10.1	10.0	101%	5.6%
tert-Butylbenzene	9.60	10.0	96.0%	10.2	10.0	102%	6.1%
sec-Butylbenzene	9.96	10.0	99.6%	10.6	10.0	106%	6.2%
4-Isopropyltoluene	10.2	10.0	102%	10.7	10.0	107%	4.8%
n-Butylbenzene	10.3	10.0	103%	10.9	10.0	109%	5.7%
1,2,4-Trichlorobenzene	10.6	10.0	106%	11.2	10.0	112%	5.5%
Naphthalene	12.8 Q	10.0	128%	13.6 Q	10.0	136%	6.1%
1,2,3-Trichlorobenzene	10.9	10.0	109%	11.7	10.0	117%	7.1%

Reported in µg/L (ppb)

RPD calculated using sample concentrations per SW846.

Volatile Surrogate Recovery

	LCS	LCSD
d4-1,2-Dichloroethane	103%	103%
d8-Toluene	97.2%	94.6%
Bromofluorobenzene	90.6%	92.5%
d4-1,2-Dichlorobenzene	99.8%	101%

YD80:66646

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LCS-033114A**
 LAB CONTROL SAMPLE

Lab Sample ID: LCS-033114A QC Report No: YD80-Joint Base Lewis McChord
LIMS ID: 14-5010 Project: LOG RAM
Matrix: Water
Data Release Authorized: JB Date Sampled: NA
Reported: 04/02/14 Date Received: NA

Instrument/Analyst LCS: NT2/PAB Sample Amount LCS: 10.0 mL
LCSD: NT2/PAB LCSD: 10.0 mL
Date Analyzed LCS: 03/31/14 21:12 Purge Volume LCS: 10.0 mL
LCSD: 03/31/14 21:39 LCSD: 10.0 mL

Analyte	LCS	Spike Added-LCS	LCS Recovery	LCSD	Spike Added-LCSD	LCSD Recovery	RPD
Chloromethane	12.2	10.0	122%	11.6	10.0	116%	5.0%
Bromomethane	10.3	10.0	103%	9.15	10.0	91.5%	11.8%
Vinyl Chloride	12.6	10.0	126%	11.4	10.0	114%	10.0%
Chloroethane	11.1	10.0	111%	10.7	10.0	107%	3.7%
Methylene Chloride	10.7	10.0	107%	9.91	10.0	99.1%	7.7%
Acetone	54.5	50.0	109%	50.0	50.0	100%	8.6%
Carbon Disulfide	11.7	10.0	117%	11.1	10.0	111%	5.3%
1,1-Dichloroethene	11.5	10.0	115%	11.0	10.0	110%	4.4%
1,1-Dichloroethane	11.2	10.0	112%	10.9	10.0	109%	2.7%
trans-1,2-Dichloroethene	9.81	10.0	98.1%	9.79	10.0	97.9%	0.2%
cis-1,2-Dichloroethene	11.1	10.0	111%	10.9	10.0	109%	1.8%
Chloroform	11.2	10.0	112%	10.8	10.0	108%	3.6%
1,2-Dichloroethane	10.9	10.0	109%	10.7	10.0	107%	1.9%
2-Butanone	53.2	50.0	106%	51.7	50.0	103%	2.9%
1,1,1-Trichloroethane	11.2	10.0	112%	10.7	10.0	107%	4.6%
Carbon Tetrachloride	11.1	10.0	111%	10.6	10.0	106%	4.6%
Vinyl Acetate	10.8	10.0	108%	10.4	10.0	104%	3.8%
Bromodichloromethane	11.0	10.0	110%	10.5	10.0	105%	4.7%
1,2-Dichloropropane	11.1	10.0	111%	10.2	10.0	102%	8.5%
cis-1,3-Dichloropropene	10.7	10.0	107%	10.5	10.0	105%	1.9%
Trichloroethene	10.4	10.0	104%	10.1	10.0	101%	2.9%
Dibromochloromethane	11.2	10.0	112%	10.7	10.0	107%	4.6%
1,1,2-Trichloroethane	10.9	10.0	109%	10.7	10.0	107%	1.9%
Benzene	10.4	10.0	104%	10.3	10.0	103%	1.0%
trans-1,3-Dichloropropene	11.5	10.0	115%	10.7	10.0	107%	7.2%
2-Chloroethylvinylether	9.46	10.0	94.6%	9.96	10.0	99.6%	5.1%
Bromoform	10.6	10.0	106%	11.0	10.0	110%	3.7%
4-Methyl-2-Pentanone (MIBK)	56.7	50.0	113%	53.1	50.0	106%	6.6%
2-Hexanone	57.3	50.0	115%	55.2	50.0	110%	3.7%
Tetrachloroethene	9.00	10.0	90.0%	8.93	10.0	89.3%	0.8%
1,1,2,2-Tetrachloroethane	10.9	10.0	109%	11.0	10.0	110%	0.9%
Toluene	10.6	10.0	106%	10.2	10.0	102%	3.8%
Chlorobenzene	11.6	10.0	116%	11.0	10.0	110%	5.3%
Ethylbenzene	11.1	10.0	111%	10.9	10.0	109%	1.8%
Styrene	12.0 Q	10.0	120%	11.4 Q	10.0	114%	5.1%
Trichlorofluoromethane	11.8	10.0	118%	11.3	10.0	113%	4.3%
1,1,2-Trichloro-1,2,2-trifluoroetha	13.3	10.0	133%	11.6	10.0	116%	13.7%
m,p-Xylene	22.5	20.0	112%	22.3	20.0	112%	0.9%

YD80:06047

Lab Sample ID: LCS-033114A QC Report No: YD80-Joint Base Lewis McChord
LIMS ID: 14-5010 Project: LOG RAM
Matrix: Water

Analyte	LCS	Spike Added-LCS	LCS Recovery	LCSD	Spike Added-LCSD	LCSD Recovery	RPD
o-Xylene	11.8 Q	10.0	118%	11.1 Q	10.0	111%	6.1%
1,2-Dichlorobenzene	10.7	10.0	107%	10.8	10.0	108%	0.9%
1,3-Dichlorobenzene	11.4	10.0	114%	11.2	10.0	112%	1.8%
1,4-Dichlorobenzene	11.0	10.0	110%	10.9	10.0	109%	0.9%
Acrolein	54.1	50.0	108%	51.2	50.0	102%	5.5%
Iodomethane	11.2	10.0	112%	10.6	10.0	106%	5.5%
Bromoethane	11.3	10.0	113%	11.0	10.0	110%	2.7%
Acrylonitrile	10.7	10.0	107%	9.70	10.0	97.0%	9.8%
1,1-Dichloropropene	11.2	10.0	112%	10.7	10.0	107%	4.6%
Dibromomethane	10.7	10.0	107%	10.6	10.0	106%	0.9%
1,1,1,2-Tetrachloroethane	11.6	10.0	116%	11.1	10.0	111%	4.4%
1,2-Dibromo-3-chloropropane	10.7	10.0	107%	10.4	10.0	104%	2.8%
1,2,3-Trichloropropane	10.8	10.0	108%	10.4	10.0	104%	3.8%
trans-1,4-Dichloro-2-butene	8.95	10.0	89.5%	9.19	10.0	91.9%	2.6%
1,3,5-Trimethylbenzene	11.3	10.0	113%	11.5	10.0	115%	1.8%
1,2,4-Trimethylbenzene	11.3	10.0	113%	11.1	10.0	111%	1.8%
Hexachlorobutadiene	11.4 B	10.0	114%	11.6 B	10.0	116%	1.7%
1,2-Dibromoethane	11.2	10.0	112%	10.4	10.0	104%	7.4%
Bromochloromethane	11.4	10.0	114%	10.8	10.0	108%	5.4%
2,2-Dichloropropane	11.6	10.0	116%	11.0	10.0	110%	5.3%
1,3-Dichloropropane	10.9	10.0	109%	10.7	10.0	107%	1.9%
Isopropylbenzene	11.1 Q	10.0	111%	11.1 Q	10.0	111%	0.0%
n-Propylbenzene	11.0	10.0	110%	11.1	10.0	111%	0.9%
Bromobenzene	10.4	10.0	104%	10.4	10.0	104%	0.0%
2-Chlorotoluene	10.8	10.0	108%	10.6	10.0	106%	1.9%
4-Chlorotoluene	10.9	10.0	109%	10.9	10.0	109%	0.0%
tert-Butylbenzene	10.9	10.0	109%	10.8	10.0	108%	0.9%
sec-Butylbenzene	11.8 Q	10.0	118%	11.8 Q	10.0	118%	0.0%
4-Isopropyltoluene	11.6	10.0	116%	11.5	10.0	115%	0.9%
n-Butylbenzene	11.7 B	10.0	117%	11.4 B	10.0	114%	2.6%
1,2,4-Trichlorobenzene	8.18	10.0	81.8%	7.94	10.0	79.4%	3.0%
Naphthalene	7.91	10.0	79.1%	7.84	10.0	78.4%	0.9%
1,2,3-Trichlorobenzene	8.50	10.0	85.0%	7.75	10.0	77.5%	9.2%

Reported in µg/L (ppb)

RPD calculated using sample concentrations per SW846.

Volatile Surrogate Recovery

	LCS	LCSD
d4-1,2-Dichloroethane	100%	101%
d8-Toluene	99.1%	98.9%
Bromofluorobenzene	105%	101%
d4-1,2-Dichlorobenzene	101%	102%

Analytical Resources, Incorporated
Analytical Chemists and Consultants

April 8, 2014

Thomas Lynott
Department of the Army
Directorate of Public Works
Attn Environmental Division (T. Lynott)
2012 Liggett Ave Box 339500 MS 17
Joint Base Lewis-McChord, Washington 98433-9500
Official Business

RE: Client Project: LogRam
ARI Job No.: YE75

Dear Mr. Lynott:

Please find enclosed the original Chain-of-Custody record (COC), sample receipt documentation, and the final data for the project referenced above. Analytical Resources, Inc. (ARI) accepted twenty water samples on March 28, 2014. For further details regarding sample receipt please refer to the enclosed Cooler Receipt Form.

The samples were analyzed for VOCs, as requested on the COCs.

The LCS and/or LCSD are out of control low for naphthalene and/ or 1,2,3-Trichlorobenzene.

An electronic copy of this report and all supporting raw data will remain on file with ARI. Should you have any questions or problems, please feel free to contact me at your convenience.

Respectfully,
ANALYTICAL RESOURCES, INC.

Kelly Bottem
Client Services Manager
(206) 695-6211
kellyb@arilabs.com
www.arilabs.com

eFile: YE75

4611 South 134th Place, Suite 100 • Tukwila WA 98168 • **206-695-6200** • **206-695-6201** fax

Chain of Custody Record & Laboratory Analysis Request

ARI Assigned Number: YE75	Turn-around Requested: STANDARD	Page: 1 of 14	
ARI Client Company: JOINT BASE LEWIS MCCHORD PUBLIC WORKS IMLM-PWE	Phone: 2539661802	Date: 28MAR14	Ice Present? Y
Client Contact: TOM J LYNOTT		No. of Coolers: 3	Cooler Temps: 1.1, 1.3, 5.3
Client Project Name: LOG RAM			
Client Project #:	Samplers: T LYNOTT JBECKER		

Analytical Resources, Incorporated
Analytical Chemists and Consultants
4611 South 134th Place, Suite 100
Tukwila, WA 98168
206-695-6200 206-695-6201 (fax)

Sample ID	Date	Time	Matrix	No Containers	Analysis Requested: 10064								Notes/Comments
L6C140326B5PA381-1	26MAR14	1345	WATER	2	X								TOTAL VOCS
L6C140326B5PA382-1	26MAR14	1350	WATER	2	X								
L6C140326B5PA384-1	26MAR14	0915	WATER	2	X								
L6C140326DUP6-1	26MAR14	0800	WATER	2	X								BOX
L6C140326DUP7-1	26MAR14	0830	WATER	2	X								1
L6C140326DUP8-1	26MAR14	0835	WATER	2	X								
L6C140327DUP20-1	27MAR14	0700	WATER	2	X								
L6C140326FL3-1	26MAR14	1445	WATER	2	X								
L6C140326LC03-1	26MAR14	1250	WATER	2	X								
L6C140326LC06-1	26MAR14	1240	WATER	2	X								

Comments/Special Instructions	Relinquished by (Signature)	Received by (Signature)	Relinquished by: (Signature)	Received by (Signature)
	Printed Name: TOM J LYNOTT	Printed Name: Jennifer Millsap	Printed Name	Printed Name.
	Company: VERSAR	Company: ARI	Company:	Company
	Date & Time: 28MAR14 1205	Date & Time: 3/28/14 1205	Date & Time	Date & Time:

YE75 : 9002

Limits of Liability: *ARI will perform all requested services in accordance with appropriate methodology following ARI Standard Operating Procedures and the ARI Quality Assurance Program. This program meets standards for the industry. The total liability of ARI, its officers, agents, employees, or successors, arising out of or in connection with the requested services, shall not exceed the Invoiced amount for said services. The acceptance by the client of a proposal for services by ARI release ARI from any liability in excess thereof, not withstanding any provision to the contrary in any contract, purchase order or co-signed agreement between ARI and the Client.*

Sample Retention Policy: All samples submitted to ARI will be appropriately discarded no sooner than 90 days after receipt or 60 days after submission of hardcopy data, whichever is longer, unless alternate retention schedules have been established by work-order or contract.

Chain of Custody Record & Laboratory Analysis Request

TO 0021

ARI Assigned Number:	Turn-around Requested: STANDARD TAT	Page: 2 of 14	
ARI Client Company: JOINT BASE LEWIS McCHORD PUBLIC WORKS IMLM-PWE	Phone: 2539661802	Date: 28MAR14	Ice Present? Y
Client Contact: TOM J LYNOTT		No. of Coolers: 3	Cooler Temps: 1.1, 1.3, 5.3
Client Project Name: LOG RAM			
Client Project #:	Samplers: T LYNOTT J BECKER		

Analytical Resources, Incorporated
Analytical Chemists and Consultants
4611 South 134th Place, Suite 100
Tukwila, WA 98168
206-695-6200 206-695-6201 (fax)

Sample ID	Date	Time	Matrix	No Containers	Analysis Requested: 1006A	Notes/Comments
L6C140326LC16-1	26MAR14	1410	WATER	2	X	TOTAL VOCS
L6C140326LC24-1	26MAR14	1150	WATER	2	X	
L6C140326LC26-1	26MAR14	1130	WATER	2	X	BOX
L6C140326LC66B-1	26MAR14	1305	WATER	2	X	1
L6C140326LC66D-1	26MAR14	1310	WATER	2	X	
L6C140326LC67D-1	26MAR14	1340	WATER	2	X	
L6C140326LC72D-1	26MAR14	1450	WATER	2	X	
L6C140326LC75D-1	26MAR14	0920	WATER	2	X	
L6C140326LC84D1-1	26MAR14	1505	WATER	2	X	
L6C140326LC84D2-1	26MAR14	1510	WATER	2	X	

Comments/Special Instructions	Relinquished by (Signature)	Received by (Signature)	Relinquished by (Signature)	Received by: (Signature)
	Printed Name: TOM J LYNOTT	Printed Name: Jennifer Millsap	Printed Name	Printed Name:
	Company: VERSAR	Company: ARI	Company	Company:
	Date & Time: 28MAR14 1205	Date & Time: 3/28/14 1205	Date & Time.	Date & Time:

YES 00003

Limits of Liability: *ARI will perform all requested services in accordance with appropriate methodology following ARI Standard Operating Procedures and the ARI Quality Assurance Program. This program meets standards for the industry. The total liability of ARI, its officers, agents, employees, or successors, arising out of or in connection with the requested services, shall not exceed the Invoiced amount for said services. The acceptance by the client of a proposal for services by ARI release ARI from any liability in excess thereof, not withstanding any provision to the contrary in any contract, purchase order or co-signed agreement between ARI and the Client.*

Sample Retention Policy: All samples submitted to ARI will be appropriately discarded no sooner than 90 days after receipt or 60 days after submission of hardcopy data, whichever is longer, unless alternate retention schedules have been established by work-order or contract.

Sample ID Cross Reference Report

ANALYTICAL RESOURCES INCORPORATED

ARI Job No: YE75
Client: Joint Base Lewis McChord
Project Event: N/A
Project Name: Log RAM

	Sample ID	ARI Lab ID	ARI LIMS ID	Matrix	Sample Date/Time	VTSR
1.	LGC14032685PA381-1	YE75A	14-5848	Water	03/26/14 13:45	03/28/14 12:05
2.	LGC14032685PA382-1	YE75B	14-5849	Water	03/26/14 13:50	03/28/14 12:05
3.	LGC14032685PA384-1	YE75C	14-5850	Water	03/26/14 09:15	03/28/14 12:05
4.	LGC140326DUP6-1	YE75D	14-5851	Water	03/26/14 08:00	03/28/14 12:05
5.	LGC140326DUP7-1	YE75E	14-5852	Water	03/26/14 08:30	03/28/14 12:05
6.	LGC140326DUP8-1	YE75F	14-5853	Water	03/26/14 08:35	03/28/14 12:05
7.	LGC140327DUP20-1	YE75G	14-5854	Water	03/27/14 07:00	03/28/14 12:05
8.	LGC140326FL3-1	YE75H	14-5855	Water	03/26/14 14:45	03/28/14 12:05
9.	LGC140326LC03-1	YE75I	14-5856	Water	03/26/14 12:50	03/28/14 12:05
10.	LGC140326LC06-1	YE75J	14-5857	Water	03/26/14 12:40	03/28/14 12:05
11.	LGC140326LC16-1	YE75K	14-5858	Water	03/26/14 14:10	03/28/14 12:05
12.	LGC140326LC24-1	YE75L	14-5859	Water	03/26/14 11:50	03/28/14 12:05
13.	LGC140326LC26-1	YE75M	14-5860	Water	03/26/14 11:30	03/28/14 12:05
14.	LGC140326LC66B-1	YE75N	14-5861	Water	03/26/14 13:05	03/28/14 12:05
15.	LGC140326LC66D-1	YE75O	14-5862	Water	03/26/14 13:10	03/28/14 12:05
16.	LGC140326LC67D-1	YE75P	14-5863	Water	03/26/14 13:40	03/28/14 12:05
17.	LGC140326LC72D-1	YE75Q	14-5864	Water	03/26/14 14:50	03/28/14 12:05
18.	LGC140326LC75D-1	YE75R	14-5865	Water	03/26/14 09:20	03/28/14 12:05
19.	LGC140326LC84D1-1	YE75S	14-5866	Water	03/26/14 15:05	03/28/14 12:05
20.	LGC140326LC84D2-1	YE75T	14-5867	Water	03/26/14 15:10	03/28/14 12:05

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Cooler Receipt Form

ARI Client: BLM

Project Name: Log Ram

COC No(s) _____ (NA)

Delivered by: Fed-Ex UPS Courier (Hand Delivered) Other: _____

Assigned ARI Job No: YE75

Tracking No: _____ (NA)

Preliminary Examination Phase:

Were intact, properly signed and dated custody seals attached to the outside of to cooler? YES (NO)

Were custody papers included with the cooler? (YES) NO

Were custody papers properly filled out (ink, signed, etc.) (YES) NO

Temperature of Cooler(s) (°C) (recommended 2.0-6.0 °C for chemistry) 1.1 1.3 5.3

Time: 1205

If cooler temperature is out of compliance fill out form 00070F

Temp Gun ID#: 12341222

Cooler Accepted by: JM Date: 3/28/14 Time: 1205

Complete custody forms and attach all shipping documents

Log-In Phase:

Was a temperature blank included in the cooler? YES (NO)

What kind of packing material was used? Bubble Wrap Wet Ice (Gel Packs) Baggies (Foam Block) Paper Other: BOX

Was sufficient ice used (if appropriate)? NA (YES) NO

Were all bottles sealed in individual plastic bags? YES (NO)

Did all bottles arrive in good condition (unbroken)? (YES) NO

Were all bottle labels complete and legible? (YES) NO

Did the number of containers listed on COC match with the number of containers received? (YES) NO

Did all bottle labels and tags agree with custody papers? (YES) NO

Were all bottles used correct for the requested analyses? (YES) NO

Do any of the analyses (bottles) require preservation? (attach preservation sheet, excluding VOCs)... (NA) YES NO

Were all VOC vials free of air bubbles? NA (YES) NO

Was sufficient amount of sample sent in each bottle? (YES) NO

Date VOC Trip Blank was made at ARI . (NA) _____

Was Sample Split by ARI : (NA) YES Date/Time:_____ Equipment:_____ Split by:_____

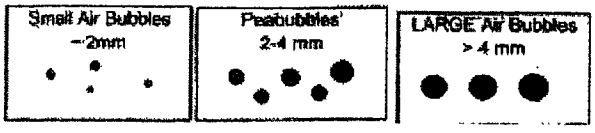
Samples Logged by: AV Date: 3/28/14 Time: 1252

***** Notify Project Manager of discrepancies or concerns *****

Sample ID on Bottle	Sample ID on COC	Sample ID on Bottle	Sample ID on COC

Additional Notes, Discrepancies, & Resolutions:

By: Date:



Small → "sm" (< 2 mm)
Peabubbles → "pb" (2 to < 4 mm)
Large → "lg" (4 to < 6 mm)
Headspace → "hs" (> 6 mm)

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC14032685PA381-1**
 SAMPLE

Lab Sample ID: YE75A
LIMS ID: 14-5848
Matrix: Water
Data Release Authorized:
Reported: 04/07/14

QC Report No: YE75-Joint Base Lewis McChord
Project: Log RAM

Date Sampled: 03/26/14
Date Received: 03/28/14

Instrument/Analyst: NT3/PKC
Date Analyzed: 04/03/14 11:18

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	LOQ	Result	Q
74-87-3	Chloromethane	0.50	< 0.50	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.20	< 0.20	U
75-00-3	Chloroethane	0.20	< 0.20	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	Acetone	5.0	< 5.0	U
75-15-0	Carbon Disulfide	0.20	< 0.20	U
75-35-4	1,1-Dichloroethene	0.20	< 0.20	U
75-34-3	1,1-Dichloroethane	0.20	< 0.20	U
156-60-5	trans-1,2-Dichloroethene	0.20	< 0.20	U
156-59-2	**cis-1,2-Dichloroethene**	**0.20**	**0.20**	
67-66-3	Chloroform	0.20	< 0.20	U
107-06-2	1,2-Dichloroethane	0.20	< 0.20	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	0.20	< 0.20	U
56-23-5	Carbon Tetrachloride	0.20	< 0.20	U
108-05-4	Vinyl Acetate	0.20	< 0.20	U
75-27-4	Bromodichloromethane	0.20	< 0.20	U
78-87-5	1,2-Dichloropropane	0.20	< 0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	< 0.20	U
79-01-6	**Trichloroethene**	**0.20**	**14**	
124-48-1	Dibromochloromethane	0.20	< 0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	< 0.20	U
71-43-2	Benzene	0.20	< 0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	< 0.20	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.20	< 0.20	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.20	< 0.20	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	< 0.20	U
108-88-3	Toluene	0.20	< 0.20	U
108-90-7	Chlorobenzene	0.20	< 0.20	U
100-41-4	Ethylbenzene	0.20	< 0.20	U
100-42-5	Styrene	0.20	< 0.20	U
75-69-4	Trichlorofluoromethane	0.20	< 0.20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.20	< 0.20	U
179601-23-1	m,p-Xylene	0.40	< 0.40	U
95-47-6	o-Xylene	0.20	< 0.20	U
95-50-1	1,2-Dichlorobenzene	0.20	< 0.20	U
541-73-1	1,3-Dichlorobenzene	0.20	< 0.20	U
106-46-7	1,4-Dichlorobenzene	0.20	< 0.20	U

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC14032685PA381-1**
 SAMPLE

Lab Sample ID: YE75A
LIMS ID: 14-5848
Matrix: Water
Date Analyzed: 04/03/14 11:18

QC Report No: YE75-Joint Base Lewis McChord
Project: Log RAM

CAS Number	Analyte	LOQ	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Iodomethane	1.0	< 1.0	U
74-96-4	Bromoethane	0.20	< 0.20	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.20	< 0.20	U
74-95-3	Dibromomethane	0.20	< 0.20	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	< 0.20	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	< 0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	< 0.50	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.20	< 0.20	U
95-63-6	1,2,4-Trimethylbenzene	0.20	< 0.20	U
87-68-3	Hexachlorobutadiene	0.50	< 0.50	U
106-93-4	1,2-Dibromoethane	0.20	< 0.20	U
74-97-5	Bromochloromethane	0.20	< 0.20	U
594-20-7	2,2-Dichloropropane	0.20	< 0.20	U
142-28-9	1,3-Dichloropropane	0.20	< 0.20	U
98-82-8	Isopropylbenzene	0.20	< 0.20	U
103-65-1	n-Propylbenzene	0.20	< 0.20	U
108-86-1	Bromobenzene	0.20	< 0.20	U
95-49-8	2-Chlorotoluene	0.20	< 0.20	U
106-43-4	4-Chlorotoluene	0.20	< 0.20	U
98-06-6	tert-Butylbenzene	0.20	< 0.20	U
135-98-8	sec-Butylbenzene	0.20	< 0.20	U
99-87-6	4-Isopropyltoluene	0.20	< 0.20	U
104-51-8	n-Butylbenzene	0.20	< 0.20	U
120-82-1	1,2,4-Trichlorobenzene	0.50	< 0.50	U
91-20-3	Naphthalene	0.50	< 0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	< 0.50	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	100%
d8-Toluene	97.3%
Bromofluorobenzene	98.4%
d4-1,2-Dichlorobenzene	99.9%

2-Chloroethylvinylether is an acid labile compound and may not be recovered from an acid preserved sample.

EPA SW-846 indicates that vinyl chloride and styrene may degrade in the presence of acid preservative.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC14032685PA382-1**
 SAMPLE

Lab Sample ID: YE75B
LIMS ID: 14-5849
Matrix: Water
Data Release Authorized:
Reported: 04/07/14

QC Report No: YE75-Joint Base Lewis McChord
Project: Log RAM

Date Sampled: 03/26/14
Date Received: 03/28/14

Instrument/Analyst: NT3/PKC
Date Analyzed: 04/03/14 11:47

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	LOQ	Result	Q
74-87-3	Chloromethane	0.50	< 0.50	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.20	< 0.20	U
75-00-3	Chloroethane	0.20	< 0.20	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	**Acetone**	**5.0**	**12**	
75-15-0	Carbon Disulfide	0.20	< 0.20	U
75-35-4	1,1-Dichloroethene	0.20	< 0.20	U
75-34-3	1,1-Dichloroethane	0.20	< 0.20	U
156-60-5	trans-1,2-Dichloroethene	0.20	< 0.20	U
156-59-2	cis-1,2-Dichloroethene	0.20	< 0.20	U
67-66-3	Chloroform	0.20	< 0.20	U
107-06-2	1,2-Dichloroethane	0.20	< 0.20	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	0.20	< 0.20	U
56-23-5	Carbon Tetrachloride	0.20	< 0.20	U
108-05-4	Vinyl Acetate	0.20	< 0.20	U
75-27-4	Bromodichloromethane	0.20	< 0.20	U
78-87-5	1,2-Dichloropropane	0.20	< 0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	< 0.20	U
79-01-6	**Trichloroethene**	**0.20**	**5.6**	
124-48-1	Dibromochloromethane	0.20	< 0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	< 0.20	U
71-43-2	Benzene	0.20	< 0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	< 0.20	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.20	< 0.20	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.20	< 0.20	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	< 0.20	U
108-88-3	Toluene	0.20	< 0.20	U
108-90-7	Chlorobenzene	0.20	< 0.20	U
100-41-4	Ethylbenzene	0.20	< 0.20	U
100-42-5	Styrene	0.20	< 0.20	U
75-69-4	Trichlorofluoromethane	0.20	< 0.20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.20	< 0.20	U
179601-23-1	m,p-Xylene	0.40	< 0.40	U
95-47-6	o-Xylene	0.20	< 0.20	U
95-50-1	1,2-Dichlorobenzene	0.20	< 0.20	U
541-73-1	1,3-Dichlorobenzene	0.20	< 0.20	U
106-46-7	1,4-Dichlorobenzene	0.20	< 0.20	U

Lab Sample ID: YE75B
LIMS ID: 14-5849
Matrix: Water
Date Analyzed: 04/03/14 11:47

QC Report No: YE75-Joint Base Lewis McChord
Project: Log RAM

CAS Number	Analyte	LOQ	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Iodomethane	1.0	< 1.0	U
74-96-4	Bromoethane	0.20	< 0.20	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.20	< 0.20	U
74-95-3	Dibromomethane	0.20	< 0.20	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	< 0.20	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	< 0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	< 0.50	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.20	< 0.20	U
95-63-6	1,2,4-Trimethylbenzene	0.20	< 0.20	U
87-68-3	Hexachlorobutadiene	0.50	< 0.50	U
106-93-4	1,2-Dibromoethane	0.20	< 0.20	U
74-97-5	Bromochloromethane	0.20	< 0.20	U
594-20-7	2,2-Dichloropropane	0.20	< 0.20	U
142-28-9	1,3-Dichloropropane	0.20	< 0.20	U
98-82-8	Isopropylbenzene	0.20	< 0.20	U
103-65-1	n-Propylbenzene	0.20	< 0.20	U
108-86-1	Bromobenzene	0.20	< 0.20	U
95-49-8	2-Chlorotoluene	0.20	< 0.20	U
106-43-4	4-Chlorotoluene	0.20	< 0.20	U
98-06-6	tert-Butylbenzene	0.20	< 0.20	U
135-98-8	sec-Butylbenzene	0.20	< 0.20	U
99-87-6	4-Isopropyltoluene	0.20	< 0.20	U
104-51-8	n-Butylbenzene	0.20	< 0.20	U
120-82-1	1,2,4-Trichlorobenzene	0.50	< 0.50	U
91-20-3	Naphthalene	0.50	< 0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	< 0.50	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	100%
d8-Toluene	101%
Bromofluorobenzene	96.1%
d4-1,2-Dichlorobenzene	99.6%

2-Chloroethylvinylether is an acid labile compound and may not be recovered from an acid preserved sample.

EPA SW-846 indicates that vinyl chloride and styrene may degrade in the presence of acid preservative.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC14032685PA384-1**
 SAMPLE

Lab Sample ID: YE75C
LIMS ID: 14-5850
Matrix: Water
Data Release Authorized:
Reported: 04/07/14

QC Report No: YE75-Joint Base Lewis McChord
Project: Log RAM

Date Sampled: 03/26/14
Date Received: 03/28/14

Instrument/Analyst: NT3/PKC
Date Analyzed: 04/03/14 12:15

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	LOQ	Result	Q
74-87-3	Chloromethane	0.50	< 0.50	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.20	< 0.20	U
75-00-3	Chloroethane	0.20	< 0.20	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	**Acetone**	**5.0**	**10**	
75-15-0	Carbon Disulfide	0.20	< 0.20	U
75-35-4	1,1-Dichloroethene	0.20	< 0.20	U
75-34-3	1,1-Dichloroethane	0.20	< 0.20	U
156-60-5	trans-1,2-Dichloroethene	0.20	< 0.20	U
156-59-2	cis-1,2-Dichloroethene	0.20	< 0.20	U
67-66-3	Chloroform	0.20	< 0.20	U
107-06-2	1,2-Dichloroethane	0.20	< 0.20	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	0.20	< 0.20	U
56-23-5	Carbon Tetrachloride	0.20	< 0.20	U
108-05-4	Vinyl Acetate	0.20	< 0.20	U
75-27-4	Bromodichloromethane	0.20	< 0.20	U
78-87-5	1,2-Dichloropropane	0.20	< 0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	< 0.20	U
79-01-6	Trichloroethene	0.20	< 0.20	U
124-48-1	Dibromochloromethane	0.20	< 0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	< 0.20	U
71-43-2	Benzene	0.20	< 0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	< 0.20	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.20	< 0.20	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.20	< 0.20	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	< 0.20	U
108-88-3	Toluene	0.20	< 0.20	U
108-90-7	Chlorobenzene	0.20	< 0.20	U
100-41-4	Ethylbenzene	0.20	< 0.20	U
100-42-5	Styrene	0.20	< 0.20	U
75-69-4	Trichlorofluoromethane	0.20	< 0.20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.20	< 0.20	U
179601-23-1	m,p-Xylene	0.40	< 0.40	U
95-47-6	o-Xylene	0.20	< 0.20	U
95-50-1	1,2-Dichlorobenzene	0.20	< 0.20	U
541-73-1	1,3-Dichlorobenzene	0.20	< 0.20	U
106-46-7	1,4-Dichlorobenzene	0.20	< 0.20	U

Lab Sample ID: YE75C
LIMS ID: 14-5850
Matrix: Water
Date Analyzed: 04/03/14 12:15

QC Report No: YE75-Joint Base Lewis McChord
Project: Log RAM

CAS Number	Analyte	LOQ	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Iodomethane	1.0	< 1.0	U
74-96-4	Bromoethane	0.20	< 0.20	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.20	< 0.20	U
74-95-3	Dibromomethane	0.20	< 0.20	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	< 0.20	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	< 0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	< 0.50	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.20	< 0.20	U
95-63-6	1,2,4-Trimethylbenzene	0.20	< 0.20	U
87-68-3	Hexachlorobutadiene	0.50	< 0.50	U
106-93-4	1,2-Dibromoethane	0.20	< 0.20	U
74-97-5	Bromochloromethane	0.20	< 0.20	U
594-20-7	2,2-Dichloropropane	0.20	< 0.20	U
142-28-9	1,3-Dichloropropane	0.20	< 0.20	U
98-82-8	Isopropylbenzene	0.20	< 0.20	U
103-65-1	n-Propylbenzene	0.20	< 0.20	U
108-86-1	Bromobenzene	0.20	< 0.20	U
95-49-8	2-Chlorotoluene	0.20	< 0.20	U
106-43-4	4-Chlorotoluene	0.20	< 0.20	U
98-06-6	tert-Butylbenzene	0.20	< 0.20	U
135-98-8	sec-Butylbenzene	0.20	< 0.20	U
99-87-6	4-Isopropyltoluene	0.20	< 0.20	U
104-51-8	n-Butylbenzene	0.20	< 0.20	U
120-82-1	1,2,4-Trichlorobenzene	0.50	< 0.50	U
91-20-3	Naphthalene	0.50	< 0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	< 0.50	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	102%
d8-Toluene	99.0%
Bromofluorobenzene	97.9%
d4-1,2-Dichlorobenzene	99.9%

2-Chloroethylvinylether is an acid labile compound and may not be recovered from an acid preserved sample.

EPA SW-846 indicates that vinyl chloride and styrene may degrade in the presence of acid preservative.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140326DUP6-1**
 SAMPLE

Lab Sample ID: YE75D
LIMS ID: 14-5851
Matrix: Water
Data Release Authorized:
Reported: 04/07/14

QC Report No: YE75-Joint Base Lewis McChord
Project: Log RAM
Date Sampled: 03/26/14
Date Received: 03/28/14

Instrument/Analyst: NT3/PKC
Date Analyzed: 04/03/14 12:43

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	LOQ	Result	Q
74-87-3	Chloromethane	0.50	< 0.50	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.20	< 0.20	U
75-00-3	Chloroethane	0.20	< 0.20	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	**Acetone**	**5.0**	**10**	
75-15-0	Carbon Disulfide	0.20	< 0.20	U
75-35-4	1,1-Dichloroethene	0.20	< 0.20	U
75-34-3	1,1-Dichloroethane	0.20	< 0.20	U
156-60-5	trans-1,2-Dichloroethene	0.20	< 0.20	U
156-59-2	cis-1,2-Dichloroethene	0.20	< 0.20	U
67-66-3	Chloroform	0.20	< 0.20	U
107-06-2	1,2-Dichloroethane	0.20	< 0.20	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	0.20	< 0.20	U
56-23-5	Carbon Tetrachloride	0.20	< 0.20	U
108-05-4	Vinyl Acetate	0.20	< 0.20	U
75-27-4	Bromodichloromethane	0.20	< 0.20	U
78-87-5	1,2-Dichloropropane	0.20	< 0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	< 0.20	U
79-01-6	Trichloroethene	0.20	< 0.20	U
124-48-1	Dibromochloromethane	0.20	< 0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	< 0.20	U
71-43-2	Benzene	0.20	< 0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	< 0.20	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.20	< 0.20	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.20	< 0.20	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	< 0.20	U
108-88-3	Toluene	0.20	< 0.20	U
108-90-7	Chlorobenzene	0.20	< 0.20	U
100-41-4	Ethylbenzene	0.20	< 0.20	U
100-42-5	Styrene	0.20	< 0.20	U
75-69-4	Trichlorofluoromethane	0.20	< 0.20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.20	< 0.20	U
179601-23-1	m,p-Xylene	0.40	< 0.40	U
95-47-6	o-Xylene	0.20	< 0.20	U
95-50-1	1,2-Dichlorobenzene	0.20	< 0.20	U
541-73-1	1,3-Dichlorobenzene	0.20	< 0.20	U
106-46-7	1,4-Dichlorobenzene	0.20	< 0.20	U

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140326DUP6-1**
 SAMPLE

Lab Sample ID: YE75D
LIMS ID: 14-5851
Matrix: Water
Date Analyzed: 04/03/14 12:43

QC Report No: YE75-Joint Base Lewis McChord
Project: Log RAM

CAS Number	Analyte	LOQ	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Iodomethane	1.0	< 1.0	U
74-96-4	Bromoethane	0.20	< 0.20	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.20	< 0.20	U
74-95-3	Dibromomethane	0.20	< 0.20	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	< 0.20	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	< 0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	< 0.50	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.20	< 0.20	U
95-63-6	1,2,4-Trimethylbenzene	0.20	< 0.20	U
87-68-3	Hexachlorobutadiene	0.50	< 0.50	U
106-93-4	1,2-Dibromoethane	0.20	< 0.20	U
74-97-5	Bromochloromethane	0.20	< 0.20	U
594-20-7	2,2-Dichloropropane	0.20	< 0.20	U
142-28-9	1,3-Dichloropropane	0.20	< 0.20	U
98-82-8	Isopropylbenzene	0.20	< 0.20	U
103-65-1	n-Propylbenzene	0.20	< 0.20	U
108-86-1	Bromobenzene	0.20	< 0.20	U
95-49-8	2-Chlorotoluene	0.20	< 0.20	U
106-43-4	4-Chlorotoluene	0.20	< 0.20	U
98-06-6	tert-Butylbenzene	0.20	< 0.20	U
135-98-8	sec-Butylbenzene	0.20	< 0.20	U
99-87-6	4-Isopropyltoluene	0.20	< 0.20	U
104-51-8	n-Butylbenzene	0.20	< 0.20	U
120-82-1	1,2,4-Trichlorobenzene	0.50	< 0.50	U
91-20-3	Naphthalene	0.50	< 0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	< 0.50	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	100%
d8-Toluene	98.2%
Bromofluorobenzene	97.3%
d4-1,2-Dichlorobenzene	100%

2-Chloroethylvinylether is an acid labile compound and may not be recovered from an acid preserved sample.

EPA SW-846 indicates that vinyl chloride and styrene may degrade in the presence of acid preservative.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140326DUP7-1**
 SAMPLE

Lab Sample ID: YE75E
LIMS ID: 14-5852
Matrix: Water
Data Release Authorized:
Reported: 04/07/14

QC Report No: YE75-Joint Base Lewis McChord
Project: Log RAM
Date Sampled: 03/26/14
Date Received: 03/28/14

Instrument/Analyst: NT3/PKC
Date Analyzed: 04/03/14 13:12

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	LOQ	Result	Q
74-87-3	Chloromethane	0.50	< 0.50	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.20	< 0.20	U
75-00-3	Chloroethane	0.20	< 0.20	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	Acetone	5.0	< 5.0	U
75-15-0	Carbon Disulfide	0.20	< 0.20	U
75-35-4	1,1-Dichloroethene	0.20	< 0.20	U
75-34-3	1,1-Dichloroethane	0.20	< 0.20	U
156-60-5	trans-1,2-Dichloroethene	0.20	< 0.20	U
156-59-2	**cis-1,2-Dichloroethene**	**0.20**	**0.44**	
67-66-3	Chloroform	0.20	< 0.20	U
107-06-2	1,2-Dichloroethane	0.20	< 0.20	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	0.20	< 0.20	U
56-23-5	Carbon Tetrachloride	0.20	< 0.20	U
108-05-4	Vinyl Acetate	0.20	< 0.20	U
75-27-4	Bromodichloromethane	0.20	< 0.20	U
78-87-5	1,2-Dichloropropane	0.20	< 0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	< 0.20	U
79-01-6	**Trichloroethene**	**0.20**	**34**	
124-48-1	Dibromochloromethane	0.20	< 0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	< 0.20	U
71-43-2	Benzene	0.20	< 0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	< 0.20	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.20	< 0.20	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.20	< 0.20	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	< 0.20	U
108-88-3	Toluene	0.20	< 0.20	U
108-90-7	Chlorobenzene	0.20	< 0.20	U
100-41-4	Ethylbenzene	0.20	< 0.20	U
100-42-5	Styrene	0.20	< 0.20	U
75-69-4	Trichlorofluoromethane	0.20	< 0.20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.20	< 0.20	U
179601-23-1	m,p-Xylene	0.40	< 0.40	U
95-47-6	o-Xylene	0.20	< 0.20	U
95-50-1	1,2-Dichlorobenzene	0.20	< 0.20	U
541-73-1	1,3-Dichlorobenzene	0.20	< 0.20	U
106-46-7	1,4-Dichlorobenzene	0.20	< 0.20	U

Lab Sample ID: YE75E
LIMS ID: 14-5852
Matrix: Water
Date Analyzed: 04/03/14 13:12

QC Report No: YE75-Joint Base Lewis McChord
Project: Log RAM

CAS Number	Analyte	LOQ	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Iodomethane	1.0	< 1.0	U
74-96-4	Bromoethane	0.20	< 0.20	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.20	< 0.20	U
74-95-3	Dibromomethane	0.20	< 0.20	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	< 0.20	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	< 0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	< 0.50	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.20	< 0.20	U
95-63-6	1,2,4-Trimethylbenzene	0.20	< 0.20	U
87-68-3	Hexachlorobutadiene	0.50	< 0.50	U
106-93-4	1,2-Dibromoethane	0.20	< 0.20	U
74-97-5	Bromochloromethane	0.20	< 0.20	U
594-20-7	2,2-Dichloropropane	0.20	< 0.20	U
142-28-9	1,3-Dichloropropane	0.20	< 0.20	U
98-82-8	Isopropylbenzene	0.20	< 0.20	U
103-65-1	n-Propylbenzene	0.20	< 0.20	U
108-86-1	Bromobenzene	0.20	< 0.20	U
95-49-8	2-Chlorotoluene	0.20	< 0.20	U
106-43-4	4-Chlorotoluene	0.20	< 0.20	U
98-06-6	tert-Butylbenzene	0.20	< 0.20	U
135-98-8	sec-Butylbenzene	0.20	< 0.20	U
99-87-6	4-Isopropyltoluene	0.20	< 0.20	U
104-51-8	n-Butylbenzene	0.20	< 0.20	U
120-82-1	1,2,4-Trichlorobenzene	0.50	< 0.50	U
91-20-3	Naphthalene	0.50	< 0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	< 0.50	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	102%
d8-Toluene	100%
Bromofluorobenzene	99.1%
d4-1,2-Dichlorobenzene	99.5%

2-Chloroethylvinylether is an acid labile compound and may not be recovered from an acid preserved sample.

EPA SW-846 indicates that vinyl chloride and styrene may degrade in the presence of acid preservative.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140326DUP8-1**
Page 1 of 2 **SAMPLE**

Lab Sample ID: YE75F
LIMS ID: 14-5853
Matrix: Water
Data Release Authorized:
Reported: 04/07/14

QC Report No: YE75-Joint Base Lewis McChord
Project: Log RAM

Date Sampled: 03/26/14
Date Received: 03/28/14

Instrument/Analyst: NT3/PKC
Date Analyzed: 04/03/14 13:40

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	LOQ	Result	Q
74-87-3	Chloromethane	0.50	< 0.50	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.20	< 0.20	U
75-00-3	Chloroethane	0.20	< 0.20	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	**Acetone**	**5.0**	**5.4**	
75-15-0	Carbon Disulfide	0.20	< 0.20	U
75-35-4	1,1-Dichloroethene	0.20	< 0.20	U
75-34-3	1,1-Dichloroethane	0.20	< 0.20	U
156-60-5	trans-1,2-Dichloroethene	0.20	< 0.20	U
156-59-2	cis-1,2-Dichloroethene	0.20	< 0.20	U
67-66-3	Chloroform	0.20	< 0.20	U
107-06-2	1,2-Dichloroethane	0.20	< 0.20	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	0.20	< 0.20	U
56-23-5	Carbon Tetrachloride	0.20	< 0.20	U
108-05-4	Vinyl Acetate	0.20	< 0.20	U
75-27-4	Bromodichloromethane	0.20	< 0.20	U
78-87-5	1,2-Dichloropropane	0.20	< 0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	< 0.20	U
79-01-6	**Trichloroethene**	**0.20**	**5.9**	
124-48-1	Dibromochloromethane	0.20	< 0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	< 0.20	U
71-43-2	Benzene	0.20	< 0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	< 0.20	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.20	< 0.20	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.20	< 0.20	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	< 0.20	U
108-88-3	Toluene	0.20	< 0.20	U
108-90-7	Chlorobenzene	0.20	< 0.20	U
100-41-4	Ethylbenzene	0.20	< 0.20	U
100-42-5	Styrene	0.20	< 0.20	U
75-69-4	Trichlorofluoromethane	0.20	< 0.20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.20	< 0.20	U
179601-23-1	m,p-Xylene	0.40	< 0.40	U
95-47-6	o-Xylene	0.20	< 0.20	U
95-50-1	1,2-Dichlorobenzene	0.20	< 0.20	U
541-73-1	1,3-Dichlorobenzene	0.20	< 0.20	U
106-46-7	1,4-Dichlorobenzene	0.20	< 0.20	U

Lab Sample ID: YE75F
LIMS ID: 14-5853
Matrix: Water
Date Analyzed: 04/03/14 13:40

QC Report No: YE75-Joint Base Lewis McChord
Project: Log RAM

CAS Number	Analyte	LOQ	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Iodomethane	1.0	< 1.0	U
74-96-4	Bromoethane	0.20	< 0.20	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.20	< 0.20	U
74-95-3	Dibromomethane	0.20	< 0.20	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	< 0.20	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	< 0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	< 0.50	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.20	< 0.20	U
95-63-6	1,2,4-Trimethylbenzene	0.20	< 0.20	U
87-68-3	Hexachlorobutadiene	0.50	< 0.50	U
106-93-4	1,2-Dibromoethane	0.20	< 0.20	U
74-97-5	Bromochloromethane	0.20	< 0.20	U
594-20-7	2,2-Dichloropropane	0.20	< 0.20	U
142-28-9	1,3-Dichloropropane	0.20	< 0.20	U
98-82-8	Isopropylbenzene	0.20	< 0.20	U
103-65-1	n-Propylbenzene	0.20	< 0.20	U
108-86-1	Bromobenzene	0.20	< 0.20	U
95-49-8	2-Chlorotoluene	0.20	< 0.20	U
106-43-4	4-Chlorotoluene	0.20	< 0.20	U
98-06-6	tert-Butylbenzene	0.20	< 0.20	U
135-98-8	sec-Butylbenzene	0.20	< 0.20	U
99-87-6	4-Isopropyltoluene	0.20	< 0.20	U
104-51-8	n-Butylbenzene	0.20	< 0.20	U
120-82-1	1,2,4-Trichlorobenzene	0.50	< 0.50	U
91-20-3	Naphthalene	0.50	< 0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	< 0.50	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	104%
d8-Toluene	99.4%
Bromofluorobenzene	96.1%
d4-1,2-Dichlorobenzene	101%

2-Chloroethylvinylether is an acid labile compound and may not be recovered from an acid preserved sample.

EPA SW-846 indicates that vinyl chloride and styrene may degrade in the presence of acid preservative.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140327DUP20-1**
Page 1 of 2 **SAMPLE**

Lab Sample ID: YE75G
LIMS ID: 14-5854
Matrix: Water
Data Release Authorized:
Reported: 04/07/14

QC Report No: YE75-Joint Base Lewis McChord
Project: Log RAM

Date Sampled: 03/27/14
Date Received: 03/28/14

Instrument/Analyst: NT3/PKC
Date Analyzed: 04/03/14 14:09

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	LOQ	Result	Q
74-87-3	Chloromethane	0.50	< 0.50	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.20	< 0.20	U
75-00-3	Chloroethane	0.20	< 0.20	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	**Acetone**	**5.0**	**8.3**	
75-15-0	Carbon Disulfide	0.20	< 0.20	U
75-35-4	1,1-Dichloroethene	0.20	< 0.20	U
75-34-3	1,1-Dichloroethane	0.20	< 0.20	U
156-60-5	trans-1,2-Dichloroethene	0.20	< 0.20	U
156-59-2	cis-1,2-Dichloroethene	0.20	< 0.20	U
67-66-3	Chloroform	0.20	< 0.20	U
107-06-2	1,2-Dichloroethane	0.20	< 0.20	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	0.20	< 0.20	U
56-23-5	Carbon Tetrachloride	0.20	< 0.20	U
108-05-4	Vinyl Acetate	0.20	< 0.20	U
75-27-4	Bromodichloromethane	0.20	< 0.20	U
78-87-5	1,2-Dichloropropane	0.20	< 0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	< 0.20	U
79-01-6	**Trichloroethene**	**0.20**	**1.6**	
124-48-1	Dibromochloromethane	0.20	< 0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	< 0.20	U
71-43-2	Benzene	0.20	< 0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	< 0.20	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.20	< 0.20	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.20	< 0.20	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	< 0.20	U
108-88-3	Toluene	0.20	< 0.20	U
108-90-7	Chlorobenzene	0.20	< 0.20	U
100-41-4	Ethylbenzene	0.20	< 0.20	U
100-42-5	Styrene	0.20	< 0.20	U
75-69-4	Trichlorofluoromethane	0.20	< 0.20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.20	< 0.20	U
179601-23-1	m,p-Xylene	0.40	< 0.40	U
95-47-6	o-Xylene	0.20	< 0.20	U
95-50-1	1,2-Dichlorobenzene	0.20	< 0.20	U
541-73-1	1,3-Dichlorobenzene	0.20	< 0.20	U
106-46-7	1,4-Dichlorobenzene	0.20	< 0.20	U

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140327DUP20-1**
 SAMPLE

Lab Sample ID: YE75G
LIMS ID: 14-5854
Matrix: Water
Date Analyzed: 04/03/14 14:09

QC Report No: YE75-Joint Base Lewis McChord
Project: Log RAM

CAS Number	Analyte	LOQ	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Iodomethane	1.0	< 1.0	U
74-96-4	Bromoethane	0.20	< 0.20	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.20	< 0.20	U
74-95-3	Dibromomethane	0.20	< 0.20	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	< 0.20	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	< 0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	< 0.50	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.20	< 0.20	U
95-63-6	1,2,4-Trimethylbenzene	0.20	< 0.20	U
87-68-3	Hexachlorobutadiene	0.50	< 0.50	U
106-93-4	1,2-Dibromoethane	0.20	< 0.20	U
74-97-5	Bromochloromethane	0.20	< 0.20	U
594-20-7	2,2-Dichloropropane	0.20	< 0.20	U
142-28-9	1,3-Dichloropropane	0.20	< 0.20	U
98-82-8	Isopropylbenzene	0.20	< 0.20	U
103-65-1	n-Propylbenzene	0.20	< 0.20	U
108-86-1	Bromobenzene	0.20	< 0.20	U
95-49-8	2-Chlorotoluene	0.20	< 0.20	U
106-43-4	4-Chlorotoluene	0.20	< 0.20	U
98-06-6	tert-Butylbenzene	0.20	< 0.20	U
135-98-8	sec-Butylbenzene	0.20	< 0.20	U
99-87-6	4-Isopropyltoluene	0.20	< 0.20	U
104-51-8	n-Butylbenzene	0.20	< 0.20	U
120-82-1	1,2,4-Trichlorobenzene	0.50	< 0.50	U
91-20-3	Naphthalene	0.50	< 0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	< 0.50	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	100%
d8-Toluene	102%
Bromofluorobenzene	98.6%
d4-1,2-Dichlorobenzene	101%

2-Chloroethylvinylether is an acid labile compound and may not be recovered from an acid preserved sample.

EPA SW-846 indicates that vinyl chloride and styrene may degrade in the presence of acid preservative.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140326FL3-1**
 SAMPLE

Lab Sample ID: YE75H
LIMS ID: 14-5855
Matrix: Water
Data Release Authorized:
Reported: 04/07/14

QC Report No: YE75-Joint Base Lewis McChord
Project: Log RAM

Date Sampled: 03/26/14
Date Received: 03/28/14

Instrument/Analyst: NT3/PKC
Date Analyzed: 04/03/14 14:37

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	LOQ	Result	Q
74-87-3	Chloromethane	0.50	< 0.50	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.20	< 0.20	U
75-00-3	Chloroethane	0.20	< 0.20	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	**Acetone**	**5.0**	**9.6**	
75-15-0	Carbon Disulfide	0.20	< 0.20	U
75-35-4	1,1-Dichloroethene	0.20	< 0.20	U
75-34-3	1,1-Dichloroethane	0.20	< 0.20	U
156-60-5	trans-1,2-Dichloroethene	0.20	< 0.20	U
156-59-2	cis-1,2-Dichloroethene	0.20	< 0.20	U
67-66-3	Chloroform	0.20	< 0.20	U
107-06-2	1,2-Dichloroethane	0.20	< 0.20	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	0.20	< 0.20	U
56-23-5	Carbon Tetrachloride	0.20	< 0.20	U
108-05-4	Vinyl Acetate	0.20	< 0.20	U
75-27-4	Bromodichloromethane	0.20	< 0.20	U
78-87-5	1,2-Dichloropropane	0.20	< 0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	< 0.20	U
79-01-6	**Trichloroethene**	**0.20**	**2.3**	
124-48-1	Dibromochloromethane	0.20	< 0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	< 0.20	U
71-43-2	Benzene	0.20	< 0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	< 0.20	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.20	< 0.20	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.20	< 0.20	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	< 0.20	U
108-88-3	Toluene	0.20	< 0.20	U
108-90-7	Chlorobenzene	0.20	< 0.20	U
100-41-4	Ethylbenzene	0.20	< 0.20	U
100-42-5	Styrene	0.20	< 0.20	U
75-69-4	Trichlorofluoromethane	0.20	< 0.20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.20	< 0.20	U
179601-23-1	m,p-Xylene	0.40	< 0.40	U
95-47-6	o-Xylene	0.20	< 0.20	U
95-50-1	1,2-Dichlorobenzene	0.20	< 0.20	U
541-73-1	1,3-Dichlorobenzene	0.20	< 0.20	U
106-46-7	1,4-Dichlorobenzene	0.20	< 0.20	U

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140326FL3-1**
 SAMPLE

Lab Sample ID: YE75H
LIMS ID: 14-5855
Matrix: Water
Date Analyzed: 04/03/14 14:37

QC Report No: YE75-Joint Base Lewis McChord
Project: Log RAM

CAS Number	Analyte	LOQ	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Iodomethane	1.0	< 1.0	U
74-96-4	Bromoethane	0.20	< 0.20	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.20	< 0.20	U
74-95-3	Dibromomethane	0.20	< 0.20	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	< 0.20	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	< 0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	< 0.50	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.20	< 0.20	U
95-63-6	1,2,4-Trimethylbenzene	0.20	< 0.20	U
87-68-3	Hexachlorobutadiene	0.50	< 0.50	U
106-93-4	1,2-Dibromoethane	0.20	< 0.20	U
74-97-5	Bromochloromethane	0.20	< 0.20	U
594-20-7	2,2-Dichloropropane	0.20	< 0.20	U
142-28-9	1,3-Dichloropropane	0.20	< 0.20	U
98-82-8	Isopropylbenzene	0.20	< 0.20	U
103-65-1	n-Propylbenzene	0.20	< 0.20	U
108-86-1	Bromobenzene	0.20	< 0.20	U
95-49-8	2-Chlorotoluene	0.20	< 0.20	U
106-43-4	4-Chlorotoluene	0.20	< 0.20	U
98-06-6	tert-Butylbenzene	0.20	< 0.20	U
135-98-8	sec-Butylbenzene	0.20	< 0.20	U
99-87-6	4-Isopropyltoluene	0.20	< 0.20	U
104-51-8	n-Butylbenzene	0.20	< 0.20	U
120-82-1	1,2,4-Trichlorobenzene	0.50	< 0.50	U
91-20-3	Naphthalene	0.50	< 0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	< 0.50	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	104%
d8-Toluene	100%
Bromofluorobenzene	99.3%
d4-1,2-Dichlorobenzene	102%

2-Chloroethylvinylether is an acid labile compound and may not be recovered from an acid preserved sample.

EPA SW-846 indicates that vinyl chloride and styrene may degrade in the presence of acid preservative.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140326LC03-1**
 SAMPLE

Lab Sample ID: YE75I
LIMS ID: 14-5856
Matrix: Water
Data Release Authorized:
Reported: 04/07/14

QC Report No: YE75-Joint Base Lewis McChord
Project: Log RAM

Date Sampled: 03/26/14
Date Received: 03/28/14

Instrument/Analyst: NT3/PKC
Date Analyzed: 04/03/14 15:06

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	LOQ	Result	Q
74-87-3	Chloromethane	0.50	< 0.50	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.20	< 0.20	U
75-00-3	Chloroethane	0.20	< 0.20	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	Acetone	5.0	< 5.0	U
75-15-0	Carbon Disulfide	0.20	< 0.20	U
75-35-4	1,1-Dichloroethene	0.20	< 0.20	U
75-34-3	1,1-Dichloroethane	0.20	< 0.20	U
156-60-5	trans-1,2-Dichloroethene	0.20	< 0.20	U
156-59-2	cis-1,2-Dichloroethene	0.20	< 0.20	U
67-66-3	Chloroform	0.20	< 0.20	U
107-06-2	1,2-Dichloroethane	0.20	< 0.20	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	0.20	< 0.20	U
56-23-5	Carbon Tetrachloride	0.20	< 0.20	U
108-05-4	Vinyl Acetate	0.20	< 0.20	U
75-27-4	Bromodichloromethane	0.20	< 0.20	U
78-87-5	1,2-Dichloropropane	0.20	< 0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	< 0.20	U
79-01-6	**Trichloroethene**	**0.20**	**0.49**	
124-48-1	Dibromochloromethane	0.20	< 0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	< 0.20	U
71-43-2	Benzene	0.20	< 0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	< 0.20	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.20	< 0.20	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.20	< 0.20	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	< 0.20	U
108-88-3	Toluene	0.20	< 0.20	U
108-90-7	Chlorobenzene	0.20	< 0.20	U
100-41-4	Ethylbenzene	0.20	< 0.20	U
100-42-5	Styrene	0.20	< 0.20	U
75-69-4	Trichlorofluoromethane	0.20	< 0.20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.20	< 0.20	U
179601-23-1	m,p-Xylene	0.40	< 0.40	U
95-47-6	o-Xylene	0.20	< 0.20	U
95-50-1	1,2-Dichlorobenzene	0.20	< 0.20	U
541-73-1	1,3-Dichlorobenzene	0.20	< 0.20	U
106-46-7	1,4-Dichlorobenzene	0.20	< 0.20	U

Lab Sample ID: YE75I
LIMS ID: 14-5856
Matrix: Water
Date Analyzed: 04/03/14 15:06

QC Report No: YE75-Joint Base Lewis McChord
Project: Log RAM

CAS Number	Analyte	LOQ	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Iodomethane	1.0	< 1.0	U
74-96-4	Bromoethane	0.20	< 0.20	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.20	< 0.20	U
74-95-3	Dibromomethane	0.20	< 0.20	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	< 0.20	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	< 0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	< 0.50	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.20	< 0.20	U
95-63-6	1,2,4-Trimethylbenzene	0.20	< 0.20	U
87-68-3	Hexachlorobutadiene	0.50	< 0.50	U
106-93-4	1,2-Dibromoethane	0.20	< 0.20	U
74-97-5	Bromochloromethane	0.20	< 0.20	U
594-20-7	2,2-Dichloropropane	0.20	< 0.20	U
142-28-9	1,3-Dichloropropane	0.20	< 0.20	U
98-82-8	Isopropylbenzene	0.20	< 0.20	U
103-65-1	n-Propylbenzene	0.20	< 0.20	U
108-86-1	Bromobenzene	0.20	< 0.20	U
95-49-8	2-Chlorotoluene	0.20	< 0.20	U
106-43-4	4-Chlorotoluene	0.20	< 0.20	U
98-06-6	tert-Butylbenzene	0.20	< 0.20	U
135-98-8	sec-Butylbenzene	0.20	< 0.20	U
99-87-6	4-Isopropyltoluene	0.20	< 0.20	U
104-51-8	n-Butylbenzene	0.20	< 0.20	U
120-82-1	1,2,4-Trichlorobenzene	0.50	< 0.50	U
91-20-3	Naphthalene	0.50	< 0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	< 0.50	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	104%
d8-Toluene	99.8%
Bromofluorobenzene	97.0%
d4-1,2-Dichlorobenzene	101%

2-Chloroethylvinylether is an acid labile compound and may not be recovered from an acid preserved sample.

EPA SW-846 indicates that vinyl chloride and styrene may degrade in the presence of acid preservative.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140326LC06-1**
 SAMPLE

Lab Sample ID: YE75J
LIMS ID: 14-5857
Matrix: Water
Data Release Authorized:
Reported: 04/07/14

QC Report No: YE75-Joint Base Lewis McChord
Project: Log RAM
Date Sampled: 03/26/14
Date Received: 03/28/14

Instrument/Analyst: NT3/PKC
Date Analyzed: 04/03/14 15:34

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	LOQ	Result	Q
74-87-3	Chloromethane	0.50	< 0.50	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.20	< 0.20	U
75-00-3	Chloroethane	0.20	< 0.20	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	Acetone	5.0	< 5.0	U
75-15-0	Carbon Disulfide	0.20	< 0.20	U
75-35-4	1,1-Dichloroethene	0.20	< 0.20	U
75-34-3	1,1-Dichloroethane	0.20	< 0.20	U
156-60-5	trans-1,2-Dichloroethene	0.20	< 0.20	U
156-59-2	**cis-1,2-Dichloroethene**	**0.20**	**0.40**	
67-66-3	Chloroform	0.20	< 0.20	U
107-06-2	1,2-Dichloroethane	0.20	< 0.20	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	0.20	< 0.20	U
56-23-5	Carbon Tetrachloride	0.20	< 0.20	U
108-05-4	Vinyl Acetate	0.20	< 0.20	U
75-27-4	Bromodichloromethane	0.20	< 0.20	U
78-87-5	1,2-Dichloropropane	0.20	< 0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	< 0.20	U
79-01-6	**Trichloroethene**	**0.20**	**26**	
124-48-1	Dibromochloromethane	0.20	< 0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	< 0.20	U
71-43-2	Benzene	0.20	< 0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	< 0.20	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.20	< 0.20	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.20	< 0.20	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	< 0.20	U
108-88-3	Toluene	0.20	< 0.20	U
108-90-7	Chlorobenzene	0.20	< 0.20	U
100-41-4	Ethylbenzene	0.20	< 0.20	U
100-42-5	Styrene	0.20	< 0.20	U
75-69-4	Trichlorofluoromethane	0.20	< 0.20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.20	< 0.20	U
179601-23-1	m,p-Xylene	0.40	< 0.40	U
95-47-6	o-Xylene	0.20	< 0.20	U
95-50-1	1,2-Dichlorobenzene	0.20	< 0.20	U
541-73-1	1,3-Dichlorobenzene	0.20	< 0.20	U
106-46-7	1,4-Dichlorobenzene	0.20	< 0.20	U

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140326LC06-1**
 SAMPLE

Lab Sample ID: YE75J
LIMS ID: 14-5857
Matrix: Water
Date Analyzed: 04/03/14 15:34

QC Report No: YE75-Joint Base Lewis McChord
Project: Log RAM

CAS Number	Analyte	LOQ	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Iodomethane	1.0	< 1.0	U
74-96-4	Bromoethane	0.20	< 0.20	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.20	< 0.20	U
74-95-3	Dibromomethane	0.20	< 0.20	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	< 0.20	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	< 0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	< 0.50	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.20	< 0.20	U
95-63-6	1,2,4-Trimethylbenzene	0.20	< 0.20	U
87-68-3	Hexachlorobutadiene	0.50	< 0.50	U
106-93-4	1,2-Dibromoethane	0.20	< 0.20	U
74-97-5	Bromochloromethane	0.20	< 0.20	U
594-20-7	2,2-Dichloropropane	0.20	< 0.20	U
142-28-9	1,3-Dichloropropane	0.20	< 0.20	U
98-82-8	Isopropylbenzene	0.20	< 0.20	U
103-65-1	n-Propylbenzene	0.20	< 0.20	U
108-86-1	Bromobenzene	0.20	< 0.20	U
95-49-8	2-Chlorotoluene	0.20	< 0.20	U
106-43-4	4-Chlorotoluene	0.20	< 0.20	U
98-06-6	tert-Butylbenzene	0.20	< 0.20	U
135-98-8	sec-Butylbenzene	0.20	< 0.20	U
99-87-6	4-Isopropyltoluene	0.20	< 0.20	U
104-51-8	n-Butylbenzene	0.20	< 0.20	U
120-82-1	1,2,4-Trichlorobenzene	0.50	< 0.50	U
91-20-3	Naphthalene	0.50	< 0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	< 0.50	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	101%
d8-Toluene	97.9%
Bromofluorobenzene	95.8%
d4-1,2-Dichlorobenzene	100%

2-Chloroethylvinylether is an acid labile compound and may not be recovered from an acid preserved sample.

EPA SW-846 indicates that vinyl chloride and styrene may degrade in the presence of acid preservative.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140326LC16-1**
 SAMPLE

Lab Sample ID: YE75K
LIMS ID: 14-5858
Matrix: Water
Data Release Authorized:
Reported: 04/07/14

QC Report No: YE75-Joint Base Lewis McChord
Project: Log RAM

Date Sampled: 03/26/14
Date Received: 03/28/14

Instrument/Analyst: NT3/PKC
Date Analyzed: 04/03/14 16:03

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	LOQ	Result	Q
74-87-3	Chloromethane	0.50	< 0.50	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.20	< 0.20	U
75-00-3	Chloroethane	0.20	< 0.20	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	**Acetone**	**5.0**	**6.4**	
75-15-0	Carbon Disulfide	0.20	< 0.20	U
75-35-4	1,1-Dichloroethene	0.20	< 0.20	U
75-34-3	1,1-Dichloroethane	0.20	< 0.20	U
156-60-5	trans-1,2-Dichloroethene	0.20	< 0.20	U
156-59-2	cis-1,2-Dichloroethene	0.20	< 0.20	U
67-66-3	Chloroform	0.20	< 0.20	U
107-06-2	1,2-Dichloroethane	0.20	< 0.20	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	0.20	< 0.20	U
56-23-5	Carbon Tetrachloride	0.20	< 0.20	U
108-05-4	Vinyl Acetate	0.20	< 0.20	U
75-27-4	Bromodichloromethane	0.20	< 0.20	U
78-87-5	1,2-Dichloropropane	0.20	< 0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	< 0.20	U
79-01-6	**Trichloroethene**	**0.20**	**5.6**	
124-48-1	Dibromochloromethane	0.20	< 0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	< 0.20	U
71-43-2	Benzene	0.20	< 0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	< 0.20	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.20	< 0.20	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.20	< 0.20	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	< 0.20	U
108-88-3	Toluene	0.20	< 0.20	U
108-90-7	Chlorobenzene	0.20	< 0.20	U
100-41-4	Ethylbenzene	0.20	< 0.20	U
100-42-5	Styrene	0.20	< 0.20	U
75-69-4	Trichlorofluoromethane	0.20	< 0.20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.20	< 0.20	U
179601-23-1	m,p-Xylene	0.40	< 0.40	U
95-47-6	o-Xylene	0.20	< 0.20	U
95-50-1	1,2-Dichlorobenzene	0.20	< 0.20	U
541-73-1	1,3-Dichlorobenzene	0.20	< 0.20	U
106-46-7	1,4-Dichlorobenzene	0.20	< 0.20	U

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140326LC16-1**
 SAMPLE

Lab Sample ID: YE75K
LIMS ID: 14-5858
Matrix: Water
Date Analyzed: 04/03/14 16:03

QC Report No: YE75-Joint Base Lewis McChord
Project: Log RAM

CAS Number	Analyte	LOQ	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Iodomethane	1.0	< 1.0	U
74-96-4	Bromoethane	0.20	< 0.20	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.20	< 0.20	U
74-95-3	Dibromomethane	0.20	< 0.20	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	< 0.20	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	< 0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	< 0.50	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.20	< 0.20	U
95-63-6	1,2,4-Trimethylbenzene	0.20	< 0.20	U
87-68-3	Hexachlorobutadiene	0.50	< 0.50	U
106-93-4	1,2-Dibromoethane	0.20	< 0.20	U
74-97-5	Bromochloromethane	0.20	< 0.20	U
594-20-7	2,2-Dichloropropane	0.20	< 0.20	U
142-28-9	1,3-Dichloropropane	0.20	< 0.20	U
98-82-8	Isopropylbenzene	0.20	< 0.20	U
103-65-1	n-Propylbenzene	0.20	< 0.20	U
108-86-1	Bromobenzene	0.20	< 0.20	U
95-49-8	2-Chlorotoluene	0.20	< 0.20	U
106-43-4	4-Chlorotoluene	0.20	< 0.20	U
98-06-6	tert-Butylbenzene	0.20	< 0.20	U
135-98-8	sec-Butylbenzene	0.20	< 0.20	U
99-87-6	4-Isopropyltoluene	0.20	< 0.20	U
104-51-8	n-Butylbenzene	0.20	< 0.20	U
120-82-1	1,2,4-Trichlorobenzene	0.50	< 0.50	U
91-20-3	Naphthalene	0.50	< 0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	< 0.50	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	103%
d8-Toluene	99.0%
Bromofluorobenzene	97.2%
d4-1,2-Dichlorobenzene	100%

2-Chloroethylvinylether is an acid labile compound and may not be recovered from an acid preserved sample.

EPA SW-846 indicates that vinyl chloride and styrene may degrade in the presence of acid preservative.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140326LC24-1**
Page 1 of 2 **SAMPLE**

Lab Sample ID: YE75L
LIMS ID: 14-5859
Matrix: Water
Data Release Authorized:
Reported: 04/07/14

QC Report No: YE75-Joint Base Lewis McChord
Project: Log RAM

Date Sampled: 03/26/14
Date Received: 03/28/14

Instrument/Analyst: NT3/PKC
Date Analyzed: 04/03/14 16:31

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	LOQ	Result	Q
74-87-3	Chloromethane	0.50	< 0.50	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.20	< 0.20	U
75-00-3	Chloroethane	0.20	< 0.20	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	Acetone	5.0	< 5.0	U
75-15-0	Carbon Disulfide	0.20	< 0.20	U
75-35-4	1,1-Dichloroethene	0.20	< 0.20	U
75-34-3	1,1-Dichloroethane	0.20	< 0.20	U
156-60-5	trans-1,2-Dichloroethene	0.20	< 0.20	U
156-59-2	cis-1,2-Dichloroethene	0.20	< 0.20	U
67-66-3	Chloroform	0.20	< 0.20	U
107-06-2	1,2-Dichloroethane	0.20	< 0.20	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	0.20	< 0.20	U
56-23-5	Carbon Tetrachloride	0.20	< 0.20	U
108-05-4	Vinyl Acetate	0.20	< 0.20	U
75-27-4	Bromodichloromethane	0.20	< 0.20	U
78-87-5	1,2-Dichloropropane	0.20	< 0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	< 0.20	U
79-01-6	**Trichloroethene**	**0.20**	**1.1**	
124-48-1	Dibromochloromethane	0.20	< 0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	< 0.20	U
71-43-2	Benzene	0.20	< 0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	< 0.20	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.20	< 0.20	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.20	< 0.20	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	< 0.20	U
108-88-3	Toluene	0.20	< 0.20	U
108-90-7	Chlorobenzene	0.20	< 0.20	U
100-41-4	Ethylbenzene	0.20	< 0.20	U
100-42-5	Styrene	0.20	< 0.20	U
75-69-4	Trichlorofluoromethane	0.20	< 0.20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.20	< 0.20	U
179601-23-1	m,p-Xylene	0.40	< 0.40	U
95-47-6	o-Xylene	0.20	< 0.20	U
95-50-1	1,2-Dichlorobenzene	0.20	< 0.20	U
541-73-1	1,3-Dichlorobenzene	0.20	< 0.20	U
106-46-7	1,4-Dichlorobenzene	0.20	< 0.20	U

Lab Sample ID: YE75L
LIMS ID: 14-5859
Matrix: Water
Date Analyzed: 04/03/14 16:31

QC Report No: YE75-Joint Base Lewis McChord
Project: Log RAM

CAS Number	Analyte	LOQ	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Iodomethane	1.0	< 1.0	U
74-96-4	Bromoethane	0.20	< 0.20	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.20	< 0.20	U
74-95-3	Dibromomethane	0.20	< 0.20	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	< 0.20	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	< 0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	< 0.50	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.20	< 0.20	U
95-63-6	1,2,4-Trimethylbenzene	0.20	< 0.20	U
87-68-3	Hexachlorobutadiene	0.50	< 0.50	U
106-93-4	1,2-Dibromoethane	0.20	< 0.20	U
74-97-5	Bromochloromethane	0.20	< 0.20	U
594-20-7	2,2-Dichloropropane	0.20	< 0.20	U
142-28-9	1,3-Dichloropropane	0.20	< 0.20	U
98-82-8	Isopropylbenzene	0.20	< 0.20	U
103-65-1	n-Propylbenzene	0.20	< 0.20	U
108-86-1	Bromobenzene	0.20	< 0.20	U
95-49-8	2-Chlorotoluene	0.20	< 0.20	U
106-43-4	4-Chlorotoluene	0.20	< 0.20	U
98-06-6	tert-Butylbenzene	0.20	< 0.20	U
135-98-8	sec-Butylbenzene	0.20	< 0.20	U
99-87-6	4-Isopropyltoluene	0.20	< 0.20	U
104-51-8	n-Butylbenzene	0.20	< 0.20	U
120-82-1	1,2,4-Trichlorobenzene	0.50	< 0.50	U
91-20-3	Naphthalene	0.50	< 0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	< 0.50	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	104%
d8-Toluene	101%
Bromofluorobenzene	98.8%
d4-1,2-Dichlorobenzene	103%

2-Chloroethylvinylether is an acid labile compound and may not be recovered from an acid preserved sample.

EPA SW-846 indicates that vinyl chloride and styrene may degrade in the presence of acid preservative.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140326LC26-1**
Page 1 of 2 **SAMPLE**

Lab Sample ID: YE75M
LIMS ID: 14-5860
Matrix: Water
Data Release Authorized:
Reported: 04/07/14

QC Report No: YE75-Joint Base Lewis McChord
Project: Log RAM

Date Sampled: 03/26/14
Date Received: 03/28/14

Instrument/Analyst: NT3/PKC
Date Analyzed: 04/03/14 17:00

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	LOQ	Result	Q
74-87-3	Chloromethane	0.50	< 0.50	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.20	< 0.20	U
75-00-3	Chloroethane	0.20	< 0.20	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	**Acetone**	**5.0**	**7.5**	
75-15-0	Carbon Disulfide	0.20	< 0.20	U
75-35-4	1,1-Dichloroethene	0.20	< 0.20	U
75-34-3	1,1-Dichloroethane	0.20	< 0.20	U
156-60-5	trans-1,2-Dichloroethene	0.20	< 0.20	U
156-59-2	cis-1,2-Dichloroethene	0.20	< 0.20	U
67-66-3	Chloroform	0.20	< 0.20	U
107-06-2	1,2-Dichloroethane	0.20	< 0.20	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	0.20	< 0.20	U
56-23-5	Carbon Tetrachloride	0.20	< 0.20	U
108-05-4	Vinyl Acetate	0.20	< 0.20	U
75-27-4	Bromodichloromethane	0.20	< 0.20	U
78-87-5	**1,2-Dichloropropane**	**0.20**	**5.7**	
10061-01-5	cis-1,3-Dichloropropene	0.20	< 0.20	U
79-01-6	Trichloroethene	0.20	< 0.20	U
124-48-1	Dibromochloromethane	0.20	< 0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	< 0.20	U
71-43-2	Benzene	0.20	< 0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	< 0.20	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.20	< 0.20	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.20	< 0.20	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	< 0.20	U
108-88-3	Toluene	0.20	< 0.20	U
108-90-7	Chlorobenzene	0.20	< 0.20	U
100-41-4	Ethylbenzene	0.20	< 0.20	U
100-42-5	Styrene	0.20	< 0.20	U
75-69-4	Trichlorofluoromethane	0.20	< 0.20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.20	< 0.20	U
179601-23-1	m,p-Xylene	0.40	< 0.40	U
95-47-6	o-Xylene	0.20	< 0.20	U
95-50-1	1,2-Dichlorobenzene	0.20	< 0.20	U
541-73-1	1,3-Dichlorobenzene	0.20	< 0.20	U
106-46-7	1,4-Dichlorobenzene	0.20	< 0.20	U

Lab Sample ID: YE75M
LIMS ID: 14-5860
Matrix: Water
Date Analyzed: 04/03/14 17:00

QC Report No: YE75-Joint Base Lewis McChord
Project: Log RAM

CAS Number	Analyte	LOQ	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Iodomethane	1.0	< 1.0	U
74-96-4	Bromoethane	0.20	< 0.20	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.20	< 0.20	U
74-95-3	Dibromomethane	0.20	< 0.20	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	< 0.20	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	< 0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	< 0.50	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.20	< 0.20	U
95-63-6	1,2,4-Trimethylbenzene	0.20	< 0.20	U
87-68-3	Hexachlorobutadiene	0.50	< 0.50	U
106-93-4	1,2-Dibromoethane	0.20	< 0.20	U
74-97-5	Bromochloromethane	0.20	< 0.20	U
594-20-7	2,2-Dichloropropane	0.20	< 0.20	U
142-28-9	1,3-Dichloropropane	0.20	< 0.20	U
98-82-8	Isopropylbenzene	0.20	< 0.20	U
103-65-1	n-Propylbenzene	0.20	< 0.20	U
108-86-1	Bromobenzene	0.20	< 0.20	U
95-49-8	2-Chlorotoluene	0.20	< 0.20	U
106-43-4	4-Chlorotoluene	0.20	< 0.20	U
98-06-6	tert-Butylbenzene	0.20	< 0.20	U
135-98-8	sec-Butylbenzene	0.20	< 0.20	U
99-87-6	4-Isopropyltoluene	0.20	< 0.20	U
104-51-8	n-Butylbenzene	0.20	< 0.20	U
120-82-1	1,2,4-Trichlorobenzene	0.50	< 0.50	U
91-20-3	Naphthalene	0.50	< 0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	< 0.50	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	103%
d8-Toluene	99.0%
Bromofluorobenzene	96.8%
d4-1,2-Dichlorobenzene	99.6%

2-Chloroethylvinylether is an acid labile compound and may not be recovered from an acid preserved sample.

EPA SW-846 indicates that vinyl chloride and styrene may degrade in the presence of acid preservative.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140326LC66B-1**
 SAMPLE

Lab Sample ID: YE75N
LIMS ID: 14-5861
Matrix: Water
Data Release Authorized:
Reported: 04/07/14

QC Report No: YE75-Joint Base Lewis McChord
Project: Log RAM

Date Sampled: 03/26/14
Date Received: 03/28/14

Instrument/Analyst: NT3/PKC
Date Analyzed: 04/03/14 17:28

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	LOQ	Result	Q
74-87-3	Chloromethane	0.50	< 0.50	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.20	< 0.20	U
75-00-3	Chloroethane	0.20	< 0.20	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	**Acetone**	**5.0**	**7.2**	
75-15-0	Carbon Disulfide	0.20	< 0.20	U
75-35-4	1,1-Dichloroethene	0.20	< 0.20	U
75-34-3	1,1-Dichloroethane	0.20	< 0.20	U
156-60-5	trans-1,2-Dichloroethene	0.20	< 0.20	U
156-59-2	**cis-1,2-Dichloroethene**	**0.20**	**0.86**	
67-66-3	**Chloroform**	**0.20**	**0.35**	
107-06-2	1,2-Dichloroethane	0.20	< 0.20	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	0.20	< 0.20	U
56-23-5	Carbon Tetrachloride	0.20	< 0.20	U
108-05-4	Vinyl Acetate	0.20	< 0.20	U
75-27-4	Bromodichloromethane	0.20	< 0.20	U
78-87-5	1,2-Dichloropropane	0.20	< 0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	< 0.20	U
79-01-6	**Trichloroethene**	**0.20**	**67**	
124-48-1	Dibromochloromethane	0.20	< 0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	< 0.20	U
71-43-2	Benzene	0.20	< 0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	< 0.20	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.20	< 0.20	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	**Tetrachloroethene**	**0.20**	**0.23**	
79-34-5	1,1,2,2-Tetrachloroethane	0.20	< 0.20	U
108-88-3	Toluene	0.20	< 0.20	U
108-90-7	Chlorobenzene	0.20	< 0.20	U
100-41-4	Ethylbenzene	0.20	< 0.20	U
100-42-5	Styrene	0.20	< 0.20	U
75-69-4	Trichlorofluoromethane	0.20	< 0.20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.20	< 0.20	U
179601-23-1	m,p-Xylene	0.40	< 0.40	U
95-47-6	o-Xylene	0.20	< 0.20	U
95-50-1	1,2-Dichlorobenzene	0.20	< 0.20	U
541-73-1	1,3-Dichlorobenzene	0.20	< 0.20	U
106-46-7	1,4-Dichlorobenzene	0.20	< 0.20	U

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140326LC66B-1**
 SAMPLE

Lab Sample ID: YE75N
LIMS ID: 14-5861
Matrix: Water
Date Analyzed: 04/03/14 17:28

QC Report No: YE75-Joint Base Lewis McChord
Project: Log RAM

CAS Number	Analyte	LOQ	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Iodomethane	1.0	< 1.0	U
74-96-4	Bromoethane	0.20	< 0.20	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.20	< 0.20	U
74-95-3	Dibromomethane	0.20	< 0.20	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	< 0.20	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	< 0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	< 0.50	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.20	< 0.20	U
95-63-6	1,2,4-Trimethylbenzene	0.20	< 0.20	U
87-68-3	Hexachlorobutadiene	0.50	< 0.50	U
106-93-4	1,2-Dibromoethane	0.20	< 0.20	U
74-97-5	Bromochloromethane	0.20	< 0.20	U
594-20-7	2,2-Dichloropropane	0.20	< 0.20	U
142-28-9	1,3-Dichloropropane	0.20	< 0.20	U
98-82-8	Isopropylbenzene	0.20	< 0.20	U
103-65-1	n-Propylbenzene	0.20	< 0.20	U
108-86-1	Bromobenzene	0.20	< 0.20	U
95-49-8	2-Chlorotoluene	0.20	< 0.20	U
106-43-4	4-Chlorotoluene	0.20	< 0.20	U
98-06-6	tert-Butylbenzene	0.20	< 0.20	U
135-98-8	sec-Butylbenzene	0.20	< 0.20	U
99-87-6	4-Isopropyltoluene	0.20	< 0.20	U
104-51-8	n-Butylbenzene	0.20	< 0.20	U
120-82-1	1,2,4-Trichlorobenzene	0.50	< 0.50	U
91-20-3	Naphthalene	0.50	< 0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	< 0.50	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	101%
d8-Toluene	100%
Bromofluorobenzene	97.3%
d4-1,2-Dichlorobenzene	103%

2-Chloroethylvinylether is an acid labile compound and may not be recovered from an acid preserved sample.

EPA SW-846 indicates that vinyl chloride and styrene may degrade in the presence of acid preservative.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140326LC66D-1**
Page 1 of 2 **SAMPLE**

Lab Sample ID: YE75O
LIMS ID: 14-5862
Matrix: Water
Data Release Authorized:
Reported: 04/07/14

QC Report No: YE75-Joint Base Lewis McChord
Project: Log RAM

Date Sampled: 03/26/14
Date Received: 03/28/14

Instrument/Analyst: NT3/PKC
Date Analyzed: 04/03/14 17:57

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	LOQ	Result	Q
74-87-3	Chloromethane	0.50	< 0.50	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.20	< 0.20	U
75-00-3	Chloroethane	0.20	< 0.20	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	**Acetone**	**5.0**	**7.2**	
75-15-0	Carbon Disulfide	0.20	< 0.20	U
75-35-4	1,1-Dichloroethene	0.20	< 0.20	U
75-34-3	1,1-Dichloroethane	0.20	< 0.20	U
156-60-5	trans-1,2-Dichloroethene	0.20	< 0.20	U
156-59-2	cis-1,2-Dichloroethene	0.20	< 0.20	U
67-66-3	Chloroform	0.20	< 0.20	U
107-06-2	1,2-Dichloroethane	0.20	< 0.20	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	0.20	< 0.20	U
56-23-5	Carbon Tetrachloride	0.20	< 0.20	U
108-05-4	Vinyl Acetate	0.20	< 0.20	U
75-27-4	Bromodichloromethane	0.20	< 0.20	U
78-87-5	1,2-Dichloropropane	0.20	< 0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	< 0.20	U
79-01-6	Trichloroethene	0.20	< 0.20	U
124-48-1	Dibromochloromethane	0.20	< 0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	< 0.20	U
71-43-2	Benzene	0.20	< 0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	< 0.20	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.20	< 0.20	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.20	< 0.20	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	< 0.20	U
108-88-3	Toluene	0.20	< 0.20	U
108-90-7	Chlorobenzene	0.20	< 0.20	U
100-41-4	Ethylbenzene	0.20	< 0.20	U
100-42-5	Styrene	0.20	< 0.20	U
75-69-4	Trichlorofluoromethane	0.20	< 0.20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.20	< 0.20	U
179601-23-1	m,p-Xylene	0.40	< 0.40	U
95-47-6	o-Xylene	0.20	< 0.20	U
95-50-1	1,2-Dichlorobenzene	0.20	< 0.20	U
541-73-1	1,3-Dichlorobenzene	0.20	< 0.20	U
106-46-7	1,4-Dichlorobenzene	0.20	< 0.20	U

Lab Sample ID: YE75O
LIMS ID: 14-5862
Matrix: Water
Date Analyzed: 04/03/14 17:57

QC Report No: YE75-Joint Base Lewis McChord
Project: Log RAM

CAS Number	Analyte	LOQ	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Iodomethane	1.0	< 1.0	U
74-96-4	Bromoethane	0.20	< 0.20	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.20	< 0.20	U
74-95-3	Dibromomethane	0.20	< 0.20	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	< 0.20	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	< 0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	< 0.50	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.20	< 0.20	U
95-63-6	1,2,4-Trimethylbenzene	0.20	< 0.20	U
87-68-3	Hexachlorobutadiene	0.50	< 0.50	U
106-93-4	1,2-Dibromoethane	0.20	< 0.20	U
74-97-5	Bromochloromethane	0.20	< 0.20	U
594-20-7	2,2-Dichloropropane	0.20	< 0.20	U
142-28-9	1,3-Dichloropropane	0.20	< 0.20	U
98-82-8	Isopropylbenzene	0.20	< 0.20	U
103-65-1	n-Propylbenzene	0.20	< 0.20	U
108-86-1	Bromobenzene	0.20	< 0.20	U
95-49-8	2-Chlorotoluene	0.20	< 0.20	U
106-43-4	4-Chlorotoluene	0.20	< 0.20	U
98-06-6	tert-Butylbenzene	0.20	< 0.20	U
135-98-8	sec-Butylbenzene	0.20	< 0.20	U
99-87-6	4-Isopropyltoluene	0.20	< 0.20	U
104-51-8	n-Butylbenzene	0.20	< 0.20	U
120-82-1	1,2,4-Trichlorobenzene	0.50	< 0.50	U
91-20-3	Naphthalene	0.50	< 0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	< 0.50	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	100%
d8-Toluene	100%
Bromofluorobenzene	98.1%
d4-1,2-Dichlorobenzene	102%

2-Chloroethylvinylether is an acid labile compound and may not be recovered from an acid preserved sample.

EPA SW-846 indicates that vinyl chloride and styrene may degrade in the presence of acid preservative.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140326LC67D-1**
 SAMPLE

Lab Sample ID: YE75P
LIMS ID: 14-5863
Matrix: Water
Data Release Authorized:
Reported: 04/07/14

QC Report No: YE75-Joint Base Lewis McChord
Project: Log RAM

Date Sampled: 03/26/14
Date Received: 03/28/14

Instrument/Analyst: NT3/PKC
Date Analyzed: 04/03/14 18:25

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	LOQ	Result	Q
74-87-3	Chloromethane	0.50	< 0.50	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.20	< 0.20	U
75-00-3	Chloroethane	0.20	< 0.20	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	**Acetone**	**5.0**	**15**	
75-15-0	Carbon Disulfide	0.20	< 0.20	U
75-35-4	1,1-Dichloroethene	0.20	< 0.20	U
75-34-3	1,1-Dichloroethane	0.20	< 0.20	U
156-60-5	trans-1,2-Dichloroethene	0.20	< 0.20	U
156-59-2	**cis-1,2-Dichloroethene**	**0.20**	**4.2**	
67-66-3	**Chloroform**	**0.20**	**0.24**	
107-06-2	1,2-Dichloroethane	0.20	< 0.20	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	0.20	< 0.20	U
56-23-5	Carbon Tetrachloride	0.20	< 0.20	U
108-05-4	Vinyl Acetate	0.20	< 0.20	U
75-27-4	Bromodichloromethane	0.20	< 0.20	U
78-87-5	1,2-Dichloropropane	0.20	< 0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	< 0.20	U
79-01-6	**Trichloroethene**	**0.20**	**49**	
124-48-1	Dibromochloromethane	0.20	< 0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	< 0.20	U
71-43-2	Benzene	0.20	< 0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	< 0.20	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.20	< 0.20	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.20	< 0.20	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	< 0.20	U
108-88-3	Toluene	0.20	< 0.20	U
108-90-7	Chlorobenzene	0.20	< 0.20	U
100-41-4	Ethylbenzene	0.20	< 0.20	U
100-42-5	Styrene	0.20	< 0.20	U
75-69-4	Trichlorofluoromethane	0.20	< 0.20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.20	< 0.20	U
179601-23-1	m,p-Xylene	0.40	< 0.40	U
95-47-6	o-Xylene	0.20	< 0.20	U
95-50-1	1,2-Dichlorobenzene	0.20	< 0.20	U
541-73-1	1,3-Dichlorobenzene	0.20	< 0.20	U
106-46-7	1,4-Dichlorobenzene	0.20	< 0.20	U

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140326LC67D-1**
 SAMPLE

Lab Sample ID: YE75P
LIMS ID: 14-5863
Matrix: Water
Date Analyzed: 04/03/14 18:25

QC Report No: YE75-Joint Base Lewis McChord
Project: Log RAM

CAS Number	Analyte	LOQ	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Iodomethane	1.0	< 1.0	U
74-96-4	Bromoethane	0.20	< 0.20	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.20	< 0.20	U
74-95-3	Dibromomethane	0.20	< 0.20	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	< 0.20	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	< 0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	< 0.50	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.20	< 0.20	U
95-63-6	1,2,4-Trimethylbenzene	0.20	< 0.20	U
87-68-3	Hexachlorobutadiene	0.50	< 0.50	U
106-93-4	1,2-Dibromoethane	0.20	< 0.20	U
74-97-5	Bromochloromethane	0.20	< 0.20	U
594-20-7	2,2-Dichloropropane	0.20	< 0.20	U
142-28-9	1,3-Dichloropropane	0.20	< 0.20	U
98-82-8	Isopropylbenzene	0.20	< 0.20	U
103-65-1	n-Propylbenzene	0.20	< 0.20	U
108-86-1	Bromobenzene	0.20	< 0.20	U
95-49-8	2-Chlorotoluene	0.20	< 0.20	U
106-43-4	4-Chlorotoluene	0.20	< 0.20	U
98-06-6	tert-Butylbenzene	0.20	< 0.20	U
135-98-8	sec-Butylbenzene	0.20	< 0.20	U
99-87-6	4-Isopropyltoluene	0.20	< 0.20	U
104-51-8	n-Butylbenzene	0.20	< 0.20	U
120-82-1	1,2,4-Trichlorobenzene	0.50	< 0.50	U
91-20-3	Naphthalene	0.50	< 0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	< 0.50	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	104%
d8-Toluene	101%
Bromofluorobenzene	98.7%
d4-1,2-Dichlorobenzene	99.5%

2-Chloroethylvinylether is an acid labile compound and may not be recovered from an acid preserved sample.

EPA SW-846 indicates that vinyl chloride and styrene may degrade in the presence of acid preservative.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140326LC72D-1**
 SAMPLE

Lab Sample ID: YE75Q
LIMS ID: 14-5864
Matrix: Water
Data Release Authorized:
Reported: 04/07/14

QC Report No: YE75-Joint Base Lewis McChord
Project: Log RAM

Date Sampled: 03/26/14
Date Received: 03/28/14

Instrument/Analyst: NT3/PKC
Date Analyzed: 04/03/14 18:54

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	LOQ	Result	Q
74-87-3	Chloromethane	0.50	< 0.50	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.20	< 0.20	U
75-00-3	Chloroethane	0.20	< 0.20	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	**Acetone**	**5.0**	**9.2**	
75-15-0	Carbon Disulfide	0.20	< 0.20	U
75-35-4	1,1-Dichloroethene	0.20	< 0.20	U
75-34-3	1,1-Dichloroethane	0.20	< 0.20	U
156-60-5	trans-1,2-Dichloroethene	0.20	< 0.20	U
156-59-2	**cis-1,2-Dichloroethene**	**0.20**	**0.62**	
67-66-3	Chloroform	0.20	< 0.20	U
107-06-2	1,2-Dichloroethane	0.20	< 0.20	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	0.20	< 0.20	U
56-23-5	Carbon Tetrachloride	0.20	< 0.20	U
108-05-4	Vinyl Acetate	0.20	< 0.20	U
75-27-4	Bromodichloromethane	0.20	< 0.20	U
78-87-5	1,2-Dichloropropane	0.20	< 0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	< 0.20	U
79-01-6	**Trichloroethene**	**0.20**	**21**	
124-48-1	Dibromochloromethane	0.20	< 0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	< 0.20	U
71-43-2	Benzene	0.20	< 0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	< 0.20	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.20	< 0.20	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.20	< 0.20	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	< 0.20	U
108-88-3	Toluene	0.20	< 0.20	U
108-90-7	Chlorobenzene	0.20	< 0.20	U
100-41-4	Ethylbenzene	0.20	< 0.20	U
100-42-5	Styrene	0.20	< 0.20	U
75-69-4	Trichlorofluoromethane	0.20	< 0.20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.20	< 0.20	U
179601-23-1	m,p-Xylene	0.40	< 0.40	U
95-47-6	o-Xylene	0.20	< 0.20	U
95-50-1	1,2-Dichlorobenzene	0.20	< 0.20	U
541-73-1	1,3-Dichlorobenzene	0.20	< 0.20	U
106-46-7	1,4-Dichlorobenzene	0.20	< 0.20	U

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140326LC72D-1**
 SAMPLE

Lab Sample ID: YE75Q
LIMS ID: 14-5864
Matrix: Water
Date Analyzed: 04/03/14 18:54

QC Report No: YE75-Joint Base Lewis McChord
Project: Log RAM

CAS Number	Analyte	LOQ	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Iodomethane	1.0	< 1.0	U
74-96-4	Bromoethane	0.20	< 0.20	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.20	< 0.20	U
74-95-3	Dibromomethane	0.20	< 0.20	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	< 0.20	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	< 0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	< 0.50	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.20	< 0.20	U
95-63-6	1,2,4-Trimethylbenzene	0.20	< 0.20	U
87-68-3	Hexachlorobutadiene	0.50	< 0.50	U
106-93-4	1,2-Dibromoethane	0.20	< 0.20	U
74-97-5	Bromochloromethane	0.20	< 0.20	U
594-20-7	2,2-Dichloropropane	0.20	< 0.20	U
142-28-9	1,3-Dichloropropane	0.20	< 0.20	U
98-82-8	Isopropylbenzene	0.20	< 0.20	U
103-65-1	n-Propylbenzene	0.20	< 0.20	U
108-86-1	Bromobenzene	0.20	< 0.20	U
95-49-8	2-Chlorotoluene	0.20	< 0.20	U
106-43-4	4-Chlorotoluene	0.20	< 0.20	U
98-06-6	tert-Butylbenzene	0.20	< 0.20	U
135-98-8	sec-Butylbenzene	0.20	< 0.20	U
99-87-6	4-Isopropyltoluene	0.20	< 0.20	U
104-51-8	n-Butylbenzene	0.20	< 0.20	U
120-82-1	1,2,4-Trichlorobenzene	0.50	< 0.50	U
91-20-3	Naphthalene	0.50	< 0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	< 0.50	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	102%
d8-Toluene	98.5%
Bromofluorobenzene	98.9%
d4-1,2-Dichlorobenzene	99.8%

2-Chloroethylvinylether is an acid labile compound and may not be recovered from an acid preserved sample.

EPA SW-846 indicates that vinyl chloride and styrene may degrade in the presence of acid preservative.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140326LC75D-1**
 SAMPLE

Lab Sample ID: YE75R
LIMS ID: 14-5865
Matrix: Water
Data Release Authorized:
Reported: 04/07/14

QC Report No: YE75-Joint Base Lewis McChord
Project: Log RAM

Date Sampled: 03/26/14
Date Received: 03/28/14

Instrument/Analyst: NT3/PKC
Date Analyzed: 04/03/14 19:22

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	LOQ	Result	Q
74-87-3	Chloromethane	0.50	< 0.50	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.20	< 0.20	U
75-00-3	Chloroethane	0.20	< 0.20	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	**Acetone**	**5.0**	**14**	
75-15-0	Carbon Disulfide	0.20	< 0.20	U
75-35-4	1,1-Dichloroethene	0.20	< 0.20	U
75-34-3	1,1-Dichloroethane	0.20	< 0.20	U
156-60-5	trans-1,2-Dichloroethene	0.20	< 0.20	U
156-59-2	cis-1,2-Dichloroethene	0.20	< 0.20	U
67-66-3	Chloroform	0.20	< 0.20	U
107-06-2	1,2-Dichloroethane	0.20	< 0.20	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	0.20	< 0.20	U
56-23-5	**Carbon Tetrachloride**	**0.20**	**0.24**	
108-05-4	Vinyl Acetate	0.20	< 0.20	U
75-27-4	Bromodichloromethane	0.20	< 0.20	U
78-87-5	1,2-Dichloropropane	0.20	< 0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	< 0.20	U
79-01-6	**Trichloroethene**	**0.20**	**0.57**	
124-48-1	Dibromochloromethane	0.20	< 0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	< 0.20	U
71-43-2	Benzene	0.20	< 0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	< 0.20	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.20	< 0.20	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.20	< 0.20	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	< 0.20	U
108-88-3	Toluene	0.20	< 0.20	U
108-90-7	Chlorobenzene	0.20	< 0.20	U
100-41-4	Ethylbenzene	0.20	< 0.20	U
100-42-5	Styrene	0.20	< 0.20	U
75-69-4	Trichlorofluoromethane	0.20	< 0.20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.20	< 0.20	U
179601-23-1	m,p-Xylene	0.40	< 0.40	U
95-47-6	o-Xylene	0.20	< 0.20	U
95-50-1	1,2-Dichlorobenzene	0.20	< 0.20	U
541-73-1	1,3-Dichlorobenzene	0.20	< 0.20	U
106-46-7	1,4-Dichlorobenzene	0.20	< 0.20	U

Lab Sample ID: YE75R
LIMS ID: 14-5865
Matrix: Water
Date Analyzed: 04/03/14 19:22

QC Report No: YE75-Joint Base Lewis McChord
Project: Log RAM

CAS Number	Analyte	LOQ	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Iodomethane	1.0	< 1.0	U
74-96-4	Bromoethane	0.20	< 0.20	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.20	< 0.20	U
74-95-3	Dibromomethane	0.20	< 0.20	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	< 0.20	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	< 0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	< 0.50	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.20	< 0.20	U
95-63-6	1,2,4-Trimethylbenzene	0.20	< 0.20	U
87-68-3	Hexachlorobutadiene	0.50	< 0.50	U
106-93-4	1,2-Dibromoethane	0.20	< 0.20	U
74-97-5	Bromochloromethane	0.20	< 0.20	U
594-20-7	2,2-Dichloropropane	0.20	< 0.20	U
142-28-9	1,3-Dichloropropane	0.20	< 0.20	U
98-82-8	Isopropylbenzene	0.20	< 0.20	U
103-65-1	n-Propylbenzene	0.20	< 0.20	U
108-86-1	Bromobenzene	0.20	< 0.20	U
95-49-8	2-Chlorotoluene	0.20	< 0.20	U
106-43-4	4-Chlorotoluene	0.20	< 0.20	U
98-06-6	tert-Butylbenzene	0.20	< 0.20	U
135-98-8	sec-Butylbenzene	0.20	< 0.20	U
99-87-6	4-Isopropyltoluene	0.20	< 0.20	U
104-51-8	n-Butylbenzene	0.20	< 0.20	U
120-82-1	1,2,4-Trichlorobenzene	0.50	< 0.50	U
91-20-3	Naphthalene	0.50	< 0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	< 0.50	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	104%
d8-Toluene	101%
Bromofluorobenzene	97.2%
d4-1,2-Dichlorobenzene	100%

2-Chloroethylvinylether is an acid labile compound and may not be recovered from an acid preserved sample.

EPA SW-846 indicates that vinyl chloride and styrene may degrade in the presence of acid preservative.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140326LC84D1-1**
Page 1 of 2 **SAMPLE**

Lab Sample ID: YE75S
LIMS ID: 14-5866
Matrix: Water
Data Release Authorized:
Reported: 04/07/14

QC Report No: YE75-Joint Base Lewis McChord
Project: Log RAM

Date Sampled: 03/26/14
Date Received: 03/28/14

Instrument/Analyst: NT3/PKC
Date Analyzed: 04/03/14 19:50

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	LOQ	Result	Q
74-87-3	Chloromethane	0.50	< 0.50	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.20	< 0.20	U
75-00-3	Chloroethane	0.20	< 0.20	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	**Acetone**	**5.0**	**5.6**	
75-15-0	Carbon Disulfide	0.20	< 0.20	U
75-35-4	1,1-Dichloroethene	0.20	< 0.20	U
75-34-3	1,1-Dichloroethane	0.20	< 0.20	U
156-60-5	trans-1,2-Dichloroethene	0.20	< 0.20	U
156-59-2	cis-1,2-Dichloroethene	0.20	< 0.20	U
67-66-3	Chloroform	0.20	< 0.20	U
107-06-2	1,2-Dichloroethane	0.20	< 0.20	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	0.20	< 0.20	U
56-23-5	Carbon Tetrachloride	0.20	< 0.20	U
108-05-4	Vinyl Acetate	0.20	< 0.20	U
75-27-4	Bromodichloromethane	0.20	< 0.20	U
78-87-5	1,2-Dichloropropane	0.20	< 0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	< 0.20	U
79-01-6	**Trichloroethene**	**0.20**	**2.4**	
124-48-1	Dibromochloromethane	0.20	< 0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	< 0.20	U
71-43-2	Benzene	0.20	< 0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	< 0.20	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.20	< 0.20	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.20	< 0.20	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	< 0.20	U
108-88-3	Toluene	0.20	< 0.20	U
108-90-7	Chlorobenzene	0.20	< 0.20	U
100-41-4	Ethylbenzene	0.20	< 0.20	U
100-42-5	Styrene	0.20	< 0.20	U
75-69-4	Trichlorofluoromethane	0.20	< 0.20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.20	< 0.20	U
179601-23-1	m,p-Xylene	0.40	< 0.40	U
95-47-6	o-Xylene	0.20	< 0.20	U
95-50-1	1,2-Dichlorobenzene	0.20	< 0.20	U
541-73-1	1,3-Dichlorobenzene	0.20	< 0.20	U
106-46-7	1,4-Dichlorobenzene	0.20	< 0.20	U

Lab Sample ID: YE75S
LIMS ID: 14-5866
Matrix: Water
Date Analyzed: 04/03/14 19:50

QC Report No: YE75-Joint Base Lewis McChord
Project: Log RAM

CAS Number	Analyte	LOQ	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Iodomethane	1.0	< 1.0	U
74-96-4	Bromoethane	0.20	< 0.20	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.20	< 0.20	U
74-95-3	Dibromomethane	0.20	< 0.20	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	< 0.20	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	< 0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	< 0.50	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.20	< 0.20	U
95-63-6	1,2,4-Trimethylbenzene	0.20	< 0.20	U
87-68-3	Hexachlorobutadiene	0.50	< 0.50	U
106-93-4	1,2-Dibromoethane	0.20	< 0.20	U
74-97-5	Bromochloromethane	0.20	< 0.20	U
594-20-7	2,2-Dichloropropane	0.20	< 0.20	U
142-28-9	1,3-Dichloropropane	0.20	< 0.20	U
98-82-8	Isopropylbenzene	0.20	< 0.20	U
103-65-1	n-Propylbenzene	0.20	< 0.20	U
108-86-1	Bromobenzene	0.20	< 0.20	U
95-49-8	2-Chlorotoluene	0.20	< 0.20	U
106-43-4	4-Chlorotoluene	0.20	< 0.20	U
98-06-6	tert-Butylbenzene	0.20	< 0.20	U
135-98-8	sec-Butylbenzene	0.20	< 0.20	U
99-87-6	4-Isopropyltoluene	0.20	< 0.20	U
104-51-8	n-Butylbenzene	0.20	< 0.20	U
120-82-1	1,2,4-Trichlorobenzene	0.50	< 0.50	U
91-20-3	Naphthalene	0.50	< 0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	< 0.50	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	101%
d8-Toluene	100%
Bromofluorobenzene	98.8%
d4-1,2-Dichlorobenzene	98.8%

2-Chloroethylvinylether is an acid labile compound and may not be recovered from an acid preserved sample.

EPA SW-846 indicates that vinyl chloride and styrene may degrade in the presence of acid preservative.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140326LC84D2-1**
Page 1 of 2 **SAMPLE**

Lab Sample ID: YE75T
LIMS ID: 14-5867
Matrix: Water
Data Release Authorized:
Reported: 04/07/14

QC Report No: YE75-Joint Base Lewis McChord
Project: Log RAM

Date Sampled: 03/26/14
Date Received: 03/28/14

Instrument/Analyst: NT3/PKC
Date Analyzed: 04/03/14 20:18

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	LOQ	Result	Q
74-87-3	Chloromethane	0.50	< 0.50	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.20	< 0.20	U
75-00-3	Chloroethane	0.20	< 0.20	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	Acetone	5.0	< 5.0	U
75-15-0	Carbon Disulfide	0.20	< 0.20	U
75-35-4	1,1-Dichloroethene	0.20	< 0.20	U
75-34-3	1,1-Dichloroethane	0.20	< 0.20	U
156-60-5	trans-1,2-Dichloroethene	0.20	< 0.20	U
156-59-2	cis-1,2-Dichloroethene	0.20	< 0.20	U
67-66-3	Chloroform	0.20	< 0.20	U
107-06-2	1,2-Dichloroethane	0.20	< 0.20	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	0.20	< 0.20	U
56-23-5	Carbon Tetrachloride	0.20	< 0.20	U
108-05-4	Vinyl Acetate	0.20	< 0.20	U
75-27-4	Bromodichloromethane	0.20	< 0.20	U
78-87-5	1,2-Dichloropropane	0.20	< 0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	< 0.20	U
79-01-6	**Trichloroethene**	**0.20**	**1.7**	
124-48-1	Dibromochloromethane	0.20	< 0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	< 0.20	U
71-43-2	Benzene	0.20	< 0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	< 0.20	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.20	< 0.20	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.20	< 0.20	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	< 0.20	U
108-88-3	Toluene	0.20	< 0.20	U
108-90-7	Chlorobenzene	0.20	< 0.20	U
100-41-4	Ethylbenzene	0.20	< 0.20	U
100-42-5	Styrene	0.20	< 0.20	U
75-69-4	Trichlorofluoromethane	0.20	< 0.20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.20	< 0.20	U
179601-23-1	m,p-Xylene	0.40	< 0.40	U
95-47-6	o-Xylene	0.20	< 0.20	U
95-50-1	1,2-Dichlorobenzene	0.20	< 0.20	U
541-73-1	1,3-Dichlorobenzene	0.20	< 0.20	U
106-46-7	1,4-Dichlorobenzene	0.20	< 0.20	U

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140326LC84D2-1**
 SAMPLE

Lab Sample ID: YE75T
LIMS ID: 14-5867
Matrix: Water
Date Analyzed: 04/03/14 20:18

QC Report No: YE75-Joint Base Lewis McChord
Project: Log RAM

CAS Number	Analyte	LOQ	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Iodomethane	1.0	< 1.0	U
74-96-4	Bromoethane	0.20	< 0.20	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.20	< 0.20	U
74-95-3	Dibromomethane	0.20	< 0.20	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	< 0.20	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	< 0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	< 0.50	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.20	< 0.20	U
95-63-6	1,2,4-Trimethylbenzene	0.20	< 0.20	U
87-68-3	Hexachlorobutadiene	0.50	< 0.50	U
106-93-4	1,2-Dibromoethane	0.20	< 0.20	U
74-97-5	Bromochloromethane	0.20	< 0.20	U
594-20-7	2,2-Dichloropropane	0.20	< 0.20	U
142-28-9	1,3-Dichloropropane	0.20	< 0.20	U
98-82-8	Isopropylbenzene	0.20	< 0.20	U
103-65-1	n-Propylbenzene	0.20	< 0.20	U
108-86-1	Bromobenzene	0.20	< 0.20	U
95-49-8	2-Chlorotoluene	0.20	< 0.20	U
106-43-4	4-Chlorotoluene	0.20	< 0.20	U
98-06-6	tert-Butylbenzene	0.20	< 0.20	U
135-98-8	sec-Butylbenzene	0.20	< 0.20	U
99-87-6	4-Isopropyltoluene	0.20	< 0.20	U
104-51-8	n-Butylbenzene	0.20	< 0.20	U
120-82-1	1,2,4-Trichlorobenzene	0.50	< 0.50	U
91-20-3	Naphthalene	0.50	< 0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	< 0.50	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	103%
d8-Toluene	101%
Bromofluorobenzene	95.6%
d4-1,2-Dichlorobenzene	101%

2-Chloroethylvinylether is an acid labile compound and may not be recovered from an acid preserved sample.

EPA SW-846 indicates that vinyl chloride and styrene may degrade in the presence of acid preservative.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: MB-040314A**
 METHOD BLANK

Lab Sample ID: MB-040314A
LIMS ID: 14-5848
Matrix: Water
Data Release Authorized:
Reported: 04/07/14

QC Report No: YE75-Joint Base Lewis McChord
Project: Log RAM

Date Sampled: NA
Date Received: NA

Instrument/Analyst: NT3/PKC
Date Analyzed: 04/03/14 10:47

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	LOQ	Result	Q
74-87-3	Chloromethane	0.50	< 0.50	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.20	< 0.20	U
75-00-3	Chloroethane	0.20	< 0.20	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	Acetone	5.0	< 5.0	U
75-15-0	Carbon Disulfide	0.20	< 0.20	U
75-35-4	1,1-Dichloroethene	0.20	< 0.20	U
75-34-3	1,1-Dichloroethane	0.20	< 0.20	U
156-60-5	trans-1,2-Dichloroethene	0.20	< 0.20	U
156-59-2	cis-1,2-Dichloroethene	0.20	< 0.20	U
67-66-3	Chloroform	0.20	< 0.20	U
107-06-2	1,2-Dichloroethane	0.20	< 0.20	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	0.20	< 0.20	U
56-23-5	Carbon Tetrachloride	0.20	< 0.20	U
108-05-4	Vinyl Acetate	0.20	< 0.20	U
75-27-4	Bromodichloromethane	0.20	< 0.20	U
78-87-5	1,2-Dichloropropane	0.20	< 0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	< 0.20	U
79-01-6	Trichloroethene	0.20	< 0.20	U
124-48-1	Dibromochloromethane	0.20	< 0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	< 0.20	U
71-43-2	Benzene	0.20	< 0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	< 0.20	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.20	< 0.20	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.20	< 0.20	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	< 0.20	U
108-88-3	Toluene	0.20	< 0.20	U
108-90-7	Chlorobenzene	0.20	< 0.20	U
100-41-4	Ethylbenzene	0.20	< 0.20	U
100-42-5	Styrene	0.20	< 0.20	U
75-69-4	Trichlorofluoromethane	0.20	< 0.20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.20	< 0.20	U
179601-23-1	m,p-Xylene	0.40	< 0.40	U
95-47-6	o-Xylene	0.20	< 0.20	U
95-50-1	1,2-Dichlorobenzene	0.20	< 0.20	U
541-73-1	1,3-Dichlorobenzene	0.20	< 0.20	U
106-46-7	1,4-Dichlorobenzene	0.20	< 0.20	U

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: MB-040314A**
 METHOD BLANK

ANALYTICAL RESOURCES INCORPORATED

Lab Sample ID: MB-040314A
LIMS ID: 14-5848
Matrix: Water
Date Analyzed: 04/03/14 10:47

QC Report No: YE75-Joint Base Lewis McChord
Project: Log RAM

CAS Number	Analyte	LOQ	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Iodomethane	1.0	< 1.0	U
74-96-4	Bromoethane	0.20	< 0.20	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.20	< 0.20	U
74-95-3	Dibromomethane	0.20	< 0.20	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	< 0.20	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	< 0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	< 0.50	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.20	< 0.20	U
95-63-6	1,2,4-Trimethylbenzene	0.20	< 0.20	U
87-68-3	Hexachlorobutadiene	0.50	< 0.50	U
106-93-4	1,2-Dibromoethane	0.20	< 0.20	U
74-97-5	Bromochloromethane	0.20	< 0.20	U
594-20-7	2,2-Dichloropropane	0.20	< 0.20	U
142-28-9	1,3-Dichloropropane	0.20	< 0.20	U
98-82-8	Isopropylbenzene	0.20	< 0.20	U
103-65-1	n-Propylbenzene	0.20	< 0.20	U
108-86-1	Bromobenzene	0.20	< 0.20	U
95-49-8	2-Chlorotoluene	0.20	< 0.20	U
106-43-4	4-Chlorotoluene	0.20	< 0.20	U
98-06-6	tert-Butylbenzene	0.20	< 0.20	U
135-98-8	sec-Butylbenzene	0.20	< 0.20	U
99-87-6	4-Isopropyltoluene	0.20	< 0.20	U
104-51-8	n-Butylbenzene	0.20	< 0.20	U
120-82-1	1,2,4-Trichlorobenzene	0.50	< 0.50	U
91-20-3	Naphthalene	0.50	< 0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	< 0.50	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	103%
d8-Toluene	99.0%
Bromofluorobenzene	97.7%
d4-1,2-Dichlorobenzene	102%

ANALYTICAL RESOURCES INCORPORATED

VOA SURROGATE RECOVERY SUMMARY

Matrix: Water

QC Report No: YE75-Joint Base Lewis McChord
Project: Log RAM

ARI ID	Client ID	PV	DCE	TOL	BFB	DCB	TOT OUT
MB-040314A	Method Blank	10	103%	99.0%	97.7%	102%	0
LCS-040314A	Lab Control	10	98.9%	100%	98.4%	101%	0
LCSD-040314A	Lab Control Dup	10	101%	99.3%	100%	99.8%	0
YE75A	LGC14032685PA381-1	10	100%	97.3%	98.4%	99.9%	0
YE75B	LGC14032685PA382-1	10	100%	101%	96.1%	99.6%	0
YE75C	LGC14032685PA384-1	10	102%	99.0%	97.9%	99.9%	0
YE75D	LGC140326DUP6-1	10	100%	98.2%	97.3%	100%	0
YE75E	LGC140326DUP7-1	10	102%	100%	99.1%	99.5%	0
YE75F	LGC140326DUP8-1	10	104%	99.4%	96.1%	101%	0
YE75G	LGC140327DUP20-1	10	100%	102%	98.6%	101%	0
YE75H	LGC140326FL3-1	10	104%	100%	99.3%	102%	0
YE75I	LGC140326LC03-1	10	104%	99.8%	97.0%	101%	0
YE75J	LGC140326LC06-1	10	101%	97.9%	95.8%	100%	0
YE75K	LGC140326LC16-1	10	103%	99.0%	97.2%	100%	0
YE75L	LGC140326LC24-1	10	104%	101%	98.8%	103%	0
YE75M	LGC140326LC26-1	10	103%	99.0%	96.8%	99.6%	0
YE75N	LGC140326LC66B-1	10	101%	100%	97.3%	103%	0
YE75O	LGC140326LC66D-1	10	100%	100%	98.1%	102%	0
YE75P	LGC140326LC67D-1	10	104%	101%	98.7%	99.5%	0
YE75Q	LGC140326LC72D-1	10	102%	98.5%	98.9%	99.8%	0
YE75R	LGC140326LC75D-1	10	104%	101%	97.2%	100%	0
YE75S	LGC140326LC84D1-1	10	101%	100%	98.8%	98.8%	0
YE75T	LGC140326LC84D2-1	10	103%	101%	95.6%	101%	0

SW8260C	LCS/MB LIMITS	QC LIMITS
(DCE) = d4-1,2-Dichloroethane	(80-120)	(80-130)
(TOL) = d8-Toluene	(80-120)	(80-120)
(BFB) = Bromofluorobenzene	(80-120)	(80-120)
(DCB) = d4-1,2-Dichlorobenzene	(80-120)	(80-120)

Prep Method: SW5030B
Log Number Range: 14-5848 to 14-5867

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LCS-040314A**
 LAB CONTROL SAMPLE

Lab Sample ID: LCS-040314A
LIMS ID: 14-5848
Matrix: Water
Data Release Authorized:
Reported: 04/07/14

QC Report No: YE75-Joint Base Lewis McChord
Project: Log RAM

Date Sampled: NA
Date Received: NA

Instrument/Analyst LCS: NT3/PKC
LCSD: NT3/PKC
Date Analyzed LCS: 04/03/14 09:50
LCSD: 04/03/14 10:19

Sample Amount LCS: 10.0 mL
LCSD: 10.0 mL
Purge Volume LCS: 10.0 mL
LCSD: 10.0 mL

Analyte	LCS	Spike Added-LCS	LCS Recovery	LCSD	Spike Added-LCSD	LCSD Recovery	RPD
Chloromethane	9.38	10.0	93.8%	9.62	10.0	96.2%	2.5%
Bromomethane	10.0	10.0	100%	9.15	10.0	91.5%	8.9%
Vinyl Chloride	9.72	10.0	97.2%	9.77	10.0	97.7%	0.5%
Chloroethane	9.83	10.0	98.3%	10.2	10.0	102%	3.7%
Methylene Chloride	9.84	10.0	98.4%	10.1	10.0	101%	2.6%
Acetone	39.3	50.0	78.6%	44.0	50.0	88.0%	11.3%
Carbon Disulfide	9.52	10.0	95.2%	10.3	10.0	103%	7.9%
1,1-Dichloroethene	9.83	10.0	98.3%	10.2	10.0	102%	3.7%
1,1-Dichloroethane	9.56	10.0	95.6%	9.73	10.0	97.3%	1.8%
trans-1,2-Dichloroethene	9.41	10.0	94.1%	9.32	10.0	93.2%	1.0%
cis-1,2-Dichloroethene	9.45	10.0	94.5%	9.77	10.0	97.7%	3.3%
Chloroform	9.23	10.0	92.3%	9.68	10.0	96.8%	4.8%
1,2-Dichloroethane	9.67	10.0	96.7%	9.82	10.0	98.2%	1.5%
2-Butanone	42.1	50.0	84.2%	44.4	50.0	88.8%	5.3%
1,1,1-Trichloroethane	9.89	10.0	98.9%	9.94	10.0	99.4%	0.5%
Carbon Tetrachloride	10.1	10.0	101%	10.1	10.0	101%	0.0%
Vinyl Acetate	9.20	10.0	92.0%	9.62	10.0	96.2%	4.5%
Bromodichloromethane	10.1	10.0	101%	9.89	10.0	98.9%	2.1%
1,2-Dichloropropane	9.56	10.0	95.6%	9.73	10.0	97.3%	1.8%
cis-1,3-Dichloropropene	10.5	10.0	105%	10.6	10.0	106%	0.9%
Trichloroethene	9.92	10.0	99.2%	9.84	10.0	98.4%	0.8%
Dibromochloromethane	10.3	10.0	103%	10.3	10.0	103%	0.0%
1,1,2-Trichloroethane	9.57	10.0	95.7%	9.86	10.0	98.6%	3.0%
Benzene	9.91	10.0	99.1%	10.1	10.0	101%	1.9%
trans-1,3-Dichloropropene	10.2	10.0	102%	10.4	10.0	104%	1.9%
2-Chloroethylvinylether	10.3	10.0	103%	10.6	10.0	106%	2.9%
Bromoform	10.9	10.0	109%	10.9	10.0	109%	0.0%
4-Methyl-2-Pentanone (MIBK)	53.0	50.0	106%	54.5	50.0	109%	2.8%
2-Hexanone	41.6	50.0	83.2%	43.6	50.0	87.2%	4.7%
Tetrachloroethene	10.3	10.0	103%	10.2	10.0	102%	1.0%
1,1,2,2-Tetrachloroethane	9.72	10.0	97.2%	10.1	10.0	101%	3.8%
Toluene	9.83	10.0	98.3%	10.1	10.0	101%	2.7%
Chlorobenzene	10.2	10.0	102%	10.2	10.0	102%	0.0%
Ethylbenzene	10.4	10.0	104%	10.6	10.0	106%	1.9%
Styrene	10.6	10.0	106%	10.8	10.0	108%	1.9%
Trichlorofluoromethane	9.94	10.0	99.4%	10.6	10.0	106%	6.4%
1,1,2-Trichloro-1,2,2-trifluoroetha	10.1	10.0	101%	10.1	10.0	101%	0.0%
m,p-Xylene	20.7	20.0	104%	21.1	20.0	106%	1.9%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LCS-040314A**
 LAB CONTROL SAMPLE

Lab Sample ID: LCS-040314A QC Report No: YE75-Joint Base Lewis McChord
LIMS ID: 14-5848 Project: Log RAM
Matrix: Water

Analyte	LCS	Spike Added-LCS	LCS Recovery	LCSD	Spike Added-LCSD	LCSD Recovery	RPD
o-Xylene	10.3	10.0	103%	10.5	10.0	105%	1.9%
1,2-Dichlorobenzene	10.2	10.0	102%	10.4	10.0	104%	1.9%
1,3-Dichlorobenzene	10.3	10.0	103%	10.4	10.0	104%	1.0%
1,4-Dichlorobenzene	10.3	10.0	103%	10.3	10.0	103%	0.0%
Acrolein	46.2	50.0	92.4%	48.8	50.0	97.6%	5.5%
Iodomethane	10.1	10.0	101%	10.0	10.0	100%	1.0%
Bromoethane	9.27	10.0	92.7%	9.84	10.0	98.4%	6.0%
Acrylonitrile	8.87	10.0	88.7%	9.34	10.0	93.4%	5.2%
1,1-Dichloropropene	9.79	10.0	97.9%	10.1	10.0	101%	3.1%
Dibromomethane	9.52	10.0	95.2%	9.89	10.0	98.9%	3.8%
1,1,1,2-Tetrachloroethane	10.3	10.0	103%	10.2	10.0	102%	1.0%
1,2-Dibromo-3-chloropropane	10.8	10.0	108%	11.1	10.0	111%	2.7%
1,2,3-Trichloropropane	10.2	10.0	102%	9.93	10.0	99.3%	2.7%
trans-1,4-Dichloro-2-butene	10.9	10.0	109%	11.1	10.0	111%	1.8%
1,3,5-Trimethylbenzene	10.5	10.0	105%	10.4	10.0	104%	1.0%
1,2,4-Trimethylbenzene	10.2	10.0	102%	9.75	10.0	97.5%	4.5%
Hexachlorobutadiene	10.2	10.0	102%	10.3	10.0	103%	1.0%
1,2-Dibromoethane	10.0	10.0	100%	10.2	10.0	102%	2.0%
Bromochloromethane	9.51	10.0	95.1%	9.68	10.0	96.8%	1.8%
2,2-Dichloropropane	10.3	10.0	103%	10.5	10.0	105%	1.9%
1,3-Dichloropropane	9.96	10.0	99.6%	9.85	10.0	98.5%	1.1%
Isopropylbenzene	10.5	10.0	105%	10.8	10.0	108%	2.8%
n-Propylbenzene	10.7	10.0	107%	10.8	10.0	108%	0.9%
Bromobenzene	9.91	10.0	99.1%	9.85	10.0	98.5%	0.6%
2-Chlorotoluene	10.5	10.0	105%	10.6	10.0	106%	0.9%
4-Chlorotoluene	10.5	10.0	105%	10.5	10.0	105%	0.0%
tert-Butylbenzene	10.6	10.0	106%	10.7	10.0	107%	0.9%
sec-Butylbenzene	10.5	10.0	105%	10.4	10.0	104%	1.0%
4-Isopropyltoluene	10.1	10.0	101%	9.88	10.0	98.8%	2.2%
n-Butylbenzene	9.84	10.0	98.4%	8.69	10.0	86.9%	12.4%
1,2,4-Trichlorobenzene	10.1	10.0	101%	8.89	10.0	88.9%	12.7%
Naphthalene	7.91	10.0	79.1%	7.40	10.0	74.0%	6.7%
1,2,3-Trichlorobenzene	8.01	10.0	80.1%	6.94	10.0	69.4%	14.3%

Reported in µg/L (ppb)

RPD calculated using sample concentrations per SW846.

Volatile Surrogate Recovery

	LCS	LCSD
d4-1,2-Dichloroethane	98.9%	101%
d8-Toluene	100%	99.3%
Bromofluorobenzene	98.4%	100%
d4-1,2-Dichlorobenzene	101%	99.8%

Analytical Resources, Incorporated
Analytical Chemists and Consultants

April 10, 2014

Thomas Lynott
Department of the Army
Directorate of Public Works
Attn Environmental Division (T. Lynott)
2012 Liggett Ave Box 339500 MS 17
Joint Base Lewis-McChord, Washington 98433-9500
Official Business

RE: Client Project: LogRam
ARI Job No.: YE76

Dear Mr. Lynott:

Please find enclosed the original Chain-of-Custody record (COC), sample receipt documentation, and the final data for the project referenced above. Analytical Resources, Inc. (ARI) accepted twenty water samples on March 28, 2014. For further details regarding sample receipt please refer to the enclosed Cooler Receipt Form.

The samples were analyzed for VOCs, as requested on the COCs.

The 4/7/14 CCAL is out of control high for all associated FORM III "Q" flagged analytes. All associated samples that contain analyte have been flagged with a "Q" qualifier.

The 4/8/14 CCAL is out of control low for all associated FORM III "Q" flagged analytes with the exception of 2,2-Dichloropropane. All associated samples that contain analyte have been flagged with a "Q" qualifier.

The 4/2/14 CCAL is out of control low for all associated FORM III "Q" flagged analytes. All associated samples that contain analyte have been flagged with a "Q" qualifier.

The 4/2/14 LCS and/or LCSD are out of control low for several analytes.

The 4/7/14 LCS is out of control low for several analytes. The LCSD is in control and no further corrective action was taken.

The 4/8/14 LCS and/or LCSD are out of control low and or high for several analytes.

An electronic copy of this report and all supporting raw data will remain on file with ARI. Should you have any questions or problems, please feel free to contact me at your convenience.

Respectfully,
ANALYTICAL RESOURCES, INC.

Kelly Bottem
Client Services Manager
(206) 695-6211
kellyb@arilabs.com
www.arilabs.com

eFile: YE76

4611 South 134th Place, Suite 100 • Tukwila WA 98168 • **206-695-6200** • **206-695-6201** fax

Chain of Custody Record & Laboratory Analysis Request

TO 00521

ARI Assigned Number: YE76	Turn-around Requested: STANDARD TAT	Page: 3 of 14	
ARI Client Company: JOINT BASE LEWIS MCCHORD PUBLIC WORKS IMLM-PWE	Phone: 253 966 1802	Date: 28MAR14	Ice Present? Y
Client Contact: TOM J LYNOTT		No. of Coolers: 3	Cooler Temps: 1.1, 1.3, 5.3
Client Project Name: LOG RAM			
Client Project #:	Samplers: T LYNOTT J BECKER		

Analytical Resources, Incorporated
Analytical Chemists and Consultants
4611 South 134th Place, Suite 100
Tukwila, WA 98168
206-695-6200 206-695-6201 (fax)

Sample ID	Date	Time	Matrix	No. Containers	Analysis Requested: 1006A	Notes/Comments
L6C140327LC85D1-1	27MAR14	1140	WATER	2	X	TOTAL VOCs
L6C140327LC85D2-1	27MAR14	1145	WATER	2	X	
L6C140327LC88D1-1	27MAR14	1020	WATER	2	X	BOX
L6C140327LC88D2-1	27MAR14	1025	WATER	2	X	1
L6C140326LC90D1-1	26MAR14	1515	WATER	2	X	
L6C140326LC90D2-1	26MAR14	1520	WATER	2	X	
L6C140327LC91D1-1	27MAR14	1105	WATER	2	X	
L6C140327LC91D2-1	27MAR14	1110	WATER	2	X	
L6C140327LC92D1-1	27MAR14	0900	WATER	2	X	
L6C140327LC92D2-1	27MAR14	0905	WATER	2	X	

Comments/Special Instructions	Relinquished by (Signature)	Received by (Signature)	Relinquished by (Signature)	Received by: (Signature)
	Printed Name: TOM J LYNOTT	Printed Name: Jennifer Mitsap	Printed Name.	Printed Name:
	Company: VENSAR	Company: ARI	Company	Company
	Date & Time: 28MAR14 1205	Date & Time: 3/28/14 1205	Date & Time	Date & Time

Limits of Liability: *ARI will perform all requested services in accordance with appropriate methodology following ARI Standard Operating Procedures and the ARI Quality Assurance Program. This program meets standards for the industry. The total liability of ARI, its officers, agents, employees, or successors, arising out of or in connection with the requested services, shall not exceed the Invoiced amount for said services. The acceptance by the client of a proposal for services by ARI release ARI from any liability in excess thereof, not withstanding any provision to the contrary in any contract, purchase order or co-signed agreement between ARI and the Client.*

Sample Retention Policy: All samples submitted to ARI will be appropriately discarded no sooner than 90 days after receipt or 60 days after submission of hardcopy data, whichever is longer, unless alternate retention schedules have been established by work-order or contract.

Template: COC_Rev_1.doc

Chain of Custody Record & Laboratory Analysis Request

TO 00021

ARI Assigned Number:	Turn-around Requested: STANDARD TAT
ARI Client Company: JOINT BASE LEWIS MCCHORD PUBLIC WORKS JMLM-PWE	Phone: 253 966 1802
Client Contact: TOM J LYNOTT	
Client Project Name: LOG RAM	
Client Project #:	Samplers: T LYNOTT J BECKER

Page: 4 of 14	
Date: 28MAR14	Ice Present? Y
No. of Coolers: 3	Cooler Temps: 0.1, 1.3, 5.3

Analytical Resources, Incorporated
Analytical Chemists and Consultants
4611 South 134th Place, Suite 100
Tukwila, WA 98168
206-695-6200 206-695-6201 (fax)

Sample ID	Date	Time	Matrix	No. Containers	Analysis Requested: 1006A	Notes/Comments
L6C140327LC93D1-1	27MAR14	0915	WATER	2	X	TOTAL VOCs
L6C140327LC93D2-1	27MAR14	0920	WATER	2	X	
L6C140327LC94D1-1	27MAR14	0955	WATER	2	X	BOX
L6C140327LC94D2-1	27MAR14	1000	WATER	2	X	2
L6C140327LC95D1-1	27MAR14	0930	WATER	2	X	
L6C140327LC95D2-1	27MAR14	0935	WATER	2	X	
L6C140327LC102D1-1	27MAR14	1045	WATER	2	X	
L6C140327LC102D2-1	27MAR14	1050	WATER	2	X	
L6C140326LC103D-1	26MAR14	1440	WATER	2	X	
L6C140326LC132-1	26MAR14	1325	WATER	2	X	

Comments/Special Instructions	Relinquished by (Signature)	Received by: (Signature)	Relinquished by: (Signature)	Received by. (Signature)
	Printed Name: T J LYNOTT	Printed Name: Jennifer Millsap	Printed Name:	Printed Name:
	Company. VERSAR	Company. ARI	Company	Company
	Date & Time 28 MAR 14 1205	Date & Time 3/28/14 1205	Date & Time	Date & Time

Limits of Liability: *ARI will perform all requested services in accordance with appropriate methodology following ARI Standard Operating Procedures and the ARI Quality Assurance Program. This program meets standards for the industry. The total liability of ARI, its officers, agents, employees, or successors, arising out of or in connection with the requested services, shall not exceed the Invoiced amount for said services. The acceptance by the client of a proposal for services by ARI release ARI from any liability in excess thereof, not withstanding any provision to the contrary in any contract, purchase order or co-signed agreement between ARI and the Client.*

Sample Retention Policy: All samples submitted to ARI will be appropriately discarded no sooner than 90 days after receipt or 60 days after submission of hardcopy data, whichever is longer, unless alternate retention schedules have been established by work-order or contract.

COC 09-011

Sample ID Cross Reference Report

ANALYTICAL RESOURCES INCORPORATED

ARI Job No: YE76
Client: Joint Base Lewis McChord
Project Event: N/A
Project Name: Log RAM

	Sample ID	ARI Lab ID	ARI LIMS ID	Matrix	Sample Date/Time	VTSR
1.	LGC140327LC85D1-1	YE76A	14-5888	Water	03/27/14 11:40	03/28/14 12:05
2.	LGC140327LC85D2-1	YE76B	14-5889	Water	03/27/14 11:45	03/28/14 12:05
3.	LGC140327LC88D1-1	YE76C	14-5890	Water	03/27/14 10:20	03/28/14 12:05
4.	LGC140327LC88D2-1	YE76D	14-5891	Water	03/27/14 10:25	03/28/14 12:05
5.	LGC140326LC90D1-1	YE76E	14-5892	Water	03/26/14 15:15	03/28/14 12:05
6.	LGC140326LC90D2-1	YE76F	14-5893	Water	03/26/14 15:20	03/28/14 12:05
7.	LGC140327LC91D1-1	YE76G	14-5894	Water	03/27/14 11:05	03/28/14 12:05
8.	LGC140327LC91D2-1	YE76H	14-5895	Water	03/27/14 11:10	03/28/14 12:05
9.	LGC140327LC92D1-1	YE76I	14-5896	Water	03/27/14 09:00	03/28/14 12:05
10.	LGC140327LC92D2-1	YE76J	14-5897	Water	03/27/14 09:05	03/28/14 12:05
11.	LGC140327LC93D1-1	YE76K	14-5898	Water	03/27/14 09:15	03/28/14 12:05
12.	LGC140327LC93D2-1	YE76L	14-5899	Water	03/27/14 09:20	03/28/14 12:05
13.	LGC140327LC94D1-1	YE76M	14-5900	Water	03/27/14 09:55	03/28/14 12:05
14.	LGC140327LC94D2-1	YE76N	14-5901	Water	03/27/14 10:00	03/28/14 12:05
15.	LGC140327LC95D1-1	YE76O	14-5902	Water	03/27/14 09:30	03/28/14 12:05
16.	LGC140327LC95D2-1	YE76P	14-5903	Water	03/27/14 09:35	03/28/14 12:05
17.	LGC140327LC102D1-1	YE76Q	14-5904	Water	03/27/14 10:45	03/28/14 12:05
18.	LGC140327LC102D2-1	YE76R	14-5905	Water	03/27/14 10:50	03/28/14 12:05
19.	LGC140326LC103D-1	YE76S	14-5906	Water	03/26/14 14:40	03/28/14 12:05
20.	LGC140326LC132-1	YE76T	14-5907	Water	03/26/14 13:25	03/28/14 12:05

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Cooler Receipt Form

ARI Client: JBLM Project Name: Log Ram

COC No(s): _____ (NA) Delivered by: Fed-Ex UPS Courier (Hand Delivered) Other: _____

Assigned ARI Job No: YE76 Tracking No: _____ (NA)

Preliminary Examination Phase:

Were intact, properly signed and dated custody seals attached to the outside of to cooler?	YES	(NO)
Were custody papers included with the cooler?	(YES)	NO
Were custody papers properly filled out (ink, signed, etc.)	(YES)	NO

Temperature of Cooler(s) (°C) (recommended 2 0-6.0 °C for chemistry): 1.1 1.3 5.3

Time: 1205

If cooler temperature is out of compliance fill out form 00070F Temp Gun ID#: 12341222

Cooler Accepted by: JM Date: 3/28/14 Time: 1205

Complete custody forms and attach all shipping documents

Log-In Phase:

Was a temperature blank included in the cooler?		YES	(NO)
What kind of packing material was used? Bubble Wrap Wet Ice (Gel Packs) Baggies (Foam Block) Paper Other: BOX			
Was sufficient ice used (if appropriate)?	NA	(YES)	NO
Were all bottles sealed in individual plastic bags?		YES	(NO)
Did all bottles arrive in good condition (unbroken)?		(YES)	NO
Were all bottle labels complete and legible?		(YES)	NO
Did the number of containers listed on COC match with the number of containers received?		(YES)	NO
Did all bottle labels and tags agree with custody papers?		(YES)	NO
Were all bottles used correct for the requested analyses?		(YES)	NO
Do any of the analyses (bottles) require preservation? (attach preservation sheet, excluding VOCs)...	(NA)	YES	NO
Were all VOC vials free of air bubbles?	NA	YES	(NO)
Was sufficient amount of sample sent in each bottle?		(YES)	NO
Date VOC Trip Blank was made at ARI	(NA)		

Was Sample Split by ARI: (NA) YES Date/Time: _____ Equipment: _____ Split by: _____

Samples Logged by: AV Date: 3/28/14 Time: 1303

***** Notify Project Manager of discrepancies or concerns *****

Sample ID on Bottle	Sample ID on COC	Sample ID on Bottle	Sample ID on COC

Additional Notes, Discrepancies, & Resolutions:

LGC1403271C9201-1 = ISM

By: AV Date: 3/28/14

Small Air Bubbles ~2mm	Peabubbles 2-4 mm	LARGE Air Bubbles > 4 mm
• •	• • •	● ● ●

Small → "sm" (< 2 mm)

Peabubbles → "pb" (2 to < 4 mm)

Large → "lg" (4 to < 6 mm)

Headspace → "hs" (> 6 mm)

YE76 : 00005

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140327LC85D1-1**
 SAMPLE

Lab Sample ID: YE76A
LIMS ID: 14-5888
Matrix: Water
Data Release Authorized: MW
Reported: 04/09/14

QC Report No: YE76-Joint Base Lewis McChord
Project: Log RAM

Date Sampled: 03/27/14
Date Received: 03/28/14

Instrument/Analyst: NT2/PAB
Date Analyzed: 04/02/14 20:22

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	LOQ	Result	Q
74-87-3	Chloromethane	0.50	< 0.50	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.20	< 0.20	U
75-00-3	Chloroethane	0.20	< 0.20	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	**Acetone**	**5.0**	**5.4**	
75-15-0	Carbon Disulfide	0.20	< 0.20	U
75-35-4	1,1-Dichloroethene	0.20	< 0.20	U
75-34-3	1,1-Dichloroethane	0.20	< 0.20	U
156-60-5	trans-1,2-Dichloroethene	0.20	< 0.20	U
156-59-2	cis-1,2-Dichloroethene	0.20	< 0.20	U
67-66-3	Chloroform	0.20	< 0.20	U
107-06-2	1,2-Dichloroethane	0.20	< 0.20	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	0.20	< 0.20	U
56-23-5	Carbon Tetrachloride	0.20	< 0.20	U
108-05-4	Vinyl Acetate	0.20	< 0.20	U
75-27-4	Bromodichloromethane	0.20	< 0.20	U
78-87-5	1,2-Dichloropropane	0.20	< 0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	< 0.20	U
79-01-6	Trichloroethene	0.20	< 0.20	U
124-48-1	Dibromochloromethane	0.20	< 0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	< 0.20	U
71-43-2	Benzene	0.20	< 0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	< 0.20	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.20	< 0.20	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.20	< 0.20	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	< 0.20	U
108-88-3	Toluene	0.20	< 0.20	U
108-90-7	Chlorobenzene	0.20	< 0.20	U
100-41-4	Ethylbenzene	0.20	< 0.20	U
100-42-5	Styrene	0.20	< 0.20	U
75-69-4	Trichlorofluoromethane	0.20	< 0.20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.20	< 0.20	U
179601-23-1	m,p-Xylene	0.40	< 0.40	U
95-47-6	o-Xylene	0.20	< 0.20	U
95-50-1	1,2-Dichlorobenzene	0.20	< 0.20	U
541-73-1	1,3-Dichlorobenzene	0.20	< 0.20	U
106-46-7	1,4-Dichlorobenzene	0.20	< 0.20	U

Lab Sample ID: YE76A
LIMS ID: 14-5888
Matrix: Water
Date Analyzed: 04/02/14 20:22

QC Report No: YE76-Joint Base Lewis McChord
Project: Log RAM

CAS Number	Analyte	LOQ	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Iodomethane	1.0	< 1.0	U
74-96-4	Bromoethane	0.20	< 0.20	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.20	< 0.20	U
74-95-3	Dibromomethane	0.20	< 0.20	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	< 0.20	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	< 0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	< 0.50	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.20	< 0.20	U
95-63-6	1,2,4-Trimethylbenzene	0.20	< 0.20	U
87-68-3	Hexachlorobutadiene	0.50	< 0.50	U
106-93-4	1,2-Dibromoethane	0.20	< 0.20	U
74-97-5	Bromochloromethane	0.20	< 0.20	U
594-20-7	2,2-Dichloropropane	0.20	< 0.20	U
142-28-9	1,3-Dichloropropane	0.20	< 0.20	U
98-82-8	Isopropylbenzene	0.20	< 0.20	U
103-65-1	n-Propylbenzene	0.20	< 0.20	U
108-86-1	Bromobenzene	0.20	< 0.20	U
95-49-8	2-Chlorotoluene	0.20	< 0.20	U
106-43-4	4-Chlorotoluene	0.20	< 0.20	U
98-06-6	tert-Butylbenzene	0.20	< 0.20	U
135-98-8	sec-Butylbenzene	0.20	< 0.20	U
99-87-6	4-Isopropyltoluene	0.20	< 0.20	U
104-51-8	n-Butylbenzene	0.20	< 0.20	U
120-82-1	1,2,4-Trichlorobenzene	0.50	< 0.50	U
91-20-3	Naphthalene	0.50	< 0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	< 0.50	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	96.2%
d8-Toluene	96.5%
Bromofluorobenzene	94.3%
d4-1,2-Dichlorobenzene	102%

2-Chloroethylvinylether is an acid labile compound and may not be recovered from an acid preserved sample.

EPA SW-846 indicates that vinyl chloride and styrene may degrade in the presence of acid preservative.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140327LC85D2-1**
 SAMPLE

Lab Sample ID: YE76B
LIMS ID: 14-5889
Matrix: Water
Data Release Authorized: MW
Reported: 04/09/14

QC Report No: YE76-Joint Base Lewis McChord
Project: Log RAM
Date Sampled: 03/27/14
Date Received: 03/28/14

Instrument/Analyst: NT2/PAB
Date Analyzed: 04/02/14 20:49

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	LOQ	Result	Q
74-87-3	Chloromethane	0.50	< 0.50	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.20	< 0.20	U
75-00-3	Chloroethane	0.20	< 0.20	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	Acetone	5.0	< 5.0	U
75-15-0	Carbon Disulfide	0.20	< 0.20	U
75-35-4	1,1-Dichloroethene	0.20	< 0.20	U
75-34-3	1,1-Dichloroethane	0.20	< 0.20	U
156-60-5	trans-1,2-Dichloroethene	0.20	< 0.20	U
156-59-2	cis-1,2-Dichloroethene	0.20	< 0.20	U
67-66-3	Chloroform	0.20	< 0.20	U
107-06-2	1,2-Dichloroethane	0.20	< 0.20	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	0.20	< 0.20	U
56-23-5	Carbon Tetrachloride	0.20	< 0.20	U
108-05-4	Vinyl Acetate	0.20	< 0.20	U
75-27-4	Bromodichloromethane	0.20	< 0.20	U
78-87-5	1,2-Dichloropropane	0.20	< 0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	< 0.20	U
79-01-6	Trichloroethene	0.20	< 0.20	U
124-48-1	Dibromochloromethane	0.20	< 0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	< 0.20	U
71-43-2	Benzene	0.20	< 0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	< 0.20	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.20	< 0.20	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.20	< 0.20	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	< 0.20	U
108-88-3	Toluene	0.20	< 0.20	U
108-90-7	Chlorobenzene	0.20	< 0.20	U
100-41-4	Ethylbenzene	0.20	< 0.20	U
100-42-5	Styrene	0.20	< 0.20	U
75-69-4	Trichlorofluoromethane	0.20	< 0.20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.20	< 0.20	U
179601-23-1	m,p-Xylene	0.40	< 0.40	U
95-47-6	o-Xylene	0.20	< 0.20	U
95-50-1	1,2-Dichlorobenzene	0.20	< 0.20	U
541-73-1	1,3-Dichlorobenzene	0.20	< 0.20	U
106-46-7	1,4-Dichlorobenzene	0.20	< 0.20	U

YE76-00006

Lab Sample ID: YE76B
LIMS ID: 14-5889
Matrix: Water
Date Analyzed: 04/02/14 20:49

QC Report No: YE76-Joint Base Lewis McChord
Project: Log RAM

CAS Number	Analyte	LOQ	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Iodomethane	1.0	< 1.0	U
74-96-4	Bromoethane	0.20	< 0.20	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.20	< 0.20	U
74-95-3	Dibromomethane	0.20	< 0.20	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	< 0.20	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	< 0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	< 0.50	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.20	< 0.20	U
95-63-6	1,2,4-Trimethylbenzene	0.20	< 0.20	U
87-68-3	Hexachlorobutadiene	0.50	< 0.50	U
106-93-4	1,2-Dibromoethane	0.20	< 0.20	U
74-97-5	Bromochloromethane	0.20	< 0.20	U
594-20-7	2,2-Dichloropropane	0.20	< 0.20	U
142-28-9	1,3-Dichloropropane	0.20	< 0.20	U
98-82-8	Isopropylbenzene	0.20	< 0.20	U
103-65-1	n-Propylbenzene	0.20	< 0.20	U
108-86-1	Bromobenzene	0.20	< 0.20	U
95-49-8	2-Chlorotoluene	0.20	< 0.20	U
106-43-4	4-Chlorotoluene	0.20	< 0.20	U
98-06-6	tert-Butylbenzene	0.20	< 0.20	U
135-98-8	sec-Butylbenzene	0.20	< 0.20	U
99-87-6	4-Isopropyltoluene	0.20	< 0.20	U
104-51-8	n-Butylbenzene	0.20	< 0.20	U
120-82-1	1,2,4-Trichlorobenzene	0.50	< 0.50	U
91-20-3	Naphthalene	0.50	< 0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	< 0.50	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	103%
d8-Toluene	98.0%
Bromofluorobenzene	92.7%
d4-1,2-Dichlorobenzene	103%

2-Chloroethylvinylether is an acid labile compound and may not be recovered from an acid preserved sample.

EPA SW-846 indicates that vinyl chloride and styrene may degrade in the presence of acid preservative.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140327LC88D1-1**
 SAMPLE

Lab Sample ID: YE76C
LIMS ID: 14-5890
Matrix: Water
Data Release Authorized:
Reported: 04/09/14

QC Report No: YE76-Joint Base Lewis McChord
Project: Log RAM
Date Sampled: 03/27/14
Date Received: 03/28/14

Instrument/Analyst: NT2/PAB
Date Analyzed: 04/02/14 21:16

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	LOQ	Result	Q
74-87-3	Chloromethane	0.50	< 0.50	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.20	< 0.20	U
75-00-3	Chloroethane	0.20	< 0.20	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	**Acetone**	**5.0**	**11**	
75-15-0	Carbon Disulfide	0.20	< 0.20	U
75-35-4	1,1-Dichloroethene	0.20	< 0.20	U
75-34-3	1,1-Dichloroethane	0.20	< 0.20	U
156-60-5	trans-1,2-Dichloroethene	0.20	< 0.20	U
156-59-2	**cis-1,2-Dichloroethene**	**0.20**	**0.22**	
67-66-3	Chloroform	0.20	< 0.20	U
107-06-2	1,2-Dichloroethane	0.20	< 0.20	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	0.20	< 0.20	U
56-23-5	Carbon Tetrachloride	0.20	< 0.20	U
108-05-4	Vinyl Acetate	0.20	< 0.20	U
75-27-4	Bromodichloromethane	0.20	< 0.20	U
78-87-5	1,2-Dichloropropane	0.20	< 0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	< 0.20	U
79-01-6	**Trichloroethene**	**0.20**	**2.6**	
124-48-1	Dibromochloromethane	0.20	< 0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	< 0.20	U
71-43-2	Benzene	0.20	< 0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	< 0.20	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.20	< 0.20	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.20	< 0.20	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	< 0.20	U
108-88-3	Toluene	0.20	< 0.20	U
108-90-7	Chlorobenzene	0.20	< 0.20	U
100-41-4	Ethylbenzene	0.20	< 0.20	U
100-42-5	Styrene	0.20	< 0.20	U
75-69-4	Trichlorofluoromethane	0.20	< 0.20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.20	< 0.20	U
179601-23-1	m,p-Xylene	0.40	< 0.40	U
95-47-6	o-Xylene	0.20	< 0.20	U
95-50-1	1,2-Dichlorobenzene	0.20	< 0.20	U
541-73-1	1,3-Dichlorobenzene	0.20	< 0.20	U
106-46-7	1,4-Dichlorobenzene	0.20	< 0.20	U

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140327LC88D1-1**
 SAMPLE

Lab Sample ID: YE76C QC Report No: YE76-Joint Base Lewis McChord
LIMS ID: 14-5890 Project: Log RAM
Matrix: Water
Date Analyzed: 04/02/14 21:16

CAS Number	Analyte	LOQ	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Iodomethane	1.0	< 1.0	U
74-96-4	Bromoethane	0.20	< 0.20	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.20	< 0.20	U
74-95-3	Dibromomethane	0.20	< 0.20	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	< 0.20	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	< 0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	< 0.50	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.20	< 0.20	U
95-63-6	1,2,4-Trimethylbenzene	0.20	< 0.20	U
87-68-3	Hexachlorobutadiene	0.50	< 0.50	U
106-93-4	1,2-Dibromoethane	0.20	< 0.20	U
74-97-5	Bromochloromethane	0.20	< 0.20	U
594-20-7	2,2-Dichloropropane	0.20	< 0.20	U
142-28-9	1,3-Dichloropropane	0.20	< 0.20	U
98-82-8	Isopropylbenzene	0.20	< 0.20	U
103-65-1	n-Propylbenzene	0.20	< 0.20	U
108-86-1	Bromobenzene	0.20	< 0.20	U
95-49-8	2-Chlorotoluene	0.20	< 0.20	U
106-43-4	4-Chlorotoluene	0.20	< 0.20	U
98-06-6	tert-Butylbenzene	0.20	< 0.20	U
135-98-8	sec-Butylbenzene	0.20	< 0.20	U
99-87-6	4-Isopropyltoluene	0.20	< 0.20	U
104-51-8	n-Butylbenzene	0.20	< 0.20	U
120-82-1	1,2,4-Trichlorobenzene	0.50	< 0.50	U
91-20-3	Naphthalene	0.50	< 0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	< 0.50	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery	
d4-1,2-Dichloroethane	96.8%
d8-Toluene	96.2%
Bromofluorobenzene	93.3%
d4-1,2-Dichlorobenzene	100%

2-Chloroethylvinylether is an acid labile compound and may not be recovered from an acid preserved sample.

EPA SW-846 indicates that vinyl chloride and styrene may degrade in the presence of acid preservative.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140327LC88D2-1**
Page 1 of 2 **SAMPLE**

Lab Sample ID: YE76D
LIMS ID: 14-5891
Matrix: Water
Data Release Authorized: MW
Reported: 04/09/14

QC Report No: YE76-Joint Base Lewis McChord
Project: Log RAM
Date Sampled: 03/27/14
Date Received: 03/28/14

Instrument/Analyst: NT3/PAB
Date Analyzed: 04/07/14 15:13

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	LOQ	Result	Q
74-87-3	Chloromethane	0.50	< 0.50	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.20	< 0.20	U
75-00-3	Chloroethane	0.20	< 0.20	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	**Acetone**	**5.0**	**7.8**	
75-15-0	Carbon Disulfide	0.20	< 0.20	U
75-35-4	1,1-Dichloroethene	0.20	< 0.20	U
75-34-3	1,1-Dichloroethane	0.20	< 0.20	U
156-60-5	trans-1,2-Dichloroethene	0.20	< 0.20	U
156-59-2	cis-1,2-Dichloroethene	0.20	< 0.20	U
67-66-3	Chloroform	0.20	< 0.20	U
107-06-2	1,2-Dichloroethane	0.20	< 0.20	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	0.20	< 0.20	U
56-23-5	Carbon Tetrachloride	0.20	< 0.20	U
108-05-4	Vinyl Acetate	0.20	< 0.20	U
75-27-4	Bromodichloromethane	0.20	< 0.20	U
78-87-5	1,2-Dichloropropane	0.20	< 0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	< 0.20	U
79-01-6	**Trichloroethene**	**0.20**	**1.6**	
124-48-1	Dibromochloromethane	0.20	< 0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	< 0.20	U
71-43-2	Benzene	0.20	< 0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	< 0.20	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.20	< 0.20	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.20	< 0.20	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	< 0.20	U
108-88-3	Toluene	0.20	< 0.20	U
108-90-7	Chlorobenzene	0.20	< 0.20	U
100-41-4	Ethylbenzene	0.20	< 0.20	U
100-42-5	Styrene	0.20	< 0.20	U
75-69-4	Trichlorofluoromethane	0.20	< 0.20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.20	< 0.20	U
179601-23-1	m,p-Xylene	0.40	< 0.40	U
95-47-6	o-Xylene	0.20	< 0.20	U
95-50-1	1,2-Dichlorobenzene	0.20	< 0.20	U
541-73-1	1,3-Dichlorobenzene	0.20	< 0.20	U
106-46-7	1,4-Dichlorobenzene	0.20	< 0.20	U

Lab Sample ID: YE76D QC Report No: YE76-Joint Base Lewis McChord
LIMS ID: 14-5891 Project: Log RAM
Matrix: Water
Date Analyzed: 04/07/14 15:13

CAS Number	Analyte	LOQ	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Iodomethane	1.0	< 1.0	U
74-96-4	Bromoethane	0.20	< 0.20	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.20	< 0.20	U
74-95-3	Dibromomethane	0.20	< 0.20	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	< 0.20	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	< 0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	< 0.50	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.20	< 0.20	U
95-63-6	1,2,4-Trimethylbenzene	0.20	< 0.20	U
87-68-3	Hexachlorobutadiene	0.50	< 0.50	U
106-93-4	1,2-Dibromoethane	0.20	< 0.20	U
74-97-5	Bromochloromethane	0.20	< 0.20	U
594-20-7	2,2-Dichloropropane	0.20	< 0.20	U
142-28-9	1,3-Dichloropropane	0.20	< 0.20	U
98-82-8	Isopropylbenzene	0.20	< 0.20	U
103-65-1	n-Propylbenzene	0.20	< 0.20	U
108-86-1	Bromobenzene	0.20	< 0.20	U
95-49-8	2-Chlorotoluene	0.20	< 0.20	U
106-43-4	4-Chlorotoluene	0.20	< 0.20	U
98-06-6	tert-Butylbenzene	0.20	< 0.20	U
135-98-8	sec-Butylbenzene	0.20	< 0.20	U
99-87-6	4-Isopropyltoluene	0.20	< 0.20	U
104-51-8	n-Butylbenzene	0.20	< 0.20	U
120-82-1	1,2,4-Trichlorobenzene	0.50	< 0.50	U
91-20-3	Naphthalene	0.50	< 0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	< 0.50	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	105%
d8-Toluene	100%
Bromofluorobenzene	96.9%
d4-1,2-Dichlorobenzene	99.5%

2-Chloroethylvinylether is an acid labile compound and may not be recovered from an acid preserved sample.

EPA SW-846 indicates that vinyl chloride and styrene may degrade in the presence of acid preservative.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140326LC90D1-1**
 SAMPLE

Lab Sample ID: YE76E
LIMS ID: 14-5892
Matrix: Water
Data Release Authorized:
Reported: 04/09/14

QC Report No: YE76-Joint Base Lewis McChord
Project: Log RAM

Date Sampled: 03/26/14
Date Received: 03/28/14

Instrument/Analyst: NT3/PAB
Date Analyzed: 04/07/14 15:42

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	LOQ	Result	Q
74-87-3	Chloromethane	0.50	< 0.50	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.20	< 0.20	U
75-00-3	Chloroethane	0.20	< 0.20	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	Acetone	5.0	< 5.0	U
75-15-0	Carbon Disulfide	0.20	< 0.20	U
75-35-4	1,1-Dichloroethene	0.20	< 0.20	U
75-34-3	1,1-Dichloroethane	0.20	< 0.20	U
156-60-5	trans-1,2-Dichloroethene	0.20	< 0.20	U
156-59-2	cis-1,2-Dichloroethene	0.20	< 0.20	U
67-66-3	Chloroform	0.20	< 0.20	U
107-06-2	1,2-Dichloroethane	0.20	< 0.20	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	0.20	< 0.20	U
56-23-5	Carbon Tetrachloride	0.20	< 0.20	U
108-05-4	Vinyl Acetate	0.20	< 0.20	U
75-27-4	Bromodichloromethane	0.20	< 0.20	U
78-87-5	1,2-Dichloropropane	0.20	< 0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	< 0.20	U
79-01-6	**Trichloroethene**	**0.20**	**1.2**	
124-48-1	Dibromochloromethane	0.20	< 0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	< 0.20	U
71-43-2	Benzene	0.20	< 0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	< 0.20	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.20	< 0.20	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.20	< 0.20	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	< 0.20	U
108-88-3	Toluene	0.20	< 0.20	U
108-90-7	Chlorobenzene	0.20	< 0.20	U
100-41-4	Ethylbenzene	0.20	< 0.20	U
100-42-5	Styrene	0.20	< 0.20	U
75-69-4	Trichlorofluoromethane	0.20	< 0.20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.20	< 0.20	U
179601-23-1	m,p-Xylene	0.40	< 0.40	U
95-47-6	o-Xylene	0.20	< 0.20	U
95-50-1	1,2-Dichlorobenzene	0.20	< 0.20	U
541-73-1	1,3-Dichlorobenzene	0.20	< 0.20	U
106-46-7	1,4-Dichlorobenzene	0.20	< 0.20	U

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140326LC90D1-1**
Page 2 of 2 **SAMPLE**

Lab Sample ID: YE76E QC Report No: YE76-Joint Base Lewis McChord
LIMS ID: 14-5892 Project: Log RAM
Matrix: Water
Date Analyzed: 04/07/14 15:42

CAS Number	Analyte	LOQ	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Iodomethane	1.0	< 1.0	U
74-96-4	Bromoethane	0.20	< 0.20	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.20	< 0.20	U
74-95-3	Dibromomethane	0.20	< 0.20	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	< 0.20	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	< 0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	< 0.50	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.20	< 0.20	U
95-63-6	1,2,4-Trimethylbenzene	0.20	< 0.20	U
87-68-3	Hexachlorobutadiene	0.50	< 0.50	U
106-93-4	1,2-Dibromoethane	0.20	< 0.20	U
74-97-5	Bromochloromethane	0.20	< 0.20	U
594-20-7	2,2-Dichloropropane	0.20	< 0.20	U
142-28-9	1,3-Dichloropropane	0.20	< 0.20	U
98-82-8	Isopropylbenzene	0.20	< 0.20	U
103-65-1	n-Propylbenzene	0.20	< 0.20	U
108-86-1	Bromobenzene	0.20	< 0.20	U
95-49-8	2-Chlorotoluene	0.20	< 0.20	U
106-43-4	4-Chlorotoluene	0.20	< 0.20	U
98-06-6	tert-Butylbenzene	0.20	< 0.20	U
135-98-8	sec-Butylbenzene	0.20	< 0.20	U
99-87-6	4-Isopropyltoluene	0.20	< 0.20	U
104-51-8	n-Butylbenzene	0.20	< 0.20	U
120-82-1	1,2,4-Trichlorobenzene	0.50	< 0.50	U
91-20-3	Naphthalene	0.50	< 0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	< 0.50	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	103%
d8-Toluene	99.1%
Bromofluorobenzene	96.8%
d4-1,2-Dichlorobenzene	102%

2-Chloroethylvinylether is an acid labile compound and may not be recovered from an acid preserved sample.

EPA SW-846 indicates that vinyl chloride and styrene may degrade in the presence of acid preservative.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140326LC90D2-1**
Page 1 of 2 **SAMPLE**

Lab Sample ID: YE76F
LIMS ID: 14-5893
Matrix: Water
Data Release Authorized:
Reported: 04/09/14

QC Report No: YE76-Joint Base Lewis McChord
Project: Log RAM
Date Sampled: 03/26/14
Date Received: 03/28/14

Instrument/Analyst: NT3/PAB
Date Analyzed: 04/07/14 16:10

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	LOQ	Result	Q
74-87-3	Chloromethane	0.50	< 0.50	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.20	< 0.20	U
75-00-3	Chloroethane	0.20	< 0.20	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	Acetone	5.0	< 5.0	U
75-15-0	Carbon Disulfide	0.20	< 0.20	U
75-35-4	1,1-Dichloroethene	0.20	< 0.20	U
75-34-3	1,1-Dichloroethane	0.20	< 0.20	U
156-60-5	trans-1,2-Dichloroethene	0.20	< 0.20	U
156-59-2	cis-1,2-Dichloroethene	0.20	< 0.20	U
67-66-3	Chloroform	0.20	< 0.20	U
107-06-2	1,2-Dichloroethane	0.20	< 0.20	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	0.20	< 0.20	U
56-23-5	Carbon Tetrachloride	0.20	< 0.20	U
108-05-4	Vinyl Acetate	0.20	< 0.20	U
75-27-4	Bromodichloromethane	0.20	< 0.20	U
78-87-5	1,2-Dichloropropane	0.20	< 0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	< 0.20	U
79-01-6	Trichloroethene	0.20	< 0.20	U
124-48-1	Dibromochloromethane	0.20	< 0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	< 0.20	U
71-43-2	Benzene	0.20	< 0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	< 0.20	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.20	< 0.20	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.20	< 0.20	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	< 0.20	U
108-88-3	Toluene	0.20	< 0.20	U
108-90-7	Chlorobenzene	0.20	< 0.20	U
100-41-4	Ethylbenzene	0.20	< 0.20	U
100-42-5	Styrene	0.20	< 0.20	U
75-69-4	Trichlorofluoromethane	0.20	< 0.20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.20	< 0.20	U
179601-23-1	m,p-Xylene	0.40	< 0.40	U
95-47-6	o-Xylene	0.20	< 0.20	U
95-50-1	1,2-Dichlorobenzene	0.20	< 0.20	U
541-73-1	1,3-Dichlorobenzene	0.20	< 0.20	U
106-46-7	1,4-Dichlorobenzene	0.20	< 0.20	U

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140326LC90D2-1**
 SAMPLE

Lab Sample ID: YE76F QC Report No: YE76-Joint Base Lewis McChord
LIMS ID: 14-5893 Project: Log RAM
Matrix: Water
Date Analyzed: 04/07/14 16:10

CAS Number	Analyte	LOQ	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Iodomethane	1.0	< 1.0	U
74-96-4	Bromoethane	0.20	< 0.20	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.20	< 0.20	U
74-95-3	Dibromomethane	0.20	< 0.20	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	< 0.20	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	< 0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	< 0.50	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.20	< 0.20	U
95-63-6	1,2,4-Trimethylbenzene	0.20	< 0.20	U
87-68-3	Hexachlorobutadiene	0.50	< 0.50	U
106-93-4	1,2-Dibromoethane	0.20	< 0.20	U
74-97-5	Bromochloromethane	0.20	< 0.20	U
594-20-7	2,2-Dichloropropane	0.20	< 0.20	U
142-28-9	1,3-Dichloropropane	0.20	< 0.20	U
98-82-8	Isopropylbenzene	0.20	< 0.20	U
103-65-1	n-Propylbenzene	0.20	< 0.20	U
108-86-1	Bromobenzene	0.20	< 0.20	U
95-49-8	2-Chlorotoluene	0.20	< 0.20	U
106-43-4	4-Chlorotoluene	0.20	< 0.20	U
98-06-6	tert-Butylbenzene	0.20	< 0.20	U
135-98-8	sec-Butylbenzene	0.20	< 0.20	U
99-87-6	4-Isopropyltoluene	0.20	< 0.20	U
104-51-8	n-Butylbenzene	0.20	< 0.20	U
120-82-1	1,2,4-Trichlorobenzene	0.50	< 0.50	U
91-20-3	Naphthalene	0.50	< 0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	< 0.50	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	101%
d8-Toluene	101%
Bromofluorobenzene	97.2%
d4-1,2-Dichlorobenzene	100%

2-Chloroethylvinylether is an acid labile compound and may not be recovered from an acid preserved sample.

EPA SW-846 indicates that vinyl chloride and styrene may degrade in the presence of acid preservative.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140327LC91D1-1**
Page 1 of 2 **SAMPLE**

Lab Sample ID: YE76G
LIMS ID: 14-5894
Matrix: Water
Data Release Authorized:
Reported: 04/09/14

QC Report No: YE76-Joint Base Lewis McChord
Project: Log RAM
Date Sampled: 03/27/14
Date Received: 03/28/14

Instrument/Analyst: NT3/PAB
Date Analyzed: 04/07/14 16:39

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	LOQ	Result	Q
74-87-3	Chloromethane	0.50	< 0.50	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.20	< 0.20	U
75-00-3	Chloroethane	0.20	< 0.20	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	Acetone	5.0	< 5.0	U
75-15-0	Carbon Disulfide	0.20	< 0.20	U
75-35-4	1,1-Dichloroethene	0.20	< 0.20	U
75-34-3	1,1-Dichloroethane	0.20	< 0.20	U
156-60-5	trans-1,2-Dichloroethene	0.20	< 0.20	U
156-59-2	cis-1,2-Dichloroethene	0.20	< 0.20	U
67-66-3	Chloroform	0.20	< 0.20	U
107-06-2	1,2-Dichloroethane	0.20	< 0.20	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	0.20	< 0.20	U
56-23-5	Carbon Tetrachloride	0.20	< 0.20	U
108-05-4	Vinyl Acetate	0.20	< 0.20	U
75-27-4	Bromodichloromethane	0.20	< 0.20	U
78-87-5	1,2-Dichloropropane	0.20	< 0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	< 0.20	U
79-01-6	**Trichloroethene**	**0.20**	**0.60**	
124-48-1	Dibromochloromethane	0.20	< 0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	< 0.20	U
71-43-2	Benzene	0.20	< 0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	< 0.20	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.20	< 0.20	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.20	< 0.20	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	< 0.20	U
108-88-3	Toluene	0.20	< 0.20	U
108-90-7	Chlorobenzene	0.20	< 0.20	U
100-41-4	Ethylbenzene	0.20	< 0.20	U
100-42-5	Styrene	0.20	< 0.20	U
75-69-4	Trichlorofluoromethane	0.20	< 0.20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.20	< 0.20	U
179601-23-1	m,p-Xylene	0.40	< 0.40	U
95-47-6	o-Xylene	0.20	< 0.20	U
95-50-1	1,2-Dichlorobenzene	0.20	< 0.20	U
541-73-1	1,3-Dichlorobenzene	0.20	< 0.20	U
106-46-7	1,4-Dichlorobenzene	0.20	< 0.20	U

Lab Sample ID: YE76G
LIMS ID: 14-5894
Matrix: Water
Date Analyzed: 04/07/14 16:39

QC Report No: YE76-Joint Base Lewis McChord
Project: Log RAM

CAS Number	Analyte	LOQ	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Iodomethane	1.0	< 1.0	U
74-96-4	Bromoethane	0.20	< 0.20	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.20	< 0.20	U
74-95-3	Dibromomethane	0.20	< 0.20	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	< 0.20	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	< 0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	< 0.50	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.20	< 0.20	U
95-63-6	1,2,4-Trimethylbenzene	0.20	< 0.20	U
87-68-3	Hexachlorobutadiene	0.50	< 0.50	U
106-93-4	1,2-Dibromoethane	0.20	< 0.20	U
74-97-5	Bromochloromethane	0.20	< 0.20	U
594-20-7	2,2-Dichloropropane	0.20	< 0.20	U
142-28-9	1,3-Dichloropropane	0.20	< 0.20	U
98-82-8	Isopropylbenzene	0.20	< 0.20	U
103-65-1	n-Propylbenzene	0.20	< 0.20	U
108-86-1	Bromobenzene	0.20	< 0.20	U
95-49-8	2-Chlorotoluene	0.20	< 0.20	U
106-43-4	4-Chlorotoluene	0.20	< 0.20	U
98-06-6	tert-Butylbenzene	0.20	< 0.20	U
135-98-8	sec-Butylbenzene	0.20	< 0.20	U
99-87-6	4-Isopropyltoluene	0.20	< 0.20	U
104-51-8	n-Butylbenzene	0.20	< 0.20	U
120-82-1	1,2,4-Trichlorobenzene	0.50	< 0.50	U
91-20-3	Naphthalene	0.50	< 0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	< 0.50	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	104%
d8-Toluene	100%
Bromofluorobenzene	97.3%
d4-1,2-Dichlorobenzene	104%

2-Chloroethylvinylether is an acid labile compound and may not be recovered from an acid preserved sample.

EPA SW-846 indicates that vinyl chloride and styrene may degrade in the presence of acid preservative.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140327LC91D2-1**
Page 1 of 2 **SAMPLE**

Lab Sample ID: YE76H
LIMS ID: 14-5895
Matrix: Water
Data Release Authorized:
Reported: 04/09/14

QC Report No: YE76-Joint Base Lewis McChord
Project: Log RAM
Date Sampled: 03/27/14
Date Received: 03/28/14

Instrument/Analyst: NT3/PAB
Date Analyzed: 04/07/14 17:08

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	LOQ	Result	Q
74-87-3	Chloromethane	0.50	< 0.50	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.20	< 0.20	U
75-00-3	Chloroethane	0.20	< 0.20	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	**Acetone**	**5.0**	**5.4**	
75-15-0	Carbon Disulfide	0.20	< 0.20	U
75-35-4	1,1-Dichloroethene	0.20	< 0.20	U
75-34-3	1,1-Dichloroethane	0.20	< 0.20	U
156-60-5	trans-1,2-Dichloroethene	0.20	< 0.20	U
156-59-2	cis-1,2-Dichloroethene	0.20	< 0.20	U
67-66-3	Chloroform	0.20	< 0.20	U
107-06-2	1,2-Dichloroethane	0.20	< 0.20	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	0.20	< 0.20	U
56-23-5	Carbon Tetrachloride	0.20	< 0.20	U
108-05-4	Vinyl Acetate	0.20	< 0.20	U
75-27-4	Bromodichloromethane	0.20	< 0.20	U
78-87-5	1,2-Dichloropropane	0.20	< 0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	< 0.20	U
79-01-6	**Trichloroethene**	**0.20**	**3.0**	
124-48-1	Dibromochloromethane	0.20	< 0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	< 0.20	U
71-43-2	Benzene	0.20	< 0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	< 0.20	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.20	< 0.20	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.20	< 0.20	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	< 0.20	U
108-88-3	Toluene	0.20	< 0.20	U
108-90-7	Chlorobenzene	0.20	< 0.20	U
100-41-4	Ethylbenzene	0.20	< 0.20	U
100-42-5	Styrene	0.20	< 0.20	U
75-69-4	Trichlorofluoromethane	0.20	< 0.20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.20	< 0.20	U
179601-23-1	m,p-Xylene	0.40	< 0.40	U
95-47-6	o-Xylene	0.20	< 0.20	U
95-50-1	1,2-Dichlorobenzene	0.20	< 0.20	U
541-73-1	1,3-Dichlorobenzene	0.20	< 0.20	U
106-46-7	1,4-Dichlorobenzene	0.20	< 0.20	U

Lab Sample ID: YE76H QC Report No: YE76-Joint Base Lewis McChord
LIMS ID: 14-5895 Project: Log RAM
Matrix: Water
Date Analyzed: 04/07/14 17:08

CAS Number	Analyte	LOQ	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Iodomethane	1.0	< 1.0	U
74-96-4	Bromoethane	0.20	< 0.20	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.20	< 0.20	U
74-95-3	Dibromomethane	0.20	< 0.20	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	< 0.20	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	< 0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	< 0.50	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.20	< 0.20	U
95-63-6	1,2,4-Trimethylbenzene	0.20	< 0.20	U
87-68-3	Hexachlorobutadiene	0.50	< 0.50	U
106-93-4	1,2-Dibromoethane	0.20	< 0.20	U
74-97-5	Bromochloromethane	0.20	< 0.20	U
594-20-7	2,2-Dichloropropane	0.20	< 0.20	U
142-28-9	1,3-Dichloropropane	0.20	< 0.20	U
98-82-8	Isopropylbenzene	0.20	< 0.20	U
103-65-1	n-Propylbenzene	0.20	< 0.20	U
108-86-1	Bromobenzene	0.20	< 0.20	U
95-49-8	2-Chlorotoluene	0.20	< 0.20	U
106-43-4	4-Chlorotoluene	0.20	< 0.20	U
98-06-6	tert-Butylbenzene	0.20	< 0.20	U
135-98-8	sec-Butylbenzene	0.20	< 0.20	U
99-87-6	4-Isopropyltoluene	0.20	< 0.20	U
104-51-8	n-Butylbenzene	0.20	< 0.20	U
120-82-1	1,2,4-Trichlorobenzene	0.50	< 0.50	U
91-20-3	Naphthalene	0.50	< 0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	< 0.50	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	101%
d8-Toluene	102%
Bromofluorobenzene	99.8%
d4-1,2-Dichlorobenzene	101%

2-Chloroethylvinylether is an acid labile compound and may not be recovered from an acid preserved sample.

EPA SW-846 indicates that vinyl chloride and styrene may degrade in the presence of acid preservative.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140327LC92D1-1**
Page 1 of 2 **SAMPLE**

Lab Sample ID: YE76I
LIMS ID: 14-5896
Matrix: Water
Data Release Authorized:
Reported: 04/09/14

QC Report No: YE76-Joint Base Lewis McChord
Project: Log RAM
Date Sampled: 03/27/14
Date Received: 03/28/14

Instrument/Analyst: NT3/PAB
Date Analyzed: 04/07/14 17:36

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	LOQ	Result	Q
74-87-3	Chloromethane	0.50	< 0.50	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.20	< 0.20	U
75-00-3	Chloroethane	0.20	< 0.20	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	Acetone	5.0	< 5.0	U
75-15-0	Carbon Disulfide	0.20	< 0.20	U
75-35-4	1,1-Dichloroethene	0.20	< 0.20	U
75-34-3	1,1-Dichloroethane	0.20	< 0.20	U
156-60-5	trans-1,2-Dichloroethene	0.20	< 0.20	U
156-59-2	cis-1,2-Dichloroethene	0.20	< 0.20	U
67-66-3	Chloroform	0.20	< 0.20	U
107-06-2	1,2-Dichloroethane	0.20	< 0.20	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	0.20	< 0.20	U
56-23-5	Carbon Tetrachloride	0.20	< 0.20	U
108-05-4	Vinyl Acetate	0.20	< 0.20	U
75-27-4	Bromodichloromethane	0.20	< 0.20	U
78-87-5	1,2-Dichloropropane	0.20	< 0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	< 0.20	U
79-01-6	Trichloroethene	0.20	< 0.20	U
124-48-1	Dibromochloromethane	0.20	< 0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	< 0.20	U
71-43-2	Benzene	0.20	< 0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	< 0.20	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.20	< 0.20	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.20	< 0.20	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	< 0.20	U
108-88-3	Toluene	0.20	< 0.20	U
108-90-7	Chlorobenzene	0.20	< 0.20	U
100-41-4	Ethylbenzene	0.20	< 0.20	U
100-42-5	Styrene	0.20	< 0.20	U
75-69-4	Trichlorofluoromethane	0.20	< 0.20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.20	< 0.20	U
179601-23-1	m,p-Xylene	0.40	< 0.40	U
95-47-6	o-Xylene	0.20	< 0.20	U
95-50-1	1,2-Dichlorobenzene	0.20	< 0.20	U
541-73-1	1,3-Dichlorobenzene	0.20	< 0.20	U
106-46-7	1,4-Dichlorobenzene	0.20	< 0.20	U

Lab Sample ID: YE76I QC Report No: YE76-Joint Base Lewis McChord
LIMS ID: 14-5896 Project: Log RAM
Matrix: Water
Date Analyzed: 04/07/14 17:36

CAS Number	Analyte	LOQ	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Iodomethane	1.0	< 1.0	U
74-96-4	Bromoethane	0.20	< 0.20	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.20	< 0.20	U
74-95-3	Dibromomethane	0.20	< 0.20	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	< 0.20	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	< 0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	< 0.50	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.20	< 0.20	U
95-63-6	1,2,4-Trimethylbenzene	0.20	< 0.20	U
87-68-3	Hexachlorobutadiene	0.50	< 0.50	U
106-93-4	1,2-Dibromoethane	0.20	< 0.20	U
74-97-5	Bromochloromethane	0.20	< 0.20	U
594-20-7	2,2-Dichloropropane	0.20	< 0.20	U
142-28-9	1,3-Dichloropropane	0.20	< 0.20	U
98-82-8	Isopropylbenzene	0.20	< 0.20	U
103-65-1	n-Propylbenzene	0.20	< 0.20	U
108-86-1	Bromobenzene	0.20	< 0.20	U
95-49-8	2-Chlorotoluene	0.20	< 0.20	U
106-43-4	4-Chlorotoluene	0.20	< 0.20	U
98-06-6	tert-Butylbenzene	0.20	< 0.20	U
135-98-8	sec-Butylbenzene	0.20	< 0.20	U
99-87-6	4-Isopropyltoluene	0.20	< 0.20	U
104-51-8	n-Butylbenzene	0.20	< 0.20	U
120-82-1	1,2,4-Trichlorobenzene	0.50	< 0.50	U
91-20-3	Naphthalene	0.50	< 0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	< 0.50	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	104%
d8-Toluene	101%
Bromofluorobenzene	97.5%
d4-1,2-Dichlorobenzene	103%

2-Chloroethylvinylether is an acid labile compound and may not be recovered from an acid preserved sample.

EPA SW-846 indicates that vinyl chloride and styrene may degrade in the presence of acid preservative.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140327LC92D2-1**
Page 1 of 2 **SAMPLE**

Lab Sample ID: YE76J
LIMS ID: 14-5897
Matrix: Water
Data Release Authorized:
Reported: 04/09/14

QC Report No: YE76-Joint Base Lewis McChord
Project: Log RAM
Date Sampled: 03/27/14
Date Received: 03/28/14

Instrument/Analyst: NT3/PAB
Date Analyzed: 04/07/14 18:05

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	LOQ	Result	Q
74-87-3	Chloromethane	0.50	< 0.50	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.20	< 0.20	U
75-00-3	Chloroethane	0.20	< 0.20	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	Acetone	5.0	< 5.0	U
75-15-0	Carbon Disulfide	0.20	< 0.20	U
75-35-4	1,1-Dichloroethene	0.20	< 0.20	U
75-34-3	1,1-Dichloroethane	0.20	< 0.20	U
156-60-5	trans-1,2-Dichloroethene	0.20	< 0.20	U
156-59-2	cis-1,2-Dichloroethene	0.20	< 0.20	U
67-66-3	Chloroform	0.20	< 0.20	U
107-06-2	1,2-Dichloroethane	0.20	< 0.20	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	0.20	< 0.20	U
56-23-5	Carbon Tetrachloride	0.20	< 0.20	U
108-05-4	Vinyl Acetate	0.20	< 0.20	U
75-27-4	Bromodichloromethane	0.20	< 0.20	U
78-87-5	1,2-Dichloropropane	0.20	< 0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	< 0.20	U
79-01-6	Trichloroethene	0.20	< 0.20	U
124-48-1	Dibromochloromethane	0.20	< 0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	< 0.20	U
71-43-2	Benzene	0.20	< 0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	< 0.20	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.20	< 0.20	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.20	< 0.20	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	< 0.20	U
108-88-3	Toluene	0.20	< 0.20	U
108-90-7	Chlorobenzene	0.20	< 0.20	U
100-41-4	Ethylbenzene	0.20	< 0.20	U
100-42-5	Styrene	0.20	< 0.20	U
75-69-4	Trichlorofluoromethane	0.20	< 0.20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.20	< 0.20	U
179601-23-1	m,p-Xylene	0.40	< 0.40	U
95-47-6	o-Xylene	0.20	< 0.20	U
95-50-1	1,2-Dichlorobenzene	0.20	< 0.20	U
541-73-1	1,3-Dichlorobenzene	0.20	< 0.20	U
106-46-7	1,4-Dichlorobenzene	0.20	< 0.20	U

Lab Sample ID: YE76J
LIMS ID: 14-5897
Matrix: Water
Date Analyzed: 04/07/14 18:05

QC Report No: YE76-Joint Base Lewis McChord
Project: Log RAM

CAS Number	Analyte	LOQ	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Iodomethane	1.0	< 1.0	U
74-96-4	Bromoethane	0.20	< 0.20	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.20	< 0.20	U
74-95-3	Dibromomethane	0.20	< 0.20	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	< 0.20	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	< 0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	< 0.50	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.20	< 0.20	U
95-63-6	1,2,4-Trimethylbenzene	0.20	< 0.20	U
87-68-3	Hexachlorobutadiene	0.50	< 0.50	U
106-93-4	1,2-Dibromoethane	0.20	< 0.20	U
74-97-5	Bromochloromethane	0.20	< 0.20	U
594-20-7	2,2-Dichloropropane	0.20	< 0.20	U
142-28-9	1,3-Dichloropropane	0.20	< 0.20	U
98-82-8	Isopropylbenzene	0.20	< 0.20	U
103-65-1	n-Propylbenzene	0.20	< 0.20	U
108-86-1	Bromobenzene	0.20	< 0.20	U
95-49-8	2-Chlorotoluene	0.20	< 0.20	U
106-43-4	4-Chlorotoluene	0.20	< 0.20	U
98-06-6	tert-Butylbenzene	0.20	< 0.20	U
135-98-8	sec-Butylbenzene	0.20	< 0.20	U
99-87-6	4-Isopropyltoluene	0.20	< 0.20	U
104-51-8	n-Butylbenzene	0.20	< 0.20	U
120-82-1	1,2,4-Trichlorobenzene	0.50	< 0.50	U
91-20-3	Naphthalene	0.50	< 0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	< 0.50	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	102%
d8-Toluene	98.3%
Bromofluorobenzene	98.5%
d4-1,2-Dichlorobenzene	101%

2-Chloroethylvinylether is an acid labile compound and may not be recovered from an acid preserved sample.

EPA SW-846 indicates that vinyl chloride and styrene may degrade in the presence of acid preservative.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140327LC93D1-1**
 SAMPLE

Lab Sample ID: YE76K
LIMS ID: 14-5898
Matrix: Water
Data Release Authorized:
Reported: 04/09/14

QC Report No: YE76-Joint Base Lewis McChord
Project: Log RAM
Date Sampled: 03/27/14
Date Received: 03/28/14

Instrument/Analyst: NT3/PAB
Date Analyzed: 04/07/14 18:33

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	LOQ	Result	Q
74-87-3	Chloromethane	0.50	< 0.50	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.20	< 0.20	U
75-00-3	Chloroethane	0.20	< 0.20	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	**Acetone**	**5.0**	**6.2**	
75-15-0	Carbon Disulfide	0.20	< 0.20	U
75-35-4	1,1-Dichloroethene	0.20	< 0.20	U
75-34-3	1,1-Dichloroethane	0.20	< 0.20	U
156-60-5	trans-1,2-Dichloroethene	0.20	< 0.20	U
156-59-2	cis-1,2-Dichloroethene	0.20	< 0.20	U
67-66-3	Chloroform	0.20	< 0.20	U
107-06-2	1,2-Dichloroethane	0.20	< 0.20	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	0.20	< 0.20	U
56-23-5	Carbon Tetrachloride	0.20	< 0.20	U
108-05-4	Vinyl Acetate	0.20	< 0.20	U
75-27-4	Bromodichloromethane	0.20	< 0.20	U
78-87-5	1,2-Dichloropropane	0.20	< 0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	< 0.20	U
79-01-6	Trichloroethene	0.20	< 0.20	U
124-48-1	Dibromochloromethane	0.20	< 0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	< 0.20	U
71-43-2	Benzene	0.20	< 0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	< 0.20	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.20	< 0.20	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.20	< 0.20	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	< 0.20	U
108-88-3	Toluene	0.20	< 0.20	U
108-90-7	Chlorobenzene	0.20	< 0.20	U
100-41-4	Ethylbenzene	0.20	< 0.20	U
100-42-5	Styrene	0.20	< 0.20	U
75-69-4	Trichlorofluoromethane	0.20	< 0.20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.20	< 0.20	U
179601-23-1	m,p-Xylene	0.40	< 0.40	U
95-47-6	o-Xylene	0.20	< 0.20	U
95-50-1	1,2-Dichlorobenzene	0.20	< 0.20	U
541-73-1	1,3-Dichlorobenzene	0.20	< 0.20	U
106-46-7	1,4-Dichlorobenzene	0.20	< 0.20	U

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140327LC93D1-1**
 SAMPLE

Lab Sample ID: YE76K
LIMS ID: 14-5898
Matrix: Water
Date Analyzed: 04/07/14 18:33

QC Report No: YE76-Joint Base Lewis McChord
Project: Log RAM

CAS Number	Analyte	LOQ	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Iodomethane	1.0	< 1.0	U
74-96-4	Bromoethane	0.20	< 0.20	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.20	< 0.20	U
74-95-3	Dibromomethane	0.20	< 0.20	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	< 0.20	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	< 0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	< 0.50	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.20	< 0.20	U
95-63-6	1,2,4-Trimethylbenzene	0.20	< 0.20	U
87-68-3	Hexachlorobutadiene	0.50	< 0.50	U
106-93-4	1,2-Dibromoethane	0.20	< 0.20	U
74-97-5	Bromochloromethane	0.20	< 0.20	U
594-20-7	2,2-Dichloropropane	0.20	< 0.20	U
142-28-9	1,3-Dichloropropane	0.20	< 0.20	U
98-82-8	Isopropylbenzene	0.20	< 0.20	U
103-65-1	n-Propylbenzene	0.20	< 0.20	U
108-86-1	Bromobenzene	0.20	< 0.20	U
95-49-8	2-Chlorotoluene	0.20	< 0.20	U
106-43-4	4-Chlorotoluene	0.20	< 0.20	U
98-06-6	tert-Butylbenzene	0.20	< 0.20	U
135-98-8	sec-Butylbenzene	0.20	< 0.20	U
99-87-6	4-Isopropyltoluene	0.20	< 0.20	U
104-51-8	n-Butylbenzene	0.20	< 0.20	U
120-82-1	1,2,4-Trichlorobenzene	0.50	< 0.50	U
91-20-3	Naphthalene	0.50	< 0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	< 0.50	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	103%
d8-Toluene	101%
Bromofluorobenzene	96.9%
d4-1,2-Dichlorobenzene	102%

2-Chloroethylvinylether is an acid labile compound and may not be recovered from an acid preserved sample.

EPA SW-846 indicates that vinyl chloride and styrene may degrade in the presence of acid preservative.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140327LC93D2-1**
Page 1 of 2 **SAMPLE**

Lab Sample ID: YE76L
LIMS ID: 14-5899
Matrix: Water
Data Release Authorized:
Reported: 04/09/14

QC Report No: YE76-Joint Base Lewis McChord
Project: Log RAM
Date Sampled: 03/27/14
Date Received: 03/28/14

Instrument/Analyst: NT3/PAB
Date Analyzed: 04/07/14 19:02

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	LOQ	Result	Q
74-87-3	Chloromethane	0.50	< 0.50	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.20	< 0.20	U
75-00-3	Chloroethane	0.20	< 0.20	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	**Acetone**	**5.0**	**8.7**	
75-15-0	Carbon Disulfide	0.20	< 0.20	U
75-35-4	1,1-Dichloroethene	0.20	< 0.20	U
75-34-3	1,1-Dichloroethane	0.20	< 0.20	U
156-60-5	trans-1,2-Dichloroethene	0.20	< 0.20	U
156-59-2	cis-1,2-Dichloroethene	0.20	< 0.20	U
67-66-3	Chloroform	0.20	< 0.20	U
107-06-2	1,2-Dichloroethane	0.20	< 0.20	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	0.20	< 0.20	U
56-23-5	Carbon Tetrachloride	0.20	< 0.20	U
108-05-4	Vinyl Acetate	0.20	< 0.20	U
75-27-4	Bromodichloromethane	0.20	< 0.20	U
78-87-5	1,2-Dichloropropane	0.20	< 0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	< 0.20	U
79-01-6	**Trichloroethene**	**0.20**	**0.31**	
124-48-1	Dibromochloromethane	0.20	< 0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	< 0.20	U
71-43-2	Benzene	0.20	< 0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	< 0.20	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.20	< 0.20	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.20	< 0.20	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	< 0.20	U
108-88-3	Toluene	0.20	< 0.20	U
108-90-7	Chlorobenzene	0.20	< 0.20	U
100-41-4	Ethylbenzene	0.20	< 0.20	U
100-42-5	Styrene	0.20	< 0.20	U
75-69-4	Trichlorofluoromethane	0.20	< 0.20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.20	< 0.20	U
179601-23-1	m,p-Xylene	0.40	< 0.40	U
95-47-6	o-Xylene	0.20	< 0.20	U
95-50-1	1,2-Dichlorobenzene	0.20	< 0.20	U
541-73-1	1,3-Dichlorobenzene	0.20	< 0.20	U
106-46-7	1,4-Dichlorobenzene	0.20	< 0.20	U

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140327LC93D2-1**
 SAMPLE

Lab Sample ID: YE76L QC Report No: YE76-Joint Base Lewis McChord
LIMS ID: 14-5899 Project: Log RAM
Matrix: Water
Date Analyzed: 04/07/14 19:02

CAS Number	Analyte	LOQ	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Iodomethane	1.0	< 1.0	U
74-96-4	Bromoethane	0.20	< 0.20	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.20	< 0.20	U
74-95-3	Dibromomethane	0.20	< 0.20	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	< 0.20	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	< 0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	< 0.50	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.20	< 0.20	U
95-63-6	1,2,4-Trimethylbenzene	0.20	< 0.20	U
87-68-3	Hexachlorobutadiene	0.50	< 0.50	U
106-93-4	1,2-Dibromoethane	0.20	< 0.20	U
74-97-5	Bromochloromethane	0.20	< 0.20	U
594-20-7	2,2-Dichloropropane	0.20	< 0.20	U
142-28-9	1,3-Dichloropropane	0.20	< 0.20	U
98-82-8	Isopropylbenzene	0.20	< 0.20	U
103-65-1	n-Propylbenzene	0.20	< 0.20	U
108-86-1	Bromobenzene	0.20	< 0.20	U
95-49-8	2-Chlorotoluene	0.20	< 0.20	U
106-43-4	4-Chlorotoluene	0.20	< 0.20	U
98-06-6	tert-Butylbenzene	0.20	< 0.20	U
135-98-8	sec-Butylbenzene	0.20	< 0.20	U
99-87-6	4-Isopropyltoluene	0.20	< 0.20	U
104-51-8	n-Butylbenzene	0.20	< 0.20	U
120-82-1	1,2,4-Trichlorobenzene	0.50	< 0.50	U
91-20-3	Naphthalene	0.50	< 0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	< 0.50	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	102%
d8-Toluene	99.9%
Bromofluorobenzene	97.3%
d4-1,2-Dichlorobenzene	101%

2-Chloroethylvinylether is an acid labile compound and may not be recovered from an acid preserved sample.

EPA SW-846 indicates that vinyl chloride and styrene may degrade in the presence of acid preservative.

YE76-00025

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140327LC94D1-1**
Page 1 of 2 **SAMPLE**

Lab Sample ID: YE76M
LIMS ID: 14-5900
Matrix: Water
Data Release Authorized:
Reported: 04/09/14

QC Report No: YE76-Joint Base Lewis McChord
Project: Log RAM
Date Sampled: 03/27/14
Date Received: 03/28/14

Instrument/Analyst: NT3/PAB
Date Analyzed: 04/07/14 19:30

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	LOQ	Result	Q
74-87-3	Chloromethane	0.50	< 0.50	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.20	< 0.20	U
75-00-3	Chloroethane	0.20	< 0.20	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	**Acetone**	**5.0**	**6.6**	
75-15-0	Carbon Disulfide	0.20	< 0.20	U
75-35-4	1,1-Dichloroethene	0.20	< 0.20	U
75-34-3	1,1-Dichloroethane	0.20	< 0.20	U
156-60-5	trans-1,2-Dichloroethene	0.20	< 0.20	U
156-59-2	cis-1,2-Dichloroethene	0.20	< 0.20	U
67-66-3	Chloroform	0.20	< 0.20	U
107-06-2	1,2-Dichloroethane	0.20	< 0.20	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	0.20	< 0.20	U
56-23-5	Carbon Tetrachloride	0.20	< 0.20	U
108-05-4	Vinyl Acetate	0.20	< 0.20	U
75-27-4	Bromodichloromethane	0.20	< 0.20	U
78-87-5	1,2-Dichloropropane	0.20	< 0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	< 0.20	U
79-01-6	Trichloroethene	0.20	< 0.20	U
124-48-1	Dibromochloromethane	0.20	< 0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	< 0.20	U
71-43-2	Benzene	0.20	< 0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	< 0.20	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.20	< 0.20	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.20	< 0.20	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	< 0.20	U
108-88-3	Toluene	0.20	< 0.20	U
108-90-7	Chlorobenzene	0.20	< 0.20	U
100-41-4	Ethylbenzene	0.20	< 0.20	U
100-42-5	Styrene	0.20	< 0.20	U
75-69-4	Trichlorofluoromethane	0.20	< 0.20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.20	< 0.20	U
179601-23-1	m,p-Xylene	0.40	< 0.40	U
95-47-6	o-Xylene	0.20	< 0.20	U
95-50-1	1,2-Dichlorobenzene	0.20	< 0.20	U
541-73-1	1,3-Dichlorobenzene	0.20	< 0.20	U
106-46-7	1,4-Dichlorobenzene	0.20	< 0.20	U

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140327LC94D1-1**
 SAMPLE

Lab Sample ID: YE76M QC Report No: YE76-Joint Base Lewis McChord
LIMS ID: 14-5900 Project: Log RAM
Matrix: Water
Date Analyzed: 04/07/14 19:30

CAS Number	Analyte	LOQ	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Iodomethane	1.0	< 1.0	U
74-96-4	Bromoethane	0.20	< 0.20	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.20	< 0.20	U
74-95-3	Dibromomethane	0.20	< 0.20	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	< 0.20	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	< 0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	< 0.50	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.20	< 0.20	U
95-63-6	1,2,4-Trimethylbenzene	0.20	< 0.20	U
87-68-3	Hexachlorobutadiene	0.50	< 0.50	U
106-93-4	1,2-Dibromoethane	0.20	< 0.20	U
74-97-5	Bromochloromethane	0.20	< 0.20	U
594-20-7	2,2-Dichloropropane	0.20	< 0.20	U
142-28-9	1,3-Dichloropropane	0.20	< 0.20	U
98-82-8	Isopropylbenzene	0.20	< 0.20	U
103-65-1	n-Propylbenzene	0.20	< 0.20	U
108-86-1	Bromobenzene	0.20	< 0.20	U
95-49-8	2-Chlorotoluene	0.20	< 0.20	U
106-43-4	4-Chlorotoluene	0.20	< 0.20	U
98-06-6	tert-Butylbenzene	0.20	< 0.20	U
135-98-8	sec-Butylbenzene	0.20	< 0.20	U
99-87-6	4-Isopropyltoluene	0.20	< 0.20	U
104-51-8	n-Butylbenzene	0.20	< 0.20	U
120-82-1	1,2,4-Trichlorobenzene	0.50	< 0.50	U
91-20-3	Naphthalene	0.50	< 0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	< 0.50	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	104%
d8-Toluene	99.1%
Bromofluorobenzene	95.7%
d4-1,2-Dichlorobenzene	98.5%

2-Chloroethylvinylether is an acid labile compound and may not be recovered from an acid preserved sample.

EPA SW-846 indicates that vinyl chloride and styrene may degrade in the presence of acid preservative.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140327LC94D2-1**
Page 1 of 2 **SAMPLE**

Lab Sample ID: YE76N
LIMS ID: 14-5901
Matrix: Water
Data Release Authorized: MW
Reported: 04/09/14

QC Report No: YE76-Joint Base Lewis McChord
Project: Log RAM
Date Sampled: 03/27/14
Date Received: 03/28/14

Instrument/Analyst: NT3/PAB
Date Analyzed: 04/07/14 19:59

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	LOQ	Result	Q
74-87-3	Chloromethane	0.50	< 0.50	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.20	< 0.20	U
75-00-3	Chloroethane	0.20	< 0.20	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	**Acetone**	**5.0**	**5.8**	
75-15-0	Carbon Disulfide	0.20	< 0.20	U
75-35-4	1,1-Dichloroethene	0.20	< 0.20	U
75-34-3	1,1-Dichloroethane	0.20	< 0.20	U
156-60-5	trans-1,2-Dichloroethene	0.20	< 0.20	U
156-59-2	**cis-1,2-Dichloroethene**	**0.20**	**0.20**	
67-66-3	Chloroform	0.20	< 0.20	U
107-06-2	1,2-Dichloroethane	0.20	< 0.20	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	0.20	< 0.20	U
56-23-5	Carbon Tetrachloride	0.20	< 0.20	U
108-05-4	Vinyl Acetate	0.20	< 0.20	U
75-27-4	Bromodichloromethane	0.20	< 0.20	U
78-87-5	1,2-Dichloropropane	0.20	< 0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	< 0.20	U
79-01-6	**Trichloroethene**	**0.20**	**2.2**	
124-48-1	Dibromochloromethane	0.20	< 0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	< 0.20	U
71-43-2	Benzene	0.20	< 0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	< 0.20	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.20	< 0.20	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.20	< 0.20	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	< 0.20	U
108-88-3	Toluene	0.20	< 0.20	U
108-90-7	Chlorobenzene	0.20	< 0.20	U
100-41-4	Ethylbenzene	0.20	< 0.20	U
100-42-5	Styrene	0.20	< 0.20	U
75-69-4	Trichlorofluoromethane	0.20	< 0.20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.20	< 0.20	U
179601-23-1	m,p-Xylene	0.40	< 0.40	U
95-47-6	o-Xylene	0.20	< 0.20	U
95-50-1	1,2-Dichlorobenzene	0.20	< 0.20	U
541-73-1	1,3-Dichlorobenzene	0.20	< 0.20	U
106-46-7	1,4-Dichlorobenzene	0.20	< 0.20	U

Lab Sample ID: YE76N QC Report No: YE76-Joint Base Lewis McChord
LIMS ID: 14-5901 Project: Log RAM
Matrix: Water
Date Analyzed: 04/07/14 19:59

CAS Number	Analyte	LOQ	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Iodomethane	1.0	< 1.0	U
74-96-4	Bromoethane	0.20	< 0.20	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.20	< 0.20	U
74-95-3	Dibromomethane	0.20	< 0.20	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	< 0.20	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	< 0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	< 0.50	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.20	< 0.20	U
95-63-6	1,2,4-Trimethylbenzene	0.20	< 0.20	U
87-68-3	Hexachlorobutadiene	0.50	< 0.50	U
106-93-4	1,2-Dibromoethane	0.20	< 0.20	U
74-97-5	Bromochloromethane	0.20	< 0.20	U
594-20-7	2,2-Dichloropropane	0.20	< 0.20	U
142-28-9	1,3-Dichloropropane	0.20	< 0.20	U
98-82-8	Isopropylbenzene	0.20	< 0.20	U
103-65-1	n-Propylbenzene	0.20	< 0.20	U
108-86-1	Bromobenzene	0.20	< 0.20	U
95-49-8	2-Chlorotoluene	0.20	< 0.20	U
106-43-4	4-Chlorotoluene	0.20	< 0.20	U
98-06-6	tert-Butylbenzene	0.20	< 0.20	U
135-98-8	sec-Butylbenzene	0.20	< 0.20	U
99-87-6	4-Isopropyltoluene	0.20	< 0.20	U
104-51-8	n-Butylbenzene	0.20	< 0.20	U
120-82-1	1,2,4-Trichlorobenzene	0.50	< 0.50	U
91-20-3	Naphthalene	0.50	< 0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	< 0.50	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	105%
d8-Toluene	99.0%
Bromofluorobenzene	96.3%
d4-1,2-Dichlorobenzene	102%

2-Chloroethylvinylether is an acid labile compound and may not be recovered from an acid preserved sample.

EPA SW-846 indicates that vinyl chloride and styrene may degrade in the presence of acid preservative.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140327LC95D1-1**
Page 1 of 2 **SAMPLE**

Lab Sample ID: YE76O
LIMS ID: 14-5902
Matrix: Water
Data Release Authorized:
Reported: 04/09/14

QC Report No: YE76-Joint Base Lewis McChord
Project: Log RAM
Date Sampled: 03/27/14
Date Received: 03/28/14

Instrument/Analyst: NT3/PAB
Date Analyzed: 04/07/14 20:28

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	LOQ	Result	Q
74-87-3	Chloromethane	0.50	< 0.50	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.20	< 0.20	U
75-00-3	Chloroethane	0.20	< 0.20	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	**Acetone**	**5.0**	**6.4**	
75-15-0	Carbon Disulfide	0.20	< 0.20	U
75-35-4	1,1-Dichloroethene	0.20	< 0.20	U
75-34-3	1,1-Dichloroethane	0.20	< 0.20	U
156-60-5	trans-1,2-Dichloroethene	0.20	< 0.20	U
156-59-2	cis-1,2-Dichloroethene	0.20	< 0.20	U
67-66-3	Chloroform	0.20	< 0.20	U
107-06-2	1,2-Dichloroethane	0.20	< 0.20	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	0.20	< 0.20	U
56-23-5	Carbon Tetrachloride	0.20	< 0.20	U
108-05-4	Vinyl Acetate	0.20	< 0.20	U
75-27-4	Bromodichloromethane	0.20	< 0.20	U
78-87-5	1,2-Dichloropropane	0.20	< 0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	< 0.20	U
79-01-6	**Trichloroethene**	**0.20**	**0.50**	
124-48-1	Dibromochloromethane	0.20	< 0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	< 0.20	U
71-43-2	Benzene	0.20	< 0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	< 0.20	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.20	< 0.20	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.20	< 0.20	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	< 0.20	U
108-88-3	Toluene	0.20	< 0.20	U
108-90-7	Chlorobenzene	0.20	< 0.20	U
100-41-4	Ethylbenzene	0.20	< 0.20	U
100-42-5	Styrene	0.20	< 0.20	U
75-69-4	Trichlorofluoromethane	0.20	< 0.20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.20	< 0.20	U
179601-23-1	m,p-Xylene	0.40	< 0.40	U
95-47-6	o-Xylene	0.20	< 0.20	U
95-50-1	1,2-Dichlorobenzene	0.20	< 0.20	U
541-73-1	1,3-Dichlorobenzene	0.20	< 0.20	U
106-46-7	1,4-Dichlorobenzene	0.20	< 0.20	U

Lab Sample ID: YE76O
LIMS ID: 14-5902
Matrix: Water
Date Analyzed: 04/07/14 20:28

QC Report No: YE76-Joint Base Lewis McChord
Project: Log RAM

CAS Number	Analyte	LOQ	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Iodomethane	1.0	< 1.0	U
74-96-4	Bromoethane	0.20	< 0.20	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.20	< 0.20	U
74-95-3	Dibromomethane	0.20	< 0.20	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	< 0.20	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	< 0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	< 0.50	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.20	< 0.20	U
95-63-6	1,2,4-Trimethylbenzene	0.20	< 0.20	U
87-68-3	Hexachlorobutadiene	0.50	< 0.50	U
106-93-4	1,2-Dibromoethane	0.20	< 0.20	U
74-97-5	Bromochloromethane	0.20	< 0.20	U
594-20-7	2,2-Dichloropropane	0.20	< 0.20	U
142-28-9	1,3-Dichloropropane	0.20	< 0.20	U
98-82-8	Isopropylbenzene	0.20	< 0.20	U
103-65-1	n-Propylbenzene	0.20	< 0.20	U
108-86-1	Bromobenzene	0.20	< 0.20	U
95-49-8	2-Chlorotoluene	0.20	< 0.20	U
106-43-4	4-Chlorotoluene	0.20	< 0.20	U
98-06-6	tert-Butylbenzene	0.20	< 0.20	U
135-98-8	sec-Butylbenzene	0.20	< 0.20	U
99-87-6	4-Isopropyltoluene	0.20	< 0.20	U
104-51-8	n-Butylbenzene	0.20	< 0.20	U
120-82-1	1,2,4-Trichlorobenzene	0.50	< 0.50	U
91-20-3	Naphthalene	0.50	< 0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	< 0.50	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	102%
d8-Toluene	102%
Bromofluorobenzene	97.9%
d4-1,2-Dichlorobenzene	102%

2-Chloroethylvinylether is an acid labile compound and may not be recovered from an acid preserved sample.

EPA SW-846 indicates that vinyl chloride and styrene may degrade in the presence of acid preservative.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140327LC95D2-1**
Page 1 of 2 **SAMPLE**

Lab Sample ID: YE76P
LIMS ID: 14-5903
Matrix: Water
Data Release Authorized: MW
Reported: 04/09/14

QC Report No: YE76-Joint Base Lewis McChord
Project: Log RAM
Date Sampled: 03/27/14
Date Received: 03/28/14

Instrument/Analyst: NT3/PAB
Date Analyzed: 04/08/14 16:45

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	LOQ	Result	Q
74-87-3	Chloromethane	0.50	< 0.50	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.20	< 0.20	U
75-00-3	Chloroethane	0.20	< 0.20	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	**Acetone**	**5.0**	**5.4**	
75-15-0	Carbon Disulfide	0.20	< 0.20	U
75-35-4	1,1-Dichloroethene	0.20	< 0.20	U
75-34-3	1,1-Dichloroethane	0.20	< 0.20	U
156-60-5	trans-1,2-Dichloroethene	0.20	< 0.20	U
156-59-2	cis-1,2-Dichloroethene	0.20	< 0.20	U
67-66-3	Chloroform	0.20	< 0.20	U
107-06-2	1,2-Dichloroethane	0.20	< 0.20	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	0.20	< 0.20	U
56-23-5	Carbon Tetrachloride	0.20	< 0.20	U
108-05-4	Vinyl Acetate	0.20	< 0.20	U
75-27-4	Bromodichloromethane	0.20	< 0.20	U
78-87-5	1,2-Dichloropropane	0.20	< 0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	< 0.20	U
79-01-6	**Trichloroethene**	**0.20**	**0.47**	
124-48-1	Dibromochloromethane	0.20	< 0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	< 0.20	U
71-43-2	Benzene	0.20	< 0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	< 0.20	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.20	< 0.20	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.20	< 0.20	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	< 0.20	U
108-88-3	Toluene	0.20	< 0.20	U
108-90-7	Chlorobenzene	0.20	< 0.20	U
100-41-4	Ethylbenzene	0.20	< 0.20	U
100-42-5	Styrene	0.20	< 0.20	U
75-69-4	Trichlorofluoromethane	0.20	< 0.20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.20	< 0.20	U
179601-23-1	m,p-Xylene	0.40	< 0.40	U
95-47-6	o-Xylene	0.20	< 0.20	U
95-50-1	1,2-Dichlorobenzene	0.20	< 0.20	U
541-73-1	1,3-Dichlorobenzene	0.20	< 0.20	U
106-46-7	1,4-Dichlorobenzene	0.20	< 0.20	U

Lab Sample ID: YE76P
LIMS ID: 14-5903
Matrix: Water
Date Analyzed: 04/08/14 16:45

QC Report No: YE76-Joint Base Lewis McChord
Project: Log RAM

CAS Number	Analyte	LOQ	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Iodomethane	1.0	< 1.0	U
74-96-4	Bromoethane	0.20	< 0.20	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.20	< 0.20	U
74-95-3	Dibromomethane	0.20	< 0.20	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	< 0.20	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	< 0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	< 0.50	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.20	< 0.20	U
95-63-6	1,2,4-Trimethylbenzene	0.20	< 0.20	U
87-68-3	Hexachlorobutadiene	0.50	< 0.50	U
106-93-4	1,2-Dibromoethane	0.20	< 0.20	U
74-97-5	Bromochloromethane	0.20	< 0.20	U
594-20-7	2,2-Dichloropropane	0.20	< 0.20	U
142-28-9	1,3-Dichloropropane	0.20	< 0.20	U
98-82-8	Isopropylbenzene	0.20	< 0.20	U
103-65-1	n-Propylbenzene	0.20	< 0.20	U
108-86-1	Bromobenzene	0.20	< 0.20	U
95-49-8	2-Chlorotoluene	0.20	< 0.20	U
106-43-4	4-Chlorotoluene	0.20	< 0.20	U
98-06-6	tert-Butylbenzene	0.20	< 0.20	U
135-98-8	sec-Butylbenzene	0.20	< 0.20	U
99-87-6	4-Isopropyltoluene	0.20	< 0.20	U
104-51-8	n-Butylbenzene	0.20	< 0.20	U
120-82-1	1,2,4-Trichlorobenzene	0.50	< 0.50	U
91-20-3	Naphthalene	0.50	< 0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	< 0.50	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	103%
d8-Toluene	100%
Bromofluorobenzene	96.5%
d4-1,2-Dichlorobenzene	102%

2-Chloroethylvinylether is an acid labile compound and may not be recovered from an acid preserved sample.

EPA SW-846 indicates that vinyl chloride and styrene may degrade in the presence of acid preservative.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140327LC102D1-1**
Page 1 of 2 **SAMPLE**

Lab Sample ID: YE76Q
LIMS ID: 14-5904
Matrix: Water
Data Release Authorized: MW
Reported: 04/09/14

QC Report No: YE76-Joint Base Lewis McChord
Project: Log RAM
Date Sampled: 03/27/14
Date Received: 03/28/14

Instrument/Analyst: NT3/PAB
Date Analyzed: 04/08/14 17:13

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	LOQ	Result	Q
74-87-3	Chloromethane	0.50	< 0.50	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.20	< 0.20	U
75-00-3	Chloroethane	0.20	< 0.20	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	**Acetone**	**5.0**	**11**	
75-15-0	Carbon Disulfide	0.20	< 0.20	U
75-35-4	1,1-Dichloroethene	0.20	< 0.20	U
75-34-3	1,1-Dichloroethane	0.20	< 0.20	U
156-60-5	trans-1,2-Dichloroethene	0.20	< 0.20	U
156-59-2	**cis-1,2-Dichloroethene**	**0.20**	**0.22**	
67-66-3	Chloroform	0.20	< 0.20	U
107-06-2	1,2-Dichloroethane	0.20	< 0.20	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	0.20	< 0.20	U
56-23-5	Carbon Tetrachloride	0.20	< 0.20	U
108-05-4	Vinyl Acetate	0.20	< 0.20	U
75-27-4	Bromodichloromethane	0.20	< 0.20	U
78-87-5	1,2-Dichloropropane	0.20	< 0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	< 0.20	U
79-01-6	**Trichloroethene**	**0.20**	**4.3**	
124-48-1	Dibromochloromethane	0.20	< 0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	< 0.20	U
71-43-2	Benzene	0.20	< 0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	< 0.20	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.20	< 0.20	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.20	< 0.20	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	< 0.20	U
108-88-3	Toluene	0.20	< 0.20	U
108-90-7	Chlorobenzene	0.20	< 0.20	U
100-41-4	Ethylbenzene	0.20	< 0.20	U
100-42-5	Styrene	0.20	< 0.20	U
75-69-4	Trichlorofluoromethane	0.20	< 0.20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.20	< 0.20	U
179601-23-1	m,p-Xylene	0.40	< 0.40	U
95-47-6	o-Xylene	0.20	< 0.20	U
95-50-1	1,2-Dichlorobenzene	0.20	< 0.20	U
541-73-1	1,3-Dichlorobenzene	0.20	< 0.20	U
106-46-7	1,4-Dichlorobenzene	0.20	< 0.20	U

Lab Sample ID: YE76Q QC Report No: YE76-Joint Base Lewis McChord
LIMS ID: 14-5904 Project: Log RAM
Matrix: Water
Date Analyzed: 04/08/14 17:13

CAS Number	Analyte	LOQ	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Iodomethane	1.0	< 1.0	U
74-96-4	Bromoethane	0.20	< 0.20	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.20	< 0.20	U
74-95-3	Dibromomethane	0.20	< 0.20	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	< 0.20	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	< 0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	< 0.50	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.20	< 0.20	U
95-63-6	1,2,4-Trimethylbenzene	0.20	< 0.20	U
87-68-3	Hexachlorobutadiene	0.50	< 0.50	U
106-93-4	1,2-Dibromoethane	0.20	< 0.20	U
74-97-5	Bromochloromethane	0.20	< 0.20	U
594-20-7	2,2-Dichloropropane	0.20	< 0.20	U
142-28-9	1,3-Dichloropropane	0.20	< 0.20	U
98-82-8	Isopropylbenzene	0.20	< 0.20	U
103-65-1	n-Propylbenzene	0.20	< 0.20	U
108-86-1	Bromobenzene	0.20	< 0.20	U
95-49-8	2-Chlorotoluene	0.20	< 0.20	U
106-43-4	4-Chlorotoluene	0.20	< 0.20	U
98-06-6	tert-Butylbenzene	0.20	< 0.20	U
135-98-8	sec-Butylbenzene	0.20	< 0.20	U
99-87-6	4-Isopropyltoluene	0.20	< 0.20	U
104-51-8	n-Butylbenzene	0.20	< 0.20	U
120-82-1	1,2,4-Trichlorobenzene	0.50	< 0.50	U
91-20-3	Naphthalene	0.50	< 0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	< 0.50	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	102%
d8-Toluene	100%
Bromofluorobenzene	96.5%
d4-1,2-Dichlorobenzene	99.7%

2-Chloroethylvinylether is an acid labile compound and may not be recovered from an acid preserved sample.

EPA SW-846 indicates that vinyl chloride and styrene may degrade in the presence of acid preservative.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140327LC102D2-1**
Page 1 of 2 **SAMPLE**

Lab Sample ID: YE76R
LIMS ID: 14-5905
Matrix: Water
Data Release Authorized:
Reported: 04/09/14

QC Report No: YE76-Joint Base Lewis McChord
Project: Log RAM
Date Sampled: 03/27/14
Date Received: 03/28/14

Instrument/Analyst: NT3/PAB
Date Analyzed: 04/08/14 17:42

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	LOQ	Result	Q
74-87-3	Chloromethane	0.50	< 0.50	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.20	< 0.20	U
75-00-3	Chloroethane	0.20	< 0.20	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	**Acetone**	**5.0**	**6.3**	
75-15-0	Carbon Disulfide	0.20	< 0.20	U
75-35-4	1,1-Dichloroethene	0.20	< 0.20	U
75-34-3	1,1-Dichloroethane	0.20	< 0.20	U
156-60-5	trans-1,2-Dichloroethene	0.20	< 0.20	U
156-59-2	**cis-1,2-Dichloroethene**	**0.20**	**0.38**	
67-66-3	Chloroform	0.20	< 0.20	U
107-06-2	1,2-Dichloroethane	0.20	< 0.20	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	0.20	< 0.20	U
56-23-5	Carbon Tetrachloride	0.20	< 0.20	U
108-05-4	Vinyl Acetate	0.20	< 0.20	U
75-27-4	Bromodichloromethane	0.20	< 0.20	U
78-87-5	1,2-Dichloropropane	0.20	< 0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	< 0.20	U
79-01-6	**Trichloroethene**	**0.20**	**4.8**	
124-48-1	Dibromochloromethane	0.20	< 0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	< 0.20	U
71-43-2	Benzene	0.20	< 0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	< 0.20	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.20	< 0.20	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.20	< 0.20	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	< 0.20	U
108-88-3	Toluene	0.20	< 0.20	U
108-90-7	Chlorobenzene	0.20	< 0.20	U
100-41-4	Ethylbenzene	0.20	< 0.20	U
100-42-5	Styrene	0.20	< 0.20	U
75-69-4	Trichlorofluoromethane	0.20	< 0.20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.20	< 0.20	U
179601-23-1	m,p-Xylene	0.40	< 0.40	U
95-47-6	o-Xylene	0.20	< 0.20	U
95-50-1	1,2-Dichlorobenzene	0.20	< 0.20	U
541-73-1	1,3-Dichlorobenzene	0.20	< 0.20	U
106-46-7	1,4-Dichlorobenzene	0.20	< 0.20	U

Lab Sample ID: YE76R
LIMS ID: 14-5905
Matrix: Water
Date Analyzed: 04/08/14 17:42

QC Report No: YE76-Joint Base Lewis McChord
Project: Log RAM

CAS Number	Analyte	LOQ	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Iodomethane	1.0	< 1.0	U
74-96-4	Bromoethane	0.20	< 0.20	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.20	< 0.20	U
74-95-3	Dibromomethane	0.20	< 0.20	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	< 0.20	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	< 0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	< 0.50	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.20	< 0.20	U
95-63-6	1,2,4-Trimethylbenzene	0.20	< 0.20	U
87-68-3	Hexachlorobutadiene	0.50	< 0.50	U
106-93-4	1,2-Dibromoethane	0.20	< 0.20	U
74-97-5	Bromochloromethane	0.20	< 0.20	U
594-20-7	2,2-Dichloropropane	0.20	< 0.20	U
142-28-9	1,3-Dichloropropane	0.20	< 0.20	U
98-82-8	Isopropylbenzene	0.20	< 0.20	U
103-65-1	n-Propylbenzene	0.20	< 0.20	U
108-86-1	Bromobenzene	0.20	< 0.20	U
95-49-8	2-Chlorotoluene	0.20	< 0.20	U
106-43-4	4-Chlorotoluene	0.20	< 0.20	U
98-06-6	tert-Butylbenzene	0.20	< 0.20	U
135-98-8	sec-Butylbenzene	0.20	< 0.20	U
99-87-6	4-Isopropyltoluene	0.20	< 0.20	U
104-51-8	n-Butylbenzene	0.20	< 0.20	U
120-82-1	1,2,4-Trichlorobenzene	0.50	< 0.50	U
91-20-3	Naphthalene	0.50	< 0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	< 0.50	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	105%
d8-Toluene	100%
Bromofluorobenzene	96.8%
d4-1,2-Dichlorobenzene	99.9%

2-Chloroethylvinylether is an acid labile compound and may not be recovered from an acid preserved sample.

EPA SW-846 indicates that vinyl chloride and styrene may degrade in the presence of acid preservative.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140326LC103D-1**
Page 1 of 2 **SAMPLE**

Lab Sample ID: YE76S QC Report No: YE76-Joint Base Lewis McChord
LIMS ID: 14-5906 Project: Log RAM
Matrix: Water
Data Release Authorized: MW Date Sampled: 03/26/14
Reported: 04/09/14 Date Received: 03/28/14

Instrument/Analyst: NT3/PAB Sample Amount: 10.0 mL
Date Analyzed: 04/08/14 18:10 Purge Volume: 10.0 mL

CAS Number	Analyte	LOQ	Result	Q
74-87-3	Chloromethane	0.50	< 0.50	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.20	< 0.20	U
75-00-3	Chloroethane	0.20	< 0.20	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	Acetone	5.0	< 5.0	U
75-15-0	Carbon Disulfide	0.20	< 0.20	U
75-35-4	1,1-Dichloroethene	0.20	< 0.20	U
75-34-3	1,1-Dichloroethane	0.20	< 0.20	U
156-60-5	trans-1,2-Dichloroethene	0.20	< 0.20	U
156-59-2	**cis-1,2-Dichloroethene**	**0.20**	**1.2**	
67-66-3	Chloroform	0.20	< 0.20	U
107-06-2	1,2-Dichloroethane	0.20	< 0.20	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	0.20	< 0.20	U
56-23-5	Carbon Tetrachloride	0.20	< 0.20	U
108-05-4	Vinyl Acetate	0.20	< 0.20	U
75-27-4	Bromodichloromethane	0.20	< 0.20	U
78-87-5	1,2-Dichloropropane	0.20	< 0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	< 0.20	U
79-01-6	**Trichloroethene**	**0.20**	**42**	
124-48-1	Dibromochloromethane	0.20	< 0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	< 0.20	U
71-43-2	Benzene	0.20	< 0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	< 0.20	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.20	< 0.20	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.20	< 0.20	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	< 0.20	U
108-88-3	Toluene	0.20	< 0.20	U
108-90-7	Chlorobenzene	0.20	< 0.20	U
100-41-4	Ethylbenzene	0.20	< 0.20	U
100-42-5	Styrene	0.20	< 0.20	U
75-69-4	Trichlorofluoromethane	0.20	< 0.20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.20	< 0.20	U
179601-23-1	m,p-Xylene	0.40	< 0.40	U
95-47-6	o-Xylene	0.20	< 0.20	U
95-50-1	1,2-Dichlorobenzene	0.20	< 0.20	U
541-73-1	1,3-Dichlorobenzene	0.20	< 0.20	U
106-46-7	1,4-Dichlorobenzene	0.20	< 0.20	U

Lab Sample ID: YE76S
LIMS ID: 14-5906
Matrix: Water
Date Analyzed: 04/08/14 18:10

QC Report No: YE76-Joint Base Lewis McChord
Project: Log RAM

CAS Number	Analyte	LOQ	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Iodomethane	1.0	< 1.0	U
74-96-4	Bromoethane	0.20	< 0.20	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.20	< 0.20	U
74-95-3	Dibromomethane	0.20	< 0.20	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	< 0.20	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	< 0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	< 0.50	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.20	< 0.20	U
95-63-6	1,2,4-Trimethylbenzene	0.20	< 0.20	U
87-68-3	Hexachlorobutadiene	0.50	< 0.50	U
106-93-4	1,2-Dibromoethane	0.20	< 0.20	U
74-97-5	Bromochloromethane	0.20	< 0.20	U
594-20-7	2,2-Dichloropropane	0.20	< 0.20	U
142-28-9	1,3-Dichloropropane	0.20	< 0.20	U
98-82-8	Isopropylbenzene	0.20	< 0.20	U
103-65-1	n-Propylbenzene	0.20	< 0.20	U
108-86-1	Bromobenzene	0.20	< 0.20	U
95-49-8	2-Chlorotoluene	0.20	< 0.20	U
106-43-4	4-Chlorotoluene	0.20	< 0.20	U
98-06-6	tert-Butylbenzene	0.20	< 0.20	U
135-98-8	sec-Butylbenzene	0.20	< 0.20	U
99-87-6	4-Isopropyltoluene	0.20	< 0.20	U
104-51-8	n-Butylbenzene	0.20	< 0.20	U
120-82-1	1,2,4-Trichlorobenzene	0.50	< 0.50	U
91-20-3	Naphthalene	0.50	< 0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	< 0.50	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	104%
d8-Toluene	98.2%
Bromofluorobenzene	97.5%
d4-1,2-Dichlorobenzene	102%

2-Chloroethylvinylether is an acid labile compound and may not be recovered from an acid preserved sample.

EPA SW-846 indicates that vinyl chloride and styrene may degrade in the presence of acid preservative.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140326LC132-1**
Page 1 of 2 **SAMPLE**

Lab Sample ID: YE76T
LIMS ID: 14-5907
Matrix: Water
Data Release Authorized: MW
Reported: 04/09/14

QC Report No: YE76-Joint Base Lewis McChord
Project: Log RAM
Date Sampled: 03/26/14
Date Received: 03/28/14

Instrument/Analyst: NT3/PAB
Date Analyzed: 04/08/14 18:38

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	LOQ	Result	Q
74-87-3	Chloromethane	0.50	< 0.50	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.20	< 0.20	U
75-00-3	Chloroethane	0.20	< 0.20	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	Acetone	5.0	< 5.0	U
75-15-0	Carbon Disulfide	0.20	< 0.20	U
75-35-4	1,1-Dichloroethene	0.20	< 0.20	U
75-34-3	1,1-Dichloroethane	0.20	< 0.20	U
156-60-5	trans-1,2-Dichloroethene	0.20	< 0.20	U
156-59-2	**cis-1,2-Dichloroethene**	**0.20**	**0.74**	
67-66-3	**Chloroform**	**0.20**	**0.48**	
107-06-2	1,2-Dichloroethane	0.20	< 0.20	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	0.20	< 0.20	U
56-23-5	Carbon Tetrachloride	0.20	< 0.20	U
108-05-4	Vinyl Acetate	0.20	< 0.20	U
75-27-4	Bromodichloromethane	0.20	< 0.20	U
78-87-5	1,2-Dichloropropane	0.20	< 0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	< 0.20	U
79-01-6	**Trichloroethene**	**0.20**	**49**	
124-48-1	Dibromochloromethane	0.20	< 0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	< 0.20	U
71-43-2	Benzene	0.20	< 0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	< 0.20	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.20	< 0.20	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	**Tetrachloroethene**	**0.20**	**0.38**	
79-34-5	1,1,2,2-Tetrachloroethane	0.20	< 0.20	U
108-88-3	Toluene	0.20	< 0.20	U
108-90-7	Chlorobenzene	0.20	< 0.20	U
100-41-4	Ethylbenzene	0.20	< 0.20	U
100-42-5	Styrene	0.20	< 0.20	U
75-69-4	Trichlorofluoromethane	0.20	< 0.20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.20	< 0.20	U
179601-23-1	m,p-Xylene	0.40	< 0.40	U
95-47-6	o-Xylene	0.20	< 0.20	U
95-50-1	1,2-Dichlorobenzene	0.20	< 0.20	U
541-73-1	1,3-Dichlorobenzene	0.20	< 0.20	U
106-46-7	1,4-Dichlorobenzene	0.20	< 0.20	U

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140326LC132-1**
 SAMPLE

Lab Sample ID: YE76T
LIMS ID: 14-5907
Matrix: Water
Date Analyzed: 04/08/14 18:38

QC Report No: YE76-Joint Base Lewis McChord
Project: Log RAM

CAS Number	Analyte	LOQ	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Iodomethane	1.0	< 1.0	U
74-96-4	Bromoethane	0.20	< 0.20	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.20	< 0.20	U
74-95-3	Dibromomethane	0.20	< 0.20	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	< 0.20	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	< 0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	< 0.50	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.20	< 0.20	U
95-63-6	1,2,4-Trimethylbenzene	0.20	< 0.20	U
87-68-3	Hexachlorobutadiene	0.50	< 0.50	U
106-93-4	1,2-Dibromoethane	0.20	< 0.20	U
74-97-5	Bromochloromethane	0.20	< 0.20	U
594-20-7	2,2-Dichloropropane	0.20	< 0.20	U
142-28-9	1,3-Dichloropropane	0.20	< 0.20	U
98-82-8	Isopropylbenzene	0.20	< 0.20	U
103-65-1	n-Propylbenzene	0.20	< 0.20	U
108-86-1	Bromobenzene	0.20	< 0.20	U
95-49-8	2-Chlorotoluene	0.20	< 0.20	U
106-43-4	4-Chlorotoluene	0.20	< 0.20	U
98-06-6	tert-Butylbenzene	0.20	< 0.20	U
135-98-8	sec-Butylbenzene	0.20	< 0.20	U
99-87-6	4-Isopropyltoluene	0.20	< 0.20	U
104-51-8	n-Butylbenzene	0.20	< 0.20	U
120-82-1	1,2,4-Trichlorobenzene	0.50	< 0.50	U
91-20-3	Naphthalene	0.50	< 0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	< 0.50	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	103%
d8-Toluene	96.6%
Bromofluorobenzene	95.5%
d4-1,2-Dichlorobenzene	102%

2-Chloroethylvinylether is an acid labile compound and may not be recovered from an acid preserved sample.

EPA SW-846 indicates that vinyl chloride and styrene may degrade in the presence of acid preservative.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: MB-040214A**
 METHOD BLANK

Lab Sample ID: MB-040214A
LIMS ID: 14-5888
Matrix: Water
Data Release Authorized: MW
Reported: 04/09/14

QC Report No: YE76-Joint Base Lewis McChord
Project: Log RAM
Date Sampled: NA
Date Received: NA

Instrument/Analyst: NT2/PAB
Date Analyzed: 04/02/14 15:02

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	LOQ	Result	Q
74-87-3	Chloromethane	0.50	< 0.50	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.20	< 0.20	U
75-00-3	Chloroethane	0.20	< 0.20	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	Acetone	5.0	< 5.0	U
75-15-0	Carbon Disulfide	0.20	< 0.20	U
75-35-4	1,1-Dichloroethene	0.20	< 0.20	U
75-34-3	1,1-Dichloroethane	0.20	< 0.20	U
156-60-5	trans-1,2-Dichloroethene	0.20	< 0.20	U
156-59-2	cis-1,2-Dichloroethene	0.20	< 0.20	U
67-66-3	Chloroform	0.20	< 0.20	U
107-06-2	1,2-Dichloroethane	0.20	< 0.20	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	0.20	< 0.20	U
56-23-5	Carbon Tetrachloride	0.20	< 0.20	U
108-05-4	Vinyl Acetate	0.20	< 0.20	U
75-27-4	Bromodichloromethane	0.20	< 0.20	U
78-87-5	1,2-Dichloropropane	0.20	< 0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	< 0.20	U
79-01-6	Trichloroethene	0.20	< 0.20	U
124-48-1	Dibromochloromethane	0.20	< 0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	< 0.20	U
71-43-2	Benzene	0.20	< 0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	< 0.20	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.20	< 0.20	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.20	< 0.20	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	< 0.20	U
108-88-3	Toluene	0.20	< 0.20	U
108-90-7	Chlorobenzene	0.20	< 0.20	U
100-41-4	Ethylbenzene	0.20	< 0.20	U
100-42-5	Styrene	0.20	< 0.20	U
75-69-4	Trichlorofluoromethane	0.20	< 0.20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.20	< 0.20	U
179601-23-1	m,p-Xylene	0.40	< 0.40	U
95-47-6	o-Xylene	0.20	< 0.20	U
95-50-1	1,2-Dichlorobenzene	0.20	< 0.20	U
541-73-1	1,3-Dichlorobenzene	0.20	< 0.20	U
106-46-7	1,4-Dichlorobenzene	0.20	< 0.20	U

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: MB-040214A**
 METHOD BLANK

Lab Sample ID: MB-040214A QC Report No: YE76-Joint Base Lewis McChord
LIMS ID: 14-5888 Project: Log RAM
Matrix: Water
Date Analyzed: 04/02/14 15:02

CAS Number	Analyte	LOQ	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Iodomethane	1.0	< 1.0	U
74-96-4	Bromoethane	0.20	< 0.20	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.20	< 0.20	U
74-95-3	Dibromomethane	0.20	< 0.20	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	< 0.20	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	< 0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	< 0.50	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.20	< 0.20	U
95-63-6	1,2,4-Trimethylbenzene	0.20	< 0.20	U
87-68-3	Hexachlorobutadiene	0.50	< 0.50	U
106-93-4	1,2-Dibromoethane	0.20	< 0.20	U
74-97-5	Bromochloromethane	0.20	< 0.20	U
594-20-7	2,2-Dichloropropane	0.20	< 0.20	U
142-28-9	1,3-Dichloropropane	0.20	< 0.20	U
98-82-8	Isopropylbenzene	0.20	< 0.20	U
103-65-1	n-Propylbenzene	0.20	< 0.20	U
108-86-1	Bromobenzene	0.20	< 0.20	U
95-49-8	2-Chlorotoluene	0.20	< 0.20	U
106-43-4	4-Chlorotoluene	0.20	< 0.20	U
98-06-6	tert-Butylbenzene	0.20	< 0.20	U
135-98-8	sec-Butylbenzene	0.20	< 0.20	U
99-87-6	4-Isopropyltoluene	0.20	< 0.20	U
104-51-8	n-Butylbenzene	0.20	< 0.20	U
120-82-1	1,2,4-Trichlorobenzene	0.50	< 0.50	U
91-20-3	Naphthalene	0.50	< 0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	< 0.50	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	100%
d8-Toluene	98.0%
Bromofluorobenzene	95.1%
d4-1,2-Dichlorobenzene	104%

YE76:00047

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: MB-040714A**
 METHOD BLANK

Lab Sample ID: MB-040714A
LIMS ID: 14-5891
Matrix: Water
Data Release Authorized: MW
Reported: 04/09/14

QC Report No: YE76-Joint Base Lewis McChord
Project: Log RAM
Date Sampled: NA
Date Received: NA

Instrument/Analyst: NT3/PAB
Date Analyzed: 04/07/14 11:25

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	LOQ	Result	Q
74-87-3	Chloromethane	0.50	< 0.50	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.20	< 0.20	U
75-00-3	Chloroethane	0.20	< 0.20	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	Acetone	5.0	< 5.0	U
75-15-0	Carbon Disulfide	0.20	< 0.20	U
75-35-4	1,1-Dichloroethene	0.20	< 0.20	U
75-34-3	1,1-Dichloroethane	0.20	< 0.20	U
156-60-5	trans-1,2-Dichloroethene	0.20	< 0.20	U
156-59-2	cis-1,2-Dichloroethene	0.20	< 0.20	U
67-66-3	Chloroform	0.20	< 0.20	U
107-06-2	1,2-Dichloroethane	0.20	< 0.20	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	0.20	< 0.20	U
56-23-5	Carbon Tetrachloride	0.20	< 0.20	U
108-05-4	Vinyl Acetate	0.20	< 0.20	U
75-27-4	Bromodichloromethane	0.20	< 0.20	U
78-87-5	1,2-Dichloropropane	0.20	< 0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	< 0.20	U
79-01-6	Trichloroethene	0.20	< 0.20	U
124-48-1	Dibromochloromethane	0.20	< 0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	< 0.20	U
71-43-2	Benzene	0.20	< 0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	< 0.20	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.20	< 0.20	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.20	< 0.20	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	< 0.20	U
108-88-3	Toluene	0.20	< 0.20	U
108-90-7	Chlorobenzene	0.20	< 0.20	U
100-41-4	Ethylbenzene	0.20	< 0.20	U
100-42-5	Styrene	0.20	< 0.20	U
75-69-4	Trichlorofluoromethane	0.20	< 0.20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.20	< 0.20	U
179601-23-1	m,p-Xylene	0.40	< 0.40	U
95-47-6	o-Xylene	0.20	< 0.20	U
95-50-1	1,2-Dichlorobenzene	0.20	< 0.20	U
541-73-1	1,3-Dichlorobenzene	0.20	< 0.20	U
106-46-7	1,4-Dichlorobenzene	0.20	< 0.20	U

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: MB-040714A**
 METHOD BLANK

Lab Sample ID: MB-040714A QC Report No: YE76-Joint Base Lewis McChord
LIMS ID: 14-5891 Project: Log RAM
Matrix: Water
Date Analyzed: 04/07/14 11:25

CAS Number	Analyte	LOQ	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Iodomethane	1.0	< 1.0	U
74-96-4	Bromoethane	0.20	< 0.20	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.20	< 0.20	U
74-95-3	Dibromomethane	0.20	< 0.20	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	< 0.20	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	< 0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	< 0.50	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.20	< 0.20	U
95-63-6	1,2,4-Trimethylbenzene	0.20	< 0.20	U
87-68-3	Hexachlorobutadiene	0.50	< 0.50	U
106-93-4	1,2-Dibromoethane	0.20	< 0.20	U
74-97-5	Bromochloromethane	0.20	< 0.20	U
594-20-7	2,2-Dichloropropane	0.20	< 0.20	U
142-28-9	1,3-Dichloropropane	0.20	< 0.20	U
98-82-8	Isopropylbenzene	0.20	< 0.20	U
103-65-1	n-Propylbenzene	0.20	< 0.20	U
108-86-1	Bromobenzene	0.20	< 0.20	U
95-49-8	2-Chlorotoluene	0.20	< 0.20	U
106-43-4	4-Chlorotoluene	0.20	< 0.20	U
98-06-6	tert-Butylbenzene	0.20	< 0.20	U
135-98-8	sec-Butylbenzene	0.20	< 0.20	U
99-87-6	4-Isopropyltoluene	0.20	< 0.20	U
104-51-8	n-Butylbenzene	0.20	< 0.20	U
120-82-1	1,2,4-Trichlorobenzene	0.50	< 0.50	U
91-20-3	Naphthalene	0.50	< 0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	< 0.50	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	103%
d8-Toluene	101%
Bromofluorobenzene	97.8%
d4-1,2-Dichlorobenzene	104%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: MB-040814A**
 METHOD BLANK

Lab Sample ID: MB-040814A QC Report No: YE76-Joint Base Lewis McChord
LIMS ID: 14-5903 Project: Log RAM
Matrix: Water
Data Release Authorized: MW Date Sampled: NA
Reported: 04/09/14 Date Received: NA

Instrument/Analyst: NT3/PAB Sample Amount: 10.0 mL
Date Analyzed: 04/08/14 10:28 Purge Volume: 10.0 mL

CAS Number	Analyte	LOQ	Result	Q
74-87-3	Chloromethane	0.50	< 0.50	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.20	< 0.20	U
75-00-3	Chloroethane	0.20	< 0.20	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	Acetone	5.0	< 5.0	U
75-15-0	Carbon Disulfide	0.20	< 0.20	U
75-35-4	1,1-Dichloroethene	0.20	< 0.20	U
75-34-3	1,1-Dichloroethane	0.20	< 0.20	U
156-60-5	trans-1,2-Dichloroethene	0.20	< 0.20	U
156-59-2	cis-1,2-Dichloroethene	0.20	< 0.20	U
67-66-3	Chloroform	0.20	< 0.20	U
107-06-2	1,2-Dichloroethane	0.20	< 0.20	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	0.20	< 0.20	U
56-23-5	Carbon Tetrachloride	0.20	< 0.20	U
108-05-4	Vinyl Acetate	0.20	< 0.20	U
75-27-4	Bromodichloromethane	0.20	< 0.20	U
78-87-5	1,2-Dichloropropane	0.20	< 0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	< 0.20	U
79-01-6	Trichloroethene	0.20	< 0.20	U
124-48-1	Dibromochloromethane	0.20	< 0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	< 0.20	U
71-43-2	Benzene	0.20	< 0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	< 0.20	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.20	< 0.20	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.20	< 0.20	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	< 0.20	U
108-88-3	Toluene	0.20	< 0.20	U
108-90-7	Chlorobenzene	0.20	< 0.20	U
100-41-4	Ethylbenzene	0.20	< 0.20	U
100-42-5	Styrene	0.20	< 0.20	U
75-69-4	Trichlorofluoromethane	0.20	< 0.20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.20	< 0.20	U
179601-23-1	m,p-Xylene	0.40	< 0.40	U
95-47-6	o-Xylene	0.20	< 0.20	U
95-50-1	1,2-Dichlorobenzene	0.20	< 0.20	U
541-73-1	1,3-Dichlorobenzene	0.20	< 0.20	U
106-46-7	1,4-Dichlorobenzene	0.20	< 0.20	U

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: MB-040814A**
 METHOD BLANK

Lab Sample ID: MB-040814A QC Report No: YE76-Joint Base Lewis McChord
LIMS ID: 14-5903 Project: Log RAM
Matrix: Water
Date Analyzed: 04/08/14 10:28

CAS Number	Analyte	LOQ	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Iodomethane	1.0	< 1.0	U
74-96-4	Bromoethane	0.20	< 0.20	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.20	< 0.20	U
74-95-3	Dibromomethane	0.20	< 0.20	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	< 0.20	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	< 0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	< 0.50	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.20	< 0.20	U
95-63-6	1,2,4-Trimethylbenzene	0.20	< 0.20	U
87-68-3	Hexachlorobutadiene	0.50	< 0.50	U
106-93-4	1,2-Dibromoethane	0.20	< 0.20	U
74-97-5	Bromochloromethane	0.20	< 0.20	U
594-20-7	2,2-Dichloropropane	0.20	< 0.20	U
142-28-9	1,3-Dichloropropane	0.20	< 0.20	U
98-82-8	Isopropylbenzene	0.20	< 0.20	U
103-65-1	n-Propylbenzene	0.20	< 0.20	U
108-86-1	Bromobenzene	0.20	< 0.20	U
95-49-8	2-Chlorotoluene	0.20	< 0.20	U
106-43-4	4-Chlorotoluene	0.20	< 0.20	U
98-06-6	tert-Butylbenzene	0.20	< 0.20	U
135-98-8	sec-Butylbenzene	0.20	< 0.20	U
99-87-6	4-Isopropyltoluene	0.20	< 0.20	U
104-51-8	n-Butylbenzene	0.20	< 0.20	U
120-82-1	1,2,4-Trichlorobenzene	0.50	< 0.50	U
91-20-3	Naphthalene	0.50	< 0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	< 0.50	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	105%
d8-Toluene	97.5%
Bromofluorobenzene	97.6%
d4-1,2-Dichlorobenzene	102%

ANALYTICAL RESOURCES INCORPORATED

VOA SURROGATE RECOVERY SUMMARY

Matrix: Water

QC Report No: YE76-Joint Base Lewis McChord
Project: Log RAM

ARI ID	Client ID	PV	DCE	TOL	BFB	DCB	TOT OUT
MB-040214A	Method Blank	10	100%	98.0%	95.1%	104%	0
LCS-040214A	Lab Control	10	90.2%	99.1%	92.7%	102%	0
LCSD-040214A	Lab Control Dup	10	97.3%	98.4%	101%	102%	0
YE76A	LGC140327LC85D1-1	10	96.2%	96.5%	94.3%	102%	0
YE76B	LGC140327LC85D2-1	10	103%	98.0%	92.7%	103%	0
YE76C	LGC140327LC88D1-1	10	96.8%	96.2%	93.3%	100%	0
MB-040714A	Method Blank	10	103%	101%	97.8%	104%	0
LCS-040714A	Lab Control	10	101%	101%	98.2%	99.2%	0
LCSD-040714A	Lab Control Dup	10	101%	103%	97.9%	99.3%	0
YE76D	LGC140327LC88D2-1	10	105%	100%	96.9%	99.5%	0
YE76E	LGC140326LC90D1-1	10	103%	99.1%	96.8%	102%	0
YE76F	LGC140326LC90D2-1	10	101%	101%	97.2%	100%	0
YE76G	LGC140327LC91D1-1	10	104%	100%	97.3%	104%	0
YE76H	LGC140327LC91D2-1	10	101%	102%	99.8%	101%	0
YE76I	LGC140327LC92D1-1	10	104%	101%	97.5%	103%	0
YE76J	LGC140327LC92D2-1	10	102%	98.3%	98.5%	101%	0
YE76K	LGC140327LC93D1-1	10	103%	101%	96.9%	102%	0
YE76L	LGC140327LC93D2-1	10	102%	99.9%	97.3%	101%	0
YE76M	LGC140327LC94D1-1	10	104%	99.1%	95.7%	98.5%	0
YE76N	LGC140327LC94D2-1	10	105%	99.0%	96.3%	102%	0
YE76O	LGC140327LC95D1-1	10	102%	102%	97.9%	102%	0
MB-040814A	Method Blank	10	105%	97.5%	97.6%	102%	0
LCS-040814A	Lab Control	10	99.9%	98.2%	97.8%	101%	0
LCSD-040814A	Lab Control Dup	10	103%	100%	98.4%	99.1%	0
YE76P	LGC140327LC95D2-1	10	103%	100%	96.5%	102%	0
YE76Q	LGC140327LC102D1-1	10	102%	100%	96.5%	99.7%	0
YE76R	LGC140327LC102D2-1	10	105%	100%	96.8%	99.9%	0
YE76S	LGC140326LC103D-1	10	104%	98.2%	97.5%	102%	0
YE76T	LGC140326LC132-1	10	103%	96.6%	95.5%	102%	0

	LCS/MB LIMITS	QC LIMITS
SW8260C		
(DCE) = d4-1,2-Dichloroethane	(80-120)	(80-130)
(TOL) = d8-Toluene	(80-120)	(80-120)
(BFB) = Bromofluorobenzene	(80-120)	(80-120)
(DCB) = d4-1,2-Dichlorobenzene	(80-120)	(80-120)

Prep Method: SW5030B
Log Number Range: 14-5888 to 14-5907

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LCS-040214A**
 LAB CONTROL SAMPLE

Lab Sample ID: LCS-040214A QC Report No: YE76-Joint Base Lewis McChord
LIMS ID: 14-5888 Project: Log RAM
Matrix: Water
Data Release Authorized: Date Sampled: NA
Reported: 04/09/14 Date Received: NA

Instrument/Analyst LCS: NT2/PAB Sample Amount LCS: 10.0 mL
LCSD: NT2/PAB LCSD: 10.0 mL
Date Analyzed LCS: 04/02/14 14:08 Purge Volume LCS: 10.0 mL
LCSD: 04/02/14 14:35 LCSD: 10.0 mL

Analyte	LCS	Spike Added-LCS	LCS Recovery	LCSD	Spike Added-LCSD	LCSD Recovery	RPD
Chloromethane	9.73	10.0	97.3%	11.5	10.0	115%	16.7%
Bromomethane	8.66	10.0	86.6%	9.41	10.0	94.1%	8.3%
Vinyl Chloride	9.91	10.0	99.1%	11.6	10.0	116%	15.7%
Chloroethane	9.34	10.0	93.4%	10.7	10.0	107%	13.6%
Methylene Chloride	9.15	10.0	91.5%	10.4	10.0	104%	12.8%
Acetone	44.4	50.0	88.8%	49.5	50.0	99.0%	10.9%
Carbon Disulfide	10.1	10.0	101%	11.3	10.0	113%	11.2%
1,1-Dichloroethene	10.0	10.0	100%	11.1	10.0	111%	10.4%
1,1-Dichloroethane	10.0	10.0	100%	10.6	10.0	106%	5.8%
trans-1,2-Dichloroethene	9.07	10.0	90.7%	9.63	10.0	96.3%	6.0%
cis-1,2-Dichloroethene	9.89	10.0	98.9%	10.5	10.0	105%	6.0%
Chloroform	10.0	10.0	100%	10.5	10.0	105%	4.9%
1,2-Dichloroethane	10.5	10.0	105%	10.7	10.0	107%	1.9%
2-Butanone	46.4	50.0	92.8%	48.5	50.0	97.0%	4.4%
1,1,1-Trichloroethane	9.11	10.0	91.1%	9.97	10.0	99.7%	9.0%
Carbon Tetrachloride	7.33 Q	10.0	73.3%	8.12 Q	10.0	81.2%	10.2%
Vinyl Acetate	8.07 Q	10.0	80.7%	8.47 Q	10.0	84.7%	4.8%
Bromodichloromethane	8.68	10.0	86.8%	9.09	10.0	90.9%	4.6%
1,2-Dichloropropane	10.8	10.0	108%	10.5	10.0	105%	2.8%
cis-1,3-Dichloropropene	9.78	10.0	97.8%	9.69	10.0	96.9%	0.9%
Trichloroethene	10.8	10.0	108%	10.9	10.0	109%	0.9%
Dibromochloromethane	7.73 Q	10.0	77.3%	7.89 Q	10.0	78.9%	2.0%
1,1,2-Trichloroethane	10.5	10.0	105%	10.6	10.0	106%	0.9%
Benzene	10.6	10.0	106%	10.6	10.0	106%	0.0%
trans-1,3-Dichloropropene	9.77	10.0	97.7%	9.86	10.0	98.6%	0.9%
2-Chloroethylvinylether	8.90	10.0	89.0%	9.15	10.0	91.5%	2.8%
Bromoform	6.30 Q	10.0	63.0%	6.51 Q	10.0	65.1%	3.3%
4-Methyl-2-Pentanone (MIBK)	49.8	50.0	99.6%	52.1	50.0	104%	4.5%
2-Hexanone	52.1	50.0	104%	51.8	50.0	104%	0.6%
Tetrachloroethene	10.0	10.0	100%	9.34	10.0	93.4%	6.8%
1,1,2,2-Tetrachloroethane	10.8	10.0	108%	10.3	10.0	103%	4.7%
Toluene	10.5	10.0	105%	10.4	10.0	104%	1.0%
Chlorobenzene	11.6	10.0	116%	11.3	10.0	113%	2.6%
Ethylbenzene	11.1	10.0	111%	11.3	10.0	113%	1.8%
Styrene	11.3	10.0	113%	11.3	10.0	113%	0.0%
Trichlorofluoromethane	10.1	10.0	101%	11.2	10.0	112%	10.3%
1,1,2-Trichloro-1,2,2-trifluoroetha	10.5	10.0	105%	11.8	10.0	118%	11.7%
m,p-Xylene	22.7	20.0	114%	22.4	20.0	112%	1.3%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LCS-040214A**
 LAB CONTROL SAMPLE

Lab Sample ID: LCS-040214A QC Report No: YE76-Joint Base Lewis McChord
LIMS ID: 14-5888 Project: Log RAM
Matrix: Water

Analyte	LCS	Spike Added-LCS	LCS Recovery	LCSD	Spike Added-LCSD	LCSD Recovery	RPD
o-Xylene	11.1	10.0	111%	11.4	10.0	114%	2.7%
1,2-Dichlorobenzene	10.8	10.0	108%	10.9	10.0	109%	0.9%
1,3-Dichlorobenzene	11.3	10.0	113%	11.2	10.0	112%	0.9%
1,4-Dichlorobenzene	10.9	10.0	109%	10.8	10.0	108%	0.9%
Acrolein	49.3	50.0	98.6%	57.1	50.0	114%	14.7%
Iodomethane	10.3	10.0	103%	11.5	10.0	115%	11.0%
Bromoethane	9.79	10.0	97.9%	10.9	10.0	109%	10.7%
Acrylonitrile	8.56	10.0	85.6%	9.61	10.0	96.1%	11.6%
1,1-Dichloropropene	11.1	10.0	111%	10.7	10.0	107%	3.7%
Dibromomethane	10.0	10.0	100%	10.6	10.0	106%	5.8%
1,1,1,2-Tetrachloroethane	8.48 Q	10.0	84.8%	9.10 Q	10.0	91.0%	7.1%
1,2-Dibromo-3-chloropropane	7.14 Q	10.0	71.4%	8.55 Q	10.0	85.5%	18.0%
1,2,3-Trichloropropane	10.7	10.0	107%	10.7	10.0	107%	0.0%
trans-1,4-Dichloro-2-butene	8.38	10.0	83.8%	8.38	10.0	83.8%	0.0%
1,3,5-Trimethylbenzene	11.3	10.0	113%	11.1	10.0	111%	1.8%
1,2,4-Trimethylbenzene	11.3	10.0	113%	11.0	10.0	110%	2.7%
Hexachlorobutadiene	11.0	10.0	110%	10.9	10.0	109%	0.9%
1,2-Dibromoethane	9.95	10.0	99.5%	10.3	10.0	103%	3.5%
Bromochloromethane	10.5	10.0	105%	11.5	10.0	115%	9.1%
2,2-Dichloropropane	9.30	10.0	93.0%	10.4	10.0	104%	11.2%
1,3-Dichloropropane	11.1	10.0	111%	10.7	10.0	107%	3.7%
Isopropylbenzene	11.5	10.0	115%	11.0	10.0	110%	4.4%
n-Propylbenzene	11.3	10.0	113%	10.9	10.0	109%	3.6%
Bromobenzene	10.7	10.0	107%	10.7	10.0	107%	0.0%
2-Chlorotoluene	11.0	10.0	110%	10.7	10.0	107%	2.8%
4-Chlorotoluene	10.9	10.0	109%	10.4	10.0	104%	4.7%
tert-Butylbenzene	11.1	10.0	111%	10.7	10.0	107%	3.7%
sec-Butylbenzene	11.9	10.0	119%	11.5	10.0	115%	3.4%
4-Isopropyltoluene	11.4	10.0	114%	11.5	10.0	115%	0.9%
n-Butylbenzene	11.4	10.0	114%	11.3	10.0	113%	0.9%
1,2,4-Trichlorobenzene	7.65	10.0	76.5%	8.18	10.0	81.8%	6.7%
Naphthalene	6.82 Q	10.0	68.2%	7.16 Q	10.0	71.6%	4.9%
1,2,3-Trichlorobenzene	7.65	10.0	76.5%	7.77	10.0	77.7%	1.6%

Reported in µg/L (ppb)

RPD calculated using sample concentrations per SW846.

Volatile Surrogate Recovery

	LCS	LCSD
d4-1,2-Dichloroethane	90.2%	97.3%
d8-Toluene	99.1%	98.4%
Bromofluorobenzene	92.7%	101%
d4-1,2-Dichlorobenzene	102%	102%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LCS-040714A**
 LAB CONTROL SAMPLE

Lab Sample ID: LCS-040714A QC Report No: YE76-Joint Base Lewis McChord
LIMS ID: 14-5891 Project: Log RAM
Matrix: Water
Data Release Authorized: MW Date Sampled: NA
Reported: 04/09/14 Date Received: NA

Instrument/Analyst LCS: NT3/PAB Sample Amount LCS: 10.0 mL
LCSD: NT3/PAB LCSD: 10.0 mL
Date Analyzed LCS: 04/07/14 10:28 Purge Volume LCS: 10.0 mL
LCSD: 04/07/14 10:57 LCSD: 10.0 mL

Analyte	LCS	Spike Added-LCS	LCS Recovery	LCSD	Spike Added-LCSD	LCSD Recovery	RPD
Chloromethane	9.42	10.0	94.2%	10.5	10.0	105%	10.8%
Bromomethane	8.77	10.0	87.7%	10.3	10.0	103%	16.0%
Vinyl Chloride	8.96	10.0	89.6%	10.3	10.0	103%	13.9%
Chloroethane	7.02	10.0	70.2%	8.92	10.0	89.2%	23.8%
Methylene Chloride	9.93	10.0	99.3%	10.6	10.0	106%	6.5%
Acetone	50.4	50.0	101%	54.1	50.0	108%	7.1%
Carbon Disulfide	9.63	10.0	96.3%	10.6	10.0	106%	9.6%
1,1-Dichloroethene	9.36	10.0	93.6%	10.4	10.0	104%	10.5%
1,1-Dichloroethane	9.53	10.0	95.3%	10.6	10.0	106%	10.6%
trans-1,2-Dichloroethene	9.14	10.0	91.4%	10.2	10.0	102%	11.0%
cis-1,2-Dichloroethene	9.52	10.0	95.2%	10.7	10.0	107%	11.7%
Chloroform	9.17	10.0	91.7%	10.2	10.0	102%	10.6%
1,2-Dichloroethane	9.61	10.0	96.1%	10.7	10.0	107%	10.7%
2-Butanone	45.0	50.0	90.0%	51.4	50.0	103%	13.3%
1,1,1-Trichloroethane	9.81	10.0	98.1%	10.8	10.0	108%	9.6%
Carbon Tetrachloride	9.98	10.0	99.8%	10.8	10.0	108%	7.9%
Vinyl Acetate	9.83	10.0	98.3%	11.2	10.0	112%	13.0%
Bromodichloromethane	9.83	10.0	98.3%	10.8	10.0	108%	9.4%
1,2-Dichloropropane	9.53	10.0	95.3%	10.5	10.0	105%	9.7%
cis-1,3-Dichloropropene	10.1	10.0	101%	11.2	10.0	112%	10.3%
Trichloroethene	9.69	10.0	96.9%	10.6	10.0	106%	9.0%
Dibromochloromethane	9.85	10.0	98.5%	10.7	10.0	107%	8.3%
1,1,2-Trichloroethane	9.46	10.0	94.6%	10.6	10.0	106%	11.4%
Benzene	9.80	10.0	98.0%	10.7	10.0	107%	8.8%
trans-1,3-Dichloropropene	10.2	10.0	102%	11.2	10.0	112%	9.3%
2-Chloroethylvinylether	10.3	10.0	103%	11.4	10.0	114%	10.1%
Bromoform	10.8 Q	10.0	108%	11.8 Q	10.0	118%	8.8%
4-Methyl-2-Pentanone (MIBK)	53.0	50.0	106%	60.6	50.0	121%	13.4%
2-Hexanone	38.9	50.0	77.8%	45.6	50.0	91.2%	15.9%
Tetrachloroethene	9.75	10.0	97.5%	10.6	10.0	106%	8.4%
1,1,2,2-Tetrachloroethane	9.46	10.0	94.6%	10.7	10.0	107%	12.3%
Toluene	9.86	10.0	98.6%	10.8	10.0	108%	9.1%
Chlorobenzene	9.62	10.0	96.2%	10.6	10.0	106%	9.7%
Ethylbenzene	9.91	10.0	99.1%	10.9	10.0	109%	9.5%
Styrene	10.0	10.0	100%	10.9	10.0	109%	8.6%
Trichlorofluoromethane	9.55	10.0	95.5%	11.2	10.0	112%	15.9%
1,1,2-Trichloro-1,2,2-trifluoroetha	9.88	10.0	98.8%	10.6	10.0	106%	7.0%
m,p-Xylene	19.7	20.0	98.5%	21.5	20.0	108%	8.7%

YE76.00055

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LCS-040714A**
 LAB CONTROL SAMPLE

Lab Sample ID: LCS-040714A QC Report No: YE76-Joint Base Lewis McChord
LIMS ID: 14-5891 Project: Log RAM
Matrix: Water

Analyte	LCS	Spike Added-LCS	LCS Recovery	LCSD	Spike Added-LCSD	LCSD Recovery	RPD
o-Xylene	9.76	10.0	97.6%	10.6	10.0	106%	8.3%
1,2-Dichlorobenzene	9.73	10.0	97.3%	10.6	10.0	106%	8.6%
1,3-Dichlorobenzene	9.85	10.0	98.5%	10.6	10.0	106%	7.3%
1,4-Dichlorobenzene	9.65	10.0	96.5%	10.6	10.0	106%	9.4%
Acrolein	53.4	50.0	107%	60.9	50.0	122%	13.1%
Iodomethane	9.36	10.0	93.6%	10.2	10.0	102%	8.6%
Bromoethane	8.63	10.0	86.3%	9.84	10.0	98.4%	13.1%
Acrylonitrile	9.26	10.0	92.6%	10.1	10.0	101%	8.7%
1,1-Dichloropropene	9.58	10.0	95.8%	10.8	10.0	108%	12.0%
Dibromomethane	9.36	10.0	93.6%	10.7	10.0	107%	13.4%
1,1,1,2-Tetrachloroethane	9.78	10.0	97.8%	10.5	10.0	105%	7.1%
1,2-Dibromo-3-chloropropane	10.4	10.0	104%	11.7	10.0	117%	11.8%
1,2,3-Trichloropropane	9.52	10.0	95.2%	11.2	10.0	112%	16.2%
trans-1,4-Dichloro-2-butene	11.0	10.0	110%	12.3	10.0	123%	11.2%
1,3,5-Trimethylbenzene	9.62	10.0	96.2%	10.5	10.0	105%	8.7%
1,2,4-Trimethylbenzene	8.69	10.0	86.9%	9.72	10.0	97.2%	11.2%
Hexachlorobutadiene	9.97	10.0	99.7%	10.7	10.0	107%	7.1%
1,2-Dibromoethane	9.68	10.0	96.8%	10.9	10.0	109%	11.9%
Bromochloromethane	9.35	10.0	93.5%	10.3	10.0	103%	9.7%
2,2-Dichloropropane	10.7	10.0	107%	11.8	10.0	118%	9.8%
1,3-Dichloropropane	9.46	10.0	94.6%	10.3	10.0	103%	8.5%
Isopropylbenzene	10.3	10.0	103%	11.1	10.0	111%	7.5%
n-Propylbenzene	10.3	10.0	103%	11.1	10.0	111%	7.5%
Bromobenzene	9.53	10.0	95.3%	10.5	10.0	105%	9.7%
2-Chlorotoluene	9.90	10.0	99.0%	10.8	10.0	108%	8.7%
4-Chlorotoluene	10.0	10.0	100%	10.8	10.0	108%	7.7%
tert-Butylbenzene	10.0	10.0	100%	10.8	10.0	108%	7.7%
sec-Butylbenzene	9.62	10.0	96.2%	10.4	10.0	104%	7.8%
4-Isopropyltoluene	8.71	10.0	87.1%	9.57	10.0	95.7%	9.4%
n-Butylbenzene	7.57	10.0	75.7%	8.87	10.0	88.7%	15.8%
1,2,4-Trichlorobenzene	9.15	10.0	91.5%	11.2	10.0	112%	20.1%
Naphthalene	9.35	10.0	93.5%	11.0	10.0	110%	16.2%
1,2,3-Trichlorobenzene	7.69	10.0	76.9%	9.35	10.0	93.5%	19.5%

Reported in µg/L (ppb)

RPD calculated using sample concentrations per SW846.

Volatile Surrogate Recovery

	LCS	LCSD
d4-1,2-Dichloroethane	101%	101%
d8-Toluene	101%	103%
Bromofluorobenzene	98.2%	97.9%
d4-1,2-Dichlorobenzene	99.2%	99.3%

YE76:00056

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LCS-040814A**
 LAB CONTROL SAMPLE

Lab Sample ID: LCS-040814A
LIMS ID: 14-5903
Matrix: Water
Data Release Authorized: MW
Reported: 04/09/14

QC Report No: YE76-Joint Base Lewis McChord
Project: Log RAM
Date Sampled: NA
Date Received: NA

Instrument/Analyst LCS: NT3/PAB
LCSD: NT3/PAB
Date Analyzed LCS: 04/08/14 09:31
LCSD: 04/08/14 11:01

Sample Amount LCS: 10.0 mL
LCSD: 10.0 mL
Purge Volume LCS: 10.0 mL
LCSD: 10.0 mL

Analyte	LCS	Spike Added-LCS	LCS Recovery	LCSD	Spike Added-LCSD	LCSD Recovery	RPD
Chloromethane	9.64	10.0	96.4%	10.3	10.0	103%	6.6%
Bromomethane	7.33 Q	10.0	73.3%	8.43 Q	10.0	84.3%	14.0%
Vinyl Chloride	9.63	10.0	96.3%	10.6	10.0	106%	9.6%
Chloroethane	9.56	10.0	95.6%	9.71	10.0	97.1%	1.6%
Methylene Chloride	10.1	10.0	101%	10.2	10.0	102%	1.0%
Acetone	32.6	50.0	65.2%	57.2	50.0	114%	54.8%
Carbon Disulfide	10.2	10.0	102%	11.2	10.0	112%	9.3%
1,1-Dichloroethene	10.0	10.0	100%	10.7	10.0	107%	6.8%
1,1-Dichloroethane	10.1	10.0	101%	10.7	10.0	107%	5.8%
trans-1,2-Dichloroethene	9.83	10.0	98.3%	10.6	10.0	106%	7.5%
cis-1,2-Dichloroethene	10.0	10.0	100%	10.6	10.0	106%	5.8%
Chloroform	9.75	10.0	97.5%	10.4	10.0	104%	6.5%
1,2-Dichloroethane	10.1	10.0	101%	10.8	10.0	108%	6.7%
2-Butanone	46.5	50.0	93.0%	51.2	50.0	102%	9.6%
1,1,1-Trichloroethane	10.5	10.0	105%	11.1	10.0	111%	5.6%
Carbon Tetrachloride	10.5	10.0	105%	11.2	10.0	112%	6.5%
Vinyl Acetate	9.66	10.0	96.6%	10.8	10.0	108%	11.1%
Bromodichloromethane	10.6	10.0	106%	10.9	10.0	109%	2.8%
1,2-Dichloropropane	10.0	10.0	100%	10.6	10.0	106%	5.8%
cis-1,3-Dichloropropene	10.7	10.0	107%	11.2	10.0	112%	4.6%
Trichloroethene	10.3	10.0	103%	10.8	10.0	108%	4.7%
Dibromochloromethane	11.0	10.0	110%	11.2	10.0	112%	1.8%
1,1,2-Trichloroethane	9.94	10.0	99.4%	10.6	10.0	106%	6.4%
Benzene	10.3	10.0	103%	10.9	10.0	109%	5.7%
trans-1,3-Dichloropropene	10.7	10.0	107%	11.3	10.0	113%	5.5%
2-Chloroethylvinylether	10.5	10.0	105%	11.4	10.0	114%	8.2%
Bromoform	11.8	10.0	118%	12.0	10.0	120%	1.7%
4-Methyl-2-Pentanone (MIBK)	55.6	50.0	111%	58.7	50.0	117%	5.4%
2-Hexanone	43.5	50.0	87.0%	45.9	50.0	91.8%	5.4%
Tetrachloroethene	10.8	10.0	108%	10.9	10.0	109%	0.9%
1,1,2,2-Tetrachloroethane	10.5	10.0	105%	11.2	10.0	112%	6.5%
Toluene	10.3	10.0	103%	10.8	10.0	108%	4.7%
Chlorobenzene	10.7	10.0	107%	11.0	10.0	110%	2.8%
Ethylbenzene	11.0	10.0	110%	11.4	10.0	114%	3.6%
Styrene	11.0	10.0	110%	11.6	10.0	116%	5.3%
Trichlorofluoromethane	10.9	10.0	109%	11.5	10.0	115%	5.4%
1,1,2-Trichloro-1,2,2-trifluoroetha	10.6	10.0	106%	11.3	10.0	113%	6.4%
m,p-Xylene	21.9	20.0	110%	22.8	20.0	114%	4.0%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LCS-040814A**
 LAB CONTROL SAMPLE

Lab Sample ID: LCS-040814A QC Report No: YE76-Joint Base Lewis McChord
LIMS ID: 14-5903 Project: Log RAM
Matrix: Water

Analyte	LCS	Spike Added-LCS	LCS Recovery	LCSD	Spike Added-LCSD	LCSD Recovery	RPD
o-Xylene	10.8	10.0	108%	11.0	10.0	110%	1.8%
1,2-Dichlorobenzene	10.5	10.0	105%	11.2	10.0	112%	6.5%
1,3-Dichlorobenzene	10.7	10.0	107%	11.3	10.0	113%	5.5%
1,4-Dichlorobenzene	10.8	10.0	108%	11.3	10.0	113%	4.5%
Acrolein	28.7 Q	50.0	57.4%	41.7 Q	50.0	83.4%	36.9%
Iodomethane	7.32 Q	10.0	73.2%	8.65 Q	10.0	86.5%	16.7%
Bromoethane	9.33	10.0	93.3%	9.84	10.0	98.4%	5.3%
Acrylonitrile	8.85	10.0	88.5%	10.4	10.0	104%	16.1%
1,1-Dichloropropene	10.2	10.0	102%	11.0	10.0	110%	7.5%
Dibromomethane	9.82	10.0	98.2%	10.8	10.0	108%	9.5%
1,1,1,2-Tetrachloroethane	10.5	10.0	105%	11.1	10.0	111%	5.6%
1,2-Dibromo-3-chloropropane	11.1	10.0	111%	12.0	10.0	120%	7.8%
1,2,3-Trichloropropane	11.2	10.0	112%	11.0	10.0	110%	1.8%
trans-1,4-Dichloro-2-butene	11.0	10.0	110%	12.1	10.0	121%	9.5%
1,3,5-Trimethylbenzene	11.1	10.0	111%	11.3	10.0	113%	1.8%
1,2,4-Trimethylbenzene	11.3	10.0	113%	11.0	10.0	110%	2.7%
Hexachlorobutadiene	11.4	10.0	114%	11.3	10.0	113%	0.9%
1,2-Dibromoethane	10.2	10.0	102%	10.9	10.0	109%	6.6%
Bromochloromethane	9.54	10.0	95.4%	10.9	10.0	109%	13.3%
2,2-Dichloropropane	11.3 Q	10.0	113%	12.1 Q	10.0	121%	6.8%
1,3-Dichloropropane	10.4	10.0	104%	10.8	10.0	108%	3.8%
Isopropylbenzene	11.1	10.0	111%	11.8	10.0	118%	6.1%
n-Propylbenzene	11.3	10.0	113%	11.9	10.0	119%	5.2%
Bromobenzene	10.3	10.0	103%	11.0	10.0	110%	6.6%
2-Chlorotoluene	10.7	10.0	107%	11.5	10.0	115%	7.2%
4-Chlorotoluene	10.9	10.0	109%	11.6	10.0	116%	6.2%
tert-Butylbenzene	11.0	10.0	110%	11.5	10.0	115%	4.4%
sec-Butylbenzene	11.0	10.0	110%	11.3	10.0	113%	2.7%
4-Isopropyltoluene	11.0	10.0	110%	10.7	10.0	107%	2.8%
n-Butylbenzene	11.7	10.0	117%	10.3	10.0	103%	12.7%
1,2,4-Trichlorobenzene	14.4	10.0	144%	12.8	10.0	128%	11.8%
Naphthalene	13.8	10.0	138%	12.2	10.0	122%	12.3%
1,2,3-Trichlorobenzene	12.1	10.0	121%	10.9	10.0	109%	10.4%

Reported in µg/L (ppb)

RPD calculated using sample concentrations per SW846.

Volatile Surrogate Recovery

	LCS	LCSD
d4-1,2-Dichloroethane	99.9%	103%
d8-Toluene	98.2%	100%
Bromofluorobenzene	97.8%	98.4%
d4-1,2-Dichlorobenzene	101%	99.1%

Analytical Resources, Incorporated
Analytical Chemists and Consultants

April 10, 2014

Thomas Lynott
Department of the Army
Directorate of Public Works
Attn Environmental Division (T. Lynott)
2012 Liggett Ave Box 339500 MS 17
Joint Base Lewis-McChord, Washington 98433-9500
Official Business

RE: Client Project: LogRam
ARI Job No.: YE78

Dear Mr. Lynott:

Please find enclosed the original Chain-of-Custody record (COC), sample receipt documentation, and the final data for the project referenced above. Analytical Resources, Inc. (ARI) accepted nineteen water samples on March 28, 2014. For further details regarding sample receipt please refer to the enclosed Cooler Receipt Form.

The samples were analyzed for VOCs, as requested on the COCs.

The 4/4/14 and 4/3/14 CCALs are out of control low for all associated FORM III "Q" flagged analytes. All associated samples that contain analyte have been flagged with a "Q" qualifier.

The 4/2/14 CCAL is out of control high for all associated FORM III "Q" flagged analytes. All associated samples that contain analyte have been flagged with a "Q" qualifier.

The 4/2/14 LCSD is out of control low for hexachlorobutadiene. The LCS is in control and no further corrective action was taken.

The 4/3/14 method blank contained n-Butylbenzene. All associated samples that contain analyte have been flagged with a "B" qualifier.

The 4/3/14 14 LCS and/or LCSD are out of control low for naphthalene, 1,2,3-Trichlorobenzene and 1,2-Dibromo-3-chloropropane.

The VOCs 4/4/14 LCS and/or LCSD are out of control low for 2-Hexanone, 1,2,3-Trichlorobenzene, N-Butylbenzene and 4-Isopropyltoluene.

An electronic copy of this report and all supporting raw data will remain on file with ARI. Should you have any questions or problems, please feel free to contact me at your convenience.

Respectfully,
ANALYTICAL RESOURCES, INC.

Kelly Bottem
Client Services Manager
(206) 695-6211
kellyb@arilabs.com
www.arilabs.com

eFile: YE78

1 of 58

Chain of Custody Record & Laboratory Analysis Request

TO 0021

ARI Assigned Number: YE18	Turn-around Requested: STANDARD TAT	Page: 5 of 14	
ARI Client Company: JOINT BASE LEWIS McCHORD PUBLIC WORKS JMLM-PWE	Phone: 253 966 1802	Date: 28MAR14	Ice Present? Y
Client Contact: TOM J LYNOTT		No. of Coolers: 3	Cooler Temps: 1.1, 1.3, 5.3
Client Project Name: LOG RAM			
Client Project #:	Samplers: T LYNOTT J BECKER		

Analytical Resources, Incorporated
Analytical Chemists and Consultants
4611 South 134th Place, Suite 100
Tukwila, WA 98168
206-695-6200 206-695-6201 (fax)

Sample ID	Date	Time	Matrix	No. Containers	Analysis Requested: 1006A	Notes/Comments
L6C140326LC135-1	26MAR14	1145	WATER	2	X	TOTAL VOCs
L6C140326LC178-1	26MAR14	1055	WATER	2	X	
L6C140326LC180-1	26MAR14	1000	WATER	2	X	BOX
L6C140326LC182-1	26MAR14	1020	WATER	2	X	2
L6C140326LC216-1	26MAR14	1330	WATER	2	X	
L6C140326LC217-1	26MAR14	1425	WATER	2	X	
L6C140326MAMCOF02-1	26MAR14	1430	WATER	2	X	
L6C140326MT3-1	26MAR14	1125	WATER	2	X	
L6C140326SWMC07-1	26MAR14	0945	WATER	2	X	
L6C140326SWMC08-1	26MAR14	0950	WATER	2	X	

Comments/Special Instructions	Relinquished by (Signature)	Received by (Signature)	Relinquished by: (Signature)	Received by: (Signature)
	Printed Name: TOM J LYNOTT	Printed Name: Jennifer Miller	Printed Name:	Printed Name
	Company: VENSAR	Company: ARI	Company	Company:
	Date & Time: 28MAR14 1205	Date & Time: 3/28/14 1205	Date & Time:	Date & Time:

Limits of Liability: *ARI will perform all requested services in accordance with appropriate methodology following ARI Standard Operating Procedures and the ARI Quality Assurance Program. This program meets standards for the industry. The total liability of ARI, its officers, agents, employees, or successors, arising out of or in connection with the requested services, shall not exceed the Invoiced amount for said services. The acceptance by the client of a proposal for services by ARI release ARI from any liability in excess thereof, not withstanding any provision to the contrary in any contract, purchase order or co-signed agreement between ARI and the Client.*

Sample Retention Policy: All samples submitted to ARI will be appropriately discarded no sooner than 90 days after receipt or 60 days after submission of hardcopy data, whichever is longer, unless alternate retention schedules have been established by work-order or contract.

ver 1.6, 6/06/12

Chain of Custody Record & Laboratory Analysis Request

TO 0021

Analytical Resources, Incorporated
Analytical Chemists and Consultants
4611 South 134th Place, Suite 100
Tukwila, WA 98168
206-695-6200 206-695-6201 (fax)

ARI Assigned Number:	Turn-around Requested: STANDARD TAT
ARI Client Company: JOINT BASE LEWIS MCCHORD PUBLIC WORKS JMLM PWE	Phone: 253 966 1802
Client Contact: TOM J LYNOTT	
Client Project Name: LOG RAM	
Client Project #:	Samplers: T LYNOTT J BECKER

Page: 6 of 14
Date: 28MAR14 Ice Present? Y
No. of Coolers: 3 Cooler Temps: 1.1, 1.3, 5.3

Sample ID	Date	Time	Matrix	No Containers	Analysis Requested: 1006A								Notes/Comments
LGC140326SWMC09-1	26MAR14	0955	WATER	2	X								TOTAL VOCS
LGC140325LC21C-1	25MAR14	1120	WATER	2	X								
LGC140325LC64A-1	25MAR14	1210	WATER	2	X								BOX
LGC140325LC64B-1	25MAR14	1212	WATER	2	X								2
LGC140325LC108-1	25MAR14	1135	WATER	2	X								
LGC140325LC137B-1	25MAR14	1103	WATER	2	X								
LGC140325LC137C-1	25MAR14	1105	WATER	2	X								
LGC140325LC160-1	25MAR14	1230	WATER	2	X								
LGC140328TB-1	28MAR14	0900	WATER	2	X								
										TJL			

Comments/Special Instructions	Relinquished by: (Signature)	Received by: (Signature)	Relinquished by (Signature)	Received by (Signature)
	Printed Name: TOM J LYNOTT	Printed Name: Jennifer Millsap	Printed Name:	Printed Name.
	Company: VERSAR	Company ARI	Company	Company
	Date & Time: 28MAR14 1205	Date & Time: 3/28/14 1205	Date & Time	Date & Time:

Limits of Liability: *ARI will perform all requested services in accordance with appropriate methodology following ARI Standard Operating Procedures and the ARI Quality Assurance Program. This program meets standards for the industry. The total liability of ARI, its officers, agents, employees, or successors, arising out of or in connection with the requested services, shall not exceed the Invoiced amount for said services. The acceptance by the client of a proposal for services by ARI release ARI from any liability in excess thereof, not withstanding any provision to the contrary in any contract, purchase order or co-signed agreement between ARI and the Client.*

Sample Retention Policy: All samples submitted to ARI will be appropriately discarded no sooner than 90 days after receipt or 60 days after submission of hardcopy data, whichever is longer, unless alternate retention schedules have been established by work-order or contract.

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Cooler Receipt Form

ARI Client: JBLM

Project Name: Log Ram

COC No(s): _____ (NA)

Delivered by: Fed-Ex UPS Courier (Hand Delivered) Other: _____

Assigned ARI Job No: 'E78

Tracking No: _____ (NA)

Preliminary Examination Phase:

Were intact, properly signed and dated custody seals attached to the outside of to cooler? YES (NO)

Were custody papers included with the cooler? (YES) NO

Were custody papers properly filled out (ink, signed, etc) (YES) NO

Temperature of Cooler(s) (°C) (recommended 2.0-6.0 °C for chemistry) 1.1 1.3 5.3

Time. 1205

If cooler temperature is out of compliance fill out form 00070F Temp Gun ID#: 12341234

Cooler Accepted by JM Date: 3/28/14 Time. 1205

Complete custody forms and attach all shipping documents

Log-In Phase:

Was a temperature blank included in the cooler? YES (NO)

What kind of packing material was used? Bubble Wrap Wet Ice (Gel Packs) Baggies (Foam Block) Paper Other: BOX

Was sufficient ice used (if appropriate)? NA (YES) NO

Were all bottles sealed in individual plastic bags? YES (NO)

Did all bottles arrive in good condition (unbroken)? (YES) NO TB

Were all bottle labels complete and legible? (YES) NO

Did the number of containers listed on COC match with the number of containers received? (YES) NO

Did all bottle labels and tags agree with custody papers? (YES) NO

Were all bottles used correct for the requested analyses? (YES) NO

Do any of the analyses (bottles) require preservation? (attach preservation sheet, excluding VOCs)... (NA) YES NO

Were all VOC vials free of air bubbles? NA (YES) NO

Was sufficient amount of sample sent in each bottle? (YES) NO

Date VOC Trip Blank was made at ARI NA _____

Was Sample Split by ARI : (NA) YES Date/Time:_____ Equipment:_____ Split by:_____

Samples Logged by. AV Date: 3/28/14 Time: 1253

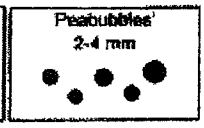
***** Notify Project Manager of discrepancies or concerns *****

Sample ID on Bottle	Sample ID on COC	Sample ID on Bottle	Sample ID on COC

Additional Notes, Discrepancies, & Resolutions:

LGC 14G3 26 LC217-1 1 broken vial

By: TB Date. 3.28.14

Small Air Bubbles ~2mm	Peabubbles 2-4 mm	LARGE Air Bubbles > 4 mm
		

Small → "sm" (< 2 mm)
Peabubbles → "pb" (2 to < 4 mm)
Large → "lg" (4 to < 6 mm)
Headspace → "hs" (> 6 mm)

TE78 : 66694

Sample ID Cross Reference Report

ANALYTICAL RESOURCES INCORPORATED

ARI Job No: YE78
Client: Joint Base Lewis McChord
Project Event: N/A
Project Name: Log Ram

	Sample ID	ARI Lab ID	ARI LIMS ID	Matrix	Sample Date/Time	VTSR
1.	LGC140326LC135-1	YE78A	14-5829	Water	03/26/14 11:45	03/28/14 12:05
2.	LGC140326LC178-1	YE78B	14-5830	Water	03/26/14 10:55	03/28/14 12:05
3.	LGC140326LC180-1	YE78C	14-5831	Water	03/26/14 10:00	03/28/14 12:05
4.	LGC140326LC182-1	YE78D	14-5832	Water	03/26/14 10:20	03/28/14 12:05
5.	LGC140326LC216-1	YE78E	14-5833	Water	03/26/14 13:30	03/28/14 12:05
6.	LGC140326LC217-1	YE78F	14-5834	Water	03/26/14 14:25	03/28/14 12:05
7.	LGC140326MAMCOF02-1	YE78G	14-5835	Water	03/26/14 14:30	03/28/14 12:05
8.	LGC140326MT3-1	YE78H	14-5836	Water	03/26/14 11:25	03/28/14 12:05
9.	LGC140326SWMC07-1	YE78I	14-5837	Water	03/26/14 09:45	03/28/14 12:05
10.	LGC140326SWMC08-1	YE78J	14-5838	Water	03/26/14 09:50	03/28/14 12:05
11.	LGC140326SWMC09-1	YE78K	14-5839	Water	03/26/14 09:55	03/28/14 12:05
12.	LGC140325LC21C-1	YE78L	14-5840	Water	03/25/14 11:20	03/28/14 12:05
13.	LGC140325LC64A-1	YE78M	14-5841	Water	03/25/14 12:10	03/28/14 12:05
14.	LGC140325LC64B-1	YE78N	14-5842	Water	03/25/14 12:12	03/28/14 12:05
15.	LGC140325LC108-1	YE78O	14-5843	Water	03/25/14 11:35	03/28/14 12:05
16.	LGC140325LC137B-1	YE78P	14-5844	Water	03/25/14 11:03	03/28/14 12:05
17.	LGC140325LC137C-1	YE78Q	14-5845	Water	03/25/14 11:05	03/28/14 12:05
18.	LGC140325LC160-1	YE78R	14-5846	Water	03/25/14 12:30	03/28/14 12:05
19.	LGC140328TB-1	YE78S	14-5847	Water	03/28/14 09:00	03/28/14 12:05

YE78:00065

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140326LC135-1**
 SAMPLE

Lab Sample ID: YE78A
LIMS ID: 14-5829
Matrix: Water
Data Release Authorized:
Reported: 04/09/14

QC Report No: YE78-Joint Base Lewis McChord
Project: Log Ram

Date Sampled: 03/26/14
Date Received: 03/28/14

Instrument/Analyst: NT15/PAB
Date Analyzed: 04/02/14 21:47

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	LOQ	Result	Q
74-87-3	Chloromethane	0.50	< 0.50	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.20	< 0.20	U
75-00-3	Chloroethane	0.20	< 0.20	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	Acetone	5.0	< 5.0	U
75-15-0	Carbon Disulfide	0.20	< 0.20	U
75-35-4	1,1-Dichloroethene	0.20	< 0.20	U
75-34-3	1,1-Dichloroethane	0.20	< 0.20	U
156-60-5	trans-1,2-Dichloroethene	0.20	< 0.20	U
156-59-2	**cis-1,2-Dichloroethene**	**0.20**	**0.61**	
67-66-3	Chloroform	0.20	< 0.20	U
107-06-2	1,2-Dichloroethane	0.20	< 0.20	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	0.20	< 0.20	U
56-23-5	Carbon Tetrachloride	0.20	< 0.20	U
108-05-4	Vinyl Acetate	0.20	< 0.20	U
75-27-4	Bromodichloromethane	0.20	< 0.20	U
78-87-5	1,2-Dichloropropane	0.20	< 0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	< 0.20	U
79-01-6	**Trichloroethene**	**0.20**	**48**	
124-48-1	Dibromochloromethane	0.20	< 0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	< 0.20	U
71-43-2	Benzene	0.20	< 0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	< 0.20	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.20	< 0.20	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.20	< 0.20	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	< 0.20	U
108-88-3	Toluene	0.20	< 0.20	U
108-90-7	Chlorobenzene	0.20	< 0.20	U
100-41-4	Ethylbenzene	0.20	< 0.20	U
100-42-5	Styrene	0.20	< 0.20	U
75-69-4	Trichlorofluoromethane	0.20	< 0.20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.20	< 0.20	U
179601-23-1	m,p-Xylene	0.40	< 0.40	U
95-47-6	o-Xylene	0.20	< 0.20	U
95-50-1	1,2-Dichlorobenzene	0.20	< 0.20	U
541-73-1	1,3-Dichlorobenzene	0.20	< 0.20	U
106-46-7	1,4-Dichlorobenzene	0.20	< 0.20	U

YE78:60606

Lab Sample ID: YE78A
LIMS ID: 14-5829
Matrix: Water
Date Analyzed: 04/02/14 21:47

QC Report No: YE78-Joint Base Lewis McChord
Project: Log Ram

CAS Number	Analyte	LOQ	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Iodomethane	1.0	< 1.0	U
74-96-4	Bromoethane	0.20	< 0.20	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.20	< 0.20	U
74-95-3	Dibromomethane	0.20	< 0.20	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	< 0.20	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	< 0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	< 0.50	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.20	< 0.20	U
95-63-6	1,2,4-Trimethylbenzene	0.20	< 0.20	U
87-68-3	Hexachlorobutadiene	0.50	< 0.50	U
106-93-4	1,2-Dibromoethane	0.20	< 0.20	U
74-97-5	Bromochloromethane	0.20	< 0.20	U
594-20-7	2,2-Dichloropropane	0.20	< 0.20	U
142-28-9	1,3-Dichloropropane	0.20	< 0.20	U
98-82-8	Isopropylbenzene	0.20	< 0.20	U
103-65-1	n-Propylbenzene	0.20	< 0.20	U
108-86-1	Bromobenzene	0.20	< 0.20	U
95-49-8	2-Chlorotoluene	0.20	< 0.20	U
106-43-4	4-Chlorotoluene	0.20	< 0.20	U
98-06-6	tert-Butylbenzene	0.20	< 0.20	U
135-98-8	sec-Butylbenzene	0.20	< 0.20	U
99-87-6	4-Isopropyltoluene	0.20	< 0.20	U
104-51-8	n-Butylbenzene	0.20	< 0.20	U
120-82-1	1,2,4-Trichlorobenzene	0.50	< 0.50	U
91-20-3	Naphthalene	0.50	< 0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	< 0.50	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	119%
d8-Toluene	101%
Bromofluorobenzene	98.4%
d4-1,2-Dichlorobenzene	101%

2-Chloroethylvinylether is an acid labile compound and may not be recovered from an acid preserved sample.

EPA SW-846 indicates that vinyl chloride and styrene may degrade in the presence of acid preservative.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140326LC178-1**
 SAMPLE

Lab Sample ID: YE78B
LIMS ID: 14-5830
Matrix: Water
Data Release Authorized:
Reported: 04/09/14

QC Report No: YE78-Joint Base Lewis McChord
Project: Log Ram

Date Sampled: 03/26/14
Date Received: 03/28/14

Instrument/Analyst: NT15/PAB
Date Analyzed: 04/02/14 22:07

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	LOQ	Result	Q
74-87-3	Chloromethane	0.50	< 0.50	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.20	< 0.20	U
75-00-3	Chloroethane	0.20	< 0.20	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	Acetone	5.0	< 5.0	U
75-15-0	Carbon Disulfide	0.20	< 0.20	U
75-35-4	1,1-Dichloroethene	0.20	< 0.20	U
75-34-3	1,1-Dichloroethane	0.20	< 0.20	U
156-60-5	trans-1,2-Dichloroethene	0.20	< 0.20	U
156-59-2	cis-1,2-Dichloroethene	0.20	< 0.20	U
67-66-3	Chloroform	0.20	< 0.20	U
107-06-2	1,2-Dichloroethane	0.20	< 0.20	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	0.20	< 0.20	U
56-23-5	Carbon Tetrachloride	0.20	< 0.20	U
108-05-4	Vinyl Acetate	0.20	< 0.20	U
75-27-4	Bromodichloromethane	0.20	< 0.20	U
78-87-5	1,2-Dichloropropane	0.20	< 0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	< 0.20	U
79-01-6	**Trichloroethene**	**0.20**	**2.9**	
124-48-1	Dibromochloromethane	0.20	< 0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	< 0.20	U
71-43-2	Benzene	0.20	< 0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	< 0.20	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.20	< 0.20	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.20	< 0.20	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	< 0.20	U
108-88-3	Toluene	0.20	< 0.20	U
108-90-7	Chlorobenzene	0.20	< 0.20	U
100-41-4	Ethylbenzene	0.20	< 0.20	U
100-42-5	Styrene	0.20	< 0.20	U
75-69-4	Trichlorofluoromethane	0.20	< 0.20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.20	< 0.20	U
179601-23-1	m,p-Xylene	0.40	< 0.40	U
95-47-6	o-Xylene	0.20	< 0.20	U
95-50-1	1,2-Dichlorobenzene	0.20	< 0.20	U
541-73-1	1,3-Dichlorobenzene	0.20	< 0.20	U
106-46-7	1,4-Dichlorobenzene	0.20	< 0.20	U

YE78:00004

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140326LC178-1**
 SAMPLE

Lab Sample ID: YE78B
LIMS ID: 14-5830
Matrix: Water
Date Analyzed: 04/02/14 22:07

QC Report No: YE78-Joint Base Lewis McChord
Project: Log Ram

CAS Number	Analyte	LOQ	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Iodomethane	1.0	< 1.0	U
74-96-4	Bromoethane	0.20	< 0.20	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.20	< 0.20	U
74-95-3	Dibromomethane	0.20	< 0.20	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	< 0.20	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	< 0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	< 0.50	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.20	< 0.20	U
95-63-6	1,2,4-Trimethylbenzene	0.20	< 0.20	U
87-68-3	Hexachlorobutadiene	0.50	< 0.50	U
106-93-4	1,2-Dibromoethane	0.20	< 0.20	U
74-97-5	Bromochloromethane	0.20	< 0.20	U
594-20-7	2,2-Dichloropropane	0.20	< 0.20	U
142-28-9	1,3-Dichloropropane	0.20	< 0.20	U
98-82-8	Isopropylbenzene	0.20	< 0.20	U
103-65-1	n-Propylbenzene	0.20	< 0.20	U
108-86-1	Bromobenzene	0.20	< 0.20	U
95-49-8	2-Chlorotoluene	0.20	< 0.20	U
106-43-4	4-Chlorotoluene	0.20	< 0.20	U
98-06-6	tert-Butylbenzene	0.20	< 0.20	U
135-98-8	sec-Butylbenzene	0.20	< 0.20	U
99-87-6	4-Isopropyltoluene	0.20	< 0.20	U
104-51-8	n-Butylbenzene	0.20	< 0.20	U
120-82-1	1,2,4-Trichlorobenzene	0.50	< 0.50	U
91-20-3	Naphthalene	0.50	< 0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	< 0.50	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	120%
d8-Toluene	101%
Bromofluorobenzene	97.8%
d4-1,2-Dichlorobenzene	103%

2-Chloroethylvinylether is an acid labile compound and may not be recovered from an acid preserved sample.

EPA SW-846 indicates that vinyl chloride and styrene may degrade in the presence of acid preservative.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140326LC180-1**
 SAMPLE

Lab Sample ID: YE78C
LIMS ID: 14-5831
Matrix: Water
Data Release Authorized:
Reported: 04/09/14

QC Report No: YE78-Joint Base Lewis McChord
Project: Log Ram

Date Sampled: 03/26/14
Date Received: 03/28/14

Instrument/Analyst: NT15/PAB
Date Analyzed: 04/02/14 22:28

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	LOQ	Result	Q
74-87-3	Chloromethane	0.50	< 0.50	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.20	< 0.20	U
75-00-3	Chloroethane	0.20	< 0.20	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	Acetone	5.0	< 5.0	U
75-15-0	Carbon Disulfide	0.20	< 0.20	U
75-35-4	1,1-Dichloroethene	0.20	< 0.20	U
75-34-3	1,1-Dichloroethane	0.20	< 0.20	U
156-60-5	trans-1,2-Dichloroethene	0.20	< 0.20	U
156-59-2	cis-1,2-Dichloroethene	0.20	< 0.20	U
67-66-3	Chloroform	0.20	< 0.20	U
107-06-2	1,2-Dichloroethane	0.20	< 0.20	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	0.20	< 0.20	U
56-23-5	Carbon Tetrachloride	0.20	< 0.20	U
108-05-4	Vinyl Acetate	0.20	< 0.20	U
75-27-4	Bromodichloromethane	0.20	< 0.20	U
78-87-5	1,2-Dichloropropane	0.20	< 0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	< 0.20	U
79-01-6	**Trichloroethene**	**0.20**	**3.8**	
124-48-1	Dibromochloromethane	0.20	< 0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	< 0.20	U
71-43-2	Benzene	0.20	< 0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	< 0.20	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.20	< 0.20	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.20	< 0.20	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	< 0.20	U
108-88-3	Toluene	0.20	< 0.20	U
108-90-7	Chlorobenzene	0.20	< 0.20	U
100-41-4	Ethylbenzene	0.20	< 0.20	U
100-42-5	Styrene	0.20	< 0.20	U
75-69-4	Trichlorofluoromethane	0.20	< 0.20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.20	< 0.20	U
179601-23-1	m,p-Xylene	0.40	< 0.40	U
95-47-6	o-Xylene	0.20	< 0.20	U
95-50-1	1,2-Dichlorobenzene	0.20	< 0.20	U
541-73-1	1,3-Dichlorobenzene	0.20	< 0.20	U
106-46-7	1,4-Dichlorobenzene	0.20	< 0.20	U

Lab Sample ID: YE78C
LIMS ID: 14-5831
Matrix: Water
Date Analyzed: 04/02/14 22:28

QC Report No: YE78-Joint Base Lewis McChord
Project: Log Ram

CAS Number	Analyte	LOQ	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Iodomethane	1.0	< 1.0	U
74-96-4	Bromoethane	0.20	< 0.20	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.20	< 0.20	U
74-95-3	Dibromomethane	0.20	< 0.20	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	< 0.20	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	< 0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	< 0.50	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.20	< 0.20	U
95-63-6	1,2,4-Trimethylbenzene	0.20	< 0.20	U
87-68-3	Hexachlorobutadiene	0.50	< 0.50	U
106-93-4	1,2-Dibromoethane	0.20	< 0.20	U
74-97-5	Bromochloromethane	0.20	< 0.20	U
594-20-7	2,2-Dichloropropane	0.20	< 0.20	U
142-28-9	1,3-Dichloropropane	0.20	< 0.20	U
98-82-8	Isopropylbenzene	0.20	< 0.20	U
103-65-1	n-Propylbenzene	0.20	< 0.20	U
108-86-1	Bromobenzene	0.20	< 0.20	U
95-49-8	2-Chlorotoluene	0.20	< 0.20	U
106-43-4	4-Chlorotoluene	0.20	< 0.20	U
98-06-6	tert-Butylbenzene	0.20	< 0.20	U
135-98-8	sec-Butylbenzene	0.20	< 0.20	U
99-87-6	4-Isopropyltoluene	0.20	< 0.20	U
104-51-8	n-Butylbenzene	0.20	< 0.20	U
120-82-1	1,2,4-Trichlorobenzene	0.50	< 0.50	U
91-20-3	Naphthalene	0.50	< 0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	< 0.50	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	124%
d8-Toluene	101%
Bromofluorobenzene	98.3%
d4-1,2-Dichlorobenzene	102%

2-Chloroethylvinylether is an acid labile compound and may not be recovered from an acid preserved sample.

EPA SW-846 indicates that vinyl chloride and styrene may degrade in the presence of acid preservative.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140326LC182-1**
 SAMPLE

Lab Sample ID: YE78D
LIMS ID: 14-5832
Matrix: Water
Data Release Authorized:
Reported: 04/09/14

QC Report No: YE78-Joint Base Lewis McChord
Project: Log Ram

Date Sampled: 03/26/14
Date Received: 03/28/14

Instrument/Analyst: NT15/PAB
Date Analyzed: 04/02/14 22:50

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	LOQ	Result	Q
74-87-3	Chloromethane	0.50	< 0.50	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.20	< 0.20	U
75-00-3	Chloroethane	0.20	< 0.20	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	Acetone	5.0	< 5.0	U
75-15-0	Carbon Disulfide	0.20	< 0.20	U
75-35-4	1,1-Dichloroethene	0.20	< 0.20	U
75-34-3	1,1-Dichloroethane	0.20	< 0.20	U
156-60-5	trans-1,2-Dichloroethene	0.20	< 0.20	U
156-59-2	cis-1,2-Dichloroethene	0.20	< 0.20	U
67-66-3	Chloroform	0.20	< 0.20	U
107-06-2	1,2-Dichloroethane	0.20	< 0.20	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	0.20	< 0.20	U
56-23-5	Carbon Tetrachloride	0.20	< 0.20	U
108-05-4	Vinyl Acetate	0.20	< 0.20	U
75-27-4	Bromodichloromethane	0.20	< 0.20	U
78-87-5	1,2-Dichloropropane	0.20	< 0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	< 0.20	U
79-01-6	Trichloroethene	0.20	< 0.20	U
124-48-1	Dibromochloromethane	0.20	< 0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	< 0.20	U
71-43-2	Benzene	0.20	< 0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	< 0.20	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.20	< 0.20	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.20	< 0.20	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	< 0.20	U
108-88-3	Toluene	0.20	< 0.20	U
108-90-7	Chlorobenzene	0.20	< 0.20	U
100-41-4	Ethylbenzene	0.20	< 0.20	U
100-42-5	Styrene	0.20	< 0.20	U
75-69-4	Trichlorofluoromethane	0.20	< 0.20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.20	< 0.20	U
179601-23-1	m,p-Xylene	0.40	< 0.40	U
95-47-6	o-Xylene	0.20	< 0.20	U
95-50-1	1,2-Dichlorobenzene	0.20	< 0.20	U
541-73-1	1,3-Dichlorobenzene	0.20	< 0.20	U
106-46-7	1,4-Dichlorobenzene	0.20	< 0.20	U

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140326LC182-1**
 SAMPLE

Lab Sample ID: YE78D
LIMS ID: 14-5832
Matrix: Water
Date Analyzed: 04/02/14 22:50

QC Report No: YE78-Joint Base Lewis McChord
Project: Log Ram

CAS Number	Analyte	LOQ	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Iodomethane	1.0	< 1.0	U
74-96-4	Bromoethane	0.20	< 0.20	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.20	< 0.20	U
74-95-3	Dibromomethane	0.20	< 0.20	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	< 0.20	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	< 0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	< 0.50	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.20	< 0.20	U
95-63-6	1,2,4-Trimethylbenzene	0.20	< 0.20	U
87-68-3	Hexachlorobutadiene	0.50	< 0.50	U
106-93-4	1,2-Dibromoethane	0.20	< 0.20	U
74-97-5	Bromochloromethane	0.20	< 0.20	U
594-20-7	2,2-Dichloropropane	0.20	< 0.20	U
142-28-9	1,3-Dichloropropane	0.20	< 0.20	U
98-82-8	Isopropylbenzene	0.20	< 0.20	U
103-65-1	n-Propylbenzene	0.20	< 0.20	U
108-86-1	Bromobenzene	0.20	< 0.20	U
95-49-8	2-Chlorotoluene	0.20	< 0.20	U
106-43-4	4-Chlorotoluene	0.20	< 0.20	U
98-06-6	tert-Butylbenzene	0.20	< 0.20	U
135-98-8	sec-Butylbenzene	0.20	< 0.20	U
99-87-6	4-Isopropyltoluene	0.20	< 0.20	U
104-51-8	n-Butylbenzene	0.20	< 0.20	U
120-82-1	1,2,4-Trichlorobenzene	0.50	< 0.50	U
91-20-3	Naphthalene	0.50	< 0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	< 0.50	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	120%
d8-Toluene	102%
Bromofluorobenzene	98.3%
d4-1,2-Dichlorobenzene	102%

2-Chloroethylvinylether is an acid labile compound and may not be recovered from an acid preserved sample.

EPA SW-846 indicates that vinyl chloride and styrene may degrade in the presence of acid preservative.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140326LC216-1**
 SAMPLE

Lab Sample ID: YE78E
LIMS ID: 14-5833
Matrix: Water
Data Release Authorized:
Reported: 04/09/14

QC Report No: YE78-Joint Base Lewis McChord
Project: Log Ram

Date Sampled: 03/26/14
Date Received: 03/28/14

Instrument/Analyst: NT15/PAB
Date Analyzed: 04/02/14 23:10

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	LOQ	Result	Q
74-87-3	Chloromethane	0.50	< 0.50	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.20	< 0.20	U
75-00-3	Chloroethane	0.20	< 0.20	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	**Acetone**	**5.0**	**12**	
75-15-0	Carbon Disulfide	0.20	< 0.20	U
75-35-4	**1,1-Dichloroethene**	**0.20**	**0.47**	
75-34-3	**1,1-Dichloroethane**	**0.20**	**0.46**	
156-60-5	trans-1,2-Dichloroethene	0.20	< 0.20	U
156-59-2	**cis-1,2-Dichloroethene**	**0.20**	**8.3**	
67-66-3	**Chloroform**	**0.20**	**1.8**	**Q**
107-06-2	**1,2-Dichloroethane**	**0.20**	**0.27**	
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	**1,1,1-Trichloroethane**	**0.20**	**0.84**	**Q**
56-23-5	**Carbon Tetrachloride**	**0.20**	**1.3**	
108-05-4	Vinyl Acetate	0.20	< 0.20	U
75-27-4	Bromodichloromethane	0.20	< 0.20	U
78-87-5	1,2-Dichloropropane	0.20	< 0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	< 0.20	U
79-01-6	Trichloroethene	0.20	< 0.20	U
124-48-1	Dibromochloromethane	0.20	< 0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	< 0.20	U
71-43-2	Benzene	0.20	< 0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	< 0.20	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.20	< 0.20	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.20	< 0.20	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	< 0.20	U
108-88-3	Toluene	0.20	< 0.20	U
108-90-7	Chlorobenzene	0.20	< 0.20	U
100-41-4	Ethylbenzene	0.20	< 0.20	U
100-42-5	Styrene	0.20	< 0.20	U
75-69-4	Trichlorofluoromethane	0.20	< 0.20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.20	< 0.20	U
179601-23-1	m,p-Xylene	0.40	< 0.40	U
95-47-6	o-Xylene	0.20	< 0.20	U
95-50-1	1,2-Dichlorobenzene	0.20	< 0.20	U
541-73-1	1,3-Dichlorobenzene	0.20	< 0.20	U
106-46-7	1,4-Dichlorobenzene	0.20	< 0.20	U

Lab Sample ID: YE78E
LIMS ID: 14-5833
Matrix: Water
Date Analyzed: 04/02/14 23:10

QC Report No: YE78-Joint Base Lewis McChord
Project: Log Ram

CAS Number	Analyte	LOQ	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Iodomethane	1.0	< 1.0	U
74-96-4	Bromoethane	0.20	< 0.20	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.20	< 0.20	U
74-95-3	Dibromomethane	0.20	< 0.20	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	< 0.20	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	< 0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	< 0.50	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.20	< 0.20	U
95-63-6	1,2,4-Trimethylbenzene	0.20	< 0.20	U
87-68-3	Hexachlorobutadiene	0.50	< 0.50	U
106-93-4	1,2-Dibromoethane	0.20	< 0.20	U
74-97-5	Bromochloromethane	0.20	< 0.20	U
594-20-7	2,2-Dichloropropane	0.20	< 0.20	U
142-28-9	1,3-Dichloropropane	0.20	< 0.20	U
98-82-8	Isopropylbenzene	0.20	< 0.20	U
103-65-1	n-Propylbenzene	0.20	< 0.20	U
108-86-1	Bromobenzene	0.20	< 0.20	U
95-49-8	2-Chlorotoluene	0.20	< 0.20	U
106-43-4	4-Chlorotoluene	0.20	< 0.20	U
98-06-6	tert-Butylbenzene	0.20	< 0.20	U
135-98-8	sec-Butylbenzene	0.20	< 0.20	U
99-87-6	4-Isopropyltoluene	0.20	< 0.20	U
104-51-8	n-Butylbenzene	0.20	< 0.20	U
120-82-1	1,2,4-Trichlorobenzene	0.50	< 0.50	U
91-20-3	Naphthalene	0.50	< 0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	< 0.50	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	121%
d8-Toluene	103%
Bromofluorobenzene	98.8%
d4-1,2-Dichlorobenzene	101%

2-Chloroethylvinylether is an acid labile compound and may not be recovered from an acid preserved sample.

EPA SW-846 indicates that vinyl chloride and styrene may degrade in the presence of acid preservative.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140326LC217-1**
 SAMPLE

Lab Sample ID: YE78F
LIMS ID: 14-5834
Matrix: Water
Data Release Authorized:
Reported: 04/09/14

QC Report No: YE78-Joint Base Lewis McChord
Project: Log Ram

Date Sampled: 03/26/14
Date Received: 03/28/14

Instrument/Analyst: NT15/PAB
Date Analyzed: 04/02/14 21:26

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	LOQ	Result	Q
74-87-3	Chloromethane	0.50	< 0.50	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.20	< 0.20	U
75-00-3	Chloroethane	0.20	< 0.20	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	**Acetone**	**5.0**	**11**	
75-15-0	Carbon Disulfide	0.20	< 0.20	U
75-35-4	1,1-Dichloroethene	0.20	< 0.20	U
75-34-3	1,1-Dichloroethane	0.20	< 0.20	U
156-60-5	trans-1,2-Dichloroethene	0.20	< 0.20	U
156-59-2	cis-1,2-Dichloroethene	0.20	< 0.20	U
67-66-3	Chloroform	0.20	< 0.20	U
107-06-2	1,2-Dichloroethane	0.20	< 0.20	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	0.20	< 0.20	U
56-23-5	Carbon Tetrachloride	0.20	< 0.20	U
108-05-4	Vinyl Acetate	0.20	< 0.20	U
75-27-4	Bromodichloromethane	0.20	< 0.20	U
78-87-5	1,2-Dichloropropane	0.20	< 0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	< 0.20	U
79-01-6	**Trichloroethene**	**0.20**	**1.0**	
124-48-1	Dibromochloromethane	0.20	< 0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	< 0.20	U
71-43-2	Benzene	0.20	< 0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	< 0.20	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.20	< 0.20	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.20	< 0.20	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	< 0.20	U
108-88-3	Toluene	0.20	< 0.20	U
108-90-7	Chlorobenzene	0.20	< 0.20	U
100-41-4	Ethylbenzene	0.20	< 0.20	U
100-42-5	Styrene	0.20	< 0.20	U
75-69-4	Trichlorofluoromethane	0.20	< 0.20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.20	< 0.20	U
179601-23-1	m,p-Xylene	0.40	< 0.40	U
95-47-6	o-Xylene	0.20	< 0.20	U
95-50-1	1,2-Dichlorobenzene	0.20	< 0.20	U
541-73-1	1,3-Dichlorobenzene	0.20	< 0.20	U
106-46-7	1,4-Dichlorobenzene	0.20	< 0.20	U

YE78.0016

Lab Sample ID: YE78F
LIMS ID: 14-5834
Matrix: Water
Date Analyzed: 04/02/14 21:26

QC Report No: YE78-Joint Base Lewis McChord
Project: Log Ram

CAS Number	Analyte	LOQ	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Iodomethane	1.0	< 1.0	U
74-96-4	Bromoethane	0.20	< 0.20	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.20	< 0.20	U
74-95-3	Dibromomethane	0.20	< 0.20	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	< 0.20	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	< 0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	< 0.50	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.20	< 0.20	U
95-63-6	1,2,4-Trimethylbenzene	0.20	< 0.20	U
87-68-3	Hexachlorobutadiene	0.50	< 0.50	U
106-93-4	1,2-Dibromoethane	0.20	< 0.20	U
74-97-5	Bromochloromethane	0.20	< 0.20	U
594-20-7	2,2-Dichloropropane	0.20	< 0.20	U
142-28-9	1,3-Dichloropropane	0.20	< 0.20	U
98-82-8	Isopropylbenzene	0.20	< 0.20	U
103-65-1	n-Propylbenzene	0.20	< 0.20	U
108-86-1	Bromobenzene	0.20	< 0.20	U
95-49-8	2-Chlorotoluene	0.20	< 0.20	U
106-43-4	4-Chlorotoluene	0.20	< 0.20	U
98-06-6	tert-Butylbenzene	0.20	< 0.20	U
135-98-8	sec-Butylbenzene	0.20	< 0.20	U
99-87-6	4-Isopropyltoluene	0.20	< 0.20	U
104-51-8	n-Butylbenzene	0.20	< 0.20	U
120-82-1	1,2,4-Trichlorobenzene	0.50	< 0.50	U
91-20-3	Naphthalene	0.50	< 0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	< 0.50	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	119%
d8-Toluene	102%
Bromofluorobenzene	97.7%
d4-1,2-Dichlorobenzene	102%

2-Chloroethylvinylether is an acid labile compound and may not be recovered from an acid preserved sample.

EPA SW-846 indicates that vinyl chloride and styrene may degrade in the presence of acid preservative.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140326MAMCOF02-1**
 SAMPLE

Lab Sample ID: YE78G
LIMS ID: 14-5835
Matrix: Water
Data Release Authorized:
Reported: 04/09/14

QC Report No: YE78-Joint Base Lewis McChord
Project: Log Ram

Date Sampled: 03/26/14
Date Received: 03/28/14

Instrument/Analyst: NT15/PAB
Date Analyzed: 04/02/14 23:32

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	LOQ	Result	Q
74-87-3	Chloromethane	0.50	< 0.50	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.20	< 0.20	U
75-00-3	Chloroethane	0.20	< 0.20	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	Acetone	5.0	< 5.0	U
75-15-0	Carbon Disulfide	0.20	< 0.20	U
75-35-4	1,1-Dichloroethene	0.20	< 0.20	U
75-34-3	1,1-Dichloroethane	0.20	< 0.20	U
156-60-5	trans-1,2-Dichloroethene	0.20	< 0.20	U
156-59-2	cis-1,2-Dichloroethene	0.20	< 0.20	U
67-66-3	Chloroform	0.20	< 0.20	U
107-06-2	1,2-Dichloroethane	0.20	< 0.20	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	0.20	< 0.20	U
56-23-5	Carbon Tetrachloride	0.20	< 0.20	U
108-05-4	Vinyl Acetate	0.20	< 0.20	U
75-27-4	Bromodichloromethane	0.20	< 0.20	U
78-87-5	1,2-Dichloropropane	0.20	< 0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	< 0.20	U
79-01-6	Trichloroethene	0.20	< 0.20	U
124-48-1	Dibromochloromethane	0.20	< 0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	< 0.20	U
71-43-2	Benzene	0.20	< 0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	< 0.20	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.20	< 0.20	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.20	< 0.20	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	< 0.20	U
108-88-3	Toluene	0.20	< 0.20	U
108-90-7	Chlorobenzene	0.20	< 0.20	U
100-41-4	Ethylbenzene	0.20	< 0.20	U
100-42-5	Styrene	0.20	< 0.20	U
75-69-4	Trichlorofluoromethane	0.20	< 0.20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.20	< 0.20	U
179601-23-1	m,p-Xylene	0.40	< 0.40	U
95-47-6	o-Xylene	0.20	< 0.20	U
95-50-1	1,2-Dichlorobenzene	0.20	< 0.20	U
541-73-1	1,3-Dichlorobenzene	0.20	< 0.20	U
106-46-7	1,4-Dichlorobenzene	0.20	< 0.20	U

YE78.00018

Lab Sample ID: YE78G
LIMS ID: 14-5835
Matrix: Water
Date Analyzed: 04/02/14 23:32

QC Report No: YE78-Joint Base Lewis McChord
Project: Log Ram

CAS Number	Analyte	LOQ	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Iodomethane	1.0	< 1.0	U
74-96-4	Bromoethane	0.20	< 0.20	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.20	< 0.20	U
74-95-3	Dibromomethane	0.20	< 0.20	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	< 0.20	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	< 0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	< 0.50	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.20	< 0.20	U
95-63-6	1,2,4-Trimethylbenzene	0.20	< 0.20	U
87-68-3	Hexachlorobutadiene	0.50	< 0.50	U
106-93-4	1,2-Dibromoethane	0.20	< 0.20	U
74-97-5	Bromochloromethane	0.20	< 0.20	U
594-20-7	2,2-Dichloropropane	0.20	< 0.20	U
142-28-9	1,3-Dichloropropane	0.20	< 0.20	U
98-82-8	Isopropylbenzene	0.20	< 0.20	U
103-65-1	n-Propylbenzene	0.20	< 0.20	U
108-86-1	Bromobenzene	0.20	< 0.20	U
95-49-8	2-Chlorotoluene	0.20	< 0.20	U
106-43-4	4-Chlorotoluene	0.20	< 0.20	U
98-06-6	tert-Butylbenzene	0.20	< 0.20	U
135-98-8	sec-Butylbenzene	0.20	< 0.20	U
99-87-6	4-Isopropyltoluene	0.20	< 0.20	U
104-51-8	n-Butylbenzene	0.20	< 0.20	U
120-82-1	1,2,4-Trichlorobenzene	0.50	< 0.50	U
91-20-3	Naphthalene	0.50	< 0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	< 0.50	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	123%
d8-Toluene	103%
Bromofluorobenzene	98.5%
d4-1,2-Dichlorobenzene	102%

2-Chloroethylvinylether is an acid labile compound and may not be recovered from an acid preserved sample.

EPA SW-846 indicates that vinyl chloride and styrene may degrade in the presence of acid preservative.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140326MT3-1**
 SAMPLE

Lab Sample ID: YE78H
LIMS ID: 14-5836
Matrix: Water
Data Release Authorized:
Reported: 04/09/14

QC Report No: YE78-Joint Base Lewis McChord
Project: Log Ram

Date Sampled: 03/26/14
Date Received: 03/28/14

Instrument/Analyst: NT2/PAB
Date Analyzed: 04/03/14 13:13

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	LOQ	Result	Q
74-87-3	Chloromethane	0.50	< 0.50	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.20	< 0.20	U
75-00-3	Chloroethane	0.20	< 0.20	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	Acetone	5.0	< 5.0	U
75-15-0	Carbon Disulfide	0.20	< 0.20	U
75-35-4	1,1-Dichloroethene	0.20	< 0.20	U
75-34-3	1,1-Dichloroethane	0.20	< 0.20	U
156-60-5	trans-1,2-Dichloroethene	0.20	< 0.20	U
156-59-2	**cis-1,2-Dichloroethene**	**0.20**	**1.6**	
67-66-3	Chloroform	0.20	< 0.20	U
107-06-2	1,2-Dichloroethane	0.20	< 0.20	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	0.20	< 0.20	U
56-23-5	Carbon Tetrachloride	0.20	< 0.20	U
108-05-4	Vinyl Acetate	0.20	< 0.20	U
75-27-4	Bromodichloromethane	0.20	< 0.20	U
78-87-5	1,2-Dichloropropane	0.20	< 0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	< 0.20	U
79-01-6	**Trichloroethene**	**0.20**	**12**	
124-48-1	Dibromochloromethane	0.20	< 0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	< 0.20	U
71-43-2	Benzene	0.20	< 0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	< 0.20	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.20	< 0.20	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.20	< 0.20	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	< 0.20	U
108-88-3	Toluene	0.20	< 0.20	U
108-90-7	Chlorobenzene	0.20	< 0.20	U
100-41-4	Ethylbenzene	0.20	< 0.20	U
100-42-5	Styrene	0.20	< 0.20	U
75-69-4	Trichlorofluoromethane	0.20	< 0.20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.20	< 0.20	U
179601-23-1	m,p-Xylene	0.40	< 0.40	U
95-47-6	o-Xylene	0.20	< 0.20	U
95-50-1	1,2-Dichlorobenzene	0.20	< 0.20	U
541-73-1	1,3-Dichlorobenzene	0.20	< 0.20	U
106-46-7	1,4-Dichlorobenzene	0.20	< 0.20	U

Lab Sample ID: YE78H
LIMS ID: 14-5836
Matrix: Water
Date Analyzed: 04/03/14 13:13

QC Report No: YE78-Joint Base Lewis McChord
Project: Log Ram

CAS Number	Analyte	LOQ	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Iodomethane	1.0	< 1.0	U
74-96-4	Bromoethane	0.20	< 0.20	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.20	< 0.20	U
74-95-3	Dibromomethane	0.20	< 0.20	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	< 0.20	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	< 0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	< 0.50	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.20	< 0.20	U
95-63-6	1,2,4-Trimethylbenzene	0.20	< 0.20	U
87-68-3	Hexachlorobutadiene	0.50	< 0.50	U
106-93-4	1,2-Dibromoethane	0.20	< 0.20	U
74-97-5	Bromochloromethane	0.20	< 0.20	U
594-20-7	2,2-Dichloropropane	0.20	< 0.20	U
142-28-9	1,3-Dichloropropane	0.20	< 0.20	U
98-82-8	Isopropylbenzene	0.20	< 0.20	U
103-65-1	n-Propylbenzene	0.20	< 0.20	U
108-86-1	Bromobenzene	0.20	< 0.20	U
95-49-8	2-Chlorotoluene	0.20	< 0.20	U
106-43-4	4-Chlorotoluene	0.20	< 0.20	U
98-06-6	tert-Butylbenzene	0.20	< 0.20	U
135-98-8	sec-Butylbenzene	0.20	< 0.20	U
99-87-6	4-Isopropyltoluene	0.20	< 0.20	U
104-51-8	n-Butylbenzene	0.20	< 0.20	U
120-82-1	1,2,4-Trichlorobenzene	0.50	< 0.50	U
91-20-3	Naphthalene	0.50	< 0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	< 0.50	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	96.2%
d8-Toluene	97.8%
Bromofluorobenzene	93.8%
d4-1,2-Dichlorobenzene	102%

2-Chloroethylvinylether is an acid labile compound and may not be recovered from an acid preserved sample.

EPA SW-846 indicates that vinyl chloride and styrene may degrade in the presence of acid preservative.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140326SWMC07-1**
 SAMPLE

Lab Sample ID: YE78I
LIMS ID: 14-5837
Matrix: Water
Data Release Authorized:
Reported: 04/09/14

QC Report No: YE78-Joint Base Lewis McChord
Project: Log Ram

Date Sampled: 03/26/14
Date Received: 03/28/14

Instrument/Analyst: NT2/PAB
Date Analyzed: 04/03/14 13:39

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	LOQ	Result	Q
74-87-3	Chloromethane	0.50	< 0.50	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.20	< 0.20	U
75-00-3	Chloroethane	0.20	< 0.20	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	Acetone	5.0	< 5.0	U
75-15-0	Carbon Disulfide	0.20	< 0.20	U
75-35-4	1,1-Dichloroethene	0.20	< 0.20	U
75-34-3	1,1-Dichloroethane	0.20	< 0.20	U
156-60-5	trans-1,2-Dichloroethene	0.20	< 0.20	U
156-59-2	cis-1,2-Dichloroethene	0.20	< 0.20	U
67-66-3	Chloroform	0.20	< 0.20	U
107-06-2	1,2-Dichloroethane	0.20	< 0.20	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	0.20	< 0.20	U
56-23-5	Carbon Tetrachloride	0.20	< 0.20	U
108-05-4	Vinyl Acetate	0.20	< 0.20	U
75-27-4	Bromodichloromethane	0.20	< 0.20	U
78-87-5	1,2-Dichloropropane	0.20	< 0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	< 0.20	U
79-01-6	**Trichloroethene**	**0.20**	**0.47**	
124-48-1	Dibromochloromethane	0.20	< 0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	< 0.20	U
71-43-2	Benzene	0.20	< 0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	< 0.20	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.20	< 0.20	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.20	< 0.20	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	< 0.20	U
108-88-3	Toluene	0.20	< 0.20	U
108-90-7	Chlorobenzene	0.20	< 0.20	U
100-41-4	Ethylbenzene	0.20	< 0.20	U
100-42-5	Styrene	0.20	< 0.20	U
75-69-4	Trichlorofluoromethane	0.20	< 0.20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.20	< 0.20	U
179601-23-1	m,p-Xylene	0.40	< 0.40	U
95-47-6	o-Xylene	0.20	< 0.20	U
95-50-1	1,2-Dichlorobenzene	0.20	< 0.20	U
541-73-1	1,3-Dichlorobenzene	0.20	< 0.20	U
106-46-7	1,4-Dichlorobenzene	0.20	< 0.20	U

YE78-00022

Lab Sample ID: YE78I
LIMS ID: 14-5837
Matrix: Water
Date Analyzed: 04/03/14 13:39

QC Report No: YE78-Joint Base Lewis McChord
Project: Log Ram

CAS Number	Analyte	LOQ	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Iodomethane	1.0	< 1.0	U
74-96-4	Bromoethane	0.20	< 0.20	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.20	< 0.20	U
74-95-3	Dibromomethane	0.20	< 0.20	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	< 0.20	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	< 0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	< 0.50	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.20	< 0.20	U
95-63-6	1,2,4-Trimethylbenzene	0.20	< 0.20	U
87-68-3	Hexachlorobutadiene	0.50	< 0.50	U
106-93-4	1,2-Dibromoethane	0.20	< 0.20	U
74-97-5	Bromochloromethane	0.20	< 0.20	U
594-20-7	2,2-Dichloropropane	0.20	< 0.20	U
142-28-9	1,3-Dichloropropane	0.20	< 0.20	U
98-82-8	Isopropylbenzene	0.20	< 0.20	U
103-65-1	n-Propylbenzene	0.20	< 0.20	U
108-86-1	Bromobenzene	0.20	< 0.20	U
95-49-8	2-Chlorotoluene	0.20	< 0.20	U
106-43-4	4-Chlorotoluene	0.20	< 0.20	U
98-06-6	tert-Butylbenzene	0.20	< 0.20	U
135-98-8	sec-Butylbenzene	0.20	< 0.20	U
99-87-6	4-Isopropyltoluene	0.20	< 0.20	U
104-51-8	n-Butylbenzene	0.20	< 0.20	U
120-82-1	1,2,4-Trichlorobenzene	0.50	< 0.50	U
91-20-3	Naphthalene	0.50	< 0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	< 0.50	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	95.3%
d8-Toluene	97.9%
Bromofluorobenzene	91.2%
d4-1,2-Dichlorobenzene	99.6%

2-Chloroethylvinylether is an acid labile compound and may not be recovered from an acid preserved sample.

EPA SW-846 indicates that vinyl chloride and styrene may degrade in the presence of acid preservative.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140326SWMC08-1**
Page 1 of 2 **SAMPLE**

Lab Sample ID: YE78J
LIMS ID: 14-5838
Matrix: Water
Data Release Authorized:
Reported: 04/09/14

QC Report No: YE78-Joint Base Lewis McChord
Project: Log Ram

Date Sampled: 03/26/14
Date Received: 03/28/14

Instrument/Analyst: NT2/PAB
Date Analyzed: 04/03/14 14:06

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	LOQ	Result	Q
74-87-3	Chloromethane	0.50	< 0.50	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.20	< 0.20	U
75-00-3	Chloroethane	0.20	< 0.20	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	Acetone	5.0	< 5.0	U
75-15-0	Carbon Disulfide	0.20	< 0.20	U
75-35-4	1,1-Dichloroethene	0.20	< 0.20	U
75-34-3	1,1-Dichloroethane	0.20	< 0.20	U
156-60-5	trans-1,2-Dichloroethene	0.20	< 0.20	U
156-59-2	cis-1,2-Dichloroethene	0.20	< 0.20	U
67-66-3	Chloroform	0.20	< 0.20	U
107-06-2	1,2-Dichloroethane	0.20	< 0.20	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	0.20	< 0.20	U
56-23-5	Carbon Tetrachloride	0.20	< 0.20	U
108-05-4	Vinyl Acetate	0.20	< 0.20	U
75-27-4	Bromodichloromethane	0.20	< 0.20	U
78-87-5	1,2-Dichloropropane	0.20	< 0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	< 0.20	U
79-01-6	**Trichloroethene**	**0.20**	**0.60**	
124-48-1	Dibromochloromethane	0.20	< 0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	< 0.20	U
71-43-2	Benzene	0.20	< 0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	< 0.20	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.20	< 0.20	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.20	< 0.20	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	< 0.20	U
108-88-3	Toluene	0.20	< 0.20	U
108-90-7	Chlorobenzene	0.20	< 0.20	U
100-41-4	Ethylbenzene	0.20	< 0.20	U
100-42-5	Styrene	0.20	< 0.20	U
75-69-4	Trichlorofluoromethane	0.20	< 0.20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.20	< 0.20	U
179601-23-1	m,p-Xylene	0.40	< 0.40	U
95-47-6	o-Xylene	0.20	< 0.20	U
95-50-1	1,2-Dichlorobenzene	0.20	< 0.20	U
541-73-1	1,3-Dichlorobenzene	0.20	< 0.20	U
106-46-7	1,4-Dichlorobenzene	0.20	< 0.20	U

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140326SWMC08-1**
 SAMPLE

Lab Sample ID: YE78J
LIMS ID: 14-5838
Matrix: Water
Date Analyzed: 04/03/14 14:06

QC Report No: YE78-Joint Base Lewis McChord
Project: Log Ram

CAS Number	Analyte	LOQ	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Iodomethane	1.0	< 1.0	U
74-96-4	Bromoethane	0.20	< 0.20	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.20	< 0.20	U
74-95-3	Dibromomethane	0.20	< 0.20	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	< 0.20	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	< 0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	< 0.50	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.20	< 0.20	U
95-63-6	1,2,4-Trimethylbenzene	0.20	< 0.20	U
87-68-3	Hexachlorobutadiene	0.50	< 0.50	U
106-93-4	1,2-Dibromoethane	0.20	< 0.20	U
74-97-5	Bromochloromethane	0.20	< 0.20	U
594-20-7	2,2-Dichloropropane	0.20	< 0.20	U
142-28-9	1,3-Dichloropropane	0.20	< 0.20	U
98-82-8	Isopropylbenzene	0.20	< 0.20	U
103-65-1	n-Propylbenzene	0.20	< 0.20	U
108-86-1	Bromobenzene	0.20	< 0.20	U
95-49-8	2-Chlorotoluene	0.20	< 0.20	U
106-43-4	4-Chlorotoluene	0.20	< 0.20	U
98-06-6	tert-Butylbenzene	0.20	< 0.20	U
135-98-8	sec-Butylbenzene	0.20	< 0.20	U
99-87-6	4-Isopropyltoluene	0.20	< 0.20	U
104-51-8	n-Butylbenzene	0.20	< 0.20	U
120-82-1	1,2,4-Trichlorobenzene	0.50	< 0.50	U
91-20-3	Naphthalene	0.50	< 0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	< 0.50	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	96.4%
d8-Toluene	96.9%
Bromofluorobenzene	92.7%
d4-1,2-Dichlorobenzene	100%

2-Chloroethylvinylether is an acid labile compound and may not be recovered from an acid preserved sample.

EPA SW-846 indicates that vinyl chloride and styrene may degrade in the presence of acid preservative.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140326SWMC09-1**
 SAMPLE

Lab Sample ID: YE78K
LIMS ID: 14-5839
Matrix: Water
Data Release Authorized:
Reported: 04/09/14

QC Report No: YE78-Joint Base Lewis McChord
Project: Log Ram

Date Sampled: 03/26/14
Date Received: 03/28/14

Instrument/Analyst: NT2/PAB
Date Analyzed: 04/03/14 14:33

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	LOQ	Result	Q
74-87-3	Chloromethane	0.50	< 0.50	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.20	< 0.20	U
75-00-3	Chloroethane	0.20	< 0.20	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	Acetone	5.0	< 5.0	U
75-15-0	Carbon Disulfide	0.20	< 0.20	U
75-35-4	1,1-Dichloroethene	0.20	< 0.20	U
75-34-3	1,1-Dichloroethane	0.20	< 0.20	U
156-60-5	trans-1,2-Dichloroethene	0.20	< 0.20	U
156-59-2	cis-1,2-Dichloroethene	0.20	< 0.20	U
67-66-3	Chloroform	0.20	< 0.20	U
107-06-2	1,2-Dichloroethane	0.20	< 0.20	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	0.20	< 0.20	U
56-23-5	Carbon Tetrachloride	0.20	< 0.20	U
108-05-4	Vinyl Acetate	0.20	< 0.20	U
75-27-4	Bromodichloromethane	0.20	< 0.20	U
78-87-5	1,2-Dichloropropane	0.20	< 0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	< 0.20	U
79-01-6	**Trichloroethene**	**0.20**	**0.41**	
124-48-1	Dibromochloromethane	0.20	< 0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	< 0.20	U
71-43-2	Benzene	0.20	< 0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	< 0.20	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.20	< 0.20	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.20	< 0.20	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	< 0.20	U
108-88-3	Toluene	0.20	< 0.20	U
108-90-7	Chlorobenzene	0.20	< 0.20	U
100-41-4	Ethylbenzene	0.20	< 0.20	U
100-42-5	Styrene	0.20	< 0.20	U
75-69-4	Trichlorofluoromethane	0.20	< 0.20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.20	< 0.20	U
179601-23-1	m,p-Xylene	0.40	< 0.40	U
95-47-6	o-Xylene	0.20	< 0.20	U
95-50-1	1,2-Dichlorobenzene	0.20	< 0.20	U
541-73-1	1,3-Dichlorobenzene	0.20	< 0.20	U
106-46-7	1,4-Dichlorobenzene	0.20	< 0.20	U

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140326SWMC09-1**
 SAMPLE

Lab Sample ID: YE78K
LIMS ID: 14-5839
Matrix: Water
Date Analyzed: 04/03/14 14:33

QC Report No: YE78-Joint Base Lewis McChord
Project: Log Ram

CAS Number	Analyte	LOQ	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Iodomethane	1.0	< 1.0	U
74-96-4	Bromoethane	0.20	< 0.20	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.20	< 0.20	U
74-95-3	Dibromomethane	0.20	< 0.20	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	< 0.20	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	< 0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	< 0.50	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.20	< 0.20	U
95-63-6	1,2,4-Trimethylbenzene	0.20	< 0.20	U
87-68-3	Hexachlorobutadiene	0.50	< 0.50	U
106-93-4	1,2-Dibromoethane	0.20	< 0.20	U
74-97-5	Bromochloromethane	0.20	< 0.20	U
594-20-7	2,2-Dichloropropane	0.20	< 0.20	U
142-28-9	1,3-Dichloropropane	0.20	< 0.20	U
98-82-8	Isopropylbenzene	0.20	< 0.20	U
103-65-1	n-Propylbenzene	0.20	< 0.20	U
108-86-1	Bromobenzene	0.20	< 0.20	U
95-49-8	2-Chlorotoluene	0.20	< 0.20	U
106-43-4	4-Chlorotoluene	0.20	< 0.20	U
98-06-6	tert-Butylbenzene	0.20	< 0.20	U
135-98-8	sec-Butylbenzene	0.20	< 0.20	U
99-87-6	4-Isopropyltoluene	0.20	< 0.20	U
104-51-8	n-Butylbenzene	0.20	< 0.20	U
120-82-1	1,2,4-Trichlorobenzene	0.50	< 0.50	U
91-20-3	Naphthalene	0.50	< 0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	< 0.50	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	97.4%
d8-Toluene	98.5%
Bromofluorobenzene	92.7%
d4-1,2-Dichlorobenzene	100%

2-Chloroethylvinylether is an acid labile compound and may not be recovered from an acid preserved sample.

EPA SW-846 indicates that vinyl chloride and styrene may degrade in the presence of acid preservative.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140325LC21C-1**
 SAMPLE

Lab Sample ID: YE78L
LIMS ID: 14-5840
Matrix: Water
Data Release Authorized:
Reported: 04/09/14

QC Report No: YE78-Joint Base Lewis McChord
Project: Log Ram

Date Sampled: 03/25/14
Date Received: 03/28/14

Instrument/Analyst: NT2/PAB
Date Analyzed: 04/03/14 14:59

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	LOQ	Result	Q
74-87-3	Chloromethane	0.50	< 0.50	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.20	< 0.20	U
75-00-3	Chloroethane	0.20	< 0.20	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	**Acetone**	**5.0**	**6.1**	
75-15-0	Carbon Disulfide	0.20	< 0.20	U
75-35-4	1,1-Dichloroethene	0.20	< 0.20	U
75-34-3	1,1-Dichloroethane	0.20	< 0.20	U
156-60-5	trans-1,2-Dichloroethene	0.20	< 0.20	U
156-59-2	cis-1,2-Dichloroethene	0.20	< 0.20	U
67-66-3	Chloroform	0.20	< 0.20	U
107-06-2	1,2-Dichloroethane	0.20	< 0.20	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	0.20	< 0.20	U
56-23-5	Carbon Tetrachloride	0.20	< 0.20	U
108-05-4	Vinyl Acetate	0.20	< 0.20	U
75-27-4	Bromodichloromethane	0.20	< 0.20	U
78-87-5	1,2-Dichloropropane	0.20	< 0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	< 0.20	U
79-01-6	Trichloroethene	0.20	< 0.20	U
124-48-1	Dibromochloromethane	0.20	< 0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	< 0.20	U
71-43-2	Benzene	0.20	< 0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	< 0.20	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.20	< 0.20	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.20	< 0.20	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	< 0.20	U
108-88-3	Toluene	0.20	< 0.20	U
108-90-7	Chlorobenzene	0.20	< 0.20	U
100-41-4	Ethylbenzene	0.20	< 0.20	U
100-42-5	Styrene	0.20	< 0.20	U
75-69-4	Trichlorofluoromethane	0.20	< 0.20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.20	< 0.20	U
179601-23-1	m,p-Xylene	0.40	< 0.40	U
95-47-6	o-Xylene	0.20	< 0.20	U
95-50-1	1,2-Dichlorobenzene	0.20	< 0.20	U
541-73-1	1,3-Dichlorobenzene	0.20	< 0.20	U
106-46-7	1,4-Dichlorobenzene	0.20	< 0.20	U

Lab Sample ID: YE78L
LIMS ID: 14-5840
Matrix: Water
Date Analyzed: 04/03/14 14:59

QC Report No: YE78-Joint Base Lewis McChord
Project: Log Ram

CAS Number	Analyte	LOQ	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Iodomethane	1.0	< 1.0	U
74-96-4	Bromoethane	0.20	< 0.20	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.20	< 0.20	U
74-95-3	Dibromomethane	0.20	< 0.20	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	< 0.20	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	< 0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	< 0.50	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.20	< 0.20	U
95-63-6	1,2,4-Trimethylbenzene	0.20	< 0.20	U
87-68-3	Hexachlorobutadiene	0.50	< 0.50	U
106-93-4	1,2-Dibromoethane	0.20	< 0.20	U
74-97-5	Bromochloromethane	0.20	< 0.20	U
594-20-7	2,2-Dichloropropane	0.20	< 0.20	U
142-28-9	1,3-Dichloropropane	0.20	< 0.20	U
98-82-8	Isopropylbenzene	0.20	< 0.20	U
103-65-1	n-Propylbenzene	0.20	< 0.20	U
108-86-1	Bromobenzene	0.20	< 0.20	U
95-49-8	2-Chlorotoluene	0.20	< 0.20	U
106-43-4	4-Chlorotoluene	0.20	< 0.20	U
98-06-6	tert-Butylbenzene	0.20	< 0.20	U
135-98-8	sec-Butylbenzene	0.20	< 0.20	U
99-87-6	4-Isopropyltoluene	0.20	< 0.20	U
104-51-8	n-Butylbenzene	0.20	< 0.20	U
120-82-1	1,2,4-Trichlorobenzene	0.50	< 0.50	U
91-20-3	Naphthalene	0.50	< 0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	< 0.50	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	98.4%
d8-Toluene	99.5%
Bromofluorobenzene	92.2%
d4-1,2-Dichlorobenzene	101%

2-Chloroethylvinylether is an acid labile compound and may not be recovered from an acid preserved sample.

EPA SW-846 indicates that vinyl chloride and styrene may degrade in the presence of acid preservative.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140325LC64A-1**
 SAMPLE

Lab Sample ID: YE78M
LIMS ID: 14-5841
Matrix: Water
Data Release Authorized:
Reported: 04/09/14

QC Report No: YE78-Joint Base Lewis McChord
Project: Log Ram

Date Sampled: 03/25/14
Date Received: 03/28/14

Instrument/Analyst: NT2/PAB
Date Analyzed: 04/03/14 15:25

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	LOQ	Result	Q
74-87-3	Chloromethane	0.50	< 0.50	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.20	< 0.20	U
75-00-3	Chloroethane	0.20	< 0.20	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	Acetone	5.0	< 5.0	U
75-15-0	Carbon Disulfide	0.20	< 0.20	U
75-35-4	1,1-Dichloroethene	0.20	< 0.20	U
75-34-3	1,1-Dichloroethane	0.20	< 0.20	U
156-60-5	trans-1,2-Dichloroethene	0.20	< 0.20	U
156-59-2	**cis-1,2-Dichloroethene**	**0.20**	**2.4**	
67-66-3	Chloroform	0.20	< 0.20	U
107-06-2	1,2-Dichloroethane	0.20	< 0.20	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	0.20	< 0.20	U
56-23-5	Carbon Tetrachloride	0.20	< 0.20	U
108-05-4	Vinyl Acetate	0.20	< 0.20	U
75-27-4	Bromodichloromethane	0.20	< 0.20	U
78-87-5	1,2-Dichloropropane	0.20	< 0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	< 0.20	U
79-01-6	**Trichloroethene**	**0.20**	**43**	
124-48-1	Dibromochloromethane	0.20	< 0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	< 0.20	U
71-43-2	Benzene	0.20	< 0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	< 0.20	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.20	< 0.20	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.20	< 0.20	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	< 0.20	U
108-88-3	Toluene	0.20	< 0.20	U
108-90-7	Chlorobenzene	0.20	< 0.20	U
100-41-4	Ethylbenzene	0.20	< 0.20	U
100-42-5	Styrene	0.20	< 0.20	U
75-69-4	Trichlorofluoromethane	0.20	< 0.20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.20	< 0.20	U
179601-23-1	m,p-Xylene	0.40	< 0.40	U
95-47-6	o-Xylene	0.20	< 0.20	U
95-50-1	1,2-Dichlorobenzene	0.20	< 0.20	U
541-73-1	1,3-Dichlorobenzene	0.20	< 0.20	U
106-46-7	1,4-Dichlorobenzene	0.20	< 0.20	U

Lab Sample ID: YE78M
LIMS ID: 14-5841
Matrix: Water
Date Analyzed: 04/03/14 15:25

QC Report No: YE78-Joint Base Lewis McChord
Project: Log Ram

CAS Number	Analyte	LOQ	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Iodomethane	1.0	< 1.0	U
74-96-4	Bromoethane	0.20	< 0.20	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.20	< 0.20	U
74-95-3	Dibromomethane	0.20	< 0.20	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	< 0.20	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	< 0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	< 0.50	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.20	< 0.20	U
95-63-6	1,2,4-Trimethylbenzene	0.20	< 0.20	U
87-68-3	Hexachlorobutadiene	0.50	< 0.50	U
106-93-4	1,2-Dibromoethane	0.20	< 0.20	U
74-97-5	Bromochloromethane	0.20	< 0.20	U
594-20-7	2,2-Dichloropropane	0.20	< 0.20	U
142-28-9	1,3-Dichloropropane	0.20	< 0.20	U
98-82-8	Isopropylbenzene	0.20	< 0.20	U
103-65-1	n-Propylbenzene	0.20	< 0.20	U
108-86-1	Bromobenzene	0.20	< 0.20	U
95-49-8	2-Chlorotoluene	0.20	< 0.20	U
106-43-4	4-Chlorotoluene	0.20	< 0.20	U
98-06-6	tert-Butylbenzene	0.20	< 0.20	U
135-98-8	sec-Butylbenzene	0.20	< 0.20	U
99-87-6	4-Isopropyltoluene	0.20	< 0.20	U
104-51-8	n-Butylbenzene	0.20	< 0.20	U
120-82-1	1,2,4-Trichlorobenzene	0.50	< 0.50	U
91-20-3	Naphthalene	0.50	< 0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	< 0.50	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	93.1%
d8-Toluene	94.7%
Bromofluorobenzene	93.5%
d4-1,2-Dichlorobenzene	99.5%

2-Chloroethylvinylether is an acid labile compound and may not be recovered from an acid preserved sample.

EPA SW-846 indicates that vinyl chloride and styrene may degrade in the presence of acid preservative.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140325LC64B-1**
 SAMPLE

Lab Sample ID: YE78N
LIMS ID: 14-5842
Matrix: Water
Data Release Authorized:
Reported: 04/09/14

QC Report No: YE78-Joint Base Lewis McChord
Project: Log Ram

Date Sampled: 03/25/14
Date Received: 03/28/14

Instrument/Analyst: NT2/PAB
Date Analyzed: 04/03/14 15:52

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	LOQ	Result	Q
74-87-3	Chloromethane	0.50	< 0.50	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.20	< 0.20	U
75-00-3	Chloroethane	0.20	< 0.20	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	**Acetone**	**5.0**	**5.7**	
75-15-0	Carbon Disulfide	0.20	< 0.20	U
75-35-4	1,1-Dichloroethene	0.20	< 0.20	U
75-34-3	1,1-Dichloroethane	0.20	< 0.20	U
156-60-5	trans-1,2-Dichloroethene	0.20	< 0.20	U
156-59-2	cis-1,2-Dichloroethene	0.20	< 0.20	U
67-66-3	Chloroform	0.20	< 0.20	U
107-06-2	1,2-Dichloroethane	0.20	< 0.20	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	0.20	< 0.20	U
56-23-5	Carbon Tetrachloride	0.20	< 0.20	U
108-05-4	Vinyl Acetate	0.20	< 0.20	U
75-27-4	Bromodichloromethane	0.20	< 0.20	U
78-87-5	1,2-Dichloropropane	0.20	< 0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	< 0.20	U
79-01-6	**Trichloroethene**	**0.20**	**2.4**	
124-48-1	Dibromochloromethane	0.20	< 0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	< 0.20	U
71-43-2	Benzene	0.20	< 0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	< 0.20	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.20	< 0.20	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.20	< 0.20	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	< 0.20	U
108-88-3	Toluene	0.20	< 0.20	U
108-90-7	Chlorobenzene	0.20	< 0.20	U
100-41-4	Ethylbenzene	0.20	< 0.20	U
100-42-5	Styrene	0.20	< 0.20	U
75-69-4	Trichlorofluoromethane	0.20	< 0.20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.20	< 0.20	U
179601-23-1	m,p-Xylene	0.40	< 0.40	U
95-47-6	o-Xylene	0.20	< 0.20	U
95-50-1	1,2-Dichlorobenzene	0.20	< 0.20	U
541-73-1	1,3-Dichlorobenzene	0.20	< 0.20	U
106-46-7	1,4-Dichlorobenzene	0.20	< 0.20	U

YE78-60032

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140325LC64B-1**
 SAMPLE

Lab Sample ID: YE78N
LIMS ID: 14-5842
Matrix: Water
Date Analyzed: 04/03/14 15:52

QC Report No: YE78-Joint Base Lewis McChord
Project: Log Ram

CAS Number	Analyte	LOQ	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Iodomethane	1.0	< 1.0	U
74-96-4	Bromoethane	0.20	< 0.20	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.20	< 0.20	U
74-95-3	Dibromomethane	0.20	< 0.20	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	< 0.20	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	< 0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	< 0.50	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.20	< 0.20	U
95-63-6	1,2,4-Trimethylbenzene	0.20	< 0.20	U
87-68-3	Hexachlorobutadiene	0.50	< 0.50	U
106-93-4	1,2-Dibromoethane	0.20	< 0.20	U
74-97-5	Bromochloromethane	0.20	< 0.20	U
594-20-7	2,2-Dichloropropane	0.20	< 0.20	U
142-28-9	1,3-Dichloropropane	0.20	< 0.20	U
98-82-8	Isopropylbenzene	0.20	< 0.20	U
103-65-1	n-Propylbenzene	0.20	< 0.20	U
108-86-1	Bromobenzene	0.20	< 0.20	U
95-49-8	2-Chlorotoluene	0.20	< 0.20	U
106-43-4	4-Chlorotoluene	0.20	< 0.20	U
98-06-6	tert-Butylbenzene	0.20	< 0.20	U
135-98-8	sec-Butylbenzene	0.20	< 0.20	U
99-87-6	4-Isopropyltoluene	0.20	< 0.20	U
104-51-8	n-Butylbenzene	0.20	< 0.20	U
120-82-1	1,2,4-Trichlorobenzene	0.50	< 0.50	U
91-20-3	Naphthalene	0.50	< 0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	< 0.50	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	98.5%
d8-Toluene	100%
Bromofluorobenzene	91.6%
d4-1,2-Dichlorobenzene	102%

2-Chloroethylvinylether is an acid labile compound and may not be recovered from an acid preserved sample.

EPA SW-846 indicates that vinyl chloride and styrene may degrade in the presence of acid preservative.

TER8 00035

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140325LC108-1**
 SAMPLE

Lab Sample ID: YE780
LIMS ID: 14-5843
Matrix: Water
Data Release Authorized:
Reported: 04/09/14

QC Report No: YE78-Joint Base Lewis McChord
Project: Log Ram

Date Sampled: 03/25/14
Date Received: 03/28/14

Instrument/Analyst: NT2/PAB
Date Analyzed: 04/03/14 16:18

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	LOQ	Result	Q
74-87-3	Chloromethane	0.50	< 0.50	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.20	< 0.20	U
75-00-3	Chloroethane	0.20	< 0.20	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	**Acetone**	**5.0**	**6.3**	
75-15-0	Carbon Disulfide	0.20	< 0.20	U
75-35-4	1,1-Dichloroethene	0.20	< 0.20	U
75-34-3	1,1-Dichloroethane	0.20	< 0.20	U
156-60-5	trans-1,2-Dichloroethene	0.20	< 0.20	U
156-59-2	cis-1,2-Dichloroethene	0.20	< 0.20	U
67-66-3	Chloroform	0.20	< 0.20	U
107-06-2	1,2-Dichloroethane	0.20	< 0.20	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	0.20	< 0.20	U
56-23-5	Carbon Tetrachloride	0.20	< 0.20	U
108-05-4	Vinyl Acetate	0.20	< 0.20	U
75-27-4	Bromodichloromethane	0.20	< 0.20	U
78-87-5	1,2-Dichloropropane	0.20	< 0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	< 0.20	U
79-01-6	**Trichloroethene**	**0.20**	**3.2**	
124-48-1	Dibromochloromethane	0.20	< 0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	< 0.20	U
71-43-2	Benzene	0.20	< 0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	< 0.20	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.20	< 0.20	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.20	< 0.20	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	< 0.20	U
108-88-3	Toluene	0.20	< 0.20	U
108-90-7	Chlorobenzene	0.20	< 0.20	U
100-41-4	Ethylbenzene	0.20	< 0.20	U
100-42-5	Styrene	0.20	< 0.20	U
75-69-4	Trichlorofluoromethane	0.20	< 0.20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.20	< 0.20	U
179601-23-1	m,p-Xylene	0.40	< 0.40	U
95-47-6	o-Xylene	0.20	< 0.20	U
95-50-1	1,2-Dichlorobenzene	0.20	< 0.20	U
541-73-1	1,3-Dichlorobenzene	0.20	< 0.20	U
106-46-7	1,4-Dichlorobenzene	0.20	< 0.20	U

YE78.00034

Lab Sample ID: YE780 QC Report No: YE78-Joint Base Lewis McChord
LIMS ID: 14-5843 Project: Log Ram
Matrix: Water
Date Analyzed: 04/03/14 16:18

CAS Number	Analyte	LOQ	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Iodomethane	1.0	< 1.0	U
74-96-4	Bromoethane	0.20	< 0.20	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.20	< 0.20	U
74-95-3	Dibromomethane	0.20	< 0.20	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	< 0.20	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	< 0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	< 0.50	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.20	< 0.20	U
95-63-6	1,2,4-Trimethylbenzene	0.20	< 0.20	U
87-68-3	Hexachlorobutadiene	0.50	< 0.50	U
106-93-4	1,2-Dibromoethane	0.20	< 0.20	U
74-97-5	Bromochloromethane	0.20	< 0.20	U
594-20-7	2,2-Dichloropropane	0.20	< 0.20	U
142-28-9	1,3-Dichloropropane	0.20	< 0.20	U
98-82-8	Isopropylbenzene	0.20	< 0.20	U
103-65-1	n-Propylbenzene	0.20	< 0.20	U
108-86-1	Bromobenzene	0.20	< 0.20	U
95-49-8	2-Chlorotoluene	0.20	< 0.20	U
106-43-4	4-Chlorotoluene	0.20	< 0.20	U
98-06-6	tert-Butylbenzene	0.20	< 0.20	U
135-98-8	sec-Butylbenzene	0.20	< 0.20	U
99-87-6	4-Isopropyltoluene	0.20	< 0.20	U
104-51-8	n-Butylbenzene	0.20	< 0.20	U
120-82-1	1,2,4-Trichlorobenzene	0.50	< 0.50	U
91-20-3	Naphthalene	0.50	< 0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	< 0.50	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	101%
d8-Toluene	98.3%
Bromofluorobenzene	91.9%
d4-1,2-Dichlorobenzene	101%

2-Chloroethylvinylether is an acid labile compound and may not be recovered from an acid preserved sample.

EPA SW-846 indicates that vinyl chloride and styrene may degrade in the presence of acid preservative.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140325LC137B-1**
 SAMPLE

Lab Sample ID: YE78P
LIMS ID: 14-5844
Matrix: Water
Data Release Authorized:
Reported: 04/09/14

QC Report No: YE78-Joint Base Lewis McChord
Project: Log Ram

Date Sampled: 03/25/14
Date Received: 03/28/14

Instrument/Analyst: NT2/PAB
Date Analyzed: 04/03/14 16:45

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	LOQ	Result	Q
74-87-3	Chloromethane	0.50	< 0.50	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.20	< 0.20	U
75-00-3	Chloroethane	0.20	< 0.20	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	Acetone	5.0	< 5.0	U
75-15-0	Carbon Disulfide	0.20	< 0.20	U
75-35-4	1,1-Dichloroethene	0.20	< 0.20	U
75-34-3	1,1-Dichloroethane	0.20	< 0.20	U
156-60-5	**trans-1,2-Dichloroethene**	**0.20**	**0.21**	
156-59-2	**cis-1,2-Dichloroethene**	**0.20**	**1.8**	
67-66-3	Chloroform	0.20	< 0.20	U
107-06-2	1,2-Dichloroethane	0.20	< 0.20	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	0.20	< 0.20	U
56-23-5	Carbon Tetrachloride	0.20	< 0.20	U
108-05-4	Vinyl Acetate	0.20	< 0.20	U
75-27-4	Bromodichloromethane	0.20	< 0.20	U
78-87-5	1,2-Dichloropropane	0.20	< 0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	< 0.20	U
79-01-6	**Trichloroethene**	**0.20**	**200**	**E**
124-48-1	Dibromochloromethane	0.20	< 0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	< 0.20	U
71-43-2	Benzene	0.20	< 0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	< 0.20	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.20	< 0.20	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.20	< 0.20	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	< 0.20	U
108-88-3	Toluene	0.20	< 0.20	U
108-90-7	Chlorobenzene	0.20	< 0.20	U
100-41-4	Ethylbenzene	0.20	< 0.20	U
100-42-5	Styrene	0.20	< 0.20	U
75-69-4	Trichlorofluoromethane	0.20	< 0.20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.20	< 0.20	U
179601-23-1	m,p-Xylene	0.40	< 0.40	U
95-47-6	o-Xylene	0.20	< 0.20	U
95-50-1	1,2-Dichlorobenzene	0.20	< 0.20	U
541-73-1	1,3-Dichlorobenzene	0.20	< 0.20	U
106-46-7	1,4-Dichlorobenzene	0.20	< 0.20	U

YE78-66035

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140325LC137B-1**
 SAMPLE

Lab Sample ID: YE78P
LIMS ID: 14-5844
Matrix: Water
Date Analyzed: 04/03/14 16:45

QC Report No: YE78-Joint Base Lewis McChord
Project: Log Ram

CAS Number	Analyte	LOQ	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Iodomethane	1.0	< 1.0	U
74-96-4	Bromoethane	0.20	< 0.20	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.20	< 0.20	U
74-95-3	Dibromomethane	0.20	< 0.20	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	< 0.20	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	< 0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	< 0.50	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.20	< 0.20	U
95-63-6	1,2,4-Trimethylbenzene	0.20	< 0.20	U
87-68-3	Hexachlorobutadiene	0.50	< 0.50	U
106-93-4	1,2-Dibromoethane	0.20	< 0.20	U
74-97-5	Bromochloromethane	0.20	< 0.20	U
594-20-7	2,2-Dichloropropane	0.20	< 0.20	U
142-28-9	1,3-Dichloropropane	0.20	< 0.20	U
98-82-8	Isopropylbenzene	0.20	< 0.20	U
103-65-1	n-Propylbenzene	0.20	< 0.20	U
108-86-1	Bromobenzene	0.20	< 0.20	U
95-49-8	2-Chlorotoluene	0.20	< 0.20	U
106-43-4	4-Chlorotoluene	0.20	< 0.20	U
98-06-6	tert-Butylbenzene	0.20	< 0.20	U
135-98-8	sec-Butylbenzene	0.20	< 0.20	U
99-87-6	4-Isopropyltoluene	0.20	< 0.20	U
104-51-8	n-Butylbenzene	0.20	< 0.20	U
120-82-1	1,2,4-Trichlorobenzene	0.50	< 0.50	U
91-20-3	Naphthalene	0.50	< 0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	< 0.50	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	97.6%
d8-Toluene	94.6%
Bromofluorobenzene	90.8%
d4-1,2-Dichlorobenzene	101%

2-Chloroethylvinylether is an acid labile compound and may not be recovered from an acid preserved sample.

EPA SW-846 indicates that vinyl chloride and styrene may degrade in the presence of acid preservative.

YE78 00037

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140325LC137B-1**
 DILUTION

Lab Sample ID: YE78P
LIMS ID: 14-5844
Matrix: Water
Data Release Authorized:
Reported: 04/09/14

QC Report No: YE78-Joint Base Lewis McChord
Project: Log Ram

Date Sampled: 03/25/14
Date Received: 03/28/14

Instrument/Analyst: NT3/PAB
Date Analyzed: 04/04/14 22:57

Sample Amount: 1.00 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	LOQ	Result	Q
74-87-3	Chloromethane	5.0	< 5.0	U
74-83-9	Bromomethane	10	< 10	U
75-01-4	Vinyl Chloride	2.0	< 2.0	U
75-00-3	Chloroethane	2.0	< 2.0	U
75-09-2	Methylene Chloride	10	< 10	U
67-64-1	Acetone	50	< 50	U
75-15-0	Carbon Disulfide	2.0	< 2.0	U
75-35-4	1,1-Dichloroethene	2.0	< 2.0	U
75-34-3	1,1-Dichloroethane	2.0	< 2.0	U
156-60-5	trans-1,2-Dichloroethene	2.0	< 2.0	U
156-59-2	cis-1,2-Dichloroethene	2.0	< 2.0	U
67-66-3	Chloroform	2.0	< 2.0	U
107-06-2	1,2-Dichloroethane	2.0	< 2.0	U
78-93-3	2-Butanone	50	< 50	U
71-55-6	1,1,1-Trichloroethane	2.0	< 2.0	U
56-23-5	Carbon Tetrachloride	2.0	< 2.0	U
108-05-4	Vinyl Acetate	2.0	< 2.0	U
75-27-4	Bromodichloromethane	2.0	< 2.0	U
78-87-5	1,2-Dichloropropane	2.0	< 2.0	U
10061-01-5	cis-1,3-Dichloropropene	2.0	< 2.0	U
79-01-6	**Trichloroethene**	**2.0**	**180**	
124-48-1	Dibromochloromethane	2.0	< 2.0	U
79-00-5	1,1,2-Trichloroethane	2.0	< 2.0	U
71-43-2	Benzene	2.0	< 2.0	U
10061-02-6	trans-1,3-Dichloropropene	2.0	< 2.0	U
110-75-8	2-Chloroethylvinylether	10	< 10	U
75-25-2	Bromoform	2.0	< 2.0	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	50	< 50	U
591-78-6	2-Hexanone	50	< 50	U
127-18-4	Tetrachloroethene	2.0	< 2.0	U
79-34-5	1,1,2,2-Tetrachloroethane	2.0	< 2.0	U
108-88-3	Toluene	2.0	< 2.0	U
108-90-7	Chlorobenzene	2.0	< 2.0	U
100-41-4	Ethylbenzene	2.0	< 2.0	U
100-42-5	Styrene	2.0	< 2.0	U
75-69-4	Trichlorofluoromethane	2.0	< 2.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	2.0	< 2.0	U
179601-23-1	m,p-Xylene	4.0	< 4.0	U
95-47-6	o-Xylene	2.0	< 2.0	U
95-50-1	1,2-Dichlorobenzene	2.0	< 2.0	U
541-73-1	1,3-Dichlorobenzene	2.0	< 2.0	U
106-46-7	1,4-Dichlorobenzene	2.0	< 2.0	U

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140325LC137B-1**
 DILUTION

Lab Sample ID: YE78P QC Report No: YE78-Joint Base Lewis McChord
LIMS ID: 14-5844 Project: Log Ram
Matrix: Water
Date Analyzed: 04/04/14 22:57

CAS Number	Analyte	LOQ	Result	Q
107-02-8	Acrolein	50	< 50	U
74-88-4	Iodomethane	10	< 10	U
74-96-4	Bromoethane	2.0	< 2.0	U
107-13-1	Acrylonitrile	10	< 10	U
563-58-6	1,1-Dichloropropene	2.0	< 2.0	U
74-95-3	Dibromomethane	2.0	< 2.0	U
630-20-6	1,1,1,2-Tetrachloroethane	2.0	< 2.0	U
96-12-8	1,2-Dibromo-3-chloropropane	5.0	< 5.0	U
96-18-4	1,2,3-Trichloropropane	5.0	< 5.0	U
110-57-6	trans-1,4-Dichloro-2-butene	10	< 10	U
108-67-8	1,3,5-Trimethylbenzene	2.0	< 2.0	U
95-63-6	1,2,4-Trimethylbenzene	2.0	< 2.0	U
87-68-3	Hexachlorobutadiene	5.0	< 5.0	U
106-93-4	1,2-Dibromoethane	2.0	< 2.0	U
74-97-5	Bromochloromethane	2.0	< 2.0	U
594-20-7	2,2-Dichloropropane	2.0	< 2.0	U
142-28-9	1,3-Dichloropropane	2.0	< 2.0	U
98-82-8	Isopropylbenzene	2.0	< 2.0	U
103-65-1	n-Propylbenzene	2.0	< 2.0	U
108-86-1	Bromobenzene	2.0	< 2.0	U
95-49-8	2-Chlorotoluene	2.0	< 2.0	U
106-43-4	4-Chlorotoluene	2.0	< 2.0	U
98-06-6	tert-Butylbenzene	2.0	< 2.0	U
135-98-8	sec-Butylbenzene	2.0	< 2.0	U
99-87-6	4-Isopropyltoluene	2.0	< 2.0	U
104-51-8	n-Butylbenzene	2.0	< 2.0	U
120-82-1	1,2,4-Trichlorobenzene	5.0	< 5.0	U
91-20-3	Naphthalene	5.0	< 5.0	U
87-61-6	1,2,3-Trichlorobenzene	5.0	< 5.0	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	101%
d8-Toluene	101%
Bromofluorobenzene	96.6%
d4-1,2-Dichlorobenzene	101%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140325LC137C-1**
 SAMPLE

Lab Sample ID: YE78Q
LIMS ID: 14-5845
Matrix: Water
Data Release Authorized:
Reported: 04/09/14

QC Report No: YE78-Joint Base Lewis McChord
Project: Log Ram

Date Sampled: 03/25/14
Date Received: 03/28/14

Instrument/Analyst: NT3/PAB
Date Analyzed: 04/04/14 22:27

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	LOQ	Result	Q
74-87-3	Chloromethane	0.50	< 0.50	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.20	< 0.20	U
75-00-3	Chloroethane	0.20	< 0.20	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	Acetone	5.0	< 5.0	U
75-15-0	Carbon Disulfide	0.20	< 0.20	U
75-35-4	1,1-Dichloroethene	0.20	< 0.20	U
75-34-3	1,1-Dichloroethane	0.20	< 0.20	U
156-60-5	trans-1,2-Dichloroethene	0.20	< 0.20	U
156-59-2	cis-1,2-Dichloroethene	0.20	< 0.20	U
67-66-3	Chloroform	0.20	< 0.20	U
107-06-2	1,2-Dichloroethane	0.20	< 0.20	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	0.20	< 0.20	U
56-23-5	Carbon Tetrachloride	0.20	< 0.20	U
108-05-4	Vinyl Acetate	0.20	< 0.20	U
75-27-4	Bromodichloromethane	0.20	< 0.20	U
78-87-5	1,2-Dichloropropane	0.20	< 0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	< 0.20	U
79-01-6	**Trichloroethene**	**0.20**	**0.33**	
124-48-1	Dibromochloromethane	0.20	< 0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	< 0.20	U
71-43-2	Benzene	0.20	< 0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	< 0.20	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.20	< 0.20	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.20	< 0.20	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	< 0.20	U
108-88-3	Toluene	0.20	< 0.20	U
108-90-7	Chlorobenzene	0.20	< 0.20	U
100-41-4	Ethylbenzene	0.20	< 0.20	U
100-42-5	Styrene	0.20	< 0.20	U
75-69-4	Trichlorofluoromethane	0.20	< 0.20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.20	< 0.20	U
179601-23-1	m,p-Xylene	0.40	< 0.40	U
95-47-6	o-Xylene	0.20	< 0.20	U
95-50-1	1,2-Dichlorobenzene	0.20	< 0.20	U
541-73-1	1,3-Dichlorobenzene	0.20	< 0.20	U
106-46-7	1,4-Dichlorobenzene	0.20	< 0.20	U

YE78-00040

Lab Sample ID: YE78Q
LIMS ID: 14-5845
Matrix: Water
Date Analyzed: 04/04/14 22:27

QC Report No: YE78-Joint Base Lewis McChord
Project: Log Ram

CAS Number	Analyte	LOQ	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Iodomethane	1.0	< 1.0	U
74-96-4	Bromoethane	0.20	< 0.20	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.20	< 0.20	U
74-95-3	Dibromomethane	0.20	< 0.20	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	< 0.20	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	< 0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	< 0.50	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.20	< 0.20	U
95-63-6	1,2,4-Trimethylbenzene	0.20	< 0.20	U
87-68-3	Hexachlorobutadiene	0.50	< 0.50	U
106-93-4	1,2-Dibromoethane	0.20	< 0.20	U
74-97-5	Bromochloromethane	0.20	< 0.20	U
594-20-7	2,2-Dichloropropane	0.20	< 0.20	U
142-28-9	1,3-Dichloropropane	0.20	< 0.20	U
98-82-8	Isopropylbenzene	0.20	< 0.20	U
103-65-1	n-Propylbenzene	0.20	< 0.20	U
108-86-1	Bromobenzene	0.20	< 0.20	U
95-49-8	2-Chlorotoluene	0.20	< 0.20	U
106-43-4	4-Chlorotoluene	0.20	< 0.20	U
98-06-6	tert-Butylbenzene	0.20	< 0.20	U
135-98-8	sec-Butylbenzene	0.20	< 0.20	U
99-87-6	4-Isopropyltoluene	0.20	< 0.20	U
104-51-8	n-Butylbenzene	0.20	< 0.20	U
120-82-1	1,2,4-Trichlorobenzene	0.50	< 0.50	U
91-20-3	Naphthalene	0.50	< 0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	< 0.50	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	102%
d8-Toluene	102%
Bromofluorobenzene	98.0%
d4-1,2-Dichlorobenzene	102%

2-Chloroethylvinylether is an acid labile compound and may not be recovered from an acid preserved sample.

EPA SW-846 indicates that vinyl chloride and styrene may degrade in the presence of acid preservative.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140325LC160-1**
 SAMPLE

Lab Sample ID: YE78R
LIMS ID: 14-5846
Matrix: Water
Data Release Authorized:
Reported: 04/09/14

QC Report No: YE78-Joint Base Lewis McChord
Project: Log Ram
Date Sampled: 03/25/14
Date Received: 03/28/14

Instrument/Analyst: NT2/PAB
Date Analyzed: 04/03/14 17:38

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	LOQ	Result	Q
74-87-3	Chloromethane	0.50	< 0.50	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.20	< 0.20	U
75-00-3	Chloroethane	0.20	< 0.20	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	**Acetone**	**5.0**	**5.3**	
75-15-0	Carbon Disulfide	0.20	< 0.20	U
75-35-4	1,1-Dichloroethene	0.20	< 0.20	U
75-34-3	1,1-Dichloroethane	0.20	< 0.20	U
156-60-5	trans-1,2-Dichloroethene	0.20	< 0.20	U
156-59-2	**cis-1,2-Dichloroethene**	**0.20**	**0.49**	
67-66-3	Chloroform	0.20	< 0.20	U
107-06-2	1,2-Dichloroethane	0.20	< 0.20	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	0.20	< 0.20	U
56-23-5	Carbon Tetrachloride	0.20	< 0.20	U
108-05-4	Vinyl Acetate	0.20	< 0.20	U
75-27-4	Bromodichloromethane	0.20	< 0.20	U
78-87-5	1,2-Dichloropropane	0.20	< 0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	< 0.20	U
79-01-6	**Trichloroethene**	**0.20**	**17**	
124-48-1	Dibromochloromethane	0.20	< 0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	< 0.20	U
71-43-2	Benzene	0.20	< 0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	< 0.20	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.20	< 0.20	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.20	< 0.20	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	< 0.20	U
108-88-3	Toluene	0.20	< 0.20	U
108-90-7	Chlorobenzene	0.20	< 0.20	U
100-41-4	Ethylbenzene	0.20	< 0.20	U
100-42-5	Styrene	0.20	< 0.20	U
75-69-4	Trichlorofluoromethane	0.20	< 0.20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.20	< 0.20	U
179601-23-1	m,p-Xylene	0.40	< 0.40	U
95-47-6	o-Xylene	0.20	< 0.20	U
95-50-1	1,2-Dichlorobenzene	0.20	< 0.20	U
541-73-1	1,3-Dichlorobenzene	0.20	< 0.20	U
106-46-7	1,4-Dichlorobenzene	0.20	< 0.20	U

Lab Sample ID: YE78R
LIMS ID: 14-5846
Matrix: Water
Date Analyzed: 04/03/14 17:38

QC Report No: YE78-Joint Base Lewis McChord
Project: Log Ram

CAS Number	Analyte	LOQ	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Iodomethane	1.0	< 1.0	U
74-96-4	Bromoethane	0.20	< 0.20	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.20	< 0.20	U
74-95-3	Dibromomethane	0.20	< 0.20	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	< 0.20	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	< 0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	< 0.50	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.20	< 0.20	U
95-63-6	1,2,4-Trimethylbenzene	0.20	< 0.20	U
87-68-3	Hexachlorobutadiene	0.50	< 0.50	U
106-93-4	1,2-Dibromoethane	0.20	< 0.20	U
74-97-5	Bromochloromethane	0.20	< 0.20	U
594-20-7	2,2-Dichloropropane	0.20	< 0.20	U
142-28-9	1,3-Dichloropropane	0.20	< 0.20	U
98-82-8	Isopropylbenzene	0.20	< 0.20	U
103-65-1	n-Propylbenzene	0.20	< 0.20	U
108-86-1	Bromobenzene	0.20	< 0.20	U
95-49-8	2-Chlorotoluene	0.20	< 0.20	U
106-43-4	4-Chlorotoluene	0.20	< 0.20	U
98-06-6	tert-Butylbenzene	0.20	< 0.20	U
135-98-8	sec-Butylbenzene	0.20	< 0.20	U
99-87-6	4-Isopropyltoluene	0.20	< 0.20	U
104-51-8	n-Butylbenzene	0.20	< 0.20	U
120-82-1	1,2,4-Trichlorobenzene	0.50	< 0.50	U
91-20-3	Naphthalene	0.50	< 0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	< 0.50	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	96.7%
d8-Toluene	97.9%
Bromofluorobenzene	93.0%
d4-1,2-Dichlorobenzene	100%

2-Chloroethylvinylether is an acid labile compound and may not be recovered from an acid preserved sample.

EPA SW-846 indicates that vinyl chloride and styrene may degrade in the presence of acid preservative.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140328TB-1**
 SAMPLE

Lab Sample ID: YE78S
LIMS ID: 14-5847
Matrix: Water
Data Release Authorized:
Reported: 04/09/14

QC Report No: YE78-Joint Base Lewis McChord
Project: Log Ram

Date Sampled: 03/28/14
Date Received: 03/28/14

Instrument/Analyst: NT2/PAB
Date Analyzed: 04/03/14 18:05

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	LOQ	Result	Q
74-87-3	Chloromethane	0.50	< 0.50	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.20	< 0.20	U
75-00-3	Chloroethane	0.20	< 0.20	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	Acetone	5.0	< 5.0	U
75-15-0	Carbon Disulfide	0.20	< 0.20	U
75-35-4	1,1-Dichloroethene	0.20	< 0.20	U
75-34-3	1,1-Dichloroethane	0.20	< 0.20	U
156-60-5	trans-1,2-Dichloroethene	0.20	< 0.20	U
156-59-2	cis-1,2-Dichloroethene	0.20	< 0.20	U
67-66-3	Chloroform	0.20	< 0.20	U
107-06-2	1,2-Dichloroethane	0.20	< 0.20	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	0.20	< 0.20	U
56-23-5	Carbon Tetrachloride	0.20	< 0.20	U
108-05-4	Vinyl Acetate	0.20	< 0.20	U
75-27-4	Bromodichloromethane	0.20	< 0.20	U
78-87-5	1,2-Dichloropropane	0.20	< 0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	< 0.20	U
79-01-6	Trichloroethene	0.20	< 0.20	U
124-48-1	Dibromochloromethane	0.20	< 0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	< 0.20	U
71-43-2	Benzene	0.20	< 0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	< 0.20	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.20	< 0.20	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.20	< 0.20	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	< 0.20	U
108-88-3	Toluene	0.20	< 0.20	U
108-90-7	Chlorobenzene	0.20	< 0.20	U
100-41-4	Ethylbenzene	0.20	< 0.20	U
100-42-5	Styrene	0.20	< 0.20	U
75-69-4	Trichlorofluoromethane	0.20	< 0.20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.20	< 0.20	U
179601-23-1	m,p-Xylene	0.40	< 0.40	U
95-47-6	o-Xylene	0.20	< 0.20	U
95-50-1	1,2-Dichlorobenzene	0.20	< 0.20	U
541-73-1	1,3-Dichlorobenzene	0.20	< 0.20	U
106-46-7	1,4-Dichlorobenzene	0.20	< 0.20	U

YE78.00044

Lab Sample ID: YE78S
LIMS ID: 14-5847
Matrix: Water
Date Analyzed: 04/03/14 18:05

QC Report No: YE78-Joint Base Lewis McChord
Project: Log Ram

CAS Number	Analyte	LOQ	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Iodomethane	1.0	< 1.0	U
74-96-4	Bromoethane	0.20	< 0.20	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.20	< 0.20	U
74-95-3	Dibromomethane	0.20	< 0.20	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	< 0.20	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	< 0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	< 0.50	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.20	< 0.20	U
95-63-6	1,2,4-Trimethylbenzene	0.20	< 0.20	U
87-68-3	Hexachlorobutadiene	0.50	< 0.50	U
106-93-4	1,2-Dibromoethane	0.20	< 0.20	U
74-97-5	Bromochloromethane	0.20	< 0.20	U
594-20-7	2,2-Dichloropropane	0.20	< 0.20	U
142-28-9	1,3-Dichloropropane	0.20	< 0.20	U
98-82-8	Isopropylbenzene	0.20	< 0.20	U
103-65-1	n-Propylbenzene	0.20	< 0.20	U
108-86-1	Bromobenzene	0.20	< 0.20	U
95-49-8	2-Chlorotoluene	0.20	< 0.20	U
106-43-4	4-Chlorotoluene	0.20	< 0.20	U
98-06-6	tert-Butylbenzene	0.20	< 0.20	U
135-98-8	sec-Butylbenzene	0.20	< 0.20	U
99-87-6	4-Isopropyltoluene	0.20	< 0.20	U
104-51-8	n-Butylbenzene	0.20	< 0.20	U
120-82-1	1,2,4-Trichlorobenzene	0.50	< 0.50	U
91-20-3	Naphthalene	0.50	< 0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	< 0.50	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	96.8%
d8-Toluene	97.4%
Bromofluorobenzene	92.4%
d4-1,2-Dichlorobenzene	104%

2-Chloroethylvinylether is an acid labile compound and may not be recovered from an acid preserved sample.

EPA SW-846 indicates that vinyl chloride and styrene may degrade in the presence of acid preservative.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: MB-040214A**
 METHOD BLANK

Lab Sample ID: MB-040214A
LIMS ID: 14-5829
Matrix: Water
Data Release Authorized:
Reported: 04/09/14

QC Report No: YE78-Joint Base Lewis McChord
Project: Log Ram

Date Sampled: NA
Date Received: NA

Instrument/Analyst: NT15/PAB
Date Analyzed: 04/02/14 14:38

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	LOQ	Result	Q
74-87-3	Chloromethane	0.50	< 0.50	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.20	< 0.20	U
75-00-3	Chloroethane	0.20	< 0.20	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	Acetone	5.0	< 5.0	U
75-15-0	Carbon Disulfide	0.20	< 0.20	U
75-35-4	1,1-Dichloroethene	0.20	< 0.20	U
75-34-3	1,1-Dichloroethane	0.20	< 0.20	U
156-60-5	trans-1,2-Dichloroethene	0.20	< 0.20	U
156-59-2	cis-1,2-Dichloroethene	0.20	< 0.20	U
67-66-3	Chloroform	0.20	< 0.20	U
107-06-2	1,2-Dichloroethane	0.20	< 0.20	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	0.20	< 0.20	U
56-23-5	Carbon Tetrachloride	0.20	< 0.20	U
108-05-4	Vinyl Acetate	0.20	< 0.20	U
75-27-4	Bromodichloromethane	0.20	< 0.20	U
78-87-5	1,2-Dichloropropane	0.20	< 0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	< 0.20	U
79-01-6	Trichloroethene	0.20	< 0.20	U
124-48-1	Dibromochloromethane	0.20	< 0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	< 0.20	U
71-43-2	Benzene	0.20	< 0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	< 0.20	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.20	< 0.20	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.20	< 0.20	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	< 0.20	U
108-88-3	Toluene	0.20	< 0.20	U
108-90-7	Chlorobenzene	0.20	< 0.20	U
100-41-4	Ethylbenzene	0.20	< 0.20	U
100-42-5	Styrene	0.20	< 0.20	U
75-69-4	Trichlorofluoromethane	0.20	< 0.20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.20	< 0.20	U
179601-23-1	m,p-Xylene	0.40	< 0.40	U
95-47-6	o-Xylene	0.20	< 0.20	U
95-50-1	1,2-Dichlorobenzene	0.20	< 0.20	U
541-73-1	1,3-Dichlorobenzene	0.20	< 0.20	U
106-46-7	1,4-Dichlorobenzene	0.20	< 0.20	U

YE78 00046

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: MB-040214A**
 METHOD BLANK

Lab Sample ID: MB-040214A QC Report No: YE78-Joint Base Lewis McChord
LIMS ID: 14-5829 Project: Log Ram
Matrix: Water
Date Analyzed: 04/02/14 14:38

CAS Number	Analyte	LOQ	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Iodomethane	1.0	< 1.0	U
74-96-4	Bromoethane	0.20	< 0.20	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.20	< 0.20	U
74-95-3	Dibromomethane	0.20	< 0.20	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	< 0.20	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	< 0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	< 0.50	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.20	< 0.20	U
95-63-6	1,2,4-Trimethylbenzene	0.20	< 0.20	U
87-68-3	Hexachlorobutadiene	0.50	< 0.50	U
106-93-4	1,2-Dibromoethane	0.20	< 0.20	U
74-97-5	Bromochloromethane	0.20	< 0.20	U
594-20-7	2,2-Dichloropropane	0.20	< 0.20	U
142-28-9	1,3-Dichloropropane	0.20	< 0.20	U
98-82-8	Isopropylbenzene	0.20	< 0.20	U
103-65-1	n-Propylbenzene	0.20	< 0.20	U
108-86-1	Bromobenzene	0.20	< 0.20	U
95-49-8	2-Chlorotoluene	0.20	< 0.20	U
106-43-4	4-Chlorotoluene	0.20	< 0.20	U
98-06-6	tert-Butylbenzene	0.20	< 0.20	U
135-98-8	sec-Butylbenzene	0.20	< 0.20	U
99-87-6	4-Isopropyltoluene	0.20	< 0.20	U
104-51-8	n-Butylbenzene	0.20	< 0.20	U
120-82-1	1,2,4-Trichlorobenzene	0.50	< 0.50	U
91-20-3	Naphthalene	0.50	< 0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	< 0.50	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	113%
d8-Toluene	101%
Bromofluorobenzene	97.2%
d4-1,2-Dichlorobenzene	103%

YE78 00047

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: MB-040314A**
 METHOD BLANK

Lab Sample ID: MB-040314A
LIMS ID: 14-5836
Matrix: Water
Data Release Authorized:
Reported: 04/09/14

QC Report No: YE78-Joint Base Lewis McChord
Project: Log Ram

Date Sampled: NA
Date Received: NA

Instrument/Analyst: NT2/PAB
Date Analyzed: 04/03/14 12:35

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	LOQ	Result	Q
74-87-3	Chloromethane	0.50	< 0.50	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.20	< 0.20	U
75-00-3	Chloroethane	0.20	< 0.20	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	Acetone	5.0	< 5.0	U
75-15-0	Carbon Disulfide	0.20	< 0.20	U
75-35-4	1,1-Dichloroethene	0.20	< 0.20	U
75-34-3	1,1-Dichloroethane	0.20	< 0.20	U
156-60-5	trans-1,2-Dichloroethene	0.20	< 0.20	U
156-59-2	cis-1,2-Dichloroethene	0.20	< 0.20	U
67-66-3	Chloroform	0.20	< 0.20	U
107-06-2	1,2-Dichloroethane	0.20	< 0.20	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	0.20	< 0.20	U
56-23-5	Carbon Tetrachloride	0.20	< 0.20	U
108-05-4	Vinyl Acetate	0.20	< 0.20	U
75-27-4	Bromodichloromethane	0.20	< 0.20	U
78-87-5	1,2-Dichloropropane	0.20	< 0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	< 0.20	U
79-01-6	Trichloroethene	0.20	< 0.20	U
124-48-1	Dibromochloromethane	0.20	< 0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	< 0.20	U
71-43-2	Benzene	0.20	< 0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	< 0.20	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.20	< 0.20	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.20	< 0.20	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	< 0.20	U
108-88-3	Toluene	0.20	< 0.20	U
108-90-7	Chlorobenzene	0.20	< 0.20	U
100-41-4	Ethylbenzene	0.20	< 0.20	U
100-42-5	Styrene	0.20	< 0.20	U
75-69-4	Trichlorofluoromethane	0.20	< 0.20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.20	< 0.20	U
179601-23-1	m,p-Xylene	0.40	< 0.40	U
95-47-6	o-Xylene	0.20	< 0.20	U
95-50-1	1,2-Dichlorobenzene	0.20	< 0.20	U
541-73-1	1,3-Dichlorobenzene	0.20	< 0.20	U
106-46-7	1,4-Dichlorobenzene	0.20	< 0.20	U

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: MB-040314A**
 METHOD BLANK

Lab Sample ID: MB-040314A QC Report No: YE78-Joint Base Lewis McChord
LIMS ID: 14-5836 Project: Log Ram
Matrix: Water
Date Analyzed: 04/03/14 12:35

CAS Number	Analyte	LOQ	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Iodomethane	1.0	< 1.0	U
74-96-4	Bromoethane	0.20	< 0.20	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.20	< 0.20	U
74-95-3	Dibromomethane	0.20	< 0.20	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	< 0.20	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	< 0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	< 0.50	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.20	< 0.20	U
95-63-6	1,2,4-Trimethylbenzene	0.20	< 0.20	U
87-68-3	**Hexachlorobutadiene**	**0.50**	**0.60**	
106-93-4	1,2-Dibromoethane	0.20	< 0.20	U
74-97-5	Bromochloromethane	0.20	< 0.20	U
594-20-7	2,2-Dichloropropane	0.20	< 0.20	U
142-28-9	1,3-Dichloropropane	0.20	< 0.20	U
98-82-8	Isopropylbenzene	0.20	< 0.20	U
103-65-1	n-Propylbenzene	0.20	< 0.20	U
108-86-1	Bromobenzene	0.20	< 0.20	U
95-49-8	2-Chlorotoluene	0.20	< 0.20	U
106-43-4	4-Chlorotoluene	0.20	< 0.20	U
98-06-6	tert-Butylbenzene	0.20	< 0.20	U
135-98-8	sec-Butylbenzene	0.20	< 0.20	U
99-87-6	4-Isopropyltoluene	0.20	< 0.20	U
104-51-8	**n-Butylbenzene**	**0.20**	**0.21**	
120-82-1	1,2,4-Trichlorobenzene	0.50	< 0.50	U
91-20-3	Naphthalene	0.50	< 0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	< 0.50	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	94.7%
d8-Toluene	99.6%
Bromofluorobenzene	94.2%
d4-1,2-Dichlorobenzene	99.2%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: MB-040414A**
 METHOD BLANK

Lab Sample ID: MB-040414A
LIMS ID: 14-5844
Matrix: Water
Data Release Authorized:
Reported: 04/09/14

QC Report No: YE78-Joint Base Lewis McChord
Project: Log Ram

Date Sampled: NA
Date Received: NA

Instrument/Analyst: NT3/PAB
Date Analyzed: 04/04/14 14:49

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	LOQ	Result	Q
74-87-3	Chloromethane	0.50	< 0.50	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.20	< 0.20	U
75-00-3	Chloroethane	0.20	< 0.20	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	Acetone	5.0	< 5.0	U
75-15-0	Carbon Disulfide	0.20	< 0.20	U
75-35-4	1,1-Dichloroethene	0.20	< 0.20	U
75-34-3	1,1-Dichloroethane	0.20	< 0.20	U
156-60-5	trans-1,2-Dichloroethene	0.20	< 0.20	U
156-59-2	cis-1,2-Dichloroethene	0.20	< 0.20	U
67-66-3	Chloroform	0.20	< 0.20	U
107-06-2	1,2-Dichloroethane	0.20	< 0.20	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	0.20	< 0.20	U
56-23-5	Carbon Tetrachloride	0.20	< 0.20	U
108-05-4	Vinyl Acetate	0.20	< 0.20	U
75-27-4	Bromodichloromethane	0.20	< 0.20	U
78-87-5	1,2-Dichloropropane	0.20	< 0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	< 0.20	U
79-01-6	Trichloroethene	0.20	< 0.20	U
124-48-1	Dibromochloromethane	0.20	< 0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	< 0.20	U
71-43-2	Benzene	0.20	< 0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	< 0.20	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.20	< 0.20	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.20	< 0.20	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	< 0.20	U
108-88-3	Toluene	0.20	< 0.20	U
108-90-7	Chlorobenzene	0.20	< 0.20	U
100-41-4	Ethylbenzene	0.20	< 0.20	U
100-42-5	Styrene	0.20	< 0.20	U
75-69-4	Trichlorofluoromethane	0.20	< 0.20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.20	< 0.20	U
179601-23-1	m,p-Xylene	0.40	< 0.40	U
95-47-6	o-Xylene	0.20	< 0.20	U
95-50-1	1,2-Dichlorobenzene	0.20	< 0.20	U
541-73-1	1,3-Dichlorobenzene	0.20	< 0.20	U
106-46-7	1,4-Dichlorobenzene	0.20	< 0.20	U

Lab Sample ID: MB-040414A QC Report No: YE78-Joint Base Lewis McChord
LIMS ID: 14-5844 Project: Log Ram
Matrix: Water
Date Analyzed: 04/04/14 14:49

CAS Number	Analyte	LOQ	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Iodomethane	1.0	< 1.0	U
74-96-4	Bromoethane	0.20	< 0.20	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.20	< 0.20	U
74-95-3	Dibromomethane	0.20	< 0.20	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	< 0.20	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	< 0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	< 0.50	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.20	< 0.20	U
95-63-6	1,2,4-Trimethylbenzene	0.20	< 0.20	U
87-68-3	Hexachlorobutadiene	0.50	< 0.50	U
106-93-4	1,2-Dibromoethane	0.20	< 0.20	U
74-97-5	Bromochloromethane	0.20	< 0.20	U
594-20-7	2,2-Dichloropropane	0.20	< 0.20	U
142-28-9	1,3-Dichloropropane	0.20	< 0.20	U
98-82-8	Isopropylbenzene	0.20	< 0.20	U
103-65-1	n-Propylbenzene	0.20	< 0.20	U
108-86-1	Bromobenzene	0.20	< 0.20	U
95-49-8	2-Chlorotoluene	0.20	< 0.20	U
106-43-4	4-Chlorotoluene	0.20	< 0.20	U
98-06-6	tert-Butylbenzene	0.20	< 0.20	U
135-98-8	sec-Butylbenzene	0.20	< 0.20	U
99-87-6	4-Isopropyltoluene	0.20	< 0.20	U
104-51-8	n-Butylbenzene	0.20	< 0.20	U
120-82-1	1,2,4-Trichlorobenzene	0.50	< 0.50	U
91-20-3	Naphthalene	0.50	< 0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	< 0.50	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	103%
d8-Toluene	98.3%
Bromofluorobenzene	96.6%
d4-1,2-Dichlorobenzene	100%

ANALYTICAL RESOURCES INCORPORATED

VOA SURROGATE RECOVERY SUMMARY

Matrix: Water

QC Report No: YE78-Joint Base Lewis McChord
Project: Log Ram

ARI ID	Client ID	PV	DCE	TOL	BFB	DCB	TOT OUT
MB-040214A	Method Blank	10	113%	101%	97.2%	103%	0
LCS-040214A	Lab Control	10	105%	101%	97.9%	101%	0
LCSD-040214A	Lab Control Dup	10	106%	100%	99.6%	99.7%	0
YE78A	LGC140326LC135-1	10	119%	101%	98.4%	101%	0
YE78B	LGC140326LC178-1	10	120%	101%	97.8%	103%	0
YE78C	LGC140326LC180-1	10	124%	101%	98.3%	102%	0
YE78D	LGC140326LC182-1	10	120%	102%	98.3%	102%	0
YE78E	LGC140326LC216-1	10	121%	103%	98.8%	101%	0
YE78F	LGC140326LC217-1	10	119%	102%	97.7%	102%	0
YE78G	LGC140326MAMCOF02-1	10	123%	103%	98.5%	102%	0
MB-040314A	Method Blank	10	94.7%	99.6%	94.2%	99.2%	0
LCS-040314A	Lab Control	10	93.1%	99.9%	96.0%	101%	0
LCSD-040314A	Lab Control Dup	10	95.7%	102%	98.3%	101%	0
YE78H	LGC140326MT3-1	10	96.2%	97.8%	93.8%	102%	0
YE78I	LGC140326SWMC07-1	10	95.3%	97.9%	91.2%	99.6%	0
YE78J	LGC140326SWMC08-1	10	96.4%	96.9%	92.7%	100%	0
YE78K	LGC140326SWMC09-1	10	97.4%	98.5%	92.7%	100%	0
YE78L	LGC140325LC21C-1	10	98.4%	99.5%	92.2%	101%	0
YE78M	LGC140325LC64A-1	10	93.1%	94.7%	93.5%	99.5%	0
YE78N	LGC140325LC64B-1	10	98.5%	100%	91.6%	102%	0
YE78O	LGC140325LC108-1	10	101%	98.3%	91.9%	101%	0
MB-040414A	Method Blank	10	103%	98.3%	96.6%	100%	0
LCS-040414A	Lab Control	10	102%	101%	97.3%	99.0%	0
LCSD-040414A	Lab Control Dup	10	102%	99.0%	99.0%	99.7%	0
YE78P	LGC140325LC137B-1	10	97.6%	94.6%	90.8%	101%	0
YE78PDL	LGC140325LC137B-1	10	101%	101%	96.6%	101%	0
YE78Q	LGC140325LC137C-1	10	102%	102%	98.0%	102%	0
YE78R	LGC140325LC160-1	10	96.7%	97.9%	93.0%	100%	0
YE78S	LGC140328TB-1	10	96.8%	97.4%	92.4%	104%	0

SW8260C	LCS/MB LIMITS	QC LIMITS
(DCE) = d4-1,2-Dichloroethane	(80-120)	(80-130)
(TOL) = d8-Toluene	(80-120)	(80-120)
(BFB) = Bromofluorobenzene	(80-120)	(80-120)
(DCB) = d4-1,2-Dichlorobenzene	(80-120)	(80-120)

Prep Method: SW5030B
Log Number Range: 14-5829 to 14-5847

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LCS-040214A**
Page 1 of 2 **LAB CONTROL SAMPLE**

Lab Sample ID: LCS-040214A
LIMS ID: 14-5829
Matrix: Water
Data Release Authorized:
Reported: 04/09/14

QC Report No: YE78-Joint Base Lewis McChord
Project: Log Ram

Date Sampled: NA
Date Received: NA

Instrument/Analyst LCS: NT15/PAB
LCSD: NT15/PAB
Date Analyzed LCS: 04/02/14 13:34
LCSD: 04/02/14 15:15

Sample Amount LCS: 10.0 mL
LCSD: 10.0 mL
Purge Volume LCS: 10.0 mL
LCSD: 10.0 mL

Analyte	LCS		Spike Added-LCS	LCS Recovery	LCSD		Spike Added-LCSD	LCSD Recovery	RPD
Chloromethane	10.5		10.0	105%	9.12		10.0	91.2%	14.1%
Bromomethane	9.55		10.0	95.5%	8.54		10.0	85.4%	11.2%
Vinyl Chloride	10.7	Q	10.0	107%	9.17	Q	10.0	91.7%	15.4%
Chloroethane	9.51		10.0	95.1%	8.23		10.0	82.3%	14.4%
Methylene Chloride	9.64		10.0	96.4%	9.12		10.0	91.2%	5.5%
Acetone	46.4		50.0	92.8%	47.3		50.0	94.6%	1.9%
Carbon Disulfide	10.9		10.0	109%	9.29		10.0	92.9%	15.9%
1,1-Dichloroethene	10.9		10.0	109%	9.47		10.0	94.7%	14.0%
1,1-Dichloroethane	10.6		10.0	106%	9.64		10.0	96.4%	9.5%
trans-1,2-Dichloroethene	10.5		10.0	105%	9.25		10.0	92.5%	12.7%
cis-1,2-Dichloroethene	10.5		10.0	105%	9.68		10.0	96.8%	8.1%
Chloroform	10.7	Q	10.0	107%	9.90	Q	10.0	99.0%	7.8%
1,2-Dichloroethane	9.56		10.0	95.6%	9.24		10.0	92.4%	3.4%
2-Butanone	48.4		50.0	96.8%	50.2		50.0	100%	3.7%
1,1,1-Trichloroethane	11.1	Q	10.0	111%	9.71	Q	10.0	97.1%	13.4%
Carbon Tetrachloride	8.99		10.0	89.9%	7.37		10.0	73.7%	19.8%
Vinyl Acetate	10.4		10.0	104%	10.6		10.0	106%	1.9%
Bromodichloromethane	10.7	Q	10.0	107%	9.98	Q	10.0	99.8%	7.0%
1,2-Dichloropropane	9.88		10.0	98.8%	9.22		10.0	92.2%	6.9%
cis-1,3-Dichloropropene	10.7		10.0	107%	9.80		10.0	98.0%	8.8%
Trichloroethene	9.80		10.0	98.0%	8.69		10.0	86.9%	12.0%
Dibromochloromethane	11.9	Q	10.0	119%	11.0	Q	10.0	110%	7.9%
1,1,2-Trichloroethane	9.44		10.0	94.4%	9.34		10.0	93.4%	1.1%
Benzene	9.75		10.0	97.5%	8.84		10.0	88.4%	9.8%
trans-1,3-Dichloropropene	10.8		10.0	108%	10.1		10.0	101%	6.7%
2-Chloroethylvinylether	9.18		10.0	91.8%	9.42		10.0	94.2%	2.6%
Bromoform	9.37		10.0	93.7%	8.43		10.0	84.3%	10.6%
4-Methyl-2-Pentanone (MIBK)	46.9		50.0	93.8%	48.7		50.0	97.4%	3.8%
2-Hexanone	46.0		50.0	92.0%	47.4		50.0	94.8%	3.0%
Tetrachloroethene	9.82		10.0	98.2%	8.38		10.0	83.8%	15.8%
1,1,2,2-Tetrachloroethane	9.57		10.0	95.7%	9.36		10.0	93.6%	2.2%
Toluene	9.77		10.0	97.7%	8.76		10.0	87.6%	10.9%
Chlorobenzene	9.80		10.0	98.0%	8.78		10.0	87.8%	11.0%
Ethylbenzene	9.88		10.0	98.8%	8.66		10.0	86.6%	13.2%
Styrene	10.1		10.0	101%	9.07		10.0	90.7%	10.7%
Trichlorofluoromethane	10.1		10.0	101%	8.26		10.0	82.6%	20.0%
1,1,2-Trichloro-1,2,2-trifluoroetha	10.9		10.0	109%	9.24		10.0	92.4%	16.5%
m,p-Xylene	20.3		20.0	102%	17.8		20.0	89.0%	13.1%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LCS-040214A**
 LAB CONTROL SAMPLE

Lab Sample ID: LCS-040214A QC Report No: YE78-Joint Base Lewis McChord
LIMS ID: 14-5829 Project: Log Ram
Matrix: Water

Analyte	LCS	Spike Added-LCS	LCS Recovery	LCSD	Spike Added-LCSD	LCSD Recovery	RPD
o-Xylene	9.99	10.0	99.9%	8.89	10.0	88.9%	11.7%
1,2-Dichlorobenzene	9.71	10.0	97.1%	8.58	10.0	85.8%	12.4%
1,3-Dichlorobenzene	9.70	10.0	97.0%	8.39	10.0	83.9%	14.5%
1,4-Dichlorobenzene	9.59	10.0	95.9%	8.29	10.0	82.9%	14.5%
Acrolein	49.4	50.0	98.8%	50.7	50.0	101%	2.6%
Iodomethane	8.74	10.0	87.4%	7.79	10.0	77.9%	11.5%
Bromoethane	10.7 Q	10.0	107%	9.65 Q	10.0	96.5%	10.3%
Acrylonitrile	10.1	10.0	101%	10.3	10.0	103%	2.0%
1,1-Dichloropropene	9.59	10.0	95.9%	9.14	10.0	91.4%	4.8%
Dibromomethane	9.60	10.0	96.0%	9.44	10.0	94.4%	1.7%
1,1,1,2-Tetrachloroethane	9.56	10.0	95.6%	8.48	10.0	84.8%	12.0%
1,2-Dibromo-3-chloropropane	10.4	10.0	104%	9.98	10.0	99.8%	4.1%
1,2,3-Trichloropropane	9.62	10.0	96.2%	9.43	10.0	94.3%	2.0%
trans-1,4-Dichloro-2-butene	9.77	10.0	97.7%	9.20	10.0	92.0%	6.0%
1,3,5-Trimethylbenzene	10.2	10.0	102%	8.75	10.0	87.5%	15.3%
1,2,4-Trimethylbenzene	10.1	10.0	101%	8.67	10.0	86.7%	15.2%
Hexachlorobutadiene	9.35	10.0	93.5%	7.50	10.0	75.0%	22.0%
1,2-Dibromoethane	9.60	10.0	96.0%	9.50	10.0	95.0%	1.0%
Bromochloromethane	10.6	10.0	106%	10.3	10.0	103%	2.9%
2,2-Dichloropropane	10.5	10.0	105%	8.77	10.0	87.7%	18.0%
1,3-Dichloropropane	9.59	10.0	95.9%	9.30	10.0	93.0%	3.1%
Isopropylbenzene	10.2	10.0	102%	8.70	10.0	87.0%	15.9%
n-Propylbenzene	10.1	10.0	101%	8.52	10.0	85.2%	17.0%
Bromobenzene	9.75	10.0	97.5%	8.73	10.0	87.3%	11.0%
2-Chlorotoluene	9.99	10.0	99.9%	8.55	10.0	85.5%	15.5%
4-Chlorotoluene	9.90	10.0	99.0%	8.49	10.0	84.9%	15.3%
tert-Butylbenzene	10.2	10.0	102%	8.72	10.0	87.2%	15.6%
sec-Butylbenzene	10.1	10.0	101%	8.52	10.0	85.2%	17.0%
4-Isopropyltoluene	10.2	10.0	102%	8.56	10.0	85.6%	17.5%
n-Butylbenzene	10.1	10.0	101%	8.29	10.0	82.9%	19.7%
1,2,4-Trichlorobenzene	9.47	10.0	94.7%	8.15	10.0	81.5%	15.0%
Naphthalene	9.43	10.0	94.3%	8.92	10.0	89.2%	5.6%
1,2,3-Trichlorobenzene	9.46	10.0	94.6%	8.35	10.0	83.5%	12.5%

Reported in µg/L (ppb)

RPD calculated using sample concentrations per SW846.

Volatile Surrogate Recovery

	LCS	LCSD
d4-1,2-Dichloroethane	105%	106%
d8-Toluene	101%	100%
Bromofluorobenzene	97.9%	99.6%
d4-1,2-Dichlorobenzene	101%	99.7%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LCS-040314A**
 LAB CONTROL SAMPLE

Lab Sample ID: LCS-040314A
LIMS ID: 14-5836
Matrix: Water
Data Release Authorized:
Reported: 04/09/14

QC Report No: YE78-Joint Base Lewis McChord
Project: Log Ram
Date Sampled: NA
Date Received: NA

Instrument/Analyst LCS: NT2/PAB
LCSD: NT2/PAB
Date Analyzed LCS: 04/03/14 11:31
LCSD: 04/03/14 11:58

Sample Amount LCS: 10.0 mL
LCSD: 10.0 mL
Purge Volume LCS: 10.0 mL
LCSD: 10.0 mL

Analyte	LCS	Spike Added-LCS	LCS Recovery	LCSD	Spike Added-LCSD	LCSD Recovery	RPD
Chloromethane	9.82	10.0	98.2%	9.85	10.0	98.5%	0.3%
Bromomethane	8.64 Q	10.0	86.4%	9.18 Q	10.0	91.8%	6.1%
Vinyl Chloride	10.4	10.0	104%	10.8	10.0	108%	3.8%
Chloroethane	9.79	10.0	97.9%	9.75	10.0	97.5%	0.4%
Methylene Chloride	9.62	10.0	96.2%	9.50	10.0	95.0%	1.3%
Acetone	46.1	50.0	92.2%	47.1	50.0	94.2%	2.1%
Carbon Disulfide	10.3	10.0	103%	10.5	10.0	105%	1.9%
1,1-Dichloroethene	10.0	10.0	100%	10.2	10.0	102%	2.0%
1,1-Dichloroethane	10.2	10.0	102%	10.1	10.0	101%	1.0%
trans-1,2-Dichloroethene	9.05	10.0	90.5%	9.12	10.0	91.2%	0.8%
cis-1,2-Dichloroethene	10.1	10.0	101%	10.1	10.0	101%	0.0%
Chloroform	9.98	10.0	99.8%	9.83	10.0	98.3%	1.5%
1,2-Dichloroethane	10.5	10.0	105%	10.6	10.0	106%	0.9%
2-Butanone	46.8	50.0	93.6%	47.2	50.0	94.4%	0.9%
1,1,1-Trichloroethane	8.89	10.0	88.9%	8.98	10.0	89.8%	1.0%
Carbon Tetrachloride	7.48 Q	10.0	74.8%	7.80 Q	10.0	78.0%	4.2%
Vinyl Acetate	7.97	10.0	79.7%	8.10	10.0	81.0%	1.6%
Bromodichloromethane	8.95	10.0	89.5%	9.29	10.0	92.9%	3.7%
1,2-Dichloropropane	10.1	10.0	101%	10.5	10.0	105%	3.9%
cis-1,3-Dichloropropene	9.33	10.0	93.3%	10.1	10.0	101%	7.9%
Trichloroethene	10.5	10.0	105%	10.4	10.0	104%	1.0%
Dibromochloromethane	8.32	10.0	83.2%	8.22	10.0	82.2%	1.2%
1,1,2-Trichloroethane	10.4	10.0	104%	10.9	10.0	109%	4.7%
Benzene	10.5	10.0	105%	10.6	10.0	106%	0.9%
trans-1,3-Dichloropropene	9.07	10.0	90.7%	10.3	10.0	103%	12.7%
2-Chloroethylvinylether	9.16	10.0	91.6%	9.90	10.0	99.0%	7.8%
Bromoform	6.85 Q	10.0	68.5%	6.89 Q	10.0	68.9%	0.6%
4-Methyl-2-Pentanone (MIBK)	50.0	50.0	100%	52.8	50.0	106%	5.4%
2-Hexanone	50.6	50.0	101%	51.0	50.0	102%	0.8%
Tetrachloroethene	9.22	10.0	92.2%	9.26	10.0	92.6%	0.4%
1,1,2,2-Tetrachloroethane	10.2	10.0	102%	10.3	10.0	103%	1.0%
Toluene	10.4	10.0	104%	10.7	10.0	107%	2.8%
Chlorobenzene	11.3	10.0	113%	11.3	10.0	113%	0.0%
Ethylbenzene	10.9	10.0	109%	10.9	10.0	109%	0.0%
Styrene	11.0	10.0	110%	11.0	10.0	110%	0.0%
Trichlorofluoromethane	10.3	10.0	103%	10.5	10.0	105%	1.9%
1,1,2-Trichloro-1,2,2-trifluoroetha	11.0	10.0	110%	11.4	10.0	114%	3.6%
m,p-Xylene	22.1	20.0	110%	22.4	20.0	112%	1.3%

YE78-00055

Lab Sample ID: LCS-040314A QC Report No: YE78-Joint Base Lewis McChord
LIMS ID: 14-5836 Project: Log Ram
Matrix: Water

Analyte	LCS	Spike Added-LCS	LCS Recovery	LCSD	Spike Added-LCSD	LCSD Recovery	RPD
o-Xylene	10.8	10.0	108%	11.0	10.0	110%	1.8%
1,2-Dichlorobenzene	10.5	10.0	105%	10.5	10.0	105%	0.0%
1,3-Dichlorobenzene	10.8	10.0	108%	11.0	10.0	110%	1.8%
1,4-Dichlorobenzene	10.7	10.0	107%	10.9	10.0	109%	1.9%
Acrolein	55.5	50.0	111%	53.7	50.0	107%	3.3%
Iodomethane	10.6	10.0	106%	10.5	10.0	105%	0.9%
Bromoethane	10.1	10.0	101%	10.3	10.0	103%	2.0%
Acrylonitrile	8.81	10.0	88.1%	8.57	10.0	85.7%	2.8%
1,1-Dichloropropene	10.8	10.0	108%	10.9	10.0	109%	0.9%
Dibromomethane	10.0	10.0	100%	10.4	10.0	104%	3.9%
1,1,1,2-Tetrachloroethane	8.63	10.0	86.3%	8.79	10.0	87.9%	1.8%
1,2-Dibromo-3-chloropropane	7.37 Q	10.0	73.7%	8.63 Q	10.0	86.3%	15.8%
1,2,3-Trichloropropane	10.4	10.0	104%	9.91	10.0	99.1%	4.8%
trans-1,4-Dichloro-2-butene	8.54	10.0	85.4%	8.55	10.0	85.5%	0.1%
1,3,5-Trimethylbenzene	10.8	10.0	108%	10.5	10.0	105%	2.8%
1,2,4-Trimethylbenzene	10.6	10.0	106%	10.7	10.0	107%	0.9%
Hexachlorobutadiene	10.6 B	10.0	106%	10.9 B	10.0	109%	2.8%
1,2-Dibromoethane	9.77	10.0	97.7%	10.3	10.0	103%	5.3%
Bromochloromethane	10.6	10.0	106%	10.6	10.0	106%	0.0%
2,2-Dichloropropane	9.24	10.0	92.4%	9.20	10.0	92.0%	0.4%
1,3-Dichloropropane	10.5	10.0	105%	11.0	10.0	110%	4.7%
Isopropylbenzene	10.8	10.0	108%	10.7	10.0	107%	0.9%
n-Propylbenzene	10.7	10.0	107%	10.7	10.0	107%	0.0%
Bromobenzene	10.4	10.0	104%	10.2	10.0	102%	1.9%
2-Chlorotoluene	10.4	10.0	104%	10.3	10.0	103%	1.0%
4-Chlorotoluene	10.4	10.0	104%	10.3	10.0	103%	1.0%
tert-Butylbenzene	10.5	10.0	105%	10.4	10.0	104%	1.0%
sec-Butylbenzene	11.2	10.0	112%	11.2	10.0	112%	0.0%
4-Isopropyltoluene	10.8	10.0	108%	11.1	10.0	111%	2.7%
n-Butylbenzene	11.1 B	10.0	111%	11.0 B	10.0	110%	0.9%
1,2,4-Trichlorobenzene	7.84	10.0	78.4%	8.38	10.0	83.8%	6.7%
Naphthalene	7.09 Q	10.0	70.9%	7.61 Q	10.0	76.1%	7.1%
1,2,3-Trichlorobenzene	7.86 Q	10.0	78.6%	8.01 Q	10.0	80.1%	1.9%

Reported in µg/L (ppb)

RPD calculated using sample concentrations per SW846.

Volatile Surrogate Recovery

	LCS	LCSD
d4-1,2-Dichloroethane	93.1%	95.7%
d8-Toluene	99.9%	102%
Bromofluorobenzene	96.0%	98.3%
d4-1,2-Dichlorobenzene	101%	101%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LCS-040414A**
 LAB CONTROL SAMPLE

Lab Sample ID: LCS-040414A QC Report No: YE78-Joint Base Lewis McChord
LIMS ID: 14-5844 Project: Log Ram
Matrix: Water
Data Release Authorized:
Reported: 04/09/14 Date Received: NA

Date Sampled: NA

Instrument/Analyst LCS: NT3/PAB Sample Amount LCS: 10.0 mL
LCSD: NT3/PAB LCSD: 10.0 mL
Date Analyzed LCS: 04/04/14 13:52 Purge Volume LCS: 10.0 mL
LCSD: 04/04/14 14:21 LCSD: 10.0 mL

Analyte	LCS		Spike Added-LCS	LCS Recovery	LCSD		Spike Added-LCSD	LCSD Recovery	RPD
Chloromethane	8.76		10.0	87.6%	9.23		10.0	92.3%	5.2%
Bromomethane	9.44		10.0	94.4%	8.98		10.0	89.8%	5.0%
Vinyl Chloride	9.34		10.0	93.4%	9.11		10.0	91.1%	2.5%
Chloroethane	7.13		10.0	71.3%	9.22		10.0	92.2%	25.6%
Methylene Chloride	8.90		10.0	89.0%	9.41		10.0	94.1%	5.6%
Acetone	46.4		50.0	92.8%	45.6		50.0	91.2%	1.7%
Carbon Disulfide	8.96		10.0	89.6%	9.54		10.0	95.4%	6.3%
1,1-Dichloroethene	8.92		10.0	89.2%	9.35		10.0	93.5%	4.7%
1,1-Dichloroethane	9.09		10.0	90.9%	9.48		10.0	94.8%	4.2%
trans-1,2-Dichloroethene	8.82		10.0	88.2%	9.17		10.0	91.7%	3.9%
cis-1,2-Dichloroethene	9.29		10.0	92.9%	9.34		10.0	93.4%	0.5%
Chloroform	8.68		10.0	86.8%	9.15		10.0	91.5%	5.3%
1,2-Dichloroethane	9.38		10.0	93.8%	9.44		10.0	94.4%	0.6%
2-Butanone	41.0	Q	50.0	82.0%	43.7	Q	50.0	87.4%	6.4%
1,1,1-Trichloroethane	9.29		10.0	92.9%	9.61		10.0	96.1%	3.4%
Carbon Tetrachloride	9.42		10.0	94.2%	9.20		10.0	92.0%	2.4%
Vinyl Acetate	9.21		10.0	92.1%	9.77		10.0	97.7%	5.9%
Bromodichloromethane	9.43		10.0	94.3%	9.56		10.0	95.6%	1.4%
1,2-Dichloropropane	8.98		10.0	89.8%	9.23		10.0	92.3%	2.7%
cis-1,3-Dichloropropene	9.65		10.0	96.5%	9.74		10.0	97.4%	0.9%
Trichloroethene	9.48		10.0	94.8%	9.50		10.0	95.0%	0.2%
Dibromochloromethane	9.45		10.0	94.5%	9.70		10.0	97.0%	2.6%
1,1,2-Trichloroethane	9.09		10.0	90.9%	9.21		10.0	92.1%	1.3%
Benzene	9.45		10.0	94.5%	9.52		10.0	95.2%	0.7%
trans-1,3-Dichloropropene	9.59		10.0	95.9%	9.37		10.0	93.7%	2.3%
2-Chloroethylvinylether	9.32		10.0	93.2%	9.42		10.0	94.2%	1.1%
Bromoform	10.2		10.0	102%	10.6		10.0	106%	3.8%
4-Methyl-2-Pentanone (MIBK)	49.5		50.0	99.0%	51.2		50.0	102%	3.4%
2-Hexanone	36.0	Q	50.0	72.0%	39.6	Q	50.0	79.2%	9.5%
Tetrachloroethene	9.40		10.0	94.0%	9.72		10.0	97.2%	3.3%
1,1,2,2-Tetrachloroethane	9.25		10.0	92.5%	9.72		10.0	97.2%	5.0%
Toluene	9.46		10.0	94.6%	9.42		10.0	94.2%	0.4%
Chlorobenzene	9.45		10.0	94.5%	9.76		10.0	97.6%	3.2%
Ethylbenzene	9.64		10.0	96.4%	10.1		10.0	101%	4.7%
Styrene	9.69		10.0	96.9%	10.1		10.0	101%	4.1%
Trichlorofluoromethane	8.86		10.0	88.6%	9.60		10.0	96.0%	8.0%
1,1,2-Trichloro-1,2,2-trifluoroetha	9.29		10.0	92.9%	9.74		10.0	97.4%	4.7%
m,p-Xylene	19.3		20.0	96.5%	20.1		20.0	100%	4.1%

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LCS-040414A**
 LAB CONTROL SAMPLE

ANALYTICAL RESOURCES INCORPORATED

Lab Sample ID: LCS-040414A QC Report No: YE78-Joint Base Lewis McChord
LIMS ID: 14-5844 Project: Log Ram
Matrix: Water

Analyte	LCS	Spike Added-LCS	LCS Recovery	LCSD	Spike Added-LCSD	LCSD Recovery	RPD
o-Xylene	9.55	10.0	95.5%	9.83	10.0	98.3%	2.9%
1,2-Dichlorobenzene	9.47	10.0	94.7%	9.87	10.0	98.7%	4.1%
1,3-Dichlorobenzene	9.75	10.0	97.5%	10.1	10.0	101%	3.5%
1,4-Dichlorobenzene	9.87	10.0	98.7%	9.78	10.0	97.8%	0.9%
Acrolein	46.3	50.0	92.6%	49.1	50.0	98.2%	5.9%
Iodomethane	9.32	10.0	93.2%	9.55	10.0	95.5%	2.4%
Bromoethane	8.85	10.0	88.5%	9.21	10.0	92.1%	4.0%
Acrylonitrile	8.75 Q	10.0	87.5%	9.05 Q	10.0	90.5%	3.4%
1,1-Dichloropropene	9.43	10.0	94.3%	9.36	10.0	93.6%	0.7%
Dibromomethane	9.49	10.0	94.9%	9.44	10.0	94.4%	0.5%
1,1,1,2-Tetrachloroethane	9.19	10.0	91.9%	9.53	10.0	95.3%	3.6%
1,2-Dibromo-3-chloropropane	9.94	10.0	99.4%	10.3	10.0	103%	3.6%
1,2,3-Trichloropropane	9.66	10.0	96.6%	10.0	10.0	100%	3.5%
trans-1,4-Dichloro-2-butene	10.7	10.0	107%	10.8	10.0	108%	0.9%
1,3,5-Trimethylbenzene	9.84	10.0	98.4%	9.24	10.0	92.4%	6.3%
1,2,4-Trimethylbenzene	9.35	10.0	93.5%	8.08	10.0	80.8%	14.6%
Hexachlorobutadiene	10.5	10.0	105%	9.55	10.0	95.5%	9.5%
1,2-Dibromoethane	8.99	10.0	89.9%	9.59	10.0	95.9%	6.5%
Bromochloromethane	9.38	10.0	93.8%	9.13	10.0	91.3%	2.7%
2,2-Dichloropropane	9.87	10.0	98.7%	9.83	10.0	98.3%	0.4%
1,3-Dichloropropane	9.15	10.0	91.5%	9.51	10.0	95.1%	3.9%
Isopropylbenzene	10.2	10.0	102%	10.6	10.0	106%	3.8%
n-Propylbenzene	10.3	10.0	103%	10.4	10.0	104%	1.0%
Bromobenzene	9.48	10.0	94.8%	9.98	10.0	99.8%	5.1%
2-Chlorotoluene	9.93	10.0	99.3%	10.2	10.0	102%	2.7%
4-Chlorotoluene	10.0	10.0	100%	10.2	10.0	102%	2.0%
tert-Butylbenzene	9.90	10.0	99.0%	10.6	10.0	106%	6.8%
sec-Butylbenzene	9.69	10.0	96.9%	9.12	10.0	91.2%	6.1%
4-Isopropyltoluene	9.03	10.0	90.3%	7.75	10.0	77.5%	15.3%
n-Butylbenzene	8.43	10.0	84.3%	6.79	10.0	67.9%	21.6%
1,2,4-Trichlorobenzene	10.3	10.0	103%	8.98	10.0	89.8%	13.7%
Naphthalene	9.04	10.0	90.4%	9.69	10.0	96.9%	6.9%
1,2,3-Trichlorobenzene	8.25	10.0	82.5%	7.90	10.0	79.0%	4.3%

Reported in µg/L (ppb)

RPD calculated using sample concentrations per SW846.

Volatile Surrogate Recovery

	LCS	LCSD
d4-1,2-Dichloroethane	102%	102%
d8-Toluene	101%	99.0%
Bromofluorobenzene	97.3%	99.0%
d4-1,2-Dichlorobenzene	99.0%	99.7%

Analytical Resources, Incorporated
Analytical Chemists and Consultants

April 8, 2014

Thomas Lynott
Department of the Army
Directorate of Public Works
Attn Environmental Division (T. Lynott)
2012 Liggett Ave Box 339500 MS 17
Joint Base Lewis-McChord, Washington 98433-9500
Official Business

RE: Client Project: LogRam
ARI Job No.: YE79

Dear Mr. Lynott:

Please find enclosed the original Chain-of-Custody record (COC), sample receipt documentation, and the final data for the project referenced above. Analytical Resources, Inc. (ARI) accepted twenty water samples on March 28, 2014. For further details regarding sample receipt please refer to the enclosed Cooler Receipt Form.

The samples were analyzed for VOCs, as requested on the COCs.

The 4/1/14 CCAL is out of control low for all associated FORM III "Q" flagged analytes with the exception of S-Butylbenzene which is out of control high. All associated samples that contain analyte have been flagged with a "Q" qualifier.

The 4/2/14 CCAL is out of control low for all associated FORM III "Q" flagged analytes. All associated samples that contain analyte have been flagged with a "Q" qualifier.

The 4/1/14 LCS and/or LCSD are out of control low for naphthalene and/ or 1,2,3-Trichlorobenzene.

The 4/2/14 LCS and/or LCSD are out of control low for several analytes.

The 4/1/14 method blank contained n-Butylbenzene. All associated samples that contain analyte have been flagged with a "B" qualifier.

An electronic copy of this report and all supporting raw data will remain on file with ARI. Should you have any questions or problems, please feel free to contact me at your convenience.

Respectfully,
ANALYTICAL RESOURCES, INC.

Kelly Bottem
Client Services Manager
(206) 695-6211
kellyb@arilabs.com
www.arilabs.com

eFile: YE79

4611 South 134th Place, Suite 100 • Tukwila WA 98168 • **206-695-6200** • **206-695-6201** fax

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Cooler Receipt Form

ARI Client: BLM

Project Name: Log Ram

COC No(s): (NA)

Delivered by: Fed-Ex UPS Courier (Hand Delivered) Other:

Assigned ARI Job No:

Tracking No: (NA)

Preliminary Examination Phase:

Were intact, properly signed and dated custody seals attached to the outside of to cooler? YES (NO)

Were custody papers included with the cooler? (YES) NO

Were custody papers properly filled out (ink, signed, etc.) (YES) NO

Temperature of Cooler(s) (°C) (recommended 2 0-6.0 °C for chemistry) 1.1 1.3 5.3

Time: 1105

If cooler temperature is out of compliance fill out form 00070F

Temp Gun ID#: 12341222

Cooler Accepted by: JM Date: 3/28/14 Time: 1205

Complete custody forms and attach all shipping documents

Log-In Phase:

Was a temperature blank included in the cooler? YES (NO)

What kind of packing material was used? Bubble Wrap Wet Ice (Gel Packs) Baggies (Foam Block) Paper Other: BOX

Was sufficient ice used (if appropriate)? NA (YES) NO

Were all bottles sealed in individual plastic bags? YES (NO)

Did all bottles arrive in good condition (unbroken)? (YES) NO

Were all bottle labels complete and legible? (YES) NO

Did the number of containers listed on COC match with the number of containers received? (YES) NO

Did all bottle labels and tags agree with custody papers? (YES) NO

Were all bottles used correct for the requested analyses? (YES) NO

Do any of the analyses (bottles) require preservation? (attach preservation sheet, excluding VOCs)... (NA) YES NO

Were all VOC vials free of air bubbles? NA YES NO

Was sufficient amount of sample sent in each bottle? (YES) NO

Date VOC Trip Blank was made at ARI NA

Was Sample Split by ARI (NA) YES Date/Time: Equipment Split by:

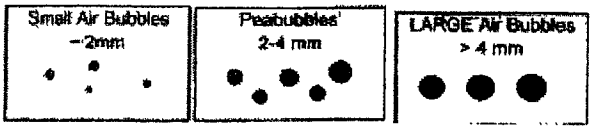
Samples Logged by: AV Date: 3/28/14 Time:

***** Notify Project Manager of discrepancies or concerns *****

Sample ID on Bottle	Sample ID on COC	Sample ID on Bottle	Sample ID on COC

Additional Notes, Discrepancies, & Resolutions:

By: Date:



Small → "sm" (< 2 mm)
Peabubbles → "pb" (2 to < 4 mm)
Large → "lg" (4 to < 6 mm)
Headspace → "hs" (> 6 mm)

Chain of Custody Record & Laboratory Analysis Request

TO 0021

Analytical Resources, Incorporated
Analytical Chemists and Consultants
4611 South 134th Place, Suite 100
Tukwila, WA 98168
206-695-6200 206-695-6201 (fax)
www.arilabs.com

ARI Assigned Number:	Turn-around Requested: STANDARD TAT
ARI Client Company: JOINT BASE LEWIS McCHORD PUBLIC WORKS IMLM-PWE	Phone: 253 466 1802
Client Contact: TOM J LYNOTT	
Client Project Name: LOGRAM	
Client Project #:	Samplers: T LYNOTT J BECKER

Page: 7 of 14

Date: 28MAR14 Ice Present? Y

No. of Coolers: 3 Cooler Temps: 1.1, 1.3, 5.3

Sample ID	Date	Time	Matrix	No. Containers	1006A								Notes/Comments
LGC140324DUP3-1	24MAR14	0800	WATER	2	X								TOTAL VOCs
LGC140325DUP4-1	25MAR14	0900	WATER	2	X								
LGC140325DUP5-1	25MAR14	0930	WATER	2	X								BOX
LGC140325LC01-1	25MAR14	1405	WATER	2	X								3
LGC140324LC19A-1	24MAR14	1335	WATER	2	X								
LGC140324LC20-1	24MAR14	1350	WATER	2	X								
LGC140325LC27-1	25MAR14	1310	WATER	2	X								
LGC140324LC34-1	24MAR14	1255	WATER	2	X								
LGC140325LC41A-1	25MAR14	1435	WATER	2	X								
LGC140325LC47D-1	25MAR14	1415	WATER	2	X								

Comments/Special Instructions	Relinquished by:	Received by:	Relinquished by:	Received by
	(Signature) [signature]	(Signature) [signature]	(Signature)	(Signature)
	Printed Name: TOM J LYNOTT	Printed Name: Jennifer Mittsop	Printed Name.	Printed Name:
	Company: ~~28~~ VERSAR	Company ARI	Company.	Company:
	Date & Time: 28MAR14 1205	Date & Time. 3/28/14 1205	Date & Time	Date & Time.

YE79:00003

Limits of Liability: *ARI will perform all requested services in accordance with appropriate methodology following ARI Standard Operating Procedures and the ARI Quality Assurance Program. This program meets standards for the industry. The total liability of ARI, its officers, agents, employees, or successors, arising out of or in connection with the requested services, shall not exceed the Invoiced amount for said services. The acceptance by the client of a proposal for services by ARI release ARI from any liability in excess thereof, not withstanding any provision to the contrary in any contract, purchase order or co-signed agreement between ARI and the Client.*

Sample Retention Policy: All samples submitted to ARI will be appropriately discarded no sooner than 90 days after receipt or 60 days after submission of hardcopy data, whichever is longer, unless alternate retention schedules have been established by work-order or contract.

Chain of Custody Record & Laboratory Analysis Request

10 00A1

Analytical Resources, Incorporated
Analytical Chemists and Consultants
4611 South 134th Place, Suite 100
Tukwila, WA 98168
206-695-6200 206-695-6201 (fax)
www.arilabs.com

ARI Assigned Number:	Turn-around Requested: STANDARD TAT
ARI Client Company: JOINTBASE LEWIS MCCHORD PUBLIC WORKS IMLM-PWE	Phone: 253 966 1802
Client Contact: TOM LYNOTT	
Client Project Name: LOG RAM	
Client Project #:	Samplers: T LYNOTT J BECKER

Page: 8 of 14
Date: 28MAR14 Ice Present? Y
No. of Coolers: 3 Cooler Temps: 1.1, 1.3, 5.3

Sample ID	Date	Time	Matrix	No. Containers	Analysis Requested: 1006A								Notes/Comments
LGC140325LC50D-1	25MAR14	1045	WATER	2	X								TOTAL VOCs
LGC140324LC53-1	24MAR14	1320	WATER	2	X								
LGC140325LC57-1	25MAR14	1335	WATER	2	X								BOX
LGC140324LC68D-1	24MAR14	1230	WATER	2	X								3
LGC140325LC69D-1	25MAR14	1420	WATER	2	X								
LGC140324LC218-1	24MAR14	1415	WATER	2	X								
LGC140324LC222-1	24MAR14	1425	WATER	2	X								
LGC140324LC223-1	24MAR14	1435	WATER	2	X								
LGC140324LC224-1	24MAR14	1420	WATER	2	X								
LGC140324FL1-1	24MAR14	1405	WATER	2	X								

Comments/Special Instructions	Relinquished by: (Signature)	Received by: (Signature)	Relinquished by (Signature)	Received by. (Signature)
	Printed Name: TOM J LYNOTT	Printed Name: Jennifer Mitsch	Printed Name:	Printed Name
	Company: VERSAR	Company: ARI	Company:	Company:
	Date & Time: 28MAR14 1205	Date & Time: 3/28/14 1205	Date & Time:	Date & Time:

Limits of Liability: *ARI will perform all requested services in accordance with appropriate methodology following ARI Standard Operating Procedures and the ARI Quality Assurance Program. This program meets standards for the industry. The total liability of ARI, its officers, agents, employees, or successors, arising out of or in connection with the requested services, shall not exceed the Invoiced amount for said services. The acceptance by the client of a proposal for services by ARI release ARI from any liability in excess thereof, not withstanding any provision to the contrary in any contract, purchase order or co-signed agreement between ARI and the Client.*

Sample Retention Policy: All samples submitted to ARI will be appropriately discarded no sooner than 90 days after receipt or 60 days after submission of hardcopy data, whichever is longer, unless alternate retention schedules have been established by work-order or contract.

VERSION 6.000 1-Sept-2008

Sample ID Cross Reference Report

ANALYTICAL RESOURCES INCORPORATED

ARI Job No: YE79
Client: Joint Base Lewis McChord
Project Event: N/A
Project Name: Log Ram

	Sample ID	ARI Lab ID	ARI LIMS ID	Matrix	Sample Date/Time	VTSR
1.	LGC140324DUP3-1	YE79A	14-5868	Water	03/24/14 08:00	03/28/14 12:05
2.	LGC140325DUP4-1	YE79B	14-5869	Water	03/25/14 09:00	03/28/14 12:05
3.	LGC140325DUP5-1	YE79C	14-5870	Water	03/25/14 09:30	03/28/14 12:05
4.	LGC140325LC01-1	YE79D	14-5871	Water	03/25/14 14:05	03/28/14 12:05
5.	LGC140324LC19A-1	YE79E	14-5872	Water	03/24/14 13:35	03/28/14 12:05
6.	LGC140324LC20-1	YE79F	14-5873	Water	03/24/14 13:50	03/28/14 12:05
7.	LGC140325LC27-1	YE79G	14-5874	Water	03/25/14 13:10	03/28/14 12:05
8.	LGC140324LC34-1	YE79H	14-5875	Water	03/24/14 12:55	03/28/14 12:05
9.	LGC140325LC41A-1	YE79I	14-5876	Water	03/25/14 14:35	03/28/14 12:05
10.	LGC140325LC47D-1	YE79J	14-5877	Water	03/25/14 14:15	03/28/14 12:05
11.	LGC140325LC50D-1	YE79K	14-5878	Water	03/25/14 10:45	03/28/14 12:05
12.	LGC140324LC53-1	YE79L	14-5879	Water	03/24/14 13:20	03/28/14 12:05
13.	LGC140325LC57-1	YE79M	14-5880	Water	03/25/14 13:35	03/28/14 12:05
14.	LGC140324LC68D-1	YE79N	14-5881	Water	03/24/14 12:30	03/28/14 12:05
15.	LGC140325LC69D-1	YE79O	14-5882	Water	03/25/14 14:20	03/28/14 12:05
16.	LGC140324LC218-1	YE79P	14-5883	Water	03/24/14 14:15	03/28/14 12:05
17.	LGC140324LC222-1	YE79Q	14-5884	Water	03/24/14 14:25	03/28/14 12:05
18.	LGC140324LC223-1	YE79R	14-5885	Water	03/24/14 14:35	03/28/14 12:05
19.	LGC140324LC224-1	YE79S	14-5886	Water	03/24/14 14:20	03/28/14 12:05
20.	LGC140324FLI-1	YE79T	14-5887	Water	03/24/14 14:05	03/28/14 12:05

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140324DUP3-1**
Page 1 of 2 **SAMPLE**

Lab Sample ID: YE79A
LIMS ID: 14-5868
Matrix: Water
Data Release Authorized: MW
Reported: 04/08/14

QC Report No: YE79-Joint Base Lewis McChord
Project: Log Ram
Date Sampled: 03/24/14
Date Received: 03/28/14

Instrument/Analyst: NT2/PAB
Date Analyzed: 04/01/14 13:56

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	LOQ	Result	Q
74-87-3	Chloromethane	0.50	< 0.50	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.20	< 0.20	U
75-00-3	Chloroethane	0.20	< 0.20	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	**Acetone**	**5.0**	**7.0**	
75-15-0	Carbon Disulfide	0.20	< 0.20	U
75-35-4	1,1-Dichloroethene	0.20	< 0.20	U
75-34-3	1,1-Dichloroethane	0.20	< 0.20	U
156-60-5	trans-1,2-Dichloroethene	0.20	< 0.20	U
156-59-2	**cis-1,2-Dichloroethene**	**0.20**	**0.24**	
67-66-3	Chloroform	0.20	< 0.20	U
107-06-2	1,2-Dichloroethane	0.20	< 0.20	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	0.20	< 0.20	U
56-23-5	Carbon Tetrachloride	0.20	< 0.20	U
108-05-4	Vinyl Acetate	0.20	< 0.20	U
75-27-4	Bromodichloromethane	0.20	< 0.20	U
78-87-5	1,2-Dichloropropane	0.20	< 0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	< 0.20	U
79-01-6	**Trichloroethene**	**0.20**	**9.4**	
124-48-1	Dibromochloromethane	0.20	< 0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	< 0.20	U
71-43-2	Benzene	0.20	< 0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	< 0.20	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.20	< 0.20	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.20	< 0.20	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	< 0.20	U
108-88-3	Toluene	0.20	< 0.20	U
108-90-7	Chlorobenzene	0.20	< 0.20	U
100-41-4	Ethylbenzene	0.20	< 0.20	U
100-42-5	Styrene	0.20	< 0.20	U
75-69-4	Trichlorofluoromethane	0.20	< 0.20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.20	< 0.20	U
179601-23-1	m,p-Xylene	0.40	< 0.40	U
95-47-6	o-Xylene	0.20	< 0.20	U
95-50-1	1,2-Dichlorobenzene	0.20	< 0.20	U
541-73-1	1,3-Dichlorobenzene	0.20	< 0.20	U
106-46-7	1,4-Dichlorobenzene	0.20	< 0.20	U

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140324DUP3-1**
Page 2 of 2 **SAMPLE**

Lab Sample ID: YE79A QC Report No: YE79-Joint Base Lewis McChord
LIMS ID: 14-5868 Project: Log Ram
Matrix: Water
Date Analyzed: 04/01/14 13:56

CAS Number	Analyte	LOQ	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Iodomethane	1.0	< 1.0	U
74-96-4	Bromoethane	0.20	< 0.20	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.20	< 0.20	U
74-95-3	Dibromomethane	0.20	< 0.20	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	< 0.20	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	< 0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	< 0.50	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.20	< 0.20	U
95-63-6	1,2,4-Trimethylbenzene	0.20	< 0.20	U
87-68-3	Hexachlorobutadiene	0.50	< 0.50	U
106-93-4	1,2-Dibromoethane	0.20	< 0.20	U
74-97-5	Bromochloromethane	0.20	< 0.20	U
594-20-7	2,2-Dichloropropane	0.20	< 0.20	U
142-28-9	1,3-Dichloropropane	0.20	< 0.20	U
98-82-8	Isopropylbenzene	0.20	< 0.20	U
103-65-1	n-Propylbenzene	0.20	< 0.20	U
108-86-1	Bromobenzene	0.20	< 0.20	U
95-49-8	2-Chlorotoluene	0.20	< 0.20	U
106-43-4	4-Chlorotoluene	0.20	< 0.20	U
98-06-6	tert-Butylbenzene	0.20	< 0.20	U
135-98-8	sec-Butylbenzene	0.20	< 0.20	U
99-87-6	4-Isopropyltoluene	0.20	< 0.20	U
104-51-8	n-Butylbenzene	0.20	< 0.20	U
120-82-1	1,2,4-Trichlorobenzene	0.50	< 0.50	U
91-20-3	Naphthalene	0.50	< 0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	< 0.50	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	102%
d8-Toluene	96.4%
Bromofluorobenzene	100%
d4-1,2-Dichlorobenzene	98.0%

2-Chloroethylvinylether is an acid labile compound and may not be recovered from an acid preserved sample.

EPA SW-846 indicates that vinyl chloride and styrene may degrade in the presence of acid preservative.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140325DUP4-1**
Page 1 of 2 **SAMPLE**

Lab Sample ID: YE79B
LIMS ID: 14-5869
Matrix: Water
Data Release Authorized: MW
Reported: 04/08/14

QC Report No: YE79-Joint Base Lewis McChord
Project: Log Ram
Date Sampled: 03/25/14
Date Received: 03/28/14

Instrument/Analyst: NT2/PAB
Date Analyzed: 04/01/14 14:23

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	LOQ	Result	Q
74-87-3	Chloromethane	0.50	< 0.50	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.20	< 0.20	U
75-00-3	Chloroethane	0.20	< 0.20	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	**Acetone**	**5.0**	**5.8**	
75-15-0	Carbon Disulfide	0.20	< 0.20	U
75-35-4	1,1-Dichloroethene	0.20	< 0.20	U
75-34-3	1,1-Dichloroethane	0.20	< 0.20	U
156-60-5	trans-1,2-Dichloroethene	0.20	< 0.20	U
156-59-2	**cis-1,2-Dichloroethene**	**0.20**	**0.49**	
67-66-3	Chloroform	0.20	< 0.20	U
107-06-2	1,2-Dichloroethane	0.20	< 0.20	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	0.20	< 0.20	U
56-23-5	Carbon Tetrachloride	0.20	< 0.20	U
108-05-4	Vinyl Acetate	0.20	< 0.20	U
75-27-4	Bromodichloromethane	0.20	< 0.20	U
78-87-5	1,2-Dichloropropane	0.20	< 0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	< 0.20	U
79-01-6	**Trichloroethene**	**0.20**	**16**	
124-48-1	Dibromochloromethane	0.20	< 0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	< 0.20	U
71-43-2	Benzene	0.20	< 0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	< 0.20	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.20	< 0.20	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.20	< 0.20	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	< 0.20	U
108-88-3	Toluene	0.20	< 0.20	U
108-90-7	Chlorobenzene	0.20	< 0.20	U
100-41-4	Ethylbenzene	0.20	< 0.20	U
100-42-5	Styrene	0.20	< 0.20	U
75-69-4	Trichlorofluoromethane	0.20	< 0.20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.20	< 0.20	U
179601-23-1	m,p-Xylene	0.40	< 0.40	U
95-47-6	o-Xylene	0.20	< 0.20	U
95-50-1	1,2-Dichlorobenzene	0.20	< 0.20	U
541-73-1	1,3-Dichlorobenzene	0.20	< 0.20	U
106-46-7	1,4-Dichlorobenzene	0.20	< 0.20	U

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140325DUP4-1**
 SAMPLE

Lab Sample ID: YE79B QC Report No: YE79-Joint Base Lewis McChord
LIMS ID: 14-5869 Project: Log Ram
Matrix: Water
Date Analyzed: 04/01/14 14:23

CAS Number	Analyte	LOQ	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Iodomethane	1.0	< 1.0	U
74-96-4	Bromoethane	0.20	< 0.20	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.20	< 0.20	U
74-95-3	Dibromomethane	0.20	< 0.20	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	< 0.20	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	< 0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	< 0.50	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.20	< 0.20	U
95-63-6	1,2,4-Trimethylbenzene	0.20	< 0.20	U
87-68-3	Hexachlorobutadiene	0.50	< 0.50	U
106-93-4	1,2-Dibromoethane	0.20	< 0.20	U
74-97-5	Bromochloromethane	0.20	< 0.20	U
594-20-7	2,2-Dichloropropane	0.20	< 0.20	U
142-28-9	1,3-Dichloropropane	0.20	< 0.20	U
98-82-8	Isopropylbenzene	0.20	< 0.20	U
103-65-1	n-Propylbenzene	0.20	< 0.20	U
108-86-1	Bromobenzene	0.20	< 0.20	U
95-49-8	2-Chlorotoluene	0.20	< 0.20	U
106-43-4	4-Chlorotoluene	0.20	< 0.20	U
98-06-6	tert-Butylbenzene	0.20	< 0.20	U
135-98-8	sec-Butylbenzene	0.20	< 0.20	U
99-87-6	4-Isopropyltoluene	0.20	< 0.20	U
104-51-8	n-Butylbenzene	0.20	< 0.20	U
120-82-1	1,2,4-Trichlorobenzene	0.50	< 0.50	U
91-20-3	Naphthalene	0.50	< 0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	< 0.50	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	100%
d8-Toluene	95.3%
Bromofluorobenzene	96.6%
d4-1,2-Dichlorobenzene	99.8%

2-Chloroethylvinylether is an acid labile compound and may not be recovered from an acid preserved sample.

EPA SW-846 indicates that vinyl chloride and styrene may degrade in the presence of acid preservative.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140325DUP5-1**
 SAMPLE

Lab Sample ID: YE79C
LIMS ID: 14-5870
Matrix: Water
Data Release Authorized:
Reported: 04/08/14

QC Report No: YE79-Joint Base Lewis McChord
Project: Log Ram
Date Sampled: 03/25/14
Date Received: 03/28/14

Instrument/Analyst: NT2/PAB
Date Analyzed: 04/01/14 14:50

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	LOQ	Result	Q
74-87-3	Chloromethane	0.50	< 0.50	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.20	< 0.20	U
75-00-3	Chloroethane	0.20	< 0.20	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	**Acetone**	**5.0**	**11**	
75-15-0	Carbon Disulfide	0.20	< 0.20	U
75-35-4	1,1-Dichloroethene	0.20	< 0.20	U
75-34-3	1,1-Dichloroethane	0.20	< 0.20	U
156-60-5	trans-1,2-Dichloroethene	0.20	< 0.20	U
156-59-2	cis-1,2-Dichloroethene	0.20	< 0.20	U
67-66-3	Chloroform	0.20	< 0.20	U
107-06-2	1,2-Dichloroethane	0.20	< 0.20	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	0.20	< 0.20	U
56-23-5	Carbon Tetrachloride	0.20	< 0.20	U
108-05-4	Vinyl Acetate	0.20	< 0.20	U
75-27-4	Bromodichloromethane	0.20	< 0.20	U
78-87-5	1,2-Dichloropropane	0.20	< 0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	< 0.20	U
79-01-6	Trichloroethene	0.20	< 0.20	U
124-48-1	Dibromochloromethane	0.20	< 0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	< 0.20	U
71-43-2	Benzene	0.20	< 0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	< 0.20	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.20	< 0.20	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.20	< 0.20	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	< 0.20	U
108-88-3	Toluene	0.20	< 0.20	U
108-90-7	Chlorobenzene	0.20	< 0.20	U
100-41-4	Ethylbenzene	0.20	< 0.20	U
100-42-5	Styrene	0.20	< 0.20	U
75-69-4	Trichlorofluoromethane	0.20	< 0.20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.20	< 0.20	U
179601-23-1	m,p-Xylene	0.40	< 0.40	U
95-47-6	o-Xylene	0.20	< 0.20	U
95-50-1	1,2-Dichlorobenzene	0.20	< 0.20	U
541-73-1	1,3-Dichlorobenzene	0.20	< 0.20	U
106-46-7	1,4-Dichlorobenzene	0.20	< 0.20	U

Lab Sample ID: YE79C QC Report No: YE79-Joint Base Lewis McChord
LIMS ID: 14-5870 Project: Log Ram
Matrix: Water
Date Analyzed: 04/01/14 14:50

CAS Number	Analyte	LOQ	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Iodomethane	1.0	< 1.0	U
74-96-4	Bromoethane	0.20	< 0.20	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.20	< 0.20	U
74-95-3	Dibromomethane	0.20	< 0.20	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	< 0.20	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	< 0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	< 0.50	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.20	< 0.20	U
95-63-6	1,2,4-Trimethylbenzene	0.20	< 0.20	U
87-68-3	Hexachlorobutadiene	0.50	< 0.50	U
106-93-4	1,2-Dibromoethane	0.20	< 0.20	U
74-97-5	Bromochloromethane	0.20	< 0.20	U
594-20-7	2,2-Dichloropropane	0.20	< 0.20	U
142-28-9	1,3-Dichloropropane	0.20	< 0.20	U
98-82-8	Isopropylbenzene	0.20	< 0.20	U
103-65-1	n-Propylbenzene	0.20	< 0.20	U
108-86-1	Bromobenzene	0.20	< 0.20	U
95-49-8	2-Chlorotoluene	0.20	< 0.20	U
106-43-4	4-Chlorotoluene	0.20	< 0.20	U
98-06-6	tert-Butylbenzene	0.20	< 0.20	U
135-98-8	sec-Butylbenzene	0.20	< 0.20	U
99-87-6	4-Isopropyltoluene	0.20	< 0.20	U
104-51-8	n-Butylbenzene	0.20	< 0.20	U
120-82-1	1,2,4-Trichlorobenzene	0.50	< 0.50	U
91-20-3	Naphthalene	0.50	< 0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	< 0.50	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	100%
d8-Toluene	98.7%
Bromofluorobenzene	97.3%
d4-1,2-Dichlorobenzene	100%

2-Chloroethylvinylether is an acid labile compound and may not be recovered from an acid preserved sample.

EPA SW-846 indicates that vinyl chloride and styrene may degrade in the presence of acid preservative.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140325LC01-1**
Page 1 of 2 **SAMPLE**

Lab Sample ID: YE79D
LIMS ID: 14-5871
Matrix: Water
Data Release Authorized:
Reported: 04/08/14

QC Report No: YE79-Joint Base Lewis McChord
Project: Log Ram
Date Sampled: 03/25/14
Date Received: 03/28/14

Instrument/Analyst: NT2/PAB
Date Analyzed: 04/01/14 15:16

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	LOQ	Result	Q
74-87-3	Chloromethane	0.50	< 0.50	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.20	< 0.20	U
75-00-3	Chloroethane	0.20	< 0.20	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	**Acetone**	**5.0**	**5.5**	
75-15-0	Carbon Disulfide	0.20	< 0.20	U
75-35-4	1,1-Dichloroethene	0.20	< 0.20	U
75-34-3	1,1-Dichloroethane	0.20	< 0.20	U
156-60-5	trans-1,2-Dichloroethene	0.20	< 0.20	U
156-59-2	cis-1,2-Dichloroethene	0.20	< 0.20	U
67-66-3	Chloroform	0.20	< 0.20	U
107-06-2	1,2-Dichloroethane	0.20	< 0.20	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	0.20	< 0.20	U
56-23-5	Carbon Tetrachloride	0.20	< 0.20	U
108-05-4	Vinyl Acetate	0.20	< 0.20	U
75-27-4	Bromodichloromethane	0.20	< 0.20	U
78-87-5	1,2-Dichloropropane	0.20	< 0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	< 0.20	U
79-01-6	Trichloroethene	0.20	< 0.20	U
124-48-1	Dibromochloromethane	0.20	< 0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	< 0.20	U
71-43-2	Benzene	0.20	< 0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	< 0.20	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.20	< 0.20	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.20	< 0.20	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	< 0.20	U
108-88-3	Toluene	0.20	< 0.20	U
108-90-7	Chlorobenzene	0.20	< 0.20	U
100-41-4	Ethylbenzene	0.20	< 0.20	U
100-42-5	Styrene	0.20	< 0.20	U
75-69-4	Trichlorofluoromethane	0.20	< 0.20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.20	< 0.20	U
179601-23-1	m,p-Xylene	0.40	< 0.40	U
95-47-6	o-Xylene	0.20	< 0.20	U
95-50-1	1,2-Dichlorobenzene	0.20	< 0.20	U
541-73-1	1,3-Dichlorobenzene	0.20	< 0.20	U
106-46-7	1,4-Dichlorobenzene	0.20	< 0.20	U

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140325LC01-1**
 SAMPLE

Lab Sample ID: YE79D
LIMS ID: 14-5871
Matrix: Water
Date Analyzed: 04/01/14 15:16

QC Report No: YE79-Joint Base Lewis McChord
Project: Log Ram

CAS Number	Analyte	LOQ	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Iodomethane	1.0	< 1.0	U
74-96-4	Bromoethane	0.20	< 0.20	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.20	< 0.20	U
74-95-3	Dibromomethane	0.20	< 0.20	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	< 0.20	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	< 0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	< 0.50	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.20	< 0.20	U
95-63-6	1,2,4-Trimethylbenzene	0.20	< 0.20	U
87-68-3	Hexachlorobutadiene	0.50	< 0.50	U
106-93-4	1,2-Dibromoethane	0.20	< 0.20	U
74-97-5	Bromochloromethane	0.20	< 0.20	U
594-20-7	2,2-Dichloropropane	0.20	< 0.20	U
142-28-9	1,3-Dichloropropane	0.20	< 0.20	U
98-82-8	Isopropylbenzene	0.20	< 0.20	U
103-65-1	n-Propylbenzene	0.20	< 0.20	U
108-86-1	Bromobenzene	0.20	< 0.20	U
95-49-8	2-Chlorotoluene	0.20	< 0.20	U
106-43-4	4-Chlorotoluene	0.20	< 0.20	U
98-06-6	tert-Butylbenzene	0.20	< 0.20	U
135-98-8	sec-Butylbenzene	0.20	< 0.20	U
99-87-6	4-Isopropyltoluene	0.20	< 0.20	U
104-51-8	n-Butylbenzene	0.20	< 0.20	U
120-82-1	1,2,4-Trichlorobenzene	0.50	< 0.50	U
91-20-3	Naphthalene	0.50	< 0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	< 0.50	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	99.2%
d8-Toluene	99.0%
Bromofluorobenzene	101%
d4-1,2-Dichlorobenzene	98.6%

2-Chloroethylvinylether is an acid labile compound and may not be recovered from an acid preserved sample.

EPA SW-846 indicates that vinyl chloride and styrene may degrade in the presence of acid preservative.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140324LC19A-1**
 SAMPLE

Lab Sample ID: YE79E
LIMS ID: 14-5872
Matrix: Water
Data Release Authorized: MW
Reported: 04/08/14

QC Report No: YE79-Joint Base Lewis McChord
Project: Log Ram
Date Sampled: 03/24/14
Date Received: 03/28/14

Instrument/Analyst: NT2/PAB
Date Analyzed: 04/01/14 15:42

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	LOQ	Result	Q
74-87-3	Chloromethane	0.50	< 0.50	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.20	< 0.20	U
75-00-3	Chloroethane	0.20	< 0.20	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	**Acetone**	**5.0**	**8.5**	
75-15-0	Carbon Disulfide	0.20	< 0.20	U
75-35-4	1,1-Dichloroethene	0.20	< 0.20	U
75-34-3	1,1-Dichloroethane	0.20	< 0.20	U
156-60-5	trans-1,2-Dichloroethene	0.20	< 0.20	U
156-59-2	**cis-1,2-Dichloroethene**	**0.20**	**1.2**	
67-66-3	Chloroform	0.20	< 0.20	U
107-06-2	1,2-Dichloroethane	0.20	< 0.20	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	0.20	< 0.20	U
56-23-5	Carbon Tetrachloride	0.20	< 0.20	U
108-05-4	Vinyl Acetate	0.20	< 0.20	U
75-27-4	Bromodichloromethane	0.20	< 0.20	U
78-87-5	1,2-Dichloropropane	0.20	< 0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	< 0.20	U
79-01-6	**Trichloroethene**	**0.20**	**59**	
124-48-1	Dibromochloromethane	0.20	< 0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	< 0.20	U
71-43-2	Benzene	0.20	< 0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	< 0.20	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.20	< 0.20	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.20	< 0.20	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	< 0.20	U
108-88-3	Toluene	0.20	< 0.20	U
108-90-7	Chlorobenzene	0.20	< 0.20	U
100-41-4	Ethylbenzene	0.20	< 0.20	U
100-42-5	Styrene	0.20	< 0.20	U
75-69-4	Trichlorofluoromethane	0.20	< 0.20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.20	< 0.20	U
179601-23-1	m,p-Xylene	0.40	< 0.40	U
95-47-6	o-Xylene	0.20	< 0.20	U
95-50-1	1,2-Dichlorobenzene	0.20	< 0.20	U
541-73-1	1,3-Dichlorobenzene	0.20	< 0.20	U
106-46-7	1,4-Dichlorobenzene	0.20	< 0.20	U

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140324LC19A-1**
 SAMPLE

Lab Sample ID: YE79E QC Report No: YE79-Joint Base Lewis McChord
LIMS ID: 14-5872 Project: Log Ram
Matrix: Water
Date Analyzed: 04/01/14 15:42

CAS Number	Analyte	LOQ	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Iodomethane	1.0	< 1.0	U
74-96-4	Bromoethane	0.20	< 0.20	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.20	< 0.20	U
74-95-3	Dibromomethane	0.20	< 0.20	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	< 0.20	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	< 0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	< 0.50	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.20	< 0.20	U
95-63-6	1,2,4-Trimethylbenzene	0.20	< 0.20	U
87-68-3	Hexachlorobutadiene	0.50	< 0.50	U
106-93-4	1,2-Dibromoethane	0.20	< 0.20	U
74-97-5	Bromochloromethane	0.20	< 0.20	U
594-20-7	2,2-Dichloropropane	0.20	< 0.20	U
142-28-9	1,3-Dichloropropane	0.20	< 0.20	U
98-82-8	Isopropylbenzene	0.20	< 0.20	U
103-65-1	n-Propylbenzene	0.20	< 0.20	U
108-86-1	Bromobenzene	0.20	< 0.20	U
95-49-8	2-Chlorotoluene	0.20	< 0.20	U
106-43-4	4-Chlorotoluene	0.20	< 0.20	U
98-06-6	tert-Butylbenzene	0.20	< 0.20	U
135-98-8	sec-Butylbenzene	0.20	< 0.20	U
99-87-6	4-Isopropyltoluene	0.20	< 0.20	U
104-51-8	n-Butylbenzene	0.20	< 0.20	U
120-82-1	1,2,4-Trichlorobenzene	0.50	< 0.50	U
91-20-3	Naphthalene	0.50	< 0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	< 0.50	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	98.6%
d8-Toluene	94.5%
Bromofluorobenzene	95.9%
d4-1,2-Dichlorobenzene	96.9%

2-Chloroethylvinylether is an acid labile compound and may not be recovered from an acid preserved sample.

EPA SW-846 indicates that vinyl chloride and styrene may degrade in the presence of acid preservative.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140324LC20-1**
Page 1 of 2 **SAMPLE**

Lab Sample ID: YE79F
LIMS ID: 14-5873
Matrix: Water
Data Release Authorized:
Reported: 04/08/14

QC Report No: YE79-Joint Base Lewis McChord
Project: Log Ram
Date Sampled: 03/24/14
Date Received: 03/28/14

Instrument/Analyst: NT2/PAB
Date Analyzed: 04/01/14 16:09

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	LOQ	Result	Q
74-87-3	Chloromethane	0.50	< 0.50	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.20	< 0.20	U
75-00-3	Chloroethane	0.20	< 0.20	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	**Acetone**	**5.0**	**8.2**	
75-15-0	Carbon Disulfide	0.20	< 0.20	U
75-35-4	1,1-Dichloroethene	0.20	< 0.20	U
75-34-3	1,1-Dichloroethane	0.20	< 0.20	U
156-60-5	trans-1,2-Dichloroethene	0.20	< 0.20	U
156-59-2	cis-1,2-Dichloroethene	0.20	< 0.20	U
67-66-3	Chloroform	0.20	< 0.20	U
107-06-2	1,2-Dichloroethane	0.20	< 0.20	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	0.20	< 0.20	U
56-23-5	Carbon Tetrachloride	0.20	< 0.20	U
108-05-4	Vinyl Acetate	0.20	< 0.20	U
75-27-4	Bromodichloromethane	0.20	< 0.20	U
78-87-5	1,2-Dichloropropane	0.20	< 0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	< 0.20	U
79-01-6	Trichloroethene	0.20	< 0.20	U
124-48-1	Dibromochloromethane	0.20	< 0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	< 0.20	U
71-43-2	Benzene	0.20	< 0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	< 0.20	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.20	< 0.20	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.20	< 0.20	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	< 0.20	U
108-88-3	Toluene	0.20	< 0.20	U
108-90-7	Chlorobenzene	0.20	< 0.20	U
100-41-4	Ethylbenzene	0.20	< 0.20	U
100-42-5	Styrene	0.20	< 0.20	U
75-69-4	Trichlorofluoromethane	0.20	< 0.20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.20	< 0.20	U
179601-23-1	m,p-Xylene	0.40	< 0.40	U
95-47-6	o-Xylene	0.20	< 0.20	U
95-50-1	1,2-Dichlorobenzene	0.20	< 0.20	U
541-73-1	1,3-Dichlorobenzene	0.20	< 0.20	U
106-46-7	1,4-Dichlorobenzene	0.20	< 0.20	U

Lab Sample ID: YE79F QC Report No: YE79-Joint Base Lewis McChord
LIMS ID: 14-5873 Project: Log Ram
Matrix: Water
Date Analyzed: 04/01/14 16:09

CAS Number	Analyte	LOQ	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Iodomethane	1.0	< 1.0	U
74-96-4	Bromoethane	0.20	< 0.20	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.20	< 0.20	U
74-95-3	Dibromomethane	0.20	< 0.20	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	< 0.20	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	< 0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	< 0.50	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.20	< 0.20	U
95-63-6	1,2,4-Trimethylbenzene	0.20	< 0.20	U
87-68-3	Hexachlorobutadiene	0.50	< 0.50	U
106-93-4	1,2-Dibromoethane	0.20	< 0.20	U
74-97-5	Bromochloromethane	0.20	< 0.20	U
594-20-7	2,2-Dichloropropane	0.20	< 0.20	U
142-28-9	1,3-Dichloropropane	0.20	< 0.20	U
98-82-8	Isopropylbenzene	0.20	< 0.20	U
103-65-1	n-Propylbenzene	0.20	< 0.20	U
108-86-1	Bromobenzene	0.20	< 0.20	U
95-49-8	2-Chlorotoluene	0.20	< 0.20	U
106-43-4	4-Chlorotoluene	0.20	< 0.20	U
98-06-6	tert-Butylbenzene	0.20	< 0.20	U
135-98-8	sec-Butylbenzene	0.20	< 0.20	U
99-87-6	4-Isopropyltoluene	0.20	< 0.20	U
104-51-8	n-Butylbenzene	0.20	< 0.20	U
120-82-1	1,2,4-Trichlorobenzene	0.50	< 0.50	U
91-20-3	Naphthalene	0.50	< 0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	< 0.50	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	101%
d8-Toluene	99.6%
Bromofluorobenzene	94.3%
d4-1,2-Dichlorobenzene	98.3%

2-Chloroethylvinylether is an acid labile compound and may not be recovered from an acid preserved sample.

EPA SW-846 indicates that vinyl chloride and styrene may degrade in the presence of acid preservative.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140325LC27-1**
Page 1 of 2 **SAMPLE**

Lab Sample ID: YE79G
LIMS ID: 14-5874
Matrix: Water
Data Release Authorized:
Reported: 04/08/14

QC Report No: YE79-Joint Base Lewis McChord
Project: Log Ram
Date Sampled: 03/25/14
Date Received: 03/28/14

Instrument/Analyst: NT2/PAB
Date Analyzed: 04/01/14 16:36

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	LOQ	Result	Q
74-87-3	Chloromethane	0.50	< 0.50	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.20	< 0.20	U
75-00-3	Chloroethane	0.20	< 0.20	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	**Acetone**	**5.0**	**5.8**	
75-15-0	Carbon Disulfide	0.20	< 0.20	U
75-35-4	1,1-Dichloroethene	0.20	< 0.20	U
75-34-3	1,1-Dichloroethane	0.20	< 0.20	U
156-60-5	trans-1,2-Dichloroethene	0.20	< 0.20	U
156-59-2	**cis-1,2-Dichloroethene**	**0.20**	**1.5**	
67-66-3	Chloroform	0.20	< 0.20	U
107-06-2	1,2-Dichloroethane	0.20	< 0.20	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	0.20	< 0.20	U
56-23-5	Carbon Tetrachloride	0.20	< 0.20	U
108-05-4	Vinyl Acetate	0.20	< 0.20	U
75-27-4	Bromodichloromethane	0.20	< 0.20	U
78-87-5	1,2-Dichloropropane	0.20	< 0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	< 0.20	U
79-01-6	**Trichloroethene**	**0.20**	**12**	
124-48-1	Dibromochloromethane	0.20	< 0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	< 0.20	U
71-43-2	Benzene	0.20	< 0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	< 0.20	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.20	< 0.20	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.20	< 0.20	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	< 0.20	U
108-88-3	Toluene	0.20	< 0.20	U
108-90-7	Chlorobenzene	0.20	< 0.20	U
100-41-4	Ethylbenzene	0.20	< 0.20	U
100-42-5	Styrene	0.20	< 0.20	U
75-69-4	Trichlorofluoromethane	0.20	< 0.20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.20	< 0.20	U
179601-23-1	m,p-Xylene	0.40	< 0.40	U
95-47-6	o-Xylene	0.20	< 0.20	U
95-50-1	1,2-Dichlorobenzene	0.20	< 0.20	U
541-73-1	1,3-Dichlorobenzene	0.20	< 0.20	U
106-46-7	1,4-Dichlorobenzene	0.20	< 0.20	U

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140325LC27-1**
Page 2 of 2 **SAMPLE**

Lab Sample ID: YE79G
LIMS ID: 14-5874
Matrix: Water
Date Analyzed: 04/01/14 16:36

QC Report No: YE79-Joint Base Lewis McChord
Project: Log Ram

CAS Number	Analyte	LOQ	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Iodomethane	1.0	< 1.0	U
74-96-4	Bromoethane	0.20	< 0.20	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.20	< 0.20	U
74-95-3	Dibromomethane	0.20	< 0.20	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	< 0.20	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	< 0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	< 0.50	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.20	< 0.20	U
95-63-6	1,2,4-Trimethylbenzene	0.20	< 0.20	U
87-68-3	Hexachlorobutadiene	0.50	< 0.50	U
106-93-4	1,2-Dibromoethane	0.20	< 0.20	U
74-97-5	Bromochloromethane	0.20	< 0.20	U
594-20-7	2,2-Dichloropropane	0.20	< 0.20	U
142-28-9	1,3-Dichloropropane	0.20	< 0.20	U
98-82-8	Isopropylbenzene	0.20	< 0.20	U
103-65-1	n-Propylbenzene	0.20	< 0.20	U
108-86-1	Bromobenzene	0.20	< 0.20	U
95-49-8	2-Chlorotoluene	0.20	< 0.20	U
106-43-4	4-Chlorotoluene	0.20	< 0.20	U
98-06-6	tert-Butylbenzene	0.20	< 0.20	U
135-98-8	sec-Butylbenzene	0.20	< 0.20	U
99-87-6	4-Isopropyltoluene	0.20	< 0.20	U
104-51-8	n-Butylbenzene	0.20	< 0.20	U
120-82-1	1,2,4-Trichlorobenzene	0.50	< 0.50	U
91-20-3	Naphthalene	0.50	< 0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	< 0.50	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	103%
d8-Toluene	98.4%
Bromofluorobenzene	98.3%
d4-1,2-Dichlorobenzene	98.2%

2-Chloroethylvinylether is an acid labile compound and may not be recovered from an acid preserved sample.

EPA SW-846 indicates that vinyl chloride and styrene may degrade in the presence of acid preservative.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140324LC34-1**
Page 1 of 2 **SAMPLE**

Lab Sample ID: YE79H
LIMS ID: 14-5875
Matrix: Water
Data Release Authorized:
Reported: 04/08/14

QC Report No: YE79-Joint Base Lewis McChord
Project: Log Ram
Date Sampled: 03/24/14
Date Received: 03/28/14

Instrument/Analyst: NT2/PAB
Date Analyzed: 04/01/14 17:02

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	LOQ	Result	Q
74-87-3	Chloromethane	0.50	< 0.50	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.20	< 0.20	U
75-00-3	Chloroethane	0.20	< 0.20	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	Acetone	5.0	< 5.0	U
75-15-0	Carbon Disulfide	0.20	< 0.20	U
75-35-4	1,1-Dichloroethene	0.20	< 0.20	U
75-34-3	1,1-Dichloroethane	0.20	< 0.20	U
156-60-5	trans-1,2-Dichloroethene	0.20	< 0.20	U
156-59-2	**cis-1,2-Dichloroethene**	**0.20**	**1.7**	
67-66-3	Chloroform	0.20	< 0.20	U
107-06-2	1,2-Dichloroethane	0.20	< 0.20	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	0.20	< 0.20	U
56-23-5	Carbon Tetrachloride	0.20	< 0.20	U
108-05-4	Vinyl Acetate	0.20	< 0.20	U
75-27-4	Bromodichloromethane	0.20	< 0.20	U
78-87-5	1,2-Dichloropropane	0.20	< 0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	< 0.20	U
79-01-6	**Trichloroethene**	**0.20**	**1.1**	
124-48-1	Dibromochloromethane	0.20	< 0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	< 0.20	U
71-43-2	Benzene	0.20	< 0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	< 0.20	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.20	< 0.20	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.20	< 0.20	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	< 0.20	U
108-88-3	Toluene	0.20	< 0.20	U
108-90-7	Chlorobenzene	0.20	< 0.20	U
100-41-4	Ethylbenzene	0.20	< 0.20	U
100-42-5	Styrene	0.20	< 0.20	U
75-69-4	Trichlorofluoromethane	0.20	< 0.20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.20	< 0.20	U
179601-23-1	m,p-Xylene	0.40	< 0.40	U
95-47-6	o-Xylene	0.20	< 0.20	U
95-50-1	1,2-Dichlorobenzene	0.20	< 0.20	U
541-73-1	1,3-Dichlorobenzene	0.20	< 0.20	U
106-46-7	1,4-Dichlorobenzene	0.20	< 0.20	U

Lab Sample ID: YE79H QC Report No: YE79-Joint Base Lewis McChord
LIMS ID: 14-5875 Project: Log Ram
Matrix: Water
Date Analyzed: 04/01/14 17:02

CAS Number	Analyte	LOQ	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Iodomethane	1.0	< 1.0	U
74-96-4	Bromoethane	0.20	< 0.20	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.20	< 0.20	U
74-95-3	Dibromomethane	0.20	< 0.20	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	< 0.20	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	< 0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	< 0.50	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.20	< 0.20	U
95-63-6	1,2,4-Trimethylbenzene	0.20	< 0.20	U
87-68-3	Hexachlorobutadiene	0.50	< 0.50	U
106-93-4	1,2-Dibromoethane	0.20	< 0.20	U
74-97-5	Bromochloromethane	0.20	< 0.20	U
594-20-7	2,2-Dichloropropane	0.20	< 0.20	U
142-28-9	1,3-Dichloropropane	0.20	< 0.20	U
98-82-8	Isopropylbenzene	0.20	< 0.20	U
103-65-1	n-Propylbenzene	0.20	< 0.20	U
108-86-1	Bromobenzene	0.20	< 0.20	U
95-49-8	2-Chlorotoluene	0.20	< 0.20	U
106-43-4	4-Chlorotoluene	0.20	< 0.20	U
98-06-6	tert-Butylbenzene	0.20	< 0.20	U
135-98-8	sec-Butylbenzene	0.20	< 0.20	U
99-87-6	4-Isopropyltoluene	0.20	< 0.20	U
104-51-8	n-Butylbenzene	0.20	< 0.20	U
120-82-1	1,2,4-Trichlorobenzene	0.50	< 0.50	U
91-20-3	Naphthalene	0.50	< 0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	< 0.50	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	99.5%
d8-Toluene	99.0%
Bromofluorobenzene	91.5%
d4-1,2-Dichlorobenzene	97.2%

2-Chloroethylvinylether is an acid labile compound and may not be recovered from an acid preserved sample.

EPA SW-846 indicates that vinyl chloride and styrene may degrade in the presence of acid preservative.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140325LC41A-1**
Page 1 of 2 **SAMPLE**

Lab Sample ID: YE79I
LIMS ID: 14-5876
Matrix: Water
Data Release Authorized: MW
Reported: 04/08/14

QC Report No: YE79-Joint Base Lewis McChord
Project: Log Ram
Date Sampled: 03/25/14
Date Received: 03/28/14

Instrument/Analyst: NT2/PAB
Date Analyzed: 04/01/14 17:29

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	LOQ	Result	Q
74-87-3	Chloromethane	0.50	< 0.50	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.20	< 0.20	U
75-00-3	Chloroethane	0.20	< 0.20	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	**Acetone**	**5.0**	**12**	
75-15-0	Carbon Disulfide	0.20	< 0.20	U
75-35-4	1,1-Dichloroethene	0.20	< 0.20	U
75-34-3	1,1-Dichloroethane	0.20	< 0.20	U
156-60-5	trans-1,2-Dichloroethene	0.20	< 0.20	U
156-59-2	**cis-1,2-Dichloroethene**	**0.20**	**1.2**	
67-66-3	Chloroform	0.20	< 0.20	U
107-06-2	1,2-Dichloroethane	0.20	< 0.20	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	**1,1,1-Trichloroethane**	**0.20**	**0.35**	
56-23-5	Carbon Tetrachloride	0.20	< 0.20	U
108-05-4	Vinyl Acetate	0.20	< 0.20	U
75-27-4	Bromodichloromethane	0.20	< 0.20	U
78-87-5	1,2-Dichloropropane	0.20	< 0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	< 0.20	U
79-01-6	**Trichloroethene**	**0.20**	**120**	**E**
124-48-1	Dibromochloromethane	0.20	< 0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	< 0.20	U
71-43-2	Benzene	0.20	< 0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	< 0.20	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.20	< 0.20	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.20	< 0.20	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	< 0.20	U
108-88-3	Toluene	0.20	< 0.20	U
108-90-7	Chlorobenzene	0.20	< 0.20	U
100-41-4	Ethylbenzene	0.20	< 0.20	U
100-42-5	Styrene	0.20	< 0.20	U
75-69-4	Trichlorofluoromethane	0.20	< 0.20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.20	< 0.20	U
179601-23-1	m,p-Xylene	0.40	< 0.40	U
95-47-6	o-Xylene	0.20	< 0.20	U
95-50-1	1,2-Dichlorobenzene	0.20	< 0.20	U
541-73-1	1,3-Dichlorobenzene	0.20	< 0.20	U
106-46-7	1,4-Dichlorobenzene	0.20	< 0.20	U

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140325LC41A-1**
 SAMPLE

Lab Sample ID: YE79I QC Report No: YE79-Joint Base Lewis McChord
LIMS ID: 14-5876 Project: Log Ram
Matrix: Water
Date Analyzed: 04/01/14 17:29

CAS Number	Analyte	LOQ	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Iodomethane	1.0	< 1.0	U
74-96-4	Bromoethane	0.20	< 0.20	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.20	< 0.20	U
74-95-3	Dibromomethane	0.20	< 0.20	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	< 0.20	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	< 0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	< 0.50	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.20	< 0.20	U
95-63-6	1,2,4-Trimethylbenzene	0.20	< 0.20	U
87-68-3	Hexachlorobutadiene	0.50	< 0.50	U
106-93-4	1,2-Dibromoethane	0.20	< 0.20	U
74-97-5	Bromochloromethane	0.20	< 0.20	U
594-20-7	2,2-Dichloropropane	0.20	< 0.20	U
142-28-9	1,3-Dichloropropane	0.20	< 0.20	U
98-82-8	Isopropylbenzene	0.20	< 0.20	U
103-65-1	n-Propylbenzene	0.20	< 0.20	U
108-86-1	Bromobenzene	0.20	< 0.20	U
95-49-8	2-Chlorotoluene	0.20	< 0.20	U
106-43-4	4-Chlorotoluene	0.20	< 0.20	U
98-06-6	tert-Butylbenzene	0.20	< 0.20	U
135-98-8	sec-Butylbenzene	0.20	< 0.20	U
99-87-6	4-Isopropyltoluene	0.20	< 0.20	U
104-51-8	n-Butylbenzene	0.20	< 0.20	U
120-82-1	1,2,4-Trichlorobenzene	0.50	< 0.50	U
91-20-3	Naphthalene	0.50	< 0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	< 0.50	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	102%
d8-Toluene	94.2%
Bromofluorobenzene	99.6%
d4-1,2-Dichlorobenzene	97.5%

2-Chloroethylvinylether is an acid labile compound and may not be recovered from an acid preserved sample.

EPA SW-846 indicates that vinyl chloride and styrene may degrade in the presence of acid preservative.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140325LC41A-1**
Page 1 of 2 **DILUTION**

Lab Sample ID: YE79I
LIMS ID: 14-5876
Matrix: Water
Data Release Authorized: MW
Reported: 04/08/14

QC Report No: YE79-Joint Base Lewis McChord
Project: Log Ram
Date Sampled: 03/25/14
Date Received: 03/28/14

Instrument/Analyst: NT2/PAB
Date Analyzed: 04/02/14 22:11

Sample Amount: 2.00 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	LOQ	Result	Q
74-87-3	Chloromethane	2.5	< 2.5	U
74-83-9	Bromomethane	5.0	< 5.0	U
75-01-4	Vinyl Chloride	1.0	< 1.0	U
75-00-3	Chloroethane	1.0	< 1.0	U
75-09-2	Methylene Chloride	5.0	< 5.0	U
67-64-1	Acetone	25	< 25	U
75-15-0	Carbon Disulfide	1.0	< 1.0	U
75-35-4	1,1-Dichloroethene	1.0	< 1.0	U
75-34-3	1,1-Dichloroethane	1.0	< 1.0	U
156-60-5	trans-1,2-Dichloroethene	1.0	< 1.0	U
156-59-2	**cis-1,2-Dichloroethene**	**1.0**	**1.2**	
67-66-3	Chloroform	1.0	< 1.0	U
107-06-2	1,2-Dichloroethane	1.0	< 1.0	U
78-93-3	2-Butanone	25	< 25	U
71-55-6	1,1,1-Trichloroethane	1.0	< 1.0	U
56-23-5	Carbon Tetrachloride	1.0	< 1.0	U
108-05-4	Vinyl Acetate	1.0	< 1.0	U
75-27-4	Bromodichloromethane	1.0	< 1.0	U
78-87-5	1,2-Dichloropropane	1.0	< 1.0	U
10061-01-5	cis-1,3-Dichloropropene	1.0	< 1.0	U
79-01-6	**Trichloroethene**	**1.0**	**130**	
124-48-1	Dibromochloromethane	1.0	< 1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	< 1.0	U
71-43-2	Benzene	1.0	< 1.0	U
10061-02-6	trans-1,3-Dichloropropene	1.0	< 1.0	U
110-75-8	2-Chloroethylvinylether	5.0	< 5.0	U
75-25-2	Bromoform	1.0	< 1.0	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	25	< 25	U
591-78-6	2-Hexanone	25	< 25	U
127-18-4	Tetrachloroethene	1.0	< 1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	< 1.0	U
108-88-3	Toluene	1.0	< 1.0	U
108-90-7	Chlorobenzene	1.0	< 1.0	U
100-41-4	Ethylbenzene	1.0	< 1.0	U
100-42-5	Styrene	1.0	< 1.0	U
75-69-4	Trichlorofluoromethane	1.0	< 1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	< 1.0	U
179601-23-1	m,p-Xylene	2.0	< 2.0	U
95-47-6	o-Xylene	1.0	< 1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	< 1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	< 1.0	U
106-46-7	1,4-Dichlorobenzene	1.0	< 1.0	U

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140325LC41A-1**
 DILUTION

Lab Sample ID: YE79I QC Report No: YE79-Joint Base Lewis McChord
LIMS ID: 14-5876 Project: Log Ram
Matrix: Water
Date Analyzed: 04/02/14 22:11

CAS Number	Analyte	LOQ	Result	Q
107-02-8	Acrolein	25	< 25	U
74-88-4	Iodomethane	5.0	< 5.0	U
74-96-4	Bromoethane	1.0	< 1.0	U
107-13-1	Acrylonitrile	5.0	< 5.0	U
563-58-6	1,1-Dichloropropene	1.0	< 1.0	U
74-95-3	Dibromomethane	1.0	< 1.0	U
630-20-6	1,1,1,2-Tetrachloroethane	1.0	< 1.0	U
96-12-8	1,2-Dibromo-3-chloropropane	2.5	< 2.5	U
96-18-4	1,2,3-Trichloropropane	2.5	< 2.5	U
110-57-6	trans-1,4-Dichloro-2-butene	5.0	< 5.0	U
108-67-8	1,3,5-Trimethylbenzene	1.0	< 1.0	U
95-63-6	1,2,4-Trimethylbenzene	1.0	< 1.0	U
87-68-3	Hexachlorobutadiene	2.5	< 2.5	U
106-93-4	1,2-Dibromoethane	1.0	< 1.0	U
74-97-5	Bromochloromethane	1.0	< 1.0	U
594-20-7	2,2-Dichloropropane	1.0	< 1.0	U
142-28-9	1,3-Dichloropropane	1.0	< 1.0	U
98-82-8	Isopropylbenzene	1.0	< 1.0	U
103-65-1	n-Propylbenzene	1.0	< 1.0	U
108-86-1	Bromobenzene	1.0	< 1.0	U
95-49-8	2-Chlorotoluene	1.0	< 1.0	U
106-43-4	4-Chlorotoluene	1.0	< 1.0	U
98-06-6	tert-Butylbenzene	1.0	< 1.0	U
135-98-8	sec-Butylbenzene	1.0	< 1.0	U
99-87-6	4-Isopropyltoluene	1.0	< 1.0	U
104-51-8	n-Butylbenzene	1.0	< 1.0	U
120-82-1	1,2,4-Trichlorobenzene	2.5	< 2.5	U
91-20-3	Naphthalene	2.5	< 2.5	U
87-61-6	1,2,3-Trichlorobenzene	2.5	< 2.5	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	103%
d8-Toluene	94.1%
Bromofluorobenzene	92.6%
d4-1,2-Dichlorobenzene	98.5%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140325LC47D-1**
Page 1 of 2 **SAMPLE**

Lab Sample ID: YE79J
LIMS ID: 14-5877
Matrix: Water
Data Release Authorized:
Reported: 04/08/14

QC Report No: YE79-Joint Base Lewis McChord
Project: Log Ram
Date Sampled: 03/25/14
Date Received: 03/28/14

Instrument/Analyst: NT2/PAB
Date Analyzed: 04/01/14 17:56

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	LOQ	Result	Q
74-87-3	Chloromethane	0.50	< 0.50	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.20	< 0.20	U
75-00-3	Chloroethane	0.20	< 0.20	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	**Acetone**	**5.0**	**11**	
75-15-0	Carbon Disulfide	0.20	< 0.20	U
75-35-4	1,1-Dichloroethene	0.20	< 0.20	U
75-34-3	1,1-Dichloroethane	0.20	< 0.20	U
156-60-5	trans-1,2-Dichloroethene	0.20	< 0.20	U
156-59-2	cis-1,2-Dichloroethene	0.20	< 0.20	U
67-66-3	Chloroform	0.20	< 0.20	U
107-06-2	1,2-Dichloroethane	0.20	< 0.20	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	0.20	< 0.20	U
56-23-5	Carbon Tetrachloride	0.20	< 0.20	U
108-05-4	Vinyl Acetate	0.20	< 0.20	U
75-27-4	Bromodichloromethane	0.20	< 0.20	U
78-87-5	1,2-Dichloropropane	0.20	< 0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	< 0.20	U
79-01-6	Trichloroethene	0.20	< 0.20	U
124-48-1	Dibromochloromethane	0.20	< 0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	< 0.20	U
71-43-2	Benzene	0.20	< 0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	< 0.20	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.20	< 0.20	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.20	< 0.20	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	< 0.20	U
108-88-3	Toluene	0.20	< 0.20	U
108-90-7	Chlorobenzene	0.20	< 0.20	U
100-41-4	Ethylbenzene	0.20	< 0.20	U
100-42-5	Styrene	0.20	< 0.20	U
75-69-4	Trichlorofluoromethane	0.20	< 0.20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.20	< 0.20	U
179601-23-1	m,p-Xylene	0.40	< 0.40	U
95-47-6	o-Xylene	0.20	< 0.20	U
95-50-1	1,2-Dichlorobenzene	0.20	< 0.20	U
541-73-1	1,3-Dichlorobenzene	0.20	< 0.20	U
106-46-7	1,4-Dichlorobenzene	0.20	< 0.20	U

Lab Sample ID: YE79J QC Report No: YE79-Joint Base Lewis McChord
LIMS ID: 14-5877 Project: Log Ram
Matrix: Water
Date Analyzed: 04/01/14 17:56

CAS Number	Analyte	LOQ	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Iodomethane	1.0	< 1.0	U
74-96-4	Bromoethane	0.20	< 0.20	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.20	< 0.20	U
74-95-3	Dibromomethane	0.20	< 0.20	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	< 0.20	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	< 0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	< 0.50	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.20	< 0.20	U
95-63-6	1,2,4-Trimethylbenzene	0.20	< 0.20	U
87-68-3	Hexachlorobutadiene	0.50	< 0.50	U
106-93-4	1,2-Dibromoethane	0.20	< 0.20	U
74-97-5	Bromochloromethane	0.20	< 0.20	U
594-20-7	2,2-Dichloropropane	0.20	< 0.20	U
142-28-9	1,3-Dichloropropane	0.20	< 0.20	U
98-82-8	Isopropylbenzene	0.20	< 0.20	U
103-65-1	n-Propylbenzene	0.20	< 0.20	U
108-86-1	Bromobenzene	0.20	< 0.20	U
95-49-8	2-Chlorotoluene	0.20	< 0.20	U
106-43-4	4-Chlorotoluene	0.20	< 0.20	U
98-06-6	tert-Butylbenzene	0.20	< 0.20	U
135-98-8	sec-Butylbenzene	0.20	< 0.20	U
99-87-6	4-Isopropyltoluene	0.20	< 0.20	U
104-51-8	n-Butylbenzene	0.20	< 0.20	U
120-82-1	1,2,4-Trichlorobenzene	0.50	< 0.50	U
91-20-3	Naphthalene	0.50	< 0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	< 0.50	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	95.9%
d8-Toluene	96.4%
Bromofluorobenzene	94.7%
d4-1,2-Dichlorobenzene	99.4%

2-Chloroethylvinylether is an acid labile compound and may not be recovered from an acid preserved sample.

EPA SW-846 indicates that vinyl chloride and styrene may degrade in the presence of acid preservative.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140325LC50D-1**
Page 1 of 2 **SAMPLE**

Lab Sample ID: YE79K
LIMS ID: 14-5878
Matrix: Water
Data Release Authorized: MW
Reported: 04/08/14

QC Report No: YE79-Joint Base Lewis McChord
Project: Log Ram
Date Sampled: 03/25/14
Date Received: 03/28/14

Instrument/Analyst: NT2/PAB
Date Analyzed: 04/01/14 18:22

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	LOQ	Result	Q
74-87-3	Chloromethane	0.50	< 0.50	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.20	< 0.20	U
75-00-3	Chloroethane	0.20	< 0.20	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	Acetone	5.0	< 5.0	U
75-15-0	Carbon Disulfide	0.20	< 0.20	U
75-35-4	1,1-Dichloroethene	0.20	< 0.20	U
75-34-3	1,1-Dichloroethane	0.20	< 0.20	U
156-60-5	trans-1,2-Dichloroethene	0.20	< 0.20	U
156-59-2	cis-1,2-Dichloroethene	0.20	< 0.20	U
67-66-3	Chloroform	0.20	< 0.20	U
107-06-2	1,2-Dichloroethane	0.20	< 0.20	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	0.20	< 0.20	U
56-23-5	Carbon Tetrachloride	0.20	< 0.20	U
108-05-4	Vinyl Acetate	0.20	< 0.20	U
75-27-4	Bromodichloromethane	0.20	< 0.20	U
78-87-5	1,2-Dichloropropane	0.20	< 0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	< 0.20	U
79-01-6	Trichloroethene	0.20	< 0.20	U
124-48-1	Dibromochloromethane	0.20	< 0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	< 0.20	U
71-43-2	Benzene	0.20	< 0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	< 0.20	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.20	< 0.20	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.20	< 0.20	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	< 0.20	U
108-88-3	Toluene	0.20	< 0.20	U
108-90-7	Chlorobenzene	0.20	< 0.20	U
100-41-4	Ethylbenzene	0.20	< 0.20	U
100-42-5	Styrene	0.20	< 0.20	U
75-69-4	Trichlorofluoromethane	0.20	< 0.20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.20	< 0.20	U
179601-23-1	m,p-Xylene	0.40	< 0.40	U
95-47-6	o-Xylene	0.20	< 0.20	U
95-50-1	1,2-Dichlorobenzene	0.20	< 0.20	U
541-73-1	1,3-Dichlorobenzene	0.20	< 0.20	U
106-46-7	1,4-Dichlorobenzene	0.20	< 0.20	U

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140325LC50D-1**
 SAMPLE

Lab Sample ID: YE79K QC Report No: YE79-Joint Base Lewis McChord
LIMS ID: 14-5878 Project: Log Ram
Matrix: Water
Date Analyzed: 04/01/14 18:22

CAS Number	Analyte	LOQ	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Iodomethane	1.0	< 1.0	U
74-96-4	Bromoethane	0.20	< 0.20	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.20	< 0.20	U
74-95-3	Dibromomethane	0.20	< 0.20	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	< 0.20	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	< 0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	< 0.50	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.20	< 0.20	U
95-63-6	1,2,4-Trimethylbenzene	0.20	< 0.20	U
87-68-3	Hexachlorobutadiene	0.50	< 0.50	U
106-93-4	1,2-Dibromoethane	0.20	< 0.20	U
74-97-5	Bromochloromethane	0.20	< 0.20	U
594-20-7	2,2-Dichloropropane	0.20	< 0.20	U
142-28-9	1,3-Dichloropropane	0.20	< 0.20	U
98-82-8	Isopropylbenzene	0.20	< 0.20	U
103-65-1	n-Propylbenzene	0.20	< 0.20	U
108-86-1	Bromobenzene	0.20	< 0.20	U
95-49-8	2-Chlorotoluene	0.20	< 0.20	U
106-43-4	4-Chlorotoluene	0.20	< 0.20	U
98-06-6	tert-Butylbenzene	0.20	< 0.20	U
135-98-8	sec-Butylbenzene	0.20	< 0.20	U
99-87-6	4-Isopropyltoluene	0.20	< 0.20	U
104-51-8	n-Butylbenzene	0.20	< 0.20	U
120-82-1	1,2,4-Trichlorobenzene	0.50	< 0.50	U
91-20-3	Naphthalene	0.50	< 0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	< 0.50	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	97.4%
d8-Toluene	99.3%
Bromofluorobenzene	97.5%
d4-1,2-Dichlorobenzene	99.6%

2-Chloroethylvinylether is an acid labile compound and may not be recovered from an acid preserved sample.

EPA SW-846 indicates that vinyl chloride and styrene may degrade in the presence of acid preservative.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140324LC53-1**
Page 1 of 2 **SAMPLE**

Lab Sample ID: YE79L
LIMS ID: 14-5879
Matrix: Water
Data Release Authorized:
Reported: 04/08/14

QC Report No: YE79-Joint Base Lewis McChord
Project: Log Ram
Date Sampled: 03/24/14
Date Received: 03/28/14

Instrument/Analyst: NT2/PAB
Date Analyzed: 04/01/14 18:49

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	LOQ	Result	Q
74-87-3	Chloromethane	0.50	< 0.50	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.20	< 0.20	U
75-00-3	Chloroethane	0.20	< 0.20	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	**Acetone**	**5.0**	**5.2**	
75-15-0	Carbon Disulfide	0.20	< 0.20	U
75-35-4	1,1-Dichloroethene	0.20	< 0.20	U
75-34-3	1,1-Dichloroethane	0.20	< 0.20	U
156-60-5	**trans-1,2-Dichloroethene**	**0.20**	**0.24**	
156-59-2	**cis-1,2-Dichloroethene**	**0.20**	**5.6**	
67-66-3	Chloroform	0.20	< 0.20	U
107-06-2	**1,2-Dichloroethane**	**0.20**	**0.26**	
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	0.20	< 0.20	U
56-23-5	Carbon Tetrachloride	0.20	< 0.20	U
108-05-4	Vinyl Acetate	0.20	< 0.20	U
75-27-4	Bromodichloromethane	0.20	< 0.20	U
78-87-5	1,2-Dichloropropane	0.20	< 0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	< 0.20	U
79-01-6	**Trichloroethene**	**0.20**	**190**	**E**
124-48-1	Dibromochloromethane	0.20	< 0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	< 0.20	U
71-43-2	Benzene	0.20	< 0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	< 0.20	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.20	< 0.20	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.20	< 0.20	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	< 0.20	U
108-88-3	Toluene	0.20	< 0.20	U
108-90-7	Chlorobenzene	0.20	< 0.20	U
100-41-4	Ethylbenzene	0.20	< 0.20	U
100-42-5	Styrene	0.20	< 0.20	U
75-69-4	Trichlorofluoromethane	0.20	< 0.20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.20	< 0.20	U
179601-23-1	m,p-Xylene	0.40	< 0.40	U
95-47-6	o-Xylene	0.20	< 0.20	U
95-50-1	1,2-Dichlorobenzene	0.20	< 0.20	U
541-73-1	1,3-Dichlorobenzene	0.20	< 0.20	U
106-46-7	1,4-Dichlorobenzene	0.20	< 0.20	U

Lab Sample ID: YE79L
LIMS ID: 14-5879
Matrix: Water
Date Analyzed: 04/01/14 18:49

QC Report No: YE79-Joint Base Lewis McChord
Project: Log Ram

CAS Number	Analyte	LOQ	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Iodomethane	1.0	< 1.0	U
74-96-4	Bromoethane	0.20	< 0.20	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.20	< 0.20	U
74-95-3	Dibromomethane	0.20	< 0.20	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	< 0.20	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	< 0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	< 0.50	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.20	< 0.20	U
95-63-6	1,2,4-Trimethylbenzene	0.20	< 0.20	U
87-68-3	Hexachlorobutadiene	0.50	< 0.50	U
106-93-4	1,2-Dibromoethane	0.20	< 0.20	U
74-97-5	Bromochloromethane	0.20	< 0.20	U
594-20-7	2,2-Dichloropropane	0.20	< 0.20	U
142-28-9	1,3-Dichloropropane	0.20	< 0.20	U
98-82-8	Isopropylbenzene	0.20	< 0.20	U
103-65-1	n-Propylbenzene	0.20	< 0.20	U
108-86-1	Bromobenzene	0.20	< 0.20	U
95-49-8	2-Chlorotoluene	0.20	< 0.20	U
106-43-4	4-Chlorotoluene	0.20	< 0.20	U
98-06-6	tert-Butylbenzene	0.20	< 0.20	U
135-98-8	sec-Butylbenzene	0.20	< 0.20	U
99-87-6	4-Isopropyltoluene	0.20	< 0.20	U
104-51-8	n-Butylbenzene	0.20	< 0.20	U
120-82-1	1,2,4-Trichlorobenzene	0.50	< 0.50	U
91-20-3	Naphthalene	0.50	< 0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	< 0.50	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	99.4%
d8-Toluene	96.7%
Bromofluorobenzene	97.4%
d4-1,2-Dichlorobenzene	101%

2-Chloroethylvinylether is an acid labile compound and may not be recovered from an acid preserved sample.

EPA SW-846 indicates that vinyl chloride and styrene may degrade in the presence of acid preservative.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140324LC53-1**
Page 1 of 2 **DILUTION**

Lab Sample ID: YE79L
LIMS ID: 14-5879
Matrix: Water
Data Release Authorized:
Reported: 04/08/14

QC Report No: YE79-Joint Base Lewis McChord
Project: Log Ram
Date Sampled: 03/24/14
Date Received: 03/28/14

Instrument/Analyst: NT2/PAB
Date Analyzed: 04/02/14 23:08

Sample Amount: 1.00 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	LOQ	Result	Q
74-87-3	Chloromethane	5.0	< 5.0	U
74-83-9	Bromomethane	10	< 10	U
75-01-4	Vinyl Chloride	2.0	< 2.0	U
75-00-3	Chloroethane	2.0	< 2.0	U
75-09-2	Methylene Chloride	10	< 10	U
67-64-1	Acetone	50	< 50	U
75-15-0	Carbon Disulfide	2.0	< 2.0	U
75-35-4	1,1-Dichloroethene	2.0	< 2.0	U
75-34-3	1,1-Dichloroethane	2.0	< 2.0	U
156-60-5	trans-1,2-Dichloroethene	2.0	< 2.0	U
156-59-2	**cis-1,2-Dichloroethene**	**2.0**	**6.1**	
67-66-3	Chloroform	2.0	< 2.0	U
107-06-2	1,2-Dichloroethane	2.0	< 2.0	U
78-93-3	2-Butanone	50	< 50	U
71-55-6	1,1,1-Trichloroethane	2.0	< 2.0	U
56-23-5	Carbon Tetrachloride	2.0	< 2.0	U
108-05-4	Vinyl Acetate	2.0	< 2.0	U
75-27-4	Bromodichloromethane	2.0	< 2.0	U
78-87-5	1,2-Dichloropropane	2.0	< 2.0	U
10061-01-5	cis-1,3-Dichloropropene	2.0	< 2.0	U
79-01-6	**Trichloroethene**	**2.0**	**220**	
124-48-1	Dibromochloromethane	2.0	< 2.0	U
79-00-5	1,1,2-Trichloroethane	2.0	< 2.0	U
71-43-2	Benzene	2.0	< 2.0	U
10061-02-6	trans-1,3-Dichloropropene	2.0	< 2.0	U
110-75-8	2-Chloroethylvinylether	10	< 10	U
75-25-2	Bromoform	2.0	< 2.0	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	50	< 50	U
591-78-6	2-Hexanone	50	< 50	U
127-18-4	Tetrachloroethene	2.0	< 2.0	U
79-34-5	1,1,2,2-Tetrachloroethane	2.0	< 2.0	U
108-88-3	Toluene	2.0	< 2.0	U
108-90-7	Chlorobenzene	2.0	< 2.0	U
100-41-4	Ethylbenzene	2.0	< 2.0	U
100-42-5	Styrene	2.0	< 2.0	U
75-69-4	Trichlorofluoromethane	2.0	< 2.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	2.0	< 2.0	U
179601-23-1	m,p-Xylene	4.0	< 4.0	U
95-47-6	o-Xylene	2.0	< 2.0	U
95-50-1	1,2-Dichlorobenzene	2.0	< 2.0	U
541-73-1	1,3-Dichlorobenzene	2.0	< 2.0	U
106-46-7	1,4-Dichlorobenzene	2.0	< 2.0	U

Lab Sample ID: YE79L QC Report No: YE79-Joint Base Lewis McChord
LIMS ID: 14-5879 Project: Log Ram
Matrix: Water
Date Analyzed: 04/02/14 23:08

CAS Number	Analyte	LOQ	Result	Q
107-02-8	Acrolein	50	< 50	U
74-88-4	Iodomethane	10	< 10	U
74-96-4	Bromoethane	2.0	< 2.0	U
107-13-1	Acrylonitrile	10	< 10	U
563-58-6	1,1-Dichloropropene	2.0	< 2.0	U
74-95-3	Dibromomethane	2.0	< 2.0	U
630-20-6	1,1,1,2-Tetrachloroethane	2.0	< 2.0	U
96-12-8	1,2-Dibromo-3-chloropropane	5.0	< 5.0	U
96-18-4	1,2,3-Trichloropropane	5.0	< 5.0	U
110-57-6	trans-1,4-Dichloro-2-butene	10	< 10	U
108-67-8	1,3,5-Trimethylbenzene	2.0	< 2.0	U
95-63-6	1,2,4-Trimethylbenzene	2.0	< 2.0	U
87-68-3	Hexachlorobutadiene	5.0	< 5.0	U
106-93-4	1,2-Dibromoethane	2.0	< 2.0	U
74-97-5	Bromochloromethane	2.0	< 2.0	U
594-20-7	2,2-Dichloropropane	2.0	< 2.0	U
142-28-9	1,3-Dichloropropane	2.0	< 2.0	U
98-82-8	Isopropylbenzene	2.0	< 2.0	U
103-65-1	n-Propylbenzene	2.0	< 2.0	U
108-86-1	Bromobenzene	2.0	< 2.0	U
95-49-8	2-Chlorotoluene	2.0	< 2.0	U
106-43-4	4-Chlorotoluene	2.0	< 2.0	U
98-06-6	tert-Butylbenzene	2.0	< 2.0	U
135-98-8	sec-Butylbenzene	2.0	< 2.0	U
99-87-6	4-Isopropyltoluene	2.0	< 2.0	U
104-51-8	n-Butylbenzene	2.0	< 2.0	U
120-82-1	1,2,4-Trichlorobenzene	5.0	< 5.0	U
91-20-3	Naphthalene	5.0	< 5.0	U
87-61-6	1,2,3-Trichlorobenzene	5.0	< 5.0	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	95.7%
d8-Toluene	93.6%
Bromofluorobenzene	95.0%
d4-1,2-Dichlorobenzene	99.3%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140325LC57-1**
Page 1 of 2 **SAMPLE**

Lab Sample ID: YE79M
LIMS ID: 14-5880
Matrix: Water
Data Release Authorized:
Reported: 04/08/14

QC Report No: YE79-Joint Base Lewis McChord
Project: Log Ram
Date Sampled: 03/25/14
Date Received: 03/28/14

Instrument/Analyst: NT2/PAB
Date Analyzed: 04/02/14 21:42

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	LOQ	Result	Q
74-87-3	Chloromethane	0.50	< 0.50	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.20	< 0.20	U
75-00-3	Chloroethane	0.20	< 0.20	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	**Acetone**	**5.0**	**5.5**	
75-15-0	Carbon Disulfide	0.20	< 0.20	U
75-35-4	1,1-Dichloroethene	0.20	< 0.20	U
75-34-3	1,1-Dichloroethane	0.20	< 0.20	U
156-60-5	trans-1,2-Dichloroethene	0.20	< 0.20	U
156-59-2	**cis-1,2-Dichloroethene**	**0.20**	**0.45**	
67-66-3	Chloroform	0.20	< 0.20	U
107-06-2	1,2-Dichloroethane	0.20	< 0.20	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	0.20	< 0.20	U
56-23-5	Carbon Tetrachloride	0.20	< 0.20	U
108-05-4	Vinyl Acetate	0.20	< 0.20	U
75-27-4	Bromodichloromethane	0.20	< 0.20	U
78-87-5	1,2-Dichloropropane	0.20	< 0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	< 0.20	U
79-01-6	**Trichloroethene**	**0.20**	**0.56**	
124-48-1	Dibromochloromethane	0.20	< 0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	< 0.20	U
71-43-2	Benzene	0.20	< 0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	< 0.20	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.20	< 0.20	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.20	< 0.20	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	< 0.20	U
108-88-3	Toluene	0.20	< 0.20	U
108-90-7	Chlorobenzene	0.20	< 0.20	U
100-41-4	Ethylbenzene	0.20	< 0.20	U
100-42-5	Styrene	0.20	< 0.20	U
75-69-4	Trichlorofluoromethane	0.20	< 0.20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.20	< 0.20	U
179601-23-1	m,p-Xylene	0.40	< 0.40	U
95-47-6	o-Xylene	0.20	< 0.20	U
95-50-1	1,2-Dichlorobenzene	0.20	< 0.20	U
541-73-1	1,3-Dichlorobenzene	0.20	< 0.20	U
106-46-7	1,4-Dichlorobenzene	0.20	< 0.20	U

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140325LC57-1**
 SAMPLE

Lab Sample ID: YE79M
LIMS ID: 14-5880
Matrix: Water
Date Analyzed: 04/02/14 21:42

QC Report No: YE79-Joint Base Lewis McChord
Project: Log Ram

CAS Number	Analyte	LOQ	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Iodomethane	1.0	< 1.0	U
74-96-4	Bromoethane	0.20	< 0.20	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.20	< 0.20	U
74-95-3	Dibromomethane	0.20	< 0.20	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	< 0.20	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	< 0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	< 0.50	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.20	< 0.20	U
95-63-6	1,2,4-Trimethylbenzene	0.20	< 0.20	U
87-68-3	Hexachlorobutadiene	0.50	< 0.50	U
106-93-4	1,2-Dibromoethane	0.20	< 0.20	U
74-97-5	Bromochloromethane	0.20	< 0.20	U
594-20-7	2,2-Dichloropropane	0.20	< 0.20	U
142-28-9	1,3-Dichloropropane	0.20	< 0.20	U
98-82-8	Isopropylbenzene	0.20	< 0.20	U
103-65-1	n-Propylbenzene	0.20	< 0.20	U
108-86-1	Bromobenzene	0.20	< 0.20	U
95-49-8	2-Chlorotoluene	0.20	< 0.20	U
106-43-4	4-Chlorotoluene	0.20	< 0.20	U
98-06-6	tert-Butylbenzene	0.20	< 0.20	U
135-98-8	sec-Butylbenzene	0.20	< 0.20	U
99-87-6	4-Isopropyltoluene	0.20	< 0.20	U
104-51-8	n-Butylbenzene	0.20	< 0.20	U
120-82-1	1,2,4-Trichlorobenzene	0.50	< 0.50	U
91-20-3	Naphthalene	0.50	< 0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	< 0.50	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	98.3%
d8-Toluene	97.5%
Bromofluorobenzene	96.6%
d4-1,2-Dichlorobenzene	100%

2-Chloroethylvinylether is an acid labile compound and may not be recovered from an acid preserved sample.

EPA SW-846 indicates that vinyl chloride and styrene may degrade in the presence of acid preservative.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140324LC68D-1**
Page 1 of 2 **SAMPLE**

Lab Sample ID: YE79N
LIMS ID: 14-5881
Matrix: Water
Data Release Authorized:
Reported: 04/08/14

QC Report No: YE79-Joint Base Lewis McChord
Project: Log Ram
Date Sampled: 03/24/14
Date Received: 03/28/14

Instrument/Analyst: NT2/PAB
Date Analyzed: 04/01/14 19:42

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	LOQ	Result	Q
74-87-3	Chloromethane	0.50	< 0.50	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.20	< 0.20	U
75-00-3	Chloroethane	0.20	< 0.20	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	**Acetone**	**5.0**	**6.0**	
75-15-0	Carbon Disulfide	0.20	< 0.20	U
75-35-4	1,1-Dichloroethene	0.20	< 0.20	U
75-34-3	1,1-Dichloroethane	0.20	< 0.20	U
156-60-5	trans-1,2-Dichloroethene	0.20	< 0.20	U
156-59-2	cis-1,2-Dichloroethene	0.20	< 0.20	U
67-66-3	Chloroform	0.20	< 0.20	U
107-06-2	1,2-Dichloroethane	0.20	< 0.20	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	0.20	< 0.20	U
56-23-5	Carbon Tetrachloride	0.20	< 0.20	U
108-05-4	Vinyl Acetate	0.20	< 0.20	U
75-27-4	Bromodichloromethane	0.20	< 0.20	U
78-87-5	1,2-Dichloropropane	0.20	< 0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	< 0.20	U
79-01-6	Trichloroethene	0.20	< 0.20	U
124-48-1	Dibromochloromethane	0.20	< 0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	< 0.20	U
71-43-2	Benzene	0.20	< 0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	< 0.20	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.20	< 0.20	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.20	< 0.20	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	< 0.20	U
108-88-3	Toluene	0.20	< 0.20	U
108-90-7	Chlorobenzene	0.20	< 0.20	U
100-41-4	Ethylbenzene	0.20	< 0.20	U
100-42-5	Styrene	0.20	< 0.20	U
75-69-4	Trichlorofluoromethane	0.20	< 0.20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.20	< 0.20	U
179601-23-1	m,p-Xylene	0.40	< 0.40	U
95-47-6	o-Xylene	0.20	< 0.20	U
95-50-1	1,2-Dichlorobenzene	0.20	< 0.20	U
541-73-1	1,3-Dichlorobenzene	0.20	< 0.20	U
106-46-7	1,4-Dichlorobenzene	0.20	< 0.20	U

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140324LC68D-1**
 SAMPLE

Lab Sample ID: YE79N
LIMS ID: 14-5881
Matrix: Water
Date Analyzed: 04/01/14 19:42

QC Report No: YE79-Joint Base Lewis McChord
Project: Log Ram

CAS Number	Analyte	LOQ	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Iodomethane	1.0	< 1.0	U
74-96-4	Bromoethane	0.20	< 0.20	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.20	< 0.20	U
74-95-3	Dibromomethane	0.20	< 0.20	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	< 0.20	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	< 0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	< 0.50	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.20	< 0.20	U
95-63-6	1,2,4-Trimethylbenzene	0.20	< 0.20	U
87-68-3	Hexachlorobutadiene	0.50	< 0.50	U
106-93-4	1,2-Dibromoethane	0.20	< 0.20	U
74-97-5	Bromochloromethane	0.20	< 0.20	U
594-20-7	2,2-Dichloropropane	0.20	< 0.20	U
142-28-9	1,3-Dichloropropane	0.20	< 0.20	U
98-82-8	Isopropylbenzene	0.20	< 0.20	U
103-65-1	n-Propylbenzene	0.20	< 0.20	U
108-86-1	Bromobenzene	0.20	< 0.20	U
95-49-8	2-Chlorotoluene	0.20	< 0.20	U
106-43-4	4-Chlorotoluene	0.20	< 0.20	U
98-06-6	tert-Butylbenzene	0.20	< 0.20	U
135-98-8	sec-Butylbenzene	0.20	< 0.20	U
99-87-6	4-Isopropyltoluene	0.20	< 0.20	U
104-51-8	n-Butylbenzene	0.20	< 0.20	U
120-82-1	1,2,4-Trichlorobenzene	0.50	< 0.50	U
91-20-3	Naphthalene	0.50	< 0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	< 0.50	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	98.5%
d8-Toluene	99.2%
Bromofluorobenzene	92.8%
d4-1,2-Dichlorobenzene	100%

2-Chloroethylvinylether is an acid labile compound and may not be recovered from an acid preserved sample.

EPA SW-846 indicates that vinyl chloride and styrene may degrade in the presence of acid preservative.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140325LC69D-1**
Page 1 of 2 **SAMPLE**

Lab Sample ID: YE79O
LIMS ID: 14-5882
Matrix: Water
Data Release Authorized:
Reported: 04/08/14

QC Report No: YE79-Joint Base Lewis McChord
Project: Log Ram
Date Sampled: 03/25/14
Date Received: 03/28/14

Instrument/Analyst: NT2/PAB
Date Analyzed: 04/01/14 20:09

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	LOQ	Result	Q
74-87-3	Chloromethane	0.50	< 0.50	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.20	< 0.20	U
75-00-3	Chloroethane	0.20	< 0.20	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	**Acetone**	**5.0**	**11**	
75-15-0	Carbon Disulfide	0.20	< 0.20	U
75-35-4	1,1-Dichloroethene	0.20	< 0.20	U
75-34-3	1,1-Dichloroethane	0.20	< 0.20	U
156-60-5	trans-1,2-Dichloroethene	0.20	< 0.20	U
156-59-2	**cis-1,2-Dichloroethene**	**0.20**	**1.1**	
67-66-3	Chloroform	0.20	< 0.20	U
107-06-2	1,2-Dichloroethane	0.20	< 0.20	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	0.20	< 0.20	U
56-23-5	Carbon Tetrachloride	0.20	< 0.20	U
108-05-4	Vinyl Acetate	0.20	< 0.20	U
75-27-4	Bromodichloromethane	0.20	< 0.20	U
78-87-5	1,2-Dichloropropane	0.20	< 0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	< 0.20	U
79-01-6	**Trichloroethene**	**0.20**	**110**	**E**
124-48-1	Dibromochloromethane	0.20	< 0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	< 0.20	U
71-43-2	Benzene	0.20	< 0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	< 0.20	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.20	< 0.20	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.20	< 0.20	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	< 0.20	U
108-88-3	Toluene	0.20	< 0.20	U
108-90-7	Chlorobenzene	0.20	< 0.20	U
100-41-4	Ethylbenzene	0.20	< 0.20	U
100-42-5	Styrene	0.20	< 0.20	U
75-69-4	Trichlorofluoromethane	0.20	< 0.20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.20	< 0.20	U
179601-23-1	m,p-Xylene	0.40	< 0.40	U
95-47-6	o-Xylene	0.20	< 0.20	U
95-50-1	1,2-Dichlorobenzene	0.20	< 0.20	U
541-73-1	1,3-Dichlorobenzene	0.20	< 0.20	U
106-46-7	1,4-Dichlorobenzene	0.20	< 0.20	U

Lab Sample ID: YE790 QC Report No: YE79-Joint Base Lewis McChord
LIMS ID: 14-5882 Project: Log Ram
Matrix: Water
Date Analyzed: 04/01/14 20:09

CAS Number	Analyte	LOQ	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Iodomethane	1.0	< 1.0	U
74-96-4	Bromoethane	0.20	< 0.20	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.20	< 0.20	U
74-95-3	Dibromomethane	0.20	< 0.20	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	< 0.20	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	< 0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	< 0.50	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.20	< 0.20	U
95-63-6	1,2,4-Trimethylbenzene	0.20	< 0.20	U
87-68-3	Hexachlorobutadiene	0.50	< 0.50	U
106-93-4	1,2-Dibromoethane	0.20	< 0.20	U
74-97-5	Bromochloromethane	0.20	< 0.20	U
594-20-7	2,2-Dichloropropane	0.20	< 0.20	U
142-28-9	1,3-Dichloropropane	0.20	< 0.20	U
98-82-8	Isopropylbenzene	0.20	< 0.20	U
103-65-1	n-Propylbenzene	0.20	< 0.20	U
108-86-1	Bromobenzene	0.20	< 0.20	U
95-49-8	2-Chlorotoluene	0.20	< 0.20	U
106-43-4	4-Chlorotoluene	0.20	< 0.20	U
98-06-6	tert-Butylbenzene	0.20	< 0.20	U
135-98-8	sec-Butylbenzene	0.20	< 0.20	U
99-87-6	4-Isopropyltoluene	0.20	< 0.20	U
104-51-8	n-Butylbenzene	0.20	< 0.20	U
120-82-1	1,2,4-Trichlorobenzene	0.50	< 0.50	U
91-20-3	Naphthalene	0.50	< 0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	< 0.50	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	99.1%
d8-Toluene	97.1%
Bromofluorobenzene	93.3%
d4-1,2-Dichlorobenzene	101%

2-Chloroethylvinylether is an acid labile compound and may not be recovered from an acid preserved sample.

EPA SW-846 indicates that vinyl chloride and styrene may degrade in the presence of acid preservative.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140325LC69D-1**
 DILUTION

Lab Sample ID: YE790
LIMS ID: 14-5882
Matrix: Water
Data Release Authorized:
Reported: 04/08/14

QC Report No: YE79-Joint Base Lewis McChord
Project: Log Ram
Date Sampled: 03/25/14
Date Received: 03/28/14

Instrument/Analyst: NT2/PAB
Date Analyzed: 04/02/14 22:40

Sample Amount: 2.00 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	LOQ	Result	Q
74-87-3	Chloromethane	2.5	< 2.5	U
74-83-9	Bromomethane	5.0	< 5.0	U
75-01-4	Vinyl Chloride	1.0	< 1.0	U
75-00-3	Chloroethane	1.0	< 1.0	U
75-09-2	Methylene Chloride	5.0	< 5.0	U
67-64-1	Acetone	25	< 25	U
75-15-0	Carbon Disulfide	1.0	< 1.0	U
75-35-4	1,1-Dichloroethene	1.0	< 1.0	U
75-34-3	1,1-Dichloroethane	1.0	< 1.0	U
156-60-5	trans-1,2-Dichloroethene	1.0	< 1.0	U
156-59-2	**cis-1,2-Dichloroethene**	**1.0**	**1.4**	
67-66-3	Chloroform	1.0	< 1.0	U
107-06-2	1,2-Dichloroethane	1.0	< 1.0	U
78-93-3	2-Butanone	25	< 25	U
71-55-6	1,1,1-Trichloroethane	1.0	< 1.0	U
56-23-5	Carbon Tetrachloride	1.0	< 1.0	U
108-05-4	Vinyl Acetate	1.0	< 1.0	U
75-27-4	Bromodichloromethane	1.0	< 1.0	U
78-87-5	1,2-Dichloropropane	1.0	< 1.0	U
10061-01-5	cis-1,3-Dichloropropene	1.0	< 1.0	U
79-01-6	**Trichloroethene**	**1.0**	**120**	
124-48-1	Dibromochloromethane	1.0	< 1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	< 1.0	U
71-43-2	Benzene	1.0	< 1.0	U
10061-02-6	trans-1,3-Dichloropropene	1.0	< 1.0	U
110-75-8	2-Chloroethylvinylether	5.0	< 5.0	U
75-25-2	Bromoform	1.0	< 1.0	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	25	< 25	U
591-78-6	2-Hexanone	25	< 25	U
127-18-4	Tetrachloroethene	1.0	< 1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	< 1.0	U
108-88-3	Toluene	1.0	< 1.0	U
108-90-7	Chlorobenzene	1.0	< 1.0	U
100-41-4	Ethylbenzene	1.0	< 1.0	U
100-42-5	Styrene	1.0	< 1.0	U
75-69-4	Trichlorofluoromethane	1.0	< 1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	< 1.0	U
179601-23-1	m,p-Xylene	2.0	< 2.0	U
95-47-6	o-Xylene	1.0	< 1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	< 1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	< 1.0	U
106-46-7	1,4-Dichlorobenzene	1.0	< 1.0	U

Lab Sample ID: YE79O
LIMS ID: 14-5882
Matrix: Water
Date Analyzed: 04/02/14 22:40

QC Report No: YE79-Joint Base Lewis McChord
Project: Log Ram

CAS Number	Analyte	LOQ	Result	Q
107-02-8	Acrolein	25	< 25	U
74-88-4	Iodomethane	5.0	< 5.0	U
74-96-4	Bromoethane	1.0	< 1.0	U
107-13-1	Acrylonitrile	5.0	< 5.0	U
563-58-6	1,1-Dichloropropene	1.0	< 1.0	U
74-95-3	Dibromomethane	1.0	< 1.0	U
630-20-6	1,1,1,2-Tetrachloroethane	1.0	< 1.0	U
96-12-8	1,2-Dibromo-3-chloropropane	2.5	< 2.5	U
96-18-4	1,2,3-Trichloropropane	2.5	< 2.5	U
110-57-6	trans-1,4-Dichloro-2-butene	5.0	< 5.0	U
108-67-8	1,3,5-Trimethylbenzene	1.0	< 1.0	U
95-63-6	1,2,4-Trimethylbenzene	1.0	< 1.0	U
87-68-3	Hexachlorobutadiene	2.5	< 2.5	U
106-93-4	1,2-Dibromoethane	1.0	< 1.0	U
74-97-5	Bromochloromethane	1.0	< 1.0	U
594-20-7	2,2-Dichloropropane	1.0	< 1.0	U
142-28-9	1,3-Dichloropropane	1.0	< 1.0	U
98-82-8	Isopropylbenzene	1.0	< 1.0	U
103-65-1	n-Propylbenzene	1.0	< 1.0	U
108-86-1	Bromobenzene	1.0	< 1.0	U
95-49-8	2-Chlorotoluene	1.0	< 1.0	U
106-43-4	4-Chlorotoluene	1.0	< 1.0	U
98-06-6	tert-Butylbenzene	1.0	< 1.0	U
135-98-8	sec-Butylbenzene	1.0	< 1.0	U
99-87-6	4-Isopropyltoluene	1.0	< 1.0	U
104-51-8	n-Butylbenzene	1.0	< 1.0	U
120-82-1	1,2,4-Trichlorobenzene	2.5	< 2.5	U
91-20-3	Naphthalene	2.5	< 2.5	U
87-61-6	1,2,3-Trichlorobenzene	2.5	< 2.5	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	103%
d8-Toluene	94.0%
Bromofluorobenzene	95.0%
d4-1,2-Dichlorobenzene	100%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140324LC218-1**
Page 1 of 2 **SAMPLE**

Lab Sample ID: YE79P
LIMS ID: 14-5883
Matrix: Water
Data Release Authorized:
Reported: 04/08/14

QC Report No: YE79-Joint Base Lewis McChord
Project: Log Ram
Date Sampled: 03/24/14
Date Received: 03/28/14

Instrument/Analyst: NT2/PAB
Date Analyzed: 04/01/14 20:36

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	LOQ	Result	Q
74-87-3	Chloromethane	0.50	< 0.50	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.20	< 0.20	U
75-00-3	Chloroethane	0.20	< 0.20	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	**Acetone**	**5.0**	**8.8**	
75-15-0	Carbon Disulfide	0.20	< 0.20	U
75-35-4	1,1-Dichloroethene	0.20	< 0.20	U
75-34-3	1,1-Dichloroethane	0.20	< 0.20	U
156-60-5	trans-1,2-Dichloroethene	0.20	< 0.20	U
156-59-2	**cis-1,2-Dichloroethene**	**0.20**	**0.42**	
67-66-3	Chloroform	0.20	< 0.20	U
107-06-2	1,2-Dichloroethane	0.20	< 0.20	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	0.20	< 0.20	U
56-23-5	Carbon Tetrachloride	0.20	< 0.20	U
108-05-4	Vinyl Acetate	0.20	< 0.20	U
75-27-4	Bromodichloromethane	0.20	< 0.20	U
78-87-5	1,2-Dichloropropane	0.20	< 0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	< 0.20	U
79-01-6	**Trichloroethene**	**0.20**	**21**	
124-48-1	Dibromochloromethane	0.20	< 0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	< 0.20	U
71-43-2	Benzene	0.20	< 0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	< 0.20	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.20	< 0.20	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.20	< 0.20	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	< 0.20	U
108-88-3	Toluene	0.20	< 0.20	U
108-90-7	Chlorobenzene	0.20	< 0.20	U
100-41-4	Ethylbenzene	0.20	< 0.20	U
100-42-5	Styrene	0.20	< 0.20	U
75-69-4	Trichlorofluoromethane	0.20	< 0.20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.20	< 0.20	U
179601-23-1	m,p-Xylene	0.40	< 0.40	U
95-47-6	o-Xylene	0.20	< 0.20	U
95-50-1	1,2-Dichlorobenzene	0.20	< 0.20	U
541-73-1	1,3-Dichlorobenzene	0.20	< 0.20	U
106-46-7	1,4-Dichlorobenzene	0.20	< 0.20	U

Lab Sample ID: YE79P QC Report No: YE79-Joint Base Lewis McChord
LIMS ID: 14-5883 Project: Log Ram
Matrix: Water
Date Analyzed: 04/01/14 20:36

CAS Number	Analyte	LOQ	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Iodomethane	1.0	< 1.0	U
74-96-4	Bromoethane	0.20	< 0.20	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.20	< 0.20	U
74-95-3	Dibromomethane	0.20	< 0.20	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	< 0.20	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	< 0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	< 0.50	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.20	< 0.20	U
95-63-6	1,2,4-Trimethylbenzene	0.20	< 0.20	U
87-68-3	Hexachlorobutadiene	0.50	< 0.50	U
106-93-4	1,2-Dibromoethane	0.20	< 0.20	U
74-97-5	Bromochloromethane	0.20	< 0.20	U
594-20-7	2,2-Dichloropropane	0.20	< 0.20	U
142-28-9	1,3-Dichloropropane	0.20	< 0.20	U
98-82-8	Isopropylbenzene	0.20	< 0.20	U
103-65-1	n-Propylbenzene	0.20	< 0.20	U
108-86-1	Bromobenzene	0.20	< 0.20	U
95-49-8	2-Chlorotoluene	0.20	< 0.20	U
106-43-4	4-Chlorotoluene	0.20	< 0.20	U
98-06-6	tert-Butylbenzene	0.20	< 0.20	U
135-98-8	sec-Butylbenzene	0.20	< 0.20	U
99-87-6	4-Isopropyltoluene	0.20	< 0.20	U
104-51-8	n-Butylbenzene	0.20	< 0.20	U
120-82-1	1,2,4-Trichlorobenzene	0.50	< 0.50	U
91-20-3	Naphthalene	0.50	< 0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	< 0.50	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	104%
d8-Toluene	99.5%
Bromofluorobenzene	99.0%
d4-1,2-Dichlorobenzene	99.1%

2-Chloroethylvinylether is an acid labile compound and may not be recovered from an acid preserved sample.

EPA SW-846 indicates that vinyl chloride and styrene may degrade in the presence of acid preservative.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140324LC222-1**
Page 1 of 2 **SAMPLE**

Lab Sample ID: YE79Q
LIMS ID: 14-5884
Matrix: Water
Data Release Authorized:
Reported: 04/08/14

QC Report No: YE79-Joint Base Lewis McChord
Project: Log Ram
Date Sampled: 03/24/14
Date Received: 03/28/14

Instrument/Analyst: NT2/PAB
Date Analyzed: 04/01/14 21:02

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	LOQ	Result	Q
74-87-3	Chloromethane	0.50	< 0.50	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.20	< 0.20	U
75-00-3	Chloroethane	0.20	< 0.20	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	**Acetone**	**5.0**	**7.0**	
75-15-0	Carbon Disulfide	0.20	< 0.20	U
75-35-4	1,1-Dichloroethene	0.20	< 0.20	U
75-34-3	1,1-Dichloroethane	0.20	< 0.20	U
156-60-5	trans-1,2-Dichloroethene	0.20	< 0.20	U
156-59-2	**cis-1,2-Dichloroethene**	**0.20**	**0.46**	
67-66-3	Chloroform	0.20	< 0.20	U
107-06-2	1,2-Dichloroethane	0.20	< 0.20	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	0.20	< 0.20	U
56-23-5	Carbon Tetrachloride	0.20	< 0.20	U
108-05-4	Vinyl Acetate	0.20	< 0.20	U
75-27-4	Bromodichloromethane	0.20	< 0.20	U
78-87-5	1,2-Dichloropropane	0.20	< 0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	< 0.20	U
79-01-6	**Trichloroethene**	**0.20**	**9.2**	
124-48-1	Dibromochloromethane	0.20	< 0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	< 0.20	U
71-43-2	Benzene	0.20	< 0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	< 0.20	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.20	< 0.20	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.20	< 0.20	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	< 0.20	U
108-88-3	Toluene	0.20	< 0.20	U
108-90-7	Chlorobenzene	0.20	< 0.20	U
100-41-4	Ethylbenzene	0.20	< 0.20	U
100-42-5	Styrene	0.20	< 0.20	U
75-69-4	Trichlorofluoromethane	0.20	< 0.20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.20	< 0.20	U
179601-23-1	m,p-Xylene	0.40	< 0.40	U
95-47-6	o-Xylene	0.20	< 0.20	U
95-50-1	1,2-Dichlorobenzene	0.20	< 0.20	U
541-73-1	1,3-Dichlorobenzene	0.20	< 0.20	U
106-46-7	1,4-Dichlorobenzene	0.20	< 0.20	U

Lab Sample ID: YE79Q QC Report No: YE79-Joint Base Lewis McChord
LIMS ID: 14-5884 Project: Log Ram
Matrix: Water
Date Analyzed: 04/01/14 21:02

CAS Number	Analyte	LOQ	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Iodomethane	1.0	< 1.0	U
74-96-4	Bromoethane	0.20	< 0.20	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.20	< 0.20	U
74-95-3	Dibromomethane	0.20	< 0.20	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	< 0.20	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	< 0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	< 0.50	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.20	< 0.20	U
95-63-6	1,2,4-Trimethylbenzene	0.20	< 0.20	U
87-68-3	Hexachlorobutadiene	0.50	< 0.50	U
106-93-4	1,2-Dibromoethane	0.20	< 0.20	U
74-97-5	Bromochloromethane	0.20	< 0.20	U
594-20-7	2,2-Dichloropropane	0.20	< 0.20	U
142-28-9	1,3-Dichloropropane	0.20	< 0.20	U
98-82-8	Isopropylbenzene	0.20	< 0.20	U
103-65-1	n-Propylbenzene	0.20	< 0.20	U
108-86-1	Bromobenzene	0.20	< 0.20	U
95-49-8	2-Chlorotoluene	0.20	< 0.20	U
106-43-4	4-Chlorotoluene	0.20	< 0.20	U
98-06-6	tert-Butylbenzene	0.20	< 0.20	U
135-98-8	sec-Butylbenzene	0.20	< 0.20	U
99-87-6	4-Isopropyltoluene	0.20	< 0.20	U
104-51-8	n-Butylbenzene	0.20	< 0.20	U
120-82-1	1,2,4-Trichlorobenzene	0.50	< 0.50	U
91-20-3	Naphthalene	0.50	< 0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	< 0.50	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	99.3%
d8-Toluene	96.1%
Bromofluorobenzene	98.7%
d4-1,2-Dichlorobenzene	102%

2-Chloroethylvinylether is an acid labile compound and may not be recovered from an acid preserved sample.

EPA SW-846 indicates that vinyl chloride and styrene may degrade in the presence of acid preservative.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140324LC223-1**
Page 1 of 2 **SAMPLE**

Lab Sample ID: YE79R
LIMS ID: 14-5885
Matrix: Water
Data Release Authorized:
Reported: 04/08/14

QC Report No: YE79-Joint Base Lewis McChord
Project: Log Ram
Date Sampled: 03/24/14
Date Received: 03/28/14

Instrument/Analyst: NT2/PAB
Date Analyzed: 04/01/14 21:29

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	LOQ	Result	Q
74-87-3	Chloromethane	0.50	< 0.50	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.20	< 0.20	U
75-00-3	Chloroethane	0.20	< 0.20	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	**Acetone**	**5.0**	**12**	
75-15-0	Carbon Disulfide	0.20	< 0.20	U
75-35-4	1,1-Dichloroethene	0.20	< 0.20	U
75-34-3	1,1-Dichloroethane	0.20	< 0.20	U
156-60-5	trans-1,2-Dichloroethene	0.20	< 0.20	U
156-59-2	cis-1,2-Dichloroethene	0.20	< 0.20	U
67-66-3	Chloroform	0.20	< 0.20	U
107-06-2	1,2-Dichloroethane	0.20	< 0.20	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	0.20	< 0.20	U
56-23-5	Carbon Tetrachloride	0.20	< 0.20	U
108-05-4	Vinyl Acetate	0.20	< 0.20	U
75-27-4	Bromodichloromethane	0.20	< 0.20	U
78-87-5	1,2-Dichloropropane	0.20	< 0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	< 0.20	U
79-01-6	**Trichloroethene**	**0.20**	**6.3**	
124-48-1	Dibromochloromethane	0.20	< 0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	< 0.20	U
71-43-2	Benzene	0.20	< 0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	< 0.20	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.20	< 0.20	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.20	< 0.20	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	< 0.20	U
108-88-3	Toluene	0.20	< 0.20	U
108-90-7	Chlorobenzene	0.20	< 0.20	U
100-41-4	Ethylbenzene	0.20	< 0.20	U
100-42-5	Styrene	0.20	< 0.20	U
75-69-4	Trichlorofluoromethane	0.20	< 0.20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.20	< 0.20	U
179601-23-1	m,p-Xylene	0.40	< 0.40	U
95-47-6	o-Xylene	0.20	< 0.20	U
95-50-1	1,2-Dichlorobenzene	0.20	< 0.20	U
541-73-1	1,3-Dichlorobenzene	0.20	< 0.20	U
106-46-7	1,4-Dichlorobenzene	0.20	< 0.20	U

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140324LC223-1**
 SAMPLE

Lab Sample ID: YE79R QC Report No: YE79-Joint Base Lewis McChord
LIMS ID: 14-5885 Project: Log Ram
Matrix: Water
Date Analyzed: 04/01/14 21:29

CAS Number	Analyte	LOQ	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Iodomethane	1.0	< 1.0	U
74-96-4	Bromoethane	0.20	< 0.20	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.20	< 0.20	U
74-95-3	Dibromomethane	0.20	< 0.20	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	< 0.20	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	< 0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	< 0.50	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.20	< 0.20	U
95-63-6	1,2,4-Trimethylbenzene	0.20	< 0.20	U
87-68-3	Hexachlorobutadiene	0.50	< 0.50	U
106-93-4	1,2-Dibromoethane	0.20	< 0.20	U
74-97-5	Bromochloromethane	0.20	< 0.20	U
594-20-7	2,2-Dichloropropane	0.20	< 0.20	U
142-28-9	1,3-Dichloropropane	0.20	< 0.20	U
98-82-8	Isopropylbenzene	0.20	< 0.20	U
103-65-1	n-Propylbenzene	0.20	< 0.20	U
108-86-1	Bromobenzene	0.20	< 0.20	U
95-49-8	2-Chlorotoluene	0.20	< 0.20	U
106-43-4	4-Chlorotoluene	0.20	< 0.20	U
98-06-6	tert-Butylbenzene	0.20	< 0.20	U
135-98-8	sec-Butylbenzene	0.20	< 0.20	U
99-87-6	4-Isopropyltoluene	0.20	< 0.20	U
104-51-8	n-Butylbenzene	0.20	< 0.20	U
120-82-1	1,2,4-Trichlorobenzene	0.50	< 0.50	U
91-20-3	Naphthalene	0.50	< 0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	< 0.50	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	97.0%
d8-Toluene	96.9%
Bromofluorobenzene	98.1%
d4-1,2-Dichlorobenzene	105%

2-Chloroethylvinylether is an acid labile compound and may not be recovered from an acid preserved sample.

EPA SW-846 indicates that vinyl chloride and styrene may degrade in the presence of acid preservative.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140324LC224-1**
Page 1 of 2 **SAMPLE**

Lab Sample ID: YE79S
LIMS ID: 14-5886
Matrix: Water
Data Release Authorized:
Reported: 04/08/14

QC Report No: YE79-Joint Base Lewis McChord
Project: Log Ram
Date Sampled: 03/24/14
Date Received: 03/28/14

Instrument/Analyst: NT2/PAB
Date Analyzed: 04/01/14 21:55

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	LOQ	Result	Q
74-87-3	Chloromethane	0.50	< 0.50	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.20	< 0.20	U
75-00-3	Chloroethane	0.20	< 0.20	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	**Acetone**	**5.0**	**10**	
75-15-0	Carbon Disulfide	0.20	< 0.20	U
75-35-4	1,1-Dichloroethene	0.20	< 0.20	U
75-34-3	1,1-Dichloroethane	0.20	< 0.20	U
156-60-5	trans-1,2-Dichloroethene	0.20	< 0.20	U
156-59-2	**cis-1,2-Dichloroethene**	**0.20**	**0.26**	
67-66-3	Chloroform	0.20	< 0.20	U
107-06-2	1,2-Dichloroethane	0.20	< 0.20	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	0.20	< 0.20	U
56-23-5	Carbon Tetrachloride	0.20	< 0.20	U
108-05-4	Vinyl Acetate	0.20	< 0.20	U
75-27-4	Bromodichloromethane	0.20	< 0.20	U
78-87-5	1,2-Dichloropropane	0.20	< 0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	< 0.20	U
79-01-6	**Trichloroethene**	**0.20**	**12**	
124-48-1	Dibromochloromethane	0.20	< 0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	< 0.20	U
71-43-2	Benzene	0.20	< 0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	< 0.20	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.20	< 0.20	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.20	< 0.20	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	< 0.20	U
108-88-3	Toluene	0.20	< 0.20	U
108-90-7	Chlorobenzene	0.20	< 0.20	U
100-41-4	Ethylbenzene	0.20	< 0.20	U
100-42-5	Styrene	0.20	< 0.20	U
75-69-4	Trichlorofluoromethane	0.20	< 0.20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.20	< 0.20	U
179601-23-1	m,p-Xylene	0.40	< 0.40	U
95-47-6	o-Xylene	0.20	< 0.20	U
95-50-1	1,2-Dichlorobenzene	0.20	< 0.20	U
541-73-1	1,3-Dichlorobenzene	0.20	< 0.20	U
106-46-7	1,4-Dichlorobenzene	0.20	< 0.20	U

Lab Sample ID: YE79S QC Report No: YE79-Joint Base Lewis McChord
LIMS ID: 14-5886 Project: Log Ram
Matrix: Water
Date Analyzed: 04/01/14 21:55

CAS Number	Analyte	LOQ	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Iodomethane	1.0	< 1.0	U
74-96-4	Bromoethane	0.20	< 0.20	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.20	< 0.20	U
74-95-3	Dibromomethane	0.20	< 0.20	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	< 0.20	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	< 0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	< 0.50	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.20	< 0.20	U
95-63-6	1,2,4-Trimethylbenzene	0.20	< 0.20	U
87-68-3	Hexachlorobutadiene	0.50	< 0.50	U
106-93-4	1,2-Dibromoethane	0.20	< 0.20	U
74-97-5	Bromochloromethane	0.20	< 0.20	U
594-20-7	2,2-Dichloropropane	0.20	< 0.20	U
142-28-9	1,3-Dichloropropane	0.20	< 0.20	U
98-82-8	Isopropylbenzene	0.20	< 0.20	U
103-65-1	n-Propylbenzene	0.20	< 0.20	U
108-86-1	Bromobenzene	0.20	< 0.20	U
95-49-8	2-Chlorotoluene	0.20	< 0.20	U
106-43-4	4-Chlorotoluene	0.20	< 0.20	U
98-06-6	tert-Butylbenzene	0.20	< 0.20	U
135-98-8	sec-Butylbenzene	0.20	< 0.20	U
99-87-6	4-Isopropyltoluene	0.20	< 0.20	U
104-51-8	n-Butylbenzene	0.20	< 0.20	U
120-82-1	1,2,4-Trichlorobenzene	0.50	< 0.50	U
91-20-3	Naphthalene	0.50	< 0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	< 0.50	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	96.9%
d8-Toluene	96.7%
Bromofluorobenzene	97.2%
d4-1,2-Dichlorobenzene	100%

2-Chloroethylvinylether is an acid labile compound and may not be recovered from an acid preserved sample.

EPA SW-846 indicates that vinyl chloride and styrene may degrade in the presence of acid preservative.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140324FLI-1**
Page 1 of 2 **SAMPLE**

Lab Sample ID: YE79T QC Report No: YE79-Joint Base Lewis McChord
LIMS ID: 14-5887 Project: Log Ram
Matrix: Water
Data Release Authorized: MW Date Sampled: 03/24/14
Reported: 04/08/14 Date Received: 03/28/14

Instrument/Analyst: NT2/PAB Sample Amount: 10.0 mL
Date Analyzed: 04/01/14 22:21 Purge Volume: 10.0 mL

CAS Number	Analyte	LOQ	Result	Q
74-87-3	Chloromethane	0.50	< 0.50	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.20	< 0.20	U
75-00-3	Chloroethane	0.20	< 0.20	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	**Acetone**	**5.0**	**6.6**	
75-15-0	Carbon Disulfide	0.20	< 0.20	U
75-35-4	1,1-Dichloroethene	0.20	< 0.20	U
75-34-3	1,1-Dichloroethane	0.20	< 0.20	U
156-60-5	trans-1,2-Dichloroethene	0.20	< 0.20	U
156-59-2	**cis-1,2-Dichloroethene**	**0.20**	**0.22**	
67-66-3	Chloroform	0.20	< 0.20	U
107-06-2	1,2-Dichloroethane	0.20	< 0.20	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	0.20	< 0.20	U
56-23-5	Carbon Tetrachloride	0.20	< 0.20	U
108-05-4	Vinyl Acetate	0.20	< 0.20	U
75-27-4	Bromodichloromethane	0.20	< 0.20	U
78-87-5	1,2-Dichloropropane	0.20	< 0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	< 0.20	U
79-01-6	**Trichloroethene**	**0.20**	**9.1**	
124-48-1	Dibromochloromethane	0.20	< 0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	< 0.20	U
71-43-2	Benzene	0.20	< 0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	< 0.20	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.20	< 0.20	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.20	< 0.20	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	< 0.20	U
108-88-3	Toluene	0.20	< 0.20	U
108-90-7	Chlorobenzene	0.20	< 0.20	U
100-41-4	Ethylbenzene	0.20	< 0.20	U
100-42-5	Styrene	0.20	< 0.20	U
75-69-4	Trichlorofluoromethane	0.20	< 0.20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.20	< 0.20	U
179601-23-1	m,p-Xylene	0.40	< 0.40	U
95-47-6	o-Xylene	0.20	< 0.20	U
95-50-1	1,2-Dichlorobenzene	0.20	< 0.20	U
541-73-1	1,3-Dichlorobenzene	0.20	< 0.20	U
106-46-7	1,4-Dichlorobenzene	0.20	< 0.20	U

Lab Sample ID: YE79T QC Report No: YE79-Joint Base Lewis McChord
LIMS ID: 14-5887 Project: Log Ram
Matrix: Water
Date Analyzed: 04/01/14 22:21

CAS Number	Analyte	LOQ	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Iodomethane	1.0	< 1.0	U
74-96-4	Bromoethane	0.20	< 0.20	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.20	< 0.20	U
74-95-3	Dibromomethane	0.20	< 0.20	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	< 0.20	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	< 0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	< 0.50	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.20	< 0.20	U
95-63-6	1,2,4-Trimethylbenzene	0.20	< 0.20	U
87-68-3	Hexachlorobutadiene	0.50	< 0.50	U
106-93-4	1,2-Dibromoethane	0.20	< 0.20	U
74-97-5	Bromochloromethane	0.20	< 0.20	U
594-20-7	2,2-Dichloropropane	0.20	< 0.20	U
142-28-9	1,3-Dichloropropane	0.20	< 0.20	U
98-82-8	Isopropylbenzene	0.20	< 0.20	U
103-65-1	n-Propylbenzene	0.20	< 0.20	U
108-86-1	Bromobenzene	0.20	< 0.20	U
95-49-8	2-Chlorotoluene	0.20	< 0.20	U
106-43-4	4-Chlorotoluene	0.20	< 0.20	U
98-06-6	tert-Butylbenzene	0.20	< 0.20	U
135-98-8	sec-Butylbenzene	0.20	< 0.20	U
99-87-6	4-Isopropyltoluene	0.20	< 0.20	U
104-51-8	n-Butylbenzene	0.20	< 0.20	U
120-82-1	1,2,4-Trichlorobenzene	0.50	< 0.50	U
91-20-3	Naphthalene	0.50	< 0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	< 0.50	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	101%
d8-Toluene	94.8%
Bromofluorobenzene	96.2%
d4-1,2-Dichlorobenzene	100%

2-Chloroethylvinylether is an acid labile compound and may not be recovered from an acid preserved sample.

EPA SW-846 indicates that vinyl chloride and styrene may degrade in the presence of acid preservative.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: MB-040114A**
 METHOD BLANK

Lab Sample ID: MB-040114A
LIMS ID: 14-5868
Matrix: Water
Data Release Authorized: MW
Reported: 04/08/14

QC Report No: YE79-Joint Base Lewis McChord
Project: Log Ram
Date Sampled: NA
Date Received: NA

Instrument/Analyst: NT2/PAB
Date Analyzed: 04/01/14 12:58

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	LOQ	Result	Q
74-87-3	Chloromethane	0.50	< 0.50	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.20	< 0.20	U
75-00-3	Chloroethane	0.20	< 0.20	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	Acetone	5.0	< 5.0	U
75-15-0	Carbon Disulfide	0.20	< 0.20	U
75-35-4	1,1-Dichloroethene	0.20	< 0.20	U
75-34-3	1,1-Dichloroethane	0.20	< 0.20	U
156-60-5	trans-1,2-Dichloroethene	0.20	< 0.20	U
156-59-2	cis-1,2-Dichloroethene	0.20	< 0.20	U
67-66-3	Chloroform	0.20	< 0.20	U
107-06-2	1,2-Dichloroethane	0.20	< 0.20	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	0.20	< 0.20	U
56-23-5	Carbon Tetrachloride	0.20	< 0.20	U
108-05-4	Vinyl Acetate	0.20	< 0.20	U
75-27-4	Bromodichloromethane	0.20	< 0.20	U
78-87-5	1,2-Dichloropropane	0.20	< 0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	< 0.20	U
79-01-6	Trichloroethene	0.20	< 0.20	U
124-48-1	Dibromochloromethane	0.20	< 0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	< 0.20	U
71-43-2	Benzene	0.20	< 0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	< 0.20	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.20	< 0.20	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.20	< 0.20	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	< 0.20	U
108-88-3	Toluene	0.20	< 0.20	U
108-90-7	Chlorobenzene	0.20	< 0.20	U
100-41-4	Ethylbenzene	0.20	< 0.20	U
100-42-5	Styrene	0.20	< 0.20	U
75-69-4	Trichlorofluoromethane	0.20	< 0.20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.20	< 0.20	U
179601-23-1	m,p-Xylene	0.40	< 0.40	U
95-47-6	o-Xylene	0.20	< 0.20	U
95-50-1	1,2-Dichlorobenzene	0.20	< 0.20	U
541-73-1	1,3-Dichlorobenzene	0.20	< 0.20	U
106-46-7	1,4-Dichlorobenzene	0.20	< 0.20	U

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: MB-040114A**
 METHOD BLANK

Lab Sample ID: MB-040114A QC Report No: YE79-Joint Base Lewis McChord
LIMS ID: 14-5868 Project: Log Ram
Matrix: Water
Date Analyzed: 04/01/14 12:58

CAS Number	Analyte	LOQ	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Iodomethane	1.0	< 1.0	U
74-96-4	Bromoethane	0.20	< 0.20	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.20	< 0.20	U
74-95-3	Dibromomethane	0.20	< 0.20	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	< 0.20	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	< 0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	< 0.50	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.20	< 0.20	U
95-63-6	1,2,4-Trimethylbenzene	0.20	< 0.20	U
87-68-3	Hexachlorobutadiene	0.50	< 0.50	U
106-93-4	1,2-Dibromoethane	0.20	< 0.20	U
74-97-5	Bromochloromethane	0.20	< 0.20	U
594-20-7	2,2-Dichloropropane	0.20	< 0.20	U
142-28-9	1,3-Dichloropropane	0.20	< 0.20	U
98-82-8	Isopropylbenzene	0.20	< 0.20	U
103-65-1	n-Propylbenzene	0.20	< 0.20	U
108-86-1	Bromobenzene	0.20	< 0.20	U
95-49-8	2-Chlorotoluene	0.20	< 0.20	U
106-43-4	4-Chlorotoluene	0.20	< 0.20	U
98-06-6	tert-Butylbenzene	0.20	< 0.20	U
135-98-8	sec-Butylbenzene	0.20	< 0.20	U
99-87-6	4-Isopropyltoluene	0.20	< 0.20	U
104-51-8	**n-Butylbenzene**	**0.20**	**0.22**	
120-82-1	1,2,4-Trichlorobenzene	0.50	< 0.50	U
91-20-3	Naphthalene	0.50	< 0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	< 0.50	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	96.8%
d8-Toluene	99.2%
Bromofluorobenzene	99.9%
d4-1,2-Dichlorobenzene	101%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: MB-040214A**
 METHOD BLANK

Lab Sample ID: MB-040214A QC Report No: YE79-Joint Base Lewis McChord
LIMS ID: 14-5876 Project: Log Ram
Matrix: Water
Data Release Authorized: Date Sampled: NA
Reported: 04/08/14 Date Received: NA

Instrument/Analyst: NT2/PAB Sample Amount: 10.0 mL
Date Analyzed: 04/02/14 15:02 Purge Volume: 10.0 mL

CAS Number	Analyte	LOQ	Result	Q
74-87-3	Chloromethane	0.50	< 0.50	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.20	< 0.20	U
75-00-3	Chloroethane	0.20	< 0.20	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	Acetone	5.0	< 5.0	U
75-15-0	Carbon Disulfide	0.20	< 0.20	U
75-35-4	1,1-Dichloroethene	0.20	< 0.20	U
75-34-3	1,1-Dichloroethane	0.20	< 0.20	U
156-60-5	trans-1,2-Dichloroethene	0.20	< 0.20	U
156-59-2	cis-1,2-Dichloroethene	0.20	< 0.20	U
67-66-3	Chloroform	0.20	< 0.20	U
107-06-2	1,2-Dichloroethane	0.20	< 0.20	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	0.20	< 0.20	U
56-23-5	Carbon Tetrachloride	0.20	< 0.20	U
108-05-4	Vinyl Acetate	0.20	< 0.20	U
75-27-4	Bromodichloromethane	0.20	< 0.20	U
78-87-5	1,2-Dichloropropane	0.20	< 0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	< 0.20	U
79-01-6	Trichloroethene	0.20	< 0.20	U
124-48-1	Dibromochloromethane	0.20	< 0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	< 0.20	U
71-43-2	Benzene	0.20	< 0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	< 0.20	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.20	< 0.20	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.20	< 0.20	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	< 0.20	U
108-88-3	Toluene	0.20	< 0.20	U
108-90-7	Chlorobenzene	0.20	< 0.20	U
100-41-4	Ethylbenzene	0.20	< 0.20	U
100-42-5	Styrene	0.20	< 0.20	U
75-69-4	Trichlorofluoromethane	0.20	< 0.20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.20	< 0.20	U
179601-23-1	m,p-Xylene	0.40	< 0.40	U
95-47-6	o-Xylene	0.20	< 0.20	U
95-50-1	1,2-Dichlorobenzene	0.20	< 0.20	U
541-73-1	1,3-Dichlorobenzene	0.20	< 0.20	U
106-46-7	1,4-Dichlorobenzene	0.20	< 0.20	U

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: MB-040214A**
 METHOD BLANK

Lab Sample ID: MB-040214A QC Report No: YE79-Joint Base Lewis McChord
LIMS ID: 14-5876 Project: Log Ram
Matrix: Water
Date Analyzed: 04/02/14 15:02

CAS Number	Analyte	LOQ	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Iodomethane	1.0	< 1.0	U
74-96-4	Bromoethane	0.20	< 0.20	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.20	< 0.20	U
74-95-3	Dibromomethane	0.20	< 0.20	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	< 0.20	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	< 0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	< 0.50	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.20	< 0.20	U
95-63-6	1,2,4-Trimethylbenzene	0.20	< 0.20	U
87-68-3	Hexachlorobutadiene	0.50	< 0.50	U
106-93-4	1,2-Dibromoethane	0.20	< 0.20	U
74-97-5	Bromochloromethane	0.20	< 0.20	U
594-20-7	2,2-Dichloropropane	0.20	< 0.20	U
142-28-9	1,3-Dichloropropane	0.20	< 0.20	U
98-82-8	Isopropylbenzene	0.20	< 0.20	U
103-65-1	n-Propylbenzene	0.20	< 0.20	U
108-86-1	Bromobenzene	0.20	< 0.20	U
95-49-8	2-Chlorotoluene	0.20	< 0.20	U
106-43-4	4-Chlorotoluene	0.20	< 0.20	U
98-06-6	tert-Butylbenzene	0.20	< 0.20	U
135-98-8	sec-Butylbenzene	0.20	< 0.20	U
99-87-6	4-Isopropyltoluene	0.20	< 0.20	U
104-51-8	n-Butylbenzene	0.20	< 0.20	U
120-82-1	1,2,4-Trichlorobenzene	0.50	< 0.50	U
91-20-3	Naphthalene	0.50	< 0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	< 0.50	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	100%
d8-Toluene	98.0%
Bromofluorobenzene	95.1%
d4-1,2-Dichlorobenzene	104%

ANALYTICAL RESOURCES INCORPORATED

VOA SURROGATE RECOVERY SUMMARY

Matrix: Water

QC Report No: YE79-Joint Base Lewis McChord
Project: Log Ram

ARI ID	Client ID	PV	DCE	TOL	BFB	DCB	TOT OUT
MB-040114A	Method Blank	10	96.8%	99.2%	99.9%	101%	0
LCS-040114A	Lab Control	10	95.7%	99.9%	102%	102%	0
LCSD-040114A	Lab Control Dup	10	97.2%	98.3%	101%	99.9%	0
YE79A	LGC140324DUP3-1	10	102%	96.4%	100%	98.0%	0
YE79B	LGC140325DUP4-1	10	100%	95.3%	96.6%	99.8%	0
YE79C	LGC140325DUP5-1	10	100%	98.7%	97.3%	100%	0
YE79D	LGC140325LC01-1	10	99.2%	99.0%	101%	98.6%	0
YE79E	LGC140324LC19A-1	10	98.6%	94.5%	95.9%	96.9%	0
YE79F	LGC140324LC20-1	10	101%	99.6%	94.3%	98.3%	0
YE79G	LGC140325LC27-1	10	103%	98.4%	98.3%	98.2%	0
YE79H	LGC140324LC34-1	10	99.5%	99.0%	91.5%	97.2%	0
MB-040214A	Method Blank	10	100%	98.0%	95.1%	104%	0
LCS-040214A	Lab Control	10	90.2%	99.1%	92.7%	102%	0
LCSD-040214A	Lab Control Dup	10	97.3%	98.4%	101%	102%	0
YE79I	LGC140325LC41A-1	10	102%	94.2%	99.6%	97.5%	0
YE79IDL	LGC140325LC41A-1	10	103%	94.1%	92.6%	98.5%	0
YE79J	LGC140325LC47D-1	10	95.9%	96.4%	94.7%	99.4%	0
YE79K	LGC140325LC50D-1	10	97.4%	99.3%	97.5%	99.6%	0
YE79L	LGC140324LC53-1	10	99.4%	96.7%	97.4%	101%	0
YE79LDL	LGC140324LC53-1	10	95.7%	93.6%	95.0%	99.3%	0
YE79M	LGC140325LC57-1	10	98.3%	97.5%	96.6%	100%	0
YE79N	LGC140324LC68D-1	10	98.5%	99.2%	92.8%	100%	0
YE79O	LGC140325LC69D-1	10	99.1%	97.1%	93.3%	101%	0
YE79ODL	LGC140325LC69D-1	10	103%	94.0%	95.0%	100%	0
YE79P	LGC140324LC218-1	10	104%	99.5%	99.0%	99.1%	0
YE79Q	LGC140324LC222-1	10	99.3%	96.1%	98.7%	102%	0
YE79R	LGC140324LC223-1	10	97.0%	96.9%	98.1%	105%	0
YE79S	LGC140324LC224-1	10	96.9%	96.7%	97.2%	100%	0
YE79T	LGC140324FLI-1	10	101%	94.8%	96.2%	100%	0

	LCS/MB LIMITS	QC LIMITS
SW8260C		
(DCE) = d4-1,2-Dichloroethane	(80-120)	(80-130)
(TOL) = d8-Toluene	(80-120)	(80-120)
(BFB) = Bromofluorobenzene	(80-120)	(80-120)
(DCB) = d4-1,2-Dichlorobenzene	(80-120)	(80-120)

Prep Method: SW5030B
Log Number Range: 14-5868 to 14-5887

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LCS-040114A**
 LAB CONTROL SAMPLE

Lab Sample ID: LCS-040114A QC Report No: YE79-Joint Base Lewis McChord
LIMS ID: 14-5868 Project: Log Ram
Matrix: Water
Data Release Authorized:
Reported: 04/08/14 Date Received: NA

Date Sampled: NA

Instrument/Analyst LCS: NT2/PAB Sample Amount LCS: 10.0 mL
LCSD: NT2/PAB LCSD: 10.0 mL
Date Analyzed LCS: 04/01/14 12:04 Purge Volume LCS: 10.0 mL
LCSD: 04/01/14 12:31 LCSD: 10.0 mL

Analyte	LCS		Spike Added-LCS	LCS Recovery	LCSD		Spike Added-LCSD	LCSD Recovery	RPD
Chloromethane	10.4		10.0	104%	11.3		10.0	113%	8.3%
Bromomethane	7.89	Q	10.0	78.9%	9.01	Q	10.0	90.1%	13.3%
Vinyl Chloride	10.3		10.0	103%	11.2		10.0	112%	8.4%
Chloroethane	9.08		10.0	90.8%	10.5		10.0	105%	14.5%
Methylene Chloride	9.46		10.0	94.6%	10.0		10.0	100%	5.5%
Acetone	45.6		50.0	91.2%	49.2		50.0	98.4%	7.6%
Carbon Disulfide	10.3		10.0	103%	10.9		10.0	109%	5.7%
1,1-Dichloroethene	10.3		10.0	103%	10.8		10.0	108%	4.7%
1,1-Dichloroethane	10.2		10.0	102%	10.8		10.0	108%	5.7%
trans-1,2-Dichloroethene	9.10		10.0	91.0%	9.73		10.0	97.3%	6.7%
cis-1,2-Dichloroethene	10.1		10.0	101%	10.6		10.0	106%	4.8%
Chloroform	10.3		10.0	103%	10.6		10.0	106%	2.9%
1,2-Dichloroethane	10.6		10.0	106%	10.5		10.0	105%	0.9%
2-Butanone	48.7		50.0	97.4%	50.8		50.0	102%	4.2%
1,1,1-Trichloroethane	9.84		10.0	98.4%	10.8		10.0	108%	9.3%
Carbon Tetrachloride	9.69		10.0	96.9%	9.99		10.0	99.9%	3.0%
Vinyl Acetate	9.91		10.0	99.1%	9.96		10.0	99.6%	0.5%
Bromodichloromethane	10.4		10.0	104%	10.2		10.0	102%	1.9%
1,2-Dichloropropane	10.6		10.0	106%	10.4		10.0	104%	1.9%
cis-1,3-Dichloropropene	10.4		10.0	104%	10.0		10.0	100%	3.9%
Trichloroethene	10.0		10.0	100%	10.1		10.0	101%	1.0%
Dibromochloromethane	11.0		10.0	110%	10.5		10.0	105%	4.7%
1,1,2-Trichloroethane	10.2		10.0	102%	10.5		10.0	105%	2.9%
Benzene	10.3		10.0	103%	10.4		10.0	104%	1.0%
trans-1,3-Dichloropropene	10.0		10.0	100%	10.5		10.0	105%	4.9%
2-Chloroethylvinylether	9.81		10.0	98.1%	9.56		10.0	95.6%	2.6%
Bromoform	10.0		10.0	100%	9.82		10.0	98.2%	1.8%
4-Methyl-2-Pentanone (MIBK)	50.8		50.0	102%	53.2		50.0	106%	4.6%
2-Hexanone	54.1		50.0	108%	53.9		50.0	108%	0.4%
Tetrachloroethene	9.49		10.0	94.9%	9.45		10.0	94.5%	0.4%
1,1,2,2-Tetrachloroethane	10.6		10.0	106%	10.6		10.0	106%	0.0%
Toluene	10.4		10.0	104%	10.5		10.0	105%	1.0%
Chlorobenzene	11.5		10.0	115%	11.2		10.0	112%	2.6%
Ethylbenzene	11.4		10.0	114%	11.4		10.0	114%	0.0%
Styrene	11.3		10.0	113%	11.5		10.0	115%	1.8%
Trichlorofluoromethane	10.3		10.0	103%	11.0		10.0	110%	6.6%
1,1,2-Trichloro-1,2,2-trifluoroetha	10.3		10.0	103%	11.5		10.0	115%	11.0%
m,p-Xylene	22.2		20.0	111%	22.4		20.0	112%	0.9%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LCS-040114A**
 LAB CONTROL SAMPLE

Lab Sample ID: LCS-040114A QC Report No: YE79-Joint Base Lewis McChord
LIMS ID: 14-5868 Project: Log Ram
Matrix: Water

Analyte	LCS	Spike Added-LCS	LCS Recovery	LCSD	Spike Added-LCSD	LCSD Recovery	RPD
o-Xylene	11.4	10.0	114%	11.5	10.0	115%	0.9%
1,2-Dichlorobenzene	10.2	10.0	102%	10.6	10.0	106%	3.8%
1,3-Dichlorobenzene	11.1	10.0	111%	11.0	10.0	110%	0.9%
1,4-Dichlorobenzene	10.6	10.0	106%	10.4	10.0	104%	1.9%
Acrolein	46.6	50.0	93.2%	52.4	50.0	105%	11.7%
Iodomethane	10.2	10.0	102%	10.9	10.0	109%	6.6%
Bromoethane	10.3	10.0	103%	10.4	10.0	104%	1.0%
Acrylonitrile	8.17	10.0	81.7%	9.68	10.0	96.8%	16.9%
1,1-Dichloropropene	10.8	10.0	108%	10.9	10.0	109%	0.9%
Dibromomethane	10.1	10.0	101%	10.5	10.0	105%	3.9%
1,1,1,2-Tetrachloroethane	11.1	10.0	111%	10.9	10.0	109%	1.8%
1,2-Dibromo-3-chloropropane	9.31	10.0	93.1%	9.30	10.0	93.0%	0.1%
1,2,3-Trichloropropane	11.0	10.0	110%	10.8	10.0	108%	1.8%
trans-1,4-Dichloro-2-butene	8.68	10.0	86.8%	8.52	10.0	85.2%	1.9%
1,3,5-Trimethylbenzene	11.2	10.0	112%	11.1	10.0	111%	0.9%
1,2,4-Trimethylbenzene	11.1	10.0	111%	10.8	10.0	108%	2.7%
Hexachlorobutadiene	10.7	10.0	107%	10.9	10.0	109%	1.9%
1,2-Dibromoethane	10.1	10.0	101%	9.91	10.0	99.1%	1.9%
Bromochloromethane	10.2	10.0	102%	10.5	10.0	105%	2.9%
2,2-Dichloropropane	10.1	10.0	101%	10.9	10.0	109%	7.6%
1,3-Dichloropropane	11.0	10.0	110%	10.6	10.0	106%	3.7%
Isopropylbenzene	11.2	10.0	112%	11.0	10.0	110%	1.8%
n-Propylbenzene	11.1	10.0	111%	10.9	10.0	109%	1.8%
Bromobenzene	10.6	10.0	106%	10.6	10.0	106%	0.0%
2-Chlorotoluene	10.7	10.0	107%	10.6	10.0	106%	0.9%
4-Chlorotoluene	10.7	10.0	107%	10.7	10.0	107%	0.0%
tert-Butylbenzene	11.0	10.0	110%	10.6	10.0	106%	3.7%
sec-Butylbenzene	11.7 Q	10.0	117%	11.5 Q	10.0	115%	1.7%
4-Isopropyltoluene	11.4	10.0	114%	11.1	10.0	111%	2.7%
n-Butylbenzene	11.5 B	10.0	115%	11.2 B	10.0	112%	2.6%
1,2,4-Trichlorobenzene	7.85	10.0	78.5%	8.02	10.0	80.2%	2.1%
Naphthalene	7.24 Q	10.0	72.4%	7.27 Q	10.0	72.7%	0.4%
1,2,3-Trichlorobenzene	7.36	10.0	73.6%	7.72	10.0	77.2%	4.8%

Reported in µg/L (ppb)

RPD calculated using sample concentrations per SW846.

Volatile Surrogate Recovery

	LCS	LCSD
d4-1,2-Dichloroethane	95.7%	97.2%
d8-Toluene	99.9%	98.3%
Bromofluorobenzene	102%	101%
d4-1,2-Dichlorobenzene	102%	99.9%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LCS-040214A**
 LAB CONTROL SAMPLE

Lab Sample ID: LCS-040214A QC Report No: YE79-Joint Base Lewis McChord
LIMS ID: 14-5876 Project: Log Ram
Matrix: Water
Data Release Authorized: MW Date Sampled: NA
Reported: 04/08/14 Date Received: NA

Instrument/Analyst LCS: NT2/PAB Sample Amount LCS: 10.0 mL
LCSD: NT2/PAB LCSD: 10.0 mL
Date Analyzed LCS: 04/02/14 14:08 Purge Volume LCS: 10.0 mL
LCSD: 04/02/14 14:35 LCSD: 10.0 mL

Analyte	LCS	Spike Added-LCS	LCS Recovery	LCSD	Spike Added-LCSD	LCSD Recovery	RPD
Chloromethane	9.73	10.0	97.3%	11.5	10.0	115%	16.7%
Bromomethane	8.66	10.0	86.6%	9.41	10.0	94.1%	8.3%
Vinyl Chloride	9.91	10.0	99.1%	11.6	10.0	116%	15.7%
Chloroethane	9.34	10.0	93.4%	10.7	10.0	107%	13.6%
Methylene Chloride	9.15	10.0	91.5%	10.4	10.0	104%	12.8%
Acetone	44.4	50.0	88.8%	49.5	50.0	99.0%	10.9%
Carbon Disulfide	10.1	10.0	101%	11.3	10.0	113%	11.2%
1,1-Dichloroethene	10.0	10.0	100%	11.1	10.0	111%	10.4%
1,1-Dichloroethane	10.0	10.0	100%	10.6	10.0	106%	5.8%
trans-1,2-Dichloroethene	9.07	10.0	90.7%	9.63	10.0	96.3%	6.0%
cis-1,2-Dichloroethene	9.89	10.0	98.9%	10.5	10.0	105%	6.0%
Chloroform	10.0	10.0	100%	10.5	10.0	105%	4.9%
1,2-Dichloroethane	10.5	10.0	105%	10.7	10.0	107%	1.9%
2-Butanone	46.4	50.0	92.8%	48.5	50.0	97.0%	4.4%
1,1,1-Trichloroethane	9.11	10.0	91.1%	9.97	10.0	99.7%	9.0%
Carbon Tetrachloride	7.33 Q	10.0	73.3%	8.12 Q	10.0	81.2%	10.2%
Vinyl Acetate	8.07 Q	10.0	80.7%	8.47 Q	10.0	84.7%	4.8%
Bromodichloromethane	8.68	10.0	86.8%	9.09	10.0	90.9%	4.6%
1,2-Dichloropropane	10.8	10.0	108%	10.5	10.0	105%	2.8%
cis-1,3-Dichloropropene	9.78	10.0	97.8%	9.69	10.0	96.9%	0.9%
Trichloroethene	10.8	10.0	108%	10.9	10.0	109%	0.9%
Dibromochloromethane	7.73 Q	10.0	77.3%	7.89 Q	10.0	78.9%	2.0%
1,1,2-Trichloroethane	10.5	10.0	105%	10.6	10.0	106%	0.9%
Benzene	10.6	10.0	106%	10.6	10.0	106%	0.0%
trans-1,3-Dichloropropene	9.77	10.0	97.7%	9.86	10.0	98.6%	0.9%
2-Chloroethylvinylether	8.90	10.0	89.0%	9.15	10.0	91.5%	2.8%
Bromoform	6.30 Q	10.0	63.0%	6.51 Q	10.0	65.1%	3.3%
4-Methyl-2-Pentanone (MIBK)	49.8	50.0	99.6%	52.1	50.0	104%	4.5%
2-Hexanone	52.1	50.0	104%	51.8	50.0	104%	0.6%
Tetrachloroethene	10.0	10.0	100%	9.34	10.0	93.4%	6.8%
1,1,2,2-Tetrachloroethane	10.8	10.0	108%	10.3	10.0	103%	4.7%
Toluene	10.5	10.0	105%	10.4	10.0	104%	1.0%
Chlorobenzene	11.6	10.0	116%	11.3	10.0	113%	2.6%
Ethylbenzene	11.1	10.0	111%	11.3	10.0	113%	1.8%
Styrene	11.3	10.0	113%	11.3	10.0	113%	0.0%
Trichlorofluoromethane	10.1	10.0	101%	11.2	10.0	112%	10.3%
1,1,2-Trichloro-1,2,2-trifluoroetha	10.5	10.0	105%	11.8	10.0	118%	11.7%
m,p-Xylene	22.7	20.0	114%	22.4	20.0	112%	1.3%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LCS-040214A**
 LAB CONTROL SAMPLE

Lab Sample ID: LCS-040214A QC Report No: YE79-Joint Base Lewis McChord
LIMS ID: 14-5876 Project: Log Ram
Matrix: Water

Analyte	LCS	Spike Added-LCS	LCS Recovery	LCSD	Spike Added-LCSD	LCSD Recovery	RPD
o-Xylene	11.1	10.0	111%	11.4	10.0	114%	2.7%
1,2-Dichlorobenzene	10.8	10.0	108%	10.9	10.0	109%	0.9%
1,3-Dichlorobenzene	11.3	10.0	113%	11.2	10.0	112%	0.9%
1,4-Dichlorobenzene	10.9	10.0	109%	10.8	10.0	108%	0.9%
Acrolein	49.3	50.0	98.6%	57.1	50.0	114%	14.7%
Iodomethane	10.3	10.0	103%	11.5	10.0	115%	11.0%
Bromoethane	9.79	10.0	97.9%	10.9	10.0	109%	10.7%
Acrylonitrile	8.56	10.0	85.6%	9.61	10.0	96.1%	11.6%
1,1-Dichloropropene	11.1	10.0	111%	10.7	10.0	107%	3.7%
Dibromomethane	10.0	10.0	100%	10.6	10.0	106%	5.8%
1,1,1,2-Tetrachloroethane	8.48 Q	10.0	84.8%	9.10 Q	10.0	91.0%	7.1%
1,2-Dibromo-3-chloropropane	7.14 Q	10.0	71.4%	8.55 Q	10.0	85.5%	18.0%
1,2,3-Trichloropropane	10.7	10.0	107%	10.7	10.0	107%	0.0%
trans-1,4-Dichloro-2-butene	8.38	10.0	83.8%	8.38	10.0	83.8%	0.0%
1,3,5-Trimethylbenzene	11.3	10.0	113%	11.1	10.0	111%	1.8%
1,2,4-Trimethylbenzene	11.3	10.0	113%	11.0	10.0	110%	2.7%
Hexachlorobutadiene	11.0	10.0	110%	10.9	10.0	109%	0.9%
1,2-Dibromoethane	9.95	10.0	99.5%	10.3	10.0	103%	3.5%
Bromochloromethane	10.5	10.0	105%	11.5	10.0	115%	9.1%
2,2-Dichloropropane	9.30	10.0	93.0%	10.4	10.0	104%	11.2%
1,3-Dichloropropane	11.1	10.0	111%	10.7	10.0	107%	3.7%
Isopropylbenzene	11.5	10.0	115%	11.0	10.0	110%	4.4%
n-Propylbenzene	11.3	10.0	113%	10.9	10.0	109%	3.6%
Bromobenzene	10.7	10.0	107%	10.7	10.0	107%	0.0%
2-Chlorotoluene	11.0	10.0	110%	10.7	10.0	107%	2.8%
4-Chlorotoluene	10.9	10.0	109%	10.4	10.0	104%	4.7%
tert-Butylbenzene	11.1	10.0	111%	10.7	10.0	107%	3.7%
sec-Butylbenzene	11.9	10.0	119%	11.5	10.0	115%	3.4%
4-Isopropyltoluene	11.4	10.0	114%	11.5	10.0	115%	0.9%
n-Butylbenzene	11.4	10.0	114%	11.3	10.0	113%	0.9%
1,2,4-Trichlorobenzene	7.65	10.0	76.5%	8.18	10.0	81.8%	6.7%
Naphthalene	6.82 Q	10.0	68.2%	7.16 Q	10.0	71.6%	4.9%
1,2,3-Trichlorobenzene	7.65	10.0	76.5%	7.77	10.0	77.7%	1.6%

Reported in µg/L (ppb)

RPD calculated using sample concentrations per SW846.

Volatile Surrogate Recovery

	LCS	LCSD
d4-1,2-Dichloroethane	90.2%	97.3%
d8-Toluene	99.1%	98.4%
Bromofluorobenzene	92.7%	101%
d4-1,2-Dichlorobenzene	102%	102%

Analytical Resources, Incorporated
Analytical Chemists and Consultants

April 8, 2014

Thomas Lynott
Department of the Army
Directorate of Public Works
Attn Environmental Division (T. Lynott)
2012 Liggett Ave Box 339500 MS 17
Joint Base Lewis-McChord, Washington 98433-9500
Official Business

RE: Client Project: LogRam
ARI Job No.: YE80

Dear Mr. Lynott:

Please find enclosed the original Chain-of-Custody record (COC), sample receipt documentation, and the final data for the project referenced above. Analytical Resources, Inc. (ARI) accepted twenty water samples on March 28, 2014. For further details regarding sample receipt please refer to the enclosed Cooler Receipt Form.

The samples were analyzed for VOCs, as requested on the COCs.

The 4/1/14 and 4/2/14 CCALs are out of control high for all associated FORM III "Q" flagged analyte. All associated samples that contain analyte have been flagged with a "Q" qualifier.

The 4/1/14 LCSD is out of control low for hexachlorobutadiene. The LCS is in control and no further corrective action was taken.

The 4/2/14 LCSD is out of control low for carbon disulfide and 1,1-Dichloroethene. The LCS is in control and no further corrective action was taken.

An electronic copy of this report and all supporting raw data will remain on file with ARI. Should you have any questions or problems, please feel free to contact me at your convenience.

Respectfully,
ANALYTICAL RESOURCES, INC.

Kelly Bottem
Client Services Manager
(206) 695-6211
kellyb@arilabs.com
www.arilabs.com

eFile: YE80

4611 South 134th Place, Suite 100 • Tukwila WA 98168 • **206-695-6200** • **206-695-6201** fax

Chain of Custody Record & Laboratory Analysis Request

TO 0021

Analytical Resources, Incorporated
Analytical Chemists and Consultants
4611 South 134th Place, Suite 100
Tukwila, WA 98168
206-695-6200 206-695-6201 (fax)
www.arilabs.com

ARI Assigned Number: YE80	Turn-around Requested: STANDARD TAT
ARI Client Company: JOINT BASE LEWIS McCHORD PUBLIC WORKS IMLM-PWE	Phone: 253 966 1802
Client Contact: TOM J LYNOTT	
Client Project Name: LOG RAM	
Client Project #:	Samplers: T LYNOTT J BECKER

Page: 9 of 14
Date: 28MAR14 Ice Present? Y
No. of Coolers: 3 Cooler Temps: 1.1, 1.3, 5.3

Sample ID	Date	Time	Matrix	No Containers	Analysis Requested: 1006A	Notes/Comments
L6C140325FL2-1	25MAR14	1030	WATER	2	X	TOTAL VOCs
L6C140324FL4A-1	24MAR14	1303	WATER	2	X	
L6C140324FL4B-1	24MAR14	1305	WATER	2	X	BOX
L6C140325MT1-1	25MAR14	1100	WATER	2	X	3
L6C140325MT2-1	25MAR14	1050	WATER	2	X	
L6C140325MT4-1	25MAR14	1325	WATER	2	X	
L6C140325PW1-1	25MAR14	1240	WATER	2	X	
L6C140325PW2-1	25MAR14	1245	WATER	2	X	
L6C140325PW3-1	25MAR14	1250	WATER	2	X	
L6C140325PW5-1	25MAR14	1255	WATER	2	X	

Comments/Special Instructions	Relinquished by (Signature)	Received by (Signature)	Relinquished by (Signature)	Received by (Signature)
	Printed Name: TOM J LYNOTT	Printed Name: Jennifer Hillsd	Printed Name:	Printed Name.
	Company: VERSAR	Company: ARI	Company:	Company
	Date & Time: 28MAR14 1205	Date & Time: 3/28/14 1205	Date & Time:	Date & Time:

YE80 : 00002

Limits of Liability: *ARI will perform all requested services in accordance with appropriate methodology following ARI Standard Operating Procedures and the ARI Quality Assurance Program. This program meets standards for the industry. The total liability of ARI, its officers, agents, employees, or successors, arising out of or in connection with the requested services, shall not exceed the Invoiced amount for said services. The acceptance by the client of a proposal for services by ARI release ARI from any liability in excess thereof, not withstanding any provision to the contrary in any contract, purchase order or co-signed agreement between ARI and the Client.*

Sample Retention Policy: All samples submitted to ARI will be appropriately discarded no sooner than 90 days after receipt or 60 days after submission of hardcopy data, whichever is longer, unless alternate retention schedules have been established by work-order or contract.

Chain of Custody Record & Laboratory Analysis Request

TO 0021

Analytical Resources, Incorporated
Analytical Chemists and Consultants
4611 South 134th Place, Suite 100
Tukwila, WA 98168
206-695-6200 206-695-6201 (fax)
www.arilabs.com

ARI Assigned Number:	Turn-around Requested: STANDARD TAT
ARI Client Company: JOINT BASE LEWIS MCCHORD PUBLIC WORKS IMLM-PWE	Phone: 253 4661802
Client Contact: TOM J LYNOTT	
Client Project Name: 106 RAM	
Client Project #:	Samplers: T LYNOTT J BECKER

Page: 10 of 14
Date: 28MAR14 Ice Present? Y
No. of Coolers: 3 Cooler Temps: 1.1, 1.3, 5.3

Sample ID	Date	Time	Matrix	No Containers	Analysis Requested: 10064							Notes/Comments
L6C140325PW7-1	25MAR14	1300	WATER	2	X			BOX	3			TOTAL VOCS
L6C140325PW8-1	25MAR14	1305	WATER	2	X			BOX	3			
L6C140327I5E-1	27MAR14	1112	WATER	2	X							
L6C140327I5I-1	27MAR14	1110	WATER	2	X							
L6C140327LX2-1	27MAR14	1305	WATER	2	X							BOX
L6C140327LX3-1	27MAR14	1300	WATER	2	X							4
L6C140327LX5-1	27MAR14	1250	WATER	2	X							
L6C140327LX6-1	27MAR14	1245	WATER	2	X							
L6C140327LX7-1	27MAR14	1240	WATER	2	X							
L6C140327LX9-1	27MAR14	1230	WATER	2	X							

Comments/Special Instructions	Relinquished by (Signature)	Received by (Signature)	Relinquished by (Signature)	Received by (Signature)
	Printed Name: TOM J LYNOTT	Printed Name: Jennifer Millsap	Printed Name	Printed Name.
	Company: VENSAR	Company: ARI	Company	Company:
	Date & Time: 28MAR14 1205	Date & Time: 3/28/14 1205	Date & Time.	Date & Time.

YE80:00003

Limits of Liability: *ARI will perform all requested services in accordance with appropriate methodology following ARI Standard Operating Procedures and the ARI Quality Assurance Program. This program meets standards for the industry. The total liability of ARI, its officers, agents, employees, or successors, arising out of or in connection with the requested services, shall not exceed the Invoiced amount for said services. The acceptance by the client of a proposal for services by ARI release ARI from any liability in excess thereof, not withstanding any provision to the contrary in any contract, purchase order or co-signed agreement between ARI and the Client.*

Sample Retention Policy: All samples submitted to ARI will be appropriately discarded no sooner than 90 days after receipt or 60 days after submission of hardcopy data, whichever is longer, unless alternate retention schedules have been established by work-order or contract.

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Cooler Receipt Form

ARI Client: JBLM Project Name: Log Ram

COC No(s): _____ (NA) Delivered by: Fed-Ex UPS Courier (Hand Delivered) Other: _____

Assigned ARI Job No: YE80 Tracking No: _____ (NA)

Preliminary Examination Phase:

Were intact, properly signed and dated custody seals attached to the outside of to cooler?	YES	(NO)
Were custody papers included with the cooler?	(YES)	NO
Were custody papers properly filled out (ink, signed, etc.)	(YES)	NO

Temperature of Cooler(s) (°C) (recommended 2 0-6.0 °C for chemistry): 1.1 1.3 5.3

Time: 1205

If cooler temperature is out of compliance fill out form 00070F Temp Gun ID#: 12341222

Cooler Accepted by: JM Date: 3/28/14 Time: 1205

Complete custody forms and attach all shipping documents

Log-In Phase:

Was a temperature blank included in the cooler?		YES	(NO)
What kind of packing material was used? ... Bubble Wrap Wet Ice (Gel Packs) Baggies (Foam Block) Paper Other: BOX			
Was sufficient ice used (if appropriate)?	NA	(YES)	NO
Were all bottles sealed in individual plastic bags?		YES	(NO)
Did all bottles arrive in good condition (unbroken)?		(YES)	NO
Were all bottle labels complete and legible?		(YES)	NO
Did the number of containers listed on COC match with the number of containers received?		(YES)	NO
Did all bottle labels and tags agree with custody papers?		(YES)	NO
Were all bottles used correct for the requested analyses?		(YES)	NO
Do any of the analyses (bottles) require preservation? (attach preservation sheet, excluding VOCs)	(NA)	YES	NO
Were all VOC vials free of air bubbles?	NA	(YES)	NO
Was sufficient amount of sample sent in each bottle?		(YES)	NO
Date VOC Trip Blank was made at ARI	(NA)		

Was Sample Split by ARI: (NA) YES Date/Time: _____ Equipment: _____ Split by: _____

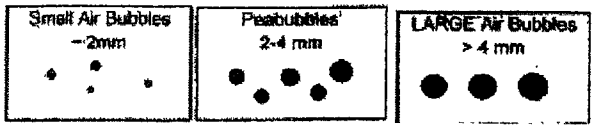
Samples Logged by: AV Date: 3/28/14 Time: 1330

***** Notify Project Manager of discrepancies or concerns *****

Sample ID on Bottle	Sample ID on COC	Sample ID on Bottle	Sample ID on COC

Additional Notes, Discrepancies, & Resolutions:

By: _____ Date: _____



Small → "sm" (< 2 mm)
Peabubbles → "pb" (2 to < 4 mm)
Large → "lg" (4 to < 6 mm)
Headspace → "hs" (> 6 mm)

Sample ID Cross Reference Report

ANALYTICAL RESOURCES INCORPORATED

ARI Job No: YE80
Client: Joint Base Lewis McChord
Project Event: N/A
Project Name: Log RAM

	Sample ID	ARI Lab ID	ARI LIMS ID	Matrix	Sample Date/Time	VTSR
1.	LGC140325FL2-1	YE80A	14-5927	Water	03/25/14 10:30	03/28/14 12:05
2.	LGC140324FL4A-1	YE80B	14-5928	Water	03/24/14 13:03	03/28/14 12:05
3.	LGC140324FL4B-1	YE80C	14-5929	Water	03/24/14 13:05	03/28/14 12:05
4.	LGC140325MT1-1	YE80D	14-5930	Water	03/25/14 11:00	03/28/14 12:05
5.	LGC140325MT2-1	YE80E	14-5931	Water	03/25/14 10:50	03/28/14 12:05
6.	LGC140325MT4-1	YE80F	14-5932	Water	03/25/14 13:25	03/28/14 12:05
7.	LGC140325PW1-1	YE80G	14-5933	Water	03/25/14 12:40	03/28/14 12:05
8.	LGC140325PW2-1	YE80H	14-5934	Water	03/25/14 12:45	03/28/14 12:05
9.	LGC140325PW3-1	YE80I	14-5935	Water	03/25/14 12:50	03/28/14 12:05
10.	LGC140325PW5-1	YE80J	14-5936	Water	03/25/14 12:55	03/28/14 12:05
11.	LGC140325PW7-1	YE80K	14-5937	Water	03/25/14 13:00	03/28/14 12:05
12.	LGC140325PW8-1	YE80L	14-5938	Water	03/25/14 13:05	03/28/14 12:05
13.	LGC140327I5E-1	YE80M	14-5939	Water	03/27/14 11:12	03/28/14 12:05
14.	LGC140327I5I-1	YE80N	14-5940	Water	03/27/14 11:10	03/28/14 12:05
15.	LGC140327LX2-1	YE80O	14-5941	Water	03/27/14 13:05	03/28/14 12:05
16.	LGC140327LX3-1	YE80P	14-5942	Water	03/27/14 13:00	03/28/14 12:05
17.	LGC140327LX5-1	YE80Q	14-5943	Water	03/27/14 12:50	03/28/14 12:05
18.	LGC140327LX6-1	YE80R	14-5944	Water	03/27/14 12:45	03/28/14 12:05
19.	LGC140327LX7-1	YE80S	14-5945	Water	03/27/14 12:40	03/28/14 12:05
20.	LGC140327LX9-1	YE80T	14-5946	Water	03/27/14 12:30	03/28/14 12:05

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140325FL2-1**
 SAMPLE

Lab Sample ID: YE80A
LIMS ID: 14-5927
Matrix: Water
Data Release Authorized:
Reported: 04/08/14

QC Report No: YE80-Joint Base Lewis McChord
Project: Log RAM

Date Sampled: 03/25/14
Date Received: 03/28/14

Instrument/Analyst: NT15/PAB
Date Analyzed: 04/01/14 17:43

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	LOQ	Result	Q
74-87-3	Chloromethane	0.50	< 0.50	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.20	< 0.20	U
75-00-3	Chloroethane	0.20	< 0.20	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	**Acetone**	**5.0**	**5.2**	
75-15-0	Carbon Disulfide	0.20	< 0.20	U
75-35-4	1,1-Dichloroethene	0.20	< 0.20	U
75-34-3	1,1-Dichloroethane	0.20	< 0.20	U
156-60-5	trans-1,2-Dichloroethene	0.20	< 0.20	U
156-59-2	cis-1,2-Dichloroethene	0.20	< 0.20	U
67-66-3	Chloroform	0.20	< 0.20	U
107-06-2	1,2-Dichloroethane	0.20	< 0.20	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	0.20	< 0.20	U
56-23-5	Carbon Tetrachloride	0.20	< 0.20	U
108-05-4	Vinyl Acetate	0.20	< 0.20	U
75-27-4	Bromodichloromethane	0.20	< 0.20	U
78-87-5	1,2-Dichloropropane	0.20	< 0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	< 0.20	U
79-01-6	**Trichloroethene**	**0.20**	**4.7**	
124-48-1	Dibromochloromethane	0.20	< 0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	< 0.20	U
71-43-2	Benzene	0.20	< 0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	< 0.20	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.20	< 0.20	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.20	< 0.20	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	< 0.20	U
108-88-3	Toluene	0.20	< 0.20	U
108-90-7	Chlorobenzene	0.20	< 0.20	U
100-41-4	Ethylbenzene	0.20	< 0.20	U
100-42-5	Styrene	0.20	< 0.20	U
75-69-4	Trichlorofluoromethane	0.20	< 0.20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.20	< 0.20	U
179601-23-1	m,p-Xylene	0.40	< 0.40	U
95-47-6	o-Xylene	0.20	< 0.20	U
95-50-1	1,2-Dichlorobenzene	0.20	< 0.20	U
541-73-1	1,3-Dichlorobenzene	0.20	< 0.20	U
106-46-7	1,4-Dichlorobenzene	0.20	< 0.20	U

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140325FL2-1**

SAMPLE

Lab Sample ID: YE80A
LIMS ID: 14-5927
Matrix: Water
Date Analyzed: 04/01/14 17:43

QC Report No: YE80-Joint Base Lewis McChord
Project: Log RAM

CAS Number	Analyte	LOQ	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Iodomethane	1.0	< 1.0	U
74-96-4	Bromoethane	0.20	< 0.20	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.20	< 0.20	U
74-95-3	Dibromomethane	0.20	< 0.20	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	< 0.20	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	< 0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	< 0.50	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.20	< 0.20	U
95-63-6	1,2,4-Trimethylbenzene	0.20	< 0.20	U
87-68-3	Hexachlorobutadiene	0.50	< 0.50	U
106-93-4	1,2-Dibromoethane	0.20	< 0.20	U
74-97-5	Bromochloromethane	0.20	< 0.20	U
594-20-7	2,2-Dichloropropane	0.20	< 0.20	U
142-28-9	1,3-Dichloropropane	0.20	< 0.20	U
98-82-8	Isopropylbenzene	0.20	< 0.20	U
103-65-1	n-Propylbenzene	0.20	< 0.20	U
108-86-1	Bromobenzene	0.20	< 0.20	U
95-49-8	2-Chlorotoluene	0.20	< 0.20	U
106-43-4	4-Chlorotoluene	0.20	< 0.20	U
98-06-6	tert-Butylbenzene	0.20	< 0.20	U
135-98-8	sec-Butylbenzene	0.20	< 0.20	U
99-87-6	4-Isopropyltoluene	0.20	< 0.20	U
104-51-8	n-Butylbenzene	0.20	< 0.20	U
120-82-1	1,2,4-Trichlorobenzene	0.50	< 0.50	U
91-20-3	Naphthalene	0.50	< 0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	< 0.50	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	100%
d8-Toluene	101%
Bromofluorobenzene	98.0%
d4-1,2-Dichlorobenzene	101%

2-Chloroethylvinylether is an acid labile compound and may not be recovered from an acid preserved sample.

EPA SW-846 indicates that vinyl chloride and styrene may degrade in the presence of acid preservative.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140324FL4A-1**
 SAMPLE

Lab Sample ID: YE80B
LIMS ID: 14-5928
Matrix: Water
Data Release Authorized:
Reported: 04/08/14

QC Report No: YE80-Joint Base Lewis McChord
Project: Log RAM

Date Sampled: 03/24/14
Date Received: 03/28/14

Instrument/Analyst: NT15/PAB
Date Analyzed: 04/01/14 18:04

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	LOQ	Result	Q
74-87-3	Chloromethane	0.50	< 0.50	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.20	< 0.20	U
75-00-3	Chloroethane	0.20	< 0.20	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	**Acetone**	**5.0**	**15**	
75-15-0	Carbon Disulfide	0.20	< 0.20	U
75-35-4	1,1-Dichloroethene	0.20	< 0.20	U
75-34-3	1,1-Dichloroethane	0.20	< 0.20	U
156-60-5	trans-1,2-Dichloroethene	0.20	< 0.20	U
156-59-2	cis-1,2-Dichloroethene	0.20	< 0.20	U
67-66-3	Chloroform	0.20	< 0.20	U
107-06-2	1,2-Dichloroethane	0.20	< 0.20	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	0.20	< 0.20	U
56-23-5	Carbon Tetrachloride	0.20	< 0.20	U
108-05-4	Vinyl Acetate	0.20	< 0.20	U
75-27-4	Bromodichloromethane	0.20	< 0.20	U
78-87-5	1,2-Dichloropropane	0.20	< 0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	< 0.20	U
79-01-6	**Trichloroethene**	**0.20**	**1.4**	
124-48-1	Dibromochloromethane	0.20	< 0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	< 0.20	U
71-43-2	Benzene	0.20	< 0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	< 0.20	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.20	< 0.20	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.20	< 0.20	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	< 0.20	U
108-88-3	Toluene	0.20	< 0.20	U
108-90-7	Chlorobenzene	0.20	< 0.20	U
100-41-4	Ethylbenzene	0.20	< 0.20	U
100-42-5	Styrene	0.20	< 0.20	U
75-69-4	Trichlorofluoromethane	0.20	< 0.20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.20	< 0.20	U
179601-23-1	m,p-Xylene	0.40	< 0.40	U
95-47-6	o-Xylene	0.20	< 0.20	U
95-50-1	1,2-Dichlorobenzene	0.20	< 0.20	U
541-73-1	1,3-Dichlorobenzene	0.20	< 0.20	U
106-46-7	1,4-Dichlorobenzene	0.20	< 0.20	U

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140324FL4A-1**
 SAMPLE

Lab Sample ID: YE80B
LIMS ID: 14-5928
Matrix: Water
Date Analyzed: 04/01/14 18:04

QC Report No: YE80-Joint Base Lewis McChord
Project: Log RAM

CAS Number	Analyte	LOQ	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Iodomethane	1.0	< 1.0	U
74-96-4	Bromoethane	0.20	< 0.20	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.20	< 0.20	U
74-95-3	Dibromomethane	0.20	< 0.20	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	< 0.20	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	< 0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	< 0.50	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.20	< 0.20	U
95-63-6	1,2,4-Trimethylbenzene	0.20	< 0.20	U
87-68-3	Hexachlorobutadiene	0.50	< 0.50	U
106-93-4	1,2-Dibromoethane	0.20	< 0.20	U
74-97-5	Bromochloromethane	0.20	< 0.20	U
594-20-7	2,2-Dichloropropane	0.20	< 0.20	U
142-28-9	1,3-Dichloropropane	0.20	< 0.20	U
98-82-8	Isopropylbenzene	0.20	< 0.20	U
103-65-1	n-Propylbenzene	0.20	< 0.20	U
108-86-1	Bromobenzene	0.20	< 0.20	U
95-49-8	2-Chlorotoluene	0.20	< 0.20	U
106-43-4	4-Chlorotoluene	0.20	< 0.20	U
98-06-6	tert-Butylbenzene	0.20	< 0.20	U
135-98-8	sec-Butylbenzene	0.20	< 0.20	U
99-87-6	4-Isopropyltoluene	0.20	< 0.20	U
104-51-8	n-Butylbenzene	0.20	< 0.20	U
120-82-1	1,2,4-Trichlorobenzene	0.50	< 0.50	U
91-20-3	Naphthalene	0.50	< 0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	< 0.50	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	104%
d8-Toluene	101%
Bromofluorobenzene	98.3%
d4-1,2-Dichlorobenzene	101%

2-Chloroethylvinylether is an acid labile compound and may not be recovered from an acid preserved sample.

EPA SW-846 indicates that vinyl chloride and styrene may degrade in the presence of acid preservative.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140324FL4B-1**
 SAMPLE

Lab Sample ID: YE80C
LIMS ID: 14-5929
Matrix: Water
Data Release Authorized:
Reported: 04/08/14

QC Report No: YE80-Joint Base Lewis McChord
Project: Log RAM

Date Sampled: 03/24/14
Date Received: 03/28/14

Instrument/Analyst: NT15/PAB
Date Analyzed: 04/01/14 18:24

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	LOQ	Result	Q
74-87-3	Chloromethane	0.50	< 0.50	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.20	< 0.20	U
75-00-3	Chloroethane	0.20	< 0.20	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	**Acetone**	**5.0**	**8.7**	
75-15-0	Carbon Disulfide	0.20	< 0.20	U
75-35-4	1,1-Dichloroethene	0.20	< 0.20	U
75-34-3	1,1-Dichloroethane	0.20	< 0.20	U
156-60-5	trans-1,2-Dichloroethene	0.20	< 0.20	U
156-59-2	**cis-1,2-Dichloroethene**	**0.20**	**0.22**	
67-66-3	Chloroform	0.20	< 0.20	U
107-06-2	1,2-Dichloroethane	0.20	< 0.20	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	0.20	< 0.20	U
56-23-5	Carbon Tetrachloride	0.20	< 0.20	U
108-05-4	Vinyl Acetate	0.20	< 0.20	U
75-27-4	Bromodichloromethane	0.20	< 0.20	U
78-87-5	1,2-Dichloropropane	0.20	< 0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	< 0.20	U
79-01-6	**Trichloroethene**	**0.20**	**1.1**	
124-48-1	Dibromochloromethane	0.20	< 0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	< 0.20	U
71-43-2	Benzene	0.20	< 0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	< 0.20	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.20	< 0.20	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.20	< 0.20	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	< 0.20	U
108-88-3	Toluene	0.20	< 0.20	U
108-90-7	Chlorobenzene	0.20	< 0.20	U
100-41-4	Ethylbenzene	0.20	< 0.20	U
100-42-5	Styrene	0.20	< 0.20	U
75-69-4	Trichlorofluoromethane	0.20	< 0.20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.20	< 0.20	U
179601-23-1	m,p-Xylene	0.40	< 0.40	U
95-47-6	o-Xylene	0.20	< 0.20	U
95-50-1	1,2-Dichlorobenzene	0.20	< 0.20	U
541-73-1	1,3-Dichlorobenzene	0.20	< 0.20	U
106-46-7	1,4-Dichlorobenzene	0.20	< 0.20	U

Lab Sample ID: YE80C
LIMS ID: 14-5929
Matrix: Water
Date Analyzed: 04/01/14 18:24

QC Report No: YE80-Joint Base Lewis McChord
Project: Log RAM

CAS Number	Analyte	LOQ	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Iodomethane	1.0	< 1.0	U
74-96-4	Bromoethane	0.20	< 0.20	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.20	< 0.20	U
74-95-3	Dibromomethane	0.20	< 0.20	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	< 0.20	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	< 0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	< 0.50	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.20	< 0.20	U
95-63-6	1,2,4-Trimethylbenzene	0.20	< 0.20	U
87-68-3	Hexachlorobutadiene	0.50	< 0.50	U
106-93-4	1,2-Dibromoethane	0.20	< 0.20	U
74-97-5	Bromochloromethane	0.20	< 0.20	U
594-20-7	2,2-Dichloropropane	0.20	< 0.20	U
142-28-9	1,3-Dichloropropane	0.20	< 0.20	U
98-82-8	Isopropylbenzene	0.20	< 0.20	U
103-65-1	n-Propylbenzene	0.20	< 0.20	U
108-86-1	Bromobenzene	0.20	< 0.20	U
95-49-8	2-Chlorotoluene	0.20	< 0.20	U
106-43-4	4-Chlorotoluene	0.20	< 0.20	U
98-06-6	tert-Butylbenzene	0.20	< 0.20	U
135-98-8	sec-Butylbenzene	0.20	< 0.20	U
99-87-6	4-Isopropyltoluene	0.20	< 0.20	U
104-51-8	n-Butylbenzene	0.20	< 0.20	U
120-82-1	1,2,4-Trichlorobenzene	0.50	< 0.50	U
91-20-3	Naphthalene	0.50	< 0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	< 0.50	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	104%
d8-Toluene	101%
Bromofluorobenzene	98.9%
d4-1,2-Dichlorobenzene	102%

2-Chloroethylvinylether is an acid labile compound and may not be recovered from an acid preserved sample.

EPA SW-846 indicates that vinyl chloride and styrene may degrade in the presence of acid preservative.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140325MT1-1**
 SAMPLE

Lab Sample ID: YE80D
LIMS ID: 14-5930
Matrix: Water
Data Release Authorized:
Reported: 04/08/14

QC Report No: YE80-Joint Base Lewis McChord
Project: Log RAM

Date Sampled: 03/25/14
Date Received: 03/28/14

Instrument/Analyst: NT15/PAB
Date Analyzed: 04/01/14 18:46

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	LOQ	Result	Q
74-87-3	Chloromethane	0.50	< 0.50	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.20	< 0.20	U
75-00-3	Chloroethane	0.20	< 0.20	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	**Acetone**	**5.0**	**8.3**	
75-15-0	Carbon Disulfide	0.20	< 0.20	U
75-35-4	1,1-Dichloroethene	0.20	< 0.20	U
75-34-3	1,1-Dichloroethane	0.20	< 0.20	U
156-60-5	**trans-1,2-Dichloroethene**	**0.20**	**0.58**	
156-59-2	**cis-1,2-Dichloroethene**	**0.20**	**1.6**	
67-66-3	Chloroform	0.20	< 0.20	U
107-06-2	1,2-Dichloroethane	0.20	< 0.20	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	0.20	< 0.20	U
56-23-5	Carbon Tetrachloride	0.20	< 0.20	U
108-05-4	Vinyl Acetate	0.20	< 0.20	U
75-27-4	Bromodichloromethane	0.20	< 0.20	U
78-87-5	1,2-Dichloropropane	0.20	< 0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	< 0.20	U
79-01-6	**Trichloroethene**	**0.20**	**110**	**E**
124-48-1	Dibromochloromethane	0.20	< 0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	< 0.20	U
71-43-2	Benzene	0.20	< 0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	< 0.20	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.20	< 0.20	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.20	< 0.20	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	< 0.20	U
108-88-3	Toluene	0.20	< 0.20	U
108-90-7	Chlorobenzene	0.20	< 0.20	U
100-41-4	Ethylbenzene	0.20	< 0.20	U
100-42-5	Styrene	0.20	< 0.20	U
75-69-4	Trichlorofluoromethane	0.20	< 0.20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.20	< 0.20	U
179601-23-1	m,p-Xylene	0.40	< 0.40	U
95-47-6	o-Xylene	0.20	< 0.20	U
95-50-1	1,2-Dichlorobenzene	0.20	< 0.20	U
541-73-1	1,3-Dichlorobenzene	0.20	< 0.20	U
106-46-7	1,4-Dichlorobenzene	0.20	< 0.20	U

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140325MT1-1**
 SAMPLE

Lab Sample ID: YE80D
LIMS ID: 14-5930
Matrix: Water
Date Analyzed: 04/01/14 18:46

QC Report No: YE80-Joint Base Lewis McChord
Project: Log RAM

CAS Number	Analyte	LOQ	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Iodomethane	1.0	< 1.0	U
74-96-4	Bromoethane	0.20	< 0.20	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.20	< 0.20	U
74-95-3	Dibromomethane	0.20	< 0.20	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	< 0.20	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	< 0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	< 0.50	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.20	< 0.20	U
95-63-6	1,2,4-Trimethylbenzene	0.20	< 0.20	U
87-68-3	Hexachlorobutadiene	0.50	< 0.50	U
106-93-4	1,2-Dibromoethane	0.20	< 0.20	U
74-97-5	Bromochloromethane	0.20	< 0.20	U
594-20-7	2,2-Dichloropropane	0.20	< 0.20	U
142-28-9	1,3-Dichloropropane	0.20	< 0.20	U
98-82-8	Isopropylbenzene	0.20	< 0.20	U
103-65-1	n-Propylbenzene	0.20	< 0.20	U
108-86-1	Bromobenzene	0.20	< 0.20	U
95-49-8	2-Chlorotoluene	0.20	< 0.20	U
106-43-4	4-Chlorotoluene	0.20	< 0.20	U
98-06-6	tert-Butylbenzene	0.20	< 0.20	U
135-98-8	sec-Butylbenzene	0.20	< 0.20	U
99-87-6	4-Isopropyltoluene	0.20	< 0.20	U
104-51-8	n-Butylbenzene	0.20	< 0.20	U
120-82-1	1,2,4-Trichlorobenzene	0.50	< 0.50	U
91-20-3	Naphthalene	0.50	< 0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	< 0.50	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	104%
d8-Toluene	99.6%
Bromofluorobenzene	99.1%
d4-1,2-Dichlorobenzene	100%

2-Chloroethylvinylether is an acid labile compound and may not be recovered from an acid preserved sample.

EPA SW-846 indicates that vinyl chloride and styrene may degrade in the presence of acid preservative.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140325MT1-1**
 DILUTION

Lab Sample ID: YE80D
LIMS ID: 14-5930
Matrix: Water
Data Release Authorized:
Reported: 04/08/14

QC Report No: YE80-Joint Base Lewis McChord
Project: Log RAM

Date Sampled: 03/25/14
Date Received: 03/28/14

Instrument/Analyst: NT15/PAB
Date Analyzed: 04/02/14 18:17

Sample Amount: 2.00 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	LOQ	Result	Q
74-87-3	Chloromethane	2.5	< 2.5	U
74-83-9	Bromomethane	5.0	< 5.0	U
75-01-4	Vinyl Chloride	1.0	< 1.0	U
75-00-3	Chloroethane	1.0	< 1.0	U
75-09-2	Methylene Chloride	5.0	< 5.0	U
67-64-1	Acetone	25	< 25	U
75-15-0	Carbon Disulfide	1.0	< 1.0	U
75-35-4	1,1-Dichloroethene	1.0	< 1.0	U
75-34-3	1,1-Dichloroethane	1.0	< 1.0	U
156-60-5	trans-1,2-Dichloroethene	1.0	< 1.0	U
156-59-2	**cis-1,2-Dichloroethene**	**1.0**	**1.6**	
67-66-3	Chloroform	1.0	< 1.0	U
107-06-2	1,2-Dichloroethane	1.0	< 1.0	U
78-93-3	2-Butanone	25	< 25	U
71-55-6	1,1,1-Trichloroethane	1.0	< 1.0	U
56-23-5	Carbon Tetrachloride	1.0	< 1.0	U
108-05-4	Vinyl Acetate	1.0	< 1.0	U
75-27-4	Bromodichloromethane	1.0	< 1.0	U
78-87-5	1,2-Dichloropropane	1.0	< 1.0	U
10061-01-5	cis-1,3-Dichloropropene	1.0	< 1.0	U
79-01-6	**Trichloroethene**	**1.0**	**100**	
124-48-1	Dibromochloromethane	1.0	< 1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	< 1.0	U
71-43-2	Benzene	1.0	< 1.0	U
10061-02-6	trans-1,3-Dichloropropene	1.0	< 1.0	U
110-75-8	2-Chloroethylvinylether	5.0	< 5.0	U
75-25-2	Bromoform	1.0	< 1.0	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	25	< 25	U
591-78-6	2-Hexanone	25	< 25	U
127-18-4	Tetrachloroethene	1.0	< 1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	< 1.0	U
108-88-3	Toluene	1.0	< 1.0	U
108-90-7	Chlorobenzene	1.0	< 1.0	U
100-41-4	Ethylbenzene	1.0	< 1.0	U
100-42-5	Styrene	1.0	< 1.0	U
75-69-4	Trichlorofluoromethane	1.0	< 1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	< 1.0	U
179601-23-1	m,p-Xylene	2.0	< 2.0	U
95-47-6	o-Xylene	1.0	< 1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	< 1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	< 1.0	U
106-46-7	1,4-Dichlorobenzene	1.0	< 1.0	U

Lab Sample ID: YE80D
LIMS ID: 14-5930
Matrix: Water
Date Analyzed: 04/02/14 18:17

QC Report No: YE80-Joint Base Lewis McChord
Project: Log RAM

CAS Number	Analyte	LOQ	Result	Q
107-02-8	Acrolein	25	< 25	U
74-88-4	Iodomethane	5.0	< 5.0	U
74-96-4	Bromoethane	1.0	< 1.0	U
107-13-1	Acrylonitrile	5.0	< 5.0	U
563-58-6	1,1-Dichloropropene	1.0	< 1.0	U
74-95-3	Dibromomethane	1.0	< 1.0	U
630-20-6	1,1,1,2-Tetrachloroethane	1.0	< 1.0	U
96-12-8	1,2-Dibromo-3-chloropropane	2.5	< 2.5	U
96-18-4	1,2,3-Trichloropropane	2.5	< 2.5	U
110-57-6	trans-1,4-Dichloro-2-butene	5.0	< 5.0	U
108-67-8	1,3,5-Trimethylbenzene	1.0	< 1.0	U
95-63-6	1,2,4-Trimethylbenzene	1.0	< 1.0	U
87-68-3	Hexachlorobutadiene	2.5	< 2.5	U
106-93-4	1,2-Dibromoethane	1.0	< 1.0	U
74-97-5	Bromochloromethane	1.0	< 1.0	U
594-20-7	2,2-Dichloropropane	1.0	< 1.0	U
142-28-9	1,3-Dichloropropane	1.0	< 1.0	U
98-82-8	Isopropylbenzene	1.0	< 1.0	U
103-65-1	n-Propylbenzene	1.0	< 1.0	U
108-86-1	Bromobenzene	1.0	< 1.0	U
95-49-8	2-Chlorotoluene	1.0	< 1.0	U
106-43-4	4-Chlorotoluene	1.0	< 1.0	U
98-06-6	tert-Butylbenzene	1.0	< 1.0	U
135-98-8	sec-Butylbenzene	1.0	< 1.0	U
99-87-6	4-Isopropyltoluene	1.0	< 1.0	U
104-51-8	n-Butylbenzene	1.0	< 1.0	U
120-82-1	1,2,4-Trichlorobenzene	2.5	< 2.5	U
91-20-3	Naphthalene	2.5	< 2.5	U
87-61-6	1,2,3-Trichlorobenzene	2.5	< 2.5	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	115%
d8-Toluene	100%
Bromofluorobenzene	98.5%
d4-1,2-Dichlorobenzene	101%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140325MT2-1**
 SAMPLE

Lab Sample ID: YE80E
LIMS ID: 14-5931
Matrix: Water
Data Release Authorized:
Reported: 04/08/14

QC Report No: YE80-Joint Base Lewis McChord
Project: Log RAM

Date Sampled: 03/25/14
Date Received: 03/28/14

Instrument/Analyst: NT15/PAB
Date Analyzed: 04/01/14 19:07

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	LOQ	Result	Q
74-87-3	Chloromethane	0.50	< 0.50	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.20	< 0.20	U
75-00-3	Chloroethane	0.20	< 0.20	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	**Acetone**	**5.0**	**7.3**	
75-15-0	Carbon Disulfide	0.20	< 0.20	U
75-35-4	1,1-Dichloroethene	0.20	< 0.20	U
75-34-3	1,1-Dichloroethane	0.20	< 0.20	U
156-60-5	trans-1,2-Dichloroethene	0.20	< 0.20	U
156-59-2	**cis-1,2-Dichloroethene**	**0.20**	**0.77**	
67-66-3	Chloroform	0.20	< 0.20	U
107-06-2	1,2-Dichloroethane	0.20	< 0.20	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	0.20	< 0.20	U
56-23-5	Carbon Tetrachloride	0.20	< 0.20	U
108-05-4	Vinyl Acetate	0.20	< 0.20	U
75-27-4	Bromodichloromethane	0.20	< 0.20	U
78-87-5	1,2-Dichloropropane	0.20	< 0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	< 0.20	U
79-01-6	**Trichloroethene**	**0.20**	**6.5**	
124-48-1	Dibromochloromethane	0.20	< 0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	< 0.20	U
71-43-2	Benzene	0.20	< 0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	< 0.20	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.20	< 0.20	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.20	< 0.20	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	< 0.20	U
108-88-3	Toluene	0.20	< 0.20	U
108-90-7	Chlorobenzene	0.20	< 0.20	U
100-41-4	Ethylbenzene	0.20	< 0.20	U
100-42-5	Styrene	0.20	< 0.20	U
75-69-4	Trichlorofluoromethane	0.20	< 0.20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.20	< 0.20	U
179601-23-1	m,p-Xylene	0.40	< 0.40	U
95-47-6	o-Xylene	0.20	< 0.20	U
95-50-1	1,2-Dichlorobenzene	0.20	< 0.20	U
541-73-1	1,3-Dichlorobenzene	0.20	< 0.20	U
106-46-7	1,4-Dichlorobenzene	0.20	< 0.20	U

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140325MT2-1**

SAMPLE

Lab Sample ID: YE80E
LIMS ID: 14-5931
Matrix: Water
Date Analyzed: 04/01/14 19:07

QC Report No: YE80-Joint Base Lewis McChord
Project: Log RAM

CAS Number	Analyte	LOQ	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Iodomethane	1.0	< 1.0	U
74-96-4	Bromoethane	0.20	< 0.20	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.20	< 0.20	U
74-95-3	Dibromomethane	0.20	< 0.20	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	< 0.20	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	< 0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	< 0.50	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.20	< 0.20	U
95-63-6	1,2,4-Trimethylbenzene	0.20	< 0.20	U
87-68-3	Hexachlorobutadiene	0.50	< 0.50	U
106-93-4	1,2-Dibromoethane	0.20	< 0.20	U
74-97-5	Bromochloromethane	0.20	< 0.20	U
594-20-7	2,2-Dichloropropane	0.20	< 0.20	U
142-28-9	1,3-Dichloropropane	0.20	< 0.20	U
98-82-8	Isopropylbenzene	0.20	< 0.20	U
103-65-1	n-Propylbenzene	0.20	< 0.20	U
108-86-1	Bromobenzene	0.20	< 0.20	U
95-49-8	2-Chlorotoluene	0.20	< 0.20	U
106-43-4	4-Chlorotoluene	0.20	< 0.20	U
98-06-6	tert-Butylbenzene	0.20	< 0.20	U
135-98-8	sec-Butylbenzene	0.20	< 0.20	U
99-87-6	4-Isopropyltoluene	0.20	< 0.20	U
104-51-8	n-Butylbenzene	0.20	< 0.20	U
120-82-1	1,2,4-Trichlorobenzene	0.50	< 0.50	U
91-20-3	Naphthalene	0.50	< 0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	< 0.50	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	103%
d8-Toluene	100%
Bromofluorobenzene	97.9%
d4-1,2-Dichlorobenzene	101%

2-Chloroethylvinylether is an acid labile compound and may not be recovered from an acid preserved sample.

EPA SW-846 indicates that vinyl chloride and styrene may degrade in the presence of acid preservative.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140325MT4-1**
 SAMPLE

Lab Sample ID: YE80F
LIMS ID: 14-5932
Matrix: Water
Data Release Authorized:
Reported: 04/08/14

QC Report No: YE80-Joint Base Lewis McChord
Project: Log RAM

Date Sampled: 03/25/14
Date Received: 03/28/14

Instrument/Analyst: NT15/PAB
Date Analyzed: 04/01/14 19:28

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	LOQ	Result	Q
74-87-3	Chloromethane	0.50	< 0.50	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.20	< 0.20	U
75-00-3	Chloroethane	0.20	< 0.20	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	**Acetone**	**5.0**	**6.7**	
75-15-0	Carbon Disulfide	0.20	< 0.20	U
75-35-4	1,1-Dichloroethene	0.20	< 0.20	U
75-34-3	1,1-Dichloroethane	0.20	< 0.20	U
156-60-5	trans-1,2-Dichloroethene	0.20	< 0.20	U
156-59-2	**cis-1,2-Dichloroethene**	**0.20**	**4.4**	
67-66-3	Chloroform	0.20	< 0.20	U
107-06-2	1,2-Dichloroethane	0.20	< 0.20	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	0.20	< 0.20	U
56-23-5	Carbon Tetrachloride	0.20	< 0.20	U
108-05-4	Vinyl Acetate	0.20	< 0.20	U
75-27-4	Bromodichloromethane	0.20	< 0.20	U
78-87-5	1,2-Dichloropropane	0.20	< 0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	< 0.20	U
79-01-6	**Trichloroethene**	**0.20**	**16**	
124-48-1	Dibromochloromethane	0.20	< 0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	< 0.20	U
71-43-2	Benzene	0.20	< 0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	< 0.20	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.20	< 0.20	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.20	< 0.20	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	< 0.20	U
108-88-3	Toluene	0.20	< 0.20	U
108-90-7	Chlorobenzene	0.20	< 0.20	U
100-41-4	Ethylbenzene	0.20	< 0.20	U
100-42-5	Styrene	0.20	< 0.20	U
75-69-4	Trichlorofluoromethane	0.20	< 0.20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.20	< 0.20	U
179601-23-1	m,p-Xylene	0.40	< 0.40	U
95-47-6	o-Xylene	0.20	< 0.20	U
95-50-1	1,2-Dichlorobenzene	0.20	< 0.20	U
541-73-1	1,3-Dichlorobenzene	0.20	< 0.20	U
106-46-7	1,4-Dichlorobenzene	0.20	< 0.20	U

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140325MT4-1**
 SAMPLE

Lab Sample ID: YE80F
LIMS ID: 14-5932
Matrix: Water
Date Analyzed: 04/01/14 19:28

QC Report No: YE80-Joint Base Lewis McChord
Project: Log RAM

CAS Number	Analyte	LOQ	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Iodomethane	1.0	< 1.0	U
74-96-4	Bromoethane	0.20	< 0.20	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.20	< 0.20	U
74-95-3	Dibromomethane	0.20	< 0.20	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	< 0.20	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	< 0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	< 0.50	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.20	< 0.20	U
95-63-6	1,2,4-Trimethylbenzene	0.20	< 0.20	U
87-68-3	Hexachlorobutadiene	0.50	< 0.50	U
106-93-4	1,2-Dibromoethane	0.20	< 0.20	U
74-97-5	Bromochloromethane	0.20	< 0.20	U
594-20-7	2,2-Dichloropropane	0.20	< 0.20	U
142-28-9	1,3-Dichloropropane	0.20	< 0.20	U
98-82-8	Isopropylbenzene	0.20	< 0.20	U
103-65-1	n-Propylbenzene	0.20	< 0.20	U
108-86-1	Bromobenzene	0.20	< 0.20	U
95-49-8	2-Chlorotoluene	0.20	< 0.20	U
106-43-4	4-Chlorotoluene	0.20	< 0.20	U
98-06-6	tert-Butylbenzene	0.20	< 0.20	U
135-98-8	sec-Butylbenzene	0.20	< 0.20	U
99-87-6	4-Isopropyltoluene	0.20	< 0.20	U
104-51-8	n-Butylbenzene	0.20	< 0.20	U
120-82-1	1,2,4-Trichlorobenzene	0.50	< 0.50	U
91-20-3	Naphthalene	0.50	< 0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	< 0.50	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	105%
d8-Toluene	100%
Bromofluorobenzene	99.3%
d4-1,2-Dichlorobenzene	101%

2-Chloroethylvinylether is an acid labile compound and may not be recovered from an acid preserved sample.

EPA SW-846 indicates that vinyl chloride and styrene may degrade in the presence of acid preservative.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140325PW1-1**
Page 1 of 2 **SAMPLE**

Lab Sample ID: YE80G
LIMS ID: 14-5933
Matrix: Water
Data Release Authorized:
Reported: 04/08/14

QC Report No: YE80-Joint Base Lewis McChord
Project: Log RAM

Date Sampled: 03/25/14
Date Received: 03/28/14

Instrument/Analyst: NT15/PAB
Date Analyzed: 04/01/14 19:49

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	LOQ	Result	Q
74-87-3	Chloromethane	0.50	< 0.50	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.20	< 0.20	U
75-00-3	Chloroethane	0.20	< 0.20	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	Acetone	5.0	< 5.0	U
75-15-0	Carbon Disulfide	0.20	< 0.20	U
75-35-4	1,1-Dichloroethene	0.20	< 0.20	U
75-34-3	1,1-Dichloroethane	0.20	< 0.20	U
156-60-5	**trans-1,2-Dichloroethene**	**0.20**	**0.54**	
156-59-2	**cis-1,2-Dichloroethene**	**0.20**	**31**	
67-66-3	Chloroform	0.20	< 0.20	U
107-06-2	1,2-Dichloroethane	0.20	< 0.20	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	0.20	< 0.20	U
56-23-5	Carbon Tetrachloride	0.20	< 0.20	U
108-05-4	Vinyl Acetate	0.20	< 0.20	U
75-27-4	Bromodichloromethane	0.20	< 0.20	U
78-87-5	1,2-Dichloropropane	0.20	< 0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	< 0.20	U
79-01-6	**Trichloroethene**	**0.20**	**220**	**E**
124-48-1	Dibromochloromethane	0.20	< 0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	< 0.20	U
71-43-2	Benzene	0.20	< 0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	< 0.20	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.20	< 0.20	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	**Tetrachloroethene**	**0.20**	**1.8**	
79-34-5	1,1,2,2-Tetrachloroethane	0.20	< 0.20	U
108-88-3	Toluene	0.20	< 0.20	U
108-90-7	Chlorobenzene	0.20	< 0.20	U
100-41-4	Ethylbenzene	0.20	< 0.20	U
100-42-5	Styrene	0.20	< 0.20	U
75-69-4	Trichlorofluoromethane	0.20	< 0.20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.20	< 0.20	U
179601-23-1	m,p-Xylene	0.40	< 0.40	U
95-47-6	o-Xylene	0.20	< 0.20	U
95-50-1	1,2-Dichlorobenzene	0.20	< 0.20	U
541-73-1	1,3-Dichlorobenzene	0.20	< 0.20	U
106-46-7	1,4-Dichlorobenzene	0.20	< 0.20	U

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140325PW1-1**

SAMPLE

Lab Sample ID: YE80G
LIMS ID: 14-5933
Matrix: Water
Date Analyzed: 04/01/14 19:49

QC Report No: YE80-Joint Base Lewis McChord
Project: Log RAM

CAS Number	Analyte	LOQ	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Iodomethane	1.0	< 1.0	U
74-96-4	Bromoethane	0.20	< 0.20	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.20	< 0.20	U
74-95-3	Dibromomethane	0.20	< 0.20	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	< 0.20	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	< 0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	< 0.50	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.20	< 0.20	U
95-63-6	1,2,4-Trimethylbenzene	0.20	< 0.20	U
87-68-3	Hexachlorobutadiene	0.50	< 0.50	U
106-93-4	1,2-Dibromoethane	0.20	< 0.20	U
74-97-5	Bromochloromethane	0.20	< 0.20	U
594-20-7	2,2-Dichloropropane	0.20	< 0.20	U
142-28-9	1,3-Dichloropropane	0.20	< 0.20	U
98-82-8	Isopropylbenzene	0.20	< 0.20	U
103-65-1	n-Propylbenzene	0.20	< 0.20	U
108-86-1	Bromobenzene	0.20	< 0.20	U
95-49-8	2-Chlorotoluene	0.20	< 0.20	U
106-43-4	4-Chlorotoluene	0.20	< 0.20	U
98-06-6	tert-Butylbenzene	0.20	< 0.20	U
135-98-8	sec-Butylbenzene	0.20	< 0.20	U
99-87-6	4-Isopropyltoluene	0.20	< 0.20	U
104-51-8	n-Butylbenzene	0.20	< 0.20	U
120-82-1	1,2,4-Trichlorobenzene	0.50	< 0.50	U
91-20-3	Naphthalene	0.50	< 0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	< 0.50	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	106%
d8-Toluene	99.3%
Bromofluorobenzene	99.5%
d4-1,2-Dichlorobenzene	100%

2-Chloroethylvinylether is an acid labile compound and may not be recovered from an acid preserved sample.

EPA SW-846 indicates that vinyl chloride and styrene may degrade in the presence of acid preservative.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140325PW1-1**
 DILUTION

Lab Sample ID: YE80G
LIMS ID: 14-5933
Matrix: Water
Data Release Authorized:
Reported: 04/08/14

QC Report No: YE80-Joint Base Lewis McChord
Project: Log RAM

Date Sampled: 03/25/14
Date Received: 03/28/14

Instrument/Analyst: NT15/PAB
Date Analyzed: 04/02/14 18:38

Sample Amount: 1.00 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	LOQ	Result	Q
74-87-3	Chloromethane	5.0	< 5.0	U
74-83-9	Bromomethane	10	< 10	U
75-01-4	Vinyl Chloride	2.0	< 2.0	U
75-00-3	Chloroethane	2.0	< 2.0	U
75-09-2	Methylene Chloride	10	< 10	U
67-64-1	Acetone	50	< 50	U
75-15-0	Carbon Disulfide	2.0	< 2.0	U
75-35-4	1,1-Dichloroethene	2.0	< 2.0	U
75-34-3	1,1-Dichloroethane	2.0	< 2.0	U
156-60-5	trans-1,2-Dichloroethene	2.0	< 2.0	U
156-59-2	**cis-1,2-Dichloroethene**	**2.0**	**29**	
67-66-3	Chloroform	2.0	< 2.0	U
107-06-2	1,2-Dichloroethane	2.0	< 2.0	U
78-93-3	2-Butanone	50	< 50	U
71-55-6	1,1,1-Trichloroethane	2.0	< 2.0	U
56-23-5	Carbon Tetrachloride	2.0	< 2.0	U
108-05-4	Vinyl Acetate	2.0	< 2.0	U
75-27-4	Bromodichloromethane	2.0	< 2.0	U
78-87-5	1,2-Dichloropropane	2.0	< 2.0	U
10061-01-5	cis-1,3-Dichloropropene	2.0	< 2.0	U
79-01-6	**Trichloroethene**	**2.0**	**210**	
124-48-1	Dibromochloromethane	2.0	< 2.0	U
79-00-5	1,1,2-Trichloroethane	2.0	< 2.0	U
71-43-2	Benzene	2.0	< 2.0	U
10061-02-6	trans-1,3-Dichloropropene	2.0	< 2.0	U
110-75-8	2-Chloroethylvinylether	10	< 10	U
75-25-2	Bromoform	2.0	< 2.0	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	50	< 50	U
591-78-6	2-Hexanone	50	< 50	U
127-18-4	Tetrachloroethene	2.0	< 2.0	U
79-34-5	1,1,2,2-Tetrachloroethane	2.0	< 2.0	U
108-88-3	Toluene	2.0	< 2.0	U
108-90-7	Chlorobenzene	2.0	< 2.0	U
100-41-4	Ethylbenzene	2.0	< 2.0	U
100-42-5	Styrene	2.0	< 2.0	U
75-69-4	Trichlorofluoromethane	2.0	< 2.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	2.0	< 2.0	U
179601-23-1	m,p-Xylene	4.0	< 4.0	U
95-47-6	o-Xylene	2.0	< 2.0	U
95-50-1	1,2-Dichlorobenzene	2.0	< 2.0	U
541-73-1	1,3-Dichlorobenzene	2.0	< 2.0	U
106-46-7	1,4-Dichlorobenzene	2.0	< 2.0	U

Lab Sample ID: YE80G
LIMS ID: 14-5933
Matrix: Water
Date Analyzed: 04/02/14 18:38

QC Report No: YE80-Joint Base Lewis McChord
Project: Log RAM

CAS Number	Analyte	LOQ	Result	Q
107-02-8	Acrolein	50	< 50	U
74-88-4	Iodomethane	10	< 10	U
74-96-4	Bromoethane	2.0	< 2.0	U
107-13-1	Acrylonitrile	10	< 10	U
563-58-6	1,1-Dichloropropene	2.0	< 2.0	U
74-95-3	Dibromomethane	2.0	< 2.0	U
630-20-6	1,1,1,2-Tetrachloroethane	2.0	< 2.0	U
96-12-8	1,2-Dibromo-3-chloropropane	5.0	< 5.0	U
96-18-4	1,2,3-Trichloropropane	5.0	< 5.0	U
110-57-6	trans-1,4-Dichloro-2-butene	10	< 10	U
108-67-8	1,3,5-Trimethylbenzene	2.0	< 2.0	U
95-63-6	1,2,4-Trimethylbenzene	2.0	< 2.0	U
87-68-3	Hexachlorobutadiene	5.0	< 5.0	U
106-93-4	1,2-Dibromoethane	2.0	< 2.0	U
74-97-5	Bromochloromethane	2.0	< 2.0	U
594-20-7	2,2-Dichloropropane	2.0	< 2.0	U
142-28-9	1,3-Dichloropropane	2.0	< 2.0	U
98-82-8	Isopropylbenzene	2.0	< 2.0	U
103-65-1	n-Propylbenzene	2.0	< 2.0	U
108-86-1	Bromobenzene	2.0	< 2.0	U
95-49-8	2-Chlorotoluene	2.0	< 2.0	U
106-43-4	4-Chlorotoluene	2.0	< 2.0	U
98-06-6	tert-Butylbenzene	2.0	< 2.0	U
135-98-8	sec-Butylbenzene	2.0	< 2.0	U
99-87-6	4-Isopropyltoluene	2.0	< 2.0	U
104-51-8	n-Butylbenzene	2.0	< 2.0	U
120-82-1	1,2,4-Trichlorobenzene	5.0	< 5.0	U
91-20-3	Naphthalene	5.0	< 5.0	U
87-61-6	1,2,3-Trichlorobenzene	5.0	< 5.0	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	115%
d8-Toluene	100%
Bromofluorobenzene	98.1%
d4-1,2-Dichlorobenzene	101%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140325PW2-1**
Page 1 of 2 **SAMPLE**

Lab Sample ID: YE80H
LIMS ID: 14-5934
Matrix: Water
Data Release Authorized:
Reported: 04/08/14

QC Report No: YE80-Joint Base Lewis McChord
Project: Log RAM

Date Sampled: 03/25/14
Date Received: 03/28/14

Instrument/Analyst: NT15/PAB
Date Analyzed: 04/01/14 20:10

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	LOQ	Result	Q
74-87-3	Chloromethane	0.50	< 0.50	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.20	< 0.20	U
75-00-3	Chloroethane	0.20	< 0.20	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	Acetone	5.0	< 5.0	U
75-15-0	Carbon Disulfide	0.20	< 0.20	U
75-35-4	1,1-Dichloroethene	0.20	< 0.20	U
75-34-3	1,1-Dichloroethane	0.20	< 0.20	U
156-60-5	trans-1,2-Dichloroethene	0.20	< 0.20	U
156-59-2	**cis-1,2-Dichloroethene**	**0.20**	**1.5**	
67-66-3	Chloroform	0.20	< 0.20	U
107-06-2	1,2-Dichloroethane	0.20	< 0.20	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	**1,1,1-Trichloroethane**	**0.20**	**0.21**	
56-23-5	Carbon Tetrachloride	0.20	< 0.20	U
108-05-4	Vinyl Acetate	0.20	< 0.20	U
75-27-4	Bromodichloromethane	0.20	< 0.20	U
78-87-5	1,2-Dichloropropane	0.20	< 0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	< 0.20	U
79-01-6	**Trichloroethene**	**0.20**	**36**	
124-48-1	Dibromochloromethane	0.20	< 0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	< 0.20	U
71-43-2	Benzene	0.20	< 0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	< 0.20	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.20	< 0.20	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.20	< 0.20	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	< 0.20	U
108-88-3	Toluene	0.20	< 0.20	U
108-90-7	Chlorobenzene	0.20	< 0.20	U
100-41-4	Ethylbenzene	0.20	< 0.20	U
100-42-5	Styrene	0.20	< 0.20	U
75-69-4	Trichlorofluoromethane	0.20	< 0.20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.20	< 0.20	U
179601-23-1	m,p-Xylene	0.40	< 0.40	U
95-47-6	o-Xylene	0.20	< 0.20	U
95-50-1	1,2-Dichlorobenzene	0.20	< 0.20	U
541-73-1	1,3-Dichlorobenzene	0.20	< 0.20	U
106-46-7	1,4-Dichlorobenzene	0.20	< 0.20	U

Lab Sample ID: YE80H
LIMS ID: 14-5934
Matrix: Water
Date Analyzed: 04/01/14 20:10

QC Report No: YE80-Joint Base Lewis McChord
Project: Log RAM

CAS Number	Analyte	LOQ	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Iodomethane	1.0	< 1.0	U
74-96-4	Bromoethane	0.20	< 0.20	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.20	< 0.20	U
74-95-3	Dibromomethane	0.20	< 0.20	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	< 0.20	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	< 0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	< 0.50	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.20	< 0.20	U
95-63-6	1,2,4-Trimethylbenzene	0.20	< 0.20	U
87-68-3	Hexachlorobutadiene	0.50	< 0.50	U
106-93-4	1,2-Dibromoethane	0.20	< 0.20	U
74-97-5	Bromochloromethane	0.20	< 0.20	U
594-20-7	2,2-Dichloropropane	0.20	< 0.20	U
142-28-9	1,3-Dichloropropane	0.20	< 0.20	U
98-82-8	Isopropylbenzene	0.20	< 0.20	U
103-65-1	n-Propylbenzene	0.20	< 0.20	U
108-86-1	Bromobenzene	0.20	< 0.20	U
95-49-8	2-Chlorotoluene	0.20	< 0.20	U
106-43-4	4-Chlorotoluene	0.20	< 0.20	U
98-06-6	tert-Butylbenzene	0.20	< 0.20	U
135-98-8	sec-Butylbenzene	0.20	< 0.20	U
99-87-6	4-Isopropyltoluene	0.20	< 0.20	U
104-51-8	n-Butylbenzene	0.20	< 0.20	U
120-82-1	1,2,4-Trichlorobenzene	0.50	< 0.50	U
91-20-3	Naphthalene	0.50	< 0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	< 0.50	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	106%
d8-Toluene	100%
Bromofluorobenzene	99.4%
d4-1,2-Dichlorobenzene	101%

2-Chloroethylvinylether is an acid labile compound and may not be recovered from an acid preserved sample.

EPA SW-846 indicates that vinyl chloride and styrene may degrade in the presence of acid preservative.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140325PW3-1**
 SAMPLE

Lab Sample ID: YE80I
LIMS ID: 14-5935
Matrix: Water
Data Release Authorized:
Reported: 04/08/14

QC Report No: YE80-Joint Base Lewis McChord
Project: Log RAM

Date Sampled: 03/25/14
Date Received: 03/28/14

Instrument/Analyst: NT15/PAB
Date Analyzed: 04/01/14 20:31

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	LOQ	Result	Q
74-87-3	Chloromethane	0.50	< 0.50	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.20	< 0.20	U
75-00-3	Chloroethane	0.20	< 0.20	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	Acetone	5.0	< 5.0	U
75-15-0	Carbon Disulfide	0.20	< 0.20	U
75-35-4	1,1-Dichloroethene	0.20	< 0.20	U
75-34-3	1,1-Dichloroethane	0.20	< 0.20	U
156-60-5	**trans-1,2-Dichloroethene**	**0.20**	**0.50**	
156-59-2	**cis-1,2-Dichloroethene**	**0.20**	**2.2**	
67-66-3	Chloroform	0.20	< 0.20	U
107-06-2	1,2-Dichloroethane	0.20	< 0.20	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	0.20	< 0.20	U
56-23-5	Carbon Tetrachloride	0.20	< 0.20	U
108-05-4	Vinyl Acetate	0.20	< 0.20	U
75-27-4	Bromodichloromethane	0.20	< 0.20	U
78-87-5	1,2-Dichloropropane	0.20	< 0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	< 0.20	U
79-01-6	**Trichloroethene**	**0.20**	**120**	**E**
124-48-1	Dibromochloromethane	0.20	< 0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	< 0.20	U
71-43-2	Benzene	0.20	< 0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	< 0.20	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.20	< 0.20	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.20	< 0.20	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	< 0.20	U
108-88-3	Toluene	0.20	< 0.20	U
108-90-7	Chlorobenzene	0.20	< 0.20	U
100-41-4	Ethylbenzene	0.20	< 0.20	U
100-42-5	Styrene	0.20	< 0.20	U
75-69-4	Trichlorofluoromethane	0.20	< 0.20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.20	< 0.20	U
179601-23-1	m,p-Xylene	0.40	< 0.40	U
95-47-6	o-Xylene	0.20	< 0.20	U
95-50-1	1,2-Dichlorobenzene	0.20	< 0.20	U
541-73-1	1,3-Dichlorobenzene	0.20	< 0.20	U
106-46-7	1,4-Dichlorobenzene	0.20	< 0.20	U

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140325PW3-1**
 SAMPLE

Lab Sample ID: YE80I
LIMS ID: 14-5935
Matrix: Water
Date Analyzed: 04/01/14 20:31

QC Report No: YE80-Joint Base Lewis McChord
Project: Log RAM

CAS Number	Analyte	LOQ	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Iodomethane	1.0	< 1.0	U
74-96-4	Bromoethane	0.20	< 0.20	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.20	< 0.20	U
74-95-3	Dibromomethane	0.20	< 0.20	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	< 0.20	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	< 0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	< 0.50	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.20	< 0.20	U
95-63-6	1,2,4-Trimethylbenzene	0.20	< 0.20	U
87-68-3	Hexachlorobutadiene	0.50	< 0.50	U
106-93-4	1,2-Dibromoethane	0.20	< 0.20	U
74-97-5	Bromochloromethane	0.20	< 0.20	U
594-20-7	2,2-Dichloropropane	0.20	< 0.20	U
142-28-9	1,3-Dichloropropane	0.20	< 0.20	U
98-82-8	Isopropylbenzene	0.20	< 0.20	U
103-65-1	n-Propylbenzene	0.20	< 0.20	U
108-86-1	Bromobenzene	0.20	< 0.20	U
95-49-8	2-Chlorotoluene	0.20	< 0.20	U
106-43-4	4-Chlorotoluene	0.20	< 0.20	U
98-06-6	tert-Butylbenzene	0.20	< 0.20	U
135-98-8	sec-Butylbenzene	0.20	< 0.20	U
99-87-6	4-Isopropyltoluene	0.20	< 0.20	U
104-51-8	n-Butylbenzene	0.20	< 0.20	U
120-82-1	1,2,4-Trichlorobenzene	0.50	< 0.50	U
91-20-3	Naphthalene	0.50	< 0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	< 0.50	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	107%
d8-Toluene	99.9%
Bromofluorobenzene	98.1%
d4-1,2-Dichlorobenzene	101%

2-Chloroethylvinylether is an acid labile compound and may not be recovered from an acid preserved sample.

EPA SW-846 indicates that vinyl chloride and styrene may degrade in the presence of acid preservative.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140325PW3-1**
Page 1 of 2 **DILUTION**

Lab Sample ID: YE80I
LIMS ID: 14-5935
Matrix: Water
Data Release Authorized:
Reported: 04/08/14

QC Report No: YE80-Joint Base Lewis McChord
Project: Log RAM

Date Sampled: 03/25/14
Date Received: 03/28/14

Instrument/Analyst: NT15/PAB
Date Analyzed: 04/02/14 18:59

Sample Amount: 2.00 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	LOQ	Result	Q
74-87-3	Chloromethane	2.5	< 2.5	U
74-83-9	Bromomethane	5.0	< 5.0	U
75-01-4	Vinyl Chloride	1.0	< 1.0	U
75-00-3	Chloroethane	1.0	< 1.0	U
75-09-2	Methylene Chloride	5.0	< 5.0	U
67-64-1	Acetone	25	< 25	U
75-15-0	Carbon Disulfide	1.0	< 1.0	U
75-35-4	1,1-Dichloroethene	1.0	< 1.0	U
75-34-3	1,1-Dichloroethane	1.0	< 1.0	U
156-60-5	trans-1,2-Dichloroethene	1.0	< 1.0	U
156-59-2	**cis-1,2-Dichloroethene**	**1.0**	**2.0**	
67-66-3	Chloroform	1.0	< 1.0	U
107-06-2	1,2-Dichloroethane	1.0	< 1.0	U
78-93-3	2-Butanone	25	< 25	U
71-55-6	1,1,1-Trichloroethane	1.0	< 1.0	U
56-23-5	Carbon Tetrachloride	1.0	< 1.0	U
108-05-4	Vinyl Acetate	1.0	< 1.0	U
75-27-4	Bromodichloromethane	1.0	< 1.0	U
78-87-5	1,2-Dichloropropane	1.0	< 1.0	U
10061-01-5	cis-1,3-Dichloropropene	1.0	< 1.0	U
79-01-6	**Trichloroethene**	**1.0**	**110**	
124-48-1	Dibromochloromethane	1.0	< 1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	< 1.0	U
71-43-2	Benzene	1.0	< 1.0	U
10061-02-6	trans-1,3-Dichloropropene	1.0	< 1.0	U
110-75-8	2-Chloroethylvinylether	5.0	< 5.0	U
75-25-2	Bromoform	1.0	< 1.0	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	25	< 25	U
591-78-6	2-Hexanone	25	< 25	U
127-18-4	Tetrachloroethene	1.0	< 1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	< 1.0	U
108-88-3	Toluene	1.0	< 1.0	U
108-90-7	Chlorobenzene	1.0	< 1.0	U
100-41-4	Ethylbenzene	1.0	< 1.0	U
100-42-5	Styrene	1.0	< 1.0	U
75-69-4	Trichlorofluoromethane	1.0	< 1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	< 1.0	U
179601-23-1	m,p-Xylene	2.0	< 2.0	U
95-47-6	o-Xylene	1.0	< 1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	< 1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	< 1.0	U
106-46-7	1,4-Dichlorobenzene	1.0	< 1.0	U

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140325PW3-1**
 DILUTION

Lab Sample ID: YE80I
LIMS ID: 14-5935
Matrix: Water
Date Analyzed: 04/02/14 18:59

QC Report No: YE80-Joint Base Lewis McChord
Project: Log RAM

CAS Number	Analyte	LOQ	Result	Q
107-02-8	Acrolein	25	< 25	U
74-88-4	Iodomethane	5.0	< 5.0	U
74-96-4	Bromoethane	1.0	< 1.0	U
107-13-1	Acrylonitrile	5.0	< 5.0	U
563-58-6	1,1-Dichloropropene	1.0	< 1.0	U
74-95-3	Dibromomethane	1.0	< 1.0	U
630-20-6	1,1,1,2-Tetrachloroethane	1.0	< 1.0	U
96-12-8	1,2-Dibromo-3-chloropropane	2.5	< 2.5	U
96-18-4	1,2,3-Trichloropropane	2.5	< 2.5	U
110-57-6	trans-1,4-Dichloro-2-butene	5.0	< 5.0	U
108-67-8	1,3,5-Trimethylbenzene	1.0	< 1.0	U
95-63-6	1,2,4-Trimethylbenzene	1.0	< 1.0	U
87-68-3	Hexachlorobutadiene	2.5	< 2.5	U
106-93-4	1,2-Dibromoethane	1.0	< 1.0	U
74-97-5	Bromochloromethane	1.0	< 1.0	U
594-20-7	2,2-Dichloropropane	1.0	< 1.0	U
142-28-9	1,3-Dichloropropane	1.0	< 1.0	U
98-82-8	Isopropylbenzene	1.0	< 1.0	U
103-65-1	n-Propylbenzene	1.0	< 1.0	U
108-86-1	Bromobenzene	1.0	< 1.0	U
95-49-8	2-Chlorotoluene	1.0	< 1.0	U
106-43-4	4-Chlorotoluene	1.0	< 1.0	U
98-06-6	tert-Butylbenzene	1.0	< 1.0	U
135-98-8	sec-Butylbenzene	1.0	< 1.0	U
99-87-6	4-Isopropyltoluene	1.0	< 1.0	U
104-51-8	n-Butylbenzene	1.0	< 1.0	U
120-82-1	1,2,4-Trichlorobenzene	2.5	< 2.5	U
91-20-3	Naphthalene	2.5	< 2.5	U
87-61-6	1,2,3-Trichlorobenzene	2.5	< 2.5	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	115%
d8-Toluene	101%
Bromofluorobenzene	98.6%
d4-1,2-Dichlorobenzene	101%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140325PW5-1**
 SAMPLE

Lab Sample ID: YE80J
LIMS ID: 14-5936
Matrix: Water
Data Release Authorized:
Reported: 04/08/14

QC Report No: YE80-Joint Base Lewis McChord
Project: Log RAM
Date Sampled: 03/25/14
Date Received: 03/28/14

Instrument/Analyst: NT15/PAB
Date Analyzed: 04/01/14 20:52

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	LOQ	Result	Q
74-87-3	Chloromethane	0.50	< 0.50	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.20	< 0.20	U
75-00-3	Chloroethane	0.20	< 0.20	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	Acetone	5.0	< 5.0	U
75-15-0	Carbon Disulfide	0.20	< 0.20	U
75-35-4	1,1-Dichloroethene	0.20	< 0.20	U
75-34-3	**1,1-Dichloroethane**	**0.20**	**0.22**	
156-60-5	trans-1,2-Dichloroethene	0.20	< 0.20	U
156-59-2	**cis-1,2-Dichloroethene**	**0.20**	**5.5**	
67-66-3	Chloroform	0.20	< 0.20	U
107-06-2	1,2-Dichloroethane	0.20	< 0.20	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	**1,1,1-Trichloroethane**	**0.20**	**0.53**	
56-23-5	Carbon Tetrachloride	0.20	< 0.20	U
108-05-4	Vinyl Acetate	0.20	< 0.20	U
75-27-4	Bromodichloromethane	0.20	< 0.20	U
78-87-5	1,2-Dichloropropane	0.20	< 0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	< 0.20	U
79-01-6	**Trichloroethene**	**0.20**	**37**	
124-48-1	Dibromochloromethane	0.20	< 0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	< 0.20	U
71-43-2	Benzene	0.20	< 0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	< 0.20	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.20	< 0.20	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.20	< 0.20	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	< 0.20	U
108-88-3	Toluene	0.20	< 0.20	U
108-90-7	Chlorobenzene	0.20	< 0.20	U
100-41-4	Ethylbenzene	0.20	< 0.20	U
100-42-5	Styrene	0.20	< 0.20	U
75-69-4	Trichlorofluoromethane	0.20	< 0.20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.20	< 0.20	U
179601-23-1	m,p-Xylene	0.40	< 0.40	U
95-47-6	o-Xylene	0.20	< 0.20	U
95-50-1	1,2-Dichlorobenzene	0.20	< 0.20	U
541-73-1	1,3-Dichlorobenzene	0.20	< 0.20	U
106-46-7	1,4-Dichlorobenzene	0.20	< 0.20	U

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140325PW5-1**
 SAMPLE

Lab Sample ID: YE80J
LIMS ID: 14-5936
Matrix: Water
Date Analyzed: 04/01/14 20:52

QC Report No: YE80-Joint Base Lewis McChord
Project: Log RAM

CAS Number	Analyte	LOQ	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Iodomethane	1.0	< 1.0	U
74-96-4	Bromoethane	0.20	< 0.20	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.20	< 0.20	U
74-95-3	Dibromomethane	0.20	< 0.20	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	< 0.20	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	< 0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	< 0.50	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.20	< 0.20	U
95-63-6	1,2,4-Trimethylbenzene	0.20	< 0.20	U
87-68-3	Hexachlorobutadiene	0.50	< 0.50	U
106-93-4	1,2-Dibromoethane	0.20	< 0.20	U
74-97-5	Bromochloromethane	0.20	< 0.20	U
594-20-7	2,2-Dichloropropane	0.20	< 0.20	U
142-28-9	1,3-Dichloropropane	0.20	< 0.20	U
98-82-8	Isopropylbenzene	0.20	< 0.20	U
103-65-1	n-Propylbenzene	0.20	< 0.20	U
108-86-1	Bromobenzene	0.20	< 0.20	U
95-49-8	2-Chlorotoluene	0.20	< 0.20	U
106-43-4	4-Chlorotoluene	0.20	< 0.20	U
98-06-6	tert-Butylbenzene	0.20	< 0.20	U
135-98-8	sec-Butylbenzene	0.20	< 0.20	U
99-87-6	4-Isopropyltoluene	0.20	< 0.20	U
104-51-8	n-Butylbenzene	0.20	< 0.20	U
120-82-1	1,2,4-Trichlorobenzene	0.50	< 0.50	U
91-20-3	Naphthalene	0.50	< 0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	< 0.50	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	106%
d8-Toluene	100%
Bromofluorobenzene	98.9%
d4-1,2-Dichlorobenzene	101%

2-Chloroethylvinylether is an acid labile compound and may not be recovered from an acid preserved sample.

EPA SW-846 indicates that vinyl chloride and styrene may degrade in the presence of acid preservative.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140325PW7-1**
 SAMPLE

Lab Sample ID: YE80K
LIMS ID: 14-5937
Matrix: Water
Data Release Authorized:
Reported: 04/08/14

QC Report No: YE80-Joint Base Lewis McChord
Project: Log RAM

Date Sampled: 03/25/14
Date Received: 03/28/14

Instrument/Analyst: NT15/PAB
Date Analyzed: 04/01/14 21:13

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	LOQ	Result	Q
74-87-3	Chloromethane	0.50	< 0.50	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.20	< 0.20	U
75-00-3	Chloroethane	0.20	< 0.20	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	Acetone	5.0	< 5.0	U
75-15-0	Carbon Disulfide	0.20	< 0.20	U
75-35-4	1,1-Dichloroethene	0.20	< 0.20	U
75-34-3	1,1-Dichloroethane	0.20	< 0.20	U
156-60-5	trans-1,2-Dichloroethene	0.20	< 0.20	U
156-59-2	**cis-1,2-Dichloroethene**	**0.20**	**2.0**	
67-66-3	Chloroform	0.20	< 0.20	U
107-06-2	1,2-Dichloroethane	0.20	< 0.20	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	0.20	< 0.20	U
56-23-5	Carbon Tetrachloride	0.20	< 0.20	U
108-05-4	Vinyl Acetate	0.20	< 0.20	U
75-27-4	Bromodichloromethane	0.20	< 0.20	U
78-87-5	1,2-Dichloropropane	0.20	< 0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	< 0.20	U
79-01-6	**Trichloroethene**	**0.20**	**26**	
124-48-1	Dibromochloromethane	0.20	< 0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	< 0.20	U
71-43-2	Benzene	0.20	< 0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	< 0.20	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.20	< 0.20	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.20	< 0.20	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	< 0.20	U
108-88-3	Toluene	0.20	< 0.20	U
108-90-7	Chlorobenzene	0.20	< 0.20	U
100-41-4	Ethylbenzene	0.20	< 0.20	U
100-42-5	Styrene	0.20	< 0.20	U
75-69-4	Trichlorofluoromethane	0.20	< 0.20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.20	< 0.20	U
179601-23-1	m,p-Xylene	0.40	< 0.40	U
95-47-6	o-Xylene	0.20	< 0.20	U
95-50-1	1,2-Dichlorobenzene	0.20	< 0.20	U
541-73-1	1,3-Dichlorobenzene	0.20	< 0.20	U
106-46-7	1,4-Dichlorobenzene	0.20	< 0.20	U

Lab Sample ID: YE80K
LIMS ID: 14-5937
Matrix: Water
Date Analyzed: 04/01/14 21:13

QC Report No: YE80-Joint Base Lewis McChord
Project: Log RAM

CAS Number	Analyte	LOQ	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Iodomethane	1.0	< 1.0	U
74-96-4	Bromoethane	0.20	< 0.20	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.20	< 0.20	U
74-95-3	Dibromomethane	0.20	< 0.20	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	< 0.20	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	< 0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	< 0.50	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.20	< 0.20	U
95-63-6	1,2,4-Trimethylbenzene	0.20	< 0.20	U
87-68-3	Hexachlorobutadiene	0.50	< 0.50	U
106-93-4	1,2-Dibromoethane	0.20	< 0.20	U
74-97-5	Bromochloromethane	0.20	< 0.20	U
594-20-7	2,2-Dichloropropane	0.20	< 0.20	U
142-28-9	1,3-Dichloropropane	0.20	< 0.20	U
98-82-8	Isopropylbenzene	0.20	< 0.20	U
103-65-1	n-Propylbenzene	0.20	< 0.20	U
108-86-1	Bromobenzene	0.20	< 0.20	U
95-49-8	2-Chlorotoluene	0.20	< 0.20	U
106-43-4	4-Chlorotoluene	0.20	< 0.20	U
98-06-6	tert-Butylbenzene	0.20	< 0.20	U
135-98-8	sec-Butylbenzene	0.20	< 0.20	U
99-87-6	4-Isopropyltoluene	0.20	< 0.20	U
104-51-8	n-Butylbenzene	0.20	< 0.20	U
120-82-1	1,2,4-Trichlorobenzene	0.50	< 0.50	U
91-20-3	Naphthalene	0.50	< 0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	< 0.50	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	107%
d8-Toluene	99.7%
Bromofluorobenzene	97.1%
d4-1,2-Dichlorobenzene	101%

2-Chloroethylvinylether is an acid labile compound and may not be recovered from an acid preserved sample.

EPA SW-846 indicates that vinyl chloride and styrene may degrade in the presence of acid preservative.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140325PW8-1**
 SAMPLE

Lab Sample ID: YE80L
LIMS ID: 14-5938
Matrix: Water
Data Release Authorized:
Reported: 04/08/14

QC Report No: YE80-Joint Base Lewis McChord
Project: Log RAM

Date Sampled: 03/25/14
Date Received: 03/28/14

Instrument/Analyst: NT15/PAB
Date Analyzed: 04/01/14 21:34

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	LOQ	Result	Q
74-87-3	Chloromethane	0.50	< 0.50	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.20	< 0.20	U
75-00-3	Chloroethane	0.20	< 0.20	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	Acetone	5.0	< 5.0	U
75-15-0	Carbon Disulfide	0.20	< 0.20	U
75-35-4	1,1-Dichloroethene	0.20	< 0.20	U
75-34-3	1,1-Dichloroethane	0.20	< 0.20	U
156-60-5	trans-1,2-Dichloroethene	0.20	< 0.20	U
156-59-2	**cis-1,2-Dichloroethene**	**0.20**	**4.9**	
67-66-3	Chloroform	0.20	< 0.20	U
107-06-2	1,2-Dichloroethane	0.20	< 0.20	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	0.20	< 0.20	U
56-23-5	Carbon Tetrachloride	0.20	< 0.20	U
108-05-4	Vinyl Acetate	0.20	< 0.20	U
75-27-4	Bromodichloromethane	0.20	< 0.20	U
78-87-5	1,2-Dichloropropane	0.20	< 0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	< 0.20	U
79-01-6	**Trichloroethene**	**0.20**	**15**	
124-48-1	Dibromochloromethane	0.20	< 0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	< 0.20	U
71-43-2	Benzene	0.20	< 0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	< 0.20	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.20	< 0.20	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.20	< 0.20	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	< 0.20	U
108-88-3	Toluene	0.20	< 0.20	U
108-90-7	Chlorobenzene	0.20	< 0.20	U
100-41-4	Ethylbenzene	0.20	< 0.20	U
100-42-5	Styrene	0.20	< 0.20	U
75-69-4	Trichlorofluoromethane	0.20	< 0.20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.20	< 0.20	U
179601-23-1	m,p-Xylene	0.40	< 0.40	U
95-47-6	o-Xylene	0.20	< 0.20	U
95-50-1	**1,2-Dichlorobenzene**	**0.20**	**0.21**	
541-73-1	1,3-Dichlorobenzene	0.20	< 0.20	U
106-46-7	1,4-Dichlorobenzene	0.20	< 0.20	U

Lab Sample ID: YE80L
LIMS ID: 14-5938
Matrix: Water
Date Analyzed: 04/01/14 21:34

QC Report No: YE80-Joint Base Lewis McChord
Project: Log RAM

CAS Number	Analyte	LOQ	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Iodomethane	1.0	< 1.0	U
74-96-4	Bromoethane	0.20	< 0.20	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.20	< 0.20	U
74-95-3	Dibromomethane	0.20	< 0.20	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	< 0.20	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	< 0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	< 0.50	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.20	< 0.20	U
95-63-6	1,2,4-Trimethylbenzene	0.20	< 0.20	U
87-68-3	Hexachlorobutadiene	0.50	< 0.50	U
106-93-4	1,2-Dibromoethane	0.20	< 0.20	U
74-97-5	Bromochloromethane	0.20	< 0.20	U
594-20-7	2,2-Dichloropropane	0.20	< 0.20	U
142-28-9	1,3-Dichloropropane	0.20	< 0.20	U
98-82-8	Isopropylbenzene	0.20	< 0.20	U
103-65-1	n-Propylbenzene	0.20	< 0.20	U
108-86-1	Bromobenzene	0.20	< 0.20	U
95-49-8	2-Chlorotoluene	0.20	< 0.20	U
106-43-4	4-Chlorotoluene	0.20	< 0.20	U
98-06-6	tert-Butylbenzene	0.20	< 0.20	U
135-98-8	sec-Butylbenzene	0.20	< 0.20	U
99-87-6	4-Isopropyltoluene	0.20	< 0.20	U
104-51-8	n-Butylbenzene	0.20	< 0.20	U
120-82-1	1,2,4-Trichlorobenzene	0.50	< 0.50	U
91-20-3	Naphthalene	0.50	< 0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	< 0.50	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	108%
d8-Toluene	100%
Bromofluorobenzene	99.4%
d4-1,2-Dichlorobenzene	101%

2-Chloroethylvinylether is an acid labile compound and may not be recovered from an acid preserved sample.

EPA SW-846 indicates that vinyl chloride and styrene may degrade in the presence of acid preservative.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140327I5E-1**
 SAMPLE

Lab Sample ID: YE80M
LIMS ID: 14-5939
Matrix: Water
Data Release Authorized:
Reported: 04/08/14

QC Report No: YE80-Joint Base Lewis McChord
Project: Log RAM

Date Sampled: 03/27/14
Date Received: 03/28/14

Instrument/Analyst: NT15/PAB
Date Analyzed: 04/01/14 21:55

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	LOQ	Result	Q
74-87-3	Chloromethane	0.50	< 0.50	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.20	< 0.20	U
75-00-3	Chloroethane	0.20	< 0.20	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	Acetone	5.0	< 5.0	U
75-15-0	Carbon Disulfide	0.20	< 0.20	U
75-35-4	1,1-Dichloroethene	0.20	< 0.20	U
75-34-3	1,1-Dichloroethane	0.20	< 0.20	U
156-60-5	trans-1,2-Dichloroethene	0.20	< 0.20	U
156-59-2	cis-1,2-Dichloroethene	0.20	< 0.20	U
67-66-3	Chloroform	0.20	< 0.20	U
107-06-2	1,2-Dichloroethane	0.20	< 0.20	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	0.20	< 0.20	U
56-23-5	Carbon Tetrachloride	0.20	< 0.20	U
108-05-4	Vinyl Acetate	0.20	< 0.20	U
75-27-4	Bromodichloromethane	0.20	< 0.20	U
78-87-5	1,2-Dichloropropane	0.20	< 0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	< 0.20	U
79-01-6	**Trichloroethene**	**0.20**	**0.57**	
124-48-1	Dibromochloromethane	0.20	< 0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	< 0.20	U
71-43-2	Benzene	0.20	< 0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	< 0.20	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.20	< 0.20	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.20	< 0.20	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	< 0.20	U
108-88-3	Toluene	0.20	< 0.20	U
108-90-7	Chlorobenzene	0.20	< 0.20	U
100-41-4	Ethylbenzene	0.20	< 0.20	U
100-42-5	Styrene	0.20	< 0.20	U
75-69-4	Trichlorofluoromethane	0.20	< 0.20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.20	< 0.20	U
179601-23-1	m,p-Xylene	0.40	< 0.40	U
95-47-6	o-Xylene	0.20	< 0.20	U
95-50-1	1,2-Dichlorobenzene	0.20	< 0.20	U
541-73-1	1,3-Dichlorobenzene	0.20	< 0.20	U
106-46-7	1,4-Dichlorobenzene	0.20	< 0.20	U

Lab Sample ID: YE80M
LIMS ID: 14-5939
Matrix: Water
Date Analyzed: 04/01/14 21:55

QC Report No: YE80-Joint Base Lewis McChord
Project: Log RAM

CAS Number	Analyte	LOQ	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Iodomethane	1.0	< 1.0	U
74-96-4	Bromoethane	0.20	< 0.20	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.20	< 0.20	U
74-95-3	Dibromomethane	0.20	< 0.20	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	< 0.20	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	< 0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	< 0.50	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.20	< 0.20	U
95-63-6	1,2,4-Trimethylbenzene	0.20	< 0.20	U
87-68-3	Hexachlorobutadiene	0.50	< 0.50	U
106-93-4	1,2-Dibromoethane	0.20	< 0.20	U
74-97-5	Bromochloromethane	0.20	< 0.20	U
594-20-7	2,2-Dichloropropane	0.20	< 0.20	U
142-28-9	1,3-Dichloropropane	0.20	< 0.20	U
98-82-8	Isopropylbenzene	0.20	< 0.20	U
103-65-1	n-Propylbenzene	0.20	< 0.20	U
108-86-1	Bromobenzene	0.20	< 0.20	U
95-49-8	2-Chlorotoluene	0.20	< 0.20	U
106-43-4	4-Chlorotoluene	0.20	< 0.20	U
98-06-6	tert-Butylbenzene	0.20	< 0.20	U
135-98-8	sec-Butylbenzene	0.20	< 0.20	U
99-87-6	4-Isopropyltoluene	0.20	< 0.20	U
104-51-8	n-Butylbenzene	0.20	< 0.20	U
120-82-1	1,2,4-Trichlorobenzene	0.50	< 0.50	U
91-20-3	Naphthalene	0.50	< 0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	< 0.50	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	108%
d8-Toluene	101%
Bromofluorobenzene	98.8%
d4-1,2-Dichlorobenzene	101%

2-Chloroethylvinylether is an acid labile compound and may not be recovered from an acid preserved sample.

EPA SW-846 indicates that vinyl chloride and styrene may degrade in the presence of acid preservative.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140327I5I-1**
Page 1 of 2 **SAMPLE**

Lab Sample ID: YE80N
LIMS ID: 14-5940
Matrix: Water
Data Release Authorized:
Reported: 04/08/14

QC Report No: YE80-Joint Base Lewis McChord
Project: Log RAM

Date Sampled: 03/27/14
Date Received: 03/28/14

Instrument/Analyst: NT15/PAB
Date Analyzed: 04/02/14 15:49

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	LOQ	Result	Q
74-87-3	Chloromethane	0.50	< 0.50	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.20	< 0.20	U
75-00-3	Chloroethane	0.20	< 0.20	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	Acetone	5.0	< 5.0	U
75-15-0	Carbon Disulfide	0.20	< 0.20	U
75-35-4	1,1-Dichloroethene	0.20	< 0.20	U
75-34-3	1,1-Dichloroethane	0.20	< 0.20	U
156-60-5	trans-1,2-Dichloroethene	0.20	< 0.20	U
156-59-2	**cis-1,2-Dichloroethene**	**0.20**	**0.83**	
67-66-3	**Chloroform**	**0.20**	**0.33**	
107-06-2	1,2-Dichloroethane	0.20	< 0.20	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	**1,1,1-Trichloroethane**	**0.20**	**0.25**	
56-23-5	Carbon Tetrachloride	0.20	< 0.20	U
108-05-4	Vinyl Acetate	0.20	< 0.20	U
75-27-4	Bromodichloromethane	0.20	< 0.20	U
78-87-5	1,2-Dichloropropane	0.20	< 0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	< 0.20	U
79-01-6	**Trichloroethene**	**0.20**	**33**	
124-48-1	Dibromochloromethane	0.20	< 0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	< 0.20	U
71-43-2	Benzene	0.20	< 0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	< 0.20	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.20	< 0.20	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.20	< 0.20	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	< 0.20	U
108-88-3	Toluene	0.20	< 0.20	U
108-90-7	Chlorobenzene	0.20	< 0.20	U
100-41-4	Ethylbenzene	0.20	< 0.20	U
100-42-5	Styrene	0.20	< 0.20	U
75-69-4	Trichlorofluoromethane	0.20	< 0.20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.20	< 0.20	U
179601-23-1	m,p-Xylene	0.40	< 0.40	U
95-47-6	o-Xylene	0.20	< 0.20	U
95-50-1	1,2-Dichlorobenzene	0.20	< 0.20	U
541-73-1	1,3-Dichlorobenzene	0.20	< 0.20	U
106-46-7	1,4-Dichlorobenzene	0.20	< 0.20	U

Lab Sample ID: YE80N
LIMS ID: 14-5940
Matrix: Water
Date Analyzed: 04/02/14 15:49

QC Report No: YE80-Joint Base Lewis McChord
Project: Log RAM

CAS Number	Analyte	LOQ	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Iodomethane	1.0	< 1.0	U
74-96-4	Bromoethane	0.20	< 0.20	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.20	< 0.20	U
74-95-3	Dibromomethane	0.20	< 0.20	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	< 0.20	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	< 0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	< 0.50	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.20	< 0.20	U
95-63-6	1,2,4-Trimethylbenzene	0.20	< 0.20	U
87-68-3	Hexachlorobutadiene	0.50	< 0.50	U
106-93-4	1,2-Dibromoethane	0.20	< 0.20	U
74-97-5	Bromochloromethane	0.20	< 0.20	U
594-20-7	2,2-Dichloropropane	0.20	< 0.20	U
142-28-9	1,3-Dichloropropane	0.20	< 0.20	U
98-82-8	Isopropylbenzene	0.20	< 0.20	U
103-65-1	n-Propylbenzene	0.20	< 0.20	U
108-86-1	Bromobenzene	0.20	< 0.20	U
95-49-8	2-Chlorotoluene	0.20	< 0.20	U
106-43-4	4-Chlorotoluene	0.20	< 0.20	U
98-06-6	tert-Butylbenzene	0.20	< 0.20	U
135-98-8	sec-Butylbenzene	0.20	< 0.20	U
99-87-6	4-Isopropyltoluene	0.20	< 0.20	U
104-51-8	n-Butylbenzene	0.20	< 0.20	U
120-82-1	1,2,4-Trichlorobenzene	0.50	< 0.50	U
91-20-3	Naphthalene	0.50	< 0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	< 0.50	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	105%
d8-Toluene	99.7%
Bromofluorobenzene	97.3%
d4-1,2-Dichlorobenzene	102%

2-Chloroethylvinylether is an acid labile compound and may not be recovered from an acid preserved sample.

EPA SW-846 indicates that vinyl chloride and styrene may degrade in the presence of acid preservative.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140327LX2-1**
 SAMPLE

Lab Sample ID: YE80O
LIMS ID: 14-5941
Matrix: Water
Data Release Authorized:
Reported: 04/08/14

QC Report No: YE80-Joint Base Lewis McChord
Project: Log RAM

Date Sampled: 03/27/14
Date Received: 03/28/14

Instrument/Analyst: NT15/PAB
Date Analyzed: 04/02/14 16:10

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	LOQ	Result	Q
74-87-3	Chloromethane	0.50	< 0.50	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.20	< 0.20	U
75-00-3	Chloroethane	0.20	< 0.20	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	**Acetone**	**5.0**	**6.4**	
75-15-0	Carbon Disulfide	0.20	< 0.20	U
75-35-4	1,1-Dichloroethene	0.20	< 0.20	U
75-34-3	1,1-Dichloroethane	0.20	< 0.20	U
156-60-5	trans-1,2-Dichloroethene	0.20	< 0.20	U
156-59-2	cis-1,2-Dichloroethene	0.20	< 0.20	U
67-66-3	Chloroform	0.20	< 0.20	U
107-06-2	1,2-Dichloroethane	0.20	< 0.20	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	0.20	< 0.20	U
56-23-5	Carbon Tetrachloride	0.20	< 0.20	U
108-05-4	Vinyl Acetate	0.20	< 0.20	U
75-27-4	Bromodichloromethane	0.20	< 0.20	U
78-87-5	1,2-Dichloropropane	0.20	< 0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	< 0.20	U
79-01-6	**Trichloroethene**	**0.20**	**4.4**	
124-48-1	Dibromochloromethane	0.20	< 0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	< 0.20	U
71-43-2	Benzene	0.20	< 0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	< 0.20	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.20	< 0.20	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.20	< 0.20	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	< 0.20	U
108-88-3	Toluene	0.20	< 0.20	U
108-90-7	Chlorobenzene	0.20	< 0.20	U
100-41-4	Ethylbenzene	0.20	< 0.20	U
100-42-5	Styrene	0.20	< 0.20	U
75-69-4	Trichlorofluoromethane	0.20	< 0.20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.20	< 0.20	U
179601-23-1	m,p-Xylene	0.40	< 0.40	U
95-47-6	o-Xylene	0.20	< 0.20	U
95-50-1	1,2-Dichlorobenzene	0.20	< 0.20	U
541-73-1	1,3-Dichlorobenzene	0.20	< 0.20	U
106-46-7	1,4-Dichlorobenzene	0.20	< 0.20	U

Lab Sample ID: YE80O
LIMS ID: 14-5941
Matrix: Water
Date Analyzed: 04/02/14 16:10

QC Report No: YE80-Joint Base Lewis McChord
Project: Log RAM

CAS Number	Analyte	LOQ	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Iodomethane	1.0	< 1.0	U
74-96-4	Bromoethane	0.20	< 0.20	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.20	< 0.20	U
74-95-3	Dibromomethane	0.20	< 0.20	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	< 0.20	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	< 0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	< 0.50	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.20	< 0.20	U
95-63-6	1,2,4-Trimethylbenzene	0.20	< 0.20	U
87-68-3	Hexachlorobutadiene	0.50	< 0.50	U
106-93-4	1,2-Dibromoethane	0.20	< 0.20	U
74-97-5	Bromochloromethane	0.20	< 0.20	U
594-20-7	2,2-Dichloropropane	0.20	< 0.20	U
142-28-9	1,3-Dichloropropane	0.20	< 0.20	U
98-82-8	Isopropylbenzene	0.20	< 0.20	U
103-65-1	n-Propylbenzene	0.20	< 0.20	U
108-86-1	Bromobenzene	0.20	< 0.20	U
95-49-8	2-Chlorotoluene	0.20	< 0.20	U
106-43-4	4-Chlorotoluene	0.20	< 0.20	U
98-06-6	tert-Butylbenzene	0.20	< 0.20	U
135-98-8	sec-Butylbenzene	0.20	< 0.20	U
99-87-6	4-Isopropyltoluene	0.20	< 0.20	U
104-51-8	n-Butylbenzene	0.20	< 0.20	U
120-82-1	1,2,4-Trichlorobenzene	0.50	< 0.50	U
91-20-3	Naphthalene	0.50	< 0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	< 0.50	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	110%
d8-Toluene	102%
Bromofluorobenzene	98.7%
d4-1,2-Dichlorobenzene	101%

2-Chloroethylvinylether is an acid labile compound and may not be recovered from an acid preserved sample.

EPA SW-846 indicates that vinyl chloride and styrene may degrade in the presence of acid preservative.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140327LX3-1**
 SAMPLE

Lab Sample ID: YE80P
LIMS ID: 14-5942
Matrix: Water
Data Release Authorized:
Reported: 04/08/14

QC Report No: YE80-Joint Base Lewis McChord
Project: Log RAM

Date Sampled: 03/27/14
Date Received: 03/28/14

Instrument/Analyst: NT15/PAB
Date Analyzed: 04/02/14 16:31

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	LOQ	Result	Q
74-87-3	Chloromethane	0.50	< 0.50	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.20	< 0.20	U
75-00-3	Chloroethane	0.20	< 0.20	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	Acetone	5.0	< 5.0	U
75-15-0	Carbon Disulfide	0.20	< 0.20	U
75-35-4	1,1-Dichloroethene	0.20	< 0.20	U
75-34-3	1,1-Dichloroethane	0.20	< 0.20	U
156-60-5	trans-1,2-Dichloroethene	0.20	< 0.20	U
156-59-2	**cis-1,2-Dichloroethene**	**0.20**	**0.61**	
67-66-3	Chloroform	0.20	< 0.20	U
107-06-2	1,2-Dichloroethane	0.20	< 0.20	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	**1,1,1-Trichloroethane**	**0.20**	**0.27**	
56-23-5	Carbon Tetrachloride	0.20	< 0.20	U
108-05-4	Vinyl Acetate	0.20	< 0.20	U
75-27-4	Bromodichloromethane	0.20	< 0.20	U
78-87-5	1,2-Dichloropropane	0.20	< 0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	< 0.20	U
79-01-6	**Trichloroethene**	**0.20**	**13**	
124-48-1	Dibromochloromethane	0.20	< 0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	< 0.20	U
71-43-2	Benzene	0.20	< 0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	< 0.20	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.20	< 0.20	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.20	< 0.20	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	< 0.20	U
108-88-3	Toluene	0.20	< 0.20	U
108-90-7	Chlorobenzene	0.20	< 0.20	U
100-41-4	Ethylbenzene	0.20	< 0.20	U
100-42-5	Styrene	0.20	< 0.20	U
75-69-4	Trichlorofluoromethane	0.20	< 0.20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.20	< 0.20	U
179601-23-1	m,p-Xylene	0.40	< 0.40	U
95-47-6	o-Xylene	0.20	< 0.20	U
95-50-1	1,2-Dichlorobenzene	0.20	< 0.20	U
541-73-1	1,3-Dichlorobenzene	0.20	< 0.20	U
106-46-7	1,4-Dichlorobenzene	0.20	< 0.20	U

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140327LX3-1**

SAMPLE

Lab Sample ID: YE80P
LIMS ID: 14-5942
Matrix: Water
Date Analyzed: 04/02/14 16:31

QC Report No: YE80-Joint Base Lewis McChord
Project: Log RAM

CAS Number	Analyte	LOQ	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Iodomethane	1.0	< 1.0	U
74-96-4	Bromoethane	0.20	< 0.20	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.20	< 0.20	U
74-95-3	Dibromomethane	0.20	< 0.20	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	< 0.20	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	< 0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	< 0.50	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.20	< 0.20	U
95-63-6	1,2,4-Trimethylbenzene	0.20	< 0.20	U
87-68-3	Hexachlorobutadiene	0.50	< 0.50	U
106-93-4	1,2-Dibromoethane	0.20	< 0.20	U
74-97-5	Bromochloromethane	0.20	< 0.20	U
594-20-7	2,2-Dichloropropane	0.20	< 0.20	U
142-28-9	1,3-Dichloropropane	0.20	< 0.20	U
98-82-8	Isopropylbenzene	0.20	< 0.20	U
103-65-1	n-Propylbenzene	0.20	< 0.20	U
108-86-1	Bromobenzene	0.20	< 0.20	U
95-49-8	2-Chlorotoluene	0.20	< 0.20	U
106-43-4	4-Chlorotoluene	0.20	< 0.20	U
98-06-6	tert-Butylbenzene	0.20	< 0.20	U
135-98-8	sec-Butylbenzene	0.20	< 0.20	U
99-87-6	4-Isopropyltoluene	0.20	< 0.20	U
104-51-8	n-Butylbenzene	0.20	< 0.20	U
120-82-1	1,2,4-Trichlorobenzene	0.50	< 0.50	U
91-20-3	Naphthalene	0.50	< 0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	< 0.50	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	112%
d8-Toluene	101%
Bromofluorobenzene	98.9%
d4-1,2-Dichlorobenzene	101%

2-Chloroethylvinylether is an acid labile compound and may not be recovered from an acid preserved sample.

EPA SW-846 indicates that vinyl chloride and styrene may degrade in the presence of acid preservative.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140327LX5-1**
 SAMPLE

Lab Sample ID: YE80Q
LIMS ID: 14-5943
Matrix: Water
Data Release Authorized:
Reported: 04/08/14

QC Report No: YE80-Joint Base Lewis McChord
Project: Log RAM

Date Sampled: 03/27/14
Date Received: 03/28/14

Instrument/Analyst: NT15/PAB
Date Analyzed: 04/02/14 16:52

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	LOQ	Result	Q
74-87-3	Chloromethane	0.50	< 0.50	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.20	< 0.20	U
75-00-3	Chloroethane	0.20	< 0.20	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	Acetone	5.0	< 5.0	U
75-15-0	Carbon Disulfide	0.20	< 0.20	U
75-35-4	1,1-Dichloroethene	0.20	< 0.20	U
75-34-3	1,1-Dichloroethane	0.20	< 0.20	U
156-60-5	trans-1,2-Dichloroethene	0.20	< 0.20	U
156-59-2	**cis-1,2-Dichloroethene**	**0.20**	**1.7**	
67-66-3	**Chloroform**	**0.20**	**0.26**	
107-06-2	1,2-Dichloroethane	0.20	< 0.20	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	**1,1,1-Trichloroethane**	**0.20**	**0.54**	
56-23-5	Carbon Tetrachloride	0.20	< 0.20	U
108-05-4	Vinyl Acetate	0.20	< 0.20	U
75-27-4	Bromodichloromethane	0.20	< 0.20	U
78-87-5	1,2-Dichloropropane	0.20	< 0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	< 0.20	U
79-01-6	**Trichloroethene**	**0.20**	**51**	
124-48-1	Dibromochloromethane	0.20	< 0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	< 0.20	U
71-43-2	Benzene	0.20	< 0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	< 0.20	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.20	< 0.20	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.20	< 0.20	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	< 0.20	U
108-88-3	Toluene	0.20	< 0.20	U
108-90-7	Chlorobenzene	0.20	< 0.20	U
100-41-4	Ethylbenzene	0.20	< 0.20	U
100-42-5	Styrene	0.20	< 0.20	U
75-69-4	Trichlorofluoromethane	0.20	< 0.20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.20	< 0.20	U
179601-23-1	m,p-Xylene	0.40	< 0.40	U
95-47-6	o-Xylene	0.20	< 0.20	U
95-50-1	1,2-Dichlorobenzene	0.20	< 0.20	U
541-73-1	1,3-Dichlorobenzene	0.20	< 0.20	U
106-46-7	1,4-Dichlorobenzene	0.20	< 0.20	U

Lab Sample ID: YE80Q
LIMS ID: 14-5943
Matrix: Water
Date Analyzed: 04/02/14 16:52

QC Report No: YE80-Joint Base Lewis McChord
Project: Log RAM

CAS Number	Analyte	LOQ	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Iodomethane	1.0	< 1.0	U
74-96-4	Bromoethane	0.20	< 0.20	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.20	< 0.20	U
74-95-3	Dibromomethane	0.20	< 0.20	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	< 0.20	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	< 0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	< 0.50	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.20	< 0.20	U
95-63-6	1,2,4-Trimethylbenzene	0.20	< 0.20	U
87-68-3	Hexachlorobutadiene	0.50	< 0.50	U
106-93-4	1,2-Dibromoethane	0.20	< 0.20	U
74-97-5	Bromochloromethane	0.20	< 0.20	U
594-20-7	2,2-Dichloropropane	0.20	< 0.20	U
142-28-9	1,3-Dichloropropane	0.20	< 0.20	U
98-82-8	Isopropylbenzene	0.20	< 0.20	U
103-65-1	n-Propylbenzene	0.20	< 0.20	U
108-86-1	Bromobenzene	0.20	< 0.20	U
95-49-8	2-Chlorotoluene	0.20	< 0.20	U
106-43-4	4-Chlorotoluene	0.20	< 0.20	U
98-06-6	tert-Butylbenzene	0.20	< 0.20	U
135-98-8	sec-Butylbenzene	0.20	< 0.20	U
99-87-6	4-Isopropyltoluene	0.20	< 0.20	U
104-51-8	n-Butylbenzene	0.20	< 0.20	U
120-82-1	1,2,4-Trichlorobenzene	0.50	< 0.50	U
91-20-3	Naphthalene	0.50	< 0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	< 0.50	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	113%
d8-Toluene	100%
Bromofluorobenzene	98.0%
d4-1,2-Dichlorobenzene	102%

2-Chloroethylvinylether is an acid labile compound and may not be recovered from an acid preserved sample.

EPA SW-846 indicates that vinyl chloride and styrene may degrade in the presence of acid preservative.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140327LX6-1**
Page 1 of 2 **SAMPLE**

Lab Sample ID: YE80R
LIMS ID: 14-5944
Matrix: Water
Data Release Authorized:
Reported: 04/08/14

QC Report No: YE80-Joint Base Lewis McChord
Project: Log RAM

Date Sampled: 03/27/14
Date Received: 03/28/14

Instrument/Analyst: NT15/PAB
Date Analyzed: 04/02/14 17:13

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	LOQ	Result	Q
74-87-3	Chloromethane	0.50	< 0.50	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.20	< 0.20	U
75-00-3	Chloroethane	0.20	< 0.20	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	Acetone	5.0	< 5.0	U
75-15-0	Carbon Disulfide	0.20	< 0.20	U
75-35-4	1,1-Dichloroethene	0.20	< 0.20	U
75-34-3	1,1-Dichloroethane	0.20	< 0.20	U
156-60-5	trans-1,2-Dichloroethene	0.20	< 0.20	U
156-59-2	**cis-1,2-Dichloroethene**	**0.20**	**1.2**	
67-66-3	**Chloroform**	**0.20**	**0.54**	
107-06-2	1,2-Dichloroethane	0.20	< 0.20	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	**1,1,1-Trichloroethane**	**0.20**	**0.71**	
56-23-5	Carbon Tetrachloride	0.20	< 0.20	U
108-05-4	Vinyl Acetate	0.20	< 0.20	U
75-27-4	Bromodichloromethane	0.20	< 0.20	U
78-87-5	1,2-Dichloropropane	0.20	< 0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	< 0.20	U
79-01-6	**Trichloroethene**	**0.20**	**55**	
124-48-1	Dibromochloromethane	0.20	< 0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	< 0.20	U
71-43-2	Benzene	0.20	< 0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	< 0.20	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.20	< 0.20	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.20	< 0.20	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	< 0.20	U
108-88-3	Toluene	0.20	< 0.20	U
108-90-7	Chlorobenzene	0.20	< 0.20	U
100-41-4	Ethylbenzene	0.20	< 0.20	U
100-42-5	Styrene	0.20	< 0.20	U
75-69-4	Trichlorofluoromethane	0.20	< 0.20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.20	< 0.20	U
179601-23-1	m,p-Xylene	0.40	< 0.40	U
95-47-6	o-Xylene	0.20	< 0.20	U
95-50-1	1,2-Dichlorobenzene	0.20	< 0.20	U
541-73-1	1,3-Dichlorobenzene	0.20	< 0.20	U
106-46-7	1,4-Dichlorobenzene	0.20	< 0.20	U

Lab Sample ID: YE80R
LIMS ID: 14-5944
Matrix: Water
Date Analyzed: 04/02/14 17:13

QC Report No: YE80-Joint Base Lewis McChord
Project: Log RAM

CAS Number	Analyte	LOQ	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Iodomethane	1.0	< 1.0	U
74-96-4	Bromoethane	0.20	< 0.20	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.20	< 0.20	U
74-95-3	Dibromomethane	0.20	< 0.20	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	< 0.20	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	< 0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	< 0.50	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.20	< 0.20	U
95-63-6	1,2,4-Trimethylbenzene	0.20	< 0.20	U
87-68-3	Hexachlorobutadiene	0.50	< 0.50	U
106-93-4	1,2-Dibromoethane	0.20	< 0.20	U
74-97-5	Bromochloromethane	0.20	< 0.20	U
594-20-7	2,2-Dichloropropane	0.20	< 0.20	U
142-28-9	1,3-Dichloropropane	0.20	< 0.20	U
98-82-8	Isopropylbenzene	0.20	< 0.20	U
103-65-1	n-Propylbenzene	0.20	< 0.20	U
108-86-1	Bromobenzene	0.20	< 0.20	U
95-49-8	2-Chlorotoluene	0.20	< 0.20	U
106-43-4	4-Chlorotoluene	0.20	< 0.20	U
98-06-6	tert-Butylbenzene	0.20	< 0.20	U
135-98-8	sec-Butylbenzene	0.20	< 0.20	U
99-87-6	4-Isopropyltoluene	0.20	< 0.20	U
104-51-8	n-Butylbenzene	0.20	< 0.20	U
120-82-1	1,2,4-Trichlorobenzene	0.50	< 0.50	U
91-20-3	Naphthalene	0.50	< 0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	< 0.50	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	113%
d8-Toluene	101%
Bromofluorobenzene	98.4%
d4-1,2-Dichlorobenzene	102%

2-Chloroethylvinylether is an acid labile compound and may not be recovered from an acid preserved sample.

EPA SW-846 indicates that vinyl chloride and styrene may degrade in the presence of acid preservative.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140327LX7-1**
 SAMPLE

Lab Sample ID: YE80S
LIMS ID: 14-5945
Matrix: Water
Data Release Authorized:
Reported: 04/08/14

QC Report No: YE80-Joint Base Lewis McChord
Project: Log RAM

Date Sampled: 03/27/14
Date Received: 03/28/14

Instrument/Analyst: NT15/PAB
Date Analyzed: 04/02/14 17:34

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	LOQ	Result	Q
74-87-3	Chloromethane	0.50	< 0.50	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.20	< 0.20	U
75-00-3	Chloroethane	0.20	< 0.20	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	Acetone	5.0	< 5.0	U
75-15-0	Carbon Disulfide	0.20	< 0.20	U
75-35-4	1,1-Dichloroethene	0.20	< 0.20	U
75-34-3	1,1-Dichloroethane	0.20	< 0.20	U
156-60-5	trans-1,2-Dichloroethene	0.20	< 0.20	U
156-59-2	**cis-1,2-Dichloroethene**	**0.20**	**1.5**	
67-66-3	**Chloroform**	**0.20**	**0.74**	
107-06-2	1,2-Dichloroethane	0.20	< 0.20	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	**1,1,1-Trichloroethane**	**0.20**	**0.24**	
56-23-5	Carbon Tetrachloride	0.20	< 0.20	U
108-05-4	Vinyl Acetate	0.20	< 0.20	U
75-27-4	Bromodichloromethane	0.20	< 0.20	U
78-87-5	1,2-Dichloropropane	0.20	< 0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	< 0.20	U
79-01-6	**Trichloroethene**	**0.20**	**65**	
124-48-1	Dibromochloromethane	0.20	< 0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	< 0.20	U
71-43-2	Benzene	0.20	< 0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	< 0.20	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.20	< 0.20	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	**Tetrachloroethene**	**0.20**	**0.25**	
79-34-5	1,1,2,2-Tetrachloroethane	0.20	< 0.20	U
108-88-3	Toluene	0.20	< 0.20	U
108-90-7	Chlorobenzene	0.20	< 0.20	U
100-41-4	Ethylbenzene	0.20	< 0.20	U
100-42-5	Styrene	0.20	< 0.20	U
75-69-4	Trichlorofluoromethane	0.20	< 0.20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.20	< 0.20	U
179601-23-1	m,p-Xylene	0.40	< 0.40	U
95-47-6	o-Xylene	0.20	< 0.20	U
95-50-1	1,2-Dichlorobenzene	0.20	< 0.20	U
541-73-1	1,3-Dichlorobenzene	0.20	< 0.20	U
106-46-7	1,4-Dichlorobenzene	0.20	< 0.20	U

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140327LX7-1**

SAMPLE

ANALYTICAL RESOURCES INCORPORATED

Lab Sample ID: YE80S
LIMS ID: 14-5945
Matrix: Water
Date Analyzed: 04/02/14 17:34

QC Report No: YE80-Joint Base Lewis McChord
Project: Log RAM

CAS Number	Analyte	LOQ	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Iodomethane	1.0	< 1.0	U
74-96-4	Bromoethane	0.20	< 0.20	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.20	< 0.20	U
74-95-3	Dibromomethane	0.20	< 0.20	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	< 0.20	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	< 0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	< 0.50	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.20	< 0.20	U
95-63-6	1,2,4-Trimethylbenzene	0.20	< 0.20	U
87-68-3	Hexachlorobutadiene	0.50	< 0.50	U
106-93-4	1,2-Dibromoethane	0.20	< 0.20	U
74-97-5	Bromochloromethane	0.20	< 0.20	U
594-20-7	2,2-Dichloropropane	0.20	< 0.20	U
142-28-9	1,3-Dichloropropane	0.20	< 0.20	U
98-82-8	Isopropylbenzene	0.20	< 0.20	U
103-65-1	n-Propylbenzene	0.20	< 0.20	U
108-86-1	Bromobenzene	0.20	< 0.20	U
95-49-8	2-Chlorotoluene	0.20	< 0.20	U
106-43-4	4-Chlorotoluene	0.20	< 0.20	U
98-06-6	tert-Butylbenzene	0.20	< 0.20	U
135-98-8	sec-Butylbenzene	0.20	< 0.20	U
99-87-6	4-Isopropyltoluene	0.20	< 0.20	U
104-51-8	n-Butylbenzene	0.20	< 0.20	U
120-82-1	1,2,4-Trichlorobenzene	0.50	< 0.50	U
91-20-3	Naphthalene	0.50	< 0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	< 0.50	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	113%
d8-Toluene	99.9%
Bromofluorobenzene	98.4%
d4-1,2-Dichlorobenzene	102%

2-Chloroethylvinylether is an acid labile compound and may not be recovered from an acid preserved sample.

EPA SW-846 indicates that vinyl chloride and styrene may degrade in the presence of acid preservative.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140327LX9-1**
Page 1 of 2 **SAMPLE**

Lab Sample ID: YE80T
LIMS ID: 14-5946
Matrix: Water
Data Release Authorized:
Reported: 04/08/14

QC Report No: YE80-Joint Base Lewis McChord
Project: Log RAM

Date Sampled: 03/27/14
Date Received: 03/28/14

Instrument/Analyst: NT15/PAB
Date Analyzed: 04/02/14 17:56

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	LOQ	Result	Q
74-87-3	Chloromethane	0.50	< 0.50	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.20	< 0.20	U
75-00-3	Chloroethane	0.20	< 0.20	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	Acetone	5.0	< 5.0	U
75-15-0	Carbon Disulfide	0.20	< 0.20	U
75-35-4	1,1-Dichloroethene	0.20	< 0.20	U
75-34-3	1,1-Dichloroethane	0.20	< 0.20	U
156-60-5	trans-1,2-Dichloroethene	0.20	< 0.20	U
156-59-2	**cis-1,2-Dichloroethene**	**0.20**	**1.2**	
67-66-3	**Chloroform**	**0.20**	**0.59**	
107-06-2	1,2-Dichloroethane	0.20	< 0.20	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	0.20	< 0.20	U
56-23-5	Carbon Tetrachloride	0.20	< 0.20	U
108-05-4	Vinyl Acetate	0.20	< 0.20	U
75-27-4	Bromodichloromethane	0.20	< 0.20	U
78-87-5	1,2-Dichloropropane	0.20	< 0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	< 0.20	U
79-01-6	**Trichloroethene**	**0.20**	**45**	
124-48-1	Dibromochloromethane	0.20	< 0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	< 0.20	U
71-43-2	Benzene	0.20	< 0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	< 0.20	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.20	< 0.20	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.20	< 0.20	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	< 0.20	U
108-88-3	Toluene	0.20	< 0.20	U
108-90-7	Chlorobenzene	0.20	< 0.20	U
100-41-4	Ethylbenzene	0.20	< 0.20	U
100-42-5	Styrene	0.20	< 0.20	U
75-69-4	Trichlorofluoromethane	0.20	< 0.20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.20	< 0.20	U
179601-23-1	m,p-Xylene	0.40	< 0.40	U
95-47-6	o-Xylene	0.20	< 0.20	U
95-50-1	1,2-Dichlorobenzene	0.20	< 0.20	U
541-73-1	1,3-Dichlorobenzene	0.20	< 0.20	U
106-46-7	1,4-Dichlorobenzene	0.20	< 0.20	U

Lab Sample ID: YE80T
LIMS ID: 14-5946
Matrix: Water
Date Analyzed: 04/02/14 17:56

QC Report No: YE80-Joint Base Lewis McChord
Project: Log RAM

CAS Number	Analyte	LOQ	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Iodomethane	1.0	< 1.0	U
74-96-4	Bromoethane	0.20	< 0.20	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.20	< 0.20	U
74-95-3	Dibromomethane	0.20	< 0.20	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	< 0.20	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	< 0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	< 0.50	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.20	< 0.20	U
95-63-6	1,2,4-Trimethylbenzene	0.20	< 0.20	U
87-68-3	Hexachlorobutadiene	0.50	< 0.50	U
106-93-4	1,2-Dibromoethane	0.20	< 0.20	U
74-97-5	Bromochloromethane	0.20	< 0.20	U
594-20-7	2,2-Dichloropropane	0.20	< 0.20	U
142-28-9	1,3-Dichloropropane	0.20	< 0.20	U
98-82-8	Isopropylbenzene	0.20	< 0.20	U
103-65-1	n-Propylbenzene	0.20	< 0.20	U
108-86-1	Bromobenzene	0.20	< 0.20	U
95-49-8	2-Chlorotoluene	0.20	< 0.20	U
106-43-4	4-Chlorotoluene	0.20	< 0.20	U
98-06-6	tert-Butylbenzene	0.20	< 0.20	U
135-98-8	sec-Butylbenzene	0.20	< 0.20	U
99-87-6	4-Isopropyltoluene	0.20	< 0.20	U
104-51-8	n-Butylbenzene	0.20	< 0.20	U
120-82-1	1,2,4-Trichlorobenzene	0.50	< 0.50	U
91-20-3	Naphthalene	0.50	< 0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	< 0.50	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	115%
d8-Toluene	100%
Bromofluorobenzene	99.1%
d4-1,2-Dichlorobenzene	101%

2-Chloroethylvinylether is an acid labile compound and may not be recovered from an acid preserved sample.

EPA SW-846 indicates that vinyl chloride and styrene may degrade in the presence of acid preservative.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: MB-040114A**
 METHOD BLANK

Lab Sample ID: MB-040114A
LIMS ID: 14-5927
Matrix: Water
Data Release Authorized:
Reported: 04/08/14

QC Report No: YE80-Joint Base Lewis McChord
Project: Log RAM

Date Sampled: NA
Date Received: NA

Instrument/Analyst: NT15/PAB
Date Analyzed: 04/01/14 13:26

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	LOQ	Result	Q
74-87-3	Chloromethane	0.50	< 0.50	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.20	< 0.20	U
75-00-3	Chloroethane	0.20	< 0.20	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	Acetone	5.0	< 5.0	U
75-15-0	Carbon Disulfide	0.20	< 0.20	U
75-35-4	1,1-Dichloroethene	0.20	< 0.20	U
75-34-3	1,1-Dichloroethane	0.20	< 0.20	U
156-60-5	trans-1,2-Dichloroethene	0.20	< 0.20	U
156-59-2	cis-1,2-Dichloroethene	0.20	< 0.20	U
67-66-3	Chloroform	0.20	< 0.20	U
107-06-2	1,2-Dichloroethane	0.20	< 0.20	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	0.20	< 0.20	U
56-23-5	Carbon Tetrachloride	0.20	< 0.20	U
108-05-4	Vinyl Acetate	0.20	< 0.20	U
75-27-4	Bromodichloromethane	0.20	< 0.20	U
78-87-5	1,2-Dichloropropane	0.20	< 0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	< 0.20	U
79-01-6	Trichloroethene	0.20	< 0.20	U
124-48-1	Dibromochloromethane	0.20	< 0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	< 0.20	U
71-43-2	Benzene	0.20	< 0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	< 0.20	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.20	< 0.20	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.20	< 0.20	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	< 0.20	U
108-88-3	Toluene	0.20	< 0.20	U
108-90-7	Chlorobenzene	0.20	< 0.20	U
100-41-4	Ethylbenzene	0.20	< 0.20	U
100-42-5	Styrene	0.20	< 0.20	U
75-69-4	Trichlorofluoromethane	0.20	< 0.20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.20	< 0.20	U
179601-23-1	m,p-Xylene	0.40	< 0.40	U
95-47-6	o-Xylene	0.20	< 0.20	U
95-50-1	1,2-Dichlorobenzene	0.20	< 0.20	U
541-73-1	1,3-Dichlorobenzene	0.20	< 0.20	U
106-46-7	1,4-Dichlorobenzene	0.20	< 0.20	U

Lab Sample ID: MB-040114A
LIMS ID: 14-5927
Matrix: Water
Date Analyzed: 04/01/14 13:26

QC Report No: YE80-Joint Base Lewis McChord
Project: Log RAM

CAS Number	Analyte	LOQ	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Iodomethane	1.0	< 1.0	U
74-96-4	Bromoethane	0.20	< 0.20	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.20	< 0.20	U
74-95-3	Dibromomethane	0.20	< 0.20	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	< 0.20	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	< 0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	< 0.50	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.20	< 0.20	U
95-63-6	1,2,4-Trimethylbenzene	0.20	< 0.20	U
87-68-3	Hexachlorobutadiene	0.50	< 0.50	U
106-93-4	1,2-Dibromoethane	0.20	< 0.20	U
74-97-5	Bromochloromethane	0.20	< 0.20	U
594-20-7	2,2-Dichloropropane	0.20	< 0.20	U
142-28-9	1,3-Dichloropropane	0.20	< 0.20	U
98-82-8	Isopropylbenzene	0.20	< 0.20	U
103-65-1	n-Propylbenzene	0.20	< 0.20	U
108-86-1	Bromobenzene	0.20	< 0.20	U
95-49-8	2-Chlorotoluene	0.20	< 0.20	U
106-43-4	4-Chlorotoluene	0.20	< 0.20	U
98-06-6	tert-Butylbenzene	0.20	< 0.20	U
135-98-8	sec-Butylbenzene	0.20	< 0.20	U
99-87-6	4-Isopropyltoluene	0.20	< 0.20	U
104-51-8	n-Butylbenzene	0.20	< 0.20	U
120-82-1	1,2,4-Trichlorobenzene	0.50	< 0.50	U
91-20-3	Naphthalene	0.50	< 0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	< 0.50	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	101%
d8-Toluene	100%
Bromofluorobenzene	98.9%
d4-1,2-Dichlorobenzene	101%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: MB-040214A**
 METHOD BLANK

Lab Sample ID: MB-040214A
LIMS ID: 14-5940
Matrix: Water
Data Release Authorized:
Reported: 04/08/14

QC Report No: YE80-Joint Base Lewis McChord
Project: Log RAM

Date Sampled: NA
Date Received: NA

Instrument/Analyst: NT15/PAB
Date Analyzed: 04/02/14 14:38

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	LOQ	Result	Q
74-87-3	Chloromethane	0.50	< 0.50	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.20	< 0.20	U
75-00-3	Chloroethane	0.20	< 0.20	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	Acetone	5.0	< 5.0	U
75-15-0	Carbon Disulfide	0.20	< 0.20	U
75-35-4	1,1-Dichloroethene	0.20	< 0.20	U
75-34-3	1,1-Dichloroethane	0.20	< 0.20	U
156-60-5	trans-1,2-Dichloroethene	0.20	< 0.20	U
156-59-2	cis-1,2-Dichloroethene	0.20	< 0.20	U
67-66-3	Chloroform	0.20	< 0.20	U
107-06-2	1,2-Dichloroethane	0.20	< 0.20	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	0.20	< 0.20	U
56-23-5	Carbon Tetrachloride	0.20	< 0.20	U
108-05-4	Vinyl Acetate	0.20	< 0.20	U
75-27-4	Bromodichloromethane	0.20	< 0.20	U
78-87-5	1,2-Dichloropropane	0.20	< 0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	< 0.20	U
79-01-6	Trichloroethene	0.20	< 0.20	U
124-48-1	Dibromochloromethane	0.20	< 0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	< 0.20	U
71-43-2	Benzene	0.20	< 0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	< 0.20	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.20	< 0.20	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.20	< 0.20	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	< 0.20	U
108-88-3	Toluene	0.20	< 0.20	U
108-90-7	Chlorobenzene	0.20	< 0.20	U
100-41-4	Ethylbenzene	0.20	< 0.20	U
100-42-5	Styrene	0.20	< 0.20	U
75-69-4	Trichlorofluoromethane	0.20	< 0.20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.20	< 0.20	U
179601-23-1	m,p-Xylene	0.40	< 0.40	U
95-47-6	o-Xylene	0.20	< 0.20	U
95-50-1	1,2-Dichlorobenzene	0.20	< 0.20	U
541-73-1	1,3-Dichlorobenzene	0.20	< 0.20	U
106-46-7	1,4-Dichlorobenzene	0.20	< 0.20	U

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: MB-040214A**
 METHOD BLANK

ANALYTICAL RESOURCES INCORPORATED

Lab Sample ID: MB-040214A
LIMS ID: 14-5940
Matrix: Water
Date Analyzed: 04/02/14 14:38

QC Report No: YE80-Joint Base Lewis McChord
Project: Log RAM

CAS Number	Analyte	LOQ	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Iodomethane	1.0	< 1.0	U
74-96-4	Bromoethane	0.20	< 0.20	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.20	< 0.20	U
74-95-3	Dibromomethane	0.20	< 0.20	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	< 0.20	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	< 0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	< 0.50	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.20	< 0.20	U
95-63-6	1,2,4-Trimethylbenzene	0.20	< 0.20	U
87-68-3	Hexachlorobutadiene	0.50	< 0.50	U
106-93-4	1,2-Dibromoethane	0.20	< 0.20	U
74-97-5	Bromochloromethane	0.20	< 0.20	U
594-20-7	2,2-Dichloropropane	0.20	< 0.20	U
142-28-9	1,3-Dichloropropane	0.20	< 0.20	U
98-82-8	Isopropylbenzene	0.20	< 0.20	U
103-65-1	n-Propylbenzene	0.20	< 0.20	U
108-86-1	Bromobenzene	0.20	< 0.20	U
95-49-8	2-Chlorotoluene	0.20	< 0.20	U
106-43-4	4-Chlorotoluene	0.20	< 0.20	U
98-06-6	tert-Butylbenzene	0.20	< 0.20	U
135-98-8	sec-Butylbenzene	0.20	< 0.20	U
99-87-6	4-Isopropyltoluene	0.20	< 0.20	U
104-51-8	n-Butylbenzene	0.20	< 0.20	U
120-82-1	1,2,4-Trichlorobenzene	0.50	< 0.50	U
91-20-3	Naphthalene	0.50	< 0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	< 0.50	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	113%
d8-Toluene	101%
Bromofluorobenzene	97.2%
d4-1,2-Dichlorobenzene	103%

ANALYTICAL RESOURCES INCORPORATED

VOA SURROGATE RECOVERY SUMMARY

Matrix: Water

QC Report No: YE80-Joint Base Lewis McChord
Project: Log RAM

ARI ID	Client ID	PV	DCE	TOL	BFB	DCB	TOT OUT
MB-040114A	Method Blank	10	101%	100%	98.9%	101%	0
LCS-040114A	Lab Control	10	97.1%	101%	98.4%	99.3%	0
LCSD-040114A	Lab Control Dup	10	102%	101%	99.1%	99.5%	0
YE80A	LGC140325FL2-1	10	100%	101%	98.0%	101%	0
YE80B	LGC140324FL4A-1	10	104%	101%	98.3%	101%	0
YE80C	LGC140324FL4B-1	10	104%	101%	98.9%	102%	0
YE80D	LGC140325MT1-1	10	104%	99.6%	99.1%	100%	0
YE80DDL	LGC140325MT1-1	10	115%	100%	98.5%	101%	0
YE80E	LGC140325MT2-1	10	103%	100%	97.9%	101%	0
YE80F	LGC140325MT4-1	10	105%	100%	99.3%	101%	0
YE80G	LGC140325PW1-1	10	106%	99.3%	99.5%	100%	0
YE80GDL	LGC140325PW1-1	10	115%	100%	98.1%	101%	0
YE80H	LGC140325PW2-1	10	106%	100%	99.4%	101%	0
YE80I	LGC140325PW3-1	10	107%	99.9%	98.1%	101%	0
YE80IDL	LGC140325PW3-1	10	115%	101%	98.6%	101%	0
YE80J	LGC140325PW5-1	10	106%	100%	98.9%	101%	0
YE80K	LGC140325PW7-1	10	107%	99.7%	97.1%	101%	0
YE80L	LGC140325PW8-1	10	108%	100%	99.4%	101%	0
YE80M	LGC140327I5E-1	10	108%	101%	98.8%	101%	0
MB-040214A	Method Blank	10	113%	101%	97.2%	103%	0
LCS-040214A	Lab Control	10	105%	101%	97.9%	101%	0
LCSD-040214A	Lab Control Dup	10	106%	100%	99.6%	99.7%	0
YE80N	LGC140327I5I-1	10	105%	99.7%	97.3%	102%	0
YE80O	LGC140327LX2-1	10	110%	102%	98.7%	101%	0
YE80P	LGC140327LX3-1	10	112%	101%	98.9%	101%	0
YE80Q	LGC140327LX5-1	10	113%	100%	98.0%	102%	0
YE80R	LGC140327LX6-1	10	113%	101%	98.4%	102%	0
YE80S	LGC140327LX7-1	10	113%	99.9%	98.4%	102%	0
YE80T	LGC140327LX9-1	10	115%	100%	99.1%	101%	0

SW8260C	LCS/MB LIMITS	QC LIMITS
(DCE) = d4-1,2-Dichloroethane	(80-120)	(80-130)
(TOL) = d8-Toluene	(80-120)	(80-120)
(BFB) = Bromofluorobenzene	(80-120)	(80-120)
(DCB) = d4-1,2-Dichlorobenzene	(80-120)	(80-120)

Prep Method: SW5030B
Log Number Range: 14-5927 to 14-5946

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LCS-040114A**
 LAB CONTROL SAMPLE

Lab Sample ID: LCS-040114A
LIMS ID: 14-5927
Matrix: Water
Data Release Authorized:
Reported: 04/08/14

QC Report No: YE80-Joint Base Lewis McChord
Project: Log RAM
Date Sampled: NA
Date Received: NA

Instrument/Analyst LCS: NT15/PAB
LCSD: NT15/PAB
Date Analyzed LCS: 04/01/14 12:32
LCSD: 04/01/14 13:05

Sample Amount LCS: 10.0 mL
LCSD: 10.0 mL
Purge Volume LCS: 10.0 mL
LCSD: 10.0 mL

Analyte	LCS		Spike Added-LCS	LCS Recovery	LCSD		Spike Added-LCSD	LCSD Recovery	RPD
Chloromethane	9.85		10.0	98.5%	9.32		10.0	93.2%	5.5%
Bromomethane	8.79		10.0	87.9%	8.41		10.0	84.1%	4.4%
Vinyl Chloride	10.2		10.0	102%	9.48		10.0	94.8%	7.3%
Chloroethane	9.11		10.0	91.1%	8.57		10.0	85.7%	6.1%
Methylene Chloride	9.10		10.0	91.0%	8.76		10.0	87.6%	3.8%
Acetone	46.3		50.0	92.6%	41.3		50.0	82.6%	11.4%
Carbon Disulfide	7.73		10.0	77.3%	6.67		10.0	66.7%	14.7%
1,1-Dichloroethene	8.42		10.0	84.2%	7.37		10.0	73.7%	13.3%
1,1-Dichloroethane	10.0		10.0	100%	9.55		10.0	95.5%	4.6%
trans-1,2-Dichloroethene	9.86		10.0	98.6%	9.23		10.0	92.3%	6.6%
cis-1,2-Dichloroethene	9.96		10.0	99.6%	9.51		10.0	95.1%	4.6%
Chloroform	10.1		10.0	101%	9.68		10.0	96.8%	4.2%
1,2-Dichloroethane	9.55		10.0	95.5%	9.40		10.0	94.0%	1.6%
2-Butanone	45.9		50.0	91.8%	44.8		50.0	89.6%	2.4%
1,1,1-Trichloroethane	10.5		10.0	105%	9.89		10.0	98.9%	6.0%
Carbon Tetrachloride	9.06		10.0	90.6%	8.33		10.0	83.3%	8.4%
Vinyl Acetate	10.1		10.0	101%	10.2		10.0	102%	1.0%
Bromodichloromethane	10.7		10.0	107%	10.4		10.0	104%	2.8%
1,2-Dichloropropane	9.99		10.0	99.9%	9.59		10.0	95.9%	4.1%
cis-1,3-Dichloropropene	10.8		10.0	108%	10.4		10.0	104%	3.8%
Trichloroethene	9.84		10.0	98.4%	9.34		10.0	93.4%	5.2%
Dibromochloromethane	11.8	Q	10.0	118%	11.5	Q	10.0	115%	2.6%
1,1,2-Trichloroethane	9.41		10.0	94.1%	9.39		10.0	93.9%	0.2%
Benzene	9.82		10.0	98.2%	9.33		10.0	93.3%	5.1%
trans-1,3-Dichloropropene	10.7	Q	10.0	107%	10.9	Q	10.0	109%	1.9%
2-Chloroethylvinylether	9.75		10.0	97.5%	9.76		10.0	97.6%	0.1%
Bromoform	9.21		10.0	92.1%	8.99		10.0	89.9%	2.4%
4-Methyl-2-Pentanone (MIBK)	46.3		50.0	92.6%	47.5		50.0	95.0%	2.6%
2-Hexanone	45.7		50.0	91.4%	46.2		50.0	92.4%	1.1%
Tetrachloroethene	9.83		10.0	98.3%	9.22		10.0	92.2%	6.4%
1,1,2,2-Tetrachloroethane	9.57		10.0	95.7%	9.52		10.0	95.2%	0.5%
Toluene	9.80		10.0	98.0%	9.27		10.0	92.7%	5.6%
Chlorobenzene	9.78		10.0	97.8%	9.34		10.0	93.4%	4.6%
Ethylbenzene	9.90		10.0	99.0%	9.34		10.0	93.4%	5.8%
Styrene	10.1		10.0	101%	9.66		10.0	96.6%	4.5%
Trichlorofluoromethane	9.40		10.0	94.0%	9.06		10.0	90.6%	3.7%
1,1,2-Trichloro-1,2,2-trifluoroetha	10.3		10.0	103%	9.56		10.0	95.6%	7.5%
m,p-Xylene	20.3		20.0	102%	19.2		20.0	96.0%	5.6%

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LCS-040114A**
 LAB CONTROL SAMPLE

Lab Sample ID: LCS-040114A QC Report No: YE80-Joint Base Lewis McChord
LIMS ID: 14-5927 Project: Log RAM
Matrix: Water

Analyte	LCS	Spike Added-LCS	LCS Recovery	LCSD	Spike Added-LCSD	LCSD Recovery	RPD
o-Xylene	10.0	10.0	100%	9.55	10.0	95.5%	4.6%
1,2-Dichlorobenzene	9.61	10.0	96.1%	9.18	10.0	91.8%	4.6%
1,3-Dichlorobenzene	9.69	10.0	96.9%	9.13	10.0	91.3%	6.0%
1,4-Dichlorobenzene	9.56	10.0	95.6%	9.03	10.0	90.3%	5.7%
Acrolein	46.1	50.0	92.2%	46.6	50.0	93.2%	1.1%
Iodomethane	8.77	10.0	87.7%	7.81	10.0	78.1%	11.6%
Bromoethane	10.1	10.0	101%	9.54	10.0	95.4%	5.7%
Acrylonitrile	9.42	10.0	94.2%	9.43	10.0	94.3%	0.1%
1,1-Dichloropropene	10.6	10.0	106%	9.93	10.0	99.3%	6.5%
Dibromomethane	9.65	10.0	96.5%	9.58	10.0	95.8%	0.7%
1,1,1,2-Tetrachloroethane	9.51	10.0	95.1%	9.10	10.0	91.0%	4.4%
1,2-Dibromo-3-chloropropane	10.3 Q	10.0	103%	10.4 Q	10.0	104%	1.0%
1,2,3-Trichloropropane	9.56	10.0	95.6%	9.47	10.0	94.7%	0.9%
trans-1,4-Dichloro-2-butene	9.83	10.0	98.3%	9.81	10.0	98.1%	0.2%
1,3,5-Trimethylbenzene	10.2	10.0	102%	9.54	10.0	95.4%	6.7%
1,2,4-Trimethylbenzene	10.1	10.0	101%	9.50	10.0	95.0%	6.1%
Hexachlorobutadiene	9.43	10.0	94.3%	8.66	10.0	86.6%	8.5%
1,2-Dibromoethane	9.72	10.0	97.2%	9.68	10.0	96.8%	0.4%
Bromochloromethane	9.97	10.0	99.7%	9.75	10.0	97.5%	2.2%
2,2-Dichloropropane	10.6	10.0	106%	9.85	10.0	98.5%	7.3%
1,3-Dichloropropane	9.56	10.0	95.6%	9.53	10.0	95.3%	0.3%
Isopropylbenzene	10.1	10.0	101%	9.48	10.0	94.8%	6.3%
n-Propylbenzene	10.0	10.0	100%	9.32	10.0	93.2%	7.0%
Bromobenzene	9.75	10.0	97.5%	9.34	10.0	93.4%	4.3%
2-Chlorotoluene	9.94	10.0	99.4%	9.36	10.0	93.6%	6.0%
4-Chlorotoluene	9.87	10.0	98.7%	9.19	10.0	91.9%	7.1%
tert-Butylbenzene	10.2	10.0	102%	9.51	10.0	95.1%	7.0%
sec-Butylbenzene	10.1	10.0	101%	9.38	10.0	93.8%	7.4%
4-Isopropyltoluene	10.2	10.0	102%	9.47	10.0	94.7%	7.4%
n-Butylbenzene	10.1	10.0	101%	9.23	10.0	92.3%	9.0%
1,2,4-Trichlorobenzene	9.54	10.0	95.4%	8.99	10.0	89.9%	5.9%
Naphthalene	9.46	10.0	94.6%	9.34	10.0	93.4%	1.3%
1,2,3-Trichlorobenzene	9.41	10.0	94.1%	8.98	10.0	89.8%	4.7%

Reported in µg/L (ppb)

RPD calculated using sample concentrations per SW846.

Volatile Surrogate Recovery

	LCS	LCSD
d4-1,2-Dichloroethane	97.1%	102%
d8-Toluene	101%	101%
Bromofluorobenzene	98.4%	99.1%
d4-1,2-Dichlorobenzene	99.3%	99.5%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LCS-040214A**
 LAB CONTROL SAMPLE

Lab Sample ID: LCS-040214A
LIMS ID: 14-5940
Matrix: Water
Data Release Authorized:
Reported: 04/08/14

QC Report No: YE80-Joint Base Lewis McChord
Project: Log RAM

Date Sampled: NA
Date Received: NA

Instrument/Analyst LCS: NT15/PAB
LCSD: NT15/PAB
Date Analyzed LCS: 04/02/14 13:34
LCSD: 04/02/14 15:15

Sample Amount LCS: 10.0 mL
LCSD: 10.0 mL
Purge Volume LCS: 10.0 mL
LCSD: 10.0 mL

Analyte	LCS		Spike Added-LCS	LCS Recovery	LCSD		Spike Added-LCSD	LCSD Recovery	RPD
Chloromethane	10.5		10.0	105%	9.12		10.0	91.2%	14.1%
Bromomethane	9.55		10.0	95.5%	8.54		10.0	85.4%	11.2%
Vinyl Chloride	10.7	Q	10.0	107%	9.17	Q	10.0	91.7%	15.4%
Chloroethane	9.51		10.0	95.1%	8.23		10.0	82.3%	14.4%
Methylene Chloride	9.64		10.0	96.4%	9.12		10.0	91.2%	5.5%
Acetone	46.4		50.0	92.8%	47.3		50.0	94.6%	1.9%
Carbon Disulfide	10.9		10.0	109%	9.29		10.0	92.9%	15.9%
1,1-Dichloroethene	10.9		10.0	109%	9.47		10.0	94.7%	14.0%
1,1-Dichloroethane	10.6		10.0	106%	9.64		10.0	96.4%	9.5%
trans-1,2-Dichloroethene	10.5		10.0	105%	9.25		10.0	92.5%	12.7%
cis-1,2-Dichloroethene	10.5		10.0	105%	9.68		10.0	96.8%	8.1%
Chloroform	10.7	Q	10.0	107%	9.90	Q	10.0	99.0%	7.8%
1,2-Dichloroethane	9.56		10.0	95.6%	9.24		10.0	92.4%	3.4%
2-Butanone	48.4		50.0	96.8%	50.2		50.0	100%	3.7%
1,1,1-Trichloroethane	11.1	Q	10.0	111%	9.71	Q	10.0	97.1%	13.4%
Carbon Tetrachloride	8.99		10.0	89.9%	7.37		10.0	73.7%	19.8%
Vinyl Acetate	10.4		10.0	104%	10.6		10.0	106%	1.9%
Bromodichloromethane	10.7	Q	10.0	107%	9.98	Q	10.0	99.8%	7.0%
1,2-Dichloropropane	9.88		10.0	98.8%	9.22		10.0	92.2%	6.9%
cis-1,3-Dichloropropene	10.7		10.0	107%	9.80		10.0	98.0%	8.8%
Trichloroethene	9.80		10.0	98.0%	8.69		10.0	86.9%	12.0%
Dibromochloromethane	11.9	Q	10.0	119%	11.0	Q	10.0	110%	7.9%
1,1,2-Trichloroethane	9.44		10.0	94.4%	9.34		10.0	93.4%	1.1%
Benzene	9.75		10.0	97.5%	8.84		10.0	88.4%	9.8%
trans-1,3-Dichloropropene	10.8		10.0	108%	10.1		10.0	101%	6.7%
2-Chloroethylvinylether	9.18		10.0	91.8%	9.42		10.0	94.2%	2.6%
Bromoform	9.37		10.0	93.7%	8.43		10.0	84.3%	10.6%
4-Methyl-2-Pentanone (MIBK)	46.9		50.0	93.8%	48.7		50.0	97.4%	3.8%
2-Hexanone	46.0		50.0	92.0%	47.4		50.0	94.8%	3.0%
Tetrachloroethene	9.82		10.0	98.2%	8.38		10.0	83.8%	15.8%
1,1,2,2-Tetrachloroethane	9.57		10.0	95.7%	9.36		10.0	93.6%	2.2%
Toluene	9.77		10.0	97.7%	8.76		10.0	87.6%	10.9%
Chlorobenzene	9.80		10.0	98.0%	8.78		10.0	87.8%	11.0%
Ethylbenzene	9.88		10.0	98.8%	8.66		10.0	86.6%	13.2%
Styrene	10.1		10.0	101%	9.07		10.0	90.7%	10.7%
Trichlorofluoromethane	10.1		10.0	101%	8.26		10.0	82.6%	20.0%
1,1,2-Trichloro-1,2,2-trifluoroetha	10.9		10.0	109%	9.24		10.0	92.4%	16.5%
m,p-Xylene	20.3		20.0	102%	17.8		20.0	89.0%	13.1%

Lab Sample ID: LCS-040214A QC Report No: YE80-Joint Base Lewis McChord
LIMS ID: 14-5940 Project: Log RAM
Matrix: Water

Analyte	LCS	Spike Added-LCS	LCS Recovery	LCSD	Spike Added-LCSD	LCSD Recovery	RPD
o-Xylene	9.99	10.0	99.9%	8.89	10.0	88.9%	11.7%
1,2-Dichlorobenzene	9.71	10.0	97.1%	8.58	10.0	85.8%	12.4%
1,3-Dichlorobenzene	9.70	10.0	97.0%	8.39	10.0	83.9%	14.5%
1,4-Dichlorobenzene	9.59	10.0	95.9%	8.29	10.0	82.9%	14.5%
Acrolein	49.4	50.0	98.8%	50.7	50.0	101%	2.6%
Iodomethane	8.74	10.0	87.4%	7.79	10.0	77.9%	11.5%
Bromoethane	10.7 Q	10.0	107%	9.65 Q	10.0	96.5%	10.3%
Acrylonitrile	10.1	10.0	101%	10.3	10.0	103%	2.0%
1,1-Dichloropropene	9.59	10.0	95.9%	9.14	10.0	91.4%	4.8%
Dibromomethane	9.60	10.0	96.0%	9.44	10.0	94.4%	1.7%
1,1,1,2-Tetrachloroethane	9.56	10.0	95.6%	8.48	10.0	84.8%	12.0%
1,2-Dibromo-3-chloropropane	10.4	10.0	104%	9.98	10.0	99.8%	4.1%
1,2,3-Trichloropropane	9.62	10.0	96.2%	9.43	10.0	94.3%	2.0%
trans-1,4-Dichloro-2-butene	9.77	10.0	97.7%	9.20	10.0	92.0%	6.0%
1,3,5-Trimethylbenzene	10.2	10.0	102%	8.75	10.0	87.5%	15.3%
1,2,4-Trimethylbenzene	10.1	10.0	101%	8.67	10.0	86.7%	15.2%
Hexachlorobutadiene	9.35	10.0	93.5%	7.50	10.0	75.0%	22.0%
1,2-Dibromoethane	9.60	10.0	96.0%	9.50	10.0	95.0%	1.0%
Bromochloromethane	10.6	10.0	106%	10.3	10.0	103%	2.9%
2,2-Dichloropropane	10.5	10.0	105%	8.77	10.0	87.7%	18.0%
1,3-Dichloropropane	9.59	10.0	95.9%	9.30	10.0	93.0%	3.1%
Isopropylbenzene	10.2	10.0	102%	8.70	10.0	87.0%	15.9%
n-Propylbenzene	10.1	10.0	101%	8.52	10.0	85.2%	17.0%
Bromobenzene	9.75	10.0	97.5%	8.73	10.0	87.3%	11.0%
2-Chlorotoluene	9.99	10.0	99.9%	8.55	10.0	85.5%	15.5%
4-Chlorotoluene	9.90	10.0	99.0%	8.49	10.0	84.9%	15.3%
tert-Butylbenzene	10.2	10.0	102%	8.72	10.0	87.2%	15.6%
sec-Butylbenzene	10.1	10.0	101%	8.52	10.0	85.2%	17.0%
4-Isopropyltoluene	10.2	10.0	102%	8.56	10.0	85.6%	17.5%
n-Butylbenzene	10.1	10.0	101%	8.29	10.0	82.9%	19.7%
1,2,4-Trichlorobenzene	9.47	10.0	94.7%	8.15	10.0	81.5%	15.0%
Naphthalene	9.43	10.0	94.3%	8.92	10.0	89.2%	5.6%
1,2,3-Trichlorobenzene	9.46	10.0	94.6%	8.35	10.0	83.5%	12.5%

Reported in µg/L (ppb)

RPD calculated using sample concentrations per SW846.

Volatile Surrogate Recovery

	LCS	LCSD
d4-1,2-Dichloroethane	105%	106%
d8-Toluene	101%	100%
Bromofluorobenzene	97.9%	99.6%
d4-1,2-Dichlorobenzene	101%	99.7%

Analytical Resources, Incorporated
Analytical Chemists and Consultants

April 10, 2014

Thomas Lynott
Department of the Army
Directorate of Public Works
Attn Environmental Division (T. Lynott)
2012 Liggett Ave Box 339500 MS 17
Joint Base Lewis-McChord, Washington 98433-9500
Official Business

RE: Client Project: LogRam
ARI Job No.: YE81

Dear Mr. Lynott:

Please find enclosed the original Chain-of-Custody record (COC), sample receipt documentation, and the final data for the project referenced above. Analytical Resources, Inc. (ARI) accepted twenty water samples on March 28, 2014. For further details regarding sample receipt please refer to the enclosed Cooler Receipt Form.

The samples were analyzed for VOCs, as requested on the COCs.

The 4/8/14 CCAL is out of control low for all associated FORM III "Q" flagged analytes with the exception of 2,2-Dichloropropane. All associated samples that contain analyte have been flagged with a "Q" qualifier.

The 4/3/14 and 4/4/14 CCALs are out of control low for all associated FORM III "Q" flagged analytes. All associated samples that contain analyte have been flagged with a "Q" qualifier.

The 4/3/14 LCS and/or LCSD are out of control low for 1,2,3-Trichlorobenzene and 2-Hexanone.

The 4/4/14 LCS and/or LCSD are out of control low for several analytes.

The 4/8/14 LCS and/or LCSD are out of control low and/or high for several analytes.

An electronic copy of this report and all supporting raw data will remain on file with ARI. Should you have any questions or problems, please feel free to contact me at your convenience.

Respectfully,
ANALYTICAL RESOURCES, INC.

Kelly Bottem
Client Services Manager
(206) 695-6211
kellyb@arilabs.com
www.arilabs.com

eFile: YE81

4611 South 134th Place, Suite 100 • Tukwila WA 98168 • **206-695-6200** • **206-695-6201** fax

Chain of Custody Record & Laboratory Analysis Request

TO 0021

Analytical Resources, Incorporated
Analytical Chemists and Consultants
4611 South 134th Place, Suite 100
Tukwila, WA 98168
206-695-6200 206-695-6201 (fax)
www.arilabs.com

ARI Assigned Number: YE81	Turn-around Requested: STANDARD TAT
ARI Client Company: JOINT BASE LEWIS McCHORD PUBLIC WORKS IMLM PWE	Phone: 253 966 1802
Client Contact: TOM LYNOTT	
Client Project Name: LOG RAM	
Client Project #:	Samplers: T LYNOTT J BECKER

Page: 11 of 14

Date: 28MAR14 Ice Present? 3

No. of Coolers: ~~1,1,1~~ 3 Cooler Temps: 1.1, 1.3, 5.3

Sample ID	Date	Time	Matrix	No Containers	Analysis Requested								Notes/Comments
LGC140327LX10-1	27MAR14	1225	WATER	2	X								
LGC140327LX11-1	27MAR14	1155	WATER	2	X								
LGC140327LX12-1	27MAR14	1150	WATER	2	X								
LGC140327LX13-1	27MAR14	1145	WATER	2	X								BOX
LGC140327LX14-1	27MAR14	1140	WATER	2	X								4
LGC140327LX15-1	27MAR14	1135	WATER	2	X								
LGC140327LX4-1	27MAR14	1255	WATER	2	X								
LGC140327DUP9-1	27MAR14	0700	WATER	2	X								
LGC140327DUP10-1	27MAR14	0730	WATER	2	X								
LGC140327DUP11-1	27MAR14	0630	WATER	2	X								

Comments/Special Instructions	Relinquished by	Received by:	Relinquished by.	Received by
	(Signature) [signature]	(Signature) [signature]	(Signature)	(Signature)
	Printed Name: TOM J LYNOTT	Printed Name: Jennifer Mittsap	Printed Name.	Printed Name.
	Company. VERSAR	Company. ARI	Company	Company
	Date & Time: 28MAR14 1205	Date & Time: 3/28/14 1205	Date & Time.	Date & Time

Limits of Liability: *ARI will perform all requested services in accordance with appropriate methodology following ARI Standard Operating Procedures and the ARI Quality Assurance Program. This program meets standards for the industry. The total liability of ARI, its officers, agents, employees, or successors, arising out of or in connection with the requested services, shall not exceed the Invoiced amount for said services. The acceptance by the client of a proposal for services by ARI release ARI from any liability in excess thereof, not withstanding any provision to the contrary in any contract, purchase order or co-signed agreement between ARI and the Client.*

Sample Retention Policy: All samples submitted to ARI will be appropriately discarded no sooner than 90 days after receipt or 60 days after submission of hardcopy data, whichever is longer, unless alternate retention schedules have been established by work-order or contract.

Chain of Custody Record & Laboratory Analysis Request

TO 0021

Analytical Resources, Incorporated
Analytical Chemists and Consultants
4611 South 134th Place, Suite 100
Tukwila, WA 98168
206-695-6200 206-695-6201 (fax)
www.arilabs.com

ARI Assigned Number:	Turn-around Requested: STANDARD TAT
ARI Client Company: JOINT BASE LEWIS McCHORD PUBLIC WORKS IMLM-PWE	Phone: 253 966 1802
Client Contact: Tom LYNOTT	
Client Project Name: LOG RAM	
Client Project #:	Samplers: T LYNOTT J BECKER

Page: 12 of 14

Date: 28 MAR 14 | Ice Present? Y

No. of Coolers: 3 | Cooler Temps: 1.1, 1.3, 5.3

Sample ID	Date	Time	Matrix	No Containers	1006A								Notes/Comments
LGC140327DUP12-1	27MAR14	0600	WATER	2	X								TOTAL VOCs
LGC140327SLAP1-1	27MAR14	1000	WATER	2	X								
LGC140327SLAP2-1	27MAR14	1020	WATER	2	X								
LGC140327SLAP3-1	27MAR14	1025	WATER	2	X								
LGC140327SLAP4-1	27MAR14	1030	WATER	2	X								BOX
LGC140327SLAP5-1	27MAR14	1040	WATER	2	X								4
LGC140327SLAP6-1	27MAR14	1050	WATER	2	X								
LGC140327LC74D-1	27MAR14	0910	WATER	2	X								
LGC140327LC96D-1	27MAR14	0855	WATER	2	X								
LGC140327LC97D-1	27MAR14	0925	WATER	2	X								

Comments/Special Instructions	Relinquished by:	Received by:	Relinquished by:	Received by
	(Signature) [signature]	(Signature) [signature]	(Signature)	(Signature)
	Printed Name: TOM J LYNOTT	Printed Name: Jennifer Millsap	Printed Name	Printed Name:
	Company: VERSAR	Company: ARI	Company	Company:
	Date & Time: 28 MAR 14 1205	Date & Time: 3/28/14 1205	Date & Time:	Date & Time

Limits of Liability: *ARI will perform all requested services in accordance with appropriate methodology following ARI Standard Operating Procedures and the ARI Quality Assurance Program. This program meets standards for the industry. The total liability of ARI, its officers, agents, employees, or successors, arising out of or in connection with the requested services, shall not exceed the Invoiced amount for said services. The acceptance by the client of a proposal for services by ARI release ARI from any liability in excess thereof, not withstanding any provision to the contrary in any contract, purchase order or co-signed agreement between ARI and the Client.*

Sample Retention Policy: All samples submitted to ARI will be appropriately discarded no sooner than 90 days after receipt or 60 days after submission of hardcopy data, whichever is longer, unless alternate retention schedules have been established by work-order or contract.

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Cooler Receipt Form

ARI Client: JBLM

Project Name: Log Ram

COC No(s): _____ (NA)

Delivered by: Fed-Ex UPS Courier (Hand Delivered) Other: _____

Assigned ARI Job No: YE81

Tracking No: _____ (NA)

Preliminary Examination Phase:

Were intact, properly signed and dated custody seals attached to the outside of to cooler?	YES	(NO)
Were custody papers included with the cooler?	(YES)	NO
Were custody papers properly filled out (ink, signed, etc.)	(YES)	NO

Temperature of Cooler(s) (°C) (recommended 2 0-6.0 °C for chemistry): 1.1 1.3 5.3

Time: 1105

If cooler temperature is out of compliance fill out form 00070F

Temp Gun ID#: 12341222

Cooler Accepted by: JM Date: 3/28/14 Time: 1205

Complete custody forms and attach all shipping documents

Log-In Phase:

Was a temperature blank included in the cooler?		YES	(NO)
What kind of packing material was used? Bubble Wrap Wet Ice (Gel Packs) Baggies (Foam Block) Paper Other: BOX			
Was sufficient ice used (if appropriate)?	NA	(YES)	NO
Were all bottles sealed in individual plastic bags?		YES	(NO)
Did all bottles arrive in good condition (unbroken)?		(YES)	NO
Were all bottle labels complete and legible?		(YES)	NO
Did the number of containers listed on COC match with the number of containers received?		(YES)	NO
Did all bottle labels and tags agree with custody papers?		(YES)	NO
Were all bottles used correct for the requested analyses?		(YES)	NO
Do any of the analyses (bottles) require preservation? (attach preservation sheet, excluding VOCs)...	(NA)	YES	NO
Were all VOC vials free of air bubbles?	NA	(YES)	NO
Was sufficient amount of sample sent in each bottle?		(YES)	NO
Date VOC Trip Blank was made at ARI	(NA)		

Was Sample Split by ARI: (NA) YES Date/Time: _____ Equipment: _____ Split by: _____

Samples Logged by: AV Date: 3/28/14 Time: 1337

*** Notify Project Manager of discrepancies or concerns ***

Sample ID on Bottle	Sample ID on COC	Sample ID on Bottle	Sample ID on COC

Additional Notes, Discrepancies, & Resolutions:

By: Date:

Small Air Bubbles ~2mm	Peabubbles 2-4 mm	LARGE Air Bubbles > 4 mm
• • •	• • •	● ● ●

Small → "sm" (< 2 mm)
Peabubbles → "pb" (2 to < 4 mm)
Large → "lg" (4 to < 6 mm)
Headspace → "hs" (> 6 mm)

YE81 : 0600H

Sample ID Cross Reference Report

ANALYTICAL RESOURCES INCORPORATED

ARI Job No: YE81
Client: Joint Base Lewis McChord
Project Event: N/A
Project Name: Log RAM

	Sample ID	ARI Lab ID	ARI LIMS ID	Matrix	Sample Date/Time	VTSR
1.	LGC140327LX10-1	YE81A	14-5947	Water	03/27/14 12:25	03/28/14 12:05
2.	LGC140327LX11-1	YE81B	14-5948	Water	03/27/14 11:55	03/28/14 12:05
3.	LGC140327LX12-1	YE81C	14-5949	Water	03/27/14 11:50	03/28/14 12:05
4.	LGC140327LX13-1	YE81D	14-5950	Water	03/27/14 11:45	03/28/14 12:05
5.	LGC140327LX14-1	YE81E	14-5951	Water	03/27/14 11:40	03/28/14 12:05
6.	LGC140327LX15-1	YE81F	14-5952	Water	03/27/14 11:35	03/28/14 12:05
7.	LGC140327LX4-1	YE81G	14-5953	Water	03/27/14 12:55	03/28/14 12:05
8.	LGC140327DUP9-1	YE81H	14-5954	Water	03/27/14 07:00	03/28/14 12:05
9.	LGC140327DUP10-1	YE81I	14-5955	Water	03/27/14 07:30	03/28/14 12:05
10.	LGC140327DUP11-1	YE81J	14-5956	Water	03/27/14 06:30	03/28/14 12:05
11.	LGC140327DUP12-1	YE81K	14-5957	Water	03/27/14 06:00	03/28/14 12:05
12.	LGC140327SLAP1-1	YE81L	14-5958	Water	03/27/14 10:00	03/28/14 12:05
13.	LGC140327SLAP2-1	YE81M	14-5959	Water	03/27/14 10:20	03/28/14 12:05
14.	LGC140327SLAP3-1	YE81N	14-5960	Water	03/27/14 10:25	03/28/14 12:05
15.	LGC140327SLAP4-1	YE81O	14-5961	Water	03/27/14 10:30	03/28/14 12:05
16.	LGC140327SLAP5-1	YE81P	14-5962	Water	03/27/14 10:40	03/28/14 12:05
17.	LGC140327SLAP6-1	YE81Q	14-5963	Water	03/27/14 10:50	03/28/14 12:05
18.	LGC140327LC74D-1	YE81R	14-5964	Water	03/27/14 09:10	03/28/14 12:05
19.	LGC140327LC96D-1	YE81S	14-5965	Water	03/27/14 08:55	03/28/14 12:05
20.	LGC140327LC97D-1	YE81T	14-5966	Water	03/27/14 09:25	03/28/14 12:05

YE81.00005

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140327LX10-1**
Page 1 of 2 **SAMPLE**

Lab Sample ID: YE81A
LIMS ID: 14-5947
Matrix: Water
Data Release Authorized:
Reported: 04/10/14

QC Report No: YE81-Joint Base Lewis McChord
Project: Log RAM
Date Sampled: 03/27/14
Date Received: 03/28/14

Instrument/Analyst: NT3/PAB
Date Analyzed: 04/04/14 00:03

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	LOQ	Result	Q
74-87-3	Chloromethane	0.50	< 0.50	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.20	< 0.20	U
75-00-3	Chloroethane	0.20	< 0.20	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	Acetone	5.0	< 5.0	U
75-15-0	Carbon Disulfide	0.20	< 0.20	U
75-35-4	1,1-Dichloroethene	0.20	< 0.20	U
75-34-3	1,1-Dichloroethane	0.20	< 0.20	U
156-60-5	trans-1,2-Dichloroethene	0.20	< 0.20	U
156-59-2	**cis-1,2-Dichloroethene**	**0.20**	**0.80**	
67-66-3	**Chloroform**	**0.20**	**0.47**	
107-06-2	1,2-Dichloroethane	0.20	< 0.20	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	0.20	< 0.20	U
56-23-5	Carbon Tetrachloride	0.20	< 0.20	U
108-05-4	Vinyl Acetate	0.20	< 0.20	U
75-27-4	Bromodichloromethane	0.20	< 0.20	U
78-87-5	1,2-Dichloropropane	0.20	< 0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	< 0.20	U
79-01-6	**Trichloroethene**	**0.20**	**42**	
124-48-1	Dibromochloromethane	0.20	< 0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	< 0.20	U
71-43-2	Benzene	0.20	< 0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	< 0.20	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.20	< 0.20	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.20	< 0.20	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	< 0.20	U
108-88-3	Toluene	0.20	< 0.20	U
108-90-7	Chlorobenzene	0.20	< 0.20	U
100-41-4	Ethylbenzene	0.20	< 0.20	U
100-42-5	Styrene	0.20	< 0.20	U
75-69-4	Trichlorofluoromethane	0.20	< 0.20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.20	< 0.20	U
179601-23-1	m,p-Xylene	0.40	< 0.40	U
95-47-6	o-Xylene	0.20	< 0.20	U
95-50-1	1,2-Dichlorobenzene	0.20	< 0.20	U
541-73-1	1,3-Dichlorobenzene	0.20	< 0.20	U
106-46-7	1,4-Dichlorobenzene	0.20	< 0.20	U

Lab Sample ID: YE81A
LIMS ID: 14-5947
Matrix: Water
Date Analyzed: 04/04/14 00:03

QC Report No: YE81-Joint Base Lewis McChord
Project: Log RAM

CAS Number	Analyte	LOQ	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Iodomethane	1.0	< 1.0	U
74-96-4	Bromoethane	0.20	< 0.20	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.20	< 0.20	U
74-95-3	Dibromomethane	0.20	< 0.20	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	< 0.20	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	< 0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	< 0.50	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.20	< 0.20	U
95-63-6	1,2,4-Trimethylbenzene	0.20	< 0.20	U
87-68-3	Hexachlorobutadiene	0.50	< 0.50	U
106-93-4	1,2-Dibromoethane	0.20	< 0.20	U
74-97-5	Bromochloromethane	0.20	< 0.20	U
594-20-7	2,2-Dichloropropane	0.20	< 0.20	U
142-28-9	1,3-Dichloropropane	0.20	< 0.20	U
98-82-8	Isopropylbenzene	0.20	< 0.20	U
103-65-1	n-Propylbenzene	0.20	< 0.20	U
108-86-1	Bromobenzene	0.20	< 0.20	U
95-49-8	2-Chlorotoluene	0.20	< 0.20	U
106-43-4	4-Chlorotoluene	0.20	< 0.20	U
98-06-6	tert-Butylbenzene	0.20	< 0.20	U
135-98-8	sec-Butylbenzene	0.20	< 0.20	U
99-87-6	4-Isopropyltoluene	0.20	< 0.20	U
104-51-8	n-Butylbenzene	0.20	< 0.20	U
120-82-1	1,2,4-Trichlorobenzene	0.50	< 0.50	U
91-20-3	Naphthalene	0.50	< 0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	< 0.50	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	103%
d8-Toluene	99.1%
Bromofluorobenzene	97.8%
d4-1,2-Dichlorobenzene	99.5%

2-Chloroethylvinylether is an acid labile compound and may not be recovered from an acid preserved sample.

EPA SW-846 indicates that vinyl chloride and styrene may degrade in the presence of acid preservative.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140327LX11-1**
Page 1 of 2 **SAMPLE**

Lab Sample ID: YE81B
LIMS ID: 14-5948
Matrix: Water
Data Release Authorized: MW
Reported: 04/10/14

QC Report No: YE81-Joint Base Lewis McChord
Project: Log RAM
Date Sampled: 03/27/14
Date Received: 03/28/14

Instrument/Analyst: NT3/PAB
Date Analyzed: 04/04/14 00:31

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	LOQ	Result	Q
74-87-3	Chloromethane	0.50	< 0.50	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.20	< 0.20	U
75-00-3	Chloroethane	0.20	< 0.20	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	Acetone	5.0	< 5.0	U
75-15-0	Carbon Disulfide	0.20	< 0.20	U
75-35-4	1,1-Dichloroethene	0.20	< 0.20	U
75-34-3	1,1-Dichloroethane	0.20	< 0.20	U
156-60-5	trans-1,2-Dichloroethene	0.20	< 0.20	U
156-59-2	**cis-1,2-Dichloroethene**	**0.20**	**0.71**	
67-66-3	**Chloroform**	**0.20**	**0.28**	
107-06-2	1,2-Dichloroethane	0.20	< 0.20	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	0.20	< 0.20	U
56-23-5	Carbon Tetrachloride	0.20	< 0.20	U
108-05-4	Vinyl Acetate	0.20	< 0.20	U
75-27-4	Bromodichloromethane	0.20	< 0.20	U
78-87-5	1,2-Dichloropropane	0.20	< 0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	< 0.20	U
79-01-6	**Trichloroethene**	**0.20**	**26**	
124-48-1	Dibromochloromethane	0.20	< 0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	< 0.20	U
71-43-2	Benzene	0.20	< 0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	< 0.20	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.20	< 0.20	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.20	< 0.20	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	< 0.20	U
108-88-3	Toluene	0.20	< 0.20	U
108-90-7	Chlorobenzene	0.20	< 0.20	U
100-41-4	Ethylbenzene	0.20	< 0.20	U
100-42-5	Styrene	0.20	< 0.20	U
75-69-4	Trichlorofluoromethane	0.20	< 0.20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.20	< 0.20	U
179601-23-1	m,p-Xylene	0.40	< 0.40	U
95-47-6	o-Xylene	0.20	< 0.20	U
95-50-1	1,2-Dichlorobenzene	0.20	< 0.20	U
541-73-1	1,3-Dichlorobenzene	0.20	< 0.20	U
106-46-7	1,4-Dichlorobenzene	0.20	< 0.20	U

Lab Sample ID: YE81B
LIMS ID: 14-5948
Matrix: Water
Date Analyzed: 04/04/14 00:31

QC Report No: YE81-Joint Base Lewis McChord
Project: Log RAM

CAS Number	Analyte	LOQ	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Iodomethane	1.0	< 1.0	U
74-96-4	Bromoethane	0.20	< 0.20	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.20	< 0.20	U
74-95-3	Dibromomethane	0.20	< 0.20	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	< 0.20	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	< 0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	< 0.50	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.20	< 0.20	U
95-63-6	1,2,4-Trimethylbenzene	0.20	< 0.20	U
87-68-3	Hexachlorobutadiene	0.50	< 0.50	U
106-93-4	1,2-Dibromoethane	0.20	< 0.20	U
74-97-5	Bromochloromethane	0.20	< 0.20	U
594-20-7	2,2-Dichloropropane	0.20	< 0.20	U
142-28-9	1,3-Dichloropropane	0.20	< 0.20	U
98-82-8	Isopropylbenzene	0.20	< 0.20	U
103-65-1	n-Propylbenzene	0.20	< 0.20	U
108-86-1	Bromobenzene	0.20	< 0.20	U
95-49-8	2-Chlorotoluene	0.20	< 0.20	U
106-43-4	4-Chlorotoluene	0.20	< 0.20	U
98-06-6	tert-Butylbenzene	0.20	< 0.20	U
135-98-8	sec-Butylbenzene	0.20	< 0.20	U
99-87-6	4-Isopropyltoluene	0.20	< 0.20	U
104-51-8	n-Butylbenzene	0.20	< 0.20	U
120-82-1	1,2,4-Trichlorobenzene	0.50	< 0.50	U
91-20-3	Naphthalene	0.50	< 0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	< 0.50	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	103%
d8-Toluene	100%
Bromofluorobenzene	97.0%
d4-1,2-Dichlorobenzene	99.6%

2-Chloroethylvinylether is an acid labile compound and may not be recovered from an acid preserved sample.

EPA SW-846 indicates that vinyl chloride and styrene may degrade in the presence of acid preservative.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140327LX12-1**
Page 1 of 2 **SAMPLE**

Lab Sample ID: YE81C
LIMS ID: 14-5949
Matrix: Water
Data Release Authorized:
Reported: 04/10/14

QC Report No: YE81-Joint Base Lewis McChord
Project: Log RAM
Date Sampled: 03/27/14
Date Received: 03/28/14

Instrument/Analyst: NT3/PAB
Date Analyzed: 04/04/14 01:00

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	LOQ	Result	Q
74-87-3	Chloromethane	0.50	< 0.50	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.20	< 0.20	U
75-00-3	Chloroethane	0.20	< 0.20	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	Acetone	5.0	< 5.0	U
75-15-0	Carbon Disulfide	0.20	< 0.20	U
75-35-4	1,1-Dichloroethene	0.20	< 0.20	U
75-34-3	1,1-Dichloroethane	0.20	< 0.20	U
156-60-5	trans-1,2-Dichloroethene	0.20	< 0.20	U
156-59-2	**cis-1,2-Dichloroethene**	**0.20**	**0.42**	
67-66-3	**Chloroform**	**0.20**	**0.22**	
107-06-2	1,2-Dichloroethane	0.20	< 0.20	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	0.20	< 0.20	U
56-23-5	Carbon Tetrachloride	0.20	< 0.20	U
108-05-4	Vinyl Acetate	0.20	< 0.20	U
75-27-4	Bromodichloromethane	0.20	< 0.20	U
78-87-5	1,2-Dichloropropane	0.20	< 0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	< 0.20	U
79-01-6	**Trichloroethene**	**0.20**	**20**	
124-48-1	Dibromochloromethane	0.20	< 0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	< 0.20	U
71-43-2	Benzene	0.20	< 0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	< 0.20	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.20	< 0.20	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.20	< 0.20	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	< 0.20	U
108-88-3	Toluene	0.20	< 0.20	U
108-90-7	Chlorobenzene	0.20	< 0.20	U
100-41-4	Ethylbenzene	0.20	< 0.20	U
100-42-5	Styrene	0.20	< 0.20	U
75-69-4	Trichlorofluoromethane	0.20	< 0.20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.20	< 0.20	U
179601-23-1	m,p-Xylene	0.40	< 0.40	U
95-47-6	o-Xylene	0.20	< 0.20	U
95-50-1	1,2-Dichlorobenzene	0.20	< 0.20	U
541-73-1	1,3-Dichlorobenzene	0.20	< 0.20	U
106-46-7	1,4-Dichlorobenzene	0.20	< 0.20	U

Lab Sample ID: YE81C
LIMS ID: 14-5949
Matrix: Water
Date Analyzed: 04/04/14 01:00

QC Report No: YE81-Joint Base Lewis McChord
Project: Log RAM

CAS Number	Analyte	LOQ	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Iodomethane	1.0	< 1.0	U
74-96-4	Bromoethane	0.20	< 0.20	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.20	< 0.20	U
74-95-3	Dibromomethane	0.20	< 0.20	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	< 0.20	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	< 0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	< 0.50	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.20	< 0.20	U
95-63-6	1,2,4-Trimethylbenzene	0.20	< 0.20	U
87-68-3	Hexachlorobutadiene	0.50	< 0.50	U
106-93-4	1,2-Dibromoethane	0.20	< 0.20	U
74-97-5	Bromochloromethane	0.20	< 0.20	U
594-20-7	2,2-Dichloropropane	0.20	< 0.20	U
142-28-9	1,3-Dichloropropane	0.20	< 0.20	U
98-82-8	Isopropylbenzene	0.20	< 0.20	U
103-65-1	n-Propylbenzene	0.20	< 0.20	U
108-86-1	Bromobenzene	0.20	< 0.20	U
95-49-8	2-Chlorotoluene	0.20	< 0.20	U
106-43-4	4-Chlorotoluene	0.20	< 0.20	U
98-06-6	tert-Butylbenzene	0.20	< 0.20	U
135-98-8	sec-Butylbenzene	0.20	< 0.20	U
99-87-6	4-Isopropyltoluene	0.20	< 0.20	U
104-51-8	n-Butylbenzene	0.20	< 0.20	U
120-82-1	1,2,4-Trichlorobenzene	0.50	< 0.50	U
91-20-3	Naphthalene	0.50	< 0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	< 0.50	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	99.9%
d8-Toluene	101%
Bromofluorobenzene	97.8%
d4-1,2-Dichlorobenzene	103%

2-Chloroethylvinylether is an acid labile compound and may not be recovered from an acid preserved sample.

EPA SW-846 indicates that vinyl chloride and styrene may degrade in the presence of acid preservative.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140327LX13-1**
Page 1 of 2 **SAMPLE**

Lab Sample ID: YE81D
LIMS ID: 14-5950
Matrix: Water
Data Release Authorized: MW
Reported: 04/10/14

QC Report No: YE81-Joint Base Lewis McChord
Project: Log RAM
Date Sampled: 03/27/14
Date Received: 03/28/14

Instrument/Analyst: NT3/PAB
Date Analyzed: 04/04/14 01:28

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	LOQ	Result	Q
74-87-3	Chloromethane	0.50	< 0.50	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.20	< 0.20	U
75-00-3	Chloroethane	0.20	< 0.20	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	Acetone	5.0	< 5.0	U
75-15-0	Carbon Disulfide	0.20	< 0.20	U
75-35-4	1,1-Dichloroethene	0.20	< 0.20	U
75-34-3	1,1-Dichloroethane	0.20	< 0.20	U
156-60-5	trans-1,2-Dichloroethene	0.20	< 0.20	U
156-59-2	**cis-1,2-Dichloroethene**	**0.20**	**0.33**	
67-66-3	Chloroform	0.20	< 0.20	U
107-06-2	1,2-Dichloroethane	0.20	< 0.20	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	0.20	< 0.20	U
56-23-5	Carbon Tetrachloride	0.20	< 0.20	U
108-05-4	Vinyl Acetate	0.20	< 0.20	U
75-27-4	Bromodichloromethane	0.20	< 0.20	U
78-87-5	1,2-Dichloropropane	0.20	< 0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	< 0.20	U
79-01-6	**Trichloroethene**	**0.20**	**6.3**	
124-48-1	Dibromochloromethane	0.20	< 0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	< 0.20	U
71-43-2	Benzene	0.20	< 0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	< 0.20	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.20	< 0.20	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.20	< 0.20	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	< 0.20	U
108-88-3	Toluene	0.20	< 0.20	U
108-90-7	Chlorobenzene	0.20	< 0.20	U
100-41-4	Ethylbenzene	0.20	< 0.20	U
100-42-5	Styrene	0.20	< 0.20	U
75-69-4	Trichlorofluoromethane	0.20	< 0.20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.20	< 0.20	U
179601-23-1	m,p-Xylene	0.40	< 0.40	U
95-47-6	o-Xylene	0.20	< 0.20	U
95-50-1	1,2-Dichlorobenzene	0.20	< 0.20	U
541-73-1	1,3-Dichlorobenzene	0.20	< 0.20	U
106-46-7	1,4-Dichlorobenzene	0.20	< 0.20	U

Lab Sample ID: YE81D QC Report No: YE81-Joint Base Lewis McChord
LIMS ID: 14-5950 Project: Log RAM
Matrix: Water
Date Analyzed: 04/04/14 01:28

CAS Number	Analyte	LOQ	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Iodomethane	1.0	< 1.0	U
74-96-4	Bromoethane	0.20	< 0.20	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.20	< 0.20	U
74-95-3	Dibromomethane	0.20	< 0.20	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	< 0.20	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	< 0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	< 0.50	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.20	< 0.20	U
95-63-6	1,2,4-Trimethylbenzene	0.20	< 0.20	U
87-68-3	Hexachlorobutadiene	0.50	< 0.50	U
106-93-4	1,2-Dibromoethane	0.20	< 0.20	U
74-97-5	Bromochloromethane	0.20	< 0.20	U
594-20-7	2,2-Dichloropropane	0.20	< 0.20	U
142-28-9	1,3-Dichloropropane	0.20	< 0.20	U
98-82-8	Isopropylbenzene	0.20	< 0.20	U
103-65-1	n-Propylbenzene	0.20	< 0.20	U
108-86-1	Bromobenzene	0.20	< 0.20	U
95-49-8	2-Chlorotoluene	0.20	< 0.20	U
106-43-4	4-Chlorotoluene	0.20	< 0.20	U
98-06-6	tert-Butylbenzene	0.20	< 0.20	U
135-98-8	sec-Butylbenzene	0.20	< 0.20	U
99-87-6	4-Isopropyltoluene	0.20	< 0.20	U
104-51-8	n-Butylbenzene	0.20	< 0.20	U
120-82-1	1,2,4-Trichlorobenzene	0.50	< 0.50	U
91-20-3	Naphthalene	0.50	< 0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	< 0.50	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	102%
d8-Toluene	101%
Bromofluorobenzene	99.3%
d4-1,2-Dichlorobenzene	100%

2-Chloroethylvinylether is an acid labile compound and may not be recovered from an acid preserved sample.

EPA SW-846 indicates that vinyl chloride and styrene may degrade in the presence of acid preservative.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140327LX14-1**
Page 1 of 2 **SAMPLE**

Lab Sample ID: YE81E
LIMS ID: 14-5951
Matrix: Water
Data Release Authorized: MW
Reported: 04/10/14

QC Report No: YE81-Joint Base Lewis McChord
Project: Log RAM
Date Sampled: 03/27/14
Date Received: 03/28/14

Instrument/Analyst: NT3/PAB
Date Analyzed: 04/04/14 01:56

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	LOQ	Result	Q
74-87-3	Chloromethane	0.50	< 0.50	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.20	< 0.20	U
75-00-3	Chloroethane	0.20	< 0.20	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	Acetone	5.0	< 5.0	U
75-15-0	Carbon Disulfide	0.20	< 0.20	U
75-35-4	1,1-Dichloroethene	0.20	< 0.20	U
75-34-3	1,1-Dichloroethane	0.20	< 0.20	U
156-60-5	trans-1,2-Dichloroethene	0.20	< 0.20	U
156-59-2	cis-1,2-Dichloroethene	0.20	< 0.20	U
67-66-3	Chloroform	0.20	< 0.20	U
107-06-2	1,2-Dichloroethane	0.20	< 0.20	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	0.20	< 0.20	U
56-23-5	Carbon Tetrachloride	0.20	< 0.20	U
108-05-4	Vinyl Acetate	0.20	< 0.20	U
75-27-4	Bromodichloromethane	0.20	< 0.20	U
78-87-5	1,2-Dichloropropane	0.20	< 0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	< 0.20	U
79-01-6	**Trichloroethene**	**0.20**	**7.0**	
124-48-1	Dibromochloromethane	0.20	< 0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	< 0.20	U
71-43-2	Benzene	0.20	< 0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	< 0.20	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.20	< 0.20	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.20	< 0.20	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	< 0.20	U
108-88-3	Toluene	0.20	< 0.20	U
108-90-7	Chlorobenzene	0.20	< 0.20	U
100-41-4	Ethylbenzene	0.20	< 0.20	U
100-42-5	Styrene	0.20	< 0.20	U
75-69-4	Trichlorofluoromethane	0.20	< 0.20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.20	< 0.20	U
179601-23-1	m,p-Xylene	0.40	< 0.40	U
95-47-6	o-Xylene	0.20	< 0.20	U
95-50-1	1,2-Dichlorobenzene	0.20	< 0.20	U
541-73-1	1,3-Dichlorobenzene	0.20	< 0.20	U
106-46-7	1,4-Dichlorobenzene	0.20	< 0.20	U

Lab Sample ID: YE81E QC Report No: YE81-Joint Base Lewis McChord
LIMS ID: 14-5951 Project: Log RAM
Matrix: Water
Date Analyzed: 04/04/14 01:56

CAS Number	Analyte	LOQ	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Iodomethane	1.0	< 1.0	U
74-96-4	Bromoethane	0.20	< 0.20	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.20	< 0.20	U
74-95-3	Dibromomethane	0.20	< 0.20	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	< 0.20	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	< 0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	< 0.50	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.20	< 0.20	U
95-63-6	1,2,4-Trimethylbenzene	0.20	< 0.20	U
87-68-3	Hexachlorobutadiene	0.50	< 0.50	U
106-93-4	1,2-Dibromoethane	0.20	< 0.20	U
74-97-5	Bromochloromethane	0.20	< 0.20	U
594-20-7	2,2-Dichloropropane	0.20	< 0.20	U
142-28-9	1,3-Dichloropropane	0.20	< 0.20	U
98-82-8	Isopropylbenzene	0.20	< 0.20	U
103-65-1	n-Propylbenzene	0.20	< 0.20	U
108-86-1	Bromobenzene	0.20	< 0.20	U
95-49-8	2-Chlorotoluene	0.20	< 0.20	U
106-43-4	4-Chlorotoluene	0.20	< 0.20	U
98-06-6	tert-Butylbenzene	0.20	< 0.20	U
135-98-8	sec-Butylbenzene	0.20	< 0.20	U
99-87-6	4-Isopropyltoluene	0.20	< 0.20	U
104-51-8	n-Butylbenzene	0.20	< 0.20	U
120-82-1	1,2,4-Trichlorobenzene	0.50	< 0.50	U
91-20-3	Naphthalene	0.50	< 0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	< 0.50	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	104%
d8-Toluene	102%
Bromofluorobenzene	99.1%
d4-1,2-Dichlorobenzene	102%

2-Chloroethylvinylether is an acid labile compound and may not be recovered from an acid preserved sample.

EPA SW-846 indicates that vinyl chloride and styrene may degrade in the presence of acid preservative.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140327LX15-1**
Page 1 of 2 **SAMPLE**

Lab Sample ID: YE81F
LIMS ID: 14-5952
Matrix: Water
Data Release Authorized: MW
Reported: 04/10/14

QC Report No: YE81-Joint Base Lewis McChord
Project: Log RAM
Date Sampled: 03/27/14
Date Received: 03/28/14

Instrument/Analyst: NT3/PAB
Date Analyzed: 04/04/14 02:25

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	LOQ	Result	Q
74-87-3	Chloromethane	0.50	< 0.50	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.20	< 0.20	U
75-00-3	Chloroethane	0.20	< 0.20	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	Acetone	5.0	< 5.0	U
75-15-0	Carbon Disulfide	0.20	< 0.20	U
75-35-4	1,1-Dichloroethene	0.20	< 0.20	U
75-34-3	1,1-Dichloroethane	0.20	< 0.20	U
156-60-5	trans-1,2-Dichloroethene	0.20	< 0.20	U
156-59-2	cis-1,2-Dichloroethene	0.20	< 0.20	U
67-66-3	Chloroform	0.20	< 0.20	U
107-06-2	1,2-Dichloroethane	0.20	< 0.20	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	0.20	< 0.20	U
56-23-5	Carbon Tetrachloride	0.20	< 0.20	U
108-05-4	Vinyl Acetate	0.20	< 0.20	U
75-27-4	Bromodichloromethane	0.20	< 0.20	U
78-87-5	1,2-Dichloropropane	0.20	< 0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	< 0.20	U
79-01-6	**Trichloroethene**	**0.20**	**3.7**	
124-48-1	Dibromochloromethane	0.20	< 0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	< 0.20	U
71-43-2	Benzene	0.20	< 0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	< 0.20	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.20	< 0.20	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.20	< 0.20	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	< 0.20	U
108-88-3	Toluene	0.20	< 0.20	U
108-90-7	Chlorobenzene	0.20	< 0.20	U
100-41-4	Ethylbenzene	0.20	< 0.20	U
100-42-5	Styrene	0.20	< 0.20	U
75-69-4	Trichlorofluoromethane	0.20	< 0.20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.20	< 0.20	U
179601-23-1	m,p-Xylene	0.40	< 0.40	U
95-47-6	o-Xylene	0.20	< 0.20	U
95-50-1	1,2-Dichlorobenzene	0.20	< 0.20	U
541-73-1	1,3-Dichlorobenzene	0.20	< 0.20	U
106-46-7	1,4-Dichlorobenzene	0.20	< 0.20	U

Lab Sample ID: YE81F QC Report No: YE81-Joint Base Lewis McChord
LIMS ID: 14-5952 Project: Log RAM
Matrix: Water
Date Analyzed: 04/04/14 02:25

CAS Number	Analyte	LOQ	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Iodomethane	1.0	< 1.0	U
74-96-4	Bromoethane	0.20	< 0.20	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.20	< 0.20	U
74-95-3	Dibromomethane	0.20	< 0.20	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	< 0.20	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	< 0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	< 0.50	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.20	< 0.20	U
95-63-6	1,2,4-Trimethylbenzene	0.20	< 0.20	U
87-68-3	Hexachlorobutadiene	0.50	< 0.50	U
106-93-4	1,2-Dibromoethane	0.20	< 0.20	U
74-97-5	Bromochloromethane	0.20	< 0.20	U
594-20-7	2,2-Dichloropropane	0.20	< 0.20	U
142-28-9	1,3-Dichloropropane	0.20	< 0.20	U
98-82-8	Isopropylbenzene	0.20	< 0.20	U
103-65-1	n-Propylbenzene	0.20	< 0.20	U
108-86-1	Bromobenzene	0.20	< 0.20	U
95-49-8	2-Chlorotoluene	0.20	< 0.20	U
106-43-4	4-Chlorotoluene	0.20	< 0.20	U
98-06-6	tert-Butylbenzene	0.20	< 0.20	U
135-98-8	sec-Butylbenzene	0.20	< 0.20	U
99-87-6	4-Isopropyltoluene	0.20	< 0.20	U
104-51-8	n-Butylbenzene	0.20	< 0.20	U
120-82-1	1,2,4-Trichlorobenzene	0.50	< 0.50	U
91-20-3	Naphthalene	0.50	< 0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	< 0.50	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	100%
d8-Toluene	98.6%
Bromofluorobenzene	97.1%
d4-1,2-Dichlorobenzene	100%

2-Chloroethylvinylether is an acid labile compound and may not be recovered from an acid preserved sample.

EPA SW-846 indicates that vinyl chloride and styrene may degrade in the presence of acid preservative.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140327LX4-1**
Page 1 of 2 **SAMPLE**

Lab Sample ID: YE81G
LIMS ID: 14-5953
Matrix: Water
Data Release Authorized: MW
Reported: 04/10/14

QC Report No: YE81-Joint Base Lewis McChord
Project: Log RAM
Date Sampled: 03/27/14
Date Received: 03/28/14

Instrument/Analyst: NT3/PAB
Date Analyzed: 04/04/14 02:53

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	LOQ	Result	Q
74-87-3	Chloromethane	0.50	< 0.50	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.20	< 0.20	U
75-00-3	Chloroethane	0.20	< 0.20	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	Acetone	5.0	< 5.0	U
75-15-0	Carbon Disulfide	0.20	< 0.20	U
75-35-4	1,1-Dichloroethene	0.20	< 0.20	U
75-34-3	1,1-Dichloroethane	0.20	< 0.20	U
156-60-5	trans-1,2-Dichloroethene	0.20	< 0.20	U
156-59-2	**cis-1,2-Dichloroethene**	**0.20**	**0.59**	
67-66-3	Chloroform	0.20	< 0.20	U
107-06-2	1,2-Dichloroethane	0.20	< 0.20	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	0.20	< 0.20	U
56-23-5	Carbon Tetrachloride	0.20	< 0.20	U
108-05-4	Vinyl Acetate	0.20	< 0.20	U
75-27-4	Bromodichloromethane	0.20	< 0.20	U
78-87-5	1,2-Dichloropropane	0.20	< 0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	< 0.20	U
79-01-6	**Trichloroethene**	**0.20**	**22**	
124-48-1	Dibromochloromethane	0.20	< 0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	< 0.20	U
71-43-2	Benzene	0.20	< 0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	< 0.20	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.20	< 0.20	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.20	< 0.20	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	< 0.20	U
108-88-3	Toluene	0.20	< 0.20	U
108-90-7	Chlorobenzene	0.20	< 0.20	U
100-41-4	Ethylbenzene	0.20	< 0.20	U
100-42-5	Styrene	0.20	< 0.20	U
75-69-4	Trichlorofluoromethane	0.20	< 0.20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.20	< 0.20	U
179601-23-1	m,p-Xylene	0.40	< 0.40	U
95-47-6	o-Xylene	0.20	< 0.20	U
95-50-1	1,2-Dichlorobenzene	0.20	< 0.20	U
541-73-1	1,3-Dichlorobenzene	0.20	< 0.20	U
106-46-7	1,4-Dichlorobenzene	0.20	< 0.20	U

Lab Sample ID: YE81G QC Report No: YE81-Joint Base Lewis McChord
LIMS ID: 14-5953 Project: Log RAM
Matrix: Water
Date Analyzed: 04/04/14 02:53

CAS Number	Analyte	LOQ	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Iodomethane	1.0	< 1.0	U
74-96-4	Bromoethane	0.20	< 0.20	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.20	< 0.20	U
74-95-3	Dibromomethane	0.20	< 0.20	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	< 0.20	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	< 0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	< 0.50	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.20	< 0.20	U
95-63-6	1,2,4-Trimethylbenzene	0.20	< 0.20	U
87-68-3	Hexachlorobutadiene	0.50	< 0.50	U
106-93-4	1,2-Dibromoethane	0.20	< 0.20	U
74-97-5	Bromochloromethane	0.20	< 0.20	U
594-20-7	2,2-Dichloropropane	0.20	< 0.20	U
142-28-9	1,3-Dichloropropane	0.20	< 0.20	U
98-82-8	Isopropylbenzene	0.20	< 0.20	U
103-65-1	n-Propylbenzene	0.20	< 0.20	U
108-86-1	Bromobenzene	0.20	< 0.20	U
95-49-8	2-Chlorotoluene	0.20	< 0.20	U
106-43-4	4-Chlorotoluene	0.20	< 0.20	U
98-06-6	tert-Butylbenzene	0.20	< 0.20	U
135-98-8	sec-Butylbenzene	0.20	< 0.20	U
99-87-6	4-Isopropyltoluene	0.20	< 0.20	U
104-51-8	n-Butylbenzene	0.20	< 0.20	U
120-82-1	1,2,4-Trichlorobenzene	0.50	< 0.50	U
91-20-3	Naphthalene	0.50	< 0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	< 0.50	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	102%
d8-Toluene	101%
Bromofluorobenzene	96.4%
d4-1,2-Dichlorobenzene	99.6%

2-Chloroethylvinylether is an acid labile compound and may not be recovered from an acid preserved sample.

EPA SW-846 indicates that vinyl chloride and styrene may degrade in the presence of acid preservative.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140327DUP9-1**
Page 1 of 2 **SAMPLE**

Lab Sample ID: YE81H
LIMS ID: 14-5954
Matrix: Water
Data Release Authorized: MW
Reported: 04/10/14

QC Report No: YE81-Joint Base Lewis McChord
Project: Log RAM
Date Sampled: 03/27/14
Date Received: 03/28/14

Instrument/Analyst: NT3/PAB
Date Analyzed: 04/04/14 19:08

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	LOQ	Result	Q
74-87-3	Chloromethane	0.50	< 0.50	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.20	< 0.20	U
75-00-3	Chloroethane	0.20	< 0.20	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	**Acetone**	**5.0**	**5.1**	
75-15-0	Carbon Disulfide	0.20	< 0.20	U
75-35-4	1,1-Dichloroethene	0.20	< 0.20	U
75-34-3	1,1-Dichloroethane	0.20	< 0.20	U
156-60-5	trans-1,2-Dichloroethene	0.20	< 0.20	U
156-59-2	**cis-1,2-Dichloroethene**	**0.20**	**1.7**	
67-66-3	Chloroform	0.20	< 0.20	U
107-06-2	1,2-Dichloroethane	0.20	< 0.20	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	0.20	< 0.20	U
56-23-5	Carbon Tetrachloride	0.20	< 0.20	U
108-05-4	Vinyl Acetate	0.20	< 0.20	U
75-27-4	Bromodichloromethane	0.20	< 0.20	U
78-87-5	1,2-Dichloropropane	0.20	< 0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	< 0.20	U
79-01-6	**Trichloroethene**	**0.20**	**59**	
124-48-1	Dibromochloromethane	0.20	< 0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	< 0.20	U
71-43-2	Benzene	0.20	< 0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	< 0.20	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.20	< 0.20	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.20	< 0.20	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	< 0.20	U
108-88-3	Toluene	0.20	< 0.20	U
108-90-7	Chlorobenzene	0.20	< 0.20	U
100-41-4	Ethylbenzene	0.20	< 0.20	U
100-42-5	Styrene	0.20	< 0.20	U
75-69-4	Trichlorofluoromethane	0.20	< 0.20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.20	< 0.20	U
179601-23-1	m,p-Xylene	0.40	< 0.40	U
95-47-6	o-Xylene	0.20	< 0.20	U
95-50-1	1,2-Dichlorobenzene	0.20	< 0.20	U
541-73-1	1,3-Dichlorobenzene	0.20	< 0.20	U
106-46-7	1,4-Dichlorobenzene	0.20	< 0.20	U

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140327DUP9-1**
 SAMPLE

Lab Sample ID: YE81H QC Report No: YE81-Joint Base Lewis McChord
LIMS ID: 14-5954 Project: Log RAM
Matrix: Water
Date Analyzed: 04/04/14 19:08

CAS Number	Analyte	LOQ	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Iodomethane	1.0	< 1.0	U
74-96-4	Bromoethane	0.20	< 0.20	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.20	< 0.20	U
74-95-3	Dibromomethane	0.20	< 0.20	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	< 0.20	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	< 0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	< 0.50	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.20	< 0.20	U
95-63-6	1,2,4-Trimethylbenzene	0.20	< 0.20	U
87-68-3	Hexachlorobutadiene	0.50	< 0.50	U
106-93-4	1,2-Dibromoethane	0.20	< 0.20	U
74-97-5	Bromochloromethane	0.20	< 0.20	U
594-20-7	2,2-Dichloropropane	0.20	< 0.20	U
142-28-9	1,3-Dichloropropane	0.20	< 0.20	U
98-82-8	Isopropylbenzene	0.20	< 0.20	U
103-65-1	n-Propylbenzene	0.20	< 0.20	U
108-86-1	Bromobenzene	0.20	< 0.20	U
95-49-8	2-Chlorotoluene	0.20	< 0.20	U
106-43-4	4-Chlorotoluene	0.20	< 0.20	U
98-06-6	tert-Butylbenzene	0.20	< 0.20	U
135-98-8	sec-Butylbenzene	0.20	< 0.20	U
99-87-6	4-Isopropyltoluene	0.20	< 0.20	U
104-51-8	n-Butylbenzene	0.20	< 0.20	U
120-82-1	1,2,4-Trichlorobenzene	0.50	< 0.50	U
91-20-3	Naphthalene	0.50	< 0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	< 0.50	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	104%
d8-Toluene	101%
Bromofluorobenzene	96.5%
d4-1,2-Dichlorobenzene	101%

2-Chloroethylvinylether is an acid labile compound and may not be recovered from an acid preserved sample.

EPA SW-846 indicates that vinyl chloride and styrene may degrade in the presence of acid preservative.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140327DUP10-1**
Page 1 of 2 **SAMPLE**

Lab Sample ID: YE81I
LIMS ID: 14-5955
Matrix: Water
Data Release Authorized:
Reported: 04/10/14

QC Report No: YE81-Joint Base Lewis McChord
Project: Log RAM
Date Sampled: 03/27/14
Date Received: 03/28/14

Instrument/Analyst: NT3/PAB
Date Analyzed: 04/04/14 19:36

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	LOQ	Result	Q
74-87-3	Chloromethane	0.50	< 0.50	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.20	< 0.20	U
75-00-3	Chloroethane	0.20	< 0.20	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	**Acetone**	**5.0**	**11**	
75-15-0	Carbon Disulfide	0.20	< 0.20	U
75-35-4	1,1-Dichloroethene	0.20	< 0.20	U
75-34-3	1,1-Dichloroethane	0.20	< 0.20	U
156-60-5	trans-1,2-Dichloroethene	0.20	< 0.20	U
156-59-2	cis-1,2-Dichloroethene	0.20	< 0.20	U
67-66-3	Chloroform	0.20	< 0.20	U
107-06-2	1,2-Dichloroethane	0.20	< 0.20	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	0.20	< 0.20	U
56-23-5	Carbon Tetrachloride	0.20	< 0.20	U
108-05-4	Vinyl Acetate	0.20	< 0.20	U
75-27-4	Bromodichloromethane	0.20	< 0.20	U
78-87-5	1,2-Dichloropropane	0.20	< 0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	< 0.20	U
79-01-6	Trichloroethene	0.20	< 0.20	U
124-48-1	Dibromochloromethane	0.20	< 0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	< 0.20	U
71-43-2	Benzene	0.20	< 0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	< 0.20	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.20	< 0.20	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.20	< 0.20	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	< 0.20	U
108-88-3	Toluene	0.20	< 0.20	U
108-90-7	Chlorobenzene	0.20	< 0.20	U
100-41-4	Ethylbenzene	0.20	< 0.20	U
100-42-5	Styrene	0.20	< 0.20	U
75-69-4	Trichlorofluoromethane	0.20	< 0.20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.20	< 0.20	U
179601-23-1	m,p-Xylene	0.40	< 0.40	U
95-47-6	o-Xylene	0.20	< 0.20	U
95-50-1	1,2-Dichlorobenzene	0.20	< 0.20	U
541-73-1	1,3-Dichlorobenzene	0.20	< 0.20	U
106-46-7	1,4-Dichlorobenzene	0.20	< 0.20	U

Lab Sample ID: YE81I
LIMS ID: 14-5955
Matrix: Water
Date Analyzed: 04/04/14 19:36

QC Report No: YE81-Joint Base Lewis McChord
Project: Log RAM

CAS Number	Analyte	LOQ	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Iodomethane	1.0	< 1.0	U
74-96-4	Bromoethane	0.20	< 0.20	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.20	< 0.20	U
74-95-3	Dibromomethane	0.20	< 0.20	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	< 0.20	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	< 0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	< 0.50	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.20	< 0.20	U
95-63-6	1,2,4-Trimethylbenzene	0.20	< 0.20	U
87-68-3	Hexachlorobutadiene	0.50	< 0.50	U
106-93-4	1,2-Dibromoethane	0.20	< 0.20	U
74-97-5	Bromochloromethane	0.20	< 0.20	U
594-20-7	2,2-Dichloropropane	0.20	< 0.20	U
142-28-9	1,3-Dichloropropane	0.20	< 0.20	U
98-82-8	Isopropylbenzene	0.20	< 0.20	U
103-65-1	n-Propylbenzene	0.20	< 0.20	U
108-86-1	Bromobenzene	0.20	< 0.20	U
95-49-8	2-Chlorotoluene	0.20	< 0.20	U
106-43-4	4-Chlorotoluene	0.20	< 0.20	U
98-06-6	tert-Butylbenzene	0.20	< 0.20	U
135-98-8	sec-Butylbenzene	0.20	< 0.20	U
99-87-6	4-Isopropyltoluene	0.20	< 0.20	U
104-51-8	n-Butylbenzene	0.20	< 0.20	U
120-82-1	1,2,4-Trichlorobenzene	0.50	< 0.50	U
91-20-3	Naphthalene	0.50	< 0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	< 0.50	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	106%
d8-Toluene	101%
Bromofluorobenzene	95.7%
d4-1,2-Dichlorobenzene	102%

2-Chloroethylvinylether is an acid labile compound and may not be recovered from an acid preserved sample.

EPA SW-846 indicates that vinyl chloride and styrene may degrade in the presence of acid preservative.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140327DUP11-1**
Page 1 of 2 **SAMPLE**

Lab Sample ID: YE81J
LIMS ID: 14-5956
Matrix: Water
Data Release Authorized:
Reported: 04/10/14

QC Report No: YE81-Joint Base Lewis McChord
Project: Log RAM
Date Sampled: 03/27/14
Date Received: 03/28/14

Instrument/Analyst: NT3/PAB
Date Analyzed: 04/04/14 20:05

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	LOQ	Result	Q
74-87-3	Chloromethane	0.50	< 0.50	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.20	< 0.20	U
75-00-3	Chloroethane	0.20	< 0.20	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	Acetone	5.0	< 5.0	U
75-15-0	Carbon Disulfide	0.20	< 0.20	U
75-35-4	1,1-Dichloroethene	0.20	< 0.20	U
75-34-3	1,1-Dichloroethane	0.20	< 0.20	U
156-60-5	trans-1,2-Dichloroethene	0.20	< 0.20	U
156-59-2	**cis-1,2-Dichloroethene**	**0.20**	**0.67**	
67-66-3	Chloroform	0.20	< 0.20	U
107-06-2	1,2-Dichloroethane	0.20	< 0.20	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	0.20	< 0.20	U
56-23-5	Carbon Tetrachloride	0.20	< 0.20	U
108-05-4	Vinyl Acetate	0.20	< 0.20	U
75-27-4	Bromodichloromethane	0.20	< 0.20	U
78-87-5	1,2-Dichloropropane	0.20	< 0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	< 0.20	U
79-01-6	**Trichloroethene**	**0.20**	**11**	
124-48-1	Dibromochloromethane	0.20	< 0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	< 0.20	U
71-43-2	Benzene	0.20	< 0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	< 0.20	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.20	< 0.20	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.20	< 0.20	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	< 0.20	U
108-88-3	Toluene	0.20	< 0.20	U
108-90-7	Chlorobenzene	0.20	< 0.20	U
100-41-4	Ethylbenzene	0.20	< 0.20	U
100-42-5	Styrene	0.20	< 0.20	U
75-69-4	Trichlorofluoromethane	0.20	< 0.20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.20	< 0.20	U
179601-23-1	m,p-Xylene	0.40	< 0.40	U
95-47-6	o-Xylene	0.20	< 0.20	U
95-50-1	1,2-Dichlorobenzene	0.20	< 0.20	U
541-73-1	1,3-Dichlorobenzene	0.20	< 0.20	U
106-46-7	1,4-Dichlorobenzene	0.20	< 0.20	U

Lab Sample ID: YE81J QC Report No: YE81-Joint Base Lewis McChord
LIMS ID: 14-5956 Project: Log RAM
Matrix: Water
Date Analyzed: 04/04/14 20:05

CAS Number	Analyte	LOQ	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Iodomethane	1.0	< 1.0	U
74-96-4	Bromoethane	0.20	< 0.20	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.20	< 0.20	U
74-95-3	Dibromomethane	0.20	< 0.20	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	< 0.20	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	< 0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	< 0.50	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.20	< 0.20	U
95-63-6	1,2,4-Trimethylbenzene	0.20	< 0.20	U
87-68-3	Hexachlorobutadiene	0.50	< 0.50	U
106-93-4	1,2-Dibromoethane	0.20	< 0.20	U
74-97-5	Bromochloromethane	0.20	< 0.20	U
594-20-7	2,2-Dichloropropane	0.20	< 0.20	U
142-28-9	1,3-Dichloropropane	0.20	< 0.20	U
98-82-8	Isopropylbenzene	0.20	< 0.20	U
103-65-1	n-Propylbenzene	0.20	< 0.20	U
108-86-1	Bromobenzene	0.20	< 0.20	U
95-49-8	2-Chlorotoluene	0.20	< 0.20	U
106-43-4	4-Chlorotoluene	0.20	< 0.20	U
98-06-6	tert-Butylbenzene	0.20	< 0.20	U
135-98-8	sec-Butylbenzene	0.20	< 0.20	U
99-87-6	4-Isopropyltoluene	0.20	< 0.20	U
104-51-8	n-Butylbenzene	0.20	< 0.20	U
120-82-1	1,2,4-Trichlorobenzene	0.50	< 0.50	U
91-20-3	Naphthalene	0.50	< 0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	< 0.50	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	106%
d8-Toluene	99.4%
Bromofluorobenzene	99.2%
d4-1,2-Dichlorobenzene	102%

2-Chloroethylvinylether is an acid labile compound and may not be recovered from an acid preserved sample.

EPA SW-846 indicates that vinyl chloride and styrene may degrade in the presence of acid preservative.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140327DUP12-1**
Page 1 of 2 **SAMPLE**

Lab Sample ID: YE81K
LIMS ID: 14-5957
Matrix: Water
Data Release Authorized:
Reported: 04/10/14

QC Report No: YE81-Joint Base Lewis McChord
Project: Log RAM
Date Sampled: 03/27/14
Date Received: 03/28/14

Instrument/Analyst: NT3/PAB
Date Analyzed: 04/04/14 20:33

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	LOQ	Result	Q
74-87-3	Chloromethane	0.50	< 0.50	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.20	< 0.20	U
75-00-3	Chloroethane	0.20	< 0.20	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	Acetone	5.0	< 5.0	U
75-15-0	Carbon Disulfide	0.20	< 0.20	U
75-35-4	1,1-Dichloroethene	0.20	< 0.20	U
75-34-3	1,1-Dichloroethane	0.20	< 0.20	U
156-60-5	trans-1,2-Dichloroethene	0.20	< 0.20	U
156-59-2	**cis-1,2-Dichloroethene**	**0.20**	**0.37**	
67-66-3	Chloroform	0.20	< 0.20	U
107-06-2	1,2-Dichloroethane	0.20	< 0.20	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	0.20	< 0.20	U
56-23-5	Carbon Tetrachloride	0.20	< 0.20	U
108-05-4	Vinyl Acetate	0.20	< 0.20	U
75-27-4	Bromodichloromethane	0.20	< 0.20	U
78-87-5	1,2-Dichloropropane	0.20	< 0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	< 0.20	U
79-01-6	**Trichloroethene**	**0.20**	**5.4**	
124-48-1	Dibromochloromethane	0.20	< 0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	< 0.20	U
71-43-2	Benzene	0.20	< 0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	< 0.20	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.20	< 0.20	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.20	< 0.20	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	< 0.20	U
108-88-3	Toluene	0.20	< 0.20	U
108-90-7	Chlorobenzene	0.20	< 0.20	U
100-41-4	Ethylbenzene	0.20	< 0.20	U
100-42-5	Styrene	0.20	< 0.20	U
75-69-4	Trichlorofluoromethane	0.20	< 0.20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.20	< 0.20	U
179601-23-1	m,p-Xylene	0.40	< 0.40	U
95-47-6	o-Xylene	0.20	< 0.20	U
95-50-1	1,2-Dichlorobenzene	0.20	< 0.20	U
541-73-1	1,3-Dichlorobenzene	0.20	< 0.20	U
106-46-7	1,4-Dichlorobenzene	0.20	< 0.20	U

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140327DUP12-1**
 SAMPLE

Lab Sample ID: YE81K QC Report No: YE81-Joint Base Lewis McChord
LIMS ID: 14-5957 Project: Log RAM
Matrix: Water
Date Analyzed: 04/04/14 20:33

CAS Number	Analyte	LOQ	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Iodomethane	1.0	< 1.0	U
74-96-4	Bromoethane	0.20	< 0.20	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.20	< 0.20	U
74-95-3	Dibromomethane	0.20	< 0.20	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	< 0.20	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	< 0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	< 0.50	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.20	< 0.20	U
95-63-6	1,2,4-Trimethylbenzene	0.20	< 0.20	U
87-68-3	Hexachlorobutadiene	0.50	< 0.50	U
106-93-4	1,2-Dibromoethane	0.20	< 0.20	U
74-97-5	Bromochloromethane	0.20	< 0.20	U
594-20-7	2,2-Dichloropropane	0.20	< 0.20	U
142-28-9	1,3-Dichloropropane	0.20	< 0.20	U
98-82-8	Isopropylbenzene	0.20	< 0.20	U
103-65-1	n-Propylbenzene	0.20	< 0.20	U
108-86-1	Bromobenzene	0.20	< 0.20	U
95-49-8	2-Chlorotoluene	0.20	< 0.20	U
106-43-4	4-Chlorotoluene	0.20	< 0.20	U
98-06-6	tert-Butylbenzene	0.20	< 0.20	U
135-98-8	sec-Butylbenzene	0.20	< 0.20	U
99-87-6	4-Isopropyltoluene	0.20	< 0.20	U
104-51-8	n-Butylbenzene	0.20	< 0.20	U
120-82-1	1,2,4-Trichlorobenzene	0.50	< 0.50	U
91-20-3	Naphthalene	0.50	< 0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	< 0.50	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	100%
d8-Toluene	99.7%
Bromofluorobenzene	96.6%
d4-1,2-Dichlorobenzene	103%

2-Chloroethylvinylether is an acid labile compound and may not be recovered from an acid preserved sample.

EPA SW-846 indicates that vinyl chloride and styrene may degrade in the presence of acid preservative.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140327SLAP1-1**
Page 1 of 2 **SAMPLE**

Lab Sample ID: YE81L
LIMS ID: 14-5958
Matrix: Water
Data Release Authorized:
Reported: 04/10/14

QC Report No: YE81-Joint Base Lewis McChord
Project: Log RAM
Date Sampled: 03/27/14
Date Received: 03/28/14

Instrument/Analyst: NT3/PAB
Date Analyzed: 04/04/14 21:02

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	LOQ	Result	Q
74-87-3	Chloromethane	0.50	< 0.50	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.20	< 0.20	U
75-00-3	Chloroethane	0.20	< 0.20	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	Acetone	5.0	< 5.0	U
75-15-0	Carbon Disulfide	0.20	< 0.20	U
75-35-4	1,1-Dichloroethene	0.20	< 0.20	U
75-34-3	1,1-Dichloroethane	0.20	< 0.20	U
156-60-5	trans-1,2-Dichloroethene	0.20	< 0.20	U
156-59-2	**cis-1,2-Dichloroethene**	**0.20**	**0.48**	
67-66-3	Chloroform	0.20	< 0.20	U
107-06-2	1,2-Dichloroethane	0.20	< 0.20	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	0.20	< 0.20	U
56-23-5	Carbon Tetrachloride	0.20	< 0.20	U
108-05-4	Vinyl Acetate	0.20	< 0.20	U
75-27-4	Bromodichloromethane	0.20	< 0.20	U
78-87-5	1,2-Dichloropropane	0.20	< 0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	< 0.20	U
79-01-6	**Trichloroethene**	**0.20**	**5.4**	
124-48-1	Dibromochloromethane	0.20	< 0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	< 0.20	U
71-43-2	Benzene	0.20	< 0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	< 0.20	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.20	< 0.20	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.20	< 0.20	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	< 0.20	U
108-88-3	Toluene	0.20	< 0.20	U
108-90-7	Chlorobenzene	0.20	< 0.20	U
100-41-4	Ethylbenzene	0.20	< 0.20	U
100-42-5	Styrene	0.20	< 0.20	U
75-69-4	Trichlorofluoromethane	0.20	< 0.20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.20	< 0.20	U
179601-23-1	m,p-Xylene	0.40	< 0.40	U
95-47-6	o-Xylene	0.20	< 0.20	U
95-50-1	1,2-Dichlorobenzene	0.20	< 0.20	U
541-73-1	1,3-Dichlorobenzene	0.20	< 0.20	U
106-46-7	1,4-Dichlorobenzene	0.20	< 0.20	U

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140327SLAP1-1**
 SAMPLE

Lab Sample ID: YE81L
LIMS ID: 14-5958
Matrix: Water
Date Analyzed: 04/04/14 21:02

QC Report No: YE81-Joint Base Lewis McChord
Project: Log RAM

CAS Number	Analyte	LOQ	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Iodomethane	1.0	< 1.0	U
74-96-4	Bromoethane	0.20	< 0.20	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.20	< 0.20	U
74-95-3	Dibromomethane	0.20	< 0.20	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	< 0.20	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	< 0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	< 0.50	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.20	< 0.20	U
95-63-6	1,2,4-Trimethylbenzene	0.20	< 0.20	U
87-68-3	Hexachlorobutadiene	0.50	< 0.50	U
106-93-4	1,2-Dibromoethane	0.20	< 0.20	U
74-97-5	Bromochloromethane	0.20	< 0.20	U
594-20-7	2,2-Dichloropropane	0.20	< 0.20	U
142-28-9	1,3-Dichloropropane	0.20	< 0.20	U
98-82-8	Isopropylbenzene	0.20	< 0.20	U
103-65-1	n-Propylbenzene	0.20	< 0.20	U
108-86-1	Bromobenzene	0.20	< 0.20	U
95-49-8	2-Chlorotoluene	0.20	< 0.20	U
106-43-4	4-Chlorotoluene	0.20	< 0.20	U
98-06-6	tert-Butylbenzene	0.20	< 0.20	U
135-98-8	sec-Butylbenzene	0.20	< 0.20	U
99-87-6	4-Isopropyltoluene	0.20	< 0.20	U
104-51-8	n-Butylbenzene	0.20	< 0.20	U
120-82-1	1,2,4-Trichlorobenzene	0.50	< 0.50	U
91-20-3	Naphthalene	0.50	< 0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	< 0.50	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	103%
d8-Toluene	101%
Bromofluorobenzene	97.5%
d4-1,2-Dichlorobenzene	102%

2-Chloroethylvinylether is an acid labile compound and may not be recovered from an acid preserved sample.

EPA SW-846 indicates that vinyl chloride and styrene may degrade in the presence of acid preservative.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140327SLAP2-1**
 SAMPLE

Lab Sample ID: YE81M
LIMS ID: 14-5959
Matrix: Water
Data Release Authorized: MW
Reported: 04/10/14

QC Report No: YE81-Joint Base Lewis McChord
Project: Log RAM
Date Sampled: 03/27/14
Date Received: 03/28/14

Instrument/Analyst: NT3/PAB
Date Analyzed: 04/04/14 21:30

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	LOQ	Result	Q
74-87-3	Chloromethane	0.50	< 0.50	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.20	< 0.20	U
75-00-3	Chloroethane	0.20	< 0.20	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	Acetone	5.0	< 5.0	U
75-15-0	Carbon Disulfide	0.20	< 0.20	U
75-35-4	1,1-Dichloroethene	0.20	< 0.20	U
75-34-3	1,1-Dichloroethane	0.20	< 0.20	U
156-60-5	trans-1,2-Dichloroethene	0.20	< 0.20	U
156-59-2	**cis-1,2-Dichloroethene**	**0.20**	**0.36**	
67-66-3	Chloroform	0.20	< 0.20	U
107-06-2	1,2-Dichloroethane	0.20	< 0.20	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	0.20	< 0.20	U
56-23-5	Carbon Tetrachloride	0.20	< 0.20	U
108-05-4	Vinyl Acetate	0.20	< 0.20	U
75-27-4	Bromodichloromethane	0.20	< 0.20	U
78-87-5	1,2-Dichloropropane	0.20	< 0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	< 0.20	U
79-01-6	**Trichloroethene**	**0.20**	**5.4**	
124-48-1	Dibromochloromethane	0.20	< 0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	< 0.20	U
71-43-2	Benzene	0.20	< 0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	< 0.20	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.20	< 0.20	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.20	< 0.20	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	< 0.20	U
108-88-3	Toluene	0.20	< 0.20	U
108-90-7	Chlorobenzene	0.20	< 0.20	U
100-41-4	Ethylbenzene	0.20	< 0.20	U
100-42-5	Styrene	0.20	< 0.20	U
75-69-4	Trichlorofluoromethane	0.20	< 0.20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.20	< 0.20	U
179601-23-1	m,p-Xylene	0.40	< 0.40	U
95-47-6	o-Xylene	0.20	< 0.20	U
95-50-1	1,2-Dichlorobenzene	0.20	< 0.20	U
541-73-1	1,3-Dichlorobenzene	0.20	< 0.20	U
106-46-7	1,4-Dichlorobenzene	0.20	< 0.20	U

YE81.00030

Lab Sample ID: YE81M
LIMS ID: 14-5959
Matrix: Water
Date Analyzed: 04/04/14 21:30

QC Report No: YE81-Joint Base Lewis McChord
Project: Log RAM

CAS Number	Analyte	LOQ	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Iodomethane	1.0	< 1.0	U
74-96-4	Bromoethane	0.20	< 0.20	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.20	< 0.20	U
74-95-3	Dibromomethane	0.20	< 0.20	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	< 0.20	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	< 0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	< 0.50	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.20	< 0.20	U
95-63-6	1,2,4-Trimethylbenzene	0.20	< 0.20	U
87-68-3	Hexachlorobutadiene	0.50	< 0.50	U
106-93-4	1,2-Dibromoethane	0.20	< 0.20	U
74-97-5	Bromochloromethane	0.20	< 0.20	U
594-20-7	2,2-Dichloropropane	0.20	< 0.20	U
142-28-9	1,3-Dichloropropane	0.20	< 0.20	U
98-82-8	Isopropylbenzene	0.20	< 0.20	U
103-65-1	n-Propylbenzene	0.20	< 0.20	U
108-86-1	Bromobenzene	0.20	< 0.20	U
95-49-8	2-Chlorotoluene	0.20	< 0.20	U
106-43-4	4-Chlorotoluene	0.20	< 0.20	U
98-06-6	tert-Butylbenzene	0.20	< 0.20	U
135-98-8	sec-Butylbenzene	0.20	< 0.20	U
99-87-6	4-Isopropyltoluene	0.20	< 0.20	U
104-51-8	n-Butylbenzene	0.20	< 0.20	U
120-82-1	1,2,4-Trichlorobenzene	0.50	< 0.50	U
91-20-3	Naphthalene	0.50	< 0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	< 0.50	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	105%
d8-Toluene	98.9%
Bromofluorobenzene	95.2%
d4-1,2-Dichlorobenzene	101%

2-Chloroethylvinylether is an acid labile compound and may not be recovered from an acid preserved sample.

EPA SW-846 indicates that vinyl chloride and styrene may degrade in the presence of acid preservative.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140327SLAP3-1**
Page 1 of 2 **SAMPLE**

Lab Sample ID: YE81N
LIMS ID: 14-5960
Matrix: Water
Data Release Authorized:
Reported: 04/10/14

QC Report No: YE81-Joint Base Lewis McChord
Project: Log RAM
Date Sampled: 03/27/14
Date Received: 03/28/14

Instrument/Analyst: NT3/PAB
Date Analyzed: 04/04/14 21:59

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	LOQ	Result	Q
74-87-3	Chloromethane	0.50	< 0.50	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.20	< 0.20	U
75-00-3	Chloroethane	0.20	< 0.20	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	Acetone	5.0	< 5.0	U
75-15-0	Carbon Disulfide	0.20	< 0.20	U
75-35-4	1,1-Dichloroethene	0.20	< 0.20	U
75-34-3	1,1-Dichloroethane	0.20	< 0.20	U
156-60-5	trans-1,2-Dichloroethene	0.20	< 0.20	U
156-59-2	**cis-1,2-Dichloroethene**	**0.20**	**0.81**	
67-66-3	Chloroform	0.20	< 0.20	U
107-06-2	1,2-Dichloroethane	0.20	< 0.20	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	0.20	< 0.20	U
56-23-5	Carbon Tetrachloride	0.20	< 0.20	U
108-05-4	Vinyl Acetate	0.20	< 0.20	U
75-27-4	Bromodichloromethane	0.20	< 0.20	U
78-87-5	1,2-Dichloropropane	0.20	< 0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	< 0.20	U
79-01-6	**Trichloroethene**	**0.20**	**22**	
124-48-1	Dibromochloromethane	0.20	< 0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	< 0.20	U
71-43-2	Benzene	0.20	< 0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	< 0.20	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.20	< 0.20	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.20	< 0.20	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	< 0.20	U
108-88-3	Toluene	0.20	< 0.20	U
108-90-7	Chlorobenzene	0.20	< 0.20	U
100-41-4	Ethylbenzene	0.20	< 0.20	U
100-42-5	Styrene	0.20	< 0.20	U
75-69-4	Trichlorofluoromethane	0.20	< 0.20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.20	< 0.20	U
179601-23-1	m,p-Xylene	0.40	< 0.40	U
95-47-6	o-Xylene	0.20	< 0.20	U
95-50-1	1,2-Dichlorobenzene	0.20	< 0.20	U
541-73-1	1,3-Dichlorobenzene	0.20	< 0.20	U
106-46-7	1,4-Dichlorobenzene	0.20	< 0.20	U

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140327SLAP3-1**
 SAMPLE

Lab Sample ID: YE81N
LIMS ID: 14-5960
Matrix: Water
Date Analyzed: 04/04/14 21:59

QC Report No: YE81-Joint Base Lewis McChord
Project: Log RAM

CAS Number	Analyte	LOQ	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Iodomethane	1.0	< 1.0	U
74-96-4	Bromoethane	0.20	< 0.20	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.20	< 0.20	U
74-95-3	Dibromomethane	0.20	< 0.20	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	< 0.20	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	< 0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	< 0.50	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.20	< 0.20	U
95-63-6	1,2,4-Trimethylbenzene	0.20	< 0.20	U
87-68-3	Hexachlorobutadiene	0.50	< 0.50	U
106-93-4	1,2-Dibromoethane	0.20	< 0.20	U
74-97-5	Bromochloromethane	0.20	< 0.20	U
594-20-7	2,2-Dichloropropane	0.20	< 0.20	U
142-28-9	1,3-Dichloropropane	0.20	< 0.20	U
98-82-8	Isopropylbenzene	0.20	< 0.20	U
103-65-1	n-Propylbenzene	0.20	< 0.20	U
108-86-1	Bromobenzene	0.20	< 0.20	U
95-49-8	2-Chlorotoluene	0.20	< 0.20	U
106-43-4	4-Chlorotoluene	0.20	< 0.20	U
98-06-6	tert-Butylbenzene	0.20	< 0.20	U
135-98-8	sec-Butylbenzene	0.20	< 0.20	U
99-87-6	4-Isopropyltoluene	0.20	< 0.20	U
104-51-8	n-Butylbenzene	0.20	< 0.20	U
120-82-1	1,2,4-Trichlorobenzene	0.50	< 0.50	U
91-20-3	Naphthalene	0.50	< 0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	< 0.50	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	105%
d8-Toluene	99.1%
Bromofluorobenzene	98.5%
d4-1,2-Dichlorobenzene	105%

2-Chloroethylvinylether is an acid labile compound and may not be recovered from an acid preserved sample.

EPA SW-846 indicates that vinyl chloride and styrene may degrade in the presence of acid preservative.

TEST 00033

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140327SLAP4-1**
Page 1 of 2 **SAMPLE**

Lab Sample ID: YE81O
LIMS ID: 14-5961
Matrix: Water
Data Release Authorized:
Reported: 04/10/14

QC Report No: YE81-Joint Base Lewis McChord
Project: Log RAM
Date Sampled: 03/27/14
Date Received: 03/28/14

Instrument/Analyst: NT3/PAB
Date Analyzed: 04/08/14 11:32

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	LOQ	Result	Q
74-87-3	Chloromethane	0.50	< 0.50	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.20	< 0.20	U
75-00-3	Chloroethane	0.20	< 0.20	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	Acetone	5.0	< 5.0	U
75-15-0	Carbon Disulfide	0.20	< 0.20	U
75-35-4	1,1-Dichloroethene	0.20	< 0.20	U
75-34-3	1,1-Dichloroethane	0.20	< 0.20	U
156-60-5	trans-1,2-Dichloroethene	0.20	< 0.20	U
156-59-2	**cis-1,2-Dichloroethene**	**0.20**	**0.57**	
67-66-3	Chloroform	0.20	< 0.20	U
107-06-2	1,2-Dichloroethane	0.20	< 0.20	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	0.20	< 0.20	U
56-23-5	Carbon Tetrachloride	0.20	< 0.20	U
108-05-4	Vinyl Acetate	0.20	< 0.20	U
75-27-4	Bromodichloromethane	0.20	< 0.20	U
78-87-5	1,2-Dichloropropane	0.20	< 0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	< 0.20	U
79-01-6	**Trichloroethene**	**0.20**	**26**	
124-48-1	Dibromochloromethane	0.20	< 0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	< 0.20	U
71-43-2	Benzene	0.20	< 0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	< 0.20	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.20	< 0.20	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.20	< 0.20	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	< 0.20	U
108-88-3	Toluene	0.20	< 0.20	U
108-90-7	Chlorobenzene	0.20	< 0.20	U
100-41-4	Ethylbenzene	0.20	< 0.20	U
100-42-5	Styrene	0.20	< 0.20	U
75-69-4	Trichlorofluoromethane	0.20	< 0.20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.20	< 0.20	U
179601-23-1	m,p-Xylene	0.40	< 0.40	U
95-47-6	o-Xylene	0.20	< 0.20	U
95-50-1	1,2-Dichlorobenzene	0.20	< 0.20	U
541-73-1	1,3-Dichlorobenzene	0.20	< 0.20	U
106-46-7	1,4-Dichlorobenzene	0.20	< 0.20	U

Lab Sample ID: YE81O
LIMS ID: 14-5961
Matrix: Water
Date Analyzed: 04/08/14 11:32

QC Report No: YE81-Joint Base Lewis McChord
Project: Log RAM

CAS Number	Analyte	LOQ	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Iodomethane	1.0	< 1.0	U
74-96-4	Bromoethane	0.20	< 0.20	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.20	< 0.20	U
74-95-3	Dibromomethane	0.20	< 0.20	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	< 0.20	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	< 0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	< 0.50	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.20	< 0.20	U
95-63-6	1,2,4-Trimethylbenzene	0.20	< 0.20	U
87-68-3	Hexachlorobutadiene	0.50	< 0.50	U
106-93-4	1,2-Dibromoethane	0.20	< 0.20	U
74-97-5	Bromochloromethane	0.20	< 0.20	U
594-20-7	2,2-Dichloropropane	0.20	< 0.20	U
142-28-9	1,3-Dichloropropane	0.20	< 0.20	U
98-82-8	Isopropylbenzene	0.20	< 0.20	U
103-65-1	n-Propylbenzene	0.20	< 0.20	U
108-86-1	Bromobenzene	0.20	< 0.20	U
95-49-8	2-Chlorotoluene	0.20	< 0.20	U
106-43-4	4-Chlorotoluene	0.20	< 0.20	U
98-06-6	tert-Butylbenzene	0.20	< 0.20	U
135-98-8	sec-Butylbenzene	0.20	< 0.20	U
99-87-6	4-Isopropyltoluene	0.20	< 0.20	U
104-51-8	n-Butylbenzene	0.20	< 0.20	U
120-82-1	1,2,4-Trichlorobenzene	0.50	< 0.50	U
91-20-3	Naphthalene	0.50	< 0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	< 0.50	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	102%
d8-Toluene	98.6%
Bromofluorobenzene	92.5%
d4-1,2-Dichlorobenzene	100%

2-Chloroethylvinylether is an acid labile compound and may not be recovered from an acid preserved sample.

EPA SW-846 indicates that vinyl chloride and styrene may degrade in the presence of acid preservative.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140327SLAP5-1**
Page 1 of 2 **SAMPLE**

Lab Sample ID: YE81P
LIMS ID: 14-5962
Matrix: Water
Data Release Authorized:
Reported: 04/10/14

QC Report No: YE81-Joint Base Lewis McChord
Project: Log RAM
Date Sampled: 03/27/14
Date Received: 03/28/14

Instrument/Analyst: NT3/PAB
Date Analyzed: 04/08/14 12:00

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	LOQ	Result	Q
74-87-3	Chloromethane	0.50	< 0.50	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.20	< 0.20	U
75-00-3	Chloroethane	0.20	< 0.20	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	Acetone	5.0	< 5.0	U
75-15-0	Carbon Disulfide	0.20	< 0.20	U
75-35-4	1,1-Dichloroethene	0.20	< 0.20	U
75-34-3	1,1-Dichloroethane	0.20	< 0.20	U
156-60-5	trans-1,2-Dichloroethene	0.20	< 0.20	U
156-59-2	**cis-1,2-Dichloroethene**	**0.20**	**0.28**	
67-66-3	Chloroform	0.20	< 0.20	U
107-06-2	1,2-Dichloroethane	0.20	< 0.20	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	0.20	< 0.20	U
56-23-5	Carbon Tetrachloride	0.20	< 0.20	U
108-05-4	Vinyl Acetate	0.20	< 0.20	U
75-27-4	Bromodichloromethane	0.20	< 0.20	U
78-87-5	1,2-Dichloropropane	0.20	< 0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	< 0.20	U
79-01-6	**Trichloroethene**	**0.20**	**8.5**	
124-48-1	Dibromochloromethane	0.20	< 0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	< 0.20	U
71-43-2	Benzene	0.20	< 0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	< 0.20	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.20	< 0.20	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.20	< 0.20	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	< 0.20	U
108-88-3	Toluene	0.20	< 0.20	U
108-90-7	Chlorobenzene	0.20	< 0.20	U
100-41-4	Ethylbenzene	0.20	< 0.20	U
100-42-5	Styrene	0.20	< 0.20	U
75-69-4	Trichlorofluoromethane	0.20	< 0.20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.20	< 0.20	U
179601-23-1	m,p-Xylene	0.40	< 0.40	U
95-47-6	o-Xylene	0.20	< 0.20	U
95-50-1	1,2-Dichlorobenzene	0.20	< 0.20	U
541-73-1	1,3-Dichlorobenzene	0.20	< 0.20	U
106-46-7	1,4-Dichlorobenzene	0.20	< 0.20	U

Lab Sample ID: YE81P QC Report No: YE81-Joint Base Lewis McChord
LIMS ID: 14-5962 Project: Log RAM
Matrix: Water
Date Analyzed: 04/08/14 12:00

CAS Number	Analyte	LOQ	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Iodomethane	1.0	< 1.0	U
74-96-4	Bromoethane	0.20	< 0.20	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.20	< 0.20	U
74-95-3	Dibromomethane	0.20	< 0.20	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	< 0.20	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	< 0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	< 0.50	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.20	< 0.20	U
95-63-6	1,2,4-Trimethylbenzene	0.20	< 0.20	U
87-68-3	Hexachlorobutadiene	0.50	< 0.50	U
106-93-4	1,2-Dibromoethane	0.20	< 0.20	U
74-97-5	Bromochloromethane	0.20	< 0.20	U
594-20-7	2,2-Dichloropropane	0.20	< 0.20	U
142-28-9	1,3-Dichloropropane	0.20	< 0.20	U
98-82-8	Isopropylbenzene	0.20	< 0.20	U
103-65-1	n-Propylbenzene	0.20	< 0.20	U
108-86-1	Bromobenzene	0.20	< 0.20	U
95-49-8	2-Chlorotoluene	0.20	< 0.20	U
106-43-4	4-Chlorotoluene	0.20	< 0.20	U
98-06-6	tert-Butylbenzene	0.20	< 0.20	U
135-98-8	sec-Butylbenzene	0.20	< 0.20	U
99-87-6	4-Isopropyltoluene	0.20	< 0.20	U
104-51-8	n-Butylbenzene	0.20	< 0.20	U
120-82-1	1,2,4-Trichlorobenzene	0.50	< 0.50	U
91-20-3	Naphthalene	0.50	< 0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	< 0.50	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	104%
d8-Toluene	97.4%
Bromofluorobenzene	98.8%
d4-1,2-Dichlorobenzene	100%

2-Chloroethylvinylether is an acid labile compound and may not be recovered from an acid preserved sample.

EPA SW-846 indicates that vinyl chloride and styrene may degrade in the presence of acid preservative.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140327SLAP6-1**
Page 1 of 2 **SAMPLE**

Lab Sample ID: YE81Q
LIMS ID: 14-5963
Matrix: Water
Data Release Authorized:
Reported: 04/10/14

QC Report No: YE81-Joint Base Lewis McChord
Project: Log RAM
Date Sampled: 03/27/14
Date Received: 03/28/14

Instrument/Analyst: NT3/PAB
Date Analyzed: 04/08/14 12:29

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	LOQ	Result	Q
74-87-3	Chloromethane	0.50	< 0.50	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.20	< 0.20	U
75-00-3	Chloroethane	0.20	< 0.20	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	Acetone	5.0	< 5.0	U
75-15-0	Carbon Disulfide	0.20	< 0.20	U
75-35-4	1,1-Dichloroethene	0.20	< 0.20	U
75-34-3	1,1-Dichloroethane	0.20	< 0.20	U
156-60-5	trans-1,2-Dichloroethene	0.20	< 0.20	U
156-59-2	cis-1,2-Dichloroethene	0.20	< 0.20	U
67-66-3	Chloroform	0.20	< 0.20	U
107-06-2	1,2-Dichloroethane	0.20	< 0.20	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	0.20	< 0.20	U
56-23-5	Carbon Tetrachloride	0.20	< 0.20	U
108-05-4	Vinyl Acetate	0.20	< 0.20	U
75-27-4	Bromodichloromethane	0.20	< 0.20	U
78-87-5	1,2-Dichloropropane	0.20	< 0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	< 0.20	U
79-01-6	**Trichloroethene**	**0.20**	**5.6**	
124-48-1	Dibromochloromethane	0.20	< 0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	< 0.20	U
71-43-2	Benzene	0.20	< 0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	< 0.20	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.20	< 0.20	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.20	< 0.20	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	< 0.20	U
108-88-3	Toluene	0.20	< 0.20	U
108-90-7	Chlorobenzene	0.20	< 0.20	U
100-41-4	Ethylbenzene	0.20	< 0.20	U
100-42-5	Styrene	0.20	< 0.20	U
75-69-4	Trichlorofluoromethane	0.20	< 0.20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.20	< 0.20	U
179601-23-1	m,p-Xylene	0.40	< 0.40	U
95-47-6	o-Xylene	0.20	< 0.20	U
95-50-1	1,2-Dichlorobenzene	0.20	< 0.20	U
541-73-1	1,3-Dichlorobenzene	0.20	< 0.20	U
106-46-7	1,4-Dichlorobenzene	0.20	< 0.20	U

Lab Sample ID: YE81Q
LIMS ID: 14-5963
Matrix: Water
Date Analyzed: 04/08/14 12:29

QC Report No: YE81-Joint Base Lewis McChord
Project: Log RAM

CAS Number	Analyte	LOQ	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Iodomethane	1.0	< 1.0	U
74-96-4	Bromoethane	0.20	< 0.20	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.20	< 0.20	U
74-95-3	Dibromomethane	0.20	< 0.20	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	< 0.20	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	< 0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	< 0.50	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.20	< 0.20	U
95-63-6	1,2,4-Trimethylbenzene	0.20	< 0.20	U
87-68-3	Hexachlorobutadiene	0.50	< 0.50	U
106-93-4	1,2-Dibromoethane	0.20	< 0.20	U
74-97-5	Bromochloromethane	0.20	< 0.20	U
594-20-7	2,2-Dichloropropane	0.20	< 0.20	U
142-28-9	1,3-Dichloropropane	0.20	< 0.20	U
98-82-8	Isopropylbenzene	0.20	< 0.20	U
103-65-1	n-Propylbenzene	0.20	< 0.20	U
108-86-1	Bromobenzene	0.20	< 0.20	U
95-49-8	2-Chlorotoluene	0.20	< 0.20	U
106-43-4	4-Chlorotoluene	0.20	< 0.20	U
98-06-6	tert-Butylbenzene	0.20	< 0.20	U
135-98-8	sec-Butylbenzene	0.20	< 0.20	U
99-87-6	4-Isopropyltoluene	0.20	< 0.20	U
104-51-8	n-Butylbenzene	0.20	< 0.20	U
120-82-1	1,2,4-Trichlorobenzene	0.50	< 0.50	U
91-20-3	Naphthalene	0.50	< 0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	< 0.50	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	102%
d8-Toluene	98.1%
Bromofluorobenzene	95.8%
d4-1,2-Dichlorobenzene	100%

2-Chloroethylvinylether is an acid labile compound and may not be recovered from an acid preserved sample.

EPA SW-846 indicates that vinyl chloride and styrene may degrade in the presence of acid preservative.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140327LC74D-1**
Page 1 of 2 **SAMPLE**

Lab Sample ID: YE81R QC Report No: YE81-Joint Base Lewis McChord
LIMS ID: 14-5964 Project: Log RAM
Matrix: Water
Data Release Authorized: MW Date Sampled: 03/27/14
Reported: 04/10/14 Date Received: 03/28/14

Instrument/Analyst: NT3/PAB Sample Amount: 10.0 mL
Date Analyzed: 04/08/14 12:57 Purge Volume: 10.0 mL

CAS Number	Analyte	LOQ	Result	Q
74-87-3	Chloromethane	0.50	< 0.50	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.20	< 0.20	U
75-00-3	Chloroethane	0.20	< 0.20	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	**Acetone**	**5.0**	**11**	
75-15-0	Carbon Disulfide	0.20	< 0.20	U
75-35-4	1,1-Dichloroethene	0.20	< 0.20	U
75-34-3	1,1-Dichloroethane	0.20	< 0.20	U
156-60-5	trans-1,2-Dichloroethene	0.20	< 0.20	U
156-59-2	cis-1,2-Dichloroethene	0.20	< 0.20	U
67-66-3	Chloroform	0.20	< 0.20	U
107-06-2	1,2-Dichloroethane	0.20	< 0.20	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	0.20	< 0.20	U
56-23-5	Carbon Tetrachloride	0.20	< 0.20	U
108-05-4	Vinyl Acetate	0.20	< 0.20	U
75-27-4	Bromodichloromethane	0.20	< 0.20	U
78-87-5	1,2-Dichloropropane	0.20	< 0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	< 0.20	U
79-01-6	**Trichloroethene**	**0.20**	**4.5**	
124-48-1	Dibromochloromethane	0.20	< 0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	< 0.20	U
71-43-2	Benzene	0.20	< 0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	< 0.20	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.20	< 0.20	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.20	< 0.20	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	< 0.20	U
108-88-3	Toluene	0.20	< 0.20	U
108-90-7	Chlorobenzene	0.20	< 0.20	U
100-41-4	Ethylbenzene	0.20	< 0.20	U
100-42-5	Styrene	0.20	< 0.20	U
75-69-4	Trichlorofluoromethane	0.20	< 0.20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.20	< 0.20	U
179601-23-1	m,p-Xylene	0.40	< 0.40	U
95-47-6	o-Xylene	0.20	< 0.20	U
95-50-1	1,2-Dichlorobenzene	0.20	< 0.20	U
541-73-1	1,3-Dichlorobenzene	0.20	< 0.20	U
106-46-7	1,4-Dichlorobenzene	0.20	< 0.20	U

Lab Sample ID: YE81R
LIMS ID: 14-5964
Matrix: Water
Date Analyzed: 04/08/14 12:57

QC Report No: YE81-Joint Base Lewis McChord
Project: Log RAM

CAS Number	Analyte	LOQ	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Iodomethane	1.0	< 1.0	U
74-96-4	Bromoethane	0.20	< 0.20	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.20	< 0.20	U
74-95-3	Dibromomethane	0.20	< 0.20	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	< 0.20	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	< 0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	< 0.50	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.20	< 0.20	U
95-63-6	1,2,4-Trimethylbenzene	0.20	< 0.20	U
87-68-3	Hexachlorobutadiene	0.50	< 0.50	U
106-93-4	1,2-Dibromoethane	0.20	< 0.20	U
74-97-5	Bromochloromethane	0.20	< 0.20	U
594-20-7	2,2-Dichloropropane	0.20	< 0.20	U
142-28-9	1,3-Dichloropropane	0.20	< 0.20	U
98-82-8	Isopropylbenzene	0.20	< 0.20	U
103-65-1	n-Propylbenzene	0.20	< 0.20	U
108-86-1	Bromobenzene	0.20	< 0.20	U
95-49-8	2-Chlorotoluene	0.20	< 0.20	U
106-43-4	4-Chlorotoluene	0.20	< 0.20	U
98-06-6	tert-Butylbenzene	0.20	< 0.20	U
135-98-8	sec-Butylbenzene	0.20	< 0.20	U
99-87-6	4-Isopropyltoluene	0.20	< 0.20	U
104-51-8	n-Butylbenzene	0.20	< 0.20	U
120-82-1	1,2,4-Trichlorobenzene	0.50	< 0.50	U
91-20-3	Naphthalene	0.50	< 0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	< 0.50	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	104%
d8-Toluene	97.8%
Bromofluorobenzene	94.9%
d4-1,2-Dichlorobenzene	101%

2-Chloroethylvinylether is an acid labile compound and may not be recovered from an acid preserved sample.

EPA SW-846 indicates that vinyl chloride and styrene may degrade in the presence of acid preservative.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140327LC96D-1**
Page 1 of 2 **SAMPLE**

Lab Sample ID: YE81S QC Report No: YE81-Joint Base Lewis McChord
LIMS ID: 14-5965 Project: Log RAM
Matrix: Water
Data Release Authorized:
Reported: 04/10/14 Date Sampled: 03/27/14
Date Received: 03/28/14

Instrument/Analyst: NT3/PAB Sample Amount: 10.0 mL
Date Analyzed: 04/08/14 13:26 Purge Volume: 10.0 mL

CAS Number	Analyte	LOQ	Result	Q
74-87-3	Chloromethane	0.50	< 0.50	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.20	< 0.20	U
75-00-3	Chloroethane	0.20	< 0.20	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	**Acetone**	**5.0**	**5.2**	
75-15-0	Carbon Disulfide	0.20	< 0.20	U
75-35-4	1,1-Dichloroethene	0.20	< 0.20	U
75-34-3	1,1-Dichloroethane	0.20	< 0.20	U
156-60-5	trans-1,2-Dichloroethene	0.20	< 0.20	U
156-59-2	cis-1,2-Dichloroethene	0.20	< 0.20	U
67-66-3	Chloroform	0.20	< 0.20	U
107-06-2	1,2-Dichloroethane	0.20	< 0.20	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	0.20	< 0.20	U
56-23-5	Carbon Tetrachloride	0.20	< 0.20	U
108-05-4	Vinyl Acetate	0.20	< 0.20	U
75-27-4	Bromodichloromethane	0.20	< 0.20	U
78-87-5	1,2-Dichloropropane	0.20	< 0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	< 0.20	U
79-01-6	**Trichloroethene**	**0.20**	**6.4**	
124-48-1	Dibromochloromethane	0.20	< 0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	< 0.20	U
71-43-2	Benzene	0.20	< 0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	< 0.20	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.20	< 0.20	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.20	< 0.20	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	< 0.20	U
108-88-3	Toluene	0.20	< 0.20	U
108-90-7	Chlorobenzene	0.20	< 0.20	U
100-41-4	Ethylbenzene	0.20	< 0.20	U
100-42-5	Styrene	0.20	< 0.20	U
75-69-4	Trichlorofluoromethane	0.20	< 0.20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.20	< 0.20	U
179601-23-1	m,p-Xylene	0.40	< 0.40	U
95-47-6	o-Xylene	0.20	< 0.20	U
95-50-1	1,2-Dichlorobenzene	0.20	< 0.20	U
541-73-1	1,3-Dichlorobenzene	0.20	< 0.20	U
106-46-7	1,4-Dichlorobenzene	0.20	< 0.20	U

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140327LC96D-1**
 SAMPLE

Lab Sample ID: YE81S QC Report No: YE81-Joint Base Lewis McChord
LIMS ID: 14-5965 Project: Log RAM
Matrix: Water
Date Analyzed: 04/08/14 13:26

CAS Number	Analyte	LOQ	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Iodomethane	1.0	< 1.0	U
74-96-4	Bromoethane	0.20	< 0.20	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.20	< 0.20	U
74-95-3	Dibromomethane	0.20	< 0.20	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	< 0.20	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	< 0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	< 0.50	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.20	< 0.20	U
95-63-6	1,2,4-Trimethylbenzene	0.20	< 0.20	U
87-68-3	Hexachlorobutadiene	0.50	< 0.50	U
106-93-4	1,2-Dibromoethane	0.20	< 0.20	U
74-97-5	Bromochloromethane	0.20	< 0.20	U
594-20-7	2,2-Dichloropropane	0.20	< 0.20	U
142-28-9	1,3-Dichloropropane	0.20	< 0.20	U
98-82-8	Isopropylbenzene	0.20	< 0.20	U
103-65-1	n-Propylbenzene	0.20	< 0.20	U
108-86-1	Bromobenzene	0.20	< 0.20	U
95-49-8	2-Chlorotoluene	0.20	< 0.20	U
106-43-4	4-Chlorotoluene	0.20	< 0.20	U
98-06-6	tert-Butylbenzene	0.20	< 0.20	U
135-98-8	sec-Butylbenzene	0.20	< 0.20	U
99-87-6	4-Isopropyltoluene	0.20	< 0.20	U
104-51-8	n-Butylbenzene	0.20	< 0.20	U
120-82-1	1,2,4-Trichlorobenzene	0.50	< 0.50	U
91-20-3	Naphthalene	0.50	< 0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	< 0.50	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	108%
d8-Toluene	98.5%
Bromofluorobenzene	97.4%
d4-1,2-Dichlorobenzene	99.8%

2-Chloroethylvinylether is an acid labile compound and may not be recovered from an acid preserved sample.

EPA SW-846 indicates that vinyl chloride and styrene may degrade in the presence of acid preservative.

YE81.00043

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140327LC97D-1**
Page 1 of 2 **SAMPLE**

Lab Sample ID: YE81T
LIMS ID: 14-5966
Matrix: Water
Data Release Authorized: MW
Reported: 04/10/14

QC Report No: YE81-Joint Base Lewis McChord
Project: Log RAM
Date Sampled: 03/27/14
Date Received: 03/28/14

Instrument/Analyst: NT3/PAB
Date Analyzed: 04/08/14 13:54

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	LOQ	Result	Q
74-87-3	Chloromethane	0.50	< 0.50	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.20	< 0.20	U
75-00-3	Chloroethane	0.20	< 0.20	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	**Acetone**	**5.0**	**6.8**	
75-15-0	Carbon Disulfide	0.20	< 0.20	U
75-35-4	1,1-Dichloroethene	0.20	< 0.20	U
75-34-3	1,1-Dichloroethane	0.20	< 0.20	U
156-60-5	trans-1,2-Dichloroethene	0.20	< 0.20	U
156-59-2	cis-1,2-Dichloroethene	0.20	< 0.20	U
67-66-3	Chloroform	0.20	< 0.20	U
107-06-2	1,2-Dichloroethane	0.20	< 0.20	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	0.20	< 0.20	U
56-23-5	Carbon Tetrachloride	0.20	< 0.20	U
108-05-4	Vinyl Acetate	0.20	< 0.20	U
75-27-4	Bromodichloromethane	0.20	< 0.20	U
78-87-5	1,2-Dichloropropane	0.20	< 0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	< 0.20	U
79-01-6	Trichloroethene	0.20	< 0.20	U
124-48-1	Dibromochloromethane	0.20	< 0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	< 0.20	U
71-43-2	Benzene	0.20	< 0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	< 0.20	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.20	< 0.20	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.20	< 0.20	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	< 0.20	U
108-88-3	Toluene	0.20	< 0.20	U
108-90-7	Chlorobenzene	0.20	< 0.20	U
100-41-4	Ethylbenzene	0.20	< 0.20	U
100-42-5	Styrene	0.20	< 0.20	U
75-69-4	Trichlorofluoromethane	0.20	< 0.20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.20	< 0.20	U
179601-23-1	m,p-Xylene	0.40	< 0.40	U
95-47-6	o-Xylene	0.20	< 0.20	U
95-50-1	1,2-Dichlorobenzene	0.20	< 0.20	U
541-73-1	1,3-Dichlorobenzene	0.20	< 0.20	U
106-46-7	1,4-Dichlorobenzene	0.20	< 0.20	U

Lab Sample ID: YE81T QC Report No: YE81-Joint Base Lewis McChord
LIMS ID: 14-5966 Project: Log RAM
Matrix: Water
Date Analyzed: 04/08/14 13:54

CAS Number	Analyte	LOQ	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Iodomethane	1.0	< 1.0	U
74-96-4	Bromoethane	0.20	< 0.20	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.20	< 0.20	U
74-95-3	Dibromomethane	0.20	< 0.20	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	< 0.20	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	< 0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	< 0.50	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.20	< 0.20	U
95-63-6	1,2,4-Trimethylbenzene	0.20	< 0.20	U
87-68-3	Hexachlorobutadiene	0.50	< 0.50	U
106-93-4	1,2-Dibromoethane	0.20	< 0.20	U
74-97-5	Bromochloromethane	0.20	< 0.20	U
594-20-7	2,2-Dichloropropane	0.20	< 0.20	U
142-28-9	1,3-Dichloropropane	0.20	< 0.20	U
98-82-8	Isopropylbenzene	0.20	< 0.20	U
103-65-1	n-Propylbenzene	0.20	< 0.20	U
108-86-1	Bromobenzene	0.20	< 0.20	U
95-49-8	2-Chlorotoluene	0.20	< 0.20	U
106-43-4	4-Chlorotoluene	0.20	< 0.20	U
98-06-6	tert-Butylbenzene	0.20	< 0.20	U
135-98-8	sec-Butylbenzene	0.20	< 0.20	U
99-87-6	4-Isopropyltoluene	0.20	< 0.20	U
104-51-8	n-Butylbenzene	0.20	< 0.20	U
120-82-1	1,2,4-Trichlorobenzene	0.50	< 0.50	U
91-20-3	Naphthalene	0.50	< 0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	< 0.50	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	102%
d8-Toluene	99.5%
Bromofluorobenzene	98.7%
d4-1,2-Dichlorobenzene	99.7%

2-Chloroethylvinylether is an acid labile compound and may not be recovered from an acid preserved sample.

EPA SW-846 indicates that vinyl chloride and styrene may degrade in the presence of acid preservative.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: MB-040314A**
 METHOD BLANK

Lab Sample ID: MB-040314A
LIMS ID: 14-5947
Matrix: Water
Data Release Authorized: MW
Reported: 04/10/14

QC Report No: YE81-Joint Base Lewis McChord
Project: Log RAM
Date Sampled: NA
Date Received: NA

Instrument/Analyst: NT3/PAB
Date Analyzed: 04/03/14 23:34

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	LOQ	Result	Q
74-87-3	Chloromethane	0.50	< 0.50	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.20	< 0.20	U
75-00-3	Chloroethane	0.20	< 0.20	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	Acetone	5.0	< 5.0	U
75-15-0	Carbon Disulfide	0.20	< 0.20	U
75-35-4	1,1-Dichloroethene	0.20	< 0.20	U
75-34-3	1,1-Dichloroethane	0.20	< 0.20	U
156-60-5	trans-1,2-Dichloroethene	0.20	< 0.20	U
156-59-2	cis-1,2-Dichloroethene	0.20	< 0.20	U
67-66-3	Chloroform	0.20	< 0.20	U
107-06-2	1,2-Dichloroethane	0.20	< 0.20	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	0.20	< 0.20	U
56-23-5	Carbon Tetrachloride	0.20	< 0.20	U
108-05-4	Vinyl Acetate	0.20	< 0.20	U
75-27-4	Bromodichloromethane	0.20	< 0.20	U
78-87-5	1,2-Dichloropropane	0.20	< 0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	< 0.20	U
79-01-6	Trichloroethene	0.20	< 0.20	U
124-48-1	Dibromochloromethane	0.20	< 0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	< 0.20	U
71-43-2	Benzene	0.20	< 0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	< 0.20	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.20	< 0.20	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.20	< 0.20	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	< 0.20	U
108-88-3	Toluene	0.20	< 0.20	U
108-90-7	Chlorobenzene	0.20	< 0.20	U
100-41-4	Ethylbenzene	0.20	< 0.20	U
100-42-5	Styrene	0.20	< 0.20	U
75-69-4	Trichlorofluoromethane	0.20	< 0.20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.20	< 0.20	U
179601-23-1	m,p-Xylene	0.40	< 0.40	U
95-47-6	o-Xylene	0.20	< 0.20	U
95-50-1	1,2-Dichlorobenzene	0.20	< 0.20	U
541-73-1	1,3-Dichlorobenzene	0.20	< 0.20	U
106-46-7	1,4-Dichlorobenzene	0.20	< 0.20	U

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: MB-040314A**
 METHOD BLANK

Lab Sample ID: MB-040314A QC Report No: YE81-Joint Base Lewis McChord
LIMS ID: 14-5947 Project: Log RAM
Matrix: Water
Date Analyzed: 04/03/14 23:34

CAS Number	Analyte	LOQ	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Iodomethane	1.0	< 1.0	U
74-96-4	Bromoethane	0.20	< 0.20	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.20	< 0.20	U
74-95-3	Dibromomethane	0.20	< 0.20	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	< 0.20	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	< 0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	< 0.50	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.20	< 0.20	U
95-63-6	1,2,4-Trimethylbenzene	0.20	< 0.20	U
87-68-3	Hexachlorobutadiene	0.50	< 0.50	U
106-93-4	1,2-Dibromoethane	0.20	< 0.20	U
74-97-5	Bromochloromethane	0.20	< 0.20	U
594-20-7	2,2-Dichloropropane	0.20	< 0.20	U
142-28-9	1,3-Dichloropropane	0.20	< 0.20	U
98-82-8	Isopropylbenzene	0.20	< 0.20	U
103-65-1	n-Propylbenzene	0.20	< 0.20	U
108-86-1	Bromobenzene	0.20	< 0.20	U
95-49-8	2-Chlorotoluene	0.20	< 0.20	U
106-43-4	4-Chlorotoluene	0.20	< 0.20	U
98-06-6	tert-Butylbenzene	0.20	< 0.20	U
135-98-8	sec-Butylbenzene	0.20	< 0.20	U
99-87-6	4-Isopropyltoluene	0.20	< 0.20	U
104-51-8	n-Butylbenzene	0.20	< 0.20	U
120-82-1	1,2,4-Trichlorobenzene	0.50	< 0.50	U
91-20-3	Naphthalene	0.50	< 0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	< 0.50	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	100%
d8-Toluene	101%
Bromofluorobenzene	97.0%
d4-1,2-Dichlorobenzene	97.9%

YE81.00047

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: MB-040414A**
 METHOD BLANK

Lab Sample ID: MB-040414A
LIMS ID: 14-5954
Matrix: Water
Data Release Authorized: MW
Reported: 04/10/14

QC Report No: YE81-Joint Base Lewis McChord
Project: Log RAM
Date Sampled: NA
Date Received: NA

Instrument/Analyst: NT3/PAB
Date Analyzed: 04/04/14 14:49

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	LOQ	Result	Q
74-87-3	Chloromethane	0.50	< 0.50	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.20	< 0.20	U
75-00-3	Chloroethane	0.20	< 0.20	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	Acetone	5.0	< 5.0	U
75-15-0	Carbon Disulfide	0.20	< 0.20	U
75-35-4	1,1-Dichloroethene	0.20	< 0.20	U
75-34-3	1,1-Dichloroethane	0.20	< 0.20	U
156-60-5	trans-1,2-Dichloroethene	0.20	< 0.20	U
156-59-2	cis-1,2-Dichloroethene	0.20	< 0.20	U
67-66-3	Chloroform	0.20	< 0.20	U
107-06-2	1,2-Dichloroethane	0.20	< 0.20	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	0.20	< 0.20	U
56-23-5	Carbon Tetrachloride	0.20	< 0.20	U
108-05-4	Vinyl Acetate	0.20	< 0.20	U
75-27-4	Bromodichloromethane	0.20	< 0.20	U
78-87-5	1,2-Dichloropropane	0.20	< 0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	< 0.20	U
79-01-6	Trichloroethene	0.20	< 0.20	U
124-48-1	Dibromochloromethane	0.20	< 0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	< 0.20	U
71-43-2	Benzene	0.20	< 0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	< 0.20	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.20	< 0.20	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.20	< 0.20	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	< 0.20	U
108-88-3	Toluene	0.20	< 0.20	U
108-90-7	Chlorobenzene	0.20	< 0.20	U
100-41-4	Ethylbenzene	0.20	< 0.20	U
100-42-5	Styrene	0.20	< 0.20	U
75-69-4	Trichlorofluoromethane	0.20	< 0.20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.20	< 0.20	U
179601-23-1	m,p-Xylene	0.40	< 0.40	U
95-47-6	o-Xylene	0.20	< 0.20	U
95-50-1	1,2-Dichlorobenzene	0.20	< 0.20	U
541-73-1	1,3-Dichlorobenzene	0.20	< 0.20	U
106-46-7	1,4-Dichlorobenzene	0.20	< 0.20	U

Lab Sample ID: MB-040414A QC Report No: YE81-Joint Base Lewis McChord
LIMS ID: 14-5954 Project: Log RAM
Matrix: Water
Date Analyzed: 04/04/14 14:49

CAS Number	Analyte	LOQ	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Iodomethane	1.0	< 1.0	U
74-96-4	Bromoethane	0.20	< 0.20	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.20	< 0.20	U
74-95-3	Dibromomethane	0.20	< 0.20	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	< 0.20	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	< 0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	< 0.50	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.20	< 0.20	U
95-63-6	1,2,4-Trimethylbenzene	0.20	< 0.20	U
87-68-3	Hexachlorobutadiene	0.50	< 0.50	U
106-93-4	1,2-Dibromoethane	0.20	< 0.20	U
74-97-5	Bromochloromethane	0.20	< 0.20	U
594-20-7	2,2-Dichloropropane	0.20	< 0.20	U
142-28-9	1,3-Dichloropropane	0.20	< 0.20	U
98-82-8	Isopropylbenzene	0.20	< 0.20	U
103-65-1	n-Propylbenzene	0.20	< 0.20	U
108-86-1	Bromobenzene	0.20	< 0.20	U
95-49-8	2-Chlorotoluene	0.20	< 0.20	U
106-43-4	4-Chlorotoluene	0.20	< 0.20	U
98-06-6	tert-Butylbenzene	0.20	< 0.20	U
135-98-8	sec-Butylbenzene	0.20	< 0.20	U
99-87-6	4-Isopropyltoluene	0.20	< 0.20	U
104-51-8	n-Butylbenzene	0.20	< 0.20	U
120-82-1	1,2,4-Trichlorobenzene	0.50	< 0.50	U
91-20-3	Naphthalene	0.50	< 0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	< 0.50	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	103%
d8-Toluene	98.3%
Bromofluorobenzene	96.6%
d4-1,2-Dichlorobenzene	100%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: MB-040814A**
Page 1 of 2 **METHOD BLANK**

Lab Sample ID: MB-040814A
LIMS ID: 14-5961
Matrix: Water
Data Release Authorized:
Reported: 04/10/14

QC Report No: YE81-Joint Base Lewis McChord
Project: Log RAM
Date Sampled: NA
Date Received: NA

Instrument/Analyst: NT3/PAB
Date Analyzed: 04/08/14 10:28

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	LOQ	Result	Q
74-87-3	Chloromethane	0.50	< 0.50	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.20	< 0.20	U
75-00-3	Chloroethane	0.20	< 0.20	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	Acetone	5.0	< 5.0	U
75-15-0	Carbon Disulfide	0.20	< 0.20	U
75-35-4	1,1-Dichloroethene	0.20	< 0.20	U
75-34-3	1,1-Dichloroethane	0.20	< 0.20	U
156-60-5	trans-1,2-Dichloroethene	0.20	< 0.20	U
156-59-2	cis-1,2-Dichloroethene	0.20	< 0.20	U
67-66-3	Chloroform	0.20	< 0.20	U
107-06-2	1,2-Dichloroethane	0.20	< 0.20	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	0.20	< 0.20	U
56-23-5	Carbon Tetrachloride	0.20	< 0.20	U
108-05-4	Vinyl Acetate	0.20	< 0.20	U
75-27-4	Bromodichloromethane	0.20	< 0.20	U
78-87-5	1,2-Dichloropropane	0.20	< 0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	< 0.20	U
79-01-6	Trichloroethene	0.20	< 0.20	U
124-48-1	Dibromochloromethane	0.20	< 0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	< 0.20	U
71-43-2	Benzene	0.20	< 0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	< 0.20	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.20	< 0.20	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.20	< 0.20	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	< 0.20	U
108-88-3	Toluene	0.20	< 0.20	U
108-90-7	Chlorobenzene	0.20	< 0.20	U
100-41-4	Ethylbenzene	0.20	< 0.20	U
100-42-5	Styrene	0.20	< 0.20	U
75-69-4	Trichlorofluoromethane	0.20	< 0.20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.20	< 0.20	U
179601-23-1	m,p-Xylene	0.40	< 0.40	U
95-47-6	o-Xylene	0.20	< 0.20	U
95-50-1	1,2-Dichlorobenzene	0.20	< 0.20	U
541-73-1	1,3-Dichlorobenzene	0.20	< 0.20	U
106-46-7	1,4-Dichlorobenzene	0.20	< 0.20	U

Lab Sample ID: MB-040814A QC Report No: YE81-Joint Base Lewis McChord
LIMS ID: 14-5961 Project: Log RAM
Matrix: Water
Date Analyzed: 04/08/14 10:28

CAS Number	Analyte	LOQ	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Iodomethane	1.0	< 1.0	U
74-96-4	Bromoethane	0.20	< 0.20	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.20	< 0.20	U
74-95-3	Dibromomethane	0.20	< 0.20	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	< 0.20	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	< 0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	< 0.50	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.20	< 0.20	U
95-63-6	1,2,4-Trimethylbenzene	0.20	< 0.20	U
87-68-3	Hexachlorobutadiene	0.50	< 0.50	U
106-93-4	1,2-Dibromoethane	0.20	< 0.20	U
74-97-5	Bromochloromethane	0.20	< 0.20	U
594-20-7	2,2-Dichloropropane	0.20	< 0.20	U
142-28-9	1,3-Dichloropropane	0.20	< 0.20	U
98-82-8	Isopropylbenzene	0.20	< 0.20	U
103-65-1	n-Propylbenzene	0.20	< 0.20	U
108-86-1	Bromobenzene	0.20	< 0.20	U
95-49-8	2-Chlorotoluene	0.20	< 0.20	U
106-43-4	4-Chlorotoluene	0.20	< 0.20	U
98-06-6	tert-Butylbenzene	0.20	< 0.20	U
135-98-8	sec-Butylbenzene	0.20	< 0.20	U
99-87-6	4-Isopropyltoluene	0.20	< 0.20	U
104-51-8	n-Butylbenzene	0.20	< 0.20	U
120-82-1	1,2,4-Trichlorobenzene	0.50	< 0.50	U
91-20-3	Naphthalene	0.50	< 0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	< 0.50	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	105%
d8-Toluene	97.5%
Bromofluorobenzene	97.6%
d4-1,2-Dichlorobenzene	102%

ANALYTICAL RESOURCES INCORPORATED

VOA SURROGATE RECOVERY SUMMARY

Matrix: Water

QC Report No: YE81-Joint Base Lewis McChord
Project: Log RAM

ARI ID	Client ID	PV	DCE	TOL	BFB	DCB	TOT OUT
MB-040314A	Method Blank	10	100%	101%	97.0%	97.9%	0
LCS-040314A	Lab Control	10	102%	99.8%	97.8%	99.4%	0
LCSD-040314A	Lab Control Dup	10	100%	102%	96.4%	99.4%	0
YE81A	LGC140327LX10-1	10	103%	99.1%	97.8%	99.5%	0
YE81B	LGC140327LX11-1	10	103%	100%	97.0%	99.6%	0
YE81C	LGC140327LX12-1	10	99.9%	101%	97.8%	103%	0
YE81D	LGC140327LX13-1	10	102%	101%	99.3%	100%	0
YE81E	LGC140327LX14-1	10	104%	102%	99.1%	102%	0
YE81F	LGC140327LX15-1	10	100%	98.6%	97.1%	100%	0
YE81G	LGC140327LX4-1	10	102%	101%	96.4%	99.6%	0
MB-040414A	Method Blank	10	103%	98.3%	96.6%	100%	0
LCS-040414A	Lab Control	10	102%	101%	97.3%	99.0%	0
LCSD-040414A	Lab Control Dup	10	102%	99.0%	99.0%	99.7%	0
YE81H	LGC140327DUP9-1	10	104%	101%	96.5%	101%	0
YE81I	LGC140327DUP10-1	10	106%	101%	95.7%	102%	0
YE81J	LGC140327DUP11-1	10	106%	99.4%	99.2%	102%	0
YE81K	LGC140327DUP12-1	10	100%	99.7%	96.6%	103%	0
YE81L	LGC140327SLAP1-1	10	103%	101%	97.5%	102%	0
YE81M	LGC140327SLAP2-1	10	105%	98.9%	95.2%	101%	0
YE81N	LGC140327SLAP3-1	10	105%	99.1%	98.5%	105%	0
MB-040814A	Method Blank	10	105%	97.5%	97.6%	102%	0
LCS-040814A	Lab Control	10	99.9%	98.2%	97.8%	101%	0
LCSD-040814A	Lab Control Dup	10	103%	100%	98.4%	99.1%	0
YE81O	LGC140327SLAP4-1	10	102%	98.6%	92.5%	100%	0
YE81P	LGC140327SLAP5-1	10	104%	97.4%	98.8%	100%	0
YE81Q	LGC140327SLAP6-1	10	102%	98.1%	95.8%	100%	0
YE81R	LGC140327LC74D-1	10	104%	97.8%	94.9%	101%	0
YE81S	LGC140327LC96D-1	10	108%	98.5%	97.4%	99.8%	0
YE81T	LGC140327LC97D-1	10	102%	99.5%	98.7%	99.7%	0

SW8260C	LCS/MB LIMITS	QC LIMITS
(DCE) = d4-1,2-Dichloroethane	(80-120)	(80-130)
(TOL) = d8-Toluene	(80-120)	(80-120)
(BFB) = Bromofluorobenzene	(80-120)	(80-120)
(DCB) = d4-1,2-Dichlorobenzene	(80-120)	(80-120)

Prep Method: SW5030B
Log Number Range: 14-5947 to 14-5966

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LCS-040314A**
 LAB CONTROL SAMPLE

Lab Sample ID: LCS-040314A QC Report No: YE81-Joint Base Lewis McChord
LIMS ID: 14-5947 Project: Log RAM
Matrix: Water
Data Release Authorized: MW Date Sampled: NA
Reported: 04/10/14 Date Received: NA

Instrument/Analyst LCS: NT3/PAB Sample Amount LCS: 10.0 mL
LCSD: NT3/PAB LCSD: 10.0 mL
Date Analyzed LCS: 04/03/14 22:38 Purge Volume LCS: 10.0 mL
LCSD: 04/03/14 23:06 LCSD: 10.0 mL

Analyte	LCS	Spike Added-LCS	LCS Recovery	LCSD	Spike Added-LCSD	LCSD Recovery	RPD
Chloromethane	9.66	10.0	96.6%	9.96	10.0	99.6%	3.1%
Bromomethane	10.9	10.0	109%	10.8	10.0	108%	0.9%
Vinyl Chloride	10.2	10.0	102%	10.2	10.0	102%	0.0%
Chloroethane	10.1	10.0	101%	9.99	10.0	99.9%	1.1%
Methylene Chloride	10.1	10.0	101%	10.4	10.0	104%	2.9%
Acetone	51.8	50.0	104%	48.4	50.0	96.8%	6.8%
Carbon Disulfide	10.5	10.0	105%	10.5	10.0	105%	0.0%
1,1-Dichloroethene	10.1	10.0	101%	10.3	10.0	103%	2.0%
1,1-Dichloroethane	10.1	10.0	101%	10.3	10.0	103%	2.0%
trans-1,2-Dichloroethene	9.84	10.0	98.4%	9.86	10.0	98.6%	0.2%
cis-1,2-Dichloroethene	9.96	10.0	99.6%	10.0	10.0	100%	0.4%
Chloroform	9.67	10.0	96.7%	9.93	10.0	99.3%	2.7%
1,2-Dichloroethane	9.96	10.0	99.6%	10.1	10.0	101%	1.4%
2-Butanone	45.0	50.0	90.0%	43.7	50.0	87.4%	2.9%
1,1,1-Trichloroethane	10.2	10.0	102%	10.3	10.0	103%	1.0%
Carbon Tetrachloride	9.97	10.0	99.7%	10.2	10.0	102%	2.3%
Vinyl Acetate	9.78	10.0	97.8%	9.96	10.0	99.6%	1.8%
Bromodichloromethane	10.1	10.0	101%	10.5	10.0	105%	3.9%
1,2-Dichloropropane	9.95	10.0	99.5%	10.1	10.0	101%	1.5%
cis-1,3-Dichloropropene	10.3	10.0	103%	10.4	10.0	104%	1.0%
Trichloroethene	9.97	10.0	99.7%	10.2	10.0	102%	2.3%
Dibromochloromethane	10.5	10.0	105%	10.4	10.0	104%	1.0%
1,1,2-Trichloroethane	9.93	10.0	99.3%	9.87	10.0	98.7%	0.6%
Benzene	10.1	10.0	101%	10.3	10.0	103%	2.0%
trans-1,3-Dichloropropene	10.3	10.0	103%	10.3	10.0	103%	0.0%
2-Chloroethylvinylether	10.4	10.0	104%	10.7	10.0	107%	2.8%
Bromoform	10.8	10.0	108%	10.7	10.0	107%	0.9%
4-Methyl-2-Pentanone (MIBK)	54.1	50.0	108%	53.6	50.0	107%	0.9%
2-Hexanone	40.8 Q	50.0	81.6%	39.4 Q	50.0	78.8%	3.5%
Tetrachloroethene	10.1	10.0	101%	9.57	10.0	95.7%	5.4%
1,1,2,2-Tetrachloroethane	9.86	10.0	98.6%	9.58	10.0	95.8%	2.9%
Toluene	10.4	10.0	104%	10.3	10.0	103%	1.0%
Chlorobenzene	10.4	10.0	104%	10.2	10.0	102%	1.9%
Ethylbenzene	10.6	10.0	106%	10.5	10.0	105%	0.9%
Styrene	10.6	10.0	106%	10.6	10.0	106%	0.0%
Trichlorofluoromethane	10.4	10.0	104%	10.7	10.0	107%	2.8%
1,1,2-Trichloro-1,2,2-trifluoroetha	10.4	10.0	104%	9.99	10.0	99.9%	4.0%
m,p-Xylene	21.2	20.0	106%	20.8	20.0	104%	1.9%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LCS-040314A**
 LAB CONTROL SAMPLE

Lab Sample ID: LCS-040314A QC Report No: YE81-Joint Base Lewis McChord
LIMS ID: 14-5947 Project: Log RAM
Matrix: Water

Analyte	LCS	Spike Added-LCS	LCS Recovery	LCSD	Spike Added-LCSD	LCSD Recovery	RPD
o-Xylene	10.4	10.0	104%	10.4	10.0	104%	0.0%
1,2-Dichlorobenzene	10.2	10.0	102%	10.1	10.0	101%	1.0%
1,3-Dichlorobenzene	10.3	10.0	103%	10.0	10.0	100%	3.0%
1,4-Dichlorobenzene	10.3	10.0	103%	9.95	10.0	99.5%	3.5%
Acrolein	46.0 Q	50.0	92.0%	48.2 Q	50.0	96.4%	4.7%
Iodomethane	10.6	10.0	106%	10.0	10.0	100%	5.8%
Bromoethane	10.0	10.0	100%	9.97	10.0	99.7%	0.3%
Acrylonitrile	9.13	10.0	91.3%	8.96	10.0	89.6%	1.9%
1,1-Dichloropropene	9.97	10.0	99.7%	10.3	10.0	103%	3.3%
Dibromomethane	10.2	10.0	102%	9.87	10.0	98.7%	3.3%
1,1,1,2-Tetrachloroethane	10.0	10.0	100%	10.1	10.0	101%	1.0%
1,2-Dibromo-3-chloropropane	10.8	10.0	108%	10.6	10.0	106%	1.9%
1,2,3-Trichloropropane	10.4	10.0	104%	9.76	10.0	97.6%	6.3%
trans-1,4-Dichloro-2-butene	10.9	10.0	109%	10.4	10.0	104%	4.7%
1,3,5-Trimethylbenzene	10.2	10.0	102%	10.2	10.0	102%	0.0%
1,2,4-Trimethylbenzene	9.61	10.0	96.1%	9.89	10.0	98.9%	2.9%
Hexachlorobutadiene	9.79	10.0	97.9%	9.77	10.0	97.7%	0.2%
1,2-Dibromoethane	9.92	10.0	99.2%	10.2	10.0	102%	2.8%
Bromochloromethane	9.24	10.0	92.4%	9.98	10.0	99.8%	7.7%
2,2-Dichloropropane	9.39	10.0	93.9%	9.35	10.0	93.5%	0.4%
1,3-Dichloropropane	10.0	10.0	100%	9.85	10.0	98.5%	1.5%
Isopropylbenzene	10.9	10.0	109%	10.6	10.0	106%	2.8%
n-Propylbenzene	10.7	10.0	107%	10.4	10.0	104%	2.8%
Bromobenzene	10.3	10.0	103%	10.0	10.0	100%	3.0%
2-Chlorotoluene	10.5	10.0	105%	10.2	10.0	102%	2.9%
4-Chlorotoluene	10.6	10.0	106%	10.3	10.0	103%	2.9%
tert-Butylbenzene	10.8	10.0	108%	10.5	10.0	105%	2.8%
sec-Butylbenzene	10.2	10.0	102%	10.2	10.0	102%	0.0%
4-Isopropyltoluene	9.35	10.0	93.5%	9.56	10.0	95.6%	2.2%
n-Butylbenzene	8.38	10.0	83.8%	8.61	10.0	86.1%	2.7%
1,2,4-Trichlorobenzene	9.74	10.0	97.4%	9.89	10.0	98.9%	1.5%
Naphthalene	9.09	10.0	90.9%	9.24	10.0	92.4%	1.6%
1,2,3-Trichlorobenzene	7.91	10.0	79.1%	8.19	10.0	81.9%	3.5%

Reported in µg/L (ppb)

RPD calculated using sample concentrations per SW846.

Volatile Surrogate Recovery

	LCS	LCSD
d4-1,2-Dichloroethane	102%	100%
d8-Toluene	99.8%	102%
Bromofluorobenzene	97.8%	96.4%
d4-1,2-Dichlorobenzene	99.4%	99.4%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LCS-040414A**
 LAB CONTROL SAMPLE

Lab Sample ID: LCS-040414A QC Report No: YE81-Joint Base Lewis McChord
LIMS ID: 14-5954 Project: Log RAM
Matrix: Water
Data Release Authorized: MW Date Sampled: NA
Reported: 04/10/14 Date Received: NA

Instrument/Analyst LCS: NT3/PAB Sample Amount LCS: 10.0 mL
LCSD: NT3/PAB LCSD: 10.0 mL
Date Analyzed LCS: 04/04/14 13:52 Purge Volume LCS: 10.0 mL
LCSD: 04/04/14 14:21 LCSD: 10.0 mL

Analyte	LCS	Spike Added-LCS	LCS Recovery	LCSD	Spike Added-LCSD	LCSD Recovery	RPD
Chloromethane	8.76	10.0	87.6%	9.23	10.0	92.3%	5.2%
Bromomethane	9.44	10.0	94.4%	8.98	10.0	89.8%	5.0%
Vinyl Chloride	9.34	10.0	93.4%	9.11	10.0	91.1%	2.5%
Chloroethane	7.13	10.0	71.3%	9.22	10.0	92.2%	25.6%
Methylene Chloride	8.90	10.0	89.0%	9.41	10.0	94.1%	5.6%
Acetone	46.4	50.0	92.8%	45.6	50.0	91.2%	1.7%
Carbon Disulfide	8.96	10.0	89.6%	9.54	10.0	95.4%	6.3%
1,1-Dichloroethene	8.92	10.0	89.2%	9.35	10.0	93.5%	4.7%
1,1-Dichloroethane	9.09	10.0	90.9%	9.48	10.0	94.8%	4.2%
trans-1,2-Dichloroethene	8.82	10.0	88.2%	9.17	10.0	91.7%	3.9%
cis-1,2-Dichloroethene	9.29	10.0	92.9%	9.34	10.0	93.4%	0.5%
Chloroform	8.68	10.0	86.8%	9.15	10.0	91.5%	5.3%
1,2-Dichloroethane	9.38	10.0	93.8%	9.44	10.0	94.4%	0.6%
2-Butanone	41.0 Q	50.0	82.0%	43.7 Q	50.0	87.4%	6.4%
1,1,1-Trichloroethane	9.29	10.0	92.9%	9.61	10.0	96.1%	3.4%
Carbon Tetrachloride	9.42	10.0	94.2%	9.20	10.0	92.0%	2.4%
Vinyl Acetate	9.21	10.0	92.1%	9.77	10.0	97.7%	5.9%
Bromodichloromethane	9.43	10.0	94.3%	9.56	10.0	95.6%	1.4%
1,2-Dichloropropane	8.98	10.0	89.8%	9.23	10.0	92.3%	2.7%
cis-1,3-Dichloropropene	9.65	10.0	96.5%	9.74	10.0	97.4%	0.9%
Trichloroethene	9.48	10.0	94.8%	9.50	10.0	95.0%	0.2%
Dibromochloromethane	9.45	10.0	94.5%	9.70	10.0	97.0%	2.6%
1,1,2-Trichloroethane	9.09	10.0	90.9%	9.21	10.0	92.1%	1.3%
Benzene	9.45	10.0	94.5%	9.52	10.0	95.2%	0.7%
trans-1,3-Dichloropropene	9.59	10.0	95.9%	9.37	10.0	93.7%	2.3%
2-Chloroethylvinylether	9.32	10.0	93.2%	9.42	10.0	94.2%	1.1%
Bromoform	10.2	10.0	102%	10.6	10.0	106%	3.8%
4-Methyl-2-Pentanone (MIBK)	49.5	50.0	99.0%	51.2	50.0	102%	3.4%
2-Hexanone	36.0 Q	50.0	72.0%	39.6 Q	50.0	79.2%	9.5%
Tetrachloroethene	9.40	10.0	94.0%	9.72	10.0	97.2%	3.3%
1,1,2,2-Tetrachloroethane	9.25	10.0	92.5%	9.72	10.0	97.2%	5.0%
Toluene	9.46	10.0	94.6%	9.42	10.0	94.2%	0.4%
Chlorobenzene	9.45	10.0	94.5%	9.76	10.0	97.6%	3.2%
Ethylbenzene	9.64	10.0	96.4%	10.1	10.0	101%	4.7%
Styrene	9.69	10.0	96.9%	10.1	10.0	101%	4.1%
Trichlorofluoromethane	8.86	10.0	88.6%	9.60	10.0	96.0%	8.0%
1,1,2-Trichloro-1,2,2-trifluoroetha	9.29	10.0	92.9%	9.74	10.0	97.4%	4.7%
m,p-Xylene	19.3	20.0	96.5%	20.1	20.0	100%	4.1%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LCS-040414A**
 LAB CONTROL SAMPLE

Lab Sample ID: LCS-040414A QC Report No: YE81-Joint Base Lewis McChord
LIMS ID: 14-5954 Project: Log RAM
Matrix: Water

Analyte	LCS	Spike Added-LCS	LCS Recovery	LCSD	Spike Added-LCSD	LCSD Recovery	RPD
o-Xylene	9.55	10.0	95.5%	9.83	10.0	98.3%	2.9%
1,2-Dichlorobenzene	9.47	10.0	94.7%	9.87	10.0	98.7%	4.1%
1,3-Dichlorobenzene	9.75	10.0	97.5%	10.1	10.0	101%	3.5%
1,4-Dichlorobenzene	9.87	10.0	98.7%	9.78	10.0	97.8%	0.9%
Acrolein	46.3	50.0	92.6%	49.1	50.0	98.2%	5.9%
Iodomethane	9.32	10.0	93.2%	9.55	10.0	95.5%	2.4%
Bromoethane	8.85	10.0	88.5%	9.21	10.0	92.1%	4.0%
Acrylonitrile	8.75 Q	10.0	87.5%	9.05 Q	10.0	90.5%	3.4%
1,1-Dichloropropene	9.43	10.0	94.3%	9.36	10.0	93.6%	0.7%
Dibromomethane	9.49	10.0	94.9%	9.44	10.0	94.4%	0.5%
1,1,1,2-Tetrachloroethane	9.19	10.0	91.9%	9.53	10.0	95.3%	3.6%
1,2-Dibromo-3-chloropropane	9.94	10.0	99.4%	10.3	10.0	103%	3.6%
1,2,3-Trichloropropane	9.66	10.0	96.6%	10.0	10.0	100%	3.5%
trans-1,4-Dichloro-2-butene	10.7	10.0	107%	10.8	10.0	108%	0.9%
1,3,5-Trimethylbenzene	9.84	10.0	98.4%	9.24	10.0	92.4%	6.3%
1,2,4-Trimethylbenzene	9.35	10.0	93.5%	8.08	10.0	80.8%	14.6%
Hexachlorobutadiene	10.5	10.0	105%	9.55	10.0	95.5%	9.5%
1,2-Dibromoethane	8.99	10.0	89.9%	9.59	10.0	95.9%	6.5%
Bromochloromethane	9.38	10.0	93.8%	9.13	10.0	91.3%	2.7%
2,2-Dichloropropane	9.87	10.0	98.7%	9.83	10.0	98.3%	0.4%
1,3-Dichloropropane	9.15	10.0	91.5%	9.51	10.0	95.1%	3.9%
Isopropylbenzene	10.2	10.0	102%	10.6	10.0	106%	3.8%
n-Propylbenzene	10.3	10.0	103%	10.4	10.0	104%	1.0%
Bromobenzene	9.48	10.0	94.8%	9.98	10.0	99.8%	5.1%
2-Chlorotoluene	9.93	10.0	99.3%	10.2	10.0	102%	2.7%
4-Chlorotoluene	10.0	10.0	100%	10.2	10.0	102%	2.0%
tert-Butylbenzene	9.90	10.0	99.0%	10.6	10.0	106%	6.8%
sec-Butylbenzene	9.69	10.0	96.9%	9.12	10.0	91.2%	6.1%
4-Isopropyltoluene	9.03	10.0	90.3%	7.75	10.0	77.5%	15.3%
n-Butylbenzene	8.43	10.0	84.3%	6.79	10.0	67.9%	21.6%
1,2,4-Trichlorobenzene	10.3	10.0	103%	8.98	10.0	89.8%	13.7%
Naphthalene	9.04	10.0	90.4%	9.69	10.0	96.9%	6.9%
1,2,3-Trichlorobenzene	8.25	10.0	82.5%	7.90	10.0	79.0%	4.3%

Reported in µg/L (ppb)

RPD calculated using sample concentrations per SW846.

Volatile Surrogate Recovery

	LCS	LCSD
d4-1,2-Dichloroethane	102%	102%
d8-Toluene	101%	99.0%
Bromofluorobenzene	97.3%	99.0%
d4-1,2-Dichlorobenzene	99.0%	99.7%

YE81.00056

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LCS-040814A**
 LAB CONTROL SAMPLE

Lab Sample ID: LCS-040814A QC Report No: YE81-Joint Base Lewis McChord
LIMS ID: 14-5961 Project: Log RAM
Matrix: Water
Data Release Authorized: MW Date Sampled: NA
Reported: 04/10/14 Date Received: NA

Instrument/Analyst LCS: NT3/PAB Sample Amount LCS: 10.0 mL
LCSD: NT3/PAB LCSD: 10.0 mL
Date Analyzed LCS: 04/08/14 09:31 Purge Volume LCS: 10.0 mL
LCSD: 04/08/14 11:01 LCSD: 10.0 mL

Analyte	LCS	Spike Added-LCS	LCS Recovery	LCSD	Spike Added-LCSD	LCSD Recovery	RPD
Chloromethane	9.64	10.0	96.4%	10.3	10.0	103%	6.6%
Bromomethane	7.33 Q	10.0	73.3%	8.43 Q	10.0	84.3%	14.0%
Vinyl Chloride	9.63	10.0	96.3%	10.6	10.0	106%	9.6%
Chloroethane	9.56	10.0	95.6%	9.71	10.0	97.1%	1.6%
Methylene Chloride	10.1	10.0	101%	10.2	10.0	102%	1.0%
Acetone	32.6	50.0	65.2%	57.2	50.0	114%	54.8%
Carbon Disulfide	10.2	10.0	102%	11.2	10.0	112%	9.3%
1,1-Dichloroethene	10.0	10.0	100%	10.7	10.0	107%	6.8%
1,1-Dichloroethane	10.1	10.0	101%	10.7	10.0	107%	5.8%
trans-1,2-Dichloroethene	9.83	10.0	98.3%	10.6	10.0	106%	7.5%
cis-1,2-Dichloroethene	10.0	10.0	100%	10.6	10.0	106%	5.8%
Chloroform	9.75	10.0	97.5%	10.4	10.0	104%	6.5%
1,2-Dichloroethane	10.1	10.0	101%	10.8	10.0	108%	6.7%
2-Butanone	46.5	50.0	93.0%	51.2	50.0	102%	9.6%
1,1,1-Trichloroethane	10.5	10.0	105%	11.1	10.0	111%	5.6%
Carbon Tetrachloride	10.5	10.0	105%	11.2	10.0	112%	6.5%
Vinyl Acetate	9.66	10.0	96.6%	10.8	10.0	108%	11.1%
Bromodichloromethane	10.6	10.0	106%	10.9	10.0	109%	2.8%
1,2-Dichloropropane	10.0	10.0	100%	10.6	10.0	106%	5.8%
cis-1,3-Dichloropropene	10.7	10.0	107%	11.2	10.0	112%	4.6%
Trichloroethene	10.3	10.0	103%	10.8	10.0	108%	4.7%
Dibromochloromethane	11.0	10.0	110%	11.2	10.0	112%	1.8%
1,1,2-Trichloroethane	9.94	10.0	99.4%	10.6	10.0	106%	6.4%
Benzene	10.3	10.0	103%	10.9	10.0	109%	5.7%
trans-1,3-Dichloropropene	10.7	10.0	107%	11.3	10.0	113%	5.5%
2-Chloroethylvinylether	10.5	10.0	105%	11.4	10.0	114%	8.2%
Bromoform	11.8	10.0	118%	12.0	10.0	120%	1.7%
4-Methyl-2-Pentanone (MIBK)	55.6	50.0	111%	58.7	50.0	117%	5.4%
2-Hexanone	43.5	50.0	87.0%	45.9	50.0	91.8%	5.4%
Tetrachloroethene	10.8	10.0	108%	10.9	10.0	109%	0.9%
1,1,2,2-Tetrachloroethane	10.5	10.0	105%	11.2	10.0	112%	6.5%
Toluene	10.3	10.0	103%	10.8	10.0	108%	4.7%
Chlorobenzene	10.7	10.0	107%	11.0	10.0	110%	2.8%
Ethylbenzene	11.0	10.0	110%	11.4	10.0	114%	3.6%
Styrene	11.0	10.0	110%	11.6	10.0	116%	5.3%
Trichlorofluoromethane	10.9	10.0	109%	11.5	10.0	115%	5.4%
1,1,2-Trichloro-1,2,2-trifluoroetha	10.6	10.0	106%	11.3	10.0	113%	6.4%
m,p-Xylene	21.9	20.0	110%	22.8	20.0	114%	4.0%

YE81.00057

Lab Sample ID: LCS-040814A QC Report No: YE81-Joint Base Lewis McChord
LIMS ID: 14-5961 Project: Log RAM
Matrix: Water

Analyte	LCS	Spike Added-LCS	LCS Recovery	LCSD	Spike Added-LCSD	LCSD Recovery	RPD
o-Xylene	10.8	10.0	108%	11.0	10.0	110%	1.8%
1,2-Dichlorobenzene	10.5	10.0	105%	11.2	10.0	112%	6.5%
1,3-Dichlorobenzene	10.7	10.0	107%	11.3	10.0	113%	5.5%
1,4-Dichlorobenzene	10.8	10.0	108%	11.3	10.0	113%	4.5%
Acrolein	28.7 Q	50.0	57.4%	41.7 Q	50.0	83.4%	36.9%
Iodomethane	7.32 Q	10.0	73.2%	8.65 Q	10.0	86.5%	16.7%
Bromoethane	9.33	10.0	93.3%	9.84	10.0	98.4%	5.3%
Acrylonitrile	8.85	10.0	88.5%	10.4	10.0	104%	16.1%
1,1-Dichloropropene	10.2	10.0	102%	11.0	10.0	110%	7.5%
Dibromomethane	9.82	10.0	98.2%	10.8	10.0	108%	9.5%
1,1,1,2-Tetrachloroethane	10.5	10.0	105%	11.1	10.0	111%	5.6%
1,2-Dibromo-3-chloropropane	11.1	10.0	111%	12.0	10.0	120%	7.8%
1,2,3-Trichloropropane	11.2	10.0	112%	11.0	10.0	110%	1.8%
trans-1,4-Dichloro-2-butene	11.0	10.0	110%	12.1	10.0	121%	9.5%
1,3,5-Trimethylbenzene	11.1	10.0	111%	11.3	10.0	113%	1.8%
1,2,4-Trimethylbenzene	11.3	10.0	113%	11.0	10.0	110%	2.7%
Hexachlorobutadiene	11.4	10.0	114%	11.3	10.0	113%	0.9%
1,2-Dibromoethane	10.2	10.0	102%	10.9	10.0	109%	6.6%
Bromochloromethane	9.54	10.0	95.4%	10.9	10.0	109%	13.3%
2,2-Dichloropropane	11.3 Q	10.0	113%	12.1 Q	10.0	121%	6.8%
1,3-Dichloropropane	10.4	10.0	104%	10.8	10.0	108%	3.8%
Isopropylbenzene	11.1	10.0	111%	11.8	10.0	118%	6.1%
n-Propylbenzene	11.3	10.0	113%	11.9	10.0	119%	5.2%
Bromobenzene	10.3	10.0	103%	11.0	10.0	110%	6.6%
2-Chlorotoluene	10.7	10.0	107%	11.5	10.0	115%	7.2%
4-Chlorotoluene	10.9	10.0	109%	11.6	10.0	116%	6.2%
tert-Butylbenzene	11.0	10.0	110%	11.5	10.0	115%	4.4%
sec-Butylbenzene	11.0	10.0	110%	11.3	10.0	113%	2.7%
4-Isopropyltoluene	11.0	10.0	110%	10.7	10.0	107%	2.8%
n-Butylbenzene	11.7	10.0	117%	10.3	10.0	103%	12.7%
1,2,4-Trichlorobenzene	14.4	10.0	144%	12.8	10.0	128%	11.8%
Naphthalene	13.8	10.0	138%	12.2	10.0	122%	12.3%
1,2,3-Trichlorobenzene	12.1	10.0	121%	10.9	10.0	109%	10.4%

Reported in µg/L (ppb)

RPD calculated using sample concentrations per SW846.

Volatile Surrogate Recovery

	LCS	LCSD
d4-1,2-Dichloroethane	99.9%	103%
d8-Toluene	98.2%	100%
Bromofluorobenzene	97.8%	98.4%
d4-1,2-Dichlorobenzene	101%	99.1%

Analytical Resources, Incorporated
Analytical Chemists and Consultants

April 8, 2014

Thomas Lynott
Department of the Army
Directorate of Public Works
Attn Environmental Division (T. Lynott)
2012 Liggett Ave Box 339500 MS 17
Joint Base Lewis-McChord, Washington 98433-9500
Official Business

RE: Client Project: LogRam
ARI Job No.: YE82

Dear Mr. Lynott:

Please find enclosed the original Chain-of-Custody record (COC), sample receipt documentation, and the final data for the project referenced above. Analytical Resources, Inc. (ARI) accepted seventeen water samples on March 28, 2014. For further details regarding sample receipt please refer to the enclosed Cooler Receipt Form.

The samples were analyzed for VOCs, as requested on the COCs.

The CCAL is out of control low for all associated FORM III "Q" flagged analyte. All associated samples that contain analyte have been flagged with a "Q" qualifier.

The LCSD is out of control low for N-Butylbenzene. The LCS is in control and no further corrective action was taken.

An electronic copy of this report and all supporting raw data will remain on file with ARI. Should you have any questions or problems, please feel free to contact me at your convenience.

Respectfully,
ANALYTICAL RESOURCES, INC.

Kelly Bottem
Client Services Manager
(206) 695-6211
kellyb@arilabs.com
www.arilabs.com

eFile: YE82

10 44

Chain of Custody Record & Laboratory Analysis Request

TO 0021

Analytical Resources, Incorporated
Analytical Chemists and Consultants
4611 South 134th Place, Suite 100
Tukwila, WA 98168
206-695-6200 206-695-6201 (fax)
www.arilabs.com

ARI Assigned Number:	Turn-around Requested: STANDARD TAT	Page: 13 of 14	
ARI Client Company: JOINT BASE LEWIS McCHORD PUBLIC WORKS IMLM-PWE	Phone: 253 966 1802	Date: 28 MAR 14	Ice Present? Y
Client Contact: TOM LYNOTT		No. of Coolers: 3	Cooler Temps: 1.1, 1.3, 5.3
Client Project Name: LOG RAM			
Client Project #:	Samplers: T LYNOTT J BECKER		

Sample ID	Date	Time	Matrix	No Containers	1006A								Notes/Comments
LGC140327LC98D1-1	27MAR14	1350	WATER	2	X								TOTAL VOCS
LGC140327LC98D2-1	27MAR14	1355	WATER	2	X								
LGC140327LC99D-1	27MAR14	0915	WATER	2	X								
LGC140327LC101D1-1	27MAR14	0940	WATER	2	X								
LGC140327LC101D2-1	27MAR14	0945	WATER	2	X								
LGC140327LC111B-1	27MAR14	1320	WATER	2	X								
LGC140327LC116B-1	27MAR14	1335	WATER	2	X								
LGC140328TB1-1	~~28~~ 28 MAR 14	1030	WATER	2	X								
LGC140328SLAPE-1	28MAR14	1012	WATER	2	X								
LGC140328SLAPI-1	28MAR14	1010	WATER	2	X								

BOX 4

NO BOX

BOX 4

NO BOX

Comments/Special Instructions	Relinquished by	Received by:	Relinquished by:	Received by:
	(Signature) [signature]	(Signature) [signature]	(Signature)	(Signature)
	Printed Name: TOM J LYNOTT	Printed Name: Jennifer Millsap	Printed Name	Printed Name
	Company: VERSAR	Company: ARI	Company	Company
	Date & Time 28MAR14 1205	Date & Time 3/28/14 1205	Date & Time	Date & Time.

YE82:00002

Limits of Liability: *ARI will perform all requested services in accordance with appropriate methodology following ARI Standard Operating Procedures and the ARI Quality Assurance Program. This program meets standards for the industry. The total liability of ARI, its officers, agents, employees, or successors, arising out of or in connection with the requested services, shall not exceed the Invoiced amount for said services. The acceptance by the client of a proposal for services by ARI release ARI from any liability in excess thereof, not withstanding any provision to the contrary in any contract, purchase order or co-signed agreement between ARI and the Client.*

Sample Retention Policy: All samples submitted to ARI will be appropriately discarded no sooner than 90 days after receipt or 60 days after submission of hardcopy data, whichever is longer, unless alternate retention schedules have been established by work-order or contract.

Chain of Custody Record & Laboratory Analysis Request

TO 0021

Analytical Resources, Incorporated
Analytical Chemists and Consultants
4611 South 134th Place, Suite 100
Tukwila, WA 98168
206-695-6200 206-695-6201 (fax)
www.arilabs.com

ARI Assigned Number: YE82	Turn-around Requested: STANDARD TAT
ARI Client Company: JOINT BASE LEWIS-MCCHORD PUBLIC WORKS	Phone: 253-966-1802
Client Contact: TOM J LYNOTT	
Client Project Name: Log RAM	
Client Project #:	Samplers: J.BECKER T.LYNOTT

Page: 14 of 14
Date: 28 MAR 14 | Ice Present? Y
No. of Coolers: 3 | Cooler Temps: 1.1, 1.3, 5.3

Sample ID	Date	Time	Matrix	No. Containers	Analysis Requested: 1006A	Notes/Comments
LGC140328LC14A-1	28MAR14	0915	WATER	2	X	TOTAL VOC'S
LGC140328LC77D-1	28MAR14	0900	WATER	2	X	
LGC140328LC122B-1	28MAR14	0835	WATER	2	X	
LGC140328LC124-1	28MAR14	0845	WATER	2	X	NO
LGC140328LC126-1	28MAR14	0940	WATER	2	X	
LGC140328LC128-1	28MAR14	0905	WATER	2	X	BOX
LGC140328LC167-1	28MAR14	0825	WATER	2	X	
LGC140328LC219-1	28MAR14	0925	WATER	2	X	
LGC140328TO4-1	28MAR14	0955	WATER	2	X	
LGC140328TB2-1	28MAR14	1200	WATER	2	X	

Comments/Special Instructions	Relinquished by: (Signature)	Received by (Signature)	Relinquished by (Signature)	Received by. (Signature)
	Printed Name: TOM J LYNOTT	Printed Name: Jennifer Hillsgrove	Printed Name	Printed Name.
	Company: VERSAR	Company: ARI	Company	Company:
	Date & Time: 28MAR14 1205	Date & Time 5/28/14 1205	Date & Time	Date & Time:

YE82 : 00003

Limits of Liability: *ARI will perform all requested services in accordance with appropriate methodology following ARI Standard Operating Procedures and the ARI Quality Assurance Program. This program meets standards for the industry. The total liability of ARI, its officers, agents, employees, or successors, arising out of or in connection with the requested services, shall not exceed the Invoiced amount for said services. The acceptance by the client of a proposal for services by ARI release ARI from any liability in excess thereof, not withstanding any provision to the contrary in any contract, purchase order or co-signed agreement between ARI and the Client.*

Sample Retention Policy: All samples submitted to ARI will be appropriately discarded no sooner than 90 days after receipt or 60 days after submission of hardcopy data, whichever is longer, unless alternate retention schedules have been established by work-order or contract.

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Cooler Receipt Form

ARI Client: JBLM Project Name: Log Ram

COC No(s): _____ (NA) Delivered by: Fed-Ex UPS Courier (Hand Delivered) Other: _____

Assigned ARI Job No: YE82 Tracking No: _____ (NA)

Preliminary Examination Phase:

Were intact, properly signed and dated custody seals attached to the outside of to cooler?	YES	(NO)
Were custody papers included with the cooler?	(YES)	NO
Were custody papers properly filled out (ink, signed, etc)	(YES)	NO

Temperature of Cooler(s) (°C) (recommended 2 0-6.0 °C for chemistry): 1.1 1.3 5.3

Time: 1105

If cooler temperature is out of compliance fill out form 00070F Temp Gun ID#: 12341222

Cooler Accepted by: JM Date: 3/28/14 Time: 1205

Complete custody forms and attach all shipping documents

Log-In Phase:

Was a temperature blank included in the cooler?		YES	(NO)
What kind of packing material was used? ... Bubble Wrap Wet Ice (Gel Packs) Baggies (Foam Block) Paper Other: BOX			
Was sufficient ice used (if appropriate)?	NA	(YES)	NO
Were all bottles sealed in individual plastic bags?		YES	(NO)
Did all bottles arrive in good condition (unbroken)?		(YES)	NO
Were all bottle labels complete and legible?		(YES)	NO
Did the number of containers listed on COC match with the number of containers received?		(YES)	NO
Did all bottle labels and tags agree with custody papers?		(YES)	NO
Were all bottles used correct for the requested analyses?		(YES)	NO
Do any of the analyses (bottles) require preservation? (attach preservation sheet, excluding VOCs)...	(NA)	YES	NO
Were all VOC vials free of air bubbles?	NA	YES	NO
Was sufficient amount of sample sent in each bottle?		(YES)	NO
Date VOC Trip Blank was made at ARI..	NA		_____

Was Sample Split by ARI : (NA) YES Date/Time: _____ Equipment: _____ Split by: _____

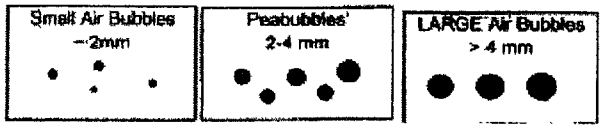
Samples Logged by: AV Date: 3/28/14 Time: 1314

*** Notify Project Manager of discrepancies or concerns ***

Sample ID on Bottle	Sample ID on COC	Sample ID on Bottle	Sample ID on COC

Additional Notes, Discrepancies, & Resolutions:

By: _____ Date: _____



Small → "sm" (< 2 mm)
Peabubbles → "pb" (2 to < 4 mm)
Large → "lg" (4 to < 6 mm)
Headspace → "hs" (> 6 mm)

Sample ID Cross Reference Report

ANALYTICAL RESOURCES INCORPORATED

ARI Job No: YE82
Client: Joint Base Lewis McChord
Project Event: N/A
Project Name: Log Ram

	Sample ID	ARI Lab ID	ARI LIMS ID	Matrix	Sample Date/Time	VTSR
1.	LGC140327LC98D1-1	YE82A	14-5908	Water	03/27/14 13:50	03/28/14 12:05
2.	LGC140327LC98D2-1	YE82B	14-5909	Water	03/27/14 13:55	03/28/14 12:05
3.	LGC140327LC99D-1	YE82C	14-5910	Water	03/27/14 09:15	03/28/14 12:05
4.	LGC140327LC101D1-1	YE82D	14-5911	Water	03/27/14 09:40	03/28/14 12:05
5.	LGC140328TB1-1	YE82E	14-5912	Water	03/28/14 10:30	03/28/14 12:05
6.	LGC140328SLAPE-1	YE82F	14-5913	Water	03/28/14 10:12	03/28/14 12:05
7.	LGC140328SLAPI-1	YE82G	14-5914	Water	03/28/14 10:10	03/28/14 12:05
8.	LGC140328LC14A-1	YE82H	14-5915	Water	03/28/14 09:15	03/28/14 12:05
9.	LGC140328LC77D-1	YE82I	14-5916	Water	03/28/14 09:00	03/28/14 12:05
10.	LGC140328LC122B-1	YE82J	14-5917	Water	03/28/14 08:35	03/28/14 12:05
11.	LGC140328LC124-1	YE82K	14-5918	Water	03/28/14 08:45	03/28/14 12:05
12.	LGC140328LC126-1	YE82L	14-5919	Water	03/28/14 09:40	03/28/14 12:05
13.	LGC140328LC128-1	YE82M	14-5920	Water	03/28/14 09:05	03/28/14 12:05
14.	LGC140328LC167-1	YE82N	14-5921	Water	03/28/14 08:25	03/28/14 12:05
15.	LGC140328LC219-1	YE82O	14-5922	Water	03/28/14 09:25	03/28/14 12:05
16.	LGC140328T04-1	YE82P	14-5923	Water	03/28/14 09:55	03/28/14 12:05
17.	LGC140328TB2-1	YE82Q	14-5924	Water	03/28/14 12:00	03/28/14 12:05

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140327LC98D1-1**
 SAMPLE

Lab Sample ID: YE82A
LIMS ID: 14-5908
Matrix: Water
Data Release Authorized:
Reported: 04/09/14

QC Report No: YE82-Joint Base Lewis McChord
Project: Log Ram

Date Sampled: 03/27/14
Date Received: 03/28/14

Instrument/Analyst: NT3/LH
Date Analyzed: 04/08/14 23:47

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	LOQ	Result	Q
74-87-3	Chloromethane	0.50	< 0.50	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.20	< 0.20	U
75-00-3	Chloroethane	0.20	< 0.20	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	**Acetone**	**5.0**	**6.2**	
75-15-0	Carbon Disulfide	0.20	< 0.20	U
75-35-4	1,1-Dichloroethene	0.20	< 0.20	U
75-34-3	1,1-Dichloroethane	0.20	< 0.20	U
156-60-5	trans-1,2-Dichloroethene	0.20	< 0.20	U
156-59-2	cis-1,2-Dichloroethene	0.20	< 0.20	U
67-66-3	Chloroform	0.20	< 0.20	U
107-06-2	1,2-Dichloroethane	0.20	< 0.20	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	0.20	< 0.20	U
56-23-5	Carbon Tetrachloride	0.20	< 0.20	U
108-05-4	Vinyl Acetate	0.20	< 0.20	U
75-27-4	Bromodichloromethane	0.20	< 0.20	U
78-87-5	1,2-Dichloropropane	0.20	< 0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	< 0.20	U
79-01-6	**Trichloroethene**	**0.20**	**0.77**	
124-48-1	Dibromochloromethane	0.20	< 0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	< 0.20	U
71-43-2	Benzene	0.20	< 0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	< 0.20	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.20	< 0.20	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.20	< 0.20	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	< 0.20	U
108-88-3	Toluene	0.20	< 0.20	U
108-90-7	Chlorobenzene	0.20	< 0.20	U
100-41-4	Ethylbenzene	0.20	< 0.20	U
100-42-5	Styrene	0.20	< 0.20	U
75-69-4	Trichlorofluoromethane	0.20	< 0.20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.20	< 0.20	U
179601-23-1	m,p-Xylene	0.40	< 0.40	U
95-47-6	o-Xylene	0.20	< 0.20	U
95-50-1	1,2-Dichlorobenzene	0.20	< 0.20	U
541-73-1	1,3-Dichlorobenzene	0.20	< 0.20	U
106-46-7	1,4-Dichlorobenzene	0.20	< 0.20	U

Lab Sample ID: YE82A
LIMS ID: 14-5908
Matrix: Water
Date Analyzed: 04/08/14 23:47

QC Report No: YE82-Joint Base Lewis McChord
Project: Log Ram

CAS Number	Analyte	LOQ	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Iodomethane	1.0	< 1.0	U
74-96-4	Bromoethane	0.20	< 0.20	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.20	< 0.20	U
74-95-3	Dibromomethane	0.20	< 0.20	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	< 0.20	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	< 0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	< 0.50	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.20	< 0.20	U
95-63-6	1,2,4-Trimethylbenzene	0.20	< 0.20	U
87-68-3	Hexachlorobutadiene	0.50	< 0.50	U
106-93-4	1,2-Dibromoethane	0.20	< 0.20	U
74-97-5	Bromochloromethane	0.20	< 0.20	U
594-20-7	2,2-Dichloropropane	0.20	< 0.20	U
142-28-9	1,3-Dichloropropane	0.20	< 0.20	U
98-82-8	Isopropylbenzene	0.20	< 0.20	U
103-65-1	n-Propylbenzene	0.20	< 0.20	U
108-86-1	Bromobenzene	0.20	< 0.20	U
95-49-8	2-Chlorotoluene	0.20	< 0.20	U
106-43-4	4-Chlorotoluene	0.20	< 0.20	U
98-06-6	tert-Butylbenzene	0.20	< 0.20	U
135-98-8	sec-Butylbenzene	0.20	< 0.20	U
99-87-6	4-Isopropyltoluene	0.20	< 0.20	U
104-51-8	n-Butylbenzene	0.20	< 0.20	U
120-82-1	1,2,4-Trichlorobenzene	0.50	< 0.50	U
91-20-3	Naphthalene	0.50	< 0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	< 0.50	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	104%
d8-Toluene	99.4%
Bromofluorobenzene	96.6%
d4-1,2-Dichlorobenzene	99.7%

2-Chloroethylvinylether is an acid labile compound and may not be recovered from an acid preserved sample.

EPA SW-846 indicates that vinyl chloride and styrene may degrade in the presence of acid preservative.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140327LC98D2-1**
 SAMPLE

Lab Sample ID: YE82B
LIMS ID: 14-5909
Matrix: Water
Data Release Authorized:
Reported: 04/09/14

QC Report No: YE82-Joint Base Lewis McChord
Project: Log Ram

Date Sampled: 03/27/14
Date Received: 03/28/14

Instrument/Analyst: NT3/LH
Date Analyzed: 04/09/14 00:16

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	LOQ	Result	Q
74-87-3	Chloromethane	0.50	< 0.50	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.20	< 0.20	U
75-00-3	Chloroethane	0.20	< 0.20	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	Acetone	5.0	< 5.0	U
75-15-0	Carbon Disulfide	0.20	< 0.20	U
75-35-4	1,1-Dichloroethene	0.20	< 0.20	U
75-34-3	1,1-Dichloroethane	0.20	< 0.20	U
156-60-5	trans-1,2-Dichloroethene	0.20	< 0.20	U
156-59-2	cis-1,2-Dichloroethene	0.20	< 0.20	U
67-66-3	Chloroform	0.20	< 0.20	U
107-06-2	1,2-Dichloroethane	0.20	< 0.20	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	0.20	< 0.20	U
56-23-5	Carbon Tetrachloride	0.20	< 0.20	U
108-05-4	Vinyl Acetate	0.20	< 0.20	U
75-27-4	Bromodichloromethane	0.20	< 0.20	U
78-87-5	1,2-Dichloropropane	0.20	< 0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	< 0.20	U
79-01-6	**Trichloroethene**	**0.20**	**9.9**	
124-48-1	Dibromochloromethane	0.20	< 0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	< 0.20	U
71-43-2	Benzene	0.20	< 0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	< 0.20	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.20	< 0.20	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.20	< 0.20	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	< 0.20	U
108-88-3	Toluene	0.20	< 0.20	U
108-90-7	Chlorobenzene	0.20	< 0.20	U
100-41-4	Ethylbenzene	0.20	< 0.20	U
100-42-5	Styrene	0.20	< 0.20	U
75-69-4	Trichlorofluoromethane	0.20	< 0.20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.20	< 0.20	U
179601-23-1	m,p-Xylene	0.40	< 0.40	U
95-47-6	o-Xylene	0.20	< 0.20	U
95-50-1	1,2-Dichlorobenzene	0.20	< 0.20	U
541-73-1	1,3-Dichlorobenzene	0.20	< 0.20	U
106-46-7	1,4-Dichlorobenzene	0.20	< 0.20	U

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140327LC98D2-1**

SAMPLE

Lab Sample ID: YE82B
LIMS ID: 14-5909
Matrix: Water
Date Analyzed: 04/09/14 00:16

QC Report No: YE82-Joint Base Lewis McChord
Project: Log Ram

CAS Number	Analyte	LOQ	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Iodomethane	1.0	< 1.0	U
74-96-4	Bromoethane	0.20	< 0.20	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.20	< 0.20	U
74-95-3	Dibromomethane	0.20	< 0.20	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	< 0.20	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	< 0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	< 0.50	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.20	< 0.20	U
95-63-6	1,2,4-Trimethylbenzene	0.20	< 0.20	U
87-68-3	Hexachlorobutadiene	0.50	< 0.50	U
106-93-4	1,2-Dibromoethane	0.20	< 0.20	U
74-97-5	Bromochloromethane	0.20	< 0.20	U
594-20-7	2,2-Dichloropropane	0.20	< 0.20	U
142-28-9	1,3-Dichloropropane	0.20	< 0.20	U
98-82-8	Isopropylbenzene	0.20	< 0.20	U
103-65-1	n-Propylbenzene	0.20	< 0.20	U
108-86-1	Bromobenzene	0.20	< 0.20	U
95-49-8	2-Chlorotoluene	0.20	< 0.20	U
106-43-4	4-Chlorotoluene	0.20	< 0.20	U
98-06-6	tert-Butylbenzene	0.20	< 0.20	U
135-98-8	sec-Butylbenzene	0.20	< 0.20	U
99-87-6	4-Isopropyltoluene	0.20	< 0.20	U
104-51-8	n-Butylbenzene	0.20	< 0.20	U
120-82-1	1,2,4-Trichlorobenzene	0.50	< 0.50	U
91-20-3	Naphthalene	0.50	< 0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	< 0.50	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	105%
d8-Toluene	98.4%
Bromofluorobenzene	96.6%
d4-1,2-Dichlorobenzene	98.8%

2-Chloroethylvinylether is an acid labile compound and may not be recovered from an acid preserved sample.

EPA SW-846 indicates that vinyl chloride and styrene may degrade in the presence of acid preservative.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140327LC99D-1**
 SAMPLE

Lab Sample ID: YE82C
LIMS ID: 14-5910
Matrix: Water
Data Release Authorized:
Reported: 04/09/14

QC Report No: YE82-Joint Base Lewis McChord
Project: Log Ram

Date Sampled: 03/27/14
Date Received: 03/28/14

Instrument/Analyst: NT3/LH
Date Analyzed: 04/09/14 00:44

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	LOQ	Result	Q
74-87-3	Chloromethane	0.50	< 0.50	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.20	< 0.20	U
75-00-3	Chloroethane	0.20	< 0.20	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	Acetone	5.0	< 5.0	U
75-15-0	Carbon Disulfide	0.20	< 0.20	U
75-35-4	1,1-Dichloroethene	0.20	< 0.20	U
75-34-3	1,1-Dichloroethane	0.20	< 0.20	U
156-60-5	trans-1,2-Dichloroethene	0.20	< 0.20	U
156-59-2	**cis-1,2-Dichloroethene**	**0.20**	**1.9**	
67-66-3	Chloroform	0.20	< 0.20	U
107-06-2	1,2-Dichloroethane	0.20	< 0.20	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	0.20	< 0.20	U
56-23-5	Carbon Tetrachloride	0.20	< 0.20	U
108-05-4	Vinyl Acetate	0.20	< 0.20	U
75-27-4	Bromodichloromethane	0.20	< 0.20	U
78-87-5	1,2-Dichloropropane	0.20	< 0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	< 0.20	U
79-01-6	**Trichloroethene**	**0.20**	**62**	
124-48-1	Dibromochloromethane	0.20	< 0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	< 0.20	U
71-43-2	Benzene	0.20	< 0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	< 0.20	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.20	< 0.20	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.20	< 0.20	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	< 0.20	U
108-88-3	Toluene	0.20	< 0.20	U
108-90-7	Chlorobenzene	0.20	< 0.20	U
100-41-4	Ethylbenzene	0.20	< 0.20	U
100-42-5	Styrene	0.20	< 0.20	U
75-69-4	Trichlorofluoromethane	0.20	< 0.20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.20	< 0.20	U
179601-23-1	m,p-Xylene	0.40	< 0.40	U
95-47-6	o-Xylene	0.20	< 0.20	U
95-50-1	1,2-Dichlorobenzene	0.20	< 0.20	U
541-73-1	1,3-Dichlorobenzene	0.20	< 0.20	U
106-46-7	1,4-Dichlorobenzene	0.20	< 0.20	U

Lab Sample ID: YE82C
LIMS ID: 14-5910
Matrix: Water
Date Analyzed: 04/09/14 00:44

QC Report No: YE82-Joint Base Lewis McChord
Project: Log Ram

CAS Number	Analyte	LOQ	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Iodomethane	1.0	< 1.0	U
74-96-4	Bromoethane	0.20	< 0.20	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.20	< 0.20	U
74-95-3	Dibromomethane	0.20	< 0.20	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	< 0.20	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	< 0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	< 0.50	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.20	< 0.20	U
95-63-6	1,2,4-Trimethylbenzene	0.20	< 0.20	U
87-68-3	Hexachlorobutadiene	0.50	< 0.50	U
106-93-4	1,2-Dibromoethane	0.20	< 0.20	U
74-97-5	Bromochloromethane	0.20	< 0.20	U
594-20-7	2,2-Dichloropropane	0.20	< 0.20	U
142-28-9	1,3-Dichloropropane	0.20	< 0.20	U
98-82-8	Isopropylbenzene	0.20	< 0.20	U
103-65-1	n-Propylbenzene	0.20	< 0.20	U
108-86-1	Bromobenzene	0.20	< 0.20	U
95-49-8	2-Chlorotoluene	0.20	< 0.20	U
106-43-4	4-Chlorotoluene	0.20	< 0.20	U
98-06-6	tert-Butylbenzene	0.20	< 0.20	U
135-98-8	sec-Butylbenzene	0.20	< 0.20	U
99-87-6	4-Isopropyltoluene	0.20	< 0.20	U
104-51-8	n-Butylbenzene	0.20	< 0.20	U
120-82-1	1,2,4-Trichlorobenzene	0.50	< 0.50	U
91-20-3	Naphthalene	0.50	< 0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	< 0.50	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	106%
d8-Toluene	99.8%
Bromofluorobenzene	94.9%
d4-1,2-Dichlorobenzene	98.4%

2-Chloroethylvinylether is an acid labile compound and may not be recovered from an acid preserved sample.

EPA SW-846 indicates that vinyl chloride and styrene may degrade in the presence of acid preservative.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140327LC101D1-1**
 SAMPLE

Lab Sample ID: YE82D
LIMS ID: 14-5911
Matrix: Water
Data Release Authorized:
Reported: 04/09/14

QC Report No: YE82-Joint Base Lewis McChord
Project: Log Ram

Date Sampled: 03/27/14
Date Received: 03/28/14

Instrument/Analyst: NT3/LH
Date Analyzed: 04/09/14 01:12

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	LOQ	Result	Q
74-87-3	Chloromethane	0.50	< 0.50	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.20	< 0.20	U
75-00-3	Chloroethane	0.20	< 0.20	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	**Acetone**	**5.0**	**5.2**	
75-15-0	Carbon Disulfide	0.20	< 0.20	U
75-35-4	1,1-Dichloroethene	0.20	< 0.20	U
75-34-3	1,1-Dichloroethane	0.20	< 0.20	U
156-60-5	trans-1,2-Dichloroethene	0.20	< 0.20	U
156-59-2	**cis-1,2-Dichloroethene**	**0.20**	**0.49**	
67-66-3	Chloroform	0.20	< 0.20	U
107-06-2	1,2-Dichloroethane	0.20	< 0.20	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	0.20	< 0.20	U
56-23-5	Carbon Tetrachloride	0.20	< 0.20	U
108-05-4	Vinyl Acetate	0.20	< 0.20	U
75-27-4	Bromodichloromethane	0.20	< 0.20	U
78-87-5	1,2-Dichloropropane	0.20	< 0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	< 0.20	U
79-01-6	**Trichloroethene**	**0.20**	**1.9**	
124-48-1	Dibromochloromethane	0.20	< 0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	< 0.20	U
71-43-2	Benzene	0.20	< 0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	< 0.20	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.20	< 0.20	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.20	< 0.20	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	< 0.20	U
108-88-3	Toluene	0.20	< 0.20	U
108-90-7	Chlorobenzene	0.20	< 0.20	U
100-41-4	Ethylbenzene	0.20	< 0.20	U
100-42-5	Styrene	0.20	< 0.20	U
75-69-4	Trichlorofluoromethane	0.20	< 0.20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.20	< 0.20	U
179601-23-1	m,p-Xylene	0.40	< 0.40	U
95-47-6	o-Xylene	0.20	< 0.20	U
95-50-1	1,2-Dichlorobenzene	0.20	< 0.20	U
541-73-1	1,3-Dichlorobenzene	0.20	< 0.20	U
106-46-7	1,4-Dichlorobenzene	0.20	< 0.20	U

Lab Sample ID: YE82D
LIMS ID: 14-5911
Matrix: Water
Date Analyzed: 04/09/14 01:12

QC Report No: YE82-Joint Base Lewis McChord
Project: Log Ram

CAS Number	Analyte	LOQ	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Iodomethane	1.0	< 1.0	U
74-96-4	Bromoethane	0.20	< 0.20	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.20	< 0.20	U
74-95-3	Dibromomethane	0.20	< 0.20	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	< 0.20	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	< 0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	< 0.50	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.20	< 0.20	U
95-63-6	1,2,4-Trimethylbenzene	0.20	< 0.20	U
87-68-3	Hexachlorobutadiene	0.50	< 0.50	U
106-93-4	1,2-Dibromoethane	0.20	< 0.20	U
74-97-5	Bromochloromethane	0.20	< 0.20	U
594-20-7	2,2-Dichloropropane	0.20	< 0.20	U
142-28-9	1,3-Dichloropropane	0.20	< 0.20	U
98-82-8	Isopropylbenzene	0.20	< 0.20	U
103-65-1	n-Propylbenzene	0.20	< 0.20	U
108-86-1	Bromobenzene	0.20	< 0.20	U
95-49-8	2-Chlorotoluene	0.20	< 0.20	U
106-43-4	4-Chlorotoluene	0.20	< 0.20	U
98-06-6	tert-Butylbenzene	0.20	< 0.20	U
135-98-8	sec-Butylbenzene	0.20	< 0.20	U
99-87-6	4-Isopropyltoluene	0.20	< 0.20	U
104-51-8	n-Butylbenzene	0.20	< 0.20	U
120-82-1	1,2,4-Trichlorobenzene	0.50	< 0.50	U
91-20-3	Naphthalene	0.50	< 0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	< 0.50	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	106%
d8-Toluene	99.7%
Bromofluorobenzene	95.7%
d4-1,2-Dichlorobenzene	101%

2-Chloroethylvinylether is an acid labile compound and may not be recovered from an acid preserved sample.

EPA SW-846 indicates that vinyl chloride and styrene may degrade in the presence of acid preservative.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140328TB1-1**
 SAMPLE

Lab Sample ID: YE82E
LIMS ID: 14-5912
Matrix: Water
Data Release Authorized:
Reported: 04/09/14

QC Report No: YE82-Joint Base Lewis McChord
Project: Log Ram

Date Sampled: 03/28/14
Date Received: 03/28/14

Instrument/Analyst: NT3/LH
Date Analyzed: 04/09/14 01:41

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	LOQ	Result	Q
74-87-3	Chloromethane	0.50	< 0.50	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.20	< 0.20	U
75-00-3	Chloroethane	0.20	< 0.20	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	Acetone	5.0	< 5.0	U
75-15-0	Carbon Disulfide	0.20	< 0.20	U
75-35-4	1,1-Dichloroethene	0.20	< 0.20	U
75-34-3	1,1-Dichloroethane	0.20	< 0.20	U
156-60-5	trans-1,2-Dichloroethene	0.20	< 0.20	U
156-59-2	cis-1,2-Dichloroethene	0.20	< 0.20	U
67-66-3	Chloroform	0.20	< 0.20	U
107-06-2	1,2-Dichloroethane	0.20	< 0.20	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	0.20	< 0.20	U
56-23-5	Carbon Tetrachloride	0.20	< 0.20	U
108-05-4	Vinyl Acetate	0.20	< 0.20	U
75-27-4	Bromodichloromethane	0.20	< 0.20	U
78-87-5	1,2-Dichloropropane	0.20	< 0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	< 0.20	U
79-01-6	Trichloroethene	0.20	< 0.20	U
124-48-1	Dibromochloromethane	0.20	< 0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	< 0.20	U
71-43-2	Benzene	0.20	< 0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	< 0.20	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.20	< 0.20	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.20	< 0.20	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	< 0.20	U
108-88-3	Toluene	0.20	< 0.20	U
108-90-7	Chlorobenzene	0.20	< 0.20	U
100-41-4	Ethylbenzene	0.20	< 0.20	U
100-42-5	Styrene	0.20	< 0.20	U
75-69-4	Trichlorofluoromethane	0.20	< 0.20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.20	< 0.20	U
179601-23-1	m,p-Xylene	0.40	< 0.40	U
95-47-6	o-Xylene	0.20	< 0.20	U
95-50-1	1,2-Dichlorobenzene	0.20	< 0.20	U
541-73-1	1,3-Dichlorobenzene	0.20	< 0.20	U
106-46-7	1,4-Dichlorobenzene	0.20	< 0.20	U

Lab Sample ID: YE82E
LIMS ID: 14-5912
Matrix: Water
Date Analyzed: 04/09/14 01:41

QC Report No: YE82-Joint Base Lewis McChord
Project: Log Ram

CAS Number	Analyte	LOQ	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Iodomethane	1.0	< 1.0	U
74-96-4	Bromoethane	0.20	< 0.20	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.20	< 0.20	U
74-95-3	Dibromomethane	0.20	< 0.20	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	< 0.20	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	< 0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	< 0.50	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.20	< 0.20	U
95-63-6	1,2,4-Trimethylbenzene	0.20	< 0.20	U
87-68-3	Hexachlorobutadiene	0.50	< 0.50	U
106-93-4	1,2-Dibromoethane	0.20	< 0.20	U
74-97-5	Bromochloromethane	0.20	< 0.20	U
594-20-7	2,2-Dichloropropane	0.20	< 0.20	U
142-28-9	1,3-Dichloropropane	0.20	< 0.20	U
98-82-8	Isopropylbenzene	0.20	< 0.20	U
103-65-1	n-Propylbenzene	0.20	< 0.20	U
108-86-1	Bromobenzene	0.20	< 0.20	U
95-49-8	2-Chlorotoluene	0.20	< 0.20	U
106-43-4	4-Chlorotoluene	0.20	< 0.20	U
98-06-6	tert-Butylbenzene	0.20	< 0.20	U
135-98-8	sec-Butylbenzene	0.20	< 0.20	U
99-87-6	4-Isopropyltoluene	0.20	< 0.20	U
104-51-8	n-Butylbenzene	0.20	< 0.20	U
120-82-1	1,2,4-Trichlorobenzene	0.50	< 0.50	U
91-20-3	Naphthalene	0.50	< 0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	< 0.50	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	105%
d8-Toluene	97.8%
Bromofluorobenzene	98.4%
d4-1,2-Dichlorobenzene	98.9%

2-Chloroethylvinylether is an acid labile compound and may not be recovered from an acid preserved sample.

EPA SW-846 indicates that vinyl chloride and styrene may degrade in the presence of acid preservative.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140328SLAPE-1**
 SAMPLE

Lab Sample ID: YE82F
LIMS ID: 14-5913
Matrix: Water
Data Release Authorized:
Reported: 04/09/14

QC Report No: YE82-Joint Base Lewis McChord
Project: Log Ram

Date Sampled: 03/28/14
Date Received: 03/28/14

Instrument/Analyst: NT3/LH
Date Analyzed: 04/09/14 02:09

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	LOQ	Result	Q
74-87-3	Chloromethane	0.50	< 0.50	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.20	< 0.20	U
75-00-3	Chloroethane	0.20	< 0.20	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	Acetone	5.0	< 5.0	U
75-15-0	Carbon Disulfide	0.20	< 0.20	U
75-35-4	1,1-Dichloroethene	0.20	< 0.20	U
75-34-3	1,1-Dichloroethane	0.20	< 0.20	U
156-60-5	trans-1,2-Dichloroethene	0.20	< 0.20	U
156-59-2	cis-1,2-Dichloroethene	0.20	< 0.20	U
67-66-3	Chloroform	0.20	< 0.20	U
107-06-2	1,2-Dichloroethane	0.20	< 0.20	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	0.20	< 0.20	U
56-23-5	Carbon Tetrachloride	0.20	< 0.20	U
108-05-4	Vinyl Acetate	0.20	< 0.20	U
75-27-4	Bromodichloromethane	0.20	< 0.20	U
78-87-5	1,2-Dichloropropane	0.20	< 0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	< 0.20	U
79-01-6	**Trichloroethene**	**0.20**	**0.55**	
124-48-1	Dibromochloromethane	0.20	< 0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	< 0.20	U
71-43-2	Benzene	0.20	< 0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	< 0.20	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.20	< 0.20	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.20	< 0.20	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	< 0.20	U
108-88-3	Toluene	0.20	< 0.20	U
108-90-7	Chlorobenzene	0.20	< 0.20	U
100-41-4	Ethylbenzene	0.20	< 0.20	U
100-42-5	Styrene	0.20	< 0.20	U
75-69-4	Trichlorofluoromethane	0.20	< 0.20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.20	< 0.20	U
179601-23-1	m,p-Xylene	0.40	< 0.40	U
95-47-6	o-Xylene	0.20	< 0.20	U
95-50-1	1,2-Dichlorobenzene	0.20	< 0.20	U
541-73-1	1,3-Dichlorobenzene	0.20	< 0.20	U
106-46-7	1,4-Dichlorobenzene	0.20	< 0.20	U

Lab Sample ID: YE82F
LIMS ID: 14-5913
Matrix: Water
Date Analyzed: 04/09/14 02:09

QC Report No: YE82-Joint Base Lewis McChord
Project: Log Ram

CAS Number	Analyte	LOQ	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Iodomethane	1.0	< 1.0	U
74-96-4	Bromoethane	0.20	< 0.20	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.20	< 0.20	U
74-95-3	Dibromomethane	0.20	< 0.20	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	< 0.20	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	< 0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	< 0.50	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.20	< 0.20	U
95-63-6	1,2,4-Trimethylbenzene	0.20	< 0.20	U
87-68-3	Hexachlorobutadiene	0.50	< 0.50	U
106-93-4	1,2-Dibromoethane	0.20	< 0.20	U
74-97-5	Bromochloromethane	0.20	< 0.20	U
594-20-7	2,2-Dichloropropane	0.20	< 0.20	U
142-28-9	1,3-Dichloropropane	0.20	< 0.20	U
98-82-8	Isopropylbenzene	0.20	< 0.20	U
103-65-1	n-Propylbenzene	0.20	< 0.20	U
108-86-1	Bromobenzene	0.20	< 0.20	U
95-49-8	2-Chlorotoluene	0.20	< 0.20	U
106-43-4	4-Chlorotoluene	0.20	< 0.20	U
98-06-6	tert-Butylbenzene	0.20	< 0.20	U
135-98-8	sec-Butylbenzene	0.20	< 0.20	U
99-87-6	4-Isopropyltoluene	0.20	< 0.20	U
104-51-8	n-Butylbenzene	0.20	< 0.20	U
120-82-1	1,2,4-Trichlorobenzene	0.50	< 0.50	U
91-20-3	Naphthalene	0.50	< 0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	< 0.50	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	101%
d8-Toluene	99.4%
Bromofluorobenzene	96.8%
d4-1,2-Dichlorobenzene	99.3%

2-Chloroethylvinylether is an acid labile compound and may not be recovered from an acid preserved sample.

EPA SW-846 indicates that vinyl chloride and styrene may degrade in the presence of acid preservative.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140328SLAPI-1**
 SAMPLE

Lab Sample ID: YE82G
LIMS ID: 14-5914
Matrix: Water
Data Release Authorized:
Reported: 04/09/14

QC Report No: YE82-Joint Base Lewis McChord
Project: Log Ram

Date Sampled: 03/28/14
Date Received: 03/28/14

Instrument/Analyst: NT3/LH
Date Analyzed: 04/09/14 02:37

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	LOQ	Result	Q
74-87-3	Chloromethane	0.50	< 0.50	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.20	< 0.20	U
75-00-3	Chloroethane	0.20	< 0.20	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	Acetone	5.0	< 5.0	U
75-15-0	Carbon Disulfide	0.20	< 0.20	U
75-35-4	1,1-Dichloroethene	0.20	< 0.20	U
75-34-3	1,1-Dichloroethane	0.20	< 0.20	U
156-60-5	trans-1,2-Dichloroethene	0.20	< 0.20	U
156-59-2	**cis-1,2-Dichloroethene**	**0.20**	**0.41**	
67-66-3	Chloroform	0.20	< 0.20	U
107-06-2	1,2-Dichloroethane	0.20	< 0.20	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	0.20	< 0.20	U
56-23-5	Carbon Tetrachloride	0.20	< 0.20	U
108-05-4	Vinyl Acetate	0.20	< 0.20	U
75-27-4	Bromodichloromethane	0.20	< 0.20	U
78-87-5	1,2-Dichloropropane	0.20	< 0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	< 0.20	U
79-01-6	**Trichloroethene**	**0.20**	**14**	
124-48-1	Dibromochloromethane	0.20	< 0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	< 0.20	U
71-43-2	Benzene	0.20	< 0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	< 0.20	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.20	< 0.20	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.20	< 0.20	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	< 0.20	U
108-88-3	Toluene	0.20	< 0.20	U
108-90-7	Chlorobenzene	0.20	< 0.20	U
100-41-4	Ethylbenzene	0.20	< 0.20	U
100-42-5	Styrene	0.20	< 0.20	U
75-69-4	Trichlorofluoromethane	0.20	< 0.20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.20	< 0.20	U
179601-23-1	m,p-Xylene	0.40	< 0.40	U
95-47-6	o-Xylene	0.20	< 0.20	U
95-50-1	1,2-Dichlorobenzene	0.20	< 0.20	U
541-73-1	1,3-Dichlorobenzene	0.20	< 0.20	U
106-46-7	1,4-Dichlorobenzene	0.20	< 0.20	U

Lab Sample ID: YE82G
LIMS ID: 14-5914
Matrix: Water
Date Analyzed: 04/09/14 02:37

QC Report No: YE82-Joint Base Lewis McChord
Project: Log Ram

CAS Number	Analyte	LOQ	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Iodomethane	1.0	< 1.0	U
74-96-4	Bromoethane	0.20	< 0.20	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.20	< 0.20	U
74-95-3	Dibromomethane	0.20	< 0.20	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	< 0.20	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	< 0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	< 0.50	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.20	< 0.20	U
95-63-6	1,2,4-Trimethylbenzene	0.20	< 0.20	U
87-68-3	Hexachlorobutadiene	0.50	< 0.50	U
106-93-4	1,2-Dibromoethane	0.20	< 0.20	U
74-97-5	Bromochloromethane	0.20	< 0.20	U
594-20-7	2,2-Dichloropropane	0.20	< 0.20	U
142-28-9	1,3-Dichloropropane	0.20	< 0.20	U
98-82-8	Isopropylbenzene	0.20	< 0.20	U
103-65-1	n-Propylbenzene	0.20	< 0.20	U
108-86-1	Bromobenzene	0.20	< 0.20	U
95-49-8	2-Chlorotoluene	0.20	< 0.20	U
106-43-4	4-Chlorotoluene	0.20	< 0.20	U
98-06-6	tert-Butylbenzene	0.20	< 0.20	U
135-98-8	sec-Butylbenzene	0.20	< 0.20	U
99-87-6	4-Isopropyltoluene	0.20	< 0.20	U
104-51-8	n-Butylbenzene	0.20	< 0.20	U
120-82-1	1,2,4-Trichlorobenzene	0.50	< 0.50	U
91-20-3	Naphthalene	0.50	< 0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	< 0.50	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	104%
d8-Toluene	99.5%
Bromofluorobenzene	95.4%
d4-1,2-Dichlorobenzene	102%

2-Chloroethylvinylether is an acid labile compound and may not be recovered from an acid preserved sample.

EPA SW-846 indicates that vinyl chloride and styrene may degrade in the presence of acid preservative.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140328LC14A-1**
 SAMPLE

Lab Sample ID: YE82H
LIMS ID: 14-5915
Matrix: Water
Data Release Authorized:
Reported: 04/09/14

QC Report No: YE82-Joint Base Lewis McChord
Project: Log Ram

Date Sampled: 03/28/14
Date Received: 03/28/14

Instrument/Analyst: NT3/LH
Date Analyzed: 04/09/14 03:05

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	LOQ	Result	Q
74-87-3	Chloromethane	0.50	< 0.50	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.20	< 0.20	U
75-00-3	Chloroethane	0.20	< 0.20	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	**Acetone**	**5.0**	**5.4**	
75-15-0	Carbon Disulfide	0.20	< 0.20	U
75-35-4	1,1-Dichloroethene	0.20	< 0.20	U
75-34-3	1,1-Dichloroethane	0.20	< 0.20	U
156-60-5	trans-1,2-Dichloroethene	0.20	< 0.20	U
156-59-2	**cis-1,2-Dichloroethene**	**0.20**	**0.69**	
67-66-3	**Chloroform**	**0.20**	**0.24**	
107-06-2	1,2-Dichloroethane	0.20	< 0.20	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	0.20	< 0.20	U
56-23-5	Carbon Tetrachloride	0.20	< 0.20	U
108-05-4	Vinyl Acetate	0.20	< 0.20	U
75-27-4	Bromodichloromethane	0.20	< 0.20	U
78-87-5	1,2-Dichloropropane	0.20	< 0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	< 0.20	U
79-01-6	**Trichloroethene**	**0.20**	**37**	
124-48-1	Dibromochloromethane	0.20	< 0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	< 0.20	U
71-43-2	Benzene	0.20	< 0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	< 0.20	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.20	< 0.20	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.20	< 0.20	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	< 0.20	U
108-88-3	Toluene	0.20	< 0.20	U
108-90-7	Chlorobenzene	0.20	< 0.20	U
100-41-4	Ethylbenzene	0.20	< 0.20	U
100-42-5	Styrene	0.20	< 0.20	U
75-69-4	Trichlorofluoromethane	0.20	< 0.20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.20	< 0.20	U
179601-23-1	m,p-Xylene	0.40	< 0.40	U
95-47-6	o-Xylene	0.20	< 0.20	U
95-50-1	1,2-Dichlorobenzene	0.20	< 0.20	U
541-73-1	1,3-Dichlorobenzene	0.20	< 0.20	U
106-46-7	1,4-Dichlorobenzene	0.20	< 0.20	U

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140328LC14A-1**
 SAMPLE

Lab Sample ID: YE82H
LIMS ID: 14-5915
Matrix: Water
Date Analyzed: 04/09/14 03:05

QC Report No: YE82-Joint Base Lewis McChord
Project: Log Ram

CAS Number	Analyte	LOQ	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Iodomethane	1.0	< 1.0	U
74-96-4	Bromoethane	0.20	< 0.20	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.20	< 0.20	U
74-95-3	Dibromomethane	0.20	< 0.20	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	< 0.20	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	< 0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	< 0.50	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.20	< 0.20	U
95-63-6	1,2,4-Trimethylbenzene	0.20	< 0.20	U
87-68-3	Hexachlorobutadiene	0.50	< 0.50	U
106-93-4	1,2-Dibromoethane	0.20	< 0.20	U
74-97-5	Bromochloromethane	0.20	< 0.20	U
594-20-7	2,2-Dichloropropane	0.20	< 0.20	U
142-28-9	1,3-Dichloropropane	0.20	< 0.20	U
98-82-8	Isopropylbenzene	0.20	< 0.20	U
103-65-1	n-Propylbenzene	0.20	< 0.20	U
108-86-1	Bromobenzene	0.20	< 0.20	U
95-49-8	2-Chlorotoluene	0.20	< 0.20	U
106-43-4	4-Chlorotoluene	0.20	< 0.20	U
98-06-6	tert-Butylbenzene	0.20	< 0.20	U
135-98-8	sec-Butylbenzene	0.20	< 0.20	U
99-87-6	4-Isopropyltoluene	0.20	< 0.20	U
104-51-8	n-Butylbenzene	0.20	< 0.20	U
120-82-1	1,2,4-Trichlorobenzene	0.50	< 0.50	U
91-20-3	Naphthalene	0.50	< 0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	< 0.50	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	102%
d8-Toluene	99.7%
Bromofluorobenzene	95.3%
d4-1,2-Dichlorobenzene	102%

2-Chloroethylvinylether is an acid labile compound and may not be recovered from an acid preserved sample.

EPA SW-846 indicates that vinyl chloride and styrene may degrade in the presence of acid preservative.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140328LC77D-1**
 SAMPLE

Lab Sample ID: YE82I
LIMS ID: 14-5916
Matrix: Water
Data Release Authorized:
Reported: 04/09/14

QC Report No: YE82-Joint Base Lewis McChord
Project: Log Ram

Date Sampled: 03/28/14
Date Received: 03/28/14

Instrument/Analyst: NT3/LH
Date Analyzed: 04/09/14 03:33

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	LOQ	Result	Q
74-87-3	Chloromethane	0.50	< 0.50	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.20	< 0.20	U
75-00-3	Chloroethane	0.20	< 0.20	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	**Acetone**	**5.0**	**6.3**	
75-15-0	Carbon Disulfide	0.20	< 0.20	U
75-35-4	1,1-Dichloroethene	0.20	< 0.20	U
75-34-3	1,1-Dichloroethane	0.20	< 0.20	U
156-60-5	trans-1,2-Dichloroethene	0.20	< 0.20	U
156-59-2	cis-1,2-Dichloroethene	0.20	< 0.20	U
67-66-3	Chloroform	0.20	< 0.20	U
107-06-2	1,2-Dichloroethane	0.20	< 0.20	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	0.20	< 0.20	U
56-23-5	Carbon Tetrachloride	0.20	< 0.20	U
108-05-4	Vinyl Acetate	0.20	< 0.20	U
75-27-4	Bromodichloromethane	0.20	< 0.20	U
78-87-5	1,2-Dichloropropane	0.20	< 0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	< 0.20	U
79-01-6	**Trichloroethene**	**0.20**	**2.8**	
124-48-1	Dibromochloromethane	0.20	< 0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	< 0.20	U
71-43-2	Benzene	0.20	< 0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	< 0.20	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.20	< 0.20	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.20	< 0.20	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	< 0.20	U
108-88-3	Toluene	0.20	< 0.20	U
108-90-7	Chlorobenzene	0.20	< 0.20	U
100-41-4	Ethylbenzene	0.20	< 0.20	U
100-42-5	Styrene	0.20	< 0.20	U
75-69-4	Trichlorofluoromethane	0.20	< 0.20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.20	< 0.20	U
179601-23-1	m,p-Xylene	0.40	< 0.40	U
95-47-6	o-Xylene	0.20	< 0.20	U
95-50-1	1,2-Dichlorobenzene	0.20	< 0.20	U
541-73-1	1,3-Dichlorobenzene	0.20	< 0.20	U
106-46-7	1,4-Dichlorobenzene	0.20	< 0.20	U

Lab Sample ID: YE82I
LIMS ID: 14-5916
Matrix: Water
Date Analyzed: 04/09/14 03:33

QC Report No: YE82-Joint Base Lewis McChord
Project: Log Ram

CAS Number	Analyte	LOQ	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Iodomethane	1.0	< 1.0	U
74-96-4	Bromoethane	0.20	< 0.20	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.20	< 0.20	U
74-95-3	Dibromomethane	0.20	< 0.20	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	< 0.20	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	< 0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	< 0.50	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.20	< 0.20	U
95-63-6	1,2,4-Trimethylbenzene	0.20	< 0.20	U
87-68-3	Hexachlorobutadiene	0.50	< 0.50	U
106-93-4	1,2-Dibromoethane	0.20	< 0.20	U
74-97-5	Bromochloromethane	0.20	< 0.20	U
594-20-7	2,2-Dichloropropane	0.20	< 0.20	U
142-28-9	1,3-Dichloropropane	0.20	< 0.20	U
98-82-8	Isopropylbenzene	0.20	< 0.20	U
103-65-1	n-Propylbenzene	0.20	< 0.20	U
108-86-1	Bromobenzene	0.20	< 0.20	U
95-49-8	2-Chlorotoluene	0.20	< 0.20	U
106-43-4	4-Chlorotoluene	0.20	< 0.20	U
98-06-6	tert-Butylbenzene	0.20	< 0.20	U
135-98-8	sec-Butylbenzene	0.20	< 0.20	U
99-87-6	4-Isopropyltoluene	0.20	< 0.20	U
104-51-8	n-Butylbenzene	0.20	< 0.20	U
120-82-1	1,2,4-Trichlorobenzene	0.50	< 0.50	U
91-20-3	Naphthalene	0.50	< 0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	< 0.50	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	105%
d8-Toluene	101%
Bromofluorobenzene	96.3%
d4-1,2-Dichlorobenzene	101%

2-Chloroethylvinylether is an acid labile compound and may not be recovered from an acid preserved sample.

EPA SW-846 indicates that vinyl chloride and styrene may degrade in the presence of acid preservative.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140328LC122B-1**
 SAMPLE

Lab Sample ID: YE82J
LIMS ID: 14-5917
Matrix: Water
Data Release Authorized:
Reported: 04/09/14

QC Report No: YE82-Joint Base Lewis McChord
Project: Log Ram

Date Sampled: 03/28/14
Date Received: 03/28/14

Instrument/Analyst: NT3/LH
Date Analyzed: 04/09/14 04:02

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	LOQ	Result	Q
74-87-3	Chloromethane	0.50	< 0.50	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.20	< 0.20	U
75-00-3	Chloroethane	0.20	< 0.20	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	Acetone	5.0	< 5.0	U
75-15-0	Carbon Disulfide	0.20	< 0.20	U
75-35-4	1,1-Dichloroethene	0.20	< 0.20	U
75-34-3	1,1-Dichloroethane	0.20	< 0.20	U
156-60-5	trans-1,2-Dichloroethene	0.20	< 0.20	U
156-59-2	cis-1,2-Dichloroethene	0.20	< 0.20	U
67-66-3	Chloroform	0.20	< 0.20	U
107-06-2	1,2-Dichloroethane	0.20	< 0.20	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	0.20	< 0.20	U
56-23-5	Carbon Tetrachloride	0.20	< 0.20	U
108-05-4	Vinyl Acetate	0.20	< 0.20	U
75-27-4	Bromodichloromethane	0.20	< 0.20	U
78-87-5	1,2-Dichloropropane	0.20	< 0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	< 0.20	U
79-01-6	Trichloroethene	0.20	< 0.20	U
124-48-1	Dibromochloromethane	0.20	< 0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	< 0.20	U
71-43-2	Benzene	0.20	< 0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	< 0.20	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.20	< 0.20	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.20	< 0.20	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	< 0.20	U
108-88-3	Toluene	0.20	< 0.20	U
108-90-7	Chlorobenzene	0.20	< 0.20	U
100-41-4	Ethylbenzene	0.20	< 0.20	U
100-42-5	Styrene	0.20	< 0.20	U
75-69-4	Trichlorofluoromethane	0.20	< 0.20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.20	< 0.20	U
179601-23-1	m,p-Xylene	0.40	< 0.40	U
95-47-6	o-Xylene	0.20	< 0.20	U
95-50-1	1,2-Dichlorobenzene	0.20	< 0.20	U
541-73-1	1,3-Dichlorobenzene	0.20	< 0.20	U
106-46-7	1,4-Dichlorobenzene	0.20	< 0.20	U

Lab Sample ID: YE82J
LIMS ID: 14-5917
Matrix: Water
Date Analyzed: 04/09/14 04:02

QC Report No: YE82-Joint Base Lewis McChord
Project: Log Ram

CAS Number	Analyte	LOQ	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Iodomethane	1.0	< 1.0	U
74-96-4	Bromoethane	0.20	< 0.20	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.20	< 0.20	U
74-95-3	Dibromomethane	0.20	< 0.20	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	< 0.20	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	< 0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	< 0.50	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.20	< 0.20	U
95-63-6	1,2,4-Trimethylbenzene	0.20	< 0.20	U
87-68-3	Hexachlorobutadiene	0.50	< 0.50	U
106-93-4	1,2-Dibromoethane	0.20	< 0.20	U
74-97-5	Bromochloromethane	0.20	< 0.20	U
594-20-7	2,2-Dichloropropane	0.20	< 0.20	U
142-28-9	1,3-Dichloropropane	0.20	< 0.20	U
98-82-8	Isopropylbenzene	0.20	< 0.20	U
103-65-1	n-Propylbenzene	0.20	< 0.20	U
108-86-1	Bromobenzene	0.20	< 0.20	U
95-49-8	2-Chlorotoluene	0.20	< 0.20	U
106-43-4	4-Chlorotoluene	0.20	< 0.20	U
98-06-6	tert-Butylbenzene	0.20	< 0.20	U
135-98-8	sec-Butylbenzene	0.20	< 0.20	U
99-87-6	4-Isopropyltoluene	0.20	< 0.20	U
104-51-8	n-Butylbenzene	0.20	< 0.20	U
120-82-1	1,2,4-Trichlorobenzene	0.50	< 0.50	U
91-20-3	Naphthalene	0.50	< 0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	< 0.50	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	105%
d8-Toluene	100%
Bromofluorobenzene	97.5%
d4-1,2-Dichlorobenzene	103%

2-Chloroethylvinylether is an acid labile compound and may not be recovered from an acid preserved sample.

EPA SW-846 indicates that vinyl chloride and styrene may degrade in the presence of acid preservative.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140328LC124-1**
 SAMPLE

Lab Sample ID: YE82K
LIMS ID: 14-5918
Matrix: Water
Data Release Authorized:
Reported: 04/09/14

QC Report No: YE82-Joint Base Lewis McChord
Project: Log Ram

Date Sampled: 03/28/14
Date Received: 03/28/14

Instrument/Analyst: NT3/LH
Date Analyzed: 04/09/14 04:30

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	LOQ	Result	Q
74-87-3	Chloromethane	0.50	< 0.50	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.20	< 0.20	U
75-00-3	Chloroethane	0.20	< 0.20	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	Acetone	5.0	< 5.0	U
75-15-0	Carbon Disulfide	0.20	< 0.20	U
75-35-4	1,1-Dichloroethene	0.20	< 0.20	U
75-34-3	1,1-Dichloroethane	0.20	< 0.20	U
156-60-5	trans-1,2-Dichloroethene	0.20	< 0.20	U
156-59-2	cis-1,2-Dichloroethene	0.20	< 0.20	U
67-66-3	Chloroform	0.20	< 0.20	U
107-06-2	1,2-Dichloroethane	0.20	< 0.20	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	0.20	< 0.20	U
56-23-5	Carbon Tetrachloride	0.20	< 0.20	U
108-05-4	Vinyl Acetate	0.20	< 0.20	U
75-27-4	Bromodichloromethane	0.20	< 0.20	U
78-87-5	1,2-Dichloropropane	0.20	< 0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	< 0.20	U
79-01-6	**Trichloroethene**	**0.20**	**4.8**	
124-48-1	Dibromochloromethane	0.20	< 0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	< 0.20	U
71-43-2	Benzene	0.20	< 0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	< 0.20	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.20	< 0.20	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.20	< 0.20	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	< 0.20	U
108-88-3	Toluene	0.20	< 0.20	U
108-90-7	Chlorobenzene	0.20	< 0.20	U
100-41-4	Ethylbenzene	0.20	< 0.20	U
100-42-5	Styrene	0.20	< 0.20	U
75-69-4	Trichlorofluoromethane	0.20	< 0.20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.20	< 0.20	U
179601-23-1	m,p-Xylene	0.40	< 0.40	U
95-47-6	o-Xylene	0.20	< 0.20	U
95-50-1	1,2-Dichlorobenzene	0.20	< 0.20	U
541-73-1	1,3-Dichlorobenzene	0.20	< 0.20	U
106-46-7	1,4-Dichlorobenzene	0.20	< 0.20	U

Lab Sample ID: YE82K
LIMS ID: 14-5918
Matrix: Water
Date Analyzed: 04/09/14 04:30

QC Report No: YE82-Joint Base Lewis McChord
Project: Log Ram

CAS Number	Analyte	LOQ	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Iodomethane	1.0	< 1.0	U
74-96-4	Bromoethane	0.20	< 0.20	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.20	< 0.20	U
74-95-3	Dibromomethane	0.20	< 0.20	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	< 0.20	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	< 0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	< 0.50	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.20	< 0.20	U
95-63-6	1,2,4-Trimethylbenzene	0.20	< 0.20	U
87-68-3	Hexachlorobutadiene	0.50	< 0.50	U
106-93-4	1,2-Dibromoethane	0.20	< 0.20	U
74-97-5	Bromochloromethane	0.20	< 0.20	U
594-20-7	2,2-Dichloropropane	0.20	< 0.20	U
142-28-9	1,3-Dichloropropane	0.20	< 0.20	U
98-82-8	Isopropylbenzene	0.20	< 0.20	U
103-65-1	n-Propylbenzene	0.20	< 0.20	U
108-86-1	Bromobenzene	0.20	< 0.20	U
95-49-8	2-Chlorotoluene	0.20	< 0.20	U
106-43-4	4-Chlorotoluene	0.20	< 0.20	U
98-06-6	tert-Butylbenzene	0.20	< 0.20	U
135-98-8	sec-Butylbenzene	0.20	< 0.20	U
99-87-6	4-Isopropyltoluene	0.20	< 0.20	U
104-51-8	n-Butylbenzene	0.20	< 0.20	U
120-82-1	1,2,4-Trichlorobenzene	0.50	< 0.50	U
91-20-3	Naphthalene	0.50	< 0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	< 0.50	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	104%
d8-Toluene	99.0%
Bromofluorobenzene	95.3%
d4-1,2-Dichlorobenzene	101%

2-Chloroethylvinylether is an acid labile compound and may not be recovered from an acid preserved sample.

EPA SW-846 indicates that vinyl chloride and styrene may degrade in the presence of acid preservative.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140328LC126-1**
Page 1 of 2 **SAMPLE**

Lab Sample ID: YE82L
LIMS ID: 14-5919
Matrix: Water
Data Release Authorized:
Reported: 04/09/14

QC Report No: YE82-Joint Base Lewis McChord
Project: Log Ram

Date Sampled: 03/28/14
Date Received: 03/28/14

Instrument/Analyst: NT3/LH
Date Analyzed: 04/09/14 04:58

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	LOQ	Result	Q
74-87-3	Chloromethane	0.50	< 0.50	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.20	< 0.20	U
75-00-3	Chloroethane	0.20	< 0.20	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	Acetone	5.0	< 5.0	U
75-15-0	Carbon Disulfide	0.20	< 0.20	U
75-35-4	1,1-Dichloroethene	0.20	< 0.20	U
75-34-3	1,1-Dichloroethane	0.20	< 0.20	U
156-60-5	trans-1,2-Dichloroethene	0.20	< 0.20	U
156-59-2	**cis-1,2-Dichloroethene**	**0.20**	**2.0**	
67-66-3	**Chloroform**	**0.20**	**0.27**	
107-06-2	1,2-Dichloroethane	0.20	< 0.20	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	0.20	< 0.20	U
56-23-5	**Carbon Tetrachloride**	**0.20**	**0.30**	
108-05-4	Vinyl Acetate	0.20	< 0.20	U
75-27-4	Bromodichloromethane	0.20	< 0.20	U
78-87-5	1,2-Dichloropropane	0.20	< 0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	< 0.20	U
79-01-6	**Trichloroethene**	**0.20**	**12**	
124-48-1	Dibromochloromethane	0.20	< 0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	< 0.20	U
71-43-2	Benzene	0.20	< 0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	< 0.20	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.20	< 0.20	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.20	< 0.20	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	< 0.20	U
108-88-3	Toluene	0.20	< 0.20	U
108-90-7	Chlorobenzene	0.20	< 0.20	U
100-41-4	Ethylbenzene	0.20	< 0.20	U
100-42-5	Styrene	0.20	< 0.20	U
75-69-4	Trichlorofluoromethane	0.20	< 0.20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.20	< 0.20	U
179601-23-1	m,p-Xylene	0.40	< 0.40	U
95-47-6	o-Xylene	0.20	< 0.20	U
95-50-1	1,2-Dichlorobenzene	0.20	< 0.20	U
541-73-1	1,3-Dichlorobenzene	0.20	< 0.20	U
106-46-7	1,4-Dichlorobenzene	0.20	< 0.20	U

Lab Sample ID: YE82L
LIMS ID: 14-5919
Matrix: Water
Date Analyzed: 04/09/14 04:58

QC Report No: YE82-Joint Base Lewis McChord
Project: Log Ram

CAS Number	Analyte	LOQ	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Iodomethane	1.0	< 1.0	U
74-96-4	Bromoethane	0.20	< 0.20	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.20	< 0.20	U
74-95-3	Dibromomethane	0.20	< 0.20	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	< 0.20	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	< 0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	< 0.50	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.20	< 0.20	U
95-63-6	1,2,4-Trimethylbenzene	0.20	< 0.20	U
87-68-3	Hexachlorobutadiene	0.50	< 0.50	U
106-93-4	1,2-Dibromoethane	0.20	< 0.20	U
74-97-5	Bromochloromethane	0.20	< 0.20	U
594-20-7	2,2-Dichloropropane	0.20	< 0.20	U
142-28-9	1,3-Dichloropropane	0.20	< 0.20	U
98-82-8	Isopropylbenzene	0.20	< 0.20	U
103-65-1	n-Propylbenzene	0.20	< 0.20	U
108-86-1	Bromobenzene	0.20	< 0.20	U
95-49-8	2-Chlorotoluene	0.20	< 0.20	U
106-43-4	4-Chlorotoluene	0.20	< 0.20	U
98-06-6	tert-Butylbenzene	0.20	< 0.20	U
135-98-8	sec-Butylbenzene	0.20	< 0.20	U
99-87-6	4-Isopropyltoluene	0.20	< 0.20	U
104-51-8	n-Butylbenzene	0.20	< 0.20	U
120-82-1	1,2,4-Trichlorobenzene	0.50	< 0.50	U
91-20-3	Naphthalene	0.50	< 0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	< 0.50	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	101%
d8-Toluene	98.6%
Bromofluorobenzene	96.8%
d4-1,2-Dichlorobenzene	101%

2-Chloroethylvinylether is an acid labile compound and may not be recovered from an acid preserved sample.

EPA SW-846 indicates that vinyl chloride and styrene may degrade in the presence of acid preservative.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140328LC128-1**
 SAMPLE

Lab Sample ID: YE82M
LIMS ID: 14-5920
Matrix: Water
Data Release Authorized:
Reported: 04/09/14

QC Report No: YE82-Joint Base Lewis McChord
Project: Log Ram

Date Sampled: 03/28/14
Date Received: 03/28/14

Instrument/Analyst: NT3/LH
Date Analyzed: 04/09/14 05:27

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	LOQ	Result	Q
74-87-3	Chloromethane	0.50	< 0.50	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.20	< 0.20	U
75-00-3	Chloroethane	0.20	< 0.20	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	**Acetone**	**5.0**	**5.6**	
75-15-0	Carbon Disulfide	0.20	< 0.20	U
75-35-4	1,1-Dichloroethene	0.20	< 0.20	U
75-34-3	1,1-Dichloroethane	0.20	< 0.20	U
156-60-5	trans-1,2-Dichloroethene	0.20	< 0.20	U
156-59-2	**cis-1,2-Dichloroethene**	**0.20**	**0.62**	
67-66-3	Chloroform	0.20	< 0.20	U
107-06-2	1,2-Dichloroethane	0.20	< 0.20	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	0.20	< 0.20	U
56-23-5	Carbon Tetrachloride	0.20	< 0.20	U
108-05-4	Vinyl Acetate	0.20	< 0.20	U
75-27-4	Bromodichloromethane	0.20	< 0.20	U
78-87-5	1,2-Dichloropropane	0.20	< 0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	< 0.20	U
79-01-6	**Trichloroethene**	**0.20**	**18**	
124-48-1	Dibromochloromethane	0.20	< 0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	< 0.20	U
71-43-2	Benzene	0.20	< 0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	< 0.20	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.20	< 0.20	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.20	< 0.20	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	< 0.20	U
108-88-3	Toluene	0.20	< 0.20	U
108-90-7	Chlorobenzene	0.20	< 0.20	U
100-41-4	Ethylbenzene	0.20	< 0.20	U
100-42-5	Styrene	0.20	< 0.20	U
75-69-4	Trichlorofluoromethane	0.20	< 0.20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.20	< 0.20	U
179601-23-1	m,p-Xylene	0.40	< 0.40	U
95-47-6	o-Xylene	0.20	< 0.20	U
95-50-1	1,2-Dichlorobenzene	0.20	< 0.20	U
541-73-1	1,3-Dichlorobenzene	0.20	< 0.20	U
106-46-7	1,4-Dichlorobenzene	0.20	< 0.20	U

Lab Sample ID: YE82M
LIMS ID: 14-5920
Matrix: Water
Date Analyzed: 04/09/14 05:27

QC Report No: YE82-Joint Base Lewis McChord
Project: Log Ram

CAS Number	Analyte	LOQ	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Iodomethane	1.0	< 1.0	U
74-96-4	Bromoethane	0.20	< 0.20	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.20	< 0.20	U
74-95-3	Dibromomethane	0.20	< 0.20	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	< 0.20	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	< 0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	< 0.50	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.20	< 0.20	U
95-63-6	1,2,4-Trimethylbenzene	0.20	< 0.20	U
87-68-3	Hexachlorobutadiene	0.50	< 0.50	U
106-93-4	1,2-Dibromoethane	0.20	< 0.20	U
74-97-5	Bromochloromethane	0.20	< 0.20	U
594-20-7	2,2-Dichloropropane	0.20	< 0.20	U
142-28-9	1,3-Dichloropropane	0.20	< 0.20	U
98-82-8	Isopropylbenzene	0.20	< 0.20	U
103-65-1	n-Propylbenzene	0.20	< 0.20	U
108-86-1	Bromobenzene	0.20	< 0.20	U
95-49-8	2-Chlorotoluene	0.20	< 0.20	U
106-43-4	4-Chlorotoluene	0.20	< 0.20	U
98-06-6	tert-Butylbenzene	0.20	< 0.20	U
135-98-8	sec-Butylbenzene	0.20	< 0.20	U
99-87-6	4-Isopropyltoluene	0.20	< 0.20	U
104-51-8	n-Butylbenzene	0.20	< 0.20	U
120-82-1	1,2,4-Trichlorobenzene	0.50	< 0.50	U
91-20-3	Naphthalene	0.50	< 0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	< 0.50	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	106%
d8-Toluene	98.1%
Bromofluorobenzene	96.3%
d4-1,2-Dichlorobenzene	98.4%

2-Chloroethylvinylether is an acid labile compound and may not be recovered from an acid preserved sample.

EPA SW-846 indicates that vinyl chloride and styrene may degrade in the presence of acid preservative.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140328LC167-1**
 SAMPLE

Lab Sample ID: YE82N
LIMS ID: 14-5921
Matrix: Water
Data Release Authorized:
Reported: 04/09/14

QC Report No: YE82-Joint Base Lewis McChord
Project: Log Ram

Date Sampled: 03/28/14
Date Received: 03/28/14

Instrument/Analyst: NT3/LH
Date Analyzed: 04/09/14 05:55

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	LOQ	Result	Q
74-87-3	Chloromethane	0.50	< 0.50	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.20	< 0.20	U
75-00-3	Chloroethane	0.20	< 0.20	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	Acetone	5.0	< 5.0	U
75-15-0	Carbon Disulfide	0.20	< 0.20	U
75-35-4	1,1-Dichloroethene	0.20	< 0.20	U
75-34-3	1,1-Dichloroethane	0.20	< 0.20	U
156-60-5	trans-1,2-Dichloroethene	0.20	< 0.20	U
156-59-2	cis-1,2-Dichloroethene	0.20	< 0.20	U
67-66-3	Chloroform	0.20	< 0.20	U
107-06-2	1,2-Dichloroethane	0.20	< 0.20	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	0.20	< 0.20	U
56-23-5	Carbon Tetrachloride	0.20	< 0.20	U
108-05-4	Vinyl Acetate	0.20	< 0.20	U
75-27-4	Bromodichloromethane	0.20	< 0.20	U
78-87-5	1,2-Dichloropropane	0.20	< 0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	< 0.20	U
79-01-6	Trichloroethene	0.20	< 0.20	U
124-48-1	Dibromochloromethane	0.20	< 0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	< 0.20	U
71-43-2	Benzene	0.20	< 0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	< 0.20	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.20	< 0.20	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.20	< 0.20	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	< 0.20	U
108-88-3	Toluene	0.20	< 0.20	U
108-90-7	Chlorobenzene	0.20	< 0.20	U
100-41-4	Ethylbenzene	0.20	< 0.20	U
100-42-5	Styrene	0.20	< 0.20	U
75-69-4	Trichlorofluoromethane	0.20	< 0.20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.20	< 0.20	U
179601-23-1	m,p-Xylene	0.40	< 0.40	U
95-47-6	o-Xylene	0.20	< 0.20	U
95-50-1	1,2-Dichlorobenzene	0.20	< 0.20	U
541-73-1	1,3-Dichlorobenzene	0.20	< 0.20	U
106-46-7	1,4-Dichlorobenzene	0.20	< 0.20	U

Lab Sample ID: YE82N
LIMS ID: 14-5921
Matrix: Water
Date Analyzed: 04/09/14 05:55

QC Report No: YE82-Joint Base Lewis McChord
Project: Log Ram

CAS Number	Analyte	LOQ	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Iodomethane	1.0	< 1.0	U
74-96-4	Bromoethane	0.20	< 0.20	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.20	< 0.20	U
74-95-3	Dibromomethane	0.20	< 0.20	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	< 0.20	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	< 0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	< 0.50	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.20	< 0.20	U
95-63-6	1,2,4-Trimethylbenzene	0.20	< 0.20	U
87-68-3	Hexachlorobutadiene	0.50	< 0.50	U
106-93-4	1,2-Dibromoethane	0.20	< 0.20	U
74-97-5	Bromochloromethane	0.20	< 0.20	U
594-20-7	2,2-Dichloropropane	0.20	< 0.20	U
142-28-9	1,3-Dichloropropane	0.20	< 0.20	U
98-82-8	Isopropylbenzene	0.20	< 0.20	U
103-65-1	n-Propylbenzene	0.20	< 0.20	U
108-86-1	Bromobenzene	0.20	< 0.20	U
95-49-8	2-Chlorotoluene	0.20	< 0.20	U
106-43-4	4-Chlorotoluene	0.20	< 0.20	U
98-06-6	tert-Butylbenzene	0.20	< 0.20	U
135-98-8	sec-Butylbenzene	0.20	< 0.20	U
99-87-6	4-Isopropyltoluene	0.20	< 0.20	U
104-51-8	n-Butylbenzene	0.20	< 0.20	U
120-82-1	1,2,4-Trichlorobenzene	0.50	< 0.50	U
91-20-3	Naphthalene	0.50	< 0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	< 0.50	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	106%
d8-Toluene	102%
Bromofluorobenzene	96.5%
d4-1,2-Dichlorobenzene	102%

2-Chloroethylvinylether is an acid labile compound and may not be recovered from an acid preserved sample.

EPA SW-846 indicates that vinyl chloride and styrene may degrade in the presence of acid preservative.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140328LC219-1**
 SAMPLE

Lab Sample ID: YE82O
LIMS ID: 14-5922
Matrix: Water
Data Release Authorized:
Reported: 04/09/14

QC Report No: YE82-Joint Base Lewis McChord
Project: Log Ram
Date Sampled: 03/28/14
Date Received: 03/28/14

Instrument/Analyst: NT3/LH
Date Analyzed: 04/09/14 06:23

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	LOQ	Result	Q
74-87-3	Chloromethane	0.50	< 0.50	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.20	< 0.20	U
75-00-3	Chloroethane	0.20	< 0.20	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	**Acetone**	**5.0**	**7.0**	
75-15-0	Carbon Disulfide	0.20	< 0.20	U
75-35-4	**1,1-Dichloroethene**	**0.20**	**0.30**	
75-34-3	1,1-Dichloroethane	0.20	< 0.20	U
156-60-5	trans-1,2-Dichloroethene	0.20	< 0.20	U
156-59-2	**cis-1,2-Dichloroethene**	**0.20**	**3.1**	
67-66-3	**Chloroform**	**0.20**	**0.35**	
107-06-2	1,2-Dichloroethane	0.20	< 0.20	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	**1,1,1-Trichloroethane**	**0.20**	**1.5**	
56-23-5	**Carbon Tetrachloride**	**0.20**	**0.20**	
108-05-4	Vinyl Acetate	0.20	< 0.20	U
75-27-4	Bromodichloromethane	0.20	< 0.20	U
78-87-5	1,2-Dichloropropane	0.20	< 0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	< 0.20	U
79-01-6	**Trichloroethene**	**0.20**	**41**	
124-48-1	Dibromochloromethane	0.20	< 0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	< 0.20	U
71-43-2	Benzene	0.20	< 0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	< 0.20	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.20	< 0.20	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.20	< 0.20	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	< 0.20	U
108-88-3	Toluene	0.20	< 0.20	U
108-90-7	Chlorobenzene	0.20	< 0.20	U
100-41-4	Ethylbenzene	0.20	< 0.20	U
100-42-5	Styrene	0.20	< 0.20	U
75-69-4	Trichlorofluoromethane	0.20	< 0.20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.20	< 0.20	U
179601-23-1	m,p-Xylene	0.40	< 0.40	U
95-47-6	o-Xylene	0.20	< 0.20	U
95-50-1	1,2-Dichlorobenzene	0.20	< 0.20	U
541-73-1	1,3-Dichlorobenzene	0.20	< 0.20	U
106-46-7	1,4-Dichlorobenzene	0.20	< 0.20	U

Lab Sample ID: YE82O
LIMS ID: 14-5922
Matrix: Water
Date Analyzed: 04/09/14 06:23

QC Report No: YE82-Joint Base Lewis McChord
Project: Log Ram

CAS Number	Analyte	LOQ	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Iodomethane	1.0	< 1.0	U
74-96-4	Bromoethane	0.20	< 0.20	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.20	< 0.20	U
74-95-3	Dibromomethane	0.20	< 0.20	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	< 0.20	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	< 0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	< 0.50	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.20	< 0.20	U
95-63-6	1,2,4-Trimethylbenzene	0.20	< 0.20	U
87-68-3	Hexachlorobutadiene	0.50	< 0.50	U
106-93-4	1,2-Dibromoethane	0.20	< 0.20	U
74-97-5	Bromochloromethane	0.20	< 0.20	U
594-20-7	2,2-Dichloropropane	0.20	< 0.20	U
142-28-9	1,3-Dichloropropane	0.20	< 0.20	U
98-82-8	Isopropylbenzene	0.20	< 0.20	U
103-65-1	n-Propylbenzene	0.20	< 0.20	U
108-86-1	Bromobenzene	0.20	< 0.20	U
95-49-8	2-Chlorotoluene	0.20	< 0.20	U
106-43-4	4-Chlorotoluene	0.20	< 0.20	U
98-06-6	tert-Butylbenzene	0.20	< 0.20	U
135-98-8	sec-Butylbenzene	0.20	< 0.20	U
99-87-6	4-Isopropyltoluene	0.20	< 0.20	U
104-51-8	n-Butylbenzene	0.20	< 0.20	U
120-82-1	1,2,4-Trichlorobenzene	0.50	< 0.50	U
91-20-3	Naphthalene	0.50	< 0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	< 0.50	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	106%
d8-Toluene	96.9%
Bromofluorobenzene	96.7%
d4-1,2-Dichlorobenzene	99.2%

2-Chloroethylvinylether is an acid labile compound and may not be recovered from an acid preserved sample.

EPA SW-846 indicates that vinyl chloride and styrene may degrade in the presence of acid preservative.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140328T04-1**
 SAMPLE

Lab Sample ID: YE82P
LIMS ID: 14-5923
Matrix: Water
Data Release Authorized:
Reported: 04/09/14

QC Report No: YE82-Joint Base Lewis McChord
Project: Log Ram

Date Sampled: 03/28/14
Date Received: 03/28/14

Instrument/Analyst: NT3/LH
Date Analyzed: 04/09/14 06:52

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	LOQ	Result	Q
74-87-3	Chloromethane	0.50	< 0.50	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.20	< 0.20	U
75-00-3	Chloroethane	0.20	< 0.20	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	Acetone	5.0	< 5.0	U
75-15-0	Carbon Disulfide	0.20	< 0.20	U
75-35-4	1,1-Dichloroethene	0.20	< 0.20	U
75-34-3	1,1-Dichloroethane	0.20	< 0.20	U
156-60-5	trans-1,2-Dichloroethene	0.20	< 0.20	U
156-59-2	**cis-1,2-Dichloroethene**	**0.20**	**0.22**	
67-66-3	Chloroform	0.20	< 0.20	U
107-06-2	1,2-Dichloroethane	0.20	< 0.20	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	0.20	< 0.20	U
56-23-5	Carbon Tetrachloride	0.20	< 0.20	U
108-05-4	Vinyl Acetate	0.20	< 0.20	U
75-27-4	Bromodichloromethane	0.20	< 0.20	U
78-87-5	1,2-Dichloropropane	0.20	< 0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	< 0.20	U
79-01-6	**Trichloroethene**	**0.20**	**8.1**	
124-48-1	Dibromochloromethane	0.20	< 0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	< 0.20	U
71-43-2	Benzene	0.20	< 0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	< 0.20	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.20	< 0.20	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.20	< 0.20	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	< 0.20	U
108-88-3	Toluene	0.20	< 0.20	U
108-90-7	Chlorobenzene	0.20	< 0.20	U
100-41-4	Ethylbenzene	0.20	< 0.20	U
100-42-5	Styrene	0.20	< 0.20	U
75-69-4	Trichlorofluoromethane	0.20	< 0.20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.20	< 0.20	U
179601-23-1	m,p-Xylene	0.40	< 0.40	U
95-47-6	o-Xylene	0.20	< 0.20	U
95-50-1	1,2-Dichlorobenzene	0.20	< 0.20	U
541-73-1	1,3-Dichlorobenzene	0.20	< 0.20	U
106-46-7	1,4-Dichlorobenzene	0.20	< 0.20	U

Lab Sample ID: YE82P
LIMS ID: 14-5923
Matrix: Water
Date Analyzed: 04/09/14 06:52

QC Report No: YE82-Joint Base Lewis McChord
Project: Log Ram

CAS Number	Analyte	LOQ	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Iodomethane	1.0	< 1.0	U
74-96-4	Bromoethane	0.20	< 0.20	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.20	< 0.20	U
74-95-3	Dibromomethane	0.20	< 0.20	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	< 0.20	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	< 0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	< 0.50	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.20	< 0.20	U
95-63-6	1,2,4-Trimethylbenzene	0.20	< 0.20	U
87-68-3	Hexachlorobutadiene	0.50	< 0.50	U
106-93-4	1,2-Dibromoethane	0.20	< 0.20	U
74-97-5	Bromochloromethane	0.20	< 0.20	U
594-20-7	2,2-Dichloropropane	0.20	< 0.20	U
142-28-9	1,3-Dichloropropane	0.20	< 0.20	U
98-82-8	Isopropylbenzene	0.20	< 0.20	U
103-65-1	n-Propylbenzene	0.20	< 0.20	U
108-86-1	Bromobenzene	0.20	< 0.20	U
95-49-8	2-Chlorotoluene	0.20	< 0.20	U
106-43-4	4-Chlorotoluene	0.20	< 0.20	U
98-06-6	tert-Butylbenzene	0.20	< 0.20	U
135-98-8	sec-Butylbenzene	0.20	< 0.20	U
99-87-6	4-Isopropyltoluene	0.20	< 0.20	U
104-51-8	n-Butylbenzene	0.20	< 0.20	U
120-82-1	1,2,4-Trichlorobenzene	0.50	< 0.50	U
91-20-3	Naphthalene	0.50	< 0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	< 0.50	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	105%
d8-Toluene	100%
Bromofluorobenzene	96.7%
d4-1,2-Dichlorobenzene	99.0%

2-Chloroethylvinylether is an acid labile compound and may not be recovered from an acid preserved sample.

EPA SW-846 indicates that vinyl chloride and styrene may degrade in the presence of acid preservative.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140328TB2-1**
Page 1 of 2 **SAMPLE**

Lab Sample ID: YE82Q
LIMS ID: 14-5924
Matrix: Water
Data Release Authorized:
Reported: 04/09/14

QC Report No: YE82-Joint Base Lewis McChord
Project: Log Ram

Date Sampled: 03/28/14
Date Received: 03/28/14

Instrument/Analyst: NT3/LH
Date Analyzed: 04/08/14 23:19

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	LOQ	Result	Q
74-87-3	Chloromethane	0.50	< 0.50	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.20	< 0.20	U
75-00-3	Chloroethane	0.20	< 0.20	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	Acetone	5.0	< 5.0	U
75-15-0	Carbon Disulfide	0.20	< 0.20	U
75-35-4	1,1-Dichloroethene	0.20	< 0.20	U
75-34-3	1,1-Dichloroethane	0.20	< 0.20	U
156-60-5	trans-1,2-Dichloroethene	0.20	< 0.20	U
156-59-2	cis-1,2-Dichloroethene	0.20	< 0.20	U
67-66-3	Chloroform	0.20	< 0.20	U
107-06-2	1,2-Dichloroethane	0.20	< 0.20	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	0.20	< 0.20	U
56-23-5	Carbon Tetrachloride	0.20	< 0.20	U
108-05-4	Vinyl Acetate	0.20	< 0.20	U
75-27-4	Bromodichloromethane	0.20	< 0.20	U
78-87-5	1,2-Dichloropropane	0.20	< 0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	< 0.20	U
79-01-6	Trichloroethene	0.20	< 0.20	U
124-48-1	Dibromochloromethane	0.20	< 0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	< 0.20	U
71-43-2	Benzene	0.20	< 0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	< 0.20	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.20	< 0.20	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.20	< 0.20	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	< 0.20	U
108-88-3	Toluene	0.20	< 0.20	U
108-90-7	Chlorobenzene	0.20	< 0.20	U
100-41-4	Ethylbenzene	0.20	< 0.20	U
100-42-5	Styrene	0.20	< 0.20	U
75-69-4	Trichlorofluoromethane	0.20	< 0.20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.20	< 0.20	U
179601-23-1	m,p-Xylene	0.40	< 0.40	U
95-47-6	o-Xylene	0.20	< 0.20	U
95-50-1	1,2-Dichlorobenzene	0.20	< 0.20	U
541-73-1	1,3-Dichlorobenzene	0.20	< 0.20	U
106-46-7	1,4-Dichlorobenzene	0.20	< 0.20	U

Lab Sample ID: YE82Q
LIMS ID: 14-5924
Matrix: Water
Date Analyzed: 04/08/14 23:19

QC Report No: YE82-Joint Base Lewis McChord
Project: Log Ram

CAS Number	Analyte	LOQ	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Iodomethane	1.0	< 1.0	U
74-96-4	Bromoethane	0.20	< 0.20	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.20	< 0.20	U
74-95-3	Dibromomethane	0.20	< 0.20	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	< 0.20	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	< 0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	< 0.50	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.20	< 0.20	U
95-63-6	1,2,4-Trimethylbenzene	0.20	< 0.20	U
87-68-3	Hexachlorobutadiene	0.50	< 0.50	U
106-93-4	1,2-Dibromoethane	0.20	< 0.20	U
74-97-5	Bromochloromethane	0.20	< 0.20	U
594-20-7	2,2-Dichloropropane	0.20	< 0.20	U
142-28-9	1,3-Dichloropropane	0.20	< 0.20	U
98-82-8	Isopropylbenzene	0.20	< 0.20	U
103-65-1	n-Propylbenzene	0.20	< 0.20	U
108-86-1	Bromobenzene	0.20	< 0.20	U
95-49-8	2-Chlorotoluene	0.20	< 0.20	U
106-43-4	4-Chlorotoluene	0.20	< 0.20	U
98-06-6	tert-Butylbenzene	0.20	< 0.20	U
135-98-8	sec-Butylbenzene	0.20	< 0.20	U
99-87-6	4-Isopropyltoluene	0.20	< 0.20	U
104-51-8	n-Butylbenzene	0.20	< 0.20	U
120-82-1	1,2,4-Trichlorobenzene	0.50	< 0.50	U
91-20-3	Naphthalene	0.50	< 0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	< 0.50	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	102%
d8-Toluene	99.9%
Bromofluorobenzene	95.6%
d4-1,2-Dichlorobenzene	99.7%

2-Chloroethylvinylether is an acid labile compound and may not be recovered from an acid preserved sample.

EPA SW-846 indicates that vinyl chloride and styrene may degrade in the presence of acid preservative.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: MB-040814A**
 METHOD BLANK

Lab Sample ID: MB-040814A
LIMS ID: 14-5908
Matrix: Water
Data Release Authorized:
Reported: 04/09/14

QC Report No: YE82-Joint Base Lewis McChord
Project: Log Ram

Date Sampled: NA
Date Received: NA

Instrument/Analyst: NT3/LH
Date Analyzed: 04/08/14 22:51

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	LOQ	Result	Q
74-87-3	Chloromethane	0.50	< 0.50	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.20	< 0.20	U
75-00-3	Chloroethane	0.20	< 0.20	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	Acetone	5.0	< 5.0	U
75-15-0	Carbon Disulfide	0.20	< 0.20	U
75-35-4	1,1-Dichloroethene	0.20	< 0.20	U
75-34-3	1,1-Dichloroethane	0.20	< 0.20	U
156-60-5	trans-1,2-Dichloroethene	0.20	< 0.20	U
156-59-2	cis-1,2-Dichloroethene	0.20	< 0.20	U
67-66-3	Chloroform	0.20	< 0.20	U
107-06-2	1,2-Dichloroethane	0.20	< 0.20	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	0.20	< 0.20	U
56-23-5	Carbon Tetrachloride	0.20	< 0.20	U
108-05-4	Vinyl Acetate	0.20	< 0.20	U
75-27-4	Bromodichloromethane	0.20	< 0.20	U
78-87-5	1,2-Dichloropropane	0.20	< 0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	< 0.20	U
79-01-6	Trichloroethene	0.20	< 0.20	U
124-48-1	Dibromochloromethane	0.20	< 0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	< 0.20	U
71-43-2	Benzene	0.20	< 0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	< 0.20	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.20	< 0.20	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.20	< 0.20	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	< 0.20	U
108-88-3	Toluene	0.20	< 0.20	U
108-90-7	Chlorobenzene	0.20	< 0.20	U
100-41-4	Ethylbenzene	0.20	< 0.20	U
100-42-5	Styrene	0.20	< 0.20	U
75-69-4	Trichlorofluoromethane	0.20	< 0.20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.20	< 0.20	U
179601-23-1	m,p-Xylene	0.40	< 0.40	U
95-47-6	o-Xylene	0.20	< 0.20	U
95-50-1	1,2-Dichlorobenzene	0.20	< 0.20	U
541-73-1	1,3-Dichlorobenzene	0.20	< 0.20	U
106-46-7	1,4-Dichlorobenzene	0.20	< 0.20	U

Lab Sample ID: MB-040814A
LIMS ID: 14-5908
Matrix: Water
Date Analyzed: 04/08/14 22:51

QC Report No: YE82-Joint Base Lewis McChord
Project: Log Ram

CAS Number	Analyte	LOQ	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Iodomethane	1.0	< 1.0	U
74-96-4	Bromoethane	0.20	< 0.20	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.20	< 0.20	U
74-95-3	Dibromomethane	0.20	< 0.20	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	< 0.20	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	< 0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	< 0.50	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.20	< 0.20	U
95-63-6	1,2,4-Trimethylbenzene	0.20	< 0.20	U
87-68-3	Hexachlorobutadiene	0.50	< 0.50	U
106-93-4	1,2-Dibromoethane	0.20	< 0.20	U
74-97-5	Bromochloromethane	0.20	< 0.20	U
594-20-7	2,2-Dichloropropane	0.20	< 0.20	U
142-28-9	1,3-Dichloropropane	0.20	< 0.20	U
98-82-8	Isopropylbenzene	0.20	< 0.20	U
103-65-1	n-Propylbenzene	0.20	< 0.20	U
108-86-1	Bromobenzene	0.20	< 0.20	U
95-49-8	2-Chlorotoluene	0.20	< 0.20	U
106-43-4	4-Chlorotoluene	0.20	< 0.20	U
98-06-6	tert-Butylbenzene	0.20	< 0.20	U
135-98-8	sec-Butylbenzene	0.20	< 0.20	U
99-87-6	4-Isopropyltoluene	0.20	< 0.20	U
104-51-8	n-Butylbenzene	0.20	< 0.20	U
120-82-1	1,2,4-Trichlorobenzene	0.50	< 0.50	U
91-20-3	Naphthalene	0.50	< 0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	< 0.50	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	103%
d8-Toluene	101%
Bromofluorobenzene	94.6%
d4-1,2-Dichlorobenzene	101%

ANALYTICAL RESOURCES INCORPORATED

VOA SURROGATE RECOVERY SUMMARY

Matrix: Water

QC Report No: YE82-Joint Base Lewis McChord
Project: Log Ram

ARI ID	Client ID	PV	DCE	TOL	BFB	DCB	TOT OUT
MB-040814A	Method Blank	10	103%	101%	94.6%	101%	0
LCS-040814A	Lab Control	10	101%	98.5%	96.0%	100%	0
LCSD-040814A	Lab Control Dup	10	101%	100%	97.4%	98.9%	0
YE82A	LGC140327LC98D1-1	10	104%	99.4%	96.6%	99.7%	0
YE82B	LGC140327LC98D2-1	10	105%	98.4%	96.6%	98.8%	0
YE82C	LGC140327LC99D-1	10	106%	99.8%	94.9%	98.4%	0
YE82D	LGC140327LC101D1-1	10	106%	99.7%	95.7%	101%	0
YE82E	LGC140328TB1-1	10	105%	97.8%	98.4%	98.9%	0
YE82F	LGC140328SLAPE-1	10	101%	99.4%	96.8%	99.3%	0
YE82G	LGC140328SLAPI-1	10	104%	99.5%	95.4%	102%	0
YE82H	LGC140328LC14A-1	10	102%	99.7%	95.3%	102%	0
YE82I	LGC140328LC77D-1	10	105%	101%	96.3%	101%	0
YE82J	LGC140328LC122B-1	10	105%	100%	97.5%	103%	0
YE82K	LGC140328LC124-1	10	104%	99.0%	95.3%	101%	0
YE82L	LGC140328LC126-1	10	101%	98.6%	96.8%	101%	0
YE82M	LGC140328LC128-1	10	106%	98.1%	96.3%	98.4%	0
YE82N	LGC140328LC167-1	10	106%	102%	96.5%	102%	0
YE82O	LGC140328LC219-1	10	106%	96.9%	96.7%	99.2%	0
YE82P	LGC140328T04-1	10	105%	100%	96.7%	99.0%	0
YE82Q	LGC140328TB2-1	10	102%	99.9%	95.6%	99.7%	0

	LCS/MB LIMITS	QC LIMITS
SW8260C		
(DCE) = d4-1,2-Dichloroethane	(80-120)	(80-130)
(TOL) = d8-Toluene	(80-120)	(80-120)
(BFB) = Bromofluorobenzene	(80-120)	(80-120)
(DCB) = d4-1,2-Dichlorobenzene	(80-120)	(80-120)

Prep Method: SW5030B
Log Number Range: 14-5908 to 14-5924

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LCS-040814A**
 LAB CONTROL SAMPLE

Lab Sample ID: LCS-040814A QC Report No: YE82-Joint Base Lewis McChord
LIMS ID: 14-5908 Project: Log Ram
Matrix: Water
Data Release Authorized:
Reported: 04/09/14 Date Received: NA

Date Sampled: NA

Instrument/Analyst LCS: NT3/LH Sample Amount LCS: 10.0 mL
LCSD: NT3/LH LCSD: 10.0 mL
Date Analyzed LCS: 04/08/14 21:54 Purge Volume LCS: 10.0 mL
LCSD: 04/08/14 22:23 LCSD: 10.0 mL

Analyte	LCS	Spike Added-LCS	LCS Recovery	LCSD	Spike Added-LCSD	LCSD Recovery	RPD
Chloromethane	9.95	10.0	99.5%	9.60	10.0	96.0%	3.6%
Bromomethane	9.26	10.0	92.6%	8.66	10.0	86.6%	6.7%
Vinyl Chloride	9.97	10.0	99.7%	9.22	10.0	92.2%	7.8%
Chloroethane	9.65	10.0	96.5%	9.80	10.0	98.0%	1.5%
Methylene Chloride	10.3	10.0	103%	10.3	10.0	103%	0.0%
Acetone	43.4	50.0	86.8%	38.0	50.0	76.0%	13.3%
Carbon Disulfide	10.3	10.0	103%	9.93	10.0	99.3%	3.7%
1,1-Dichloroethene	9.99	10.0	99.9%	9.84	10.0	98.4%	1.5%
1,1-Dichloroethane	10.2	10.0	102%	9.85	10.0	98.5%	3.5%
trans-1,2-Dichloroethene	9.67	10.0	96.7%	9.64	10.0	96.4%	0.3%
cis-1,2-Dichloroethene	10.2	10.0	102%	9.87	10.0	98.7%	3.3%
Chloroform	9.68	10.0	96.8%	9.47	10.0	94.7%	2.2%
1,2-Dichloroethane	10.3	10.0	103%	10.2	10.0	102%	1.0%
2-Butanone	48.7	50.0	97.4%	47.4	50.0	94.8%	2.7%
1,1,1-Trichloroethane	10.3	10.0	103%	9.95	10.0	99.5%	3.5%
Carbon Tetrachloride	10.2	10.0	102%	10.1	10.0	101%	1.0%
Vinyl Acetate	10.5	10.0	105%	10.1	10.0	101%	3.9%
Bromodichloromethane	10.4	10.0	104%	10.2	10.0	102%	1.9%
1,2-Dichloropropane	9.94	10.0	99.4%	9.80	10.0	98.0%	1.4%
cis-1,3-Dichloropropene	10.3	10.0	103%	10.0	10.0	100%	3.0%
Trichloroethene	9.97	10.0	99.7%	10.0	10.0	100%	0.3%
Dibromochloromethane	10.6	10.0	106%	10.5	10.0	105%	0.9%
1,1,2-Trichloroethane	9.99	10.0	99.9%	10.1	10.0	101%	1.1%
Benzene	10.2	10.0	102%	10.1	10.0	101%	1.0%
trans-1,3-Dichloropropene	10.2	10.0	102%	10.0	10.0	100%	2.0%
2-Chloroethylvinylether	10.8	10.0	108%	10.4	10.0	104%	3.8%
Bromoform	11.1	10.0	111%	11.1	10.0	111%	0.0%
4-Methyl-2-Pentanone (MIBK)	57.0	50.0	114%	56.5	50.0	113%	0.9%
2-Hexanone	45.2	50.0	90.4%	42.8	50.0	85.6%	5.5%
Tetrachloroethene	10.1	10.0	101%	9.72	10.0	97.2%	3.8%
1,1,2,2-Tetrachloroethane	10.6	10.0	106%	10.4	10.0	104%	1.9%
Toluene	10.0	10.0	100%	10.1	10.0	101%	1.0%
Chlorobenzene	10.4	10.0	104%	10.2	10.0	102%	1.9%
Ethylbenzene	10.7	10.0	107%	10.4	10.0	104%	2.8%
Styrene	10.9	10.0	109%	10.7	10.0	107%	1.9%
Trichlorofluoromethane	10.4	10.0	104%	9.87	10.0	98.7%	5.2%
1,1,2-Trichloro-1,2,2-trifluoroetha	10.3	10.0	103%	9.59	10.0	95.9%	7.1%
m,p-Xylene	21.4	20.0	107%	20.8	20.0	104%	2.8%

Lab Sample ID: LCS-040814A QC Report No: YE82-Joint Base Lewis McChord
LIMS ID: 14-5908 Project: Log Ram
Matrix: Water

Analyte	LCS	Spike Added-LCS	LCS Recovery	LCSD	Spike Added-LCSD	LCSD Recovery	RPD
o-Xylene	10.5	10.0	105%	10.4	10.0	104%	1.0%
1,2-Dichlorobenzene	10.5	10.0	105%	10.3	10.0	103%	1.9%
1,3-Dichlorobenzene	10.6	10.0	106%	10.3	10.0	103%	2.9%
1,4-Dichlorobenzene	10.3	10.0	103%	10.1	10.0	101%	2.0%
Acrolein	45.6	50.0	91.2%	43.0	50.0	86.0%	5.9%
Iodomethane	9.27	10.0	92.7%	8.57	10.0	85.7%	7.8%
Bromoethane	9.08	10.0	90.8%	9.74	10.0	97.4%	7.0%
Acrylonitrile	10.3	10.0	103%	9.26	10.0	92.6%	10.6%
1,1-Dichloropropene	10.1	10.0	101%	9.83	10.0	98.3%	2.7%
Dibromomethane	10.2	10.0	102%	10.1	10.0	101%	1.0%
1,1,1,2-Tetrachloroethane	10.3	10.0	103%	10.2	10.0	102%	1.0%
1,2-Dibromo-3-chloropropane	11.8	10.0	118%	11.6	10.0	116%	1.7%
1,2,3-Trichloropropane	10.9	10.0	109%	10.8	10.0	108%	0.9%
trans-1,4-Dichloro-2-butene	11.1	10.0	111%	11.3	10.0	113%	1.8%
1,3,5-Trimethylbenzene	10.5	10.0	105%	10.1	10.0	101%	3.9%
1,2,4-Trimethylbenzene	9.86	10.0	98.6%	9.20	10.0	92.0%	6.9%
Hexachlorobutadiene	9.79	10.0	97.9%	8.60	10.0	86.0%	12.9%
1,2-Dibromoethane	10.4	10.0	104%	10.1	10.0	101%	2.9%
Bromochloromethane	9.84	10.0	98.4%	9.70	10.0	97.0%	1.4%
2,2-Dichloropropane	9.27	10.0	92.7%	8.77	10.0	87.7%	5.5%
1,3-Dichloropropane	10.3	10.0	103%	9.98	10.0	99.8%	3.2%
Isopropylbenzene	10.9	10.0	109%	10.9	10.0	109%	0.0%
n-Propylbenzene	10.8	10.0	108%	10.6	10.0	106%	1.9%
Bromobenzene	10.3	10.0	103%	10.2	10.0	102%	1.0%
2-Chlorotoluene	10.7	10.0	107%	10.5	10.0	105%	1.9%
4-Chlorotoluene	10.6	10.0	106%	10.6	10.0	106%	0.0%
tert-Butylbenzene	10.7	10.0	107%	10.6	10.0	106%	0.9%
sec-Butylbenzene	10.2	10.0	102%	9.72	10.0	97.2%	4.8%
4-Isopropyltoluene	9.36	10.0	93.6%	8.76	10.0	87.6%	6.6%
n-Butylbenzene	8.65 Q	10.0	86.5%	7.55 Q	10.0	75.5%	13.6%
1,2,4-Trichlorobenzene	11.2	10.0	112%	10.2	10.0	102%	9.3%
Naphthalene	10.2	10.0	102%	10.3	10.0	103%	1.0%
1,2,3-Trichlorobenzene	9.47 Q	10.0	94.7%	8.62 Q	10.0	86.2%	9.4%

Reported in µg/L (ppb)

RPD calculated using sample concentrations per SW846.

Volatile Surrogate Recovery

	LCS	LCSD
d4-1,2-Dichloroethane	101%	101%
d8-Toluene	98.5%	100%
Bromofluorobenzene	96.0%	97.4%
d4-1,2-Dichlorobenzene	100%	98.9%

Analytical Resources, Incorporated
Analytical Chemists and Consultants

April 8, 2014

Thomas Lynott
Department of the Army
Directorate of Public Works
Attn Environmental Division (T. Lynott)
2012 Liggett Ave Box 339500 MS 17
Joint Base Lewis-McChord, Washington 98433-9500
Official Business

RE: Client Project: LogRam
ARI Job No.: YE96

Dear Mr. Lynott:

Please find enclosed the original Chain-of-Custody record (COC), sample receipt documentation, and the final data for the project referenced above. Analytical Resources, Inc. (ARI) accepted three water samples on March 31, 2014. For further details regarding sample receipt please refer to the enclosed Cooler Receipt Form.

The samples were analyzed for VOCs, as requested on the COCs.

The CCAL is out of control low for all associated FORM III "Q" flagged analyte. All associated samples that contain analyte have been flagged with a "Q" qualifier.

The LCSD is out of control low for N-Butylbenzene. The LCS is in control and no further corrective action was taken.

An electronic copy of this report and all supporting raw data will remain on file with ARI. Should you have any questions or problems, please feel free to contact me at your convenience.

Respectfully,
ANALYTICAL RESOURCES, INC.

Kelly Bottem
Client Services Manager
(206) 695-6211
kellyb@arilabs.com
www.arilabs.com

eFile: YE96

4611 South 134th Place, Suite 100 • Tukwila WA 98168 • **206-695-6200** • **206-695-6201** fax

Chain of Custody Record & Laboratory Analysis Request

ARI Assigned Number: YE96	Turn-around Requested:	Page: 1 of 1	
ARI Client Company: JOINT BASE LEWIS-MCCHORD PUBLIC WORKS	Phone: 253-966-1802	Date: 27MAR14	Ice Present? Y
Client Contact: TOM J LYNOTT		No. of Coolers: 1	Cooler Temps: 8.3
Client Project Name: LOG RAM			
Client Project #:	Samplers: J. BECKER, T. LYNOTT		

Analytical Resources, Incorporated
Analytical Chemists and Consultants
4611 South 134th Place, Suite 100
Tukwila, WA 98168
206-695-6200 206-695-6201 (fax)
www.arilabs.com

Sample ID	Date	Time	Matrix	No Containers	Analysis Requested: 10064A	Notes/Comments
LGC140327LC101D2-1	27MAR14	0945	WATER	2	X	TOTAL VOC'S
LGC140327LC111B-1	27MAR14	1320	WATER	2	X	
LGC140327LC116B-1	27MAR14	1335	WATER	2	X	

Comments/Special Instructions	Relinquished by: (Signature)	Received by: (Signature)	Relinquished by. (Signature)	Received by (Signature)
	Printed Name: JEREMY BECKER	Printed Name: A. VOIGTJOHN	Printed Name.	Printed Name
	Company: VERSAR, INC.	Company: ARI	Company.	Company.
	Date & Time: 31MAR14 0958	Date & Time: 3/31/14 958	Date & Time.	Date & Time

Limits of Liability: *ARI will perform all requested services in accordance with appropriate methodology following ARI Standard Operating Procedures and the ARI Quality Assurance Program. This program meets standards for the industry. The total liability of ARI, its officers, agents, employees, or successors, arising out of or in connection with the requested services, shall not exceed the Invoiced amount for said services. The acceptance by the client of a proposal for services by ARI release ARI from any liability in excess thereof, not withstanding any provision to the contrary in any contract, purchase order or co-signed agreement between ARI and the Client.*

Sample Retention Policy: All samples submitted to ARI will be appropriately discarded no sooner than 90 days after receipt or 60 days after submission of hardcopy data, whichever is longer, unless alternate retention schedules have been established by work-order or contract.

YE96 : 09062

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Cooler Temperature Compliance Form

YE96

Cooler#: 1	Temperature(°C): 8.3	
Sample ID	**Bottle Count**	**Bottle Type**
Samples received above 6°C.		

Cooler#:	Temperature(°C):	
Sample ID	**Bottle Count**	**Bottle Type**

Cooler#:	Temperature(°C):	
Sample ID	**Bottle Count**	**Bottle Type**

Cooler#:	Temperature(°C):	
Sample ID	**Bottle Count**	**Bottle Type**

Completed by: AV Date: 3/31/14 Time: 1420

Sample ID Cross Reference Report

ANALYTICAL RESOURCES INCORPORATED

ARI Job No: YE96
Client: Joint Base Lewis McChord
Project Event: N/A
Project Name: Log RAM

	Sample ID	ARI Lab ID	ARI LIMS ID	Matrix	Sample Date/Time	VTSR
1.	LGC140327LC101D2-1	YE96A	14-6062	Water	03/27/14 09:45	03/31/14 09:58
2.	LGC140327LC111B-1	YE96B	14-6063	Water	03/27/14 13:20	03/31/14 09:58
3.	LGC140327LC116B-1	YE96C	14-6064	Water	03/27/14 13:35	03/31/14 09:58

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Cooler Receipt Form

ARI Client: 3M Project Name: Log Ram

COC No(s): _____ (NA) Delivered by: Fed-Ex UPS Courier Hand Delivered Other: _____

Assigned ARI Job No: YE96 Tracking No: _____ (NA)

Preliminary Examination Phase:

Were intact, properly signed and dated custody seals attached to the outside of to cooler?	YES	(NO)
Were custody papers included with the cooler?	(YES)	NO
Were custody papers properly filled out (ink, signed, etc.)	(YES)	NO

Temperature of Cooler(s) (°C) (recommended 2 0-6 0 °C for chemistry): 8.3

Time: 0958

If cooler temperature is out of compliance fill out form 00070F Temp Gun ID#: 12241233

Cooler Accepted by: AV Date: 3/31/14 Time: 0958

Complete custody forms and attach all shipping documents

Log-In Phase:

Was a temperature blank included in the cooler?			(NO)
What kind of packing material was used?	Bubble Wrap Wet Ice (Gel Packs) Baggies (Foam Block) Paper Other:		
Was sufficient ice used (if appropriate)?	NA	YES	(NO)
Were all bottles sealed in individual plastic bags?		YES	(NO)
Did all bottles arrive in good condition (unbroken)?		(YES)	NO
Were all bottle labels complete and legible?		(YES)	NO
Did the number of containers listed on COC match with the number of containers received?		(YES)	NO
Did all bottle labels and tags agree with custody papers?		(YES)	NO
Were all bottles used correct for the requested analyses?		(YES)	NO
Do any of the analyses (bottles) require preservation? (attach preservation sheet, excluding VOCs).	(NA)	YES	NO
Were all VOC vials free of air bubbles?	NA	(YES)	NO
Was sufficient amount of sample sent in each bottle?		(YES)	NO
Date VOC Trip Blank was made at ARI	(NA)		

Was Sample Split by ARI: (NA) YES Date/Time: _____ Equipment: _____ Split by: _____

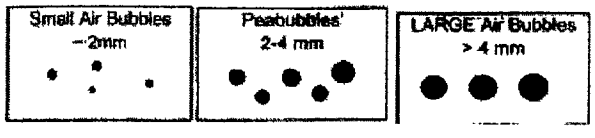
Samples Logged by: AV Date: 3/31/14 Time: 1105

***** Notify Project Manager of discrepancies or concerns *****

Sample ID on Bottle	Sample ID on COC	Sample ID on Bottle	Sample ID on COC

Additional Notes, Discrepancies, & Resolutions:

By Date:



Small → "sm" (< 2 mm)
Peabubbles → "pb" (2 to < 4 mm)
Large → "lg" (4 to < 6 mm)
Headspace → "hs" (> 6 mm)

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140327LC101D2-1**
 SAMPLE

Lab Sample ID: YE96A
LIMS ID: 14-6062
Matrix: Water
Data Release Authorized:
Reported: 04/09/14

QC Report No: YE96-Joint Base Lewis McChord
Project: Log RAM

Date Sampled: 03/27/14
Date Received: 03/31/14

Instrument/Analyst: NT3/LH
Date Analyzed: 04/09/14 07:20

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	LOQ	Result	Q
74-87-3	Chloromethane	0.50	< 0.50	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.20	< 0.20	U
75-00-3	Chloroethane	0.20	< 0.20	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	Acetone	5.0	< 5.0	U
75-15-0	Carbon Disulfide	0.20	< 0.20	U
75-35-4	1,1-Dichloroethene	0.20	< 0.20	U
75-34-3	1,1-Dichloroethane	0.20	< 0.20	U
156-60-5	trans-1,2-Dichloroethene	0.20	< 0.20	U
156-59-2	**cis-1,2-Dichloroethene**	**0.20**	**0.68**	
67-66-3	Chloroform	0.20	< 0.20	U
107-06-2	1,2-Dichloroethane	0.20	< 0.20	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	0.20	< 0.20	U
56-23-5	Carbon Tetrachloride	0.20	< 0.20	U
108-05-4	Vinyl Acetate	0.20	< 0.20	U
75-27-4	Bromodichloromethane	0.20	< 0.20	U
78-87-5	1,2-Dichloropropane	0.20	< 0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	< 0.20	U
79-01-6	**Trichloroethene**	**0.20**	**11**	
124-48-1	Dibromochloromethane	0.20	< 0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	< 0.20	U
71-43-2	Benzene	0.20	< 0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	< 0.20	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.20	< 0.20	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.20	< 0.20	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	< 0.20	U
108-88-3	Toluene	0.20	< 0.20	U
108-90-7	Chlorobenzene	0.20	< 0.20	U
100-41-4	Ethylbenzene	0.20	< 0.20	U
100-42-5	Styrene	0.20	< 0.20	U
75-69-4	Trichlorofluoromethane	0.20	< 0.20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.20	< 0.20	U
179601-23-1	m,p-Xylene	0.40	< 0.40	U
95-47-6	o-Xylene	0.20	< 0.20	U
95-50-1	1,2-Dichlorobenzene	0.20	< 0.20	U
541-73-1	1,3-Dichlorobenzene	0.20	< 0.20	U
106-46-7	1,4-Dichlorobenzene	0.20	< 0.20	U

Lab Sample ID: YE96A
LIMS ID: 14-6062
Matrix: Water
Date Analyzed: 04/09/14 07:20

QC Report No: YE96-Joint Base Lewis McChord
Project: Log RAM

CAS Number	Analyte	LOQ	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Iodomethane	1.0	< 1.0	U
74-96-4	Bromoethane	0.20	< 0.20	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.20	< 0.20	U
74-95-3	Dibromomethane	0.20	< 0.20	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	< 0.20	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	< 0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	< 0.50	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.20	< 0.20	U
95-63-6	1,2,4-Trimethylbenzene	0.20	< 0.20	U
87-68-3	Hexachlorobutadiene	0.50	< 0.50	U
106-93-4	1,2-Dibromoethane	0.20	< 0.20	U
74-97-5	Bromochloromethane	0.20	< 0.20	U
594-20-7	2,2-Dichloropropane	0.20	< 0.20	U
142-28-9	1,3-Dichloropropane	0.20	< 0.20	U
98-82-8	Isopropylbenzene	0.20	< 0.20	U
103-65-1	n-Propylbenzene	0.20	< 0.20	U
108-86-1	Bromobenzene	0.20	< 0.20	U
95-49-8	2-Chlorotoluene	0.20	< 0.20	U
106-43-4	4-Chlorotoluene	0.20	< 0.20	U
98-06-6	tert-Butylbenzene	0.20	< 0.20	U
135-98-8	sec-Butylbenzene	0.20	< 0.20	U
99-87-6	4-Isopropyltoluene	0.20	< 0.20	U
104-51-8	n-Butylbenzene	0.20	< 0.20	U
120-82-1	1,2,4-Trichlorobenzene	0.50	< 0.50	U
91-20-3	Naphthalene	0.50	< 0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	< 0.50	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	104%
d8-Toluene	99.3%
Bromofluorobenzene	97.0%
d4-1,2-Dichlorobenzene	100%

2-Chloroethylvinylether is an acid labile compound and may not be recovered from an acid preserved sample.

EPA SW-846 indicates that vinyl chloride and styrene may degrade in the presence of acid preservative.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140327LC111B-1**
 SAMPLE

Lab Sample ID: YE96B
LIMS ID: 14-6063
Matrix: Water
Data Release Authorized:
Reported: 04/09/14

QC Report No: YE96-Joint Base Lewis McChord
Project: Log RAM

Date Sampled: 03/27/14
Date Received: 03/31/14

Instrument/Analyst: NT3/LH
Date Analyzed: 04/09/14 07:48

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	LOQ	Result	Q
74-87-3	Chloromethane	0.50	< 0.50	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.20	< 0.20	U
75-00-3	Chloroethane	0.20	< 0.20	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	**Acetone**	**5.0**	**5.4**	
75-15-0	Carbon Disulfide	0.20	< 0.20	U
75-35-4	1,1-Dichloroethene	0.20	< 0.20	U
75-34-3	1,1-Dichloroethane	0.20	< 0.20	U
156-60-5	trans-1,2-Dichloroethene	0.20	< 0.20	U
156-59-2	**cis-1,2-Dichloroethene**	**0.20**	**1.4**	
67-66-3	**Chloroform**	**0.20**	**0.33**	
107-06-2	1,2-Dichloroethane	0.20	< 0.20	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	0.20	< 0.20	U
56-23-5	**Carbon Tetrachloride**	**0.20**	**0.90**	
108-05-4	Vinyl Acetate	0.20	< 0.20	U
75-27-4	Bromodichloromethane	0.20	< 0.20	U
78-87-5	**1,2-Dichloropropane**	**0.20**	**0.35**	
10061-01-5	cis-1,3-Dichloropropene	0.20	< 0.20	U
79-01-6	**Trichloroethene**	**0.20**	**4.5**	
124-48-1	Dibromochloromethane	0.20	< 0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	< 0.20	U
71-43-2	Benzene	0.20	< 0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	< 0.20	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.20	< 0.20	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.20	< 0.20	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	< 0.20	U
108-88-3	Toluene	0.20	< 0.20	U
108-90-7	Chlorobenzene	0.20	< 0.20	U
100-41-4	Ethylbenzene	0.20	< 0.20	U
100-42-5	Styrene	0.20	< 0.20	U
75-69-4	Trichlorofluoromethane	0.20	< 0.20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.20	< 0.20	U
179601-23-1	m,p-Xylene	0.40	< 0.40	U
95-47-6	o-Xylene	0.20	< 0.20	U
95-50-1	1,2-Dichlorobenzene	0.20	< 0.20	U
541-73-1	1,3-Dichlorobenzene	0.20	< 0.20	U
106-46-7	1,4-Dichlorobenzene	0.20	< 0.20	U

Lab Sample ID: YE96B
LIMS ID: 14-6063
Matrix: Water
Date Analyzed: 04/09/14 07:48

QC Report No: YE96-Joint Base Lewis McChord
Project: Log RAM

CAS Number	Analyte	LOQ	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Iodomethane	1.0	< 1.0	U
74-96-4	Bromoethane	0.20	< 0.20	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.20	< 0.20	U
74-95-3	Dibromomethane	0.20	< 0.20	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	< 0.20	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	< 0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	< 0.50	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.20	< 0.20	U
95-63-6	1,2,4-Trimethylbenzene	0.20	< 0.20	U
87-68-3	Hexachlorobutadiene	0.50	< 0.50	U
106-93-4	1,2-Dibromoethane	0.20	< 0.20	U
74-97-5	Bromochloromethane	0.20	< 0.20	U
594-20-7	2,2-Dichloropropane	0.20	< 0.20	U
142-28-9	1,3-Dichloropropane	0.20	< 0.20	U
98-82-8	Isopropylbenzene	0.20	< 0.20	U
103-65-1	n-Propylbenzene	0.20	< 0.20	U
108-86-1	Bromobenzene	0.20	< 0.20	U
95-49-8	2-Chlorotoluene	0.20	< 0.20	U
106-43-4	4-Chlorotoluene	0.20	< 0.20	U
98-06-6	tert-Butylbenzene	0.20	< 0.20	U
135-98-8	sec-Butylbenzene	0.20	< 0.20	U
99-87-6	4-Isopropyltoluene	0.20	< 0.20	U
104-51-8	n-Butylbenzene	0.20	< 0.20	U
120-82-1	1,2,4-Trichlorobenzene	0.50	< 0.50	U
91-20-3	Naphthalene	0.50	< 0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	< 0.50	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	102%
d8-Toluene	98.2%
Bromofluorobenzene	97.3%
d4-1,2-Dichlorobenzene	101%

2-Chloroethylvinylether is an acid labile compound and may not be recovered from an acid preserved sample.

EPA SW-846 indicates that vinyl chloride and styrene may degrade in the presence of acid preservative.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140327LC116B-1**
 SAMPLE

Lab Sample ID: YE96C
LIMS ID: 14-6064
Matrix: Water
Data Release Authorized:
Reported: 04/09/14

QC Report No: YE96-Joint Base Lewis McChord
Project: Log RAM

Date Sampled: 03/27/14
Date Received: 03/31/14

Instrument/Analyst: NT3/LH
Date Analyzed: 04/09/14 08:17

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	LOQ	Result	Q
74-87-3	Chloromethane	0.50	< 0.50	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.20	< 0.20	U
75-00-3	Chloroethane	0.20	< 0.20	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	**Acetone**	**5.0**	**5.6**	
75-15-0	Carbon Disulfide	0.20	< 0.20	U
75-35-4	1,1-Dichloroethene	0.20	< 0.20	U
75-34-3	1,1-Dichloroethane	0.20	< 0.20	U
156-60-5	trans-1,2-Dichloroethene	0.20	< 0.20	U
156-59-2	**cis-1,2-Dichloroethene**	**0.20**	**1.0**	
67-66-3	Chloroform	0.20	< 0.20	U
107-06-2	1,2-Dichloroethane	0.20	< 0.20	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	0.20	< 0.20	U
56-23-5	Carbon Tetrachloride	0.20	< 0.20	U
108-05-4	Vinyl Acetate	0.20	< 0.20	U
75-27-4	Bromodichloromethane	0.20	< 0.20	U
78-87-5	1,2-Dichloropropane	0.20	< 0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	< 0.20	U
79-01-6	**Trichloroethene**	**0.20**	**36**	
124-48-1	Dibromochloromethane	0.20	< 0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	< 0.20	U
71-43-2	Benzene	0.20	< 0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	< 0.20	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.20	< 0.20	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.20	< 0.20	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	< 0.20	U
108-88-3	Toluene	0.20	< 0.20	U
108-90-7	Chlorobenzene	0.20	< 0.20	U
100-41-4	Ethylbenzene	0.20	< 0.20	U
100-42-5	Styrene	0.20	< 0.20	U
75-69-4	Trichlorofluoromethane	0.20	< 0.20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.20	< 0.20	U
179601-23-1	m,p-Xylene	0.40	< 0.40	U
95-47-6	o-Xylene	0.20	< 0.20	U
95-50-1	1,2-Dichlorobenzene	0.20	< 0.20	U
541-73-1	1,3-Dichlorobenzene	0.20	< 0.20	U
106-46-7	1,4-Dichlorobenzene	0.20	< 0.20	U

Lab Sample ID: YE96C
LIMS ID: 14-6064
Matrix: Water
Date Analyzed: 04/09/14 08:17

QC Report No: YE96-Joint Base Lewis McChord
Project: Log RAM

CAS Number	Analyte	LOQ	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Iodomethane	1.0	< 1.0	U
74-96-4	Bromoethane	0.20	< 0.20	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.20	< 0.20	U
74-95-3	Dibromomethane	0.20	< 0.20	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	< 0.20	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	< 0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	< 0.50	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.20	< 0.20	U
95-63-6	1,2,4-Trimethylbenzene	0.20	< 0.20	U
87-68-3	Hexachlorobutadiene	0.50	< 0.50	U
106-93-4	1,2-Dibromoethane	0.20	< 0.20	U
74-97-5	Bromochloromethane	0.20	< 0.20	U
594-20-7	2,2-Dichloropropane	0.20	< 0.20	U
142-28-9	1,3-Dichloropropane	0.20	< 0.20	U
98-82-8	Isopropylbenzene	0.20	< 0.20	U
103-65-1	n-Propylbenzene	0.20	< 0.20	U
108-86-1	Bromobenzene	0.20	< 0.20	U
95-49-8	2-Chlorotoluene	0.20	< 0.20	U
106-43-4	4-Chlorotoluene	0.20	< 0.20	U
98-06-6	tert-Butylbenzene	0.20	< 0.20	U
135-98-8	sec-Butylbenzene	0.20	< 0.20	U
99-87-6	4-Isopropyltoluene	0.20	< 0.20	U
104-51-8	n-Butylbenzene	0.20	< 0.20	U
120-82-1	1,2,4-Trichlorobenzene	0.50	< 0.50	U
91-20-3	Naphthalene	0.50	< 0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	< 0.50	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	106%
d8-Toluene	99.3%
Bromofluorobenzene	97.7%
d4-1,2-Dichlorobenzene	101%

2-Chloroethylvinylether is an acid labile compound and may not be recovered from an acid preserved sample.

EPA SW-846 indicates that vinyl chloride and styrene may degrade in the presence of acid preservative.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: MB-040814A**
 METHOD BLANK

Lab Sample ID: MB-040814A
LIMS ID: 14-6062
Matrix: Water
Data Release Authorized:
Reported: 04/09/14

QC Report No: YE96-Joint Base Lewis McChord
Project: Log RAM

Date Sampled: NA
Date Received: NA

Instrument/Analyst: NT3/LH
Date Analyzed: 04/08/14 22:51

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	LOQ	Result	Q
74-87-3	Chloromethane	0.50	< 0.50	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.20	< 0.20	U
75-00-3	Chloroethane	0.20	< 0.20	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	Acetone	5.0	< 5.0	U
75-15-0	Carbon Disulfide	0.20	< 0.20	U
75-35-4	1,1-Dichloroethene	0.20	< 0.20	U
75-34-3	1,1-Dichloroethane	0.20	< 0.20	U
156-60-5	trans-1,2-Dichloroethene	0.20	< 0.20	U
156-59-2	cis-1,2-Dichloroethene	0.20	< 0.20	U
67-66-3	Chloroform	0.20	< 0.20	U
107-06-2	1,2-Dichloroethane	0.20	< 0.20	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	0.20	< 0.20	U
56-23-5	Carbon Tetrachloride	0.20	< 0.20	U
108-05-4	Vinyl Acetate	0.20	< 0.20	U
75-27-4	Bromodichloromethane	0.20	< 0.20	U
78-87-5	1,2-Dichloropropane	0.20	< 0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	< 0.20	U
79-01-6	Trichloroethene	0.20	< 0.20	U
124-48-1	Dibromochloromethane	0.20	< 0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	< 0.20	U
71-43-2	Benzene	0.20	< 0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	< 0.20	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.20	< 0.20	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.20	< 0.20	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	< 0.20	U
108-88-3	Toluene	0.20	< 0.20	U
108-90-7	Chlorobenzene	0.20	< 0.20	U
100-41-4	Ethylbenzene	0.20	< 0.20	U
100-42-5	Styrene	0.20	< 0.20	U
75-69-4	Trichlorofluoromethane	0.20	< 0.20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.20	< 0.20	U
179601-23-1	m,p-Xylene	0.40	< 0.40	U
95-47-6	o-Xylene	0.20	< 0.20	U
95-50-1	1,2-Dichlorobenzene	0.20	< 0.20	U
541-73-1	1,3-Dichlorobenzene	0.20	< 0.20	U
106-46-7	1,4-Dichlorobenzene	0.20	< 0.20	U

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: MB-040814A**
 METHOD BLANK

Lab Sample ID: MB-040814A QC Report No: YE96-Joint Base Lewis McChord
LIMS ID: 14-6062 Project: Log RAM
Matrix: Water
Date Analyzed: 04/08/14 22:51

CAS Number	Analyte	LOQ	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Iodomethane	1.0	< 1.0	U
74-96-4	Bromoethane	0.20	< 0.20	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.20	< 0.20	U
74-95-3	Dibromomethane	0.20	< 0.20	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	< 0.20	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	< 0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	< 0.50	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.20	< 0.20	U
95-63-6	1,2,4-Trimethylbenzene	0.20	< 0.20	U
87-68-3	Hexachlorobutadiene	0.50	< 0.50	U
106-93-4	1,2-Dibromoethane	0.20	< 0.20	U
74-97-5	Bromochloromethane	0.20	< 0.20	U
594-20-7	2,2-Dichloropropane	0.20	< 0.20	U
142-28-9	1,3-Dichloropropane	0.20	< 0.20	U
98-82-8	Isopropylbenzene	0.20	< 0.20	U
103-65-1	n-Propylbenzene	0.20	< 0.20	U
108-86-1	Bromobenzene	0.20	< 0.20	U
95-49-8	2-Chlorotoluene	0.20	< 0.20	U
106-43-4	4-Chlorotoluene	0.20	< 0.20	U
98-06-6	tert-Butylbenzene	0.20	< 0.20	U
135-98-8	sec-Butylbenzene	0.20	< 0.20	U
99-87-6	4-Isopropyltoluene	0.20	< 0.20	U
104-51-8	n-Butylbenzene	0.20	< 0.20	U
120-82-1	1,2,4-Trichlorobenzene	0.50	< 0.50	U
91-20-3	Naphthalene	0.50	< 0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	< 0.50	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	103%
d8-Toluene	101%
Bromofluorobenzene	94.6%
d4-1,2-Dichlorobenzene	101%

ANALYTICAL RESOURCES INCORPORATED

VOA SURROGATE RECOVERY SUMMARY

Matrix: Water

QC Report No: YE96-Joint Base Lewis McChord
Project: Log RAM

ARI ID	Client ID	PV	DCE	TOL	BFB	DCB	TOT OUT
MB-040814A	Method Blank	10	103%	101%	94.6%	101%	0
LCS-040814A	Lab Control	10	101%	98.5%	96.0%	100%	0
LCSD-040814A	Lab Control Dup	10	101%	100%	97.4%	98.9%	0
YE96A	LGC140327LC101D2-1	10	104%	99.3%	97.0%	100%	0
YE96B	LGC140327LC111B-1	10	102%	98.2%	97.3%	101%	0
YE96C	LGC140327LC116B-1	10	106%	99.3%	97.7%	101%	0

	LCS/MB LIMITS	QC LIMITS
SW8260C		
(DCE) = d4-1,2-Dichloroethane	(80-120)	(80-130)
(TOL) = d8-Toluene	(80-120)	(80-120)
(BFB) = Bromofluorobenzene	(80-120)	(80-120)
(DCB) = d4-1,2-Dichlorobenzene	(80-120)	(80-120)

Prep Method: SW5030B
Log Number Range: 14-6062 to 14-6064

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LCS-040814A**
 LAB CONTROL SAMPLE

Lab Sample ID: LCS-040814A QC Report No: YE96-Joint Base Lewis McChord
LIMS ID: 14-6062 Project: Log RAM
Matrix: Water
Data Release Authorized:
Reported: 04/09/14 Date Sampled: NA
Date Received: NA

Instrument/Analyst LCS: NT3/LH Sample Amount LCS: 10.0 mL
LCSD: NT3/LH LCSD: 10.0 mL
Date Analyzed LCS: 04/08/14 21:54 Purge Volume LCS: 10.0 mL
LCSD: 04/08/14 22:23 LCSD: 10.0 mL

Analyte	LCS	Spike Added-LCS	LCS Recovery	LCSD	Spike Added-LCSD	LCSD Recovery	RPD
Chloromethane	9.95	10.0	99.5%	9.60	10.0	96.0%	3.6%
Bromomethane	9.26	10.0	92.6%	8.66	10.0	86.6%	6.7%
Vinyl Chloride	9.97	10.0	99.7%	9.22	10.0	92.2%	7.8%
Chloroethane	9.65	10.0	96.5%	9.80	10.0	98.0%	1.5%
Methylene Chloride	10.3	10.0	103%	10.3	10.0	103%	0.0%
Acetone	43.4	50.0	86.8%	38.0	50.0	76.0%	13.3%
Carbon Disulfide	10.3	10.0	103%	9.93	10.0	99.3%	3.7%
1,1-Dichloroethene	9.99	10.0	99.9%	9.84	10.0	98.4%	1.5%
1,1-Dichloroethane	10.2	10.0	102%	9.85	10.0	98.5%	3.5%
trans-1,2-Dichloroethene	9.67	10.0	96.7%	9.64	10.0	96.4%	0.3%
cis-1,2-Dichloroethene	10.2	10.0	102%	9.87	10.0	98.7%	3.3%
Chloroform	9.68	10.0	96.8%	9.47	10.0	94.7%	2.2%
1,2-Dichloroethane	10.3	10.0	103%	10.2	10.0	102%	1.0%
2-Butanone	48.7	50.0	97.4%	47.4	50.0	94.8%	2.7%
1,1,1-Trichloroethane	10.3	10.0	103%	9.95	10.0	99.5%	3.5%
Carbon Tetrachloride	10.2	10.0	102%	10.1	10.0	101%	1.0%
Vinyl Acetate	10.5	10.0	105%	10.1	10.0	101%	3.9%
Bromodichloromethane	10.4	10.0	104%	10.2	10.0	102%	1.9%
1,2-Dichloropropane	9.94	10.0	99.4%	9.80	10.0	98.0%	1.4%
cis-1,3-Dichloropropene	10.3	10.0	103%	10.0	10.0	100%	3.0%
Trichloroethene	9.97	10.0	99.7%	10.0	10.0	100%	0.3%
Dibromochloromethane	10.6	10.0	106%	10.5	10.0	105%	0.9%
1,1,2-Trichloroethane	9.99	10.0	99.9%	10.1	10.0	101%	1.1%
Benzene	10.2	10.0	102%	10.1	10.0	101%	1.0%
trans-1,3-Dichloropropene	10.2	10.0	102%	10.0	10.0	100%	2.0%
2-Chloroethylvinylether	10.8	10.0	108%	10.4	10.0	104%	3.8%
Bromoform	11.1	10.0	111%	11.1	10.0	111%	0.0%
4-Methyl-2-Pentanone (MIBK)	57.0	50.0	114%	56.5	50.0	113%	0.9%
2-Hexanone	45.2	50.0	90.4%	42.8	50.0	85.6%	5.5%
Tetrachloroethene	10.1	10.0	101%	9.72	10.0	97.2%	3.8%
1,1,2,2-Tetrachloroethane	10.6	10.0	106%	10.4	10.0	104%	1.9%
Toluene	10.0	10.0	100%	10.1	10.0	101%	1.0%
Chlorobenzene	10.4	10.0	104%	10.2	10.0	102%	1.9%
Ethylbenzene	10.7	10.0	107%	10.4	10.0	104%	2.8%
Styrene	10.9	10.0	109%	10.7	10.0	107%	1.9%
Trichlorofluoromethane	10.4	10.0	104%	9.87	10.0	98.7%	5.2%
1,1,2-Trichloro-1,2,2-trifluoroetha	10.3	10.0	103%	9.59	10.0	95.9%	7.1%
m,p-Xylene	21.4	20.0	107%	20.8	20.0	104%	2.8%

Lab Sample ID: LCS-040814A QC Report No: YE96-Joint Base Lewis McChord
LIMS ID: 14-6062 Project: Log RAM
Matrix: Water

Analyte	LCS	Spike Added-LCS	LCS Recovery	LCSD	Spike Added-LCSD	LCSD Recovery	RPD
o-Xylene	10.5	10.0	105%	10.4	10.0	104%	1.0%
1,2-Dichlorobenzene	10.5	10.0	105%	10.3	10.0	103%	1.9%
1,3-Dichlorobenzene	10.6	10.0	106%	10.3	10.0	103%	2.9%
1,4-Dichlorobenzene	10.3	10.0	103%	10.1	10.0	101%	2.0%
Acrolein	45.6	50.0	91.2%	43.0	50.0	86.0%	5.9%
Iodomethane	9.27	10.0	92.7%	8.57	10.0	85.7%	7.8%
Bromoethane	9.08	10.0	90.8%	9.74	10.0	97.4%	7.0%
Acrylonitrile	10.3	10.0	103%	9.26	10.0	92.6%	10.6%
1,1-Dichloropropene	10.1	10.0	101%	9.83	10.0	98.3%	2.7%
Dibromomethane	10.2	10.0	102%	10.1	10.0	101%	1.0%
1,1,1,2-Tetrachloroethane	10.3	10.0	103%	10.2	10.0	102%	1.0%
1,2-Dibromo-3-chloropropane	11.8	10.0	118%	11.6	10.0	116%	1.7%
1,2,3-Trichloropropane	10.9	10.0	109%	10.8	10.0	108%	0.9%
trans-1,4-Dichloro-2-butene	11.1	10.0	111%	11.3	10.0	113%	1.8%
1,3,5-Trimethylbenzene	10.5	10.0	105%	10.1	10.0	101%	3.9%
1,2,4-Trimethylbenzene	9.86	10.0	98.6%	9.20	10.0	92.0%	6.9%
Hexachlorobutadiene	9.79	10.0	97.9%	8.60	10.0	86.0%	12.9%
1,2-Dibromoethane	10.4	10.0	104%	10.1	10.0	101%	2.9%
Bromochloromethane	9.84	10.0	98.4%	9.70	10.0	97.0%	1.4%
2,2-Dichloropropane	9.27	10.0	92.7%	8.77	10.0	87.7%	5.5%
1,3-Dichloropropane	10.3	10.0	103%	9.98	10.0	99.8%	3.2%
Isopropylbenzene	10.9	10.0	109%	10.9	10.0	109%	0.0%
n-Propylbenzene	10.8	10.0	108%	10.6	10.0	106%	1.9%
Bromobenzene	10.3	10.0	103%	10.2	10.0	102%	1.0%
2-Chlorotoluene	10.7	10.0	107%	10.5	10.0	105%	1.9%
4-Chlorotoluene	10.6	10.0	106%	10.6	10.0	106%	0.0%
tert-Butylbenzene	10.7	10.0	107%	10.6	10.0	106%	0.9%
sec-Butylbenzene	10.2	10.0	102%	9.72	10.0	97.2%	4.8%
4-Isopropyltoluene	9.36	10.0	93.6%	8.76	10.0	87.6%	6.6%
n-Butylbenzene	8.65 Q	10.0	86.5%	7.55 Q	10.0	75.5%	13.6%
1,2,4-Trichlorobenzene	11.2	10.0	112%	10.2	10.0	102%	9.3%
Naphthalene	10.2	10.0	102%	10.3	10.0	103%	1.0%
1,2,3-Trichlorobenzene	9.47 Q	10.0	94.7%	8.62 Q	10.0	86.2%	9.4%

Reported in µg/L (ppb)

RPD calculated using sample concentrations per SW846.

Volatile Surrogate Recovery

	LCS	LCSD
d4-1,2-Dichloroethane	101%	101%
d8-Toluene	98.5%	100%
Bromofluorobenzene	96.0%	97.4%
d4-1,2-Dichlorobenzene	100%	98.9%

Analytical Resources, Incorporated
Analytical Chemists and Consultants

February 3, 2014

Thomas Lynott
Department of the Army
Directorate of Public Works
Attn Environmental Division (T. Lynott)
2012 Liggett Ave Box 339500 MS 17
Joint Base Lewis-McChord, Washington 98433-9500
Official Business

RE: Client Project: Log Ram
ARI Job No.: XW82

Dear Mr. Lynott:

Please find enclosed the original Chain-of-Custody record (COC), sample receipt documentation, and the final data for the project referenced above. Analytical Resources, Inc. (ARI) accepted seven water samples on February 3, 2014. For further details regarding sample receipt please refer to the enclosed Cooler Receipt Form.

The samples were analyzed for VOCs, as requested on the COCs.

The CCAL is out of control low for all associated FORM III "Q" flagged analytes. All associated samples that contain analyte have been flagged with a "Q" qualifier.

The LCS is out of control low for hexachlorobutadiene. All other spike recoveries are in control and no further corrective action was taken.

An electronic copy of this report and all supporting raw data will remain on file with ARI. Should you have any questions or problems, please feel free to contact me at your convenience.

Respectfully,
ANALYTICAL RESOURCES, INC.

Kelly Bottem
Client Services Manager
(206) 695-6211
kellyb@arilabs.com
www.arilabs.com

eFile: XW82

4611 South 134th Place, Suite 100 • Tukwila WA 98168 • **206-695-6200** • **206-695-6201** fax

Chain of Custody Record & Laboratory Analysis Request

ARI Assigned Number:	Turn-around Requested: STANDARD	Page: 1 of 1	
ARI Client Company: JOINT BASE LEWIS McCHORD PUBLIC WORKS IMLM-PWE	Phone: 2539661802	Date: 3 FEB 14	Ice Present?
Client Contact: TOM J LYNOTT		No. of Coolers: 1	Cooler Temps: 3.3
Client Project Name: LOG RAM			
Client Project #:	Samplers: B THOMAS J BECKER		

Analytical Resources, Incorporated
Analytical Chemists and Consultants
4611 South 134th Place, Suite 100
Tukwila, WA 98168
206-695-6200 206-695-6201 (fax)

Sample ID	Date	Time	Matrix	No Containers	1006A								Notes/Comments
LGC140130SLAPE-1	30JAN14	1405	WATER	2	X								TOTAL VOCs
LGC140130SLAPI-1	30JAN14	1410	WATER	2	X								EPA 8260C
LGC140131TB-1	31JAN14	0800	WATER	2	X								
LGC140131EGDYI-1	31JAN14	1114	WATER	2	X								TO-17 on All
LGC140131EGDYE-1	31JAN14	1115	WATER	2	X								[illegible]
LGC140131ISI-1	31JAN14	1211	WATER	2	X								
LGC140131ISE-1	31JAN14	1212	WATER	2	X								

Comments/Special Instructions	Relinquished by:	Received by:	Relinquished by:	Received by:
	(Signature) [signature]	(Signature) [signature]	(Signature)	(Signature)
	Printed Name: JEREMY BECKER	Printed Name: Jennifer Millsap	Printed Name:	Printed Name:
	Company: VERSAR INC.	Company: ARI	Company:	Company:
	Date & Time: 3 FEB 2014 1055	Date & Time: 2/3/14 1055	Date & Time:	Date & Time:

Limits of Liability: *ARI will perform all requested services in accordance with appropriate methodology following ARI Standard Operating Procedures and the ARI Quality Assurance Program. This program meets standards for the industry. The total liability of ARI, its officers, agents, employees, or successors, arising out of or in connection with the requested services, shall not exceed the Invoiced amount for said services. The acceptance by the client of a proposal for services by ARI release ARI from any liability in excess thereof, not withstanding any provision to the contrary in any contract, purchase order or co-signed agreement between ARI and the Client.*

Sample Retention Policy: All samples submitted to ARI will be appropriately discarded no sooner than 90 days after receipt or 60 days after submission of hardcopy data, whichever is longer, unless alternate retention schedules have been established by work-order or contract.

XW82:00002

Sample ID Cross Reference Report

ANALYTICAL RESOURCES INCORPORATED

ARI Job No: XW82
Client: Joint Base Lewis McChord
Project Event: N/A
Project Name: Log Ram

	Sample ID	ARI Lab ID	ARI LIMS ID	Matrix	Sample Date/Time	VTSR
1.	LGC140130SLAPE-1	XW82A	14-1839	Water	01/30/14 14:05	02/03/14 10:55
2.	LGC140130SLAPI-1	XW82B	14-1840	Water	01/30/14 14:10	02/03/14 10:55
3.	LGC140131TB-1	XW82C	14-1841	Water	01/31/14 08:00	02/03/14 10:55
4.	LGC140131EGDYI-1	XW82D	14-1842	Water	01/31/14 11:14	02/03/14 10:55
5.	LGC140131EGDYE-1	XW82E	14-1843	Water	01/31/14 11:15	02/03/14 10:55
6.	LGC140131I5I-1	XW82F	14-1844	Water	01/31/14 12:11	02/03/14 10:55
7.	LGC140131I5E-1	XW82G	14-1845	Water	01/31/14 12:12	02/03/14 10:55

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Cooler Receipt Form

ARI Client: JBLM

Project Name: Log Ram

COC No(s): _____ (NA)

Delivered by: Fed-Ex UPS Courier Hand Delivered Other: _____

Assigned ARI Job No: XW82

Tracking No. _____ (NA)

Preliminary Examination Phase:

Were intact, properly signed and dated custody seals attached to the outside of to cooler?	YES	(NO)
Were custody papers included with the cooler?	(YES)	NO
Were custody papers properly filled out (ink, signed, etc)	(YES)	NO

Temperature of Cooler(s) (°C) (recommended 2 0-6 0 °C for chemistry) 3.3

Time: 1055

If cooler temperature is out of compliance fill out form 00070F

Temp Gun ID#: 90877952

Cooler Accepted by: JM Date 2/3/14 Time: 1055

Complete custody forms and attach all shipping documents

Log-In Phase:

Was a temperature blank included in the cooler?		YES	(NO)
What kind of packing material was used? ... Bubble Wrap Wet Ice (Gel Packs) Baggies Foam Block Paper Other: _____			
Was sufficient ice used (if appropriate)?	NA	(YES)	NO
~~Were all bottles sealed in individual plastic bags?~~		YES	(NO)
Did all bottles arrive in good condition (unbroken)?		(YES)	NO
Were all bottle labels complete and legible?		(YES)	NO
Did the number of containers listed on COC match with the number of containers received?		(YES)	NO
Did all bottle labels and tags agree with custody papers?		(YES)	NO
Were all bottles used correct for the requested analyses?		(YES)	NO
Do any of the analyses (bottles) require preservation? (attach preservation sheet, excluding VOCs)..	(NA)	YES	NO
Were all VOC vials free of air bubbles?	NA	(YES)	NO
Was sufficient amount of sample sent in each bottle?		(YES)	NO
Date VOC Trip Blank was made at ARI	(NA)		

Was Sample Split by ARI : (NA) YES Date/Time: _____ Equipment: _____ Split by: _____

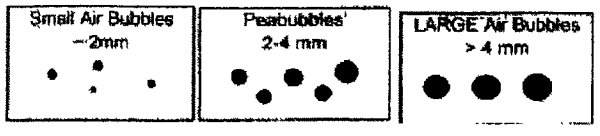
Samples Logged by: KG Date: 2-3-14 Time: 1040

***** Notify Project Manager of discrepancies or concerns *****

Sample ID on Bottle	Sample ID on COC	Sample ID on Bottle	Sample ID on COC

Additional Notes, Discrepancies, & Resolutions:

By Date:



Small → "sm" (< 2 mm)
Peabubbles → "pb" (2 to < 4 mm)
Large → "lg" (4 to < 6 mm)
Headspace → "hs" (> 6 mm)

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140130SLAPE-1**
Page 1 of 2 **SAMPLE**

Lab Sample ID: XW82A
LIMS ID: 14-1839
Matrix: Water
Data Release Authorized:
Reported: 02/12/14

QC Report No: XW82-Joint Base Lewis McChord
Project: Log Ram

Date Sampled: 01/30/14
Date Received: 02/03/14

Instrument/Analyst: NT2/PAB
Date Analyzed: 02/06/14 18:11

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	LOQ	Result	Q
74-87-3	Chloromethane	0.50	< 0.50	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.20	< 0.20	U
75-00-3	Chloroethane	0.20	< 0.20	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	Acetone	5.0	< 5.0	U
75-15-0	Carbon Disulfide	0.20	< 0.20	U
75-35-4	1,1-Dichloroethene	0.20	< 0.20	U
75-34-3	1,1-Dichloroethane	0.20	< 0.20	U
156-60-5	trans-1,2-Dichloroethene	0.20	< 0.20	U
156-59-2	cis-1,2-Dichloroethene	0.20	< 0.20	U
67-66-3	Chloroform	0.20	< 0.20	U
107-06-2	1,2-Dichloroethane	0.20	< 0.20	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	0.20	< 0.20	U
56-23-5	Carbon Tetrachloride	0.20	< 0.20	U
108-05-4	Vinyl Acetate	0.20	< 0.20	U
75-27-4	Bromodichloromethane	0.20	< 0.20	U
78-87-5	1,2-Dichloropropane	0.20	< 0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	< 0.20	U
79-01-6	**Trichloroethene**	**0.20**	**0.59**	
124-48-1	Dibromochloromethane	0.20	< 0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	< 0.20	U
71-43-2	Benzene	0.20	< 0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	< 0.20	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.20	< 0.20	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.20	< 0.20	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	< 0.20	U
108-88-3	Toluene	0.20	< 0.20	U
108-90-7	Chlorobenzene	0.20	< 0.20	U
100-41-4	Ethylbenzene	0.20	< 0.20	U
100-42-5	Styrene	0.20	< 0.20	U
75-69-4	Trichlorofluoromethane	0.20	< 0.20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.20	< 0.20	U
179601-23-1	m,p-Xylene	0.40	< 0.40	U
95-47-6	o-Xylene	0.20	< 0.20	U
95-50-1	1,2-Dichlorobenzene	0.20	< 0.20	U
541-73-1	1,3-Dichlorobenzene	0.20	< 0.20	U
106-46-7	1,4-Dichlorobenzene	0.20	< 0.20	U

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140130SLAPE-1**

SAMPLE

Lab Sample ID: XW82A
LIMS ID: 14-1839
Matrix: Water
Date Analyzed: 02/06/14 18:11

QC Report No: XW82-Joint Base Lewis McChord
Project: Log Ram

CAS Number	Analyte	LOQ	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Iodomethane	1.0	< 1.0	U
74-96-4	Bromoethane	0.20	< 0.20	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.20	< 0.20	U
74-95-3	Dibromomethane	0.20	< 0.20	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	< 0.20	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	< 0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	< 0.50	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.20	< 0.20	U
95-63-6	1,2,4-Trimethylbenzene	0.20	< 0.20	U
87-68-3	Hexachlorobutadiene	0.50	< 0.50	U
106-93-4	1,2-Dibromoethane	0.20	< 0.20	U
74-97-5	Bromochloromethane	0.20	< 0.20	U
594-20-7	2,2-Dichloropropane	0.20	< 0.20	U
142-28-9	1,3-Dichloropropane	0.20	< 0.20	U
98-82-8	Isopropylbenzene	0.20	< 0.20	U
103-65-1	n-Propylbenzene	0.20	< 0.20	U
108-86-1	Bromobenzene	0.20	< 0.20	U
95-49-8	2-Chlorotoluene	0.20	< 0.20	U
106-43-4	4-Chlorotoluene	0.20	< 0.20	U
98-06-6	tert-Butylbenzene	0.20	< 0.20	U
135-98-8	sec-Butylbenzene	0.20	< 0.20	U
99-87-6	4-Isopropyltoluene	0.20	< 0.20	U
104-51-8	n-Butylbenzene	0.20	< 0.20	U
120-82-1	1,2,4-Trichlorobenzene	0.50	< 0.50	U
91-20-3	Naphthalene	0.50	< 0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	< 0.50	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	103%
d8-Toluene	99.1%
Bromofluorobenzene	100%
d4-1,2-Dichlorobenzene	98.8%

2-Chloroethylvinylether is an acid labile compound and may not be recovered from an acid preserved sample.

EPA SW-846 indicates that vinyl chloride and styrene may degrade in the presence of acid preservative.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140130SLAPI-1**
Page 1 of 2 **SAMPLE**

Lab Sample ID: XW82B
LIMS ID: 14-1840
Matrix: Water
Data Release Authorized:
Reported: 02/12/14

QC Report No: XW82-Joint Base Lewis McChord
Project: Log Ram

Date Sampled: 01/30/14
Date Received: 02/03/14

Instrument/Analyst: NT2/PAB
Date Analyzed: 02/06/14 18:38

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	LOQ	Result	Q
74-87-3	Chloromethane	0.50	< 0.50	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.20	< 0.20	U
75-00-3	Chloroethane	0.20	< 0.20	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	Acetone	5.0	< 5.0	U
75-15-0	Carbon Disulfide	0.20	< 0.20	U
75-35-4	1,1-Dichloroethene	0.20	< 0.20	U
75-34-3	1,1-Dichloroethane	0.20	< 0.20	U
156-60-5	trans-1,2-Dichloroethene	0.20	< 0.20	U
156-59-2	**cis-1,2-Dichloroethene**	**0.20**	**0.50**	
67-66-3	Chloroform	0.20	< 0.20	U
107-06-2	1,2-Dichloroethane	0.20	< 0.20	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	0.20	< 0.20	U
56-23-5	Carbon Tetrachloride	0.20	< 0.20	U
108-05-4	Vinyl Acetate	0.20	< 0.20	U
75-27-4	Bromodichloromethane	0.20	< 0.20	U
78-87-5	1,2-Dichloropropane	0.20	< 0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	< 0.20	U
79-01-6	**Trichloroethene**	**0.20**	**15**	
124-48-1	Dibromochloromethane	0.20	< 0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	< 0.20	U
71-43-2	Benzene	0.20	< 0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	< 0.20	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.20	< 0.20	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.20	< 0.20	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	< 0.20	U
108-88-3	Toluene	0.20	< 0.20	U
108-90-7	Chlorobenzene	0.20	< 0.20	U
100-41-4	Ethylbenzene	0.20	< 0.20	U
100-42-5	Styrene	0.20	< 0.20	U
75-69-4	Trichlorofluoromethane	0.20	< 0.20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.20	< 0.20	U
179601-23-1	m,p-Xylene	0.40	< 0.40	U
95-47-6	o-Xylene	0.20	< 0.20	U
95-50-1	1,2-Dichlorobenzene	0.20	< 0.20	U
541-73-1	1,3-Dichlorobenzene	0.20	< 0.20	U
106-46-7	1,4-Dichlorobenzene	0.20	< 0.20	U

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140130SLAPI-1**
 SAMPLE

Lab Sample ID: XW82B
LIMS ID: 14-1840
Matrix: Water
Date Analyzed: 02/06/14 18:38

QC Report No: XW82-Joint Base Lewis McChord
Project: Log Ram

CAS Number	Analyte	LOQ	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Iodomethane	1.0	< 1.0	U
74-96-4	Bromoethane	0.20	< 0.20	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.20	< 0.20	U
74-95-3	Dibromomethane	0.20	< 0.20	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	< 0.20	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	< 0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	< 0.50	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.20	< 0.20	U
95-63-6	1,2,4-Trimethylbenzene	0.20	< 0.20	U
87-68-3	Hexachlorobutadiene	0.50	< 0.50	U
106-93-4	1,2-Dibromoethane	0.20	< 0.20	U
74-97-5	Bromochloromethane	0.20	< 0.20	U
594-20-7	2,2-Dichloropropane	0.20	< 0.20	U
142-28-9	1,3-Dichloropropane	0.20	< 0.20	U
98-82-8	Isopropylbenzene	0.20	< 0.20	U
103-65-1	n-Propylbenzene	0.20	< 0.20	U
108-86-1	Bromobenzene	0.20	< 0.20	U
95-49-8	2-Chlorotoluene	0.20	< 0.20	U
106-43-4	4-Chlorotoluene	0.20	< 0.20	U
98-06-6	tert-Butylbenzene	0.20	< 0.20	U
135-98-8	sec-Butylbenzene	0.20	< 0.20	U
99-87-6	4-Isopropyltoluene	0.20	< 0.20	U
104-51-8	n-Butylbenzene	0.20	< 0.20	U
120-82-1	1,2,4-Trichlorobenzene	0.50	< 0.50	U
91-20-3	Naphthalene	0.50	< 0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	< 0.50	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	102%
d8-Toluene	95.5%
Bromofluorobenzene	104%
d4-1,2-Dichlorobenzene	103%

2-Chloroethylvinylether is an acid labile compound and may not be recovered from an acid preserved sample.

EPA SW-846 indicates that vinyl chloride and styrene may degrade in the presence of acid preservative.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140131TB-1**
 SAMPLE

Lab Sample ID: XW82C
LIMS ID: 14-1841
Matrix: Water
Data Release Authorized:
Reported: 02/12/14

QC Report No: XW82-Joint Base Lewis McChord
Project: Log Ram

Date Sampled: 01/31/14
Date Received: 02/03/14

Instrument/Analyst: NT2/PAB
Date Analyzed: 02/06/14 19:05

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	LOQ	Result	Q
74-87-3	Chloromethane	0.50	< 0.50	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.20	< 0.20	U
75-00-3	Chloroethane	0.20	< 0.20	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	Acetone	5.0	< 5.0	U
75-15-0	Carbon Disulfide	0.20	< 0.20	U
75-35-4	1,1-Dichloroethene	0.20	< 0.20	U
75-34-3	1,1-Dichloroethane	0.20	< 0.20	U
156-60-5	trans-1,2-Dichloroethene	0.20	< 0.20	U
156-59-2	cis-1,2-Dichloroethene	0.20	< 0.20	U
67-66-3	Chloroform	0.20	< 0.20	U
107-06-2	1,2-Dichloroethane	0.20	< 0.20	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	0.20	< 0.20	U
56-23-5	Carbon Tetrachloride	0.20	< 0.20	U
108-05-4	Vinyl Acetate	0.20	< 0.20	U
75-27-4	Bromodichloromethane	0.20	< 0.20	U
78-87-5	1,2-Dichloropropane	0.20	< 0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	< 0.20	U
79-01-6	Trichloroethene	0.20	< 0.20	U
124-48-1	Dibromochloromethane	0.20	< 0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	< 0.20	U
71-43-2	Benzene	0.20	< 0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	< 0.20	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.20	< 0.20	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.20	< 0.20	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	< 0.20	U
108-88-3	Toluene	0.20	< 0.20	U
108-90-7	Chlorobenzene	0.20	< 0.20	U
100-41-4	Ethylbenzene	0.20	< 0.20	U
100-42-5	Styrene	0.20	< 0.20	U
75-69-4	Trichlorofluoromethane	0.20	< 0.20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.20	< 0.20	U
179601-23-1	m,p-Xylene	0.40	< 0.40	U
95-47-6	o-Xylene	0.20	< 0.20	U
95-50-1	1,2-Dichlorobenzene	0.20	< 0.20	U
541-73-1	1,3-Dichlorobenzene	0.20	< 0.20	U
106-46-7	1,4-Dichlorobenzene	0.20	< 0.20	U

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140131TB-1**

SAMPLE

Lab Sample ID: XW82C
LIMS ID: 14-1841
Matrix: Water
Date Analyzed: 02/06/14 19:05

QC Report No: XW82-Joint Base Lewis McChord
Project: Log Ram

CAS Number	Analyte	LOQ	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Iodomethane	1.0	< 1.0	U
74-96-4	Bromoethane	0.20	< 0.20	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.20	< 0.20	U
74-95-3	Dibromomethane	0.20	< 0.20	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	< 0.20	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	< 0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	< 0.50	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.20	< 0.20	U
95-63-6	1,2,4-Trimethylbenzene	0.20	< 0.20	U
87-68-3	Hexachlorobutadiene	0.50	< 0.50	U
106-93-4	1,2-Dibromoethane	0.20	< 0.20	U
74-97-5	Bromochloromethane	0.20	< 0.20	U
594-20-7	2,2-Dichloropropane	0.20	< 0.20	U
142-28-9	1,3-Dichloropropane	0.20	< 0.20	U
98-82-8	Isopropylbenzene	0.20	< 0.20	U
103-65-1	n-Propylbenzene	0.20	< 0.20	U
108-86-1	Bromobenzene	0.20	< 0.20	U
95-49-8	2-Chlorotoluene	0.20	< 0.20	U
106-43-4	4-Chlorotoluene	0.20	< 0.20	U
98-06-6	tert-Butylbenzene	0.20	< 0.20	U
135-98-8	sec-Butylbenzene	0.20	< 0.20	U
99-87-6	4-Isopropyltoluene	0.20	< 0.20	U
104-51-8	n-Butylbenzene	0.20	< 0.20	U
120-82-1	1,2,4-Trichlorobenzene	0.50	< 0.50	U
91-20-3	Naphthalene	0.50	< 0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	< 0.50	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	106%
d8-Toluene	96.6%
Bromofluorobenzene	108%
d4-1,2-Dichlorobenzene	103%

2-Chloroethylvinylether is an acid labile compound and may not be recovered from an acid preserved sample.

EPA SW-846 indicates that vinyl chloride and styrene may degrade in the presence of acid preservative.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140131EGDYI-1**
Page 1 of 2 **SAMPLE**

Lab Sample ID: XW82D
LIMS ID: 14-1842
Matrix: Water
Data Release Authorized:
Reported: 02/12/14

QC Report No: XW82-Joint Base Lewis McChord
Project: Log Ram

Date Sampled: 01/31/14
Date Received: 02/03/14

Instrument/Analyst: NT2/PAB
Date Analyzed: 02/06/14 19:31

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	LOQ	Result	Q
74-87-3	Chloromethane	0.50	< 0.50	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.20	< 0.20	U
75-00-3	Chloroethane	0.20	< 0.20	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	Acetone	5.0	< 5.0	U
75-15-0	Carbon Disulfide	0.20	< 0.20	U
75-35-4	1,1-Dichloroethene	0.20	< 0.20	U
75-34-3	1,1-Dichloroethane	0.20	< 0.20	U
156-60-5	trans-1,2-Dichloroethene	0.20	< 0.20	U
156-59-2	**cis-1,2-Dichloroethene**	**0.20**	**4.4**	
67-66-3	Chloroform	0.20	< 0.20	U
107-06-2	1,2-Dichloroethane	0.20	< 0.20	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	**1,1,1-Trichloroethane**	**0.20**	**0.42**	
56-23-5	Carbon Tetrachloride	0.20	< 0.20	U
108-05-4	Vinyl Acetate	0.20	< 0.20	U
75-27-4	Bromodichloromethane	0.20	< 0.20	U
78-87-5	1,2-Dichloropropane	0.20	< 0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	< 0.20	U
79-01-6	**Trichloroethene**	**0.20**	**40**	
124-48-1	Dibromochloromethane	0.20	< 0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	< 0.20	U
71-43-2	Benzene	0.20	< 0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	< 0.20	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.20	< 0.20	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.20	< 0.20	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	< 0.20	U
108-88-3	Toluene	0.20	< 0.20	U
108-90-7	Chlorobenzene	0.20	< 0.20	U
100-41-4	Ethylbenzene	0.20	< 0.20	U
100-42-5	Styrene	0.20	< 0.20	U
75-69-4	Trichlorofluoromethane	0.20	< 0.20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.20	< 0.20	U
179601-23-1	m,p-Xylene	0.40	< 0.40	U
95-47-6	o-Xylene	0.20	< 0.20	U
95-50-1	1,2-Dichlorobenzene	0.20	< 0.20	U
541-73-1	1,3-Dichlorobenzene	0.20	< 0.20	U
106-46-7	1,4-Dichlorobenzene	0.20	< 0.20	U

Lab Sample ID: XW82D
LIMS ID: 14-1842
Matrix: Water
Date Analyzed: 02/06/14 19:31

QC Report No: XW82-Joint Base Lewis McChord
Project: Log Ram

CAS Number	Analyte	LOQ	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Iodomethane	1.0	< 1.0	U
74-96-4	Bromoethane	0.20	< 0.20	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.20	< 0.20	U
74-95-3	Dibromomethane	0.20	< 0.20	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	< 0.20	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	< 0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	< 0.50	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.20	< 0.20	U
95-63-6	1,2,4-Trimethylbenzene	0.20	< 0.20	U
87-68-3	Hexachlorobutadiene	0.50	< 0.50	U
106-93-4	1,2-Dibromoethane	0.20	< 0.20	U
74-97-5	Bromochloromethane	0.20	< 0.20	U
594-20-7	2,2-Dichloropropane	0.20	< 0.20	U
142-28-9	1,3-Dichloropropane	0.20	< 0.20	U
98-82-8	Isopropylbenzene	0.20	< 0.20	U
103-65-1	n-Propylbenzene	0.20	< 0.20	U
108-86-1	Bromobenzene	0.20	< 0.20	U
95-49-8	2-Chlorotoluene	0.20	< 0.20	U
106-43-4	4-Chlorotoluene	0.20	< 0.20	U
98-06-6	tert-Butylbenzene	0.20	< 0.20	U
135-98-8	sec-Butylbenzene	0.20	< 0.20	U
99-87-6	4-Isopropyltoluene	0.20	< 0.20	U
104-51-8	n-Butylbenzene	0.20	< 0.20	U
120-82-1	1,2,4-Trichlorobenzene	0.50	< 0.50	U
91-20-3	Naphthalene	0.50	< 0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	< 0.50	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	100%
d8-Toluene	93.8%
Bromofluorobenzene	101%
d4-1,2-Dichlorobenzene	99.7%

2-Chloroethylvinylether is an acid labile compound and may not be recovered from an acid preserved sample.

EPA SW-846 indicates that vinyl chloride and styrene may degrade in the presence of acid preservative.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140131EGDYE-1**
Page 1 of 2 **SAMPLE**

Lab Sample ID: XW82E
LIMS ID: 14-1843
Matrix: Water
Data Release Authorized:
Reported: 02/12/14

QC Report No: XW82-Joint Base Lewis McChord
Project: Log Ram

Date Sampled: 01/31/14
Date Received: 02/03/14

Instrument/Analyst: NT2/PAB
Date Analyzed: 02/06/14 19:58

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	LOQ	Result	Q
74-87-3	Chloromethane	0.50	< 0.50	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.20	< 0.20	U
75-00-3	Chloroethane	0.20	< 0.20	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	Acetone	5.0	< 5.0	U
75-15-0	Carbon Disulfide	0.20	< 0.20	U
75-35-4	1,1-Dichloroethene	0.20	< 0.20	U
75-34-3	1,1-Dichloroethane	0.20	< 0.20	U
156-60-5	trans-1,2-Dichloroethene	0.20	< 0.20	U
156-59-2	cis-1,2-Dichloroethene	0.20	< 0.20	U
67-66-3	Chloroform	0.20	< 0.20	U
107-06-2	1,2-Dichloroethane	0.20	< 0.20	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	0.20	< 0.20	U
56-23-5	Carbon Tetrachloride	0.20	< 0.20	U
108-05-4	Vinyl Acetate	0.20	< 0.20	U
75-27-4	Bromodichloromethane	0.20	< 0.20	U
78-87-5	1,2-Dichloropropane	0.20	< 0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	< 0.20	U
79-01-6	Trichloroethene	0.20	< 0.20	U
124-48-1	Dibromochloromethane	0.20	< 0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	< 0.20	U
71-43-2	Benzene	0.20	< 0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	< 0.20	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.20	< 0.20	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.20	< 0.20	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	< 0.20	U
108-88-3	Toluene	0.20	< 0.20	U
108-90-7	Chlorobenzene	0.20	< 0.20	U
100-41-4	Ethylbenzene	0.20	< 0.20	U
100-42-5	Styrene	0.20	< 0.20	U
75-69-4	Trichlorofluoromethane	0.20	< 0.20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.20	< 0.20	U
179601-23-1	m,p-Xylene	0.40	< 0.40	U
95-47-6	o-Xylene	0.20	< 0.20	U
95-50-1	1,2-Dichlorobenzene	0.20	< 0.20	U
541-73-1	1,3-Dichlorobenzene	0.20	< 0.20	U
106-46-7	1,4-Dichlorobenzene	0.20	< 0.20	U

Lab Sample ID: XW82E
LIMS ID: 14-1843
Matrix: Water
Date Analyzed: 02/06/14 19:58

QC Report No: XW82-Joint Base Lewis McChord
Project: Log Ram

CAS Number	Analyte	LOQ	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Iodomethane	1.0	< 1.0	U
74-96-4	Bromoethane	0.20	< 0.20	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.20	< 0.20	U
74-95-3	Dibromomethane	0.20	< 0.20	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	< 0.20	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	< 0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	< 0.50	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.20	< 0.20	U
95-63-6	1,2,4-Trimethylbenzene	0.20	< 0.20	U
87-68-3	Hexachlorobutadiene	0.50	< 0.50	U
106-93-4	1,2-Dibromoethane	0.20	< 0.20	U
74-97-5	Bromochloromethane	0.20	< 0.20	U
594-20-7	2,2-Dichloropropane	0.20	< 0.20	U
142-28-9	1,3-Dichloropropane	0.20	< 0.20	U
98-82-8	Isopropylbenzene	0.20	< 0.20	U
103-65-1	n-Propylbenzene	0.20	< 0.20	U
108-86-1	Bromobenzene	0.20	< 0.20	U
95-49-8	2-Chlorotoluene	0.20	< 0.20	U
106-43-4	4-Chlorotoluene	0.20	< 0.20	U
98-06-6	tert-Butylbenzene	0.20	< 0.20	U
135-98-8	sec-Butylbenzene	0.20	< 0.20	U
99-87-6	4-Isopropyltoluene	0.20	< 0.20	U
104-51-8	n-Butylbenzene	0.20	< 0.20	U
120-82-1	1,2,4-Trichlorobenzene	0.50	< 0.50	U
91-20-3	Naphthalene	0.50	< 0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	< 0.50	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	110%
d8-Toluene	97.9%
Bromofluorobenzene	103%
d4-1,2-Dichlorobenzene	102%

2-Chloroethylvinylether is an acid labile compound and may not be recovered from an acid preserved sample.

EPA SW-846 indicates that vinyl chloride and styrene may degrade in the presence of acid preservative.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140131I5I-1**
Page 1 of 2 **SAMPLE**

Lab Sample ID: XW82F
LIMS ID: 14-1844
Matrix: Water
Data Release Authorized:
Reported: 02/12/14

QC Report No: XW82-Joint Base Lewis McChord
Project: Log Ram

Date Sampled: 01/31/14
Date Received: 02/03/14

Instrument/Analyst: NT2/PAB
Date Analyzed: 02/06/14 20:25

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	LOQ	Result	Q
74-87-3	Chloromethane	0.50	< 0.50	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.20	< 0.20	U
75-00-3	Chloroethane	0.20	< 0.20	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	Acetone	5.0	< 5.0	U
75-15-0	Carbon Disulfide	0.20	< 0.20	U
75-35-4	1,1-Dichloroethene	0.20	< 0.20	U
75-34-3	1,1-Dichloroethane	0.20	< 0.20	U
156-60-5	trans-1,2-Dichloroethene	0.20	< 0.20	U
156-59-2	**cis-1,2-Dichloroethene**	**0.20**	**0.80**	
67-66-3	**Chloroform**	**0.20**	**0.24**	
107-06-2	1,2-Dichloroethane	0.20	< 0.20	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	**1,1,1-Trichloroethane**	**0.20**	**0.22**	
56-23-5	Carbon Tetrachloride	0.20	< 0.20	U
108-05-4	Vinyl Acetate	0.20	< 0.20	U
75-27-4	Bromodichloromethane	0.20	< 0.20	U
78-87-5	1,2-Dichloropropane	0.20	< 0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	< 0.20	U
79-01-6	**Trichloroethene**	**0.20**	**29**	
124-48-1	Dibromochloromethane	0.20	< 0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	< 0.20	U
71-43-2	Benzene	0.20	< 0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	< 0.20	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.20	< 0.20	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.20	< 0.20	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	< 0.20	U
108-88-3	Toluene	0.20	< 0.20	U
108-90-7	Chlorobenzene	0.20	< 0.20	U
100-41-4	Ethylbenzene	0.20	< 0.20	U
100-42-5	Styrene	0.20	< 0.20	U
75-69-4	Trichlorofluoromethane	0.20	< 0.20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.20	< 0.20	U
179601-23-1	m,p-Xylene	0.40	< 0.40	U
95-47-6	o-Xylene	0.20	< 0.20	U
95-50-1	1,2-Dichlorobenzene	0.20	< 0.20	U
541-73-1	1,3-Dichlorobenzene	0.20	< 0.20	U
106-46-7	1,4-Dichlorobenzene	0.20	< 0.20	U

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140131I5I-1**

SAMPLE

Lab Sample ID: XW82F
LIMS ID: 14-1844
Matrix: Water
Date Analyzed: 02/06/14 20:25

QC Report No: XW82-Joint Base Lewis McChord
Project: Log Ram

CAS Number	Analyte	LOQ	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Iodomethane	1.0	< 1.0	U
74-96-4	Bromoethane	0.20	< 0.20	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.20	< 0.20	U
74-95-3	Dibromomethane	0.20	< 0.20	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	< 0.20	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	< 0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	< 0.50	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.20	< 0.20	U
95-63-6	1,2,4-Trimethylbenzene	0.20	< 0.20	U
87-68-3	Hexachlorobutadiene	0.50	< 0.50	U
106-93-4	1,2-Dibromoethane	0.20	< 0.20	U
74-97-5	Bromochloromethane	0.20	< 0.20	U
594-20-7	2,2-Dichloropropane	0.20	< 0.20	U
142-28-9	1,3-Dichloropropane	0.20	< 0.20	U
98-82-8	Isopropylbenzene	0.20	< 0.20	U
103-65-1	n-Propylbenzene	0.20	< 0.20	U
108-86-1	Bromobenzene	0.20	< 0.20	U
95-49-8	2-Chlorotoluene	0.20	< 0.20	U
106-43-4	4-Chlorotoluene	0.20	< 0.20	U
98-06-6	tert-Butylbenzene	0.20	< 0.20	U
135-98-8	sec-Butylbenzene	0.20	< 0.20	U
99-87-6	4-Isopropyltoluene	0.20	< 0.20	U
104-51-8	n-Butylbenzene	0.20	< 0.20	U
120-82-1	1,2,4-Trichlorobenzene	0.50	< 0.50	U
91-20-3	Naphthalene	0.50	< 0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	< 0.50	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	106%
d8-Toluene	96.6%
Bromofluorobenzene	97.5%
d4-1,2-Dichlorobenzene	99.3%

2-Chloroethylvinylether is an acid labile compound and may not be recovered from an acid preserved sample.

EPA SW-846 indicates that vinyl chloride and styrene may degrade in the presence of acid preservative.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140131I5E-1**
Page 1 of 2 **SAMPLE**

Lab Sample ID: XW82G
LIMS ID: 14-1845
Matrix: Water
Data Release Authorized:
Reported: 02/12/14

QC Report No: XW82-Joint Base Lewis McChord
Project: Log Ram

Date Sampled: 01/31/14
Date Received: 02/03/14

Instrument/Analyst: NT2/PAB
Date Analyzed: 02/06/14 20:51

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	LOQ	Result	Q
74-87-3	Chloromethane	0.50	< 0.50	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.20	< 0.20	U
75-00-3	Chloroethane	0.20	< 0.20	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	Acetone	5.0	< 5.0	U
75-15-0	Carbon Disulfide	0.20	< 0.20	U
75-35-4	1,1-Dichloroethene	0.20	< 0.20	U
75-34-3	1,1-Dichloroethane	0.20	< 0.20	U
156-60-5	trans-1,2-Dichloroethene	0.20	< 0.20	U
156-59-2	cis-1,2-Dichloroethene	0.20	< 0.20	U
67-66-3	Chloroform	0.20	< 0.20	U
107-06-2	1,2-Dichloroethane	0.20	< 0.20	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	0.20	< 0.20	U
56-23-5	Carbon Tetrachloride	0.20	< 0.20	U
108-05-4	Vinyl Acetate	0.20	< 0.20	U
75-27-4	Bromodichloromethane	0.20	< 0.20	U
78-87-5	1,2-Dichloropropane	0.20	< 0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	< 0.20	U
79-01-6	**Trichloroethene**	**0.20**	**0.42**	
124-48-1	Dibromochloromethane	0.20	< 0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	< 0.20	U
71-43-2	Benzene	0.20	< 0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	< 0.20	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.20	< 0.20	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.20	< 0.20	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	< 0.20	U
108-88-3	Toluene	0.20	< 0.20	U
108-90-7	Chlorobenzene	0.20	< 0.20	U
100-41-4	Ethylbenzene	0.20	< 0.20	U
100-42-5	Styrene	0.20	< 0.20	U
75-69-4	Trichlorofluoromethane	0.20	< 0.20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.20	< 0.20	U
179601-23-1	m,p-Xylene	0.40	< 0.40	U
95-47-6	o-Xylene	0.20	< 0.20	U
95-50-1	1,2-Dichlorobenzene	0.20	< 0.20	U
541-73-1	1,3-Dichlorobenzene	0.20	< 0.20	U
106-46-7	1,4-Dichlorobenzene	0.20	< 0.20	U

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140131I5E-1**

SAMPLE

Lab Sample ID: XW82G
LIMS ID: 14-1845
Matrix: Water
Date Analyzed: 02/06/14 20:51

QC Report No: XW82-Joint Base Lewis McChord
Project: Log Ram

CAS Number	Analyte	LOQ	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Iodomethane	1.0	< 1.0	U
74-96-4	Bromoethane	0.20	< 0.20	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.20	< 0.20	U
74-95-3	Dibromomethane	0.20	< 0.20	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	< 0.20	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	< 0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	< 0.50	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.20	< 0.20	U
95-63-6	1,2,4-Trimethylbenzene	0.20	< 0.20	U
87-68-3	Hexachlorobutadiene	0.50	< 0.50	U
106-93-4	1,2-Dibromoethane	0.20	< 0.20	U
74-97-5	Bromochloromethane	0.20	< 0.20	U
594-20-7	2,2-Dichloropropane	0.20	< 0.20	U
142-28-9	1,3-Dichloropropane	0.20	< 0.20	U
98-82-8	Isopropylbenzene	0.20	< 0.20	U
103-65-1	n-Propylbenzene	0.20	< 0.20	U
108-86-1	Bromobenzene	0.20	< 0.20	U
95-49-8	2-Chlorotoluene	0.20	< 0.20	U
106-43-4	4-Chlorotoluene	0.20	< 0.20	U
98-06-6	tert-Butylbenzene	0.20	< 0.20	U
135-98-8	sec-Butylbenzene	0.20	< 0.20	U
99-87-6	4-Isopropyltoluene	0.20	< 0.20	U
104-51-8	n-Butylbenzene	0.20	< 0.20	U
120-82-1	1,2,4-Trichlorobenzene	0.50	< 0.50	U
91-20-3	Naphthalene	0.50	< 0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	< 0.50	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	105%
d8-Toluene	98.1%
Bromofluorobenzene	106%
d4-1,2-Dichlorobenzene	98.7%

2-Chloroethylvinylether is an acid labile compound and may not be recovered from an acid preserved sample.

EPA SW-846 indicates that vinyl chloride and styrene may degrade in the presence of acid preservative.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: MB-020614A**
 METHOD BLANK

Lab Sample ID: MB-020614A
LIMS ID: 14-1845
Matrix: Water
Data Release Authorized:
Reported: 02/12/14

QC Report No: XW82-Joint Base Lewis McChord
Project: Log Ram

Date Sampled: NA
Date Received: NA

Instrument/Analyst: NT2/PAB
Date Analyzed: 02/06/14 11:33

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	LOQ	Result	Q
74-87-3	Chloromethane	0.50	< 0.50	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.20	< 0.20	U
75-00-3	Chloroethane	0.20	< 0.20	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	Acetone	5.0	< 5.0	U
75-15-0	Carbon Disulfide	0.20	< 0.20	U
75-35-4	1,1-Dichloroethene	0.20	< 0.20	U
75-34-3	1,1-Dichloroethane	0.20	< 0.20	U
156-60-5	trans-1,2-Dichloroethene	0.20	< 0.20	U
156-59-2	cis-1,2-Dichloroethene	0.20	< 0.20	U
67-66-3	Chloroform	0.20	< 0.20	U
107-06-2	1,2-Dichloroethane	0.20	< 0.20	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	0.20	< 0.20	U
56-23-5	Carbon Tetrachloride	0.20	< 0.20	U
108-05-4	Vinyl Acetate	0.20	< 0.20	U
75-27-4	Bromodichloromethane	0.20	< 0.20	U
78-87-5	1,2-Dichloropropane	0.20	< 0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	< 0.20	U
79-01-6	Trichloroethene	0.20	< 0.20	U
124-48-1	Dibromochloromethane	0.20	< 0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	< 0.20	U
71-43-2	Benzene	0.20	< 0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	< 0.20	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.20	< 0.20	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.20	< 0.20	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	< 0.20	U
108-88-3	Toluene	0.20	< 0.20	U
108-90-7	Chlorobenzene	0.20	< 0.20	U
100-41-4	Ethylbenzene	0.20	< 0.20	U
100-42-5	Styrene	0.20	< 0.20	U
75-69-4	Trichlorofluoromethane	0.20	< 0.20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.20	< 0.20	U
179601-23-1	m,p-Xylene	0.40	< 0.40	U
95-47-6	o-Xylene	0.20	< 0.20	U
95-50-1	1,2-Dichlorobenzene	0.20	< 0.20	U
541-73-1	1,3-Dichlorobenzene	0.20	< 0.20	U
106-46-7	1,4-Dichlorobenzene	0.20	< 0.20	U

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: MB-020614A**
 METHOD BLANK

Lab Sample ID: MB-020614A QC Report No: XW82-Joint Base Lewis McChord
LIMS ID: 14-1845 Project: Log Ram
Matrix: Water
Date Analyzed: 02/06/14 11:33

CAS Number	Analyte	LOQ	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Iodomethane	1.0	< 1.0	U
74-96-4	Bromoethane	0.20	< 0.20	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.20	< 0.20	U
74-95-3	Dibromomethane	0.20	< 0.20	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	< 0.20	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	< 0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	< 0.50	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.20	< 0.20	U
95-63-6	1,2,4-Trimethylbenzene	0.20	< 0.20	U
87-68-3	Hexachlorobutadiene	0.50	< 0.50	U
106-93-4	1,2-Dibromoethane	0.20	< 0.20	U
74-97-5	Bromochloromethane	0.20	< 0.20	U
594-20-7	2,2-Dichloropropane	0.20	< 0.20	U
142-28-9	1,3-Dichloropropane	0.20	< 0.20	U
98-82-8	Isopropylbenzene	0.20	< 0.20	U
103-65-1	n-Propylbenzene	0.20	< 0.20	U
108-86-1	Bromobenzene	0.20	< 0.20	U
95-49-8	2-Chlorotoluene	0.20	< 0.20	U
106-43-4	4-Chlorotoluene	0.20	< 0.20	U
98-06-6	tert-Butylbenzene	0.20	< 0.20	U
135-98-8	sec-Butylbenzene	0.20	< 0.20	U
99-87-6	4-Isopropyltoluene	0.20	< 0.20	U
104-51-8	n-Butylbenzene	0.20	< 0.20	U
120-82-1	1,2,4-Trichlorobenzene	0.50	< 0.50	U
91-20-3	Naphthalene	0.50	< 0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	< 0.50	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	98.0%
d8-Toluene	96.0%
Bromofluorobenzene	99.2%
d4-1,2-Dichlorobenzene	102%

ANALYTICAL RESOURCES INCORPORATED

VOA SURROGATE RECOVERY SUMMARY

Matrix: Water

QC Report No: XW82-Joint Base Lewis McChord
Project: Log Ram

ARI ID	Client ID	PV	DCE	TOL	BFB	DCB	TOT OUT
XW82A	LGC140130SLAPE-1	10	103%	99.1%	100%	98.8%	0
XW82B	LGC140130SLAPI-1	10	102%	95.5%	104%	103%	0
XW82C	LGC140131TB-1	10	106%	96.6%	108%	103%	0
XW82D	LGC140131EGDYI-1	10	100%	93.8%	101%	99.7%	0
XW82E	LGC140131EGDYE-1	10	110%	97.9%	103%	102%	0
XW82F	LGC140131I5I-1	10	106%	96.6%	97.5%	99.3%	0
MB-020614A	Method Blank	10	98.0%	96.0%	99.2%	102%	0
LCS-020614A	Lab Control	10	98.2%	96.5%	100%	101%	0
LCSD-020614A	Lab Control Dup	10	100%	100%	105%	97.6%	0
XW82G	LGC140131I5E-1	10	105%	98.1%	106%	98.7%	0

	LCS/MB LIMITS	QC LIMITS
SW8260C		
(DCE) = d4-1,2-Dichloroethane	(80-120)	(80-130)
(TOL) = d8-Toluene	(80-120)	(80-120)
(BFB) = Bromofluorobenzene	(80-120)	(80-120)
(DCB) = d4-1,2-Dichlorobenzene	(80-120)	(80-120)

Prep Method: SW5030B
Log Number Range: 14-1839 to 14-1845

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LCS-020614A**
 LAB CONTROL SAMPLE

Lab Sample ID: LCS-020614A
LIMS ID: 14-1845
Matrix: Water
Data Release Authorized:
Reported: 02/12/14

QC Report No: XW82-Joint Base Lewis McChord
Project: Log Ram

Date Sampled: NA
Date Received: NA

Instrument/Analyst LCS: NT2/PAB
LCSD: NT2/PAB
Date Analyzed LCS: 02/06/14 10:40
LCSD: 02/06/14 11:07

Sample Amount LCS: 10.0 mL
LCSD: 10.0 mL
Purge Volume LCS: 10.0 mL
LCSD: 10.0 mL

Analyte	LCS	Spike Added-LCS	LCS Recovery	LCSD	Spike Added-LCSD	LCSD Recovery	RPD
Chloromethane	10.6	10.0	106%	11.2	10.0	112%	5.5%
Bromomethane	10.8	10.0	108%	11.4	10.0	114%	5.4%
Vinyl Chloride	10.6	10.0	106%	11.1	10.0	111%	4.6%
Chloroethane	9.87	10.0	98.7%	10.3	10.0	103%	4.3%
Methylene Chloride	10.3	10.0	103%	10.6	10.0	106%	2.9%
Acetone	50.0	50.0	100%	50.8	50.0	102%	1.6%
Carbon Disulfide	10.4	10.0	104%	10.9	10.0	109%	4.7%
1,1-Dichloroethene	10.7	10.0	107%	11.0	10.0	110%	2.8%
1,1-Dichloroethane	10.4	10.0	104%	10.7	10.0	107%	2.8%
trans-1,2-Dichloroethene	9.95	10.0	99.5%	10.4	10.0	104%	4.4%
cis-1,2-Dichloroethene	10.2	10.0	102%	10.6	10.0	106%	3.8%
Chloroform	10.4	10.0	104%	10.5	10.0	105%	1.0%
1,2-Dichloroethane	11.0	10.0	110%	11.0	10.0	110%	0.0%
2-Butanone	50.6	50.0	101%	51.7	50.0	103%	2.2%
1,1,1-Trichloroethane	10.5	10.0	105%	11.1	10.0	111%	5.6%
Carbon Tetrachloride	10.9	10.0	109%	11.4	10.0	114%	4.5%
Vinyl Acetate	10.2	10.0	102%	10.3	10.0	103%	1.0%
Bromodichloromethane	10.5	10.0	105%	10.2	10.0	102%	2.9%
1,2-Dichloropropane	9.94	10.0	99.4%	10.0	10.0	100%	0.6%
cis-1,3-Dichloropropene	10.1	10.0	101%	10.5	10.0	105%	3.9%
Trichloroethene	9.61	10.0	96.1%	10.1	10.0	101%	5.0%
Dibromochloromethane	10.8	10.0	108%	10.7	10.0	107%	0.9%
1,1,2-Trichloroethane	9.75	10.0	97.5%	10.7	10.0	107%	9.3%
Benzene	10.3	10.0	103%	10.6	10.0	106%	2.9%
trans-1,3-Dichloropropene	10.2	10.0	102%	9.94	10.0	99.4%	2.6%
2-Chloroethylvinylether	9.30	10.0	93.0%	9.69	10.0	96.9%	4.1%
Bromoform	8.81	10.0	88.1%	8.43	10.0	84.3%	4.4%
4-Methyl-2-Pentanone (MIBK)	54.4	50.0	109%	53.1	50.0	106%	2.4%
2-Hexanone	51.9	50.0	104%	50.8	50.0	102%	2.1%
Tetrachloroethene	10.6	10.0	106%	10.4	10.0	104%	1.9%
1,1,2,2-Tetrachloroethane	10.3	10.0	103%	9.73	10.0	97.3%	5.7%
Toluene	9.72	10.0	97.2%	9.89	10.0	98.9%	1.7%
Chlorobenzene	10.2	10.0	102%	10.3	10.0	103%	1.0%
Ethylbenzene	10.3	10.0	103%	10.8	10.0	108%	4.7%
Styrene	11.2	10.0	112%	11.5	10.0	115%	2.6%
Trichlorofluoromethane	10.5	10.0	105%	11.4	10.0	114%	8.2%
1,1,2-Trichloro-1,2,2-trifluoroetha	10.3	10.0	103%	10.9	10.0	109%	5.7%
m,p-Xylene	21.9	20.0	110%	21.8	20.0	109%	0.5%

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LCS-020614A**

LAB CONTROL SAMPLE

ANALYTICAL RESOURCES INCORPORATED

Lab Sample ID: LCS-020614A
LIMS ID: 14-1845
Matrix: Water

QC Report No: XW82-Joint Base Lewis McChord
Project: Log Ram

Analyte	LCS	Spike Added-LCS	LCS Recovery	LCSD	Spike Added-LCSD	LCSD Recovery	RPD
o-Xylene	11.3	10.0	113%	11.4	10.0	114%	0.9%
1,2-Dichlorobenzene	10.4	10.0	104%	10.4	10.0	104%	0.0%
1,3-Dichlorobenzene	10.1	10.0	101%	9.88	10.0	98.8%	2.2%
1,4-Dichlorobenzene	9.99	10.0	99.9%	10.1	10.0	101%	1.1%
Acrolein	51.7	50.0	103%	50.8	50.0	102%	1.8%
Iodomethane	10.5	10.0	105%	10.8	10.0	108%	2.8%
Bromoethane	10.6	10.0	106%	11.2	10.0	112%	5.5%
Acrylonitrile	10.7	10.0	107%	10.6	10.0	106%	0.9%
1,1-Dichloropropene	10.4	10.0	104%	10.6	10.0	106%	1.9%
Dibromomethane	10.4	10.0	104%	10.7	10.0	107%	2.8%
1,1,1,2-Tetrachloroethane	10.8	10.0	108%	10.7	10.0	107%	0.9%
1,2-Dibromo-3-chloropropane	10.1	10.0	101%	9.87	10.0	98.7%	2.3%
1,2,3-Trichloropropane	10.0	10.0	100%	9.73	10.0	97.3%	2.7%
trans-1,4-Dichloro-2-butene	10.6	10.0	106%	10.5	10.0	105%	0.9%
1,3,5-Trimethylbenzene	10.8	10.0	108%	10.7	10.0	107%	0.9%
1,2,4-Trimethylbenzene	10.8	10.0	108%	10.6	10.0	106%	1.9%
Hexachlorobutadiene	7.73 Q	10.0	77.3%	8.07 Q	10.0	80.7%	4.3%
1,2-Dibromoethane	9.89	10.0	98.9%	10.4	10.0	104%	5.0%
Bromochloromethane	11.0	10.0	110%	11.7	10.0	117%	6.2%
2,2-Dichloropropane	10.5	10.0	105%	10.9	10.0	109%	3.7%
1,3-Dichloropropane	10.5	10.0	105%	10.2	10.0	102%	2.9%
Isopropylbenzene	10.6	10.0	106%	10.4	10.0	104%	1.9%
n-Propylbenzene	10.3	10.0	103%	9.83	10.0	98.3%	4.7%
Bromobenzene	9.98	10.0	99.8%	9.92	10.0	99.2%	0.6%
2-Chlorotoluene	10.4	10.0	104%	9.97	10.0	99.7%	4.2%
4-Chlorotoluene	10.1	10.0	101%	9.76	10.0	97.6%	3.4%
tert-Butylbenzene	10.2	10.0	102%	10.1	10.0	101%	1.0%
sec-Butylbenzene	10.6	10.0	106%	10.2	10.0	102%	3.8%
4-Isopropyltoluene	10.8	10.0	108%	10.6	10.0	106%	1.9%
n-Butylbenzene	10.3	10.0	103%	10.2	10.0	102%	1.0%
1,2,4-Trichlorobenzene	10.7	10.0	107%	10.4	10.0	104%	2.8%
Naphthalene	10.6	10.0	106%	10.4	10.0	104%	1.9%
1,2,3-Trichlorobenzene	11.2	10.0	112%	10.9	10.0	109%	2.7%

Reported in µg/L (ppb)

RPD calculated using sample concentrations per SW846.

Volatile Surrogate Recovery

	LCS	LCSD
d4-1,2-Dichloroethane	98.2%	100%
d8-Toluene	96.5%	100%
Bromofluorobenzene	100%	105%
d4-1,2-Dichlorobenzene	101%	97.6%

SECOND QUARTER

Analytical Resources, Incorporated
Analytical Chemists and Consultants

July 2, 2014

Thomas Lynott
Department of the Army
Directorate of Public Works
Attn Environmental Division (T. Lynott)
2012 Liggett Ave Box 339500 MS 17
Joint Base Lewis-McChord, Washington 98433-9500
Official Business

RE: Client Project: Log Ram
ARI Job No.: YP83

Dear Mr. Lynott:

Please find enclosed the original Chain-of-Custody record (COC), sample receipt documentation, and the final data for the project referenced above. Analytical Resources, Inc. (ARI) accepted four water samples on June 27, 2014. For further details regarding sample receipt please refer to the enclosed Cooler Receipt Form.

The samples were analyzed for VOCs, as requested on the COCs.

The VOCs CCAL is out of control low for all associated FORM III "Q" flagged analytes. All associated samples that contain analyte have been flagged with a "Q" qualifier.

An electronic copy of this report and all supporting raw data will remain on file with ARI. Should you have any questions or problems, please feel free to contact me at your convenience.

Respectfully,
ANALYTICAL RESOURCES, INC.

Kelly Bottem
Client Services Manager
(206) 695-6211
kellyb@arilabs.com
www.arilabs.com

eFile: YP83

4611 South 134th Place, Suite 100 • Tukwila WA 98168 • **206-695-6200** • **206-695-6201** fax

Chain of Custody Record & Laboratory Analysis Request

TO 21

Analytical Resources, Incorporated
Analytical Chemists and Consultants
4611 South 134th Place, Suite 100
Tukwila, WA 98168
206-695-6200 206-695-6201 (fax)
www.arilabs.com

ARI Assigned Number: YP83	Turn-around Requested: STANDARD
ARI Client Company: JOINT BASE LEWIS McCHORD PUBLIC WORKS IMLM-PWE	Phone: 253 966 1802
Client Contact: TOM J LYNOTT	
Client Project Name: LOGRAM	
Client Project #:	Samplers: T LYNOTT B THOMAS

Page: 1	of 1
Date: 27JUN14	Ice Present?
No. of Coolers:	Cooler Temps: 2.8

Sample ID	Date	Time	Matrix	No Containers	1006A								Notes/Comments
LGC140625I5E-1	25JUN14	1122	WATER	2	X								TOTAL
LGC140625I5I-1	25JUN14	1121	WATER	2	X								VOCs
LGC140623SLAPE-1	23JUN14	1120	WATER	2	X								
LGC140623SLAPI-1	23JUN14	1115	WATER	2	X								

Analysis Requested

Comments/Special Instructions	Relinquished by (Signature)	Received by (Signature)	Relinquished by (Signature)	Received by (Signature)
	Printed Name: TOM J LYNOTT	Printed Name: Taylor Streeter	Printed Name:	Printed Name:
	Company: VERSAR	Company: ARI	Company	Company
	Date & Time: 27JUN14 1310	Date & Time: 6-27-14 1310	Date & Time:	Date & Time:

Limits of Liability: *ARI will perform all requested services in accordance with appropriate methodology following ARI Standard Operating Procedures and the ARI Quality Assurance Program. This program meets standards for the industry. The total liability of ARI, its officers, agents, employees, or successors, arising out of or in connection with the requested services, shall not exceed the Invoiced amount for said services. The acceptance by the client of a proposal for services by ARI release ARI from any liability in excess thereof, not withstanding any provision to the contrary in any contract, purchase order or co-signed agreement between ARI and the Client.*

Sample Retention Policy: All samples submitted to ARI will be appropriately discarded no sooner than 90 days after receipt or 60 days after submission of hardcopy data, whichever is longer, unless alternate retention schedules have been established by work-order or contract.

YP83 : 00002

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Cooler Receipt Form

ARI Client: JBLM Project Name: Log Rom

COC No(s): _____ NA Delivered by. Fed-Ex UPS Courier Hand Delivered Other: _____

Assigned ARI Job No: YP83 Tracking No: _____ NA

Preliminary Examination Phase:

Were intact, properly signed and dated custody seals attached to the outside of to cooler?	YES	(NO)
Were custody papers included with the cooler?	(YES)	NO
Were custody papers properly filled out (ink, signed, etc.)	YES	NO
Temperature of Cooler(s) (°C) (recommended 2.0-6 0 °C for chemistry) Time: _____	2.5	
If cooler temperature is out of compliance fill out form 00070F	Temp Gun ID#:	70877453

Cooler Accepted by: TS Date: 6-27-14 Time: 1310

Complete custody forms and attach all shipping documents

Log-In Phase:

Was a temperature blank included in the cooler?		YES	(NO)
What kind of packing material was used? Bubble Wrap (Wet Ice) (Gel Packs) Baggies (Foam Block) Paper Other: _____			
Was sufficient ice used (if appropriate)?	NA	(YES)	NO
Were all bottles sealed in individual plastic bags?		YES	(NO)
Did all bottles arrive in good condition (unbroken)?		(YES)	NO
Were all bottle labels complete and legible?		(YES)	NO
Did the number of containers listed on COC match with the number of containers received?		(YES)	NO
Did all bottle labels and tags agree with custody papers?		(YES)	NO
Were all bottles used correct for the requested analyses?		(YES)	NO
Do any of the analyses (bottles) require preservation? (attach preservation sheet, excluding VOCs)...	(NA)	YES	NO
Were all VOC vials free of air bubbles?	NA	YES	NO
Was sufficient amount of sample sent in each bottle?		(YES)	NO
Date VOC Trip Blank was made at ARI	(NA)		

Was Sample Split by ARI : (NA) YES Date/Time: _____ Equipment: _____ Split by: _____

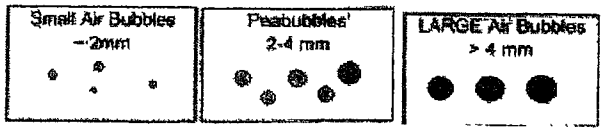
Samples Logged by: TS Date: 6-27-14 Time: 1526

*** Notify Project Manager of discrepancies or concerns ***

Sample ID on Bottle	Sample ID on COC	Sample ID on Bottle	Sample ID on COC

Additional Notes, Discrepancies, & Resolutions:

By: Date:



Small → "sm" (< 2 mm)
Peabubbles → "pb" (2 to < 4 mm)
Large → "lg" (4 to < 6 mm)
Headspace → "hs" (> 6 mm)

Sample ID Cross Reference Report

ANALYTICAL RESOURCES INCORPORATED

ARI Job No: YP83
Client: Joint Base Lewis McChord
Project Event: N/A
Project Name: LOGRAM

	Sample ID	ARI Lab ID	ARI LIMS ID	Matrix	Sample Date/Time	VTSR
1.	LGC140625I5E-1	YP83A	14-12872	Water	06/25/14 11:22	06/27/14 13:10
2.	LGC140625I5I-1	YP83B	14-12873	Water	06/25/14 11:21	06/27/14 13:10
3.	LGC140625SLAPE-1	YP83C	14-12874	Water	06/23/14 11:20	06/27/14 13:10
4.	LGC140625SLAPI-1	YP83D	14-12875	Water	06/23/14 11:15	06/27/14 13:10

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140625I5E-1**
 SAMPLE

Lab Sample ID: YP83A
LIMS ID: 14-12872
Matrix: Water
Data Release Authorized:
Reported: 07/02/14

QC Report No: YP83-Joint Base Lewis McChord
Project: LOGRAM

Date Sampled: 06/25/14
Date Received: 06/27/14

Instrument/Analyst: NT2/LH
Date Analyzed: 07/01/14 13:53

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	LOQ	Result	Q
74-87-3	Chloromethane	0.50	< 0.50	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.20	< 0.20	U
75-00-3	Chloroethane	0.20	< 0.20	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	Acetone	5.0	< 5.0	U
75-15-0	Carbon Disulfide	0.20	< 0.20	U
75-35-4	1,1-Dichloroethene	0.20	< 0.20	U
75-34-3	1,1-Dichloroethane	0.20	< 0.20	U
156-60-5	trans-1,2-Dichloroethene	0.20	< 0.20	U
156-59-2	cis-1,2-Dichloroethene	0.20	< 0.20	U
67-66-3	Chloroform	0.20	< 0.20	U
107-06-2	1,2-Dichloroethane	0.20	< 0.20	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	0.20	< 0.20	U
56-23-5	Carbon Tetrachloride	0.20	< 0.20	U
108-05-4	Vinyl Acetate	0.20	< 0.20	U
75-27-4	Bromodichloromethane	0.20	< 0.20	U
78-87-5	1,2-Dichloropropane	0.20	< 0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	< 0.20	U
79-01-6	**Trichloroethene**	**0.20**	**0.30**	
124-48-1	Dibromochloromethane	0.20	< 0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	< 0.20	U
71-43-2	Benzene	0.20	< 0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	< 0.20	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.20	< 0.20	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.20	< 0.20	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	< 0.20	U
108-88-3	Toluene	0.20	< 0.20	U
108-90-7	Chlorobenzene	0.20	< 0.20	U
100-41-4	Ethylbenzene	0.20	< 0.20	U
100-42-5	Styrene	0.20	< 0.20	U
75-69-4	Trichlorofluoromethane	0.20	< 0.20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.20	< 0.20	U
179601-23-1	m,p-Xylene	0.40	< 0.40	U
95-47-6	o-Xylene	0.20	< 0.20	U
95-50-1	1,2-Dichlorobenzene	0.20	< 0.20	U
541-73-1	1,3-Dichlorobenzene	0.20	< 0.20	U
106-46-7	1,4-Dichlorobenzene	0.20	< 0.20	U

Lab Sample ID: YP83A
LIMS ID: 14-12872
Matrix: Water
Date Analyzed: 07/01/14 13:53

QC Report No: YP83-Joint Base Lewis McChord
Project: LOGRAM

CAS Number	Analyte	LOQ	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Iodomethane	1.0	< 1.0	U
74-96-4	Bromoethane	0.20	< 0.20	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.20	< 0.20	U
74-95-3	Dibromomethane	0.20	< 0.20	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	< 0.20	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	< 0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	< 0.50	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.20	< 0.20	U
95-63-6	1,2,4-Trimethylbenzene	0.20	< 0.20	U
87-68-3	Hexachlorobutadiene	0.50	< 0.50	U
106-93-4	1,2-Dibromoethane	0.20	< 0.20	U
74-97-5	Bromochloromethane	0.20	< 0.20	U
594-20-7	2,2-Dichloropropane	0.20	< 0.20	U
142-28-9	1,3-Dichloropropane	0.20	< 0.20	U
98-82-8	Isopropylbenzene	0.20	< 0.20	U
103-65-1	n-Propylbenzene	0.20	< 0.20	U
108-86-1	Bromobenzene	0.20	< 0.20	U
95-49-8	2-Chlorotoluene	0.20	< 0.20	U
106-43-4	4-Chlorotoluene	0.20	< 0.20	U
98-06-6	tert-Butylbenzene	0.20	< 0.20	U
135-98-8	sec-Butylbenzene	0.20	< 0.20	U
99-87-6	4-Isopropyltoluene	0.20	< 0.20	U
104-51-8	n-Butylbenzene	0.20	< 0.20	U
120-82-1	1,2,4-Trichlorobenzene	0.50	< 0.50	U
91-20-3	Naphthalene	0.50	< 0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	< 0.50	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	101%
d8-Toluene	103%
Bromofluorobenzene	85.6%
d4-1,2-Dichlorobenzene	106%

2-Chloroethylvinylether is an acid labile compound and may not be recovered from an acid preserved sample.

EPA SW-846 indicates that vinyl chloride and styrene may degrade in the presence of acid preservative.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140625I5I-1**
 SAMPLE

Lab Sample ID: YP83B
LIMS ID: 14-12873
Matrix: Water
Data Release Authorized:
Reported: 07/02/14

QC Report No: YP83-Joint Base Lewis McChord
Project: LOGRAM

Date Sampled: 06/25/14
Date Received: 06/27/14

Instrument/Analyst: NT2/LH
Date Analyzed: 07/01/14 14:20

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	LOQ	Result	Q
74-87-3	Chloromethane	0.50	< 0.50	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.20	< 0.20	U
75-00-3	Chloroethane	0.20	< 0.20	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	Acetone	5.0	< 5.0	U
75-15-0	Carbon Disulfide	0.20	< 0.20	U
75-35-4	1,1-Dichloroethene	0.20	< 0.20	U
75-34-3	1,1-Dichloroethane	0.20	< 0.20	U
156-60-5	trans-1,2-Dichloroethene	0.20	< 0.20	U
156-59-2	**cis-1,2-Dichloroethene**	**0.20**	**0.59**	
67-66-3	**Chloroform**	**0.20**	**0.28**	
107-06-2	1,2-Dichloroethane	0.20	< 0.20	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	0.20	< 0.20	U
56-23-5	Carbon Tetrachloride	0.20	< 0.20	U
108-05-4	Vinyl Acetate	0.20	< 0.20	U
75-27-4	Bromodichloromethane	0.20	< 0.20	U
78-87-5	1,2-Dichloropropane	0.20	< 0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	< 0.20	U
79-01-6	**Trichloroethene**	**0.20**	**29**	
124-48-1	Dibromochloromethane	0.20	< 0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	< 0.20	U
71-43-2	Benzene	0.20	< 0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	< 0.20	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.20	< 0.20	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.20	< 0.20	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	< 0.20	U
108-88-3	Toluene	0.20	< 0.20	U
108-90-7	Chlorobenzene	0.20	< 0.20	U
100-41-4	Ethylbenzene	0.20	< 0.20	U
100-42-5	Styrene	0.20	< 0.20	U
75-69-4	Trichlorofluoromethane	0.20	< 0.20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.20	< 0.20	U
179601-23-1	m,p-Xylene	0.40	< 0.40	U
95-47-6	o-Xylene	0.20	< 0.20	U
95-50-1	1,2-Dichlorobenzene	0.20	< 0.20	U
541-73-1	1,3-Dichlorobenzene	0.20	< 0.20	U
106-46-7	1,4-Dichlorobenzene	0.20	< 0.20	U

Lab Sample ID: YP83B QC Report No: YP83-Joint Base Lewis McChord
LIMS ID: 14-12873 Project: LOGRAM
Matrix: Water
Date Analyzed: 07/01/14 14:20

CAS Number	Analyte	LOQ	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Iodomethane	1.0	< 1.0	U
74-96-4	Bromoethane	0.20	< 0.20	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.20	< 0.20	U
74-95-3	Dibromomethane	0.20	< 0.20	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	< 0.20	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	< 0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	< 0.50	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.20	< 0.20	U
95-63-6	1,2,4-Trimethylbenzene	0.20	< 0.20	U
87-68-3	Hexachlorobutadiene	0.50	< 0.50	U
106-93-4	1,2-Dibromoethane	0.20	< 0.20	U
74-97-5	Bromochloromethane	0.20	< 0.20	U
594-20-7	2,2-Dichloropropane	0.20	< 0.20	U
142-28-9	1,3-Dichloropropane	0.20	< 0.20	U
98-82-8	Isopropylbenzene	0.20	< 0.20	U
103-65-1	n-Propylbenzene	0.20	< 0.20	U
108-86-1	Bromobenzene	0.20	< 0.20	U
95-49-8	2-Chlorotoluene	0.20	< 0.20	U
106-43-4	4-Chlorotoluene	0.20	< 0.20	U
98-06-6	tert-Butylbenzene	0.20	< 0.20	U
135-98-8	sec-Butylbenzene	0.20	< 0.20	U
99-87-6	4-Isopropyltoluene	0.20	< 0.20	U
104-51-8	n-Butylbenzene	0.20	< 0.20	U
120-82-1	1,2,4-Trichlorobenzene	0.50	< 0.50	U
91-20-3	Naphthalene	0.50	< 0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	< 0.50	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	105%
d8-Toluene	91.4%
Bromofluorobenzene	82.6%
d4-1,2-Dichlorobenzene	106%

2-Chloroethylvinylether is an acid labile compound and may not be recovered from an acid preserved sample.

EPA SW-846 indicates that vinyl chloride and styrene may degrade in the presence of acid preservative.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140625SLAPE-1**
 SAMPLE

Lab Sample ID: YP83C
LIMS ID: 14-12874
Matrix: Water
Data Release Authorized:
Reported: 07/02/14

QC Report No: YP83-Joint Base Lewis McChord
Project: LOGRAM

Date Sampled: 06/23/14
Date Received: 06/27/14

Instrument/Analyst: NT2/LH
Date Analyzed: 07/01/14 14:47

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	LOQ	Result	Q
74-87-3	Chloromethane	0.50	< 0.50	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.20	< 0.20	U
75-00-3	Chloroethane	0.20	< 0.20	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	Acetone	5.0	< 5.0	U
75-15-0	Carbon Disulfide	0.20	< 0.20	U
75-35-4	1,1-Dichloroethene	0.20	< 0.20	U
75-34-3	1,1-Dichloroethane	0.20	< 0.20	U
156-60-5	trans-1,2-Dichloroethene	0.20	< 0.20	U
156-59-2	cis-1,2-Dichloroethene	0.20	< 0.20	U
67-66-3	Chloroform	0.20	< 0.20	U
107-06-2	1,2-Dichloroethane	0.20	< 0.20	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	0.20	< 0.20	U
56-23-5	Carbon Tetrachloride	0.20	< 0.20	U
108-05-4	Vinyl Acetate	0.20	< 0.20	U
75-27-4	Bromodichloromethane	0.20	< 0.20	U
78-87-5	1,2-Dichloropropane	0.20	< 0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	< 0.20	U
79-01-6	**Trichloroethene**	**0.20**	**0.54**	
124-48-1	Dibromochloromethane	0.20	< 0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	< 0.20	U
71-43-2	Benzene	0.20	< 0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	< 0.20	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.20	< 0.20	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.20	< 0.20	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	< 0.20	U
108-88-3	Toluene	0.20	< 0.20	U
108-90-7	Chlorobenzene	0.20	< 0.20	U
100-41-4	Ethylbenzene	0.20	< 0.20	U
100-42-5	Styrene	0.20	< 0.20	U
75-69-4	Trichlorofluoromethane	0.20	< 0.20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.20	< 0.20	U
179601-23-1	m,p-Xylene	0.40	< 0.40	U
95-47-6	o-Xylene	0.20	< 0.20	U
95-50-1	1,2-Dichlorobenzene	0.20	< 0.20	U
541-73-1	1,3-Dichlorobenzene	0.20	< 0.20	U
106-46-7	1,4-Dichlorobenzene	0.20	< 0.20	U

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140625SLAPE-1**
 SAMPLE

Lab Sample ID: YP83C QC Report No: YP83-Joint Base Lewis McChord
LIMS ID: 14-12874 Project: LOGRAM
Matrix: Water
Date Analyzed: 07/01/14 14:47

CAS Number	Analyte	LOQ	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Iodomethane	1.0	< 1.0	U
74-96-4	Bromoethane	0.20	< 0.20	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.20	< 0.20	U
74-95-3	Dibromomethane	0.20	< 0.20	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	< 0.20	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	< 0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	< 0.50	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.20	< 0.20	U
95-63-6	1,2,4-Trimethylbenzene	0.20	< 0.20	U
87-68-3	Hexachlorobutadiene	0.50	< 0.50	U
106-93-4	1,2-Dibromoethane	0.20	< 0.20	U
74-97-5	Bromochloromethane	0.20	< 0.20	U
594-20-7	2,2-Dichloropropane	0.20	< 0.20	U
142-28-9	1,3-Dichloropropane	0.20	< 0.20	U
98-82-8	Isopropylbenzene	0.20	< 0.20	U
103-65-1	n-Propylbenzene	0.20	< 0.20	U
108-86-1	Bromobenzene	0.20	< 0.20	U
95-49-8	2-Chlorotoluene	0.20	< 0.20	U
106-43-4	4-Chlorotoluene	0.20	< 0.20	U
98-06-6	tert-Butylbenzene	0.20	< 0.20	U
135-98-8	sec-Butylbenzene	0.20	< 0.20	U
99-87-6	4-Isopropyltoluene	0.20	< 0.20	U
104-51-8	n-Butylbenzene	0.20	< 0.20	U
120-82-1	1,2,4-Trichlorobenzene	0.50	< 0.50	U
91-20-3	Naphthalene	0.50	< 0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	< 0.50	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	112%
d8-Toluene	97.8%
Bromofluorobenzene	85.4%
d4-1,2-Dichlorobenzene	108%

2-Chloroethylvinylether is an acid labile compound and may not be recovered from an acid preserved sample.

EPA SW-846 indicates that vinyl chloride and styrene may degrade in the presence of acid preservative.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140625SLAPI-1**
 SAMPLE

Lab Sample ID: YP83D
LIMS ID: 14-12875
Matrix: Water
Data Release Authorized:
Reported: 07/02/14

QC Report No: YP83-Joint Base Lewis McChord
Project: LOGRAM
Date Sampled: 06/23/14
Date Received: 06/27/14

Instrument/Analyst: NT2/LH
Date Analyzed: 07/01/14 15:13

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	LOQ	Result	Q
74-87-3	Chloromethane	0.50	< 0.50	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.20	< 0.20	U
75-00-3	Chloroethane	0.20	< 0.20	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	Acetone	5.0	< 5.0	U
75-15-0	Carbon Disulfide	0.20	< 0.20	U
75-35-4	1,1-Dichloroethene	0.20	< 0.20	U
75-34-3	1,1-Dichloroethane	0.20	< 0.20	U
156-60-5	trans-1,2-Dichloroethene	0.20	< 0.20	U
156-59-2	**cis-1,2-Dichloroethene**	**0.20**	**0.36**	
67-66-3	Chloroform	0.20	< 0.20	U
107-06-2	1,2-Dichloroethane	0.20	< 0.20	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	0.20	< 0.20	U
56-23-5	Carbon Tetrachloride	0.20	< 0.20	U
108-05-4	Vinyl Acetate	0.20	< 0.20	U
75-27-4	Bromodichloromethane	0.20	< 0.20	U
78-87-5	1,2-Dichloropropane	0.20	< 0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	< 0.20	U
79-01-6	**Trichloroethene**	**0.20**	**16**	
124-48-1	Dibromochloromethane	0.20	< 0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	< 0.20	U
71-43-2	Benzene	0.20	< 0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	< 0.20	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.20	< 0.20	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.20	< 0.20	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	< 0.20	U
108-88-3	Toluene	0.20	< 0.20	U
108-90-7	Chlorobenzene	0.20	< 0.20	U
100-41-4	Ethylbenzene	0.20	< 0.20	U
100-42-5	Styrene	0.20	< 0.20	U
75-69-4	Trichlorofluoromethane	0.20	< 0.20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.20	< 0.20	U
179601-23-1	m,p-Xylene	0.40	< 0.40	U
95-47-6	o-Xylene	0.20	< 0.20	U
95-50-1	1,2-Dichlorobenzene	0.20	< 0.20	U
541-73-1	1,3-Dichlorobenzene	0.20	< 0.20	U
106-46-7	1,4-Dichlorobenzene	0.20	< 0.20	U

Lab Sample ID: YP83D
LIMS ID: 14-12875
Matrix: Water
Date Analyzed: 07/01/14 15:13

QC Report No: YP83-Joint Base Lewis McChord
Project: LOGRAM

CAS Number	Analyte	LOQ	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Iodomethane	1.0	< 1.0	U
74-96-4	Bromoethane	0.20	< 0.20	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.20	< 0.20	U
74-95-3	Dibromomethane	0.20	< 0.20	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	< 0.20	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	< 0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	< 0.50	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.20	< 0.20	U
95-63-6	1,2,4-Trimethylbenzene	0.20	< 0.20	U
87-68-3	Hexachlorobutadiene	0.50	< 0.50	U
106-93-4	1,2-Dibromoethane	0.20	< 0.20	U
74-97-5	Bromochloromethane	0.20	< 0.20	U
594-20-7	2,2-Dichloropropane	0.20	< 0.20	U
142-28-9	1,3-Dichloropropane	0.20	< 0.20	U
98-82-8	Isopropylbenzene	0.20	< 0.20	U
103-65-1	n-Propylbenzene	0.20	< 0.20	U
108-86-1	Bromobenzene	0.20	< 0.20	U
95-49-8	2-Chlorotoluene	0.20	< 0.20	U
106-43-4	4-Chlorotoluene	0.20	< 0.20	U
98-06-6	tert-Butylbenzene	0.20	< 0.20	U
135-98-8	sec-Butylbenzene	0.20	< 0.20	U
99-87-6	4-Isopropyltoluene	0.20	< 0.20	U
104-51-8	n-Butylbenzene	0.20	< 0.20	U
120-82-1	1,2,4-Trichlorobenzene	0.50	< 0.50	U
91-20-3	Naphthalene	0.50	< 0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	< 0.50	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	105%
d8-Toluene	93.6%
Bromofluorobenzene	85.5%
d4-1,2-Dichlorobenzene	106%

2-Chloroethylvinylether is an acid labile compound and may not be recovered from an acid preserved sample.

EPA SW-846 indicates that vinyl chloride and styrene may degrade in the presence of acid preservative.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: MB-070114A**
 METHOD BLANK

Lab Sample ID: MB-070114A
LIMS ID: 14-12872
Matrix: Water
Data Release Authorized:
Reported: 07/02/14

QC Report No: YP83-Joint Base Lewis McChord
Project: LOGRAM

Date Sampled: NA
Date Received: NA

Instrument/Analyst: NT2/LH
Date Analyzed: 07/01/14 12:39

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	LOQ	Result	Q
74-87-3	Chloromethane	0.50	< 0.50	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.20	< 0.20	U
75-00-3	Chloroethane	0.20	< 0.20	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	Acetone	5.0	< 5.0	U
75-15-0	Carbon Disulfide	0.20	< 0.20	U
75-35-4	1,1-Dichloroethene	0.20	< 0.20	U
75-34-3	1,1-Dichloroethane	0.20	< 0.20	U
156-60-5	trans-1,2-Dichloroethene	0.20	< 0.20	U
156-59-2	cis-1,2-Dichloroethene	0.20	< 0.20	U
67-66-3	Chloroform	0.20	< 0.20	U
107-06-2	1,2-Dichloroethane	0.20	< 0.20	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	0.20	< 0.20	U
56-23-5	Carbon Tetrachloride	0.20	< 0.20	U
108-05-4	Vinyl Acetate	0.20	< 0.20	U
75-27-4	Bromodichloromethane	0.20	< 0.20	U
78-87-5	1,2-Dichloropropane	0.20	< 0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	< 0.20	U
79-01-6	Trichloroethene	0.20	< 0.20	U
124-48-1	Dibromochloromethane	0.20	< 0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	< 0.20	U
71-43-2	Benzene	0.20	< 0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	< 0.20	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.20	< 0.20	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.20	< 0.20	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	< 0.20	U
108-88-3	Toluene	0.20	< 0.20	U
108-90-7	Chlorobenzene	0.20	< 0.20	U
100-41-4	Ethylbenzene	0.20	< 0.20	U
100-42-5	Styrene	0.20	< 0.20	U
75-69-4	Trichlorofluoromethane	0.20	< 0.20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.20	< 0.20	U
179601-23-1	m,p-Xylene	0.40	< 0.40	U
95-47-6	o-Xylene	0.20	< 0.20	U
95-50-1	1,2-Dichlorobenzene	0.20	< 0.20	U
541-73-1	1,3-Dichlorobenzene	0.20	< 0.20	U
106-46-7	1,4-Dichlorobenzene	0.20	< 0.20	U

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: MB-070114A**
 METHOD BLANK

Lab Sample ID: MB-070114A QC Report No: YP83-Joint Base Lewis McChord
LIMS ID: 14-12872 Project: LOGRAM
Matrix: Water
Date Analyzed: 07/01/14 12:39

CAS Number	Analyte	LOQ	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Iodomethane	1.0	< 1.0	U
74-96-4	Bromoethane	0.20	< 0.20	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.20	< 0.20	U
74-95-3	Dibromomethane	0.20	< 0.20	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	< 0.20	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	< 0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	< 0.50	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.20	< 0.20	U
95-63-6	1,2,4-Trimethylbenzene	0.20	< 0.20	U
87-68-3	Hexachlorobutadiene	0.50	< 0.50	U
106-93-4	1,2-Dibromoethane	0.20	< 0.20	U
74-97-5	Bromochloromethane	0.20	< 0.20	U
594-20-7	2,2-Dichloropropane	0.20	< 0.20	U
142-28-9	1,3-Dichloropropane	0.20	< 0.20	U
98-82-8	Isopropylbenzene	0.20	< 0.20	U
103-65-1	n-Propylbenzene	0.20	< 0.20	U
108-86-1	Bromobenzene	0.20	< 0.20	U
95-49-8	2-Chlorotoluene	0.20	< 0.20	U
106-43-4	4-Chlorotoluene	0.20	< 0.20	U
98-06-6	tert-Butylbenzene	0.20	< 0.20	U
135-98-8	sec-Butylbenzene	0.20	< 0.20	U
99-87-6	4-Isopropyltoluene	0.20	< 0.20	U
104-51-8	n-Butylbenzene	0.20	< 0.20	U
120-82-1	1,2,4-Trichlorobenzene	0.50	< 0.50	U
91-20-3	Naphthalene	0.50	< 0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	< 0.50	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	104%
d8-Toluene	99.1%
Bromofluorobenzene	83.6%
d4-1,2-Dichlorobenzene	107%

ANALYTICAL RESOURCES INCORPORATED

VOA SURROGATE RECOVERY SUMMARY

Matrix: Water

QC Report No: YP83-Joint Base Lewis McChord
Project: LOGRAM

ARI ID	Client ID	PV	DCE	TOL	BFB	DCB	TOT OUT
MB-070114A	Method Blank	10	104%	99.1%	83.6%	107%	0
LCS-070114A	Lab Control	10	93.5%	94.5%	95.0%	98.2%	0
LCSD-070114A	Lab Control Dup	10	94.4%	95.1%	95.0%	97.4%	0
YP83A	LGC140625I5E-1	10	101%	103%	85.6%	106%	0
YP83B	LGC140625I5I-1	10	105%	91.4%	82.6%	106%	0
YP83C	LGC140625SLAPE-1	10	112%	97.8%	85.4%	108%	0
YP83D	LGC140625SLAPI-1	10	105%	93.6%	85.5%	106%	0

	LCS/MB LIMITS	QC LIMITS
SW8260C		
(DCE) = d4-1,2-Dichloroethane	(80-120)	(80-130)
(TOL) = d8-Toluene	(80-120)	(80-120)
(BFB) = Bromofluorobenzene	(80-120)	(80-120)
(DCB) = d4-1,2-Dichlorobenzene	(80-120)	(80-120)

Prep Method: SW5030B
Log Number Range: 14-12872 to 14-12875

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LCS-070114A**
 LAB CONTROL SAMPLE

Lab Sample ID: LCS-070114A
LIMS ID: 14-12872
Matrix: Water
Data Release Authorized:
Reported: 07/02/14

QC Report No: YP83-Joint Base Lewis McChord
Project: LOGRAM

Date Sampled: NA
Date Received: NA

Instrument/Analyst LCS: NT2/LH
LCSD: NT2/LH
Date Analyzed LCS: 07/01/14 11:45
LCSD: 07/01/14 12:12

Sample Amount LCS: 10.0 mL
LCSD: 10.0 mL
Purge Volume LCS: 10.0 mL
LCSD: 10.0 mL

Analyte	LCS		Spike Added-LCS	LCS Recovery	LCSD		Spike Added-LCSD	LCSD Recovery	RPD
Chloromethane	9.58		10.0	95.8%	9.33		10.0	93.3%	2.6%
Bromomethane	9.85		10.0	98.5%	9.33		10.0	93.3%	5.4%
Vinyl Chloride	10.9		10.0	109%	10.5		10.0	105%	3.7%
Chloroethane	10.2		10.0	102%	9.57		10.0	95.7%	6.4%
Methylene Chloride	9.21		10.0	92.1%	8.93		10.0	89.3%	3.1%
Acetone	37.9	Q	50.0	75.8%	41.5	Q	50.0	83.0%	9.1%
Carbon Disulfide	9.54		10.0	95.4%	8.83		10.0	88.3%	7.7%
1,1-Dichloroethene	9.87		10.0	98.7%	9.51		10.0	95.1%	3.7%
1,1-Dichloroethane	9.47		10.0	94.7%	9.20		10.0	92.0%	2.9%
trans-1,2-Dichloroethene	9.59		10.0	95.9%	9.13		10.0	91.3%	4.9%
cis-1,2-Dichloroethene	9.44		10.0	94.4%	9.23		10.0	92.3%	2.2%
Chloroform	9.25		10.0	92.5%	9.36		10.0	93.6%	1.2%
1,2-Dichloroethane	9.14		10.0	91.4%	9.45		10.0	94.5%	3.3%
2-Butanone	37.5		50.0	75.0%	42.0		50.0	84.0%	11.3%
1,1,1-Trichloroethane	10.1		10.0	101%	9.68		10.0	96.8%	4.2%
Carbon Tetrachloride	11.3		10.0	113%	10.9		10.0	109%	3.6%
Vinyl Acetate	8.81		10.0	88.1%	9.27		10.0	92.7%	5.1%
Bromodichloromethane	9.77		10.0	97.7%	10.0		10.0	100%	2.3%
1,2-Dichloropropane	9.11		10.0	91.1%	9.19		10.0	91.9%	0.9%
cis-1,3-Dichloropropene	8.93		10.0	89.3%	9.27		10.0	92.7%	3.7%
Trichloroethene	10.8		10.0	108%	10.6		10.0	106%	1.9%
Dibromochloromethane	10.7		10.0	107%	10.8		10.0	108%	0.9%
1,1,2-Trichloroethane	8.80		10.0	88.0%	9.61		10.0	96.1%	8.8%
Benzene	9.38		10.0	93.8%	9.35		10.0	93.5%	0.3%
trans-1,3-Dichloropropene	9.31		10.0	93.1%	9.59		10.0	95.9%	3.0%
2-Chloroethylvinylether	7.57		10.0	75.7%	8.79		10.0	87.9%	14.9%
Bromoform	9.45		10.0	94.5%	10.9		10.0	109%	14.3%
4-Methyl-2-Pentanone (MIBK)	41.4		50.0	82.8%	45.6		50.0	91.2%	9.7%
2-Hexanone	40.0		50.0	80.0%	46.2		50.0	92.4%	14.4%
Tetrachloroethene	10.9		10.0	109%	10.9		10.0	109%	0.0%
1,1,2,2-Tetrachloroethane	8.81		10.0	88.1%	9.34		10.0	93.4%	5.8%
Toluene	9.47		10.0	94.7%	9.64		10.0	96.4%	1.8%
Chlorobenzene	10.4		10.0	104%	10.6		10.0	106%	1.9%
Ethylbenzene	10.1		10.0	101%	10.4		10.0	104%	2.9%
Styrene	10.8		10.0	108%	11.3		10.0	113%	4.5%
Trichlorofluoromethane	11.4		10.0	114%	10.9		10.0	109%	4.5%
1,1,2-Trichloro-1,2,2-trifluoroetha	12.0		10.0	120%	11.5		10.0	115%	4.3%
m,p-Xylene	21.5		20.0	108%	21.4		20.0	107%	0.5%

Lab Sample ID: LCS-070114A QC Report No: YP83-Joint Base Lewis McChord
LIMS ID: 14-12872 Project: LOGRAM
Matrix: Water

Analyte	LCS	Spike Added-LCS	LCS Recovery	LCSD	Spike Added-LCSD	LCSD Recovery	RPD
o-Xylene	10.2	10.0	102%	10.4	10.0	104%	1.9%
1,2-Dichlorobenzene	10.0	10.0	100%	10.0	10.0	100%	0.0%
1,3-Dichlorobenzene	10.5	10.0	105%	10.1	10.0	101%	3.9%
1,4-Dichlorobenzene	10.2	10.0	102%	10.0	10.0	100%	2.0%
Acrolein	42.3	50.0	84.6%	42.0	50.0	84.0%	0.7%
Iodomethane	10.4	10.0	104%	9.93	10.0	99.3%	4.6%
Bromoethane	10.6	10.0	106%	10.2	10.0	102%	3.8%
Acrylonitrile	8.20	10.0	82.0%	8.32	10.0	83.2%	1.5%
1,1-Dichloropropene	9.27	10.0	92.7%	9.36	10.0	93.6%	1.0%
Dibromomethane	9.59	10.0	95.9%	9.65	10.0	96.5%	0.6%
1,1,1,2-Tetrachloroethane	11.3	10.0	113%	11.3	10.0	113%	0.0%
1,2-Dibromo-3-chloropropane	8.92	10.0	89.2%	9.11	10.0	91.1%	2.1%
1,2,3-Trichloropropane	8.95	10.0	89.5%	9.34	10.0	93.4%	4.3%
trans-1,4-Dichloro-2-butene	8.53	10.0	85.3%	9.48	10.0	94.8%	10.5%
1,3,5-Trimethylbenzene	11.0	10.0	110%	10.6	10.0	106%	3.7%
1,2,4-Trimethylbenzene	11.0	10.0	110%	10.7	10.0	107%	2.8%
Hexachlorobutadiene	11.0	10.0	110%	11.1	10.0	111%	0.9%
1,2-Dibromoethane	9.64	10.0	96.4%	10.4	10.0	104%	7.6%
Bromochloromethane	10.3	10.0	103%	10.7	10.0	107%	3.8%
2,2-Dichloropropane	10.4	10.0	104%	10.3	10.0	103%	1.0%
1,3-Dichloropropane	8.52	10.0	85.2%	9.30	10.0	93.0%	8.8%
Isopropylbenzene	10.5	10.0	105%	10.3	10.0	103%	1.9%
n-Propylbenzene	10.2	10.0	102%	9.87	10.0	98.7%	3.3%
Bromobenzene	10.6	10.0	106%	10.4	10.0	104%	1.9%
2-Chlorotoluene	9.82	10.0	98.2%	9.74	10.0	97.4%	0.8%
4-Chlorotoluene	9.81	10.0	98.1%	9.72	10.0	97.2%	0.9%
tert-Butylbenzene	10.9	10.0	109%	10.6	10.0	106%	2.8%
sec-Butylbenzene	11.0	10.0	110%	10.7	10.0	107%	2.8%
4-Isopropyltoluene	11.9	10.0	119%	11.4	10.0	114%	4.3%
n-Butylbenzene	10.8	10.0	108%	10.3	10.0	103%	4.7%
1,2,4-Trichlorobenzene	11.2	10.0	112%	11.4	10.0	114%	1.8%
Naphthalene	10.4	10.0	104%	10.8	10.0	108%	3.8%
1,2,3-Trichlorobenzene	11.4	10.0	114%	11.5	10.0	115%	0.9%

Reported in µg/L (ppb)

RPD calculated using sample concentrations per SW846.

Volatile Surrogate Recovery

	LCS	LCSD
d4-1,2-Dichloroethane	93.5%	94.4%
d8-Toluene	94.5%	95.1%
Bromofluorobenzene	95.0%	95.0%
d4-1,2-Dichlorobenzene	98.2%	97.4%

Analytical Resources, Incorporated
Analytical Chemists and Consultants

June 26, 2014

Thomas Lynott
Department of the Army
Directorate of Public Works
Attn Environmental Division (T. Lynott)
2012 Liggett Ave Box 339500 MS 17
Joint Base Lewis-McChord, Washington 98433-9500
Official Business

RE: Client Project: Log Ram
ARI Job No.: YO30

Dear Mr. Lynott:

Please find enclosed the original Chain-of-Custody record (COC), sample receipt documentation, and the final data for the project referenced above. Analytical Resources, Inc. (ARI) accepted eleven water samples on June 17, 2014. For further details regarding sample receipt please refer to the enclosed Cooler Receipt Form.

The samples were analyzed for VOCs, as requested on the COCs.

The 6/20/14 VOCs CCAL is out of control high for acrolein and out of control low for acrylonitrile. All associated samples that contain analyte have been flagged with a "Q" qualifier.

The 6/23/14 VOCs CCAL is out of control high for all associated FORM III "Q". All associated samples that contain analyte have been flagged with a "Q" qualifier.

The method blanks contain hexachlorobutadiene. All associated samples that contain analyte have been flagged with a "B" qualifier.

The VOCs LCS and/or LCSDs are out of control high for several analytes.

An electronic copy of this report and all supporting raw data will remain on file with ARI. Should you have any questions or problems, please feel free to contact me at your convenience.

Respectfully,
ANALYTICAL RESOURCES, INC.

Kelly Bottem
Client Services Manager
(206) 695-6211
kellyb@arilabs.com
www.arilabs.com

eFile: YO30

4611 South 134th Place, Suite 100 • Tukwila WA 98168 • **206-695-6200** • **206-695-6201** fax

10 21

Chain of Custody Record & Laboratory Analysis Request

ARI Assigned Number: Y030	Turn-around Requested: STANDARD	Page: 1 of 2	
ARI Client Company: JOINT BASE LEWIS McCHORD PUBLIC WORKS IMLM DIVE	Phone: 253 466 1802	Date: 17JUN	Ice Present?
Client Contact: TOM J LYNOTT		No. of Coolers: E14	Cooler Temps: 4.2
Client Project Name: LOG RAM			
Client Project #:	Samplers: J BECKER		

Analytical Resources, Incorporated
Analytical Chemists and Consultants
4611 South 134th Place, Suite 100
Tukwila, WA 98168
206-695-6200 206-695-6201 (fax)
www.arilabs.com

Sample ID	Date	Time	Matrix	No Containers	1006A								Notes/Comments
LGC140612DUP1-1	12JUNE14	0900	WATER	2	X								TOTAL VOCs
LGC14061285PA382-1	12JUNE14	1120	WATER	2	X								
LGC14061285PA384-1	12JUNE14	1100	WATER	2	X								
LGC140612MT1-1	12JUN14	1135	WATER	2	X								
LGC140612MT2-1	12JUN14	1155	WATER	2	X								
LGC140612MT3-1	12JUNE14	1230	WATER	2	X								
LGC140612MT4-1	12JUN14	1235	WATER	2	X								
LGC140612LC108-1	12JUN14	1245	WATER	2	X								
LGC140612LC108-2	12JUN14	1255	WATER	2	X								
LGC140612LC135-1	12JUN14	1250	WATER	2	X								

Comments/Special Instructions	Relinquished by	Received by	Relinquished by	Received by
	(Signature) [signature]	(Signature) [signature]	(Signature)	(Signature)
	Printed Name: TOM J LYNOTT	Printed Name: Tyler Streeter	Printed Name	Printed Name
	Company: VENSAR	Company: ARI	Company	Company
	Date & Time: 17JUN14 1310	Date & Time: 6-17-14 1310	Date & Time:	Date & Time

Limits of Liability: *ARI will perform all requested services in accordance with appropriate methodology following ARI Standard Operating Procedures and the ARI Quality Assurance Program. This program meets standards for the industry. The total liability of ARI, its officers, agents, employees, or successors, arising out of or in connection with the requested services, shall not exceed the Invoiced amount for said services. The acceptance by the client of a proposal for services by ARI release ARI from any liability in excess thereof, not withstanding any provision to the contrary in any contract, purchase order or co-signed agreement between ARI and the Client.*

Sample Retention Policy: All samples submitted to ARI will be appropriately discarded no sooner than 90 days after receipt or 60 days after submission of hardcopy data, whichever is longer, unless alternate retention schedules have been established by work-order or contract.

Y030 : 00002

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Chain of Custody Record & Laboratory Analysis Request

Analytical Resources, Incorporated
Analytical Chemists and Consultants
4611 South 134th Place, Suite 100
Tukwila, WA 98168
206-695-6200 206-695-6201 (fax)
www.arilabs.com

ARI Assigned Number: Y030	Turn-around Requested: STANDARD
ARI Client Company: JOINT BASE LEWIS McCHORD PUBLIC WORKS IMLM-PWE	Phone: 253 966 1802
Client Contact: Tom J LYNOTT	
Client Project Name: LOGRAM	
Client Project #:	Samplers: J BECKER T LYNOTT

Page: 2 of 2	
Date: 17JUN14	Ice Present?
No. of Coolers:	Cooler Temps: 4.2

Sample ID	Date	Time	Matrix	No Containers	Analysis Requested: 1006A								Notes/Comments
LGC140617TB-1	17JUN14	1200	WATER	2	X								TOTAL VOCs

Comments/Special Instructions	Relinquished by: (Signature)	Received by: (Signature)	Relinquished by: (Signature)	Received by: (Signature)
	Printed Name: TOM J LYNOTT	Printed Name: Taylor Streeter	Printed Name:	Printed Name:
	Company: VERSAR	Company: ARI	Company:	Company:
	Date & Time: 17JUN14 1310	Date & Time: 6-17-14 1310	Date & Time:	Date & Time:

Limits of Liability: *ARI will perform all requested services in accordance with appropriate methodology following ARI Standard Operating Procedures and the ARI Quality Assurance Program. This program meets standards for the industry. The total liability of ARI, its officers, agents, employees, or successors, arising out of or in connection with the requested services, shall not exceed the Invoiced amount for said services. The acceptance by the client of a proposal for services by ARI release ARI from any liability in excess thereof, not withstanding any provision to the contrary in any contract, purchase order or co-signed agreement between ARI and the Client.*

Sample Retention Policy: All samples submitted to ARI will be appropriately discarded no sooner than 90 days after receipt or 60 days after submission of hardcopy data, whichever is longer, unless alternate retention schedules have been established by work-order or contract.

Y030 : 00003

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Cooler Receipt Form

ARI Client BLM Project Name LOG Ram

COC No(s): _____ NA Delivered by: Fed-Ex UPS Courier Hand Delivered Other: _____

Assigned ARI Job No: Y030 Tracking No: _____ NA

Preliminary Examination Phase:

Were intact, properly signed and dated custody seals attached to the outside of to cooler? YES (NO)

Were custody papers included with the cooler? (YES) NO

Were custody papers properly filled out (ink, signed, etc.) (YES) NO

Temperature of Cooler(s) (°C) (recommended 2 0-6.0 °C for chemistry) 1.2

Time: _____

If cooler temperature is out of compliance fill out form 00070F Temp Gun ID#: 90677955

Cooler Accepted by: _____ Date 6-17-14 Time: _____

Complete custody forms and attach all shipping documents

Log-In Phase:

Was a temperature blank included in the cooler? YES (NO)

What kind of packing material was used? Bubble Wrap Wet Ice (Gel Packs) Baggies Foam Block Paper Other: _____

Was sufficient ice used (if appropriate)? NA (YES) NO

Were all bottles sealed in individual plastic bags? YES (NO)

Did all bottles arrive in good condition (unbroken)? (YES) NO

Were all bottle labels complete and legible? (YES) NO

Did the number of containers listed on COC match with the number of containers received? (YES) NO

Did all bottle labels and tags agree with custody papers? (YES) NO

Were all bottles used correct for the requested analyses? (YES) NO

Do any of the analyses (bottles) require preservation? (attach preservation sheet, excluding VOCs).. (NA) YES NO

Were all VOC vials free of air bubbles? NA (YES) NO

Was sufficient amount of sample sent in each bottle? (YES) NO

Date VOC Trip Blank was made at ARI.. NA _____

Was Sample Split by ARI : (NA) YES Date/Time: _____ Equipment: _____ Split by: _____

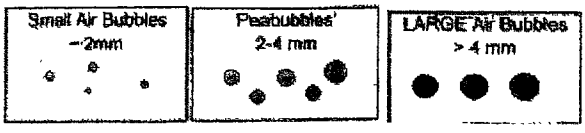
Samples Logged by: _____ Date: 6-17-14 Time: 1400

***** Notify Project Manager of discrepancies or concerns *****

Sample ID on Bottle	Sample ID on COC	Sample ID on Bottle	Sample ID on COC

Additional Notes, Discrepancies, & Resolutions:

By: Date:



Small → "sm" (< 2 mm)
Peabubbles → "pb" (2 to < 4 mm)
Large → "lg" (4 to < 6 mm)
Headspace → "hs" (> 6 mm)

Sample ID Cross Reference Report

ANALYTICAL RESOURCES INCORPORATED

ARI Job No: YO30
Client: Joint Base Lewis McChord
Project Event: N/A
Project Name: Log Ram

	Sample ID	ARI Lab ID	ARI LIMS ID	Matrix	Sample Date/Time	VTSR
1.	LGC140612DUP1-1	YO30A	14-11842	Water	06/12/14 09:00	06/17/14 13:10
2.	LGC14061285PA382-1	YO30B	14-11843	Water	06/12/14 11:20	06/17/14 13:10
3.	LGC14061285PA384-1	YO30C	14-11844	Water	06/12/14 11:00	06/17/14 13:10
4.	LGC140612MT1-1	YO30D	14-11845	Water	06/12/14 11:35	06/17/14 13:10
5.	LGC140612MT2-1	YO30E	14-11846	Water	06/12/14 11:55	06/17/14 13:10
6.	LGC140612MT3-1	YO30F	14-11847	Water	06/12/14 12:30	06/17/14 13:10
7.	LGC140612MT4-1	YO30G	14-11848	Water	06/12/14 12:35	06/17/14 13:10
8.	LGC140612LC108-1	YO30H	14-11849	Water	06/12/14 12:45	06/17/14 13:10
9.	LGC140612LC108-2	YO30I	14-11850	Water	06/12/14 12:55	06/17/14 13:10
10.	LGC140612LC135-2	YO30J	14-11851	Water	06/12/14 12:50	06/17/14 13:10
11.	LGC140617TB-1	YO30K	14-11852	Water	06/12/14	06/17/14 13:10

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140612DUP1-1**
 SAMPLE

Lab Sample ID: YO30A
LIMS ID: 14-11842
Matrix: Water
Data Release Authorized:
Reported: 06/26/14

QC Report No: YO30-Joint Base Lewis McChord
Project: Log Ram

Date Sampled: 06/12/14
Date Received: 06/17/14

Instrument/Analyst: NT3/LH
Date Analyzed: 06/20/14 21:15

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	LOQ	Result	Q
74-87-3	Chloromethane	0.50	< 0.50	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.20	< 0.20	U
75-00-3	Chloroethane	0.20	< 0.20	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	**Acetone**	**5.0**	**5.6**	
75-15-0	Carbon Disulfide	0.20	< 0.20	U
75-35-4	1,1-Dichloroethene	0.20	< 0.20	U
75-34-3	1,1-Dichloroethane	0.20	< 0.20	U
156-60-5	**trans-1,2-Dichloroethene**	**0.20**	**0.40**	
156-59-2	**cis-1,2-Dichloroethene**	**0.20**	**1.2**	
67-66-3	Chloroform	0.20	< 0.20	U
107-06-2	1,2-Dichloroethane	0.20	< 0.20	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	0.20	< 0.20	U
56-23-5	Carbon Tetrachloride	0.20	< 0.20	U
108-05-4	Vinyl Acetate	0.20	< 0.20	U
75-27-4	Bromodichloromethane	0.20	< 0.20	U
78-87-5	1,2-Dichloropropane	0.20	< 0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	< 0.20	U
79-01-6	**Trichloroethene**	**0.20**	**77**	
124-48-1	Dibromochloromethane	0.20	< 0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	< 0.20	U
71-43-2	Benzene	0.20	< 0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	< 0.20	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.20	< 0.20	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.20	< 0.20	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	< 0.20	U
108-88-3	Toluene	0.20	< 0.20	U
108-90-7	Chlorobenzene	0.20	< 0.20	U
100-41-4	Ethylbenzene	0.20	< 0.20	U
100-42-5	Styrene	0.20	< 0.20	U
75-69-4	Trichlorofluoromethane	0.20	< 0.20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.20	< 0.20	U
179601-23-1	m,p-Xylene	0.40	< 0.40	U
95-47-6	o-Xylene	0.20	< 0.20	U
95-50-1	1,2-Dichlorobenzene	0.20	< 0.20	U
541-73-1	1,3-Dichlorobenzene	0.20	< 0.20	U
106-46-7	1,4-Dichlorobenzene	0.20	< 0.20	U

Lab Sample ID: YO30A
LIMS ID: 14-11842
Matrix: Water
Date Analyzed: 06/20/14 21:15

QC Report No: YO30-Joint Base Lewis McChord
Project: Log Ram

CAS Number	Analyte	LOQ	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Iodomethane	1.0	< 1.0	U
74-96-4	Bromoethane	0.20	< 0.20	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.20	< 0.20	U
74-95-3	Dibromomethane	0.20	< 0.20	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	< 0.20	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	< 0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	< 0.50	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.20	< 0.20	U
95-63-6	1,2,4-Trimethylbenzene	0.20	< 0.20	U
87-68-3	Hexachlorobutadiene	0.50	< 0.50	U
106-93-4	1,2-Dibromoethane	0.20	< 0.20	U
74-97-5	Bromochloromethane	0.20	< 0.20	U
594-20-7	2,2-Dichloropropane	0.20	< 0.20	U
142-28-9	1,3-Dichloropropane	0.20	< 0.20	U
98-82-8	Isopropylbenzene	0.20	< 0.20	U
103-65-1	n-Propylbenzene	0.20	< 0.20	U
108-86-1	Bromobenzene	0.20	< 0.20	U
95-49-8	2-Chlorotoluene	0.20	< 0.20	U
106-43-4	4-Chlorotoluene	0.20	< 0.20	U
98-06-6	tert-Butylbenzene	0.20	< 0.20	U
135-98-8	sec-Butylbenzene	0.20	< 0.20	U
99-87-6	4-Isopropyltoluene	0.20	< 0.20	U
104-51-8	n-Butylbenzene	0.20	< 0.20	U
120-82-1	1,2,4-Trichlorobenzene	0.50	< 0.50	U
91-20-3	Naphthalene	0.50	< 0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	< 0.50	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	102%
d8-Toluene	99.0%
Bromofluorobenzene	98.7%
d4-1,2-Dichlorobenzene	103%

2-Chloroethylvinylether is an acid labile compound and may not be recovered from an acid preserved sample.

EPA SW-846 indicates that vinyl chloride and styrene may degrade in the presence of acid preservative.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC14061285PA382-1**
Page 1 of 2 **SAMPLE**

Lab Sample ID: YO30B
LIMS ID: 14-11843
Matrix: Water
Data Release Authorized:
Reported: 06/26/14

QC Report No: YO30-Joint Base Lewis McChord
Project: Log Ram

Date Sampled: 06/12/14
Date Received: 06/17/14

Instrument/Analyst: NT3/LH
Date Analyzed: 06/20/14 21:44

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	LOQ	Result	Q
74-87-3	Chloromethane	0.50	< 0.50	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.20	< 0.20	U
75-00-3	Chloroethane	0.20	< 0.20	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	**Acetone**	**5.0**	**6.7**	
75-15-0	Carbon Disulfide	0.20	< 0.20	U
75-35-4	1,1-Dichloroethene	0.20	< 0.20	U
75-34-3	1,1-Dichloroethane	0.20	< 0.20	U
156-60-5	trans-1,2-Dichloroethene	0.20	< 0.20	U
156-59-2	**cis-1,2-Dichloroethene**	**0.20**	**0.31**	
67-66-3	Chloroform	0.20	< 0.20	U
107-06-2	1,2-Dichloroethane	0.20	< 0.20	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	0.20	< 0.20	U
56-23-5	Carbon Tetrachloride	0.20	< 0.20	U
108-05-4	Vinyl Acetate	0.20	< 0.20	U
75-27-4	Bromodichloromethane	0.20	< 0.20	U
78-87-5	1,2-Dichloropropane	0.20	< 0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	< 0.20	U
79-01-6	**Trichloroethene**	**0.20**	**9.4**	
124-48-1	Dibromochloromethane	0.20	< 0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	< 0.20	U
71-43-2	Benzene	0.20	< 0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	< 0.20	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.20	< 0.20	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.20	< 0.20	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	< 0.20	U
108-88-3	Toluene	0.20	< 0.20	U
108-90-7	Chlorobenzene	0.20	< 0.20	U
100-41-4	Ethylbenzene	0.20	< 0.20	U
100-42-5	Styrene	0.20	< 0.20	U
75-69-4	Trichlorofluoromethane	0.20	< 0.20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.20	< 0.20	U
179601-23-1	m,p-Xylene	0.40	< 0.40	U
95-47-6	o-Xylene	0.20	< 0.20	U
95-50-1	1,2-Dichlorobenzene	0.20	< 0.20	U
541-73-1	1,3-Dichlorobenzene	0.20	< 0.20	U
106-46-7	1,4-Dichlorobenzene	0.20	< 0.20	U

Lab Sample ID: YO30B
LIMS ID: 14-11843
Matrix: Water
Date Analyzed: 06/20/14 21:44

QC Report No: YO30-Joint Base Lewis McChord
Project: Log Ram

CAS Number	Analyte	LOQ	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Iodomethane	1.0	< 1.0	U
74-96-4	Bromoethane	0.20	< 0.20	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.20	< 0.20	U
74-95-3	Dibromomethane	0.20	< 0.20	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	< 0.20	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	< 0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	< 0.50	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.20	< 0.20	U
95-63-6	1,2,4-Trimethylbenzene	0.20	< 0.20	U
87-68-3	Hexachlorobutadiene	0.50	< 0.50	U
106-93-4	1,2-Dibromoethane	0.20	< 0.20	U
74-97-5	Bromochloromethane	0.20	< 0.20	U
594-20-7	2,2-Dichloropropane	0.20	< 0.20	U
142-28-9	1,3-Dichloropropane	0.20	< 0.20	U
98-82-8	Isopropylbenzene	0.20	< 0.20	U
103-65-1	n-Propylbenzene	0.20	< 0.20	U
108-86-1	Bromobenzene	0.20	< 0.20	U
95-49-8	2-Chlorotoluene	0.20	< 0.20	U
106-43-4	4-Chlorotoluene	0.20	< 0.20	U
98-06-6	tert-Butylbenzene	0.20	< 0.20	U
135-98-8	sec-Butylbenzene	0.20	< 0.20	U
99-87-6	4-Isopropyltoluene	0.20	< 0.20	U
104-51-8	n-Butylbenzene	0.20	< 0.20	U
120-82-1	1,2,4-Trichlorobenzene	0.50	< 0.50	U
91-20-3	Naphthalene	0.50	< 0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	< 0.50	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	104%
d8-Toluene	99.5%
Bromofluorobenzene	101%
d4-1,2-Dichlorobenzene	102%

2-Chloroethylvinylether is an acid labile compound and may not be recovered from an acid preserved sample.

EPA SW-846 indicates that vinyl chloride and styrene may degrade in the presence of acid preservative.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC14061285PA384-1**
Page 1 of 2 **SAMPLE**

Lab Sample ID: YO30C
LIMS ID: 14-11844
Matrix: Water
Data Release Authorized:
Reported: 06/26/14

QC Report No: YO30-Joint Base Lewis McChord
Project: Log Ram

Date Sampled: 06/12/14
Date Received: 06/17/14

Instrument/Analyst: NT3/LH
Date Analyzed: 06/20/14 22:12

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	LOQ	Result	Q
74-87-3	Chloromethane	0.50	< 0.50	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.20	< 0.20	U
75-00-3	Chloroethane	0.20	< 0.20	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	**Acetone**	**5.0**	**8.7**	
75-15-0	Carbon Disulfide	0.20	< 0.20	U
75-35-4	1,1-Dichloroethene	0.20	< 0.20	U
75-34-3	1,1-Dichloroethane	0.20	< 0.20	U
156-60-5	trans-1,2-Dichloroethene	0.20	< 0.20	U
156-59-2	cis-1,2-Dichloroethene	0.20	< 0.20	U
67-66-3	Chloroform	0.20	< 0.20	U
107-06-2	1,2-Dichloroethane	0.20	< 0.20	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	0.20	< 0.20	U
56-23-5	Carbon Tetrachloride	0.20	< 0.20	U
108-05-4	Vinyl Acetate	0.20	< 0.20	U
75-27-4	Bromodichloromethane	0.20	< 0.20	U
78-87-5	1,2-Dichloropropane	0.20	< 0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	< 0.20	U
79-01-6	**Trichloroethene**	**0.20**	**0.23**	
124-48-1	Dibromochloromethane	0.20	< 0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	< 0.20	U
71-43-2	Benzene	0.20	< 0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	< 0.20	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.20	< 0.20	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.20	< 0.20	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	< 0.20	U
108-88-3	Toluene	0.20	< 0.20	U
108-90-7	Chlorobenzene	0.20	< 0.20	U
100-41-4	Ethylbenzene	0.20	< 0.20	U
100-42-5	Styrene	0.20	< 0.20	U
75-69-4	Trichlorofluoromethane	0.20	< 0.20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.20	< 0.20	U
179601-23-1	m,p-Xylene	0.40	< 0.40	U
95-47-6	o-Xylene	0.20	< 0.20	U
95-50-1	1,2-Dichlorobenzene	0.20	< 0.20	U
541-73-1	1,3-Dichlorobenzene	0.20	< 0.20	U
106-46-7	1,4-Dichlorobenzene	0.20	< 0.20	U

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC14061285PA384-1**
 SAMPLE

Lab Sample ID: YO30C
LIMS ID: 14-11844
Matrix: Water
Date Analyzed: 06/20/14 22:12

QC Report No: YO30-Joint Base Lewis McChord
Project: Log Ram

CAS Number	Analyte	LOQ	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Iodomethane	1.0	< 1.0	U
74-96-4	Bromoethane	0.20	< 0.20	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.20	< 0.20	U
74-95-3	Dibromomethane	0.20	< 0.20	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	< 0.20	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	< 0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	< 0.50	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.20	< 0.20	U
95-63-6	1,2,4-Trimethylbenzene	0.20	< 0.20	U
87-68-3	Hexachlorobutadiene	0.50	< 0.50	U
106-93-4	1,2-Dibromoethane	0.20	< 0.20	U
74-97-5	Bromochloromethane	0.20	< 0.20	U
594-20-7	2,2-Dichloropropane	0.20	< 0.20	U
142-28-9	1,3-Dichloropropane	0.20	< 0.20	U
98-82-8	Isopropylbenzene	0.20	< 0.20	U
103-65-1	n-Propylbenzene	0.20	< 0.20	U
108-86-1	Bromobenzene	0.20	< 0.20	U
95-49-8	2-Chlorotoluene	0.20	< 0.20	U
106-43-4	4-Chlorotoluene	0.20	< 0.20	U
98-06-6	tert-Butylbenzene	0.20	< 0.20	U
135-98-8	sec-Butylbenzene	0.20	< 0.20	U
99-87-6	4-Isopropyltoluene	0.20	< 0.20	U
104-51-8	n-Butylbenzene	0.20	< 0.20	U
120-82-1	1,2,4-Trichlorobenzene	0.50	< 0.50	U
91-20-3	Naphthalene	0.50	< 0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	< 0.50	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	106%
d8-Toluene	99.1%
Bromofluorobenzene	99.8%
d4-1,2-Dichlorobenzene	99.4%

2-Chloroethylvinylether is an acid labile compound and may not be recovered from an acid preserved sample.

EPA SW-846 indicates that vinyl chloride and styrene may degrade in the presence of acid preservative.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140612MT1-1**
Page 1 of 2 **SAMPLE**

Lab Sample ID: YO30D
LIMS ID: 14-11845
Matrix: Water
Data Release Authorized:
Reported: 06/26/14

QC Report No: YO30-Joint Base Lewis McChord
Project: Log Ram

Date Sampled: 06/12/14
Date Received: 06/17/14

Instrument/Analyst: NT3/LH
Date Analyzed: 06/20/14 22:40

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	LOQ	Result	Q
74-87-3	Chloromethane	0.50	< 0.50	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.20	< 0.20	U
75-00-3	Chloroethane	0.20	< 0.20	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	**Acetone**	**5.0**	**7.6**	
75-15-0	Carbon Disulfide	0.20	< 0.20	U
75-35-4	1,1-Dichloroethene	0.20	< 0.20	U
75-34-3	1,1-Dichloroethane	0.20	< 0.20	U
156-60-5	**trans-1,2-Dichloroethene**	**0.20**	**0.45**	
156-59-2	**cis-1,2-Dichloroethene**	**0.20**	**1.1**	
67-66-3	Chloroform	0.20	< 0.20	U
107-06-2	1,2-Dichloroethane	0.20	< 0.20	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	0.20	< 0.20	U
56-23-5	Carbon Tetrachloride	0.20	< 0.20	U
108-05-4	Vinyl Acetate	0.20	< 0.20	U
75-27-4	Bromodichloromethane	0.20	< 0.20	U
78-87-5	1,2-Dichloropropane	0.20	< 0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	< 0.20	U
79-01-6	**Trichloroethene**	**0.20**	**77**	
124-48-1	Dibromochloromethane	0.20	< 0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	< 0.20	U
71-43-2	Benzene	0.20	< 0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	< 0.20	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.20	< 0.20	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.20	< 0.20	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	< 0.20	U
108-88-3	Toluene	0.20	< 0.20	U
108-90-7	Chlorobenzene	0.20	< 0.20	U
100-41-4	Ethylbenzene	0.20	< 0.20	U
100-42-5	Styrene	0.20	< 0.20	U
75-69-4	Trichlorofluoromethane	0.20	< 0.20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.20	< 0.20	U
179601-23-1	m,p-Xylene	0.40	< 0.40	U
95-47-6	o-Xylene	0.20	< 0.20	U
95-50-1	1,2-Dichlorobenzene	0.20	< 0.20	U
541-73-1	1,3-Dichlorobenzene	0.20	< 0.20	U
106-46-7	1,4-Dichlorobenzene	0.20	< 0.20	U

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140612MT1-1**
 SAMPLE

Lab Sample ID: YO30D
LIMS ID: 14-11845
Matrix: Water
Date Analyzed: 06/20/14 22:40

QC Report No: YO30-Joint Base Lewis McChord
Project: Log Ram

CAS Number	Analyte	LOQ	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Iodomethane	1.0	< 1.0	U
74-96-4	Bromoethane	0.20	< 0.20	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.20	< 0.20	U
74-95-3	Dibromomethane	0.20	< 0.20	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	< 0.20	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	< 0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	< 0.50	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.20	< 0.20	U
95-63-6	1,2,4-Trimethylbenzene	0.20	< 0.20	U
87-68-3	Hexachlorobutadiene	0.50	< 0.50	U
106-93-4	1,2-Dibromoethane	0.20	< 0.20	U
74-97-5	Bromochloromethane	0.20	< 0.20	U
594-20-7	2,2-Dichloropropane	0.20	< 0.20	U
142-28-9	1,3-Dichloropropane	0.20	< 0.20	U
98-82-8	Isopropylbenzene	0.20	< 0.20	U
103-65-1	n-Propylbenzene	0.20	< 0.20	U
108-86-1	Bromobenzene	0.20	< 0.20	U
95-49-8	2-Chlorotoluene	0.20	< 0.20	U
106-43-4	4-Chlorotoluene	0.20	< 0.20	U
98-06-6	tert-Butylbenzene	0.20	< 0.20	U
135-98-8	sec-Butylbenzene	0.20	< 0.20	U
99-87-6	4-Isopropyltoluene	0.20	< 0.20	U
104-51-8	n-Butylbenzene	0.20	< 0.20	U
120-82-1	1,2,4-Trichlorobenzene	0.50	< 0.50	U
91-20-3	Naphthalene	0.50	< 0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	< 0.50	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	104%
d8-Toluene	98.1%
Bromofluorobenzene	102%
d4-1,2-Dichlorobenzene	99.2%

2-Chloroethylvinylether is an acid labile compound and may not be recovered from an acid preserved sample.

EPA SW-846 indicates that vinyl chloride and styrene may degrade in the presence of acid preservative.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140612MT2-1**
 SAMPLE

Lab Sample ID: YO30E
LIMS ID: 14-11846
Matrix: Water
Data Release Authorized:
Reported: 06/26/14

QC Report No: YO30-Joint Base Lewis McChord
Project: Log Ram
Date Sampled: 06/12/14
Date Received: 06/17/14

Instrument/Analyst: NT3/LH
Date Analyzed: 06/23/14 12:16

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	LOQ	Result	Q
74-87-3	Chloromethane	0.50	< 0.50	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.20	< 0.20	U
75-00-3	Chloroethane	0.20	< 0.20	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	**Acetone**	**5.0**	**6.8**	
75-15-0	Carbon Disulfide	0.20	< 0.20	U
75-35-4	1,1-Dichloroethene	0.20	< 0.20	U
75-34-3	1,1-Dichloroethane	0.20	< 0.20	U
156-60-5	trans-1,2-Dichloroethene	0.20	< 0.20	U
156-59-2	**cis-1,2-Dichloroethene**	**0.20**	**0.53**	
67-66-3	Chloroform	0.20	< 0.20	U
107-06-2	1,2-Dichloroethane	0.20	< 0.20	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	0.20	< 0.20	U
56-23-5	Carbon Tetrachloride	0.20	< 0.20	U
108-05-4	Vinyl Acetate	0.20	< 0.20	U
75-27-4	Bromodichloromethane	0.20	< 0.20	U
78-87-5	1,2-Dichloropropane	0.20	< 0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	< 0.20	U
79-01-6	**Trichloroethene**	**0.20**	**4.8**	
124-48-1	Dibromochloromethane	0.20	< 0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	< 0.20	U
71-43-2	Benzene	0.20	< 0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	< 0.20	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.20	< 0.20	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.20	< 0.20	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	< 0.20	U
108-88-3	Toluene	0.20	< 0.20	U
108-90-7	Chlorobenzene	0.20	< 0.20	U
100-41-4	Ethylbenzene	0.20	< 0.20	U
100-42-5	Styrene	0.20	< 0.20	U
75-69-4	Trichlorofluoromethane	0.20	< 0.20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.20	< 0.20	U
179601-23-1	m,p-Xylene	0.40	< 0.40	U
95-47-6	o-Xylene	0.20	< 0.20	U
95-50-1	1,2-Dichlorobenzene	0.20	< 0.20	U
541-73-1	1,3-Dichlorobenzene	0.20	< 0.20	U
106-46-7	1,4-Dichlorobenzene	0.20	< 0.20	U

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140612MT2-1**
 SAMPLE

Lab Sample ID: YO30E
LIMS ID: 14-11846
Matrix: Water
Date Analyzed: 06/23/14 12:16

QC Report No: YO30-Joint Base Lewis McChord
Project: Log Ram

CAS Number	Analyte	LOQ	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Iodomethane	1.0	< 1.0	U
74-96-4	Bromoethane	0.20	< 0.20	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.20	< 0.20	U
74-95-3	Dibromomethane	0.20	< 0.20	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	< 0.20	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	< 0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	< 0.50	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.20	< 0.20	U
95-63-6	1,2,4-Trimethylbenzene	0.20	< 0.20	U
87-68-3	Hexachlorobutadiene	0.50	< 0.50	U
106-93-4	1,2-Dibromoethane	0.20	< 0.20	U
74-97-5	Bromochloromethane	0.20	< 0.20	U
594-20-7	2,2-Dichloropropane	0.20	< 0.20	U
142-28-9	1,3-Dichloropropane	0.20	< 0.20	U
98-82-8	Isopropylbenzene	0.20	< 0.20	U
103-65-1	n-Propylbenzene	0.20	< 0.20	U
108-86-1	Bromobenzene	0.20	< 0.20	U
95-49-8	2-Chlorotoluene	0.20	< 0.20	U
106-43-4	4-Chlorotoluene	0.20	< 0.20	U
98-06-6	tert-Butylbenzene	0.20	< 0.20	U
135-98-8	sec-Butylbenzene	0.20	< 0.20	U
99-87-6	4-Isopropyltoluene	0.20	< 0.20	U
104-51-8	n-Butylbenzene	0.20	< 0.20	U
120-82-1	1,2,4-Trichlorobenzene	0.50	< 0.50	U
91-20-3	Naphthalene	0.50	< 0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	< 0.50	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	103%
d8-Toluene	102%
Bromofluorobenzene	99.8%
d4-1,2-Dichlorobenzene	100%

2-Chloroethylvinylether is an acid labile compound and may not be recovered from an acid preserved sample.

EPA SW-846 indicates that vinyl chloride and styrene may degrade in the presence of acid preservative.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140612MT3-1**
 SAMPLE

Lab Sample ID: YO30F
LIMS ID: 14-11847
Matrix: Water
Data Release Authorized:
Reported: 06/26/14

QC Report No: YO30-Joint Base Lewis McChord
Project: Log Ram

Date Sampled: 06/12/14
Date Received: 06/17/14

Instrument/Analyst: NT3/LH
Date Analyzed: 06/23/14 12:44

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	LOQ	Result	Q
74-87-3	Chloromethane	0.50	< 0.50	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.20	< 0.20	U
75-00-3	Chloroethane	0.20	< 0.20	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	**Acetone**	**5.0**	**5.4**	
75-15-0	Carbon Disulfide	0.20	< 0.20	U
75-35-4	1,1-Dichloroethene	0.20	< 0.20	U
75-34-3	1,1-Dichloroethane	0.20	< 0.20	U
156-60-5	trans-1,2-Dichloroethene	0.20	< 0.20	U
156-59-2	**cis-1,2-Dichloroethene**	**0.20**	**1.4**	
67-66-3	Chloroform	0.20	< 0.20	U
107-06-2	1,2-Dichloroethane	0.20	< 0.20	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	0.20	< 0.20	U
56-23-5	Carbon Tetrachloride	0.20	< 0.20	U
108-05-4	Vinyl Acetate	0.20	< 0.20	U
75-27-4	Bromodichloromethane	0.20	< 0.20	U
78-87-5	1,2-Dichloropropane	0.20	< 0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	< 0.20	U
79-01-6	**Trichloroethene**	**0.20**	**8.0**	
124-48-1	Dibromochloromethane	0.20	< 0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	< 0.20	U
71-43-2	Benzene	0.20	< 0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	< 0.20	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.20	< 0.20	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.20	< 0.20	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	< 0.20	U
108-88-3	Toluene	0.20	< 0.20	U
108-90-7	Chlorobenzene	0.20	< 0.20	U
100-41-4	Ethylbenzene	0.20	< 0.20	U
100-42-5	Styrene	0.20	< 0.20	U
75-69-4	Trichlorofluoromethane	0.20	< 0.20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.20	< 0.20	U
179601-23-1	m,p-Xylene	0.40	< 0.40	U
95-47-6	o-Xylene	0.20	< 0.20	U
95-50-1	1,2-Dichlorobenzene	0.20	< 0.20	U
541-73-1	1,3-Dichlorobenzene	0.20	< 0.20	U
106-46-7	1,4-Dichlorobenzene	0.20	< 0.20	U

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140612MT3-1**
 SAMPLE

Lab Sample ID: YO30F QC Report No: YO30-Joint Base Lewis McChord
LIMS ID: 14-11847 Project: Log Ram
Matrix: Water
Date Analyzed: 06/23/14 12:44

CAS Number	Analyte	LOQ	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Iodomethane	1.0	< 1.0	U
74-96-4	Bromoethane	0.20	< 0.20	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.20	< 0.20	U
74-95-3	Dibromomethane	0.20	< 0.20	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	< 0.20	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	< 0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	< 0.50	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.20	< 0.20	U
95-63-6	1,2,4-Trimethylbenzene	0.20	< 0.20	U
87-68-3	Hexachlorobutadiene	0.50	< 0.50	U
106-93-4	1,2-Dibromoethane	0.20	< 0.20	U
74-97-5	Bromochloromethane	0.20	< 0.20	U
594-20-7	2,2-Dichloropropane	0.20	< 0.20	U
142-28-9	1,3-Dichloropropane	0.20	< 0.20	U
98-82-8	Isopropylbenzene	0.20	< 0.20	U
103-65-1	n-Propylbenzene	0.20	< 0.20	U
108-86-1	Bromobenzene	0.20	< 0.20	U
95-49-8	2-Chlorotoluene	0.20	< 0.20	U
106-43-4	4-Chlorotoluene	0.20	< 0.20	U
98-06-6	tert-Butylbenzene	0.20	< 0.20	U
135-98-8	sec-Butylbenzene	0.20	< 0.20	U
99-87-6	4-Isopropyltoluene	0.20	< 0.20	U
104-51-8	n-Butylbenzene	0.20	< 0.20	U
120-82-1	1,2,4-Trichlorobenzene	0.50	< 0.50	U
91-20-3	Naphthalene	0.50	< 0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	< 0.50	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	103%
d8-Toluene	99.6%
Bromofluorobenzene	99.6%
d4-1,2-Dichlorobenzene	99.3%

2-Chloroethylvinylether is an acid labile compound and may not be recovered from an acid preserved sample.

EPA SW-846 indicates that vinyl chloride and styrene may degrade in the presence of acid preservative.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140612MT4-1**
Page 1 of 2 **SAMPLE**

Lab Sample ID: YO30G
LIMS ID: 14-11848
Matrix: Water
Data Release Authorized:
Reported: 06/26/14

QC Report No: YO30-Joint Base Lewis McChord
Project: Log Ram

Date Sampled: 06/12/14
Date Received: 06/17/14

Instrument/Analyst: NT3/LH
Date Analyzed: 06/23/14 13:12

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	LOQ	Result	Q
74-87-3	Chloromethane	0.50	< 0.50	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.20	< 0.20	U
75-00-3	Chloroethane	0.20	< 0.20	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	**Acetone**	**5.0**	**8.0**	
75-15-0	Carbon Disulfide	0.20	< 0.20	U
75-35-4	1,1-Dichloroethene	0.20	< 0.20	U
75-34-3	1,1-Dichloroethane	0.20	< 0.20	U
156-60-5	trans-1,2-Dichloroethene	0.20	< 0.20	U
156-59-2	**cis-1,2-Dichloroethene**	**0.20**	**0.64**	
67-66-3	Chloroform	0.20	< 0.20	U
107-06-2	1,2-Dichloroethane	0.20	< 0.20	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	0.20	< 0.20	U
56-23-5	Carbon Tetrachloride	0.20	< 0.20	U
108-05-4	Vinyl Acetate	0.20	< 0.20	U
75-27-4	Bromodichloromethane	0.20	< 0.20	U
78-87-5	1,2-Dichloropropane	0.20	< 0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	< 0.20	U
79-01-6	**Trichloroethene**	**0.20**	**9.2**	
124-48-1	Dibromochloromethane	0.20	< 0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	< 0.20	U
71-43-2	Benzene	0.20	< 0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	< 0.20	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.20	< 0.20	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.20	< 0.20	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	< 0.20	U
108-88-3	Toluene	0.20	< 0.20	U
108-90-7	Chlorobenzene	0.20	< 0.20	U
100-41-4	Ethylbenzene	0.20	< 0.20	U
100-42-5	Styrene	0.20	< 0.20	U
75-69-4	Trichlorofluoromethane	0.20	< 0.20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.20	< 0.20	U
179601-23-1	m,p-Xylene	0.40	< 0.40	U
95-47-6	o-Xylene	0.20	< 0.20	U
95-50-1	1,2-Dichlorobenzene	0.20	< 0.20	U
541-73-1	1,3-Dichlorobenzene	0.20	< 0.20	U
106-46-7	1,4-Dichlorobenzene	0.20	< 0.20	U

Lab Sample ID: YO30G
LIMS ID: 14-11848
Matrix: Water
Date Analyzed: 06/23/14 13:12

QC Report No: YO30-Joint Base Lewis McChord
Project: Log Ram

CAS Number	Analyte	LOQ	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Iodomethane	1.0	< 1.0	U
74-96-4	Bromoethane	0.20	< 0.20	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.20	< 0.20	U
74-95-3	Dibromomethane	0.20	< 0.20	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	< 0.20	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	< 0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	< 0.50	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.20	< 0.20	U
95-63-6	1,2,4-Trimethylbenzene	0.20	< 0.20	U
87-68-3	Hexachlorobutadiene	0.50	< 0.50	U
106-93-4	1,2-Dibromoethane	0.20	< 0.20	U
74-97-5	Bromochloromethane	0.20	< 0.20	U
594-20-7	2,2-Dichloropropane	0.20	< 0.20	U
142-28-9	1,3-Dichloropropane	0.20	< 0.20	U
98-82-8	Isopropylbenzene	0.20	< 0.20	U
103-65-1	n-Propylbenzene	0.20	< 0.20	U
108-86-1	Bromobenzene	0.20	< 0.20	U
95-49-8	2-Chlorotoluene	0.20	< 0.20	U
106-43-4	4-Chlorotoluene	0.20	< 0.20	U
98-06-6	tert-Butylbenzene	0.20	< 0.20	U
135-98-8	sec-Butylbenzene	0.20	< 0.20	U
99-87-6	4-Isopropyltoluene	0.20	< 0.20	U
104-51-8	n-Butylbenzene	0.20	< 0.20	U
120-82-1	1,2,4-Trichlorobenzene	0.50	< 0.50	U
91-20-3	Naphthalene	0.50	< 0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	< 0.50	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	108%
d8-Toluene	99.7%
Bromofluorobenzene	99.1%
d4-1,2-Dichlorobenzene	99.5%

2-Chloroethylvinylether is an acid labile compound and may not be recovered from an acid preserved sample.

EPA SW-846 indicates that vinyl chloride and styrene may degrade in the presence of acid preservative.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140612LC108-1**
 SAMPLE

Lab Sample ID: YO30H
LIMS ID: 14-11849
Matrix: Water
Data Release Authorized:
Reported: 06/26/14

QC Report No: YO30-Joint Base Lewis McChord
Project: Log Ram

Date Sampled: 06/12/14
Date Received: 06/17/14

Instrument/Analyst: NT3/LH
Date Analyzed: 06/23/14 13:40

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	LOQ	Result	Q
74-87-3	Chloromethane	0.50	< 0.50	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.20	< 0.20	U
75-00-3	Chloroethane	0.20	< 0.20	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	**Acetone**	**5.0**	**8.0**	
75-15-0	Carbon Disulfide	0.20	< 0.20	U
75-35-4	1,1-Dichloroethene	0.20	< 0.20	U
75-34-3	1,1-Dichloroethane	0.20	< 0.20	U
156-60-5	trans-1,2-Dichloroethene	0.20	< 0.20	U
156-59-2	cis-1,2-Dichloroethene	0.20	< 0.20	U
67-66-3	Chloroform	0.20	< 0.20	U
107-06-2	1,2-Dichloroethane	0.20	< 0.20	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	0.20	< 0.20	U
56-23-5	Carbon Tetrachloride	0.20	< 0.20	U
108-05-4	Vinyl Acetate	0.20	< 0.20	U
75-27-4	Bromodichloromethane	0.20	< 0.20	U
78-87-5	1,2-Dichloropropane	0.20	< 0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	< 0.20	U
79-01-6	**Trichloroethene**	**0.20**	**2.8**	
124-48-1	Dibromochloromethane	0.20	< 0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	< 0.20	U
71-43-2	Benzene	0.20	< 0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	< 0.20	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.20	< 0.20	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.20	< 0.20	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	< 0.20	U
108-88-3	Toluene	0.20	< 0.20	U
108-90-7	Chlorobenzene	0.20	< 0.20	U
100-41-4	Ethylbenzene	0.20	< 0.20	U
100-42-5	Styrene	0.20	< 0.20	U
75-69-4	Trichlorofluoromethane	0.20	< 0.20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.20	< 0.20	U
179601-23-1	m,p-Xylene	0.40	< 0.40	U
95-47-6	o-Xylene	0.20	< 0.20	U
95-50-1	1,2-Dichlorobenzene	0.20	< 0.20	U
541-73-1	1,3-Dichlorobenzene	0.20	< 0.20	U
106-46-7	1,4-Dichlorobenzene	0.20	< 0.20	U

Lab Sample ID: YO30H
LIMS ID: 14-11849
Matrix: Water
Date Analyzed: 06/23/14 13:40

QC Report No: YO30-Joint Base Lewis McChord
Project: Log Ram

CAS Number	Analyte	LOQ	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Iodomethane	1.0	< 1.0	U
74-96-4	Bromoethane	0.20	< 0.20	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.20	< 0.20	U
74-95-3	Dibromomethane	0.20	< 0.20	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	< 0.20	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	< 0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	< 0.50	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.20	< 0.20	U
95-63-6	1,2,4-Trimethylbenzene	0.20	< 0.20	U
87-68-3	Hexachlorobutadiene	0.50	< 0.50	U
106-93-4	1,2-Dibromoethane	0.20	< 0.20	U
74-97-5	Bromochloromethane	0.20	< 0.20	U
594-20-7	2,2-Dichloropropane	0.20	< 0.20	U
142-28-9	1,3-Dichloropropane	0.20	< 0.20	U
98-82-8	Isopropylbenzene	0.20	< 0.20	U
103-65-1	n-Propylbenzene	0.20	< 0.20	U
108-86-1	Bromobenzene	0.20	< 0.20	U
95-49-8	2-Chlorotoluene	0.20	< 0.20	U
106-43-4	4-Chlorotoluene	0.20	< 0.20	U
98-06-6	tert-Butylbenzene	0.20	< 0.20	U
135-98-8	sec-Butylbenzene	0.20	< 0.20	U
99-87-6	4-Isopropyltoluene	0.20	< 0.20	U
104-51-8	n-Butylbenzene	0.20	< 0.20	U
120-82-1	1,2,4-Trichlorobenzene	0.50	< 0.50	U
91-20-3	Naphthalene	0.50	< 0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	< 0.50	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	108%
d8-Toluene	98.3%
Bromofluorobenzene	97.1%
d4-1,2-Dichlorobenzene	102%

2-Chloroethylvinylether is an acid labile compound and may not be recovered from an acid preserved sample.

EPA SW-846 indicates that vinyl chloride and styrene may degrade in the presence of acid preservative.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140612LC108-2**
 SAMPLE

Lab Sample ID: YO30I
LIMS ID: 14-11850
Matrix: Water
Data Release Authorized:
Reported: 06/26/14

QC Report No: YO30-Joint Base Lewis McChord
Project: Log Ram

Date Sampled: 06/12/14
Date Received: 06/17/14

Instrument/Analyst: NT3/LH
Date Analyzed: 06/23/14 14:09

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	LOQ	Result	Q
74-87-3	Chloromethane	0.50	< 0.50	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.20	< 0.20	U
75-00-3	Chloroethane	0.20	< 0.20	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	**Acetone**	**5.0**	**10**	
75-15-0	Carbon Disulfide	0.20	< 0.20	U
75-35-4	1,1-Dichloroethene	0.20	< 0.20	U
75-34-3	1,1-Dichloroethane	0.20	< 0.20	U
156-60-5	trans-1,2-Dichloroethene	0.20	< 0.20	U
156-59-2	cis-1,2-Dichloroethene	0.20	< 0.20	U
67-66-3	Chloroform	0.20	< 0.20	U
107-06-2	1,2-Dichloroethane	0.20	< 0.20	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	0.20	< 0.20	U
56-23-5	Carbon Tetrachloride	0.20	< 0.20	U
108-05-4	Vinyl Acetate	0.20	< 0.20	U
75-27-4	Bromodichloromethane	0.20	< 0.20	U
78-87-5	1,2-Dichloropropane	0.20	< 0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	< 0.20	U
79-01-6	**Trichloroethene**	**0.20**	**1.8**	
124-48-1	Dibromochloromethane	0.20	< 0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	< 0.20	U
71-43-2	Benzene	0.20	< 0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	< 0.20	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.20	< 0.20	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.20	< 0.20	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	< 0.20	U
108-88-3	Toluene	0.20	< 0.20	U
108-90-7	Chlorobenzene	0.20	< 0.20	U
100-41-4	Ethylbenzene	0.20	< 0.20	U
100-42-5	Styrene	0.20	< 0.20	U
75-69-4	Trichlorofluoromethane	0.20	< 0.20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.20	< 0.20	U
179601-23-1	m,p-Xylene	0.40	< 0.40	U
95-47-6	o-Xylene	0.20	< 0.20	U
95-50-1	1,2-Dichlorobenzene	0.20	< 0.20	U
541-73-1	1,3-Dichlorobenzene	0.20	< 0.20	U
106-46-7	1,4-Dichlorobenzene	0.20	< 0.20	U

Lab Sample ID: YO30I
LIMS ID: 14-11850
Matrix: Water
Date Analyzed: 06/23/14 14:09

QC Report No: YO30-Joint Base Lewis McChord
Project: Log Ram

CAS Number	Analyte	LOQ	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Iodomethane	1.0	< 1.0	U
74-96-4	Bromoethane	0.20	< 0.20	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.20	< 0.20	U
74-95-3	Dibromomethane	0.20	< 0.20	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	< 0.20	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	< 0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	< 0.50	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.20	< 0.20	U
95-63-6	1,2,4-Trimethylbenzene	0.20	< 0.20	U
87-68-3	Hexachlorobutadiene	0.50	< 0.50	U
106-93-4	1,2-Dibromoethane	0.20	< 0.20	U
74-97-5	Bromochloromethane	0.20	< 0.20	U
594-20-7	2,2-Dichloropropane	0.20	< 0.20	U
142-28-9	1,3-Dichloropropane	0.20	< 0.20	U
98-82-8	Isopropylbenzene	0.20	< 0.20	U
103-65-1	n-Propylbenzene	0.20	< 0.20	U
108-86-1	Bromobenzene	0.20	< 0.20	U
95-49-8	2-Chlorotoluene	0.20	< 0.20	U
106-43-4	4-Chlorotoluene	0.20	< 0.20	U
98-06-6	tert-Butylbenzene	0.20	< 0.20	U
135-98-8	sec-Butylbenzene	0.20	< 0.20	U
99-87-6	4-Isopropyltoluene	0.20	< 0.20	U
104-51-8	n-Butylbenzene	0.20	< 0.20	U
120-82-1	1,2,4-Trichlorobenzene	0.50	< 0.50	U
91-20-3	Naphthalene	0.50	< 0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	< 0.50	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	106%
d8-Toluene	99.5%
Bromofluorobenzene	102%
d4-1,2-Dichlorobenzene	100%

2-Chloroethylvinylether is an acid labile compound and may not be recovered from an acid preserved sample.

EPA SW-846 indicates that vinyl chloride and styrene may degrade in the presence of acid preservative.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140612LC135-2**
 SAMPLE

Lab Sample ID: YO30J
LIMS ID: 14-11851
Matrix: Water
Data Release Authorized:
Reported: 06/26/14

QC Report No: YO30-Joint Base Lewis McChord
Project: Log Ram

Date Sampled: 06/12/14
Date Received: 06/17/14

Instrument/Analyst: NT3/LH
Date Analyzed: 06/23/14 14:37

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	LOQ	Result	Q
74-87-3	Chloromethane	0.50	< 0.50	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.20	< 0.20	U
75-00-3	Chloroethane	0.20	< 0.20	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	Acetone	5.0	< 5.0	U
75-15-0	Carbon Disulfide	0.20	< 0.20	U
75-35-4	1,1-Dichloroethene	0.20	< 0.20	U
75-34-3	1,1-Dichloroethane	0.20	< 0.20	U
156-60-5	trans-1,2-Dichloroethene	0.20	< 0.20	U
156-59-2	**cis-1,2-Dichloroethene**	**0.20**	**0.45**	
67-66-3	Chloroform	0.20	< 0.20	U
107-06-2	1,2-Dichloroethane	0.20	< 0.20	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	0.20	< 0.20	U
56-23-5	Carbon Tetrachloride	0.20	< 0.20	U
108-05-4	Vinyl Acetate	0.20	< 0.20	U
75-27-4	Bromodichloromethane	0.20	< 0.20	U
78-87-5	1,2-Dichloropropane	0.20	< 0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	< 0.20	U
79-01-6	**Trichloroethene**	**0.20**	**37**	
124-48-1	Dibromochloromethane	0.20	< 0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	< 0.20	U
71-43-2	Benzene	0.20	< 0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	< 0.20	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.20	< 0.20	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.20	< 0.20	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	< 0.20	U
108-88-3	Toluene	0.20	< 0.20	U
108-90-7	Chlorobenzene	0.20	< 0.20	U
100-41-4	Ethylbenzene	0.20	< 0.20	U
100-42-5	Styrene	0.20	< 0.20	U
75-69-4	Trichlorofluoromethane	0.20	< 0.20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.20	< 0.20	U
179601-23-1	m,p-Xylene	0.40	< 0.40	U
95-47-6	o-Xylene	0.20	< 0.20	U
95-50-1	1,2-Dichlorobenzene	0.20	< 0.20	U
541-73-1	1,3-Dichlorobenzene	0.20	< 0.20	U
106-46-7	1,4-Dichlorobenzene	0.20	< 0.20	U

Lab Sample ID: YO30J
LIMS ID: 14-11851
Matrix: Water
Date Analyzed: 06/23/14 14:37

QC Report No: YO30-Joint Base Lewis McChord
Project: Log Ram

CAS Number	Analyte	LOQ	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Iodomethane	1.0	< 1.0	U
74-96-4	Bromoethane	0.20	< 0.20	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.20	< 0.20	U
74-95-3	Dibromomethane	0.20	< 0.20	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	< 0.20	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	< 0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	< 0.50	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.20	< 0.20	U
95-63-6	1,2,4-Trimethylbenzene	0.20	< 0.20	U
87-68-3	Hexachlorobutadiene	0.50	< 0.50	U
106-93-4	1,2-Dibromoethane	0.20	< 0.20	U
74-97-5	Bromochloromethane	0.20	< 0.20	U
594-20-7	2,2-Dichloropropane	0.20	< 0.20	U
142-28-9	1,3-Dichloropropane	0.20	< 0.20	U
98-82-8	Isopropylbenzene	0.20	< 0.20	U
103-65-1	n-Propylbenzene	0.20	< 0.20	U
108-86-1	Bromobenzene	0.20	< 0.20	U
95-49-8	2-Chlorotoluene	0.20	< 0.20	U
106-43-4	4-Chlorotoluene	0.20	< 0.20	U
98-06-6	tert-Butylbenzene	0.20	< 0.20	U
135-98-8	sec-Butylbenzene	0.20	< 0.20	U
99-87-6	4-Isopropyltoluene	0.20	< 0.20	U
104-51-8	n-Butylbenzene	0.20	< 0.20	U
120-82-1	1,2,4-Trichlorobenzene	0.50	< 0.50	U
91-20-3	Naphthalene	0.50	< 0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	< 0.50	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	110%
d8-Toluene	99.8%
Bromofluorobenzene	99.6%
d4-1,2-Dichlorobenzene	102%

2-Chloroethylvinylether is an acid labile compound and may not be recovered from an acid preserved sample.

EPA SW-846 indicates that vinyl chloride and styrene may degrade in the presence of acid preservative.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140617TB-1**
 SAMPLE

Lab Sample ID: YO30K
LIMS ID: 14-11852
Matrix: Water
Data Release Authorized:
Reported: 06/26/14

QC Report No: YO30-Joint Base Lewis McChord
Project: Log Ram

Date Sampled: 06/12/14
Date Received: 06/17/14

Instrument/Analyst: NT3/LH
Date Analyzed: 06/23/14 15:05

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	LOQ	Result	Q
74-87-3	Chloromethane	0.50	< 0.50	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.20	< 0.20	U
75-00-3	Chloroethane	0.20	< 0.20	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	Acetone	5.0	< 5.0	U
75-15-0	Carbon Disulfide	0.20	< 0.20	U
75-35-4	1,1-Dichloroethene	0.20	< 0.20	U
75-34-3	1,1-Dichloroethane	0.20	< 0.20	U
156-60-5	trans-1,2-Dichloroethene	0.20	< 0.20	U
156-59-2	cis-1,2-Dichloroethene	0.20	< 0.20	U
67-66-3	Chloroform	0.20	< 0.20	U
107-06-2	1,2-Dichloroethane	0.20	< 0.20	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	0.20	< 0.20	U
56-23-5	Carbon Tetrachloride	0.20	< 0.20	U
108-05-4	Vinyl Acetate	0.20	< 0.20	U
75-27-4	Bromodichloromethane	0.20	< 0.20	U
78-87-5	1,2-Dichloropropane	0.20	< 0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	< 0.20	U
79-01-6	Trichloroethene	0.20	< 0.20	U
124-48-1	Dibromochloromethane	0.20	< 0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	< 0.20	U
71-43-2	Benzene	0.20	< 0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	< 0.20	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.20	< 0.20	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.20	< 0.20	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	< 0.20	U
108-88-3	Toluene	0.20	< 0.20	U
108-90-7	Chlorobenzene	0.20	< 0.20	U
100-41-4	Ethylbenzene	0.20	< 0.20	U
100-42-5	Styrene	0.20	< 0.20	U
75-69-4	Trichlorofluoromethane	0.20	< 0.20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.20	< 0.20	U
179601-23-1	m,p-Xylene	0.40	< 0.40	U
95-47-6	o-Xylene	0.20	< 0.20	U
95-50-1	1,2-Dichlorobenzene	0.20	< 0.20	U
541-73-1	1,3-Dichlorobenzene	0.20	< 0.20	U
106-46-7	1,4-Dichlorobenzene	0.20	< 0.20	U

Lab Sample ID: YO30K
LIMS ID: 14-11852
Matrix: Water
Date Analyzed: 06/23/14 15:05

QC Report No: YO30-Joint Base Lewis McChord
Project: Log Ram

CAS Number	Analyte	LOQ	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Iodomethane	1.0	< 1.0	U
74-96-4	Bromoethane	0.20	< 0.20	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.20	< 0.20	U
74-95-3	Dibromomethane	0.20	< 0.20	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	< 0.20	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	< 0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	< 0.50	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.20	< 0.20	U
95-63-6	1,2,4-Trimethylbenzene	0.20	< 0.20	U
87-68-3	Hexachlorobutadiene	0.50	< 0.50	U
106-93-4	1,2-Dibromoethane	0.20	< 0.20	U
74-97-5	Bromochloromethane	0.20	< 0.20	U
594-20-7	2,2-Dichloropropane	0.20	< 0.20	U
142-28-9	1,3-Dichloropropane	0.20	< 0.20	U
98-82-8	Isopropylbenzene	0.20	< 0.20	U
103-65-1	n-Propylbenzene	0.20	< 0.20	U
108-86-1	Bromobenzene	0.20	< 0.20	U
95-49-8	2-Chlorotoluene	0.20	< 0.20	U
106-43-4	4-Chlorotoluene	0.20	< 0.20	U
98-06-6	tert-Butylbenzene	0.20	< 0.20	U
135-98-8	sec-Butylbenzene	0.20	< 0.20	U
99-87-6	4-Isopropyltoluene	0.20	< 0.20	U
104-51-8	n-Butylbenzene	0.20	< 0.20	U
120-82-1	1,2,4-Trichlorobenzene	0.50	< 0.50	U
91-20-3	Naphthalene	0.50	< 0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	< 0.50	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	108%
d8-Toluene	99.1%
Bromofluorobenzene	98.3%
d4-1,2-Dichlorobenzene	101%

2-Chloroethylvinylether is an acid labile compound and may not be recovered from an acid preserved sample.

EPA SW-846 indicates that vinyl chloride and styrene may degrade in the presence of acid preservative.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: MB-062014A**
 METHOD BLANK

Lab Sample ID: MB-062014A
LIMS ID: 14-11842
Matrix: Water
Data Release Authorized:
Reported: 06/26/14

QC Report No: YO30-Joint Base Lewis McChord
Project: Log Ram

Date Sampled: NA
Date Received: NA

Instrument/Analyst: NT3/LH
Date Analyzed: 06/20/14 15:55

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	LOQ	Result	Q
74-87-3	Chloromethane	0.50	< 0.50	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.20	< 0.20	U
75-00-3	Chloroethane	0.20	< 0.20	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	Acetone	5.0	< 5.0	U
75-15-0	Carbon Disulfide	0.20	< 0.20	U
75-35-4	1,1-Dichloroethene	0.20	< 0.20	U
75-34-3	1,1-Dichloroethane	0.20	< 0.20	U
156-60-5	trans-1,2-Dichloroethene	0.20	< 0.20	U
156-59-2	cis-1,2-Dichloroethene	0.20	< 0.20	U
67-66-3	Chloroform	0.20	< 0.20	U
107-06-2	1,2-Dichloroethane	0.20	< 0.20	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	0.20	< 0.20	U
56-23-5	Carbon Tetrachloride	0.20	< 0.20	U
108-05-4	Vinyl Acetate	0.20	< 0.20	U
75-27-4	Bromodichloromethane	0.20	< 0.20	U
78-87-5	1,2-Dichloropropane	0.20	< 0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	< 0.20	U
79-01-6	Trichloroethene	0.20	< 0.20	U
124-48-1	Dibromochloromethane	0.20	< 0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	< 0.20	U
71-43-2	Benzene	0.20	< 0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	< 0.20	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.20	< 0.20	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.20	< 0.20	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	< 0.20	U
108-88-3	Toluene	0.20	< 0.20	U
108-90-7	Chlorobenzene	0.20	< 0.20	U
100-41-4	Ethylbenzene	0.20	< 0.20	U
100-42-5	Styrene	0.20	< 0.20	U
75-69-4	Trichlorofluoromethane	0.20	< 0.20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.20	< 0.20	U
179601-23-1	m,p-Xylene	0.40	< 0.40	U
95-47-6	o-Xylene	0.20	< 0.20	U
95-50-1	1,2-Dichlorobenzene	0.20	< 0.20	U
541-73-1	1,3-Dichlorobenzene	0.20	< 0.20	U
106-46-7	1,4-Dichlorobenzene	0.20	< 0.20	U

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: MB-062014A**
 METHOD BLANK

ANALYTICAL RESOURCES INCORPORATED

Lab Sample ID: MB-062014A
LIMS ID: 14-11842
Matrix: Water
Date Analyzed: 06/20/14 15:55

QC Report No: YO30-Joint Base Lewis McChord
Project: Log Ram

CAS Number	Analyte	LOQ	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Iodomethane	1.0	< 1.0	U
74-96-4	Bromoethane	0.20	< 0.20	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.20	< 0.20	U
74-95-3	Dibromomethane	0.20	< 0.20	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	< 0.20	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	< 0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	< 0.50	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.20	< 0.20	U
95-63-6	1,2,4-Trimethylbenzene	0.20	< 0.20	U
87-68-3	**Hexachlorobutadiene**	**0.50**	**1.2**	
106-93-4	1,2-Dibromoethane	0.20	< 0.20	U
74-97-5	Bromochloromethane	0.20	< 0.20	U
594-20-7	2,2-Dichloropropane	0.20	< 0.20	U
142-28-9	1,3-Dichloropropane	0.20	< 0.20	U
98-82-8	Isopropylbenzene	0.20	< 0.20	U
103-65-1	n-Propylbenzene	0.20	< 0.20	U
108-86-1	Bromobenzene	0.20	< 0.20	U
95-49-8	2-Chlorotoluene	0.20	< 0.20	U
106-43-4	4-Chlorotoluene	0.20	< 0.20	U
98-06-6	tert-Butylbenzene	0.20	< 0.20	U
135-98-8	sec-Butylbenzene	0.20	< 0.20	U
99-87-6	4-Isopropyltoluene	0.20	< 0.20	U
104-51-8	n-Butylbenzene	0.20	< 0.20	U
120-82-1	1,2,4-Trichlorobenzene	0.50	< 0.50	U
91-20-3	Naphthalene	0.50	< 0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	< 0.50	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	104%
d8-Toluene	104%
Bromofluorobenzene	101%
d4-1,2-Dichlorobenzene	99.8%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: MB-062314A**
 METHOD BLANK

Lab Sample ID: MB-062314A
LIMS ID: 14-11846
Matrix: Water
Data Release Authorized:
Reported: 06/26/14

QC Report No: YO30-Joint Base Lewis McChord
Project: Log Ram

Date Sampled: NA
Date Received: NA

Instrument/Analyst: NT3/LH
Date Analyzed: 06/23/14 11:47

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	LOQ	Result	Q
74-87-3	Chloromethane	0.50	< 0.50	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.20	< 0.20	U
75-00-3	Chloroethane	0.20	< 0.20	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	Acetone	5.0	< 5.0	U
75-15-0	Carbon Disulfide	0.20	< 0.20	U
75-35-4	1,1-Dichloroethene	0.20	< 0.20	U
75-34-3	1,1-Dichloroethane	0.20	< 0.20	U
156-60-5	trans-1,2-Dichloroethene	0.20	< 0.20	U
156-59-2	cis-1,2-Dichloroethene	0.20	< 0.20	U
67-66-3	Chloroform	0.20	< 0.20	U
107-06-2	1,2-Dichloroethane	0.20	< 0.20	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	0.20	< 0.20	U
56-23-5	Carbon Tetrachloride	0.20	< 0.20	U
108-05-4	Vinyl Acetate	0.20	< 0.20	U
75-27-4	Bromodichloromethane	0.20	< 0.20	U
78-87-5	1,2-Dichloropropane	0.20	< 0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	< 0.20	U
79-01-6	Trichloroethene	0.20	< 0.20	U
124-48-1	Dibromochloromethane	0.20	< 0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	< 0.20	U
71-43-2	Benzene	0.20	< 0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	< 0.20	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.20	< 0.20	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.20	< 0.20	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	< 0.20	U
108-88-3	Toluene	0.20	< 0.20	U
108-90-7	Chlorobenzene	0.20	< 0.20	U
100-41-4	Ethylbenzene	0.20	< 0.20	U
100-42-5	Styrene	0.20	< 0.20	U
75-69-4	Trichlorofluoromethane	0.20	< 0.20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.20	< 0.20	U
179601-23-1	m,p-Xylene	0.40	< 0.40	U
95-47-6	o-Xylene	0.20	< 0.20	U
95-50-1	1,2-Dichlorobenzene	0.20	< 0.20	U
541-73-1	1,3-Dichlorobenzene	0.20	< 0.20	U
106-46-7	1,4-Dichlorobenzene	0.20	< 0.20	U

Lab Sample ID: MB-062314A
LIMS ID: 14-11846
Matrix: Water
Date Analyzed: 06/23/14 11:47

QC Report No: YO30-Joint Base Lewis McChord
Project: Log Ram

CAS Number	Analyte	LOQ	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Iodomethane	1.0	< 1.0	U
74-96-4	Bromoethane	0.20	< 0.20	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.20	< 0.20	U
74-95-3	Dibromomethane	0.20	< 0.20	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	< 0.20	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	< 0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	< 0.50	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.20	< 0.20	U
95-63-6	1,2,4-Trimethylbenzene	0.20	< 0.20	U
87-68-3	**Hexachlorobutadiene**	**0.50**	**1.0**	
106-93-4	1,2-Dibromoethane	0.20	< 0.20	U
74-97-5	Bromochloromethane	0.20	< 0.20	U
594-20-7	2,2-Dichloropropane	0.20	< 0.20	U
142-28-9	1,3-Dichloropropane	0.20	< 0.20	U
98-82-8	Isopropylbenzene	0.20	< 0.20	U
103-65-1	n-Propylbenzene	0.20	< 0.20	U
108-86-1	Bromobenzene	0.20	< 0.20	U
95-49-8	2-Chlorotoluene	0.20	< 0.20	U
106-43-4	4-Chlorotoluene	0.20	< 0.20	U
98-06-6	tert-Butylbenzene	0.20	< 0.20	U
135-98-8	sec-Butylbenzene	0.20	< 0.20	U
99-87-6	4-Isopropyltoluene	0.20	< 0.20	U
104-51-8	n-Butylbenzene	0.20	< 0.20	U
120-82-1	1,2,4-Trichlorobenzene	0.50	< 0.50	U
91-20-3	Naphthalene	0.50	< 0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	< 0.50	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	106%
d8-Toluene	99.5%
Bromofluorobenzene	101%
d4-1,2-Dichlorobenzene	102%

ANALYTICAL RESOURCES INCORPORATED

VOA SURROGATE RECOVERY SUMMARY

Matrix: Water

QC Report No: YO30-Joint Base Lewis McChord
Project: Log Ram

ARI ID	Client ID	PV	DCE	TOL	BFB	DCB	TOT OUT
MB-062014A	Method Blank	10	104%	104%	101%	99.8%	0
LCS-062014A	Lab Control	10	102%	99.2%	106%	100%	0
LCSD-062014A	Lab Control Dup	10	99.9%	100%	103%	98.2%	0
YO30A	LGC140612DUP1-1	10	102%	99.0%	98.7%	103%	0
YO30B	LGC14061285PA382-1	10	104%	99.5%	101%	102%	0
YO30C	LGC14061285PA384-1	10	106%	99.1%	99.8%	99.4%	0
YO30D	LGC140612MT1-1	10	104%	98.1%	102%	99.2%	0
MB-062314A	Method Blank	10	106%	99.5%	101%	102%	0
LCS-062314A	Lab Control	10	103%	101%	99.4%	98.5%	0
LCSD-062314A	Lab Control Dup	10	101%	101%	101%	100%	0
YO30E	LGC140612MT2-1	10	103%	102%	99.8%	100%	0
YO30F	LGC140612MT3-1	10	103%	99.6%	99.6%	99.3%	0
YO30G	LGC140612MT4-1	10	108%	99.7%	99.1%	99.5%	0
YO30H	LGC140612LC108-1	10	108%	98.3%	97.1%	102%	0
YO30I	LGC140612LC108-2	10	106%	99.5%	102%	100%	0
YO30J	LGC140612LC135-2	10	110%	99.8%	99.6%	102%	0
YO30K	LGC140617TB-1	10	108%	99.1%	98.3%	101%	0

SW8260C	LCS/MB LIMITS	QC LIMITS
(DCE) = d4-1,2-Dichloroethane	(80-120)	(80-130)
(TOL) = d8-Toluene	(80-120)	(80-120)
(BFB) = Bromofluorobenzene	(80-120)	(80-120)
(DCB) = d4-1,2-Dichlorobenzene	(80-120)	(80-120)

Prep Method: SW5030B
Log Number Range: 14-11842 to 14-11852

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LCS-062014A**
 LAB CONTROL SAMPLE

Lab Sample ID: LCS-062014A QC Report No: YO30-Joint Base Lewis McChord
LIMS ID: 14-11842 Project: Log Ram
Matrix: Water
Data Release Authorized:
Reported: 06/26/14 Date Received: NA

Instrument/Analyst LCS: NT3/LH Sample Amount LCS: 10.0 mL
LCSD: NT3/LH LCSD: 10.0 mL
Date Analyzed LCS: 06/20/14 14:58 Purge Volume LCS: 10.0 mL
LCSD: 06/20/14 15:26 LCSD: 10.0 mL

Analyte	LCS	Spike Added-LCS	LCS Recovery	LCSD	Spike Added-LCSD	LCSD Recovery	RPD
Chloromethane	9.61	10.0	96.1%	10.1	10.0	101%	5.0%
Bromomethane	11.9	10.0	119%	12.2	10.0	122%	2.5%
Vinyl Chloride	9.73	10.0	97.3%	10.1	10.0	101%	3.7%
Chloroethane	8.36	10.0	83.6%	9.98	10.0	99.8%	17.7%
Methylene Chloride	10.5	10.0	105%	11.1	10.0	111%	5.6%
Acetone	44.9	50.0	89.8%	48.7	50.0	97.4%	8.1%
Carbon Disulfide	11.5	10.0	115%	11.9	10.0	119%	3.4%
1,1-Dichloroethene	10.3	10.0	103%	10.6	10.0	106%	2.9%
1,1-Dichloroethane	9.99	10.0	99.9%	10.6	10.0	106%	5.9%
trans-1,2-Dichloroethene	11.0	10.0	110%	11.0	10.0	110%	0.0%
cis-1,2-Dichloroethene	9.96	10.0	99.6%	10.8	10.0	108%	8.1%
Chloroform	11.1	10.0	111%	11.7	10.0	117%	5.3%
1,2-Dichloroethane	9.72	10.0	97.2%	10.4	10.0	104%	6.8%
2-Butanone	46.1	50.0	92.2%	50.4	50.0	101%	8.9%
1,1,1-Trichloroethane	11.9	10.0	119%	12.3	10.0	123%	3.3%
Carbon Tetrachloride	11.6	10.0	116%	11.9	10.0	119%	2.6%
Vinyl Acetate	10.4	10.0	104%	11.2	10.0	112%	7.4%
Bromodichloromethane	10.7	10.0	107%	11.5	10.0	115%	7.2%
1,2-Dichloropropane	9.26	10.0	92.6%	9.84	10.0	98.4%	6.1%
cis-1,3-Dichloropropene	11.2	10.0	112%	11.6	10.0	116%	3.5%
Trichloroethene	9.87	10.0	98.7%	10.2	10.0	102%	3.3%
Dibromochloromethane	10.4	10.0	104%	10.9	10.0	109%	4.7%
1,1,2-Trichloroethane	9.68	10.0	96.8%	10.5	10.0	105%	8.1%
Benzene	10.8	10.0	108%	11.3	10.0	113%	4.5%
trans-1,3-Dichloropropene	11.4	10.0	114%	12.3	10.0	123%	7.6%
2-Chloroethylvinylether	9.09	10.0	90.9%	9.90	10.0	99.0%	8.5%
Bromoform	9.60	10.0	96.0%	10.6	10.0	106%	9.9%
4-Methyl-2-Pentanone (MIBK)	47.0	50.0	94.0%	51.6	50.0	103%	9.3%
2-Hexanone	44.1	50.0	88.2%	47.7	50.0	95.4%	7.8%
Tetrachloroethene	9.57	10.0	95.7%	10.1	10.0	101%	5.4%
1,1,2,2-Tetrachloroethane	9.78	10.0	97.8%	10.6	10.0	106%	8.0%
Toluene	10.5	10.0	105%	11.1	10.0	111%	5.6%
Chlorobenzene	10.4	10.0	104%	10.9	10.0	109%	4.7%
Ethylbenzene	10.8	10.0	108%	11.1	10.0	111%	2.7%
Styrene	10.5	10.0	105%	11.0	10.0	110%	4.7%
Trichlorofluoromethane	12.3	10.0	123%	12.6	10.0	126%	2.4%
1,1,2-Trichloro-1,2,2-trifluoroetha	11.9	10.0	119%	10.5	10.0	105%	12.5%
m,p-Xylene	21.8	20.0	109%	22.4	20.0	112%	2.7%

Lab Sample ID: LCS-062014A QC Report No: YO30-Joint Base Lewis McChord
LIMS ID: 14-11842 Project: Log Ram
Matrix: Water

Analyte	LCS	Spike Added-LCS	LCS Recovery	LCSD	Spike Added-LCSD	LCSD Recovery	RPD
o-Xylene	10.4	10.0	104%	10.8	10.0	108%	3.8%
1,2-Dichlorobenzene	9.72	10.0	97.2%	9.95	10.0	99.5%	2.3%
1,3-Dichlorobenzene	9.91	10.0	99.1%	10.3	10.0	103%	3.9%
1,4-Dichlorobenzene	9.61	10.0	96.1%	10.1	10.0	101%	5.0%
Acrolein	89.2 Q	50.0	178%	90.1 Q	50.0	180%	1.0%
Iodomethane	10.4	10.0	104%	11.1	10.0	111%	6.5%
Bromoethane	10.6	10.0	106%	11.3	10.0	113%	6.4%
Acrylonitrile	8.54 Q	10.0	85.4%	8.89 Q	10.0	88.9%	4.0%
1,1-Dichloropropene	10.7	10.0	107%	11.2	10.0	112%	4.6%
Dibromomethane	9.73	10.0	97.3%	10.3	10.0	103%	5.7%
1,1,1,2-Tetrachloroethane	10.7	10.0	107%	11.2	10.0	112%	4.6%
1,2-Dibromo-3-chloropropane	9.08	10.0	90.8%	9.61	10.0	96.1%	5.7%
1,2,3-Trichloropropane	8.41	10.0	84.1%	9.80	10.0	98.0%	15.3%
trans-1,4-Dichloro-2-butene	9.21	10.0	92.1%	9.86	10.0	98.6%	6.8%
1,3,5-Trimethylbenzene	10.1	10.0	101%	10.5	10.0	105%	3.9%
1,2,4-Trimethylbenzene	10.1	10.0	101%	10.6	10.0	106%	4.8%
Hexachlorobutadiene	10.5 B	10.0	105%	11.2 B	10.0	112%	6.5%
1,2-Dibromoethane	9.98	10.0	99.8%	10.4	10.0	104%	4.1%
Bromochloromethane	10.7	10.0	107%	10.3	10.0	103%	3.8%
2,2-Dichloropropane	13.2	10.0	132%	13.7	10.0	137%	3.7%
1,3-Dichloropropane	9.88	10.0	98.8%	10.3	10.0	103%	4.2%
Isopropylbenzene	10.1	10.0	101%	10.6	10.0	106%	4.8%
n-Propylbenzene	10.5	10.0	105%	11.0	10.0	110%	4.7%
Bromobenzene	10.5	10.0	105%	10.6	10.0	106%	0.9%
2-Chlorotoluene	10.4	10.0	104%	10.8	10.0	108%	3.8%
4-Chlorotoluene	10.2	10.0	102%	10.6	10.0	106%	3.8%
tert-Butylbenzene	9.93	10.0	99.3%	10.2	10.0	102%	2.7%
sec-Butylbenzene	10.2	10.0	102%	10.5	10.0	105%	2.9%
4-Isopropyltoluene	10.0	10.0	100%	10.3	10.0	103%	3.0%
n-Butylbenzene	10.2	10.0	102%	10.8	10.0	108%	5.7%
1,2,4-Trichlorobenzene	10.1	10.0	101%	11.0	10.0	110%	8.5%
Naphthalene	8.16	10.0	81.6%	9.97	10.0	99.7%	20.0%
1,2,3-Trichlorobenzene	9.32	10.0	93.2%	10.6	10.0	106%	12.9%

Reported in µg/L (ppb)

RPD calculated using sample concentrations per SW846.

Volatile Surrogate Recovery

	LCS	LCSD
d4-1,2-Dichloroethane	102%	99.9%
d8-Toluene	99.2%	100%
Bromofluorobenzene	106%	103%
d4-1,2-Dichlorobenzene	100%	98.2%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LCS-062314A**
 LAB CONTROL SAMPLE

Lab Sample ID: LCS-062314A QC Report No: YO30-Joint Base Lewis McChord
LIMS ID: 14-11846 Project: Log Ram
Matrix: Water
Data Release Authorized:
Reported: 06/26/14 Date Received: NA

Instrument/Analyst LCS: NT3/LH Sample Amount LCS: 10.0 mL
LCSD: NT3/LH LCSD: 10.0 mL
Date Analyzed LCS: 06/23/14 10:51 Purge Volume LCS: 10.0 mL
LCSD: 06/23/14 11:19 LCSD: 10.0 mL

Analyte	LCS	Spike Added-LCS	LCS Recovery	LCSD	Spike Added-LCSD	LCSD Recovery	RPD
Chloromethane	9.19	10.0	91.9%	9.48	10.0	94.8%	3.1%
Bromomethane	11.5	10.0	115%	11.7	10.0	117%	1.7%
Vinyl Chloride	9.51	10.0	95.1%	9.79	10.0	97.9%	2.9%
Chloroethane	9.74	10.0	97.4%	8.99	10.0	89.9%	8.0%
Methylene Chloride	10.9	10.0	109%	11.0	10.0	110%	0.9%
Acetone	45.0	50.0	90.0%	45.2	50.0	90.4%	0.4%
Carbon Disulfide	11.3	10.0	113%	11.6	10.0	116%	2.6%
1,1-Dichloroethene	9.55	10.0	95.5%	10.6	10.0	106%	10.4%
1,1-Dichloroethane	10.2	10.0	102%	10.2	10.0	102%	0.0%
trans-1,2-Dichloroethene	11.0	10.0	110%	10.4	10.0	104%	5.6%
cis-1,2-Dichloroethene	10.5	10.0	105%	10.2	10.0	102%	2.9%
Chloroform	11.2	10.0	112%	11.4	10.0	114%	1.8%
1,2-Dichloroethane	10.0	10.0	100%	10.4	10.0	104%	3.9%
2-Butanone	46.2	50.0	92.4%	46.0	50.0	92.0%	0.4%
1,1,1-Trichloroethane	11.4	10.0	114%	12.0	10.0	120%	5.1%
Carbon Tetrachloride	11.4	10.0	114%	11.9	10.0	119%	4.3%
Vinyl Acetate	10.3	10.0	103%	10.7	10.0	107%	3.8%
Bromodichloromethane	10.6	10.0	106%	11.3	10.0	113%	6.4%
1,2-Dichloropropane	9.40	10.0	94.0%	9.79	10.0	97.9%	4.1%
cis-1,3-Dichloropropene	11.2	10.0	112%	11.8	10.0	118%	5.2%
Trichloroethene	9.75	10.0	97.5%	10.0	10.0	100%	2.5%
Dibromochloromethane	10.2	10.0	102%	10.7	10.0	107%	4.8%
1,1,2-Trichloroethane	10.0	10.0	100%	10.3	10.0	103%	3.0%
Benzene	10.6	10.0	106%	11.3	10.0	113%	6.4%
trans-1,3-Dichloropropene	11.7	10.0	117%	12.1	10.0	121%	3.4%
2-Chloroethylvinylether	8.79	10.0	87.9%	9.27	10.0	92.7%	5.3%
Bromoform	10.3	10.0	103%	10.8	10.0	108%	4.7%
4-Methyl-2-Pentanone (MIBK)	48.1	50.0	96.2%	48.7	50.0	97.4%	1.2%
2-Hexanone	44.6	50.0	89.2%	46.0	50.0	92.0%	3.1%
Tetrachloroethene	9.66	10.0	96.6%	10.1	10.0	101%	4.5%
1,1,2,2-Tetrachloroethane	10.3	10.0	103%	11.0	10.0	110%	6.6%
Toluene	10.6	10.0	106%	10.9	10.0	109%	2.8%
Chlorobenzene	10.5	10.0	105%	10.7	10.0	107%	1.9%
Ethylbenzene	10.6	10.0	106%	11.1	10.0	111%	4.6%
Styrene	10.5	10.0	105%	10.9	10.0	109%	3.7%
Trichlorofluoromethane	11.9	10.0	119%	9.58	10.0	95.8%	21.6%
1,1,2-Trichloro-1,2,2-trifluoroetha	11.6	10.0	116%	13.2	10.0	132%	12.9%
m,p-Xylene	21.4	20.0	107%	22.0	20.0	110%	2.8%

Lab Sample ID: LCS-062314A QC Report No: YO30-Joint Base Lewis McChord
LIMS ID: 14-11846 Project: Log Ram
Matrix: Water

Analyte	LCS	Spike Added-LCS	LCS Recovery	LCSD	Spike Added-LCSD	LCSD Recovery	RPD
o-Xylene	10.3	10.0	103%	10.8	10.0	108%	4.7%
1,2-Dichlorobenzene	10.2	10.0	102%	10.6	10.0	106%	3.8%
1,3-Dichlorobenzene	10.4	10.0	104%	10.8	10.0	108%	3.8%
1,4-Dichlorobenzene	10.2	10.0	102%	10.7	10.0	107%	4.8%
Acrolein	84.3 Q	50.0	169%	85.4 Q	50.0	171%	1.3%
Iodomethane	11.0	10.0	110%	11.4	10.0	114%	3.6%
Bromoethane	11.0	10.0	110%	10.8	10.0	108%	1.8%
Acrylonitrile	8.41	10.0	84.1%	8.81	10.0	88.1%	4.6%
1,1-Dichloropropene	10.7	10.0	107%	11.4	10.0	114%	6.3%
Dibromomethane	10.0	10.0	100%	10.3	10.0	103%	3.0%
1,1,1,2-Tetrachloroethane	10.8	10.0	108%	11.1	10.0	111%	2.7%
1,2-Dibromo-3-chloropropane	10.1	10.0	101%	10.4	10.0	104%	2.9%
1,2,3-Trichloropropane	9.08	10.0	90.8%	9.95	10.0	99.5%	9.1%
trans-1,4-Dichloro-2-butene	9.32	10.0	93.2%	10.2	10.0	102%	9.0%
1,3,5-Trimethylbenzene	10.7	10.0	107%	11.2	10.0	112%	4.6%
1,2,4-Trimethylbenzene	10.8	10.0	108%	11.2	10.0	112%	3.6%
Hexachlorobutadiene	11.9 B	10.0	119%	11.9 B	10.0	119%	0.0%
1,2-Dibromoethane	10.3	10.0	103%	10.7	10.0	107%	3.8%
Bromochloromethane	10.6	10.0	106%	10.5	10.0	105%	0.9%
2,2-Dichloropropane	13.2 Q	10.0	132%	13.5 Q	10.0	135%	2.2%
1,3-Dichloropropane	9.87	10.0	98.7%	10.3	10.0	103%	4.3%
Isopropylbenzene	10.6	10.0	106%	11.2	10.0	112%	5.5%
n-Propylbenzene	11.0	10.0	110%	11.4	10.0	114%	3.6%
Bromobenzene	10.7	10.0	107%	11.2	10.0	112%	4.6%
2-Chlorotoluene	9.80	10.0	98.0%	11.1	10.0	111%	12.4%
4-Chlorotoluene	10.7	10.0	107%	11.2	10.0	112%	4.6%
tert-Butylbenzene	10.5	10.0	105%	10.9	10.0	109%	3.7%
sec-Butylbenzene	10.6	10.0	106%	11.1	10.0	111%	4.6%
4-Isopropyltoluene	10.4	10.0	104%	10.9	10.0	109%	4.7%
n-Butylbenzene	10.9	10.0	109%	11.4	10.0	114%	4.5%
1,2,4-Trichlorobenzene	11.4	10.0	114%	11.5	10.0	115%	0.9%
Naphthalene	10.9	10.0	109%	10.8	10.0	108%	0.9%
1,2,3-Trichlorobenzene	11.3	10.0	113%	11.2	10.0	112%	0.9%

Reported in µg/L (ppb)

RPD calculated using sample concentrations per SW846.

Volatile Surrogate Recovery

	LCS	LCSD
d4-1,2-Dichloroethane	103%	101%
d8-Toluene	101%	101%
Bromofluorobenzene	99.4%	101%
d4-1,2-Dichlorobenzene	98.5%	100%

Analytical Resources, Incorporated
Analytical Chemists and Consultants

May 30, 2014

Thomas Lynott
Department of the Army
Directorate of Public Works
Attn Environmental Division (T. Lynott)
2012 Liggett Ave Box 339500 MS 17
Joint Base Lewis-McChord, Washington 98433-9500
Official Business

RE: Client Project: LOGRAM
ARI Job No.: YL05

Dear Mr. Lynott:

Please find enclosed the original Chain-of-Custody record (COC), sample receipt documentation, and the final data for the project referenced above. Analytical Resources, Inc. (ARI) accepted seven water samples on May 22, 2014. For further details regarding sample receipt please refer to the enclosed Cooler Receipt Form.

The samples were analyzed for VOCs, as requested on the COCs.

The VOCs CCAL is out of control low for all associated FORM III "Q" flagged analytes. All associated samples that contain analyte have been flagged with a "Q" qualifier.

An electronic copy of this report and all supporting raw data will remain on file with ARI. Should you have any questions or problems, please feel free to contact me at your convenience.

Respectfully,
ANALYTICAL RESOURCES, INC.

Kelly Bottem
Client Services Manager
(206) 695-6211
kellyb@arilabs.com
www.arilabs.com

eFile: YL05

4611 South 134th Place, Suite 100 • Tukwila WA 98168 • **206-695-6200** • **206-695-6201** fax

Chain of Custody Record & Laboratory Analysis Request

To 21

ARI Assigned Number: YLCS	Turn-around Requested: STANDARD	Page: 1 of 1	
ARI Client Company: JOINT BASE LEWIS MCCHORD PUBLIC WORKS IMLR DWE	Phone: 253 966 1802	Date: 22MAY 14	Ice Present? Y
Client Contact: TOM J LYNOTT		No. of Coolers: 1	Cooler Temps: 14.9
Client Project Name: LOGRAM			
Client Project #:	Samplers: T LYNOTT JBECKER		

Analytical Resources, Incorporated
Analytical Chemists and Consultants
4611 South 134th Place, Suite 100
Tukwila, WA 98168
206-695-6200 206-695-6201 (fax)
www.arilabs.com

Sample ID	Date	Time	Matrix	No Containers	Analysis Requested: 1006A	Notes/Comments
L6C140522E6DYE-1	22MAY14	1130	WATER	2	X	TOTAL
L6C140522E6DYI-1	22MAY14	1125	WATER	2	X	VOCs
L6C140522I5E-1	22MAY14	1055	WATER	2	X	
L6C140522I5I-1	22MAY14	1050	WATER	2	X	
L6C140522SLAPE-1	22MAY14	~~1015~~ 1015	WATER	2	X	
L6C140522SLAPI-1	22MAY14	1010	WATER	2	X	
L6C140522TB-1	22MAY14	1200	WATER	2	X	

Comments/Special Instructions	Relinquished by: (Signature)	Received by: (Signature)	Relinquished by (Signature)	Received by: (Signature)
	Printed Name: JEREMY BECKER ~~Tom J Lynott~~	Printed Name: Taylor Stracke	Printed Name	Printed Name:
	Company: VERSAR	Company: ARI	Company:	Company:
	Date & Time: 22MAY14 1328	Date & Time: 5-22-14 1325	Date & Time	Date & Time

Limits of Liability: *ARI will perform all requested services in accordance with appropriate methodology following ARI Standard Operating Procedures and the ARI Quality Assurance Program. This program meets standards for the industry. The total liability of ARI, its officers, agents, employees, or successors, arising out of or in connection with the requested services, shall not exceed the Invoiced amount for said services. The acceptance by the client of a proposal for services by ARI release ARI from any liability in excess thereof, not withstanding any provision to the contrary in any contract, purchase order or co-signed agreement between ARI and the Client.*

Sample Retention Policy: All samples submitted to ARI will be appropriately discarded no sooner than 90 days after receipt or 60 days after submission of hardcopy data, whichever is longer, unless alternate retention schedules have been established by work-order or contract.

COC.DOC 7/25/08 rev. 10/01/08

Sample ID Cross Reference Report

ANALYTICAL RESOURCES INCORPORATED

ARI Job No: YL05
Client: Joint Base Lewis McChord
Project Event: N/A
Project Name: LOGRAM

	Sample ID	ARI Lab ID	ARI LIMS ID	Matrix	Sample Date/Time	VTSR
1.	LGC140522EGDYE-1	YL05A	14-10004	Water	05/22/14 11:30	05/22/14 13:28
2.	LGC140522EGDYI-1	YL05B	14-10005	Water	05/22/14 11:25	05/22/14 13:28
3.	LGC140522I5E-1	YL05C	14-10006	Water	05/22/14 10:55	05/22/14 13:28
4.	LGC140522I5I-1	YL05D	14-10007	Water	05/22/14 10:50	05/22/14 13:28
5.	LGC140522SLAPE-1	YL05E	14-10008	Water	05/22/14 10:15	05/22/14 13:28
6.	LGC140522SLAPI-1	YL05F	14-10009	Water	05/22/14 10:10	05/22/14 13:28
7.	LGC140522TB-1	YL05G	14-10010	Water	05/22/14 12:00	05/22/14 13:28

YL05:00003

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Cooler Receipt Form

ARI Client. BLM Project Name: LCGRAM

COC No(s) _____ (NA) Delivered by. Fed-Ex UPS Courier Hand Delivered Other _____

Assigned ARI Job No: YLC5 Tracking No: _____ (NA)

Preliminary Examination Phase:

Were intact, properly signed and dated custody seals attached to the outside of to cooler? YES (NO)

Were custody papers included with the cooler? ... YES NO

Were custody papers properly filled out (ink, signed, etc.) ... YES NO

Temperature of Cooler(s) (°C) (recommended 2.0-6 0 °C for chemistry) 14.9

Time. 1330

If cooler temperature is out of compliance fill out form 00070F Temp Gun ID#: 90470

Cooler Accepted by: JT Date: 5-22-14 Time. 1330

Complete custody forms and attach all shipping documents

Log-In Phase:

Was a temperature blank included in the cooler? ... YES (NO)

What kind of packing material was used? .. Bubble Wrap Wet Ice Gel Packs Baggies Foam Block Paper Other: _____

Was sufficient ice used (if appropriate)? ... NA YES (NO)

Were all bottles sealed in individual plastic bags? ... YES (NO)

Did all bottles arrive in good condition (unbroken)? ... YES NO

Were all bottle labels complete and legible? ... YES NO

Did the number of containers listed on COC match with the number of containers received? ... YES NO

Did all bottle labels and tags agree with custody papers? ... YES NO

Were all bottles used correct for the requested analyses? ... YES NO

Do any of the analyses (bottles) require preservation? (attach preservation sheet, excluding VOCs)... (NA) ~~YES~~ NO

Were all VOC vials free of air bubbles? ... NA (YES) NO

Was sufficient amount of sample sent in each bottle? ... YES NO

Date VOC Trip Blank was made at ARI ... NA Client Covered

Was Sample Split by ARI (NA) YES Date/Time: _____ Equipment: _____ Split by: _____ ARI label

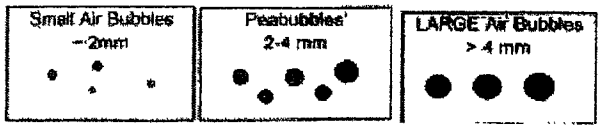
Samples Logged by. AV Date: 5/22/14 Time: 1410

***** Notify Project Manager of discrepancies or concerns *****

Sample ID on Bottle	Sample ID on COC	Sample ID on Bottle	Sample ID on COC

Additional Notes, Discrepancies, & Resolutions:

By: Date:



Small → "sm" (< 2 mm)
Peabubbles → "pb" (2 to < 4 mm)
Large → "lg" (4 to < 6 mm)
Headspace → "hs" (> 6 mm)

YLC5 : 06064

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Cooler Temperature Compliance Form

Cooler#: 1	Temperature(°C): 14.9	
Sample ID	**Bottle Count**	**Bottle Type**
Samples received above 6°C.		

Cooler#:	Temperature(°C):	
Sample ID	**Bottle Count**	**Bottle Type**

Cooler#:	Temperature(°C):	
Sample ID	**Bottle Count**	**Bottle Type**

Cooler#:	Temperature(°C):	
Sample ID	**Bottle Count**	**Bottle Type**

Completed by: AV Date: 5/22/14 Time: 1410

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140522EGDYE-1**
Page 1 of 2 **SAMPLE**

Lab Sample ID: YL05A
LIMS ID: 14-10004
Matrix: Water
Data Release Authorized:
Reported: 05/29/14

QC Report No: YL05-Joint Base Lewis McChord
Project: LOGRAM

Date Sampled: 05/22/14
Date Received: 05/22/14

Instrument/Analyst: NT2/PAB
Date Analyzed: 05/27/14 17:58

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	LOQ	Result	Q
74-87-3	Chloromethane	0.50	< 0.50	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.20	< 0.20	U
75-00-3	Chloroethane	0.20	< 0.20	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	Acetone	5.0	< 5.0	U
75-15-0	Carbon Disulfide	0.20	< 0.20	U
75-35-4	1,1-Dichloroethene	0.20	< 0.20	U
75-34-3	1,1-Dichloroethane	0.20	< 0.20	U
156-60-5	trans-1,2-Dichloroethene	0.20	< 0.20	U
156-59-2	**cis-1,2-Dichloroethene**	**0.20**	**0.58**	
67-66-3	Chloroform	0.20	< 0.20	U
107-06-2	1,2-Dichloroethane	0.20	< 0.20	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	0.20	< 0.20	U
56-23-5	Carbon Tetrachloride	0.20	< 0.20	U
108-05-4	Vinyl Acetate	0.20	< 0.20	U
75-27-4	Bromodichloromethane	0.20	< 0.20	U
78-87-5	1,2-Dichloropropane	0.20	< 0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	< 0.20	U
79-01-6	**Trichloroethene**	**0.20**	**1.2**	
124-48-1	Dibromochloromethane	0.20	< 0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	< 0.20	U
71-43-2	Benzene	0.20	< 0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	< 0.20	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.20	< 0.20	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.20	< 0.20	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	< 0.20	U
108-88-3	Toluene	0.20	< 0.20	U
108-90-7	Chlorobenzene	0.20	< 0.20	U
100-41-4	Ethylbenzene	0.20	< 0.20	U
100-42-5	Styrene	0.20	< 0.20	U
75-69-4	Trichlorofluoromethane	0.20	< 0.20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.20	< 0.20	U
179601-23-1	m,p-Xylene	0.40	< 0.40	U
95-47-6	o-Xylene	0.20	< 0.20	U
95-50-1	1,2-Dichlorobenzene	0.20	< 0.20	U
541-73-1	1,3-Dichlorobenzene	0.20	< 0.20	U
106-46-7	1,4-Dichlorobenzene	0.20	< 0.20	U

Lab Sample ID: YL05A
LIMS ID: 14-10004
Matrix: Water
Date Analyzed: 05/27/14 17:58

QC Report No: YL05-Joint Base Lewis McChord
Project: LOGRAM

CAS Number	Analyte	LOQ	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Iodomethane	1.0	< 1.0	U
74-96-4	Bromoethane	0.20	< 0.20	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.20	< 0.20	U
74-95-3	Dibromomethane	0.20	< 0.20	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	< 0.20	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	< 0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	< 0.50	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.20	< 0.20	U
95-63-6	1,2,4-Trimethylbenzene	0.20	< 0.20	U
87-68-3	Hexachlorobutadiene	0.50	< 0.50	U
106-93-4	1,2-Dibromoethane	0.20	< 0.20	U
74-97-5	Bromochloromethane	0.20	< 0.20	U
594-20-7	2,2-Dichloropropane	0.20	< 0.20	U
142-28-9	1,3-Dichloropropane	0.20	< 0.20	U
98-82-8	Isopropylbenzene	0.20	< 0.20	U
103-65-1	n-Propylbenzene	0.20	< 0.20	U
108-86-1	Bromobenzene	0.20	< 0.20	U
95-49-8	2-Chlorotoluene	0.20	< 0.20	U
106-43-4	4-Chlorotoluene	0.20	< 0.20	U
98-06-6	tert-Butylbenzene	0.20	< 0.20	U
135-98-8	sec-Butylbenzene	0.20	< 0.20	U
99-87-6	4-Isopropyltoluene	0.20	< 0.20	U
104-51-8	n-Butylbenzene	0.20	< 0.20	U
120-82-1	1,2,4-Trichlorobenzene	0.50	< 0.50	U
91-20-3	Naphthalene	0.50	< 0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	< 0.50	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	105%
d8-Toluene	98.0%
Bromofluorobenzene	96.8%
d4-1,2-Dichlorobenzene	102%

2-Chloroethylvinylether is an acid labile compound and may not be recovered from an acid preserved sample.

EPA SW-846 indicates that vinyl chloride and styrene may degrade in the presence of acid preservative.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140522EGDYI-1**
 SAMPLE

Lab Sample ID: YL05B
LIMS ID: 14-10005
Matrix: Water
Data Release Authorized:
Reported: 05/29/14

QC Report No: YL05-Joint Base Lewis McChord
Project: LOGRAM

Date Sampled: 05/22/14
Date Received: 05/22/14

Instrument/Analyst: NT2/PAB
Date Analyzed: 05/27/14 18:24

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	LOQ	Result	Q
74-87-3	Chloromethane	0.50	< 0.50	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.20	< 0.20	U
75-00-3	Chloroethane	0.20	< 0.20	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	Acetone	5.0	< 5.0	U
75-15-0	Carbon Disulfide	0.20	< 0.20	U
75-35-4	1,1-Dichloroethene	0.20	< 0.20	U
75-34-3	1,1-Dichloroethane	0.20	< 0.20	U
156-60-5	trans-1,2-Dichloroethene	0.20	< 0.20	U
156-59-2	**cis-1,2-Dichloroethene**	**0.20**	**2.5**	
67-66-3	Chloroform	0.20	< 0.20	U
107-06-2	1,2-Dichloroethane	0.20	< 0.20	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	0.20	< 0.20	U
56-23-5	Carbon Tetrachloride	0.20	< 0.20	U
108-05-4	Vinyl Acetate	0.20	< 0.20	U
75-27-4	Bromodichloromethane	0.20	< 0.20	U
78-87-5	1,2-Dichloropropane	0.20	< 0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	< 0.20	U
79-01-6	**Trichloroethene**	**0.20**	**24**	
124-48-1	Dibromochloromethane	0.20	< 0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	< 0.20	U
71-43-2	Benzene	0.20	< 0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	< 0.20	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.20	< 0.20	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.20	< 0.20	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	< 0.20	U
108-88-3	Toluene	0.20	< 0.20	U
108-90-7	Chlorobenzene	0.20	< 0.20	U
100-41-4	Ethylbenzene	0.20	< 0.20	U
100-42-5	Styrene	0.20	< 0.20	U
75-69-4	Trichlorofluoromethane	0.20	< 0.20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.20	< 0.20	U
179601-23-1	m,p-Xylene	0.40	< 0.40	U
95-47-6	o-Xylene	0.20	< 0.20	U
95-50-1	1,2-Dichlorobenzene	0.20	< 0.20	U
541-73-1	1,3-Dichlorobenzene	0.20	< 0.20	U
106-46-7	1,4-Dichlorobenzene	0.20	< 0.20	U

Lab Sample ID: YL05B
LIMS ID: 14-10005
Matrix: Water
Date Analyzed: 05/27/14 18:24

QC Report No: YL05-Joint Base Lewis McChord
Project: LOGRAM

CAS Number	Analyte	LOQ	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Iodomethane	1.0	< 1.0	U
74-96-4	Bromoethane	0.20	< 0.20	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.20	< 0.20	U
74-95-3	Dibromomethane	0.20	< 0.20	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	< 0.20	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	< 0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	< 0.50	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.20	< 0.20	U
95-63-6	1,2,4-Trimethylbenzene	0.20	< 0.20	U
87-68-3	Hexachlorobutadiene	0.50	< 0.50	U
106-93-4	1,2-Dibromoethane	0.20	< 0.20	U
74-97-5	Bromochloromethane	0.20	< 0.20	U
594-20-7	2,2-Dichloropropane	0.20	< 0.20	U
142-28-9	1,3-Dichloropropane	0.20	< 0.20	U
98-82-8	Isopropylbenzene	0.20	< 0.20	U
103-65-1	n-Propylbenzene	0.20	< 0.20	U
108-86-1	Bromobenzene	0.20	< 0.20	U
95-49-8	2-Chlorotoluene	0.20	< 0.20	U
106-43-4	4-Chlorotoluene	0.20	< 0.20	U
98-06-6	tert-Butylbenzene	0.20	< 0.20	U
135-98-8	sec-Butylbenzene	0.20	< 0.20	U
99-87-6	4-Isopropyltoluene	0.20	< 0.20	U
104-51-8	n-Butylbenzene	0.20	< 0.20	U
120-82-1	1,2,4-Trichlorobenzene	0.50	< 0.50	U
91-20-3	Naphthalene	0.50	< 0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	< 0.50	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	104%
d8-Toluene	96.2%
Bromofluorobenzene	96.5%
d4-1,2-Dichlorobenzene	102%

2-Chloroethylvinylether is an acid labile compound and may not be recovered from an acid preserved sample.

EPA SW-846 indicates that vinyl chloride and styrene may degrade in the presence of acid preservative.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140522I5E-1**
 SAMPLE

Lab Sample ID: YL05C
LIMS ID: 14-10006
Matrix: Water
Data Release Authorized:
Reported: 05/29/14

QC Report No: YL05-Joint Base Lewis McChord
Project: LOGRAM

Date Sampled: 05/22/14
Date Received: 05/22/14

Instrument/Analyst: NT2/PAB
Date Analyzed: 05/27/14 18:50

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	LOQ	Result	Q
74-87-3	Chloromethane	0.50	< 0.50	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.20	< 0.20	U
75-00-3	Chloroethane	0.20	< 0.20	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	Acetone	5.0	< 5.0	U
75-15-0	Carbon Disulfide	0.20	< 0.20	U
75-35-4	1,1-Dichloroethene	0.20	< 0.20	U
75-34-3	1,1-Dichloroethane	0.20	< 0.20	U
156-60-5	trans-1,2-Dichloroethene	0.20	< 0.20	U
156-59-2	cis-1,2-Dichloroethene	0.20	< 0.20	U
67-66-3	Chloroform	0.20	< 0.20	U
107-06-2	1,2-Dichloroethane	0.20	< 0.20	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	0.20	< 0.20	U
56-23-5	Carbon Tetrachloride	0.20	< 0.20	U
108-05-4	Vinyl Acetate	0.20	< 0.20	U
75-27-4	Bromodichloromethane	0.20	< 0.20	U
78-87-5	1,2-Dichloropropane	0.20	< 0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	< 0.20	U
79-01-6	**Trichloroethene**	**0.20**	**0.30**	
124-48-1	Dibromochloromethane	0.20	< 0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	< 0.20	U
71-43-2	Benzene	0.20	< 0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	< 0.20	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.20	< 0.20	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.20	< 0.20	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	< 0.20	U
108-88-3	Toluene	0.20	< 0.20	U
108-90-7	Chlorobenzene	0.20	< 0.20	U
100-41-4	Ethylbenzene	0.20	< 0.20	U
100-42-5	Styrene	0.20	< 0.20	U
75-69-4	Trichlorofluoromethane	0.20	< 0.20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.20	< 0.20	U
179601-23-1	m,p-Xylene	0.40	< 0.40	U
95-47-6	o-Xylene	0.20	< 0.20	U
95-50-1	1,2-Dichlorobenzene	0.20	< 0.20	U
541-73-1	1,3-Dichlorobenzene	0.20	< 0.20	U
106-46-7	1,4-Dichlorobenzene	0.20	< 0.20	U

Lab Sample ID: YL05C
LIMS ID: 14-10006
Matrix: Water
Date Analyzed: 05/27/14 18:50

QC Report No: YL05-Joint Base Lewis McChord
Project: LOGRAM

CAS Number	Analyte	LOQ	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Iodomethane	1.0	< 1.0	U
74-96-4	Bromoethane	0.20	< 0.20	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.20	< 0.20	U
74-95-3	Dibromomethane	0.20	< 0.20	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	< 0.20	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	< 0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	< 0.50	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.20	< 0.20	U
95-63-6	1,2,4-Trimethylbenzene	0.20	< 0.20	U
87-68-3	Hexachlorobutadiene	0.50	< 0.50	U
106-93-4	1,2-Dibromoethane	0.20	< 0.20	U
74-97-5	Bromochloromethane	0.20	< 0.20	U
594-20-7	2,2-Dichloropropane	0.20	< 0.20	U
142-28-9	1,3-Dichloropropane	0.20	< 0.20	U
98-82-8	Isopropylbenzene	0.20	< 0.20	U
103-65-1	n-Propylbenzene	0.20	< 0.20	U
108-86-1	Bromobenzene	0.20	< 0.20	U
95-49-8	2-Chlorotoluene	0.20	< 0.20	U
106-43-4	4-Chlorotoluene	0.20	< 0.20	U
98-06-6	tert-Butylbenzene	0.20	< 0.20	U
135-98-8	sec-Butylbenzene	0.20	< 0.20	U
99-87-6	4-Isopropyltoluene	0.20	< 0.20	U
104-51-8	n-Butylbenzene	0.20	< 0.20	U
120-82-1	1,2,4-Trichlorobenzene	0.50	< 0.50	U
91-20-3	Naphthalene	0.50	< 0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	< 0.50	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	104%
d8-Toluene	98.5%
Bromofluorobenzene	97.0%
d4-1,2-Dichlorobenzene	106%

2-Chloroethylvinylether is an acid labile compound and may not be recovered from an acid preserved sample.

EPA SW-846 indicates that vinyl chloride and styrene may degrade in the presence of acid preservative.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140522I5I-1**
 SAMPLE

Lab Sample ID: YL05D
LIMS ID: 14-10007
Matrix: Water
Data Release Authorized:
Reported: 05/29/14

QC Report No: YL05-Joint Base Lewis McChord
Project: LOGRAM

Date Sampled: 05/22/14
Date Received: 05/22/14

Instrument/Analyst: NT2/PAB
Date Analyzed: 05/27/14 19:17

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	LOQ	Result	Q
74-87-3	Chloromethane	0.50	< 0.50	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.20	< 0.20	U
75-00-3	Chloroethane	0.20	< 0.20	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	Acetone	5.0	< 5.0	U
75-15-0	Carbon Disulfide	0.20	< 0.20	U
75-35-4	1,1-Dichloroethene	0.20	< 0.20	U
75-34-3	1,1-Dichloroethane	0.20	< 0.20	U
156-60-5	trans-1,2-Dichloroethene	0.20	< 0.20	U
156-59-2	**cis-1,2-Dichloroethene**	**0.20**	**0.65**	
67-66-3	**Chloroform**	**0.20**	**0.28**	
107-06-2	1,2-Dichloroethane	0.20	< 0.20	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	**1,1,1-Trichloroethane**	**0.20**	**0.25**	
56-23-5	Carbon Tetrachloride	0.20	< 0.20	U
108-05-4	Vinyl Acetate	0.20	< 0.20	U
75-27-4	Bromodichloromethane	0.20	< 0.20	U
78-87-5	1,2-Dichloropropane	0.20	< 0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	< 0.20	U
79-01-6	**Trichloroethene**	**0.20**	**27**	
124-48-1	Dibromochloromethane	0.20	< 0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	< 0.20	U
71-43-2	Benzene	0.20	< 0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	< 0.20	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.20	< 0.20	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.20	< 0.20	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	< 0.20	U
108-88-3	Toluene	0.20	< 0.20	U
108-90-7	Chlorobenzene	0.20	< 0.20	U
100-41-4	Ethylbenzene	0.20	< 0.20	U
100-42-5	Styrene	0.20	< 0.20	U
75-69-4	Trichlorofluoromethane	0.20	< 0.20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.20	< 0.20	U
179601-23-1	m,p-Xylene	0.40	< 0.40	U
95-47-6	o-Xylene	0.20	< 0.20	U
95-50-1	1,2-Dichlorobenzene	0.20	< 0.20	U
541-73-1	1,3-Dichlorobenzene	0.20	< 0.20	U
106-46-7	1,4-Dichlorobenzene	0.20	< 0.20	U

Lab Sample ID: YL05D
LIMS ID: 14-10007
Matrix: Water
Date Analyzed: 05/27/14 19:17

QC Report No: YL05-Joint Base Lewis McChord
Project: LOGRAM

CAS Number	Analyte	LOQ	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Iodomethane	1.0	< 1.0	U
74-96-4	Bromoethane	0.20	< 0.20	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.20	< 0.20	U
74-95-3	Dibromomethane	0.20	< 0.20	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	< 0.20	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	< 0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	< 0.50	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.20	< 0.20	U
95-63-6	1,2,4-Trimethylbenzene	0.20	< 0.20	U
87-68-3	Hexachlorobutadiene	0.50	< 0.50	U
106-93-4	1,2-Dibromoethane	0.20	< 0.20	U
74-97-5	Bromochloromethane	0.20	< 0.20	U
594-20-7	2,2-Dichloropropane	0.20	< 0.20	U
142-28-9	1,3-Dichloropropane	0.20	< 0.20	U
98-82-8	Isopropylbenzene	0.20	< 0.20	U
103-65-1	n-Propylbenzene	0.20	< 0.20	U
108-86-1	Bromobenzene	0.20	< 0.20	U
95-49-8	2-Chlorotoluene	0.20	< 0.20	U
106-43-4	4-Chlorotoluene	0.20	< 0.20	U
98-06-6	tert-Butylbenzene	0.20	< 0.20	U
135-98-8	sec-Butylbenzene	0.20	< 0.20	U
99-87-6	4-Isopropyltoluene	0.20	< 0.20	U
104-51-8	n-Butylbenzene	0.20	< 0.20	U
120-82-1	1,2,4-Trichlorobenzene	0.50	< 0.50	U
91-20-3	Naphthalene	0.50	< 0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	< 0.50	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	103%
d8-Toluene	94.7%
Bromofluorobenzene	96.1%
d4-1,2-Dichlorobenzene	107%

2-Chloroethylvinylether is an acid labile compound and may not be recovered from an acid preserved sample.

EPA SW-846 indicates that vinyl chloride and styrene may degrade in the presence of acid preservative.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140522SLAPE-1**
Page 1 of 2 **SAMPLE**

Lab Sample ID: YL05E
LIMS ID: 14-10008
Matrix: Water
Data Release Authorized:
Reported: 05/29/14

QC Report No: YL05-Joint Base Lewis McChord
Project: LOGRAM

Date Sampled: 05/22/14
Date Received: 05/22/14

Instrument/Analyst: NT2/PAB
Date Analyzed: 05/27/14 19:44

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	LOQ	Result	Q
74-87-3	Chloromethane	0.50	< 0.50	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.20	< 0.20	U
75-00-3	Chloroethane	0.20	< 0.20	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	Acetone	5.0	< 5.0	U
75-15-0	Carbon Disulfide	0.20	< 0.20	U
75-35-4	1,1-Dichloroethene	0.20	< 0.20	U
75-34-3	1,1-Dichloroethane	0.20	< 0.20	U
156-60-5	trans-1,2-Dichloroethene	0.20	< 0.20	U
156-59-2	cis-1,2-Dichloroethene	0.20	< 0.20	U
67-66-3	Chloroform	0.20	< 0.20	U
107-06-2	1,2-Dichloroethane	0.20	< 0.20	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	0.20	< 0.20	U
56-23-5	Carbon Tetrachloride	0.20	< 0.20	U
108-05-4	Vinyl Acetate	0.20	< 0.20	U
75-27-4	Bromodichloromethane	0.20	< 0.20	U
78-87-5	1,2-Dichloropropane	0.20	< 0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	< 0.20	U
79-01-6	**Trichloroethene**	**0.20**	**0.50**	
124-48-1	Dibromochloromethane	0.20	< 0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	< 0.20	U
71-43-2	Benzene	0.20	< 0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	< 0.20	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.20	< 0.20	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.20	< 0.20	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	< 0.20	U
108-88-3	Toluene	0.20	< 0.20	U
108-90-7	Chlorobenzene	0.20	< 0.20	U
100-41-4	Ethylbenzene	0.20	< 0.20	U
100-42-5	Styrene	0.20	< 0.20	U
75-69-4	Trichlorofluoromethane	0.20	< 0.20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.20	< 0.20	U
179601-23-1	m,p-Xylene	0.40	< 0.40	U
95-47-6	o-Xylene	0.20	< 0.20	U
95-50-1	1,2-Dichlorobenzene	0.20	< 0.20	U
541-73-1	1,3-Dichlorobenzene	0.20	< 0.20	U
106-46-7	1,4-Dichlorobenzene	0.20	< 0.20	U

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140522SLAPE-1**
 SAMPLE

Lab Sample ID: YL05E
LIMS ID: 14-10008
Matrix: Water
Date Analyzed: 05/27/14 19:44

QC Report No: YL05-Joint Base Lewis McChord
Project: LOGRAM

CAS Number	Analyte	LOQ	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Iodomethane	1.0	< 1.0	U
74-96-4	Bromoethane	0.20	< 0.20	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.20	< 0.20	U
74-95-3	Dibromomethane	0.20	< 0.20	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	< 0.20	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	< 0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	< 0.50	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.20	< 0.20	U
95-63-6	1,2,4-Trimethylbenzene	0.20	< 0.20	U
87-68-3	Hexachlorobutadiene	0.50	< 0.50	U
106-93-4	1,2-Dibromoethane	0.20	< 0.20	U
74-97-5	Bromochloromethane	0.20	< 0.20	U
594-20-7	2,2-Dichloropropane	0.20	< 0.20	U
142-28-9	1,3-Dichloropropane	0.20	< 0.20	U
98-82-8	Isopropylbenzene	0.20	< 0.20	U
103-65-1	n-Propylbenzene	0.20	< 0.20	U
108-86-1	Bromobenzene	0.20	< 0.20	U
95-49-8	2-Chlorotoluene	0.20	< 0.20	U
106-43-4	4-Chlorotoluene	0.20	< 0.20	U
98-06-6	tert-Butylbenzene	0.20	< 0.20	U
135-98-8	sec-Butylbenzene	0.20	< 0.20	U
99-87-6	4-Isopropyltoluene	0.20	< 0.20	U
104-51-8	n-Butylbenzene	0.20	< 0.20	U
120-82-1	1,2,4-Trichlorobenzene	0.50	< 0.50	U
91-20-3	Naphthalene	0.50	< 0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	< 0.50	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	100%
d8-Toluene	101%
Bromofluorobenzene	94.4%
d4-1,2-Dichlorobenzene	105%

2-Chloroethylvinylether is an acid labile compound and may not be recovered from an acid preserved sample.

EPA SW-846 indicates that vinyl chloride and styrene may degrade in the presence of acid preservative.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140522SLAPI-1**
 SAMPLE

Lab Sample ID: YL05F
LIMS ID: 14-10009
Matrix: Water
Data Release Authorized:
Reported: 05/29/14

QC Report No: YL05-Joint Base Lewis McChord
Project: LOGRAM

Date Sampled: 05/22/14
Date Received: 05/22/14

Instrument/Analyst: NT2/PAB
Date Analyzed: 05/27/14 20:10

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	LOQ	Result	Q
74-87-3	Chloromethane	0.50	< 0.50	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.20	< 0.20	U
75-00-3	Chloroethane	0.20	< 0.20	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	Acetone	5.0	< 5.0	U
75-15-0	Carbon Disulfide	0.20	< 0.20	U
75-35-4	1,1-Dichloroethene	0.20	< 0.20	U
75-34-3	1,1-Dichloroethane	0.20	< 0.20	U
156-60-5	trans-1,2-Dichloroethene	0.20	< 0.20	U
156-59-2	**cis-1,2-Dichloroethene**	**0.20**	**0.43**	
67-66-3	Chloroform	0.20	< 0.20	U
107-06-2	1,2-Dichloroethane	0.20	< 0.20	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	0.20	< 0.20	U
56-23-5	Carbon Tetrachloride	0.20	< 0.20	U
108-05-4	Vinyl Acetate	0.20	< 0.20	U
75-27-4	Bromodichloromethane	0.20	< 0.20	U
78-87-5	1,2-Dichloropropane	0.20	< 0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	< 0.20	U
79-01-6	**Trichloroethene**	**0.20**	**16**	
124-48-1	Dibromochloromethane	0.20	< 0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	< 0.20	U
71-43-2	Benzene	0.20	< 0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	< 0.20	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.20	< 0.20	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.20	< 0.20	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	< 0.20	U
108-88-3	Toluene	0.20	< 0.20	U
108-90-7	Chlorobenzene	0.20	< 0.20	U
100-41-4	Ethylbenzene	0.20	< 0.20	U
100-42-5	Styrene	0.20	< 0.20	U
75-69-4	Trichlorofluoromethane	0.20	< 0.20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.20	< 0.20	U
179601-23-1	m,p-Xylene	0.40	< 0.40	U
95-47-6	o-Xylene	0.20	< 0.20	U
95-50-1	1,2-Dichlorobenzene	0.20	< 0.20	U
541-73-1	1,3-Dichlorobenzene	0.20	< 0.20	U
106-46-7	1,4-Dichlorobenzene	0.20	< 0.20	U

Lab Sample ID: YL05F
LIMS ID: 14-10009
Matrix: Water
Date Analyzed: 05/27/14 20:10

QC Report No: YL05-Joint Base Lewis McChord
Project: LOGRAM

CAS Number	Analyte	LOQ	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Iodomethane	1.0	< 1.0	U
74-96-4	Bromoethane	0.20	< 0.20	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.20	< 0.20	U
74-95-3	Dibromomethane	0.20	< 0.20	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	< 0.20	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	< 0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	< 0.50	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.20	< 0.20	U
95-63-6	1,2,4-Trimethylbenzene	0.20	< 0.20	U
87-68-3	Hexachlorobutadiene	0.50	< 0.50	U
106-93-4	1,2-Dibromoethane	0.20	< 0.20	U
74-97-5	Bromochloromethane	0.20	< 0.20	U
594-20-7	2,2-Dichloropropane	0.20	< 0.20	U
142-28-9	1,3-Dichloropropane	0.20	< 0.20	U
98-82-8	Isopropylbenzene	0.20	< 0.20	U
103-65-1	n-Propylbenzene	0.20	< 0.20	U
108-86-1	Bromobenzene	0.20	< 0.20	U
95-49-8	2-Chlorotoluene	0.20	< 0.20	U
106-43-4	4-Chlorotoluene	0.20	< 0.20	U
98-06-6	tert-Butylbenzene	0.20	< 0.20	U
135-98-8	sec-Butylbenzene	0.20	< 0.20	U
99-87-6	4-Isopropyltoluene	0.20	< 0.20	U
104-51-8	n-Butylbenzene	0.20	< 0.20	U
120-82-1	1,2,4-Trichlorobenzene	0.50	< 0.50	U
91-20-3	Naphthalene	0.50	< 0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	< 0.50	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	101%
d8-Toluene	99.5%
Bromofluorobenzene	96.6%
d4-1,2-Dichlorobenzene	103%

2-Chloroethylvinylether is an acid labile compound and may not be recovered from an acid preserved sample.

EPA SW-846 indicates that vinyl chloride and styrene may degrade in the presence of acid preservative.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140522TB-1**
 SAMPLE

Lab Sample ID: YL05G
LIMS ID: 14-10010
Matrix: Water
Data Release Authorized:
Reported: 05/29/14

QC Report No: YL05-Joint Base Lewis McChord
Project: LOGRAM

Date Sampled: 05/22/14
Date Received: 05/22/14

Instrument/Analyst: NT2/PAB
Date Analyzed: 05/27/14 20:37

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	LOQ	Result	Q
74-87-3	Chloromethane	0.50	< 0.50	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.20	< 0.20	U
75-00-3	Chloroethane	0.20	< 0.20	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	Acetone	5.0	< 5.0	U
75-15-0	Carbon Disulfide	0.20	< 0.20	U
75-35-4	1,1-Dichloroethene	0.20	< 0.20	U
75-34-3	1,1-Dichloroethane	0.20	< 0.20	U
156-60-5	trans-1,2-Dichloroethene	0.20	< 0.20	U
156-59-2	cis-1,2-Dichloroethene	0.20	< 0.20	U
67-66-3	Chloroform	0.20	< 0.20	U
107-06-2	1,2-Dichloroethane	0.20	< 0.20	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	0.20	< 0.20	U
56-23-5	Carbon Tetrachloride	0.20	< 0.20	U
108-05-4	Vinyl Acetate	0.20	< 0.20	U
75-27-4	Bromodichloromethane	0.20	< 0.20	U
78-87-5	1,2-Dichloropropane	0.20	< 0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	< 0.20	U
79-01-6	Trichloroethene	0.20	< 0.20	U
124-48-1	Dibromochloromethane	0.20	< 0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	< 0.20	U
71-43-2	Benzene	0.20	< 0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	< 0.20	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.20	< 0.20	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.20	< 0.20	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	< 0.20	U
108-88-3	Toluene	0.20	< 0.20	U
108-90-7	Chlorobenzene	0.20	< 0.20	U
100-41-4	Ethylbenzene	0.20	< 0.20	U
100-42-5	Styrene	0.20	< 0.20	U
75-69-4	Trichlorofluoromethane	0.20	< 0.20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.20	< 0.20	U
179601-23-1	m,p-Xylene	0.40	< 0.40	U
95-47-6	o-Xylene	0.20	< 0.20	U
95-50-1	1,2-Dichlorobenzene	0.20	< 0.20	U
541-73-1	1,3-Dichlorobenzene	0.20	< 0.20	U
106-46-7	1,4-Dichlorobenzene	0.20	< 0.20	U

Lab Sample ID: YL05G
LIMS ID: 14-10010
Matrix: Water
Date Analyzed: 05/27/14 20:37

QC Report No: YL05-Joint Base Lewis McChord
Project: LOGRAM

CAS Number	Analyte	LOQ	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Iodomethane	1.0	< 1.0	U
74-96-4	Bromoethane	0.20	< 0.20	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.20	< 0.20	U
74-95-3	Dibromomethane	0.20	< 0.20	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	< 0.20	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	< 0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	< 0.50	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.20	< 0.20	U
95-63-6	1,2,4-Trimethylbenzene	0.20	< 0.20	U
87-68-3	Hexachlorobutadiene	0.50	< 0.50	U
106-93-4	1,2-Dibromoethane	0.20	< 0.20	U
74-97-5	Bromochloromethane	0.20	< 0.20	U
594-20-7	2,2-Dichloropropane	0.20	< 0.20	U
142-28-9	1,3-Dichloropropane	0.20	< 0.20	U
98-82-8	Isopropylbenzene	0.20	< 0.20	U
103-65-1	n-Propylbenzene	0.20	< 0.20	U
108-86-1	Bromobenzene	0.20	< 0.20	U
95-49-8	2-Chlorotoluene	0.20	< 0.20	U
106-43-4	4-Chlorotoluene	0.20	< 0.20	U
98-06-6	tert-Butylbenzene	0.20	< 0.20	U
135-98-8	sec-Butylbenzene	0.20	< 0.20	U
99-87-6	4-Isopropyltoluene	0.20	< 0.20	U
104-51-8	n-Butylbenzene	0.20	< 0.20	U
120-82-1	1,2,4-Trichlorobenzene	0.50	< 0.50	U
91-20-3	Naphthalene	0.50	< 0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	< 0.50	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	104%
d8-Toluene	97.8%
Bromofluorobenzene	93.3%
d4-1,2-Dichlorobenzene	106%

2-Chloroethylvinylether is an acid labile compound and may not be recovered from an acid preserved sample.

EPA SW-846 indicates that vinyl chloride and styrene may degrade in the presence of acid preservative.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: MB-052714A**
 METHOD BLANK

Lab Sample ID: MB-052714A
LIMS ID: 14-10004
Matrix: Water
Data Release Authorized:
Reported: 05/29/14

QC Report No: YL05-Joint Base Lewis McChord
Project: LOGRAM

Date Sampled: NA
Date Received: NA

Instrument/Analyst: NT2/PAB
Date Analyzed: 05/27/14 16:12

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	LOQ	Result	Q
74-87-3	Chloromethane	0.50	< 0.50	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.20	< 0.20	U
75-00-3	Chloroethane	0.20	< 0.20	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	Acetone	5.0	< 5.0	U
75-15-0	Carbon Disulfide	0.20	< 0.20	U
75-35-4	1,1-Dichloroethene	0.20	< 0.20	U
75-34-3	1,1-Dichloroethane	0.20	< 0.20	U
156-60-5	trans-1,2-Dichloroethene	0.20	< 0.20	U
156-59-2	cis-1,2-Dichloroethene	0.20	< 0.20	U
67-66-3	Chloroform	0.20	< 0.20	U
107-06-2	1,2-Dichloroethane	0.20	< 0.20	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	0.20	< 0.20	U
56-23-5	Carbon Tetrachloride	0.20	< 0.20	U
108-05-4	Vinyl Acetate	0.20	< 0.20	U
75-27-4	Bromodichloromethane	0.20	< 0.20	U
78-87-5	1,2-Dichloropropane	0.20	< 0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	< 0.20	U
79-01-6	Trichloroethene	0.20	< 0.20	U
124-48-1	Dibromochloromethane	0.20	< 0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	< 0.20	U
71-43-2	Benzene	0.20	< 0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	< 0.20	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.20	< 0.20	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.20	< 0.20	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	< 0.20	U
108-88-3	Toluene	0.20	< 0.20	U
108-90-7	Chlorobenzene	0.20	< 0.20	U
100-41-4	Ethylbenzene	0.20	< 0.20	U
100-42-5	Styrene	0.20	< 0.20	U
75-69-4	Trichlorofluoromethane	0.20	< 0.20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.20	< 0.20	U
179601-23-1	m,p-Xylene	0.40	< 0.40	U
95-47-6	o-Xylene	0.20	< 0.20	U
95-50-1	1,2-Dichlorobenzene	0.20	< 0.20	U
541-73-1	1,3-Dichlorobenzene	0.20	< 0.20	U
106-46-7	1,4-Dichlorobenzene	0.20	< 0.20	U

Lab Sample ID: MB-052714A QC Report No: YL05-Joint Base Lewis McChord
LIMS ID: 14-10004 Project: LOGRAM
Matrix: Water
Date Analyzed: 05/27/14 16:12

CAS Number	Analyte	LOQ	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Iodomethane	1.0	< 1.0	U
74-96-4	Bromoethane	0.20	< 0.20	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.20	< 0.20	U
74-95-3	Dibromomethane	0.20	< 0.20	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	< 0.20	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	< 0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	< 0.50	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.20	< 0.20	U
95-63-6	1,2,4-Trimethylbenzene	0.20	< 0.20	U
87-68-3	Hexachlorobutadiene	0.50	< 0.50	U
106-93-4	1,2-Dibromoethane	0.20	< 0.20	U
74-97-5	Bromochloromethane	0.20	< 0.20	U
594-20-7	2,2-Dichloropropane	0.20	< 0.20	U
142-28-9	1,3-Dichloropropane	0.20	< 0.20	U
98-82-8	Isopropylbenzene	0.20	< 0.20	U
103-65-1	n-Propylbenzene	0.20	< 0.20	U
108-86-1	Bromobenzene	0.20	< 0.20	U
95-49-8	2-Chlorotoluene	0.20	< 0.20	U
106-43-4	4-Chlorotoluene	0.20	< 0.20	U
98-06-6	tert-Butylbenzene	0.20	< 0.20	U
135-98-8	sec-Butylbenzene	0.20	< 0.20	U
99-87-6	4-Isopropyltoluene	0.20	< 0.20	U
104-51-8	n-Butylbenzene	0.20	< 0.20	U
120-82-1	1,2,4-Trichlorobenzene	0.50	< 0.50	U
91-20-3	Naphthalene	0.50	< 0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	< 0.50	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	100%
d8-Toluene	98.6%
Bromofluorobenzene	94.3%
d4-1,2-Dichlorobenzene	104%

ANALYTICAL RESOURCES INCORPORATED

VOA SURROGATE RECOVERY SUMMARY

Matrix: Water

QC Report No: YL05-Joint Base Lewis McChord
Project: LOGRAM

ARI ID	Client ID	PV	DCE	TOL	BFB	DCB	TOT OUT
MB-052714A	Method Blank	10	100%	98.6%	94.3%	104%	0
LCS-052714A	Lab Control	10	95.7%	101%	101%	101%	0
LCSD-052714A	Lab Control Dup	10	91.6%	103%	99.2%	104%	0
YL05A	LGC140522EGDYE-1	10	105%	98.0%	96.8%	102%	0
YL05B	LGC140522EGDYI-1	10	104%	96.2%	96.5%	102%	0
YL05C	LGC140522I5E-1	10	104%	98.5%	97.0%	106%	0
YL05D	LGC140522I5I-1	10	103%	94.7%	96.1%	107%	0
YL05E	LGC140522SLAPE-1	10	100%	101%	94.4%	105%	0
YL05F	LGC140522SLAPI-1	10	101%	99.5%	96.6%	103%	0
YL05G	LGC140522TB-1	10	104%	97.8%	93.3%	106%	0

SW8260C	LCS/MB LIMITS	QC LIMITS
(DCE) = d4-1,2-Dichloroethane	(80-120)	(80-130)
(TOL) = d8-Toluene	(80-120)	(80-120)
(BFB) = Bromofluorobenzene	(80-120)	(80-120)
(DCB) = d4-1,2-Dichlorobenzene	(80-120)	(80-120)

Prep Method: SW5030B
Log Number Range: 14-10004 to 14-10010

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LCS-052714A**
 LAB CONTROL SAMPLE

Lab Sample ID: LCS-052714A
LIMS ID: 14-10004
Matrix: Water
Data Release Authorized:
Reported: 05/29/14

QC Report No: YL05-Joint Base Lewis McChord
Project: LOGRAM

Date Sampled: NA
Date Received: NA

Instrument/Analyst LCS: NT2/PAB
LCSD: NT2/PAB
Date Analyzed LCS: 05/27/14 15:19
LCSD: 05/27/14 15:45

Sample Amount LCS: 10.0 mL
LCSD: 10.0 mL
Purge Volume LCS: 10.0 mL
LCSD: 10.0 mL

Analyte	LCS	Spike Added-LCS	LCS Recovery	LCSD	Spike Added-LCSD	LCSD Recovery	RPD
Chloromethane	10.5	10.0	105%	9.85	10.0	98.5%	6.4%
Bromomethane	9.07	10.0	90.7%	8.73	10.0	87.3%	3.8%
Vinyl Chloride	10.7	10.0	107%	10.0	10.0	100%	6.8%
Chloroethane	10.2	10.0	102%	9.53	10.0	95.3%	6.8%
Methylene Chloride	10.2	10.0	102%	9.88	10.0	98.8%	3.2%
Acetone	59.2	50.0	118%	51.7	50.0	103%	13.5%
Carbon Disulfide	10.6	10.0	106%	9.78	10.0	97.8%	8.0%
1,1-Dichloroethene	10.7	10.0	107%	10.3	10.0	103%	3.8%
1,1-Dichloroethane	10.9	10.0	109%	10.1	10.0	101%	7.6%
trans-1,2-Dichloroethene	10.6	10.0	106%	9.79	10.0	97.9%	7.9%
cis-1,2-Dichloroethene	10.1	10.0	101%	9.51	10.0	95.1%	6.0%
Chloroform	10.7	10.0	107%	10.3	10.0	103%	3.8%
1,2-Dichloroethane	10.3	10.0	103%	10.8	10.0	108%	4.7%
2-Butanone	55.5	50.0	111%	53.2	50.0	106%	4.2%
1,1,1-Trichloroethane	10.5	10.0	105%	10.0	10.0	100%	4.9%
Carbon Tetrachloride	9.98	10.0	99.8%	9.86	10.0	98.6%	1.2%
Vinyl Acetate	9.82	10.0	98.2%	10.2	10.0	102%	3.8%
Bromodichloromethane	10.2	10.0	102%	10.4	10.0	104%	1.9%
1,2-Dichloropropane	10.2	10.0	102%	10.5	10.0	105%	2.9%
cis-1,3-Dichloropropene	10.7	10.0	107%	10.8	10.0	108%	0.9%
Trichloroethene	11.0	10.0	110%	11.3	10.0	113%	2.7%
Dibromochloromethane	9.85	10.0	98.5%	10.3	10.0	103%	4.5%
1,1,2-Trichloroethane	10.4	10.0	104%	11.0	10.0	110%	5.6%
Benzene	10.6	10.0	106%	10.6	10.0	106%	0.0%
trans-1,3-Dichloropropene	10.2	10.0	102%	10.9	10.0	109%	6.6%
2-Chloroethylvinylether	9.53	10.0	95.3%	10.2	10.0	102%	6.8%
Bromoform	8.66 Q	10.0	86.6%	9.03 Q	10.0	90.3%	4.2%
4-Methyl-2-Pentanone (MIBK)	52.0	50.0	104%	55.9	50.0	112%	7.2%
2-Hexanone	51.1	50.0	102%	55.6	50.0	111%	8.4%
Tetrachloroethene	10.5	10.0	105%	10.2	10.0	102%	2.9%
1,1,2,2-Tetrachloroethane	9.43	10.0	94.3%	9.97	10.0	99.7%	5.6%
Toluene	10.7	10.0	107%	10.9	10.0	109%	1.9%
Chlorobenzene	10.6	10.0	106%	10.8	10.0	108%	1.9%
Ethylbenzene	10.5	10.0	105%	10.5	10.0	105%	0.0%
Styrene	11.0	10.0	110%	11.0	10.0	110%	0.0%
Trichlorofluoromethane	10.8	10.0	108%	10.3	10.0	103%	4.7%
1,1,2-Trichloro-1,2,2-trifluoroetha	11.4	10.0	114%	10.5	10.0	105%	8.2%
m,p-Xylene	22.5	20.0	112%	22.6	20.0	113%	0.4%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LCS-052714A**
 LAB CONTROL SAMPLE

Lab Sample ID: LCS-052714A QC Report No: YL05-Joint Base Lewis McChord
LIMS ID: 14-10004 Project: LOGRAM
Matrix: Water

Analyte	LCS	Spike Added-LCS	LCS Recovery	LCSD	Spike Added-LCSD	LCSD Recovery	RPD
o-Xylene	10.5	10.0	105%	10.5	10.0	105%	0.0%
1,2-Dichlorobenzene	10.8	10.0	108%	10.9	10.0	109%	0.9%
1,3-Dichlorobenzene	10.1	10.0	101%	10.5	10.0	105%	3.9%
1,4-Dichlorobenzene	9.78	10.0	97.8%	9.94	10.0	99.4%	1.6%
Acrolein	52.8	50.0	106%	55.0	50.0	110%	4.1%
Iodomethane	10.6	10.0	106%	10.3	10.0	103%	2.9%
Bromoethane	11.2	10.0	112%	10.3	10.0	103%	8.4%
Acrylonitrile	10.0	10.0	100%	9.94	10.0	99.4%	0.6%
1,1-Dichloropropene	10.8	10.0	108%	10.8	10.0	108%	0.0%
Dibromomethane	10.1	10.0	101%	10.4	10.0	104%	2.9%
1,1,1,2-Tetrachloroethane	10.0	10.0	100%	10.0	10.0	100%	0.0%
1,2-Dibromo-3-chloropropane	8.49 Q	10.0	84.9%	9.19 Q	10.0	91.9%	7.9%
1,2,3-Trichloropropane	8.58	10.0	85.8%	9.32	10.0	93.2%	8.3%
trans-1,4-Dichloro-2-butene	8.84 Q	10.0	88.4%	9.28 Q	10.0	92.8%	4.9%
1,3,5-Trimethylbenzene	10.7	10.0	107%	10.9	10.0	109%	1.9%
1,2,4-Trimethylbenzene	10.6	10.0	106%	10.8	10.0	108%	1.9%
Hexachlorobutadiene	8.96 Q	10.0	89.6%	8.98 Q	10.0	89.8%	0.2%
1,2-Dibromoethane	10.2	10.0	102%	10.8	10.0	108%	5.7%
Bromochloromethane	10.8	10.0	108%	10.5	10.0	105%	2.8%
2,2-Dichloropropane	11.2	10.0	112%	10.3	10.0	103%	8.4%
1,3-Dichloropropane	10.1	10.0	101%	10.7	10.0	107%	5.8%
Isopropylbenzene	10.3	10.0	103%	10.5	10.0	105%	1.9%
n-Propylbenzene	10.2	10.0	102%	10.3	10.0	103%	1.0%
Bromobenzene	9.69	10.0	96.9%	9.81	10.0	98.1%	1.2%
2-Chlorotoluene	9.93	10.0	99.3%	10.0	10.0	100%	0.7%
4-Chlorotoluene	10.0	10.0	100%	10.2	10.0	102%	2.0%
tert-Butylbenzene	10.6	10.0	106%	10.7	10.0	107%	0.9%
sec-Butylbenzene	10.6	10.0	106%	10.6	10.0	106%	0.0%
4-Isopropyltoluene	11.0	10.0	110%	10.6	10.0	106%	3.7%
n-Butylbenzene	10.3	10.0	103%	9.96	10.0	99.6%	3.4%
1,2,4-Trichlorobenzene	9.95 Q	10.0	99.5%	10.3 Q	10.0	103%	3.5%
Naphthalene	10.0	10.0	100%	10.9	10.0	109%	8.6%
1,2,3-Trichlorobenzene	10.5	10.0	105%	10.8	10.0	108%	2.8%

Reported in µg/L (ppb)

RPD calculated using sample concentrations per SW846.

Volatile Surrogate Recovery

	LCS	LCSD
d4-1,2-Dichloroethane	95.7%	91.6%
d8-Toluene	101%	103%
Bromofluorobenzene	101%	99.2%
d4-1,2-Dichlorobenzene	101%	104%

Analytical Resources, Incorporated
Analytical Chemists and Consultants

May 1, 2014

Thomas Lynott
Department of the Army
Directorate of Public Works
Attn Environmental Division (T. Lynott)
2012 Liggett Ave Box 339500 MS 17
Joint Base Lewis-McChord, Washington 98433-9500
Official Business

RE: Client Project: LogRam
ARI Job No.: YI21

Dear Mr. Lynott:

Please find enclosed the original Chain-of-Custody record (COC), sample receipt documentation, and the final data for the project referenced above. Analytical Resources, Inc. (ARI) accepted six water samples on April 28, 2014. For further details regarding sample receipt please refer to the enclosed Cooler Receipt Form.

The samples were analyzed for VOCs, as requested on the COCs.

The VOCs CCAL is out of control high for acrolein. All associated samples that contain analyte have been flagged with a "Q" qualifier.

The VOCs LCS and LCSD are out of control high for acrolein.

An electronic copy of this report and all supporting raw data will remain on file with ARI. Should you have any questions or problems, please feel free to contact me at your convenience.

Respectfully,
ANALYTICAL RESOURCES, INC.

Kelly Bottem
Client Services Manager
(206) 695-6211
kellyb@arilabs.com
www.arilabs.com

eFile: YI21

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70 0021

Chain of Custody Record & Laboratory Analysis Request

ARI Assigned Number: YAZ1	Turn-around Requested: STANDARD TAT	Page: 1 of 1	
ARI Client Company: JOINT BASE LEWIS-McCHORD PUBLIC WORKS	Phone: 253-966-1802	Date: 28 APR 14	Ice Present? Y
Client Contact: TOM J. LYNOTT		No. of Coolers:	Cooler Temps: 3.5
Client Project Name: LogRAM			
Client Project #:	Samplers: J. BECKER		

Analytical Resources, Incorporated
Analytical Chemists and Consultants
4611 South 134th Place, Suite 100
Tukwila, WA 98168
206-695-6200 206-695-6201 (fax)
www.arilabs.com

Sample ID	Date	Time	Matrix	No Containers	1006A								Notes/Comments
LGC140425EGDYI-1	25APR14	1000	WATER	2	X								TOTAL VOC'S
LGC140425EGDYE-1	25APR14	1005	WATER	2	X								EPA METHOD 8260C
LGC140425ISI-1	25APR14	1030	WATER	2	X								
LGC140425ISE-1	25APR14	1035	WATER	2	X								
LGC140425SLAPI-1	25APR14	1045	WATER	2	X								
LGC140425SLAPE-1	25APR14	1050	WATER	2	X								

J. Becker

Comments/Special Instructions	Relinquished by (Signature)	Received by (Signature)	Relinquished by (Signature)	Received by: (Signature)
	Printed Name: JEREMY BECKER	Printed Name: Taylor Stretton	Printed Name:	Printed Name:
	Company: VERSAR, INC.	Company: ARI	Company:	Company:
	Date & Time: 28APR14 1128	Date & Time: 4-28-14 1128	Date & Time:	Date & Time:

Limits of Liability: *ARI will perform all requested services in accordance with appropriate methodology following ARI Standard Operating Procedures and the ARI Quality Assurance Program. This program meets standards for the industry. The total liability of ARI, its officers, agents, employees, or successors, arising out of or in connection with the requested services, shall not exceed the Invoiced amount for said services. The acceptance by the client of a proposal for services by ARI release ARI from any liability in excess thereof, not withstanding any provision to the contrary in any contract, purchase order or co-signed agreement between ARI and the Client.*

Sample Retention Policy: All samples submitted to ARI will be appropriately discarded no sooner than 90 days after receipt or 60 days after submission of hardcopy data, whichever is longer, unless alternate retention schedules have been established by work-order or contract.

YAZ1 : 00002

Sample ID Cross Reference Report

ANALYTICAL RESOURCES INCORPORATED

ARI Job No: YI21
Client: Joint Base Lewis McChord
Project Event: N/A
Project Name: Logram

	Sample ID	ARI Lab ID	ARI LIMS ID	Matrix	Sample Date/Time	VTSR
1.	LGC14025EGDYI-1	YI21A	14-8150	Water	04/25/14 10:00	04/28/14 11:28
2.	LGC14025EGDYE-1	YI21B	14-8151	Water	04/25/14 10:05	04/28/14 11:28
3.	LGC140425I5I-1	YI21C	14-8152	Water	04/25/14 10:30	04/28/14 11:28
4.	LGC140425I5E-1	YI21D	14-8153	Water	04/25/14 10:35	04/28/14 11:28
5.	lgc140425SLAPI-1	YI21E	14-8154	Water	04/25/14 10:45	04/28/14 11:28
6.	lgc140425SLAPE-1	YI21F	14-8155	Water	04/25/14 10:50	04/28/14 11:28

YI21 : 00003

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Cooler Receipt Form

ARI Client: JDVM Project Name: LOG Lam

COC No(s): _____ NA Delivered by: Fed-Ex UPS Courier Hand Delivered Other: _____

Assigned ARI Job No: YI21 Tracking No: _____ NA

Preliminary Examination Phase:

Were intact, properly signed and dated custody seals attached to the outside of to cooler? YES (NO)

Were custody papers included with the cooler? (YES) NO

Were custody papers properly filled out (ink, signed, etc.) (YES) NO

Temperature of Cooler(s) (°C) (recommended 2.0-6.0 °C for chemistry): 3.5

Time: _____

If cooler temperature is out of compliance fill out form 00070F Temp Gun ID#: 90879852

Cooler Accepted by: TS Date: 4-28-14 Time: 1128

Complete custody forms and attach all shipping documents

Log-In Phase:

Was a temperature blank included in the cooler? YES (NO)

What kind of packing material was used? Bubble Wrap Wet Ice Gel Packs Baggies Foam Block Paper Other: _____

Was sufficient ice used (if appropriate)? NA (YES) NO

Were all bottles sealed in individual plastic bags? YES (NO)

Did all bottles arrive in good condition (unbroken)? (YES) NO

Were all bottle labels complete and legible? (YES) NO

Did the number of containers listed on COC match with the number of containers received? (YES) NO

Did all bottle labels and tags agree with custody papers? (YES) NO

Were all bottles used correct for the requested analyses? (YES) NO

Do any of the analyses (bottles) require preservation? (attach preservation sheet, excluding VOCs)... (NA) YES NO

Were all VOC vials free of air bubbles? NA (YES) NO

Was sufficient amount of sample sent in each bottle? (YES) NO

Date VOC Trip Blank was made at ARI (NA) _____

Was Sample Split by ARI: (NA) YES Date/Time: _____ Equipment _____ Split by: _____

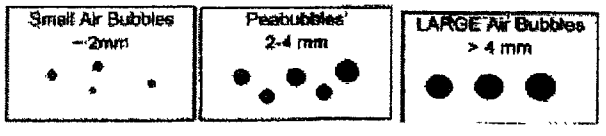
Samples Logged by TS Date: 4/28/14 Time: 1225

***** Notify Project Manager of discrepancies or concerns *****

Sample ID on Bottle	Sample ID on COC	Sample ID on Bottle	Sample ID on COC

Additional Notes, Discrepancies, & Resolutions:

By: Date:



Small → "sm" (< 2 mm)
Peabubbles → "pb" (2 to < 4 mm)
Large → "lg" (4 to < 6 mm)
Headspace → "hs" (> 6 mm)

YI21 · 00004

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC14025EGDYI-1**
 SAMPLE

Lab Sample ID: YI21A
LIMS ID: 14-8150
Matrix: Water
Data Release Authorized:
Reported: 05/01/14

QC Report No: YI21-Joint Base Lewis McChord
Project: Logram

Date Sampled: 04/25/14
Date Received: 04/28/14

Instrument/Analyst: NT3/LH
Date Analyzed: 04/30/14 13:16

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	LOQ	Result	Q
74-87-3	Chloromethane	0.50	< 0.50	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.20	< 0.20	U
75-00-3	Chloroethane	0.20	< 0.20	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	Acetone	5.0	< 5.0	U
75-15-0	Carbon Disulfide	0.20	< 0.20	U
75-35-4	1,1-Dichloroethene	0.20	< 0.20	U
75-34-3	1,1-Dichloroethane	0.20	< 0.20	U
156-60-5	trans-1,2-Dichloroethene	0.20	< 0.20	U
156-59-2	**cis-1,2-Dichloroethene**	**0.20**	**2.4**	
67-66-3	Chloroform	0.20	< 0.20	U
107-06-2	1,2-Dichloroethane	0.20	< 0.20	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	0.20	< 0.20	U
56-23-5	Carbon Tetrachloride	0.20	< 0.20	U
108-05-4	Vinyl Acetate	0.20	< 0.20	U
75-27-4	Bromodichloromethane	0.20	< 0.20	U
78-87-5	1,2-Dichloropropane	0.20	< 0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	< 0.20	U
79-01-6	**Trichloroethene**	**0.20**	**15**	
124-48-1	Dibromochloromethane	0.20	< 0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	< 0.20	U
71-43-2	Benzene	0.20	< 0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	< 0.20	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.20	< 0.20	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.20	< 0.20	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	< 0.20	U
108-88-3	Toluene	0.20	< 0.20	U
108-90-7	Chlorobenzene	0.20	< 0.20	U
100-41-4	Ethylbenzene	0.20	< 0.20	U
100-42-5	Styrene	0.20	< 0.20	U
75-69-4	Trichlorofluoromethane	0.20	< 0.20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.20	< 0.20	U
179601-23-1	m,p-Xylene	0.40	< 0.40	U
95-47-6	o-Xylene	0.20	< 0.20	U
95-50-1	1,2-Dichlorobenzene	0.20	< 0.20	U
541-73-1	1,3-Dichlorobenzene	0.20	< 0.20	U
106-46-7	1,4-Dichlorobenzene	0.20	< 0.20	U

Lab Sample ID: YI21A
LIMS ID: 14-8150
Matrix: Water
Date Analyzed: 04/30/14 13:16

QC Report No: YI21-Joint Base Lewis McChord
Project: Logram

CAS Number	Analyte	LOQ	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Iodomethane	1.0	< 1.0	U
74-96-4	Bromoethane	0.20	< 0.20	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.20	< 0.20	U
74-95-3	Dibromomethane	0.20	< 0.20	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	< 0.20	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	< 0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	< 0.50	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.20	< 0.20	U
95-63-6	1,2,4-Trimethylbenzene	0.20	< 0.20	U
87-68-3	Hexachlorobutadiene	0.50	< 0.50	U
106-93-4	1,2-Dibromoethane	0.20	< 0.20	U
74-97-5	Bromochloromethane	0.20	< 0.20	U
594-20-7	2,2-Dichloropropane	0.20	< 0.20	U
142-28-9	1,3-Dichloropropane	0.20	< 0.20	U
98-82-8	Isopropylbenzene	0.20	< 0.20	U
103-65-1	n-Propylbenzene	0.20	< 0.20	U
108-86-1	Bromobenzene	0.20	< 0.20	U
95-49-8	2-Chlorotoluene	0.20	< 0.20	U
106-43-4	4-Chlorotoluene	0.20	< 0.20	U
98-06-6	tert-Butylbenzene	0.20	< 0.20	U
135-98-8	sec-Butylbenzene	0.20	< 0.20	U
99-87-6	4-Isopropyltoluene	0.20	< 0.20	U
104-51-8	n-Butylbenzene	0.20	< 0.20	U
120-82-1	1,2,4-Trichlorobenzene	0.50	< 0.50	U
91-20-3	Naphthalene	0.50	< 0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	< 0.50	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	101%
d8-Toluene	97.3%
Bromofluorobenzene	97.5%
d4-1,2-Dichlorobenzene	103%

2-Chloroethylvinylether is an acid labile compound and may not be recovered from an acid preserved sample.

EPA SW-846 indicates that vinyl chloride and styrene may degrade in the presence of acid preservative.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC14025EGDYE-1**
Page 1 of 2 **SAMPLE**

Lab Sample ID: YI21B
LIMS ID: 14-8151
Matrix: Water
Data Release Authorized:
Reported: 05/01/14

QC Report No: YI21-Joint Base Lewis McChord
Project: Logram

Date Sampled: 04/25/14
Date Received: 04/28/14

Instrument/Analyst: NT3/LH
Date Analyzed: 04/30/14 13:45

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	LOQ	Result	Q
74-87-3	Chloromethane	0.50	< 0.50	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.20	< 0.20	U
75-00-3	Chloroethane	0.20	< 0.20	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	Acetone	5.0	< 5.0	U
75-15-0	Carbon Disulfide	0.20	< 0.20	U
75-35-4	1,1-Dichloroethene	0.20	< 0.20	U
75-34-3	1,1-Dichloroethane	0.20	< 0.20	U
156-60-5	trans-1,2-Dichloroethene	0.20	< 0.20	U
156-59-2	**cis-1,2-Dichloroethene**	**0.20**	**0.20**	
67-66-3	Chloroform	0.20	< 0.20	U
107-06-2	1,2-Dichloroethane	0.20	< 0.20	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	0.20	< 0.20	U
56-23-5	Carbon Tetrachloride	0.20	< 0.20	U
108-05-4	Vinyl Acetate	0.20	< 0.20	U
75-27-4	Bromodichloromethane	0.20	< 0.20	U
78-87-5	1,2-Dichloropropane	0.20	< 0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	< 0.20	U
79-01-6	Trichloroethene	0.20	< 0.20	U
124-48-1	Dibromochloromethane	0.20	< 0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	< 0.20	U
71-43-2	Benzene	0.20	< 0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	< 0.20	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.20	< 0.20	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.20	< 0.20	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	< 0.20	U
108-88-3	Toluene	0.20	< 0.20	U
108-90-7	Chlorobenzene	0.20	< 0.20	U
100-41-4	Ethylbenzene	0.20	< 0.20	U
100-42-5	Styrene	0.20	< 0.20	U
75-69-4	Trichlorofluoromethane	0.20	< 0.20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.20	< 0.20	U
179601-23-1	m,p-Xylene	0.40	< 0.40	U
95-47-6	o-Xylene	0.20	< 0.20	U
95-50-1	1,2-Dichlorobenzene	0.20	< 0.20	U
541-73-1	1,3-Dichlorobenzene	0.20	< 0.20	U
106-46-7	1,4-Dichlorobenzene	0.20	< 0.20	U

Lab Sample ID: YI21B
LIMS ID: 14-8151
Matrix: Water
Date Analyzed: 04/30/14 13:45

QC Report No: YI21-Joint Base Lewis McChord
Project: Logram

CAS Number	Analyte	LOQ	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Iodomethane	1.0	< 1.0	U
74-96-4	Bromoethane	0.20	< 0.20	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.20	< 0.20	U
74-95-3	Dibromomethane	0.20	< 0.20	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	< 0.20	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	< 0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	< 0.50	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.20	< 0.20	U
95-63-6	1,2,4-Trimethylbenzene	0.20	< 0.20	U
87-68-3	Hexachlorobutadiene	0.50	< 0.50	U
106-93-4	1,2-Dibromoethane	0.20	< 0.20	U
74-97-5	Bromochloromethane	0.20	< 0.20	U
594-20-7	2,2-Dichloropropane	0.20	< 0.20	U
142-28-9	1,3-Dichloropropane	0.20	< 0.20	U
98-82-8	Isopropylbenzene	0.20	< 0.20	U
103-65-1	n-Propylbenzene	0.20	< 0.20	U
108-86-1	Bromobenzene	0.20	< 0.20	U
95-49-8	2-Chlorotoluene	0.20	< 0.20	U
106-43-4	4-Chlorotoluene	0.20	< 0.20	U
98-06-6	tert-Butylbenzene	0.20	< 0.20	U
135-98-8	sec-Butylbenzene	0.20	< 0.20	U
99-87-6	4-Isopropyltoluene	0.20	< 0.20	U
104-51-8	n-Butylbenzene	0.20	< 0.20	U
120-82-1	1,2,4-Trichlorobenzene	0.50	< 0.50	U
91-20-3	Naphthalene	0.50	< 0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	< 0.50	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	102%
d8-Toluene	99.0%
Bromofluorobenzene	98.6%
d4-1,2-Dichlorobenzene	103%

2-Chloroethylvinylether is an acid labile compound and may not be recovered from an acid preserved sample.

EPA SW-846 indicates that vinyl chloride and styrene may degrade in the presence of acid preservative.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140425I5I-1**
 SAMPLE

Lab Sample ID: YI21C
LIMS ID: 14-8152
Matrix: Water
Data Release Authorized:
Reported: 05/01/14

QC Report No: YI21-Joint Base Lewis McChord
Project: Logram

Date Sampled: 04/25/14
Date Received: 04/28/14

Instrument/Analyst: NT3/LH
Date Analyzed: 04/30/14 14:14

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	LOQ	Result	Q
74-87-3	Chloromethane	0.50	< 0.50	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.20	< 0.20	U
75-00-3	Chloroethane	0.20	< 0.20	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	Acetone	5.0	< 5.0	U
75-15-0	Carbon Disulfide	0.20	< 0.20	U
75-35-4	1,1-Dichloroethene	0.20	< 0.20	U
75-34-3	1,1-Dichloroethane	0.20	< 0.20	U
156-60-5	trans-1,2-Dichloroethene	0.20	< 0.20	U
156-59-2	**cis-1,2-Dichloroethene**	**0.20**	**0.61**	
67-66-3	**Chloroform**	**0.20**	**0.28**	
107-06-2	1,2-Dichloroethane	0.20	< 0.20	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	**1,1,1-Trichloroethane**	**0.20**	**0.20**	
56-23-5	Carbon Tetrachloride	0.20	< 0.20	U
108-05-4	Vinyl Acetate	0.20	< 0.20	U
75-27-4	Bromodichloromethane	0.20	< 0.20	U
78-87-5	1,2-Dichloropropane	0.20	< 0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	< 0.20	U
79-01-6	**Trichloroethene**	**0.20**	**25**	
124-48-1	Dibromochloromethane	0.20	< 0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	< 0.20	U
71-43-2	Benzene	0.20	< 0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	< 0.20	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.20	< 0.20	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.20	< 0.20	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	< 0.20	U
108-88-3	Toluene	0.20	< 0.20	U
108-90-7	Chlorobenzene	0.20	< 0.20	U
100-41-4	Ethylbenzene	0.20	< 0.20	U
100-42-5	Styrene	0.20	< 0.20	U
75-69-4	Trichlorofluoromethane	0.20	< 0.20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.20	< 0.20	U
179601-23-1	m,p-Xylene	0.40	< 0.40	U
95-47-6	o-Xylene	0.20	< 0.20	U
95-50-1	1,2-Dichlorobenzene	0.20	< 0.20	U
541-73-1	1,3-Dichlorobenzene	0.20	< 0.20	U
106-46-7	1,4-Dichlorobenzene	0.20	< 0.20	U

Lab Sample ID: YI21C
LIMS ID: 14-8152
Matrix: Water
Date Analyzed: 04/30/14 14:14

QC Report No: YI21-Joint Base Lewis McChord
Project: Logram

CAS Number	Analyte	LOQ	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Iodomethane	1.0	< 1.0	U
74-96-4	Bromoethane	0.20	< 0.20	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.20	< 0.20	U
74-95-3	Dibromomethane	0.20	< 0.20	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	< 0.20	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	< 0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	< 0.50	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.20	< 0.20	U
95-63-6	1,2,4-Trimethylbenzene	0.20	< 0.20	U
87-68-3	Hexachlorobutadiene	0.50	< 0.50	U
106-93-4	1,2-Dibromoethane	0.20	< 0.20	U
74-97-5	Bromochloromethane	0.20	< 0.20	U
594-20-7	2,2-Dichloropropane	0.20	< 0.20	U
142-28-9	1,3-Dichloropropane	0.20	< 0.20	U
98-82-8	Isopropylbenzene	0.20	< 0.20	U
103-65-1	n-Propylbenzene	0.20	< 0.20	U
108-86-1	Bromobenzene	0.20	< 0.20	U
95-49-8	2-Chlorotoluene	0.20	< 0.20	U
106-43-4	4-Chlorotoluene	0.20	< 0.20	U
98-06-6	tert-Butylbenzene	0.20	< 0.20	U
135-98-8	sec-Butylbenzene	0.20	< 0.20	U
99-87-6	4-Isopropyltoluene	0.20	< 0.20	U
104-51-8	n-Butylbenzene	0.20	< 0.20	U
120-82-1	1,2,4-Trichlorobenzene	0.50	< 0.50	U
91-20-3	Naphthalene	0.50	< 0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	< 0.50	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	102%
d8-Toluene	99.1%
Bromofluorobenzene	97.2%
d4-1,2-Dichlorobenzene	99.3%

2-Chloroethylvinylether is an acid labile compound and may not be recovered from an acid preserved sample.

EPA SW-846 indicates that vinyl chloride and styrene may degrade in the presence of acid preservative.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140425I5E-1**
Page 1 of 2 **SAMPLE**

Lab Sample ID: YI21D
LIMS ID: 14-8153
Matrix: Water
Data Release Authorized:
Reported: 05/01/14

QC Report No: YI21-Joint Base Lewis McChord
Project: Logram

Date Sampled: 04/25/14
Date Received: 04/28/14

Instrument/Analyst: NT3/LH
Date Analyzed: 04/30/14 14:42

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	LOQ	Result	Q
74-87-3	Chloromethane	0.50	< 0.50	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.20	< 0.20	U
75-00-3	Chloroethane	0.20	< 0.20	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	Acetone	5.0	< 5.0	U
75-15-0	Carbon Disulfide	0.20	< 0.20	U
75-35-4	1,1-Dichloroethene	0.20	< 0.20	U
75-34-3	1,1-Dichloroethane	0.20	< 0.20	U
156-60-5	trans-1,2-Dichloroethene	0.20	< 0.20	U
156-59-2	cis-1,2-Dichloroethene	0.20	< 0.20	U
67-66-3	Chloroform	0.20	< 0.20	U
107-06-2	1,2-Dichloroethane	0.20	< 0.20	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	0.20	< 0.20	U
56-23-5	Carbon Tetrachloride	0.20	< 0.20	U
108-05-4	Vinyl Acetate	0.20	< 0.20	U
75-27-4	Bromodichloromethane	0.20	< 0.20	U
78-87-5	1,2-Dichloropropane	0.20	< 0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	< 0.20	U
79-01-6	**Trichloroethene**	**0.20**	**0.35**	
124-48-1	Dibromochloromethane	0.20	< 0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	< 0.20	U
71-43-2	Benzene	0.20	< 0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	< 0.20	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.20	< 0.20	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.20	< 0.20	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	< 0.20	U
108-88-3	Toluene	0.20	< 0.20	U
108-90-7	Chlorobenzene	0.20	< 0.20	U
100-41-4	Ethylbenzene	0.20	< 0.20	U
100-42-5	Styrene	0.20	< 0.20	U
75-69-4	Trichlorofluoromethane	0.20	< 0.20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.20	< 0.20	U
179601-23-1	m,p-Xylene	0.40	< 0.40	U
95-47-6	o-Xylene	0.20	< 0.20	U
95-50-1	1,2-Dichlorobenzene	0.20	< 0.20	U
541-73-1	1,3-Dichlorobenzene	0.20	< 0.20	U
106-46-7	1,4-Dichlorobenzene	0.20	< 0.20	U

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LGC140425I5E-1**
 SAMPLE

Lab Sample ID: YI21D
LIMS ID: 14-8153
Matrix: Water
Date Analyzed: 04/30/14 14:42

QC Report No: YI21-Joint Base Lewis McChord
Project: Logram

CAS Number	Analyte	LOQ	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Iodomethane	1.0	< 1.0	U
74-96-4	Bromoethane	0.20	< 0.20	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.20	< 0.20	U
74-95-3	Dibromomethane	0.20	< 0.20	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	< 0.20	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	< 0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	< 0.50	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.20	< 0.20	U
95-63-6	1,2,4-Trimethylbenzene	0.20	< 0.20	U
87-68-3	Hexachlorobutadiene	0.50	< 0.50	U
106-93-4	1,2-Dibromoethane	0.20	< 0.20	U
74-97-5	Bromochloromethane	0.20	< 0.20	U
594-20-7	2,2-Dichloropropane	0.20	< 0.20	U
142-28-9	1,3-Dichloropropane	0.20	< 0.20	U
98-82-8	Isopropylbenzene	0.20	< 0.20	U
103-65-1	n-Propylbenzene	0.20	< 0.20	U
108-86-1	Bromobenzene	0.20	< 0.20	U
95-49-8	2-Chlorotoluene	0.20	< 0.20	U
106-43-4	4-Chlorotoluene	0.20	< 0.20	U
98-06-6	tert-Butylbenzene	0.20	< 0.20	U
135-98-8	sec-Butylbenzene	0.20	< 0.20	U
99-87-6	4-Isopropyltoluene	0.20	< 0.20	U
104-51-8	n-Butylbenzene	0.20	< 0.20	U
120-82-1	1,2,4-Trichlorobenzene	0.50	< 0.50	U
91-20-3	Naphthalene	0.50	< 0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	< 0.50	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	103%
d8-Toluene	98.5%
Bromofluorobenzene	95.7%
d4-1,2-Dichlorobenzene	98.7%

2-Chloroethylvinylether is an acid labile compound and may not be recovered from an acid preserved sample.

EPA SW-846 indicates that vinyl chloride and styrene may degrade in the presence of acid preservative.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: lgc140425SLAPI-1**
Page 1 of 2 **SAMPLE**

Lab Sample ID: YI21E
LIMS ID: 14-8154
Matrix: Water
Data Release Authorized:
Reported: 05/01/14

QC Report No: YI21-Joint Base Lewis McChord
Project: Logram

Date Sampled: 04/25/14
Date Received: 04/28/14

Instrument/Analyst: NT3/LH
Date Analyzed: 04/30/14 15:10

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	LOQ	Result	Q
74-87-3	Chloromethane	0.50	< 0.50	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.20	< 0.20	U
75-00-3	Chloroethane	0.20	< 0.20	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	Acetone	5.0	< 5.0	U
75-15-0	Carbon Disulfide	0.20	< 0.20	U
75-35-4	1,1-Dichloroethene	0.20	< 0.20	U
75-34-3	1,1-Dichloroethane	0.20	< 0.20	U
156-60-5	trans-1,2-Dichloroethene	0.20	< 0.20	U
156-59-2	**cis-1,2-Dichloroethene**	**0.20**	**0.37**	
67-66-3	Chloroform	0.20	< 0.20	U
107-06-2	1,2-Dichloroethane	0.20	< 0.20	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	0.20	< 0.20	U
56-23-5	Carbon Tetrachloride	0.20	< 0.20	U
108-05-4	Vinyl Acetate	0.20	< 0.20	U
75-27-4	Bromodichloromethane	0.20	< 0.20	U
78-87-5	1,2-Dichloropropane	0.20	< 0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	< 0.20	U
79-01-6	**Trichloroethene**	**0.20**	**14**	
124-48-1	Dibromochloromethane	0.20	< 0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	< 0.20	U
71-43-2	Benzene	0.20	< 0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	< 0.20	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.20	< 0.20	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.20	< 0.20	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	< 0.20	U
108-88-3	Toluene	0.20	< 0.20	U
108-90-7	Chlorobenzene	0.20	< 0.20	U
100-41-4	Ethylbenzene	0.20	< 0.20	U
100-42-5	Styrene	0.20	< 0.20	U
75-69-4	Trichlorofluoromethane	0.20	< 0.20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.20	< 0.20	U
179601-23-1	m,p-Xylene	0.40	< 0.40	U
95-47-6	o-Xylene	0.20	< 0.20	U
95-50-1	1,2-Dichlorobenzene	0.20	< 0.20	U
541-73-1	1,3-Dichlorobenzene	0.20	< 0.20	U
106-46-7	1,4-Dichlorobenzene	0.20	< 0.20	U

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: lgc140425SLAPI-1**

SAMPLE

ANALYTICAL RESOURCES INCORPORATED

Lab Sample ID: YI21E
LIMS ID: 14-8154
Matrix: Water
Date Analyzed: 04/30/14 15:10

QC Report No: YI21-Joint Base Lewis McChord
Project: Logram

CAS Number	Analyte	LOQ	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Iodomethane	1.0	< 1.0	U
74-96-4	Bromoethane	0.20	< 0.20	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.20	< 0.20	U
74-95-3	Dibromomethane	0.20	< 0.20	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	< 0.20	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	< 0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	< 0.50	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.20	< 0.20	U
95-63-6	1,2,4-Trimethylbenzene	0.20	< 0.20	U
87-68-3	Hexachlorobutadiene	0.50	< 0.50	U
106-93-4	1,2-Dibromoethane	0.20	< 0.20	U
74-97-5	Bromochloromethane	0.20	< 0.20	U
594-20-7	2,2-Dichloropropane	0.20	< 0.20	U
142-28-9	1,3-Dichloropropane	0.20	< 0.20	U
98-82-8	Isopropylbenzene	0.20	< 0.20	U
103-65-1	n-Propylbenzene	0.20	< 0.20	U
108-86-1	Bromobenzene	0.20	< 0.20	U
95-49-8	2-Chlorotoluene	0.20	< 0.20	U
106-43-4	4-Chlorotoluene	0.20	< 0.20	U
98-06-6	tert-Butylbenzene	0.20	< 0.20	U
135-98-8	sec-Butylbenzene	0.20	< 0.20	U
99-87-6	4-Isopropyltoluene	0.20	< 0.20	U
104-51-8	n-Butylbenzene	0.20	< 0.20	U
120-82-1	1,2,4-Trichlorobenzene	0.50	< 0.50	U
91-20-3	Naphthalene	0.50	< 0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	< 0.50	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	104%
d8-Toluene	100%
Bromofluorobenzene	97.7%
d4-1,2-Dichlorobenzene	101%

2-Chloroethylvinylether is an acid labile compound and may not be recovered from an acid preserved sample.

EPA SW-846 indicates that vinyl chloride and styrene may degrade in the presence of acid preservative.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: lgc140425SLAPE-1**
Page 1 of 2 **SAMPLE**

Lab Sample ID: YI21F
LIMS ID: 14-8155
Matrix: Water
Data Release Authorized:
Reported: 05/01/14

QC Report No: YI21-Joint Base Lewis McChord
Project: Logram

Date Sampled: 04/25/14
Date Received: 04/28/14

Instrument/Analyst: NT3/LH
Date Analyzed: 04/30/14 15:39

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	LOQ	Result	Q
74-87-3	Chloromethane	0.50	< 0.50	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.20	< 0.20	U
75-00-3	Chloroethane	0.20	< 0.20	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	Acetone	5.0	< 5.0	U
75-15-0	Carbon Disulfide	0.20	< 0.20	U
75-35-4	1,1-Dichloroethene	0.20	< 0.20	U
75-34-3	1,1-Dichloroethane	0.20	< 0.20	U
156-60-5	trans-1,2-Dichloroethene	0.20	< 0.20	U
156-59-2	cis-1,2-Dichloroethene	0.20	< 0.20	U
67-66-3	Chloroform	0.20	< 0.20	U
107-06-2	1,2-Dichloroethane	0.20	< 0.20	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	0.20	< 0.20	U
56-23-5	Carbon Tetrachloride	0.20	< 0.20	U
108-05-4	Vinyl Acetate	0.20	< 0.20	U
75-27-4	Bromodichloromethane	0.20	< 0.20	U
78-87-5	1,2-Dichloropropane	0.20	< 0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	< 0.20	U
79-01-6	**Trichloroethene**	**0.20**	**0.51**	
124-48-1	Dibromochloromethane	0.20	< 0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	< 0.20	U
71-43-2	Benzene	0.20	< 0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	< 0.20	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.20	< 0.20	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.20	< 0.20	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	< 0.20	U
108-88-3	Toluene	0.20	< 0.20	U
108-90-7	Chlorobenzene	0.20	< 0.20	U
100-41-4	Ethylbenzene	0.20	< 0.20	U
100-42-5	Styrene	0.20	< 0.20	U
75-69-4	Trichlorofluoromethane	0.20	< 0.20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.20	< 0.20	U
179601-23-1	m,p-Xylene	0.40	< 0.40	U
95-47-6	o-Xylene	0.20	< 0.20	U
95-50-1	1,2-Dichlorobenzene	0.20	< 0.20	U
541-73-1	1,3-Dichlorobenzene	0.20	< 0.20	U
106-46-7	1,4-Dichlorobenzene	0.20	< 0.20	U

Lab Sample ID: YI21F
LIMS ID: 14-8155
Matrix: Water
Date Analyzed: 04/30/14 15:39

QC Report No: YI21-Joint Base Lewis McChord
Project: Logram

CAS Number	Analyte	LOQ	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Iodomethane	1.0	< 1.0	U
74-96-4	Bromoethane	0.20	< 0.20	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.20	< 0.20	U
74-95-3	Dibromomethane	0.20	< 0.20	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	< 0.20	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	< 0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	< 0.50	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.20	< 0.20	U
95-63-6	1,2,4-Trimethylbenzene	0.20	< 0.20	U
87-68-3	Hexachlorobutadiene	0.50	< 0.50	U
106-93-4	1,2-Dibromoethane	0.20	< 0.20	U
74-97-5	Bromochloromethane	0.20	< 0.20	U
594-20-7	2,2-Dichloropropane	0.20	< 0.20	U
142-28-9	1,3-Dichloropropane	0.20	< 0.20	U
98-82-8	Isopropylbenzene	0.20	< 0.20	U
103-65-1	n-Propylbenzene	0.20	< 0.20	U
108-86-1	Bromobenzene	0.20	< 0.20	U
95-49-8	2-Chlorotoluene	0.20	< 0.20	U
106-43-4	4-Chlorotoluene	0.20	< 0.20	U
98-06-6	tert-Butylbenzene	0.20	< 0.20	U
135-98-8	sec-Butylbenzene	0.20	< 0.20	U
99-87-6	4-Isopropyltoluene	0.20	< 0.20	U
104-51-8	n-Butylbenzene	0.20	< 0.20	U
120-82-1	1,2,4-Trichlorobenzene	0.50	< 0.50	U
91-20-3	Naphthalene	0.50	< 0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	< 0.50	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	108%
d8-Toluene	99.6%
Bromofluorobenzene	97.4%
d4-1,2-Dichlorobenzene	100%

2-Chloroethylvinylether is an acid labile compound and may not be recovered from an acid preserved sample.

EPA SW-846 indicates that vinyl chloride and styrene may degrade in the presence of acid preservative.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: MB-043014A**
 METHOD BLANK

Lab Sample ID: MB-043014A
LIMS ID: 14-8150
Matrix: Water
Data Release Authorized:
Reported: 05/01/14

QC Report No: YI21-Joint Base Lewis McChord
Project: Logram

Date Sampled: NA
Date Received: NA

Instrument/Analyst: NT3/LH
Date Analyzed: 04/30/14 11:23

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	LOQ	Result	Q
74-87-3	Chloromethane	0.50	< 0.50	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.20	< 0.20	U
75-00-3	Chloroethane	0.20	< 0.20	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	Acetone	5.0	< 5.0	U
75-15-0	Carbon Disulfide	0.20	< 0.20	U
75-35-4	1,1-Dichloroethene	0.20	< 0.20	U
75-34-3	1,1-Dichloroethane	0.20	< 0.20	U
156-60-5	trans-1,2-Dichloroethene	0.20	< 0.20	U
156-59-2	cis-1,2-Dichloroethene	0.20	< 0.20	U
67-66-3	Chloroform	0.20	< 0.20	U
107-06-2	1,2-Dichloroethane	0.20	< 0.20	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	0.20	< 0.20	U
56-23-5	Carbon Tetrachloride	0.20	< 0.20	U
108-05-4	Vinyl Acetate	0.20	< 0.20	U
75-27-4	Bromodichloromethane	0.20	< 0.20	U
78-87-5	1,2-Dichloropropane	0.20	< 0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	< 0.20	U
79-01-6	Trichloroethene	0.20	< 0.20	U
124-48-1	Dibromochloromethane	0.20	< 0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	< 0.20	U
71-43-2	Benzene	0.20	< 0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	< 0.20	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.20	< 0.20	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.20	< 0.20	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	< 0.20	U
108-88-3	Toluene	0.20	< 0.20	U
108-90-7	Chlorobenzene	0.20	< 0.20	U
100-41-4	Ethylbenzene	0.20	< 0.20	U
100-42-5	Styrene	0.20	< 0.20	U
75-69-4	Trichlorofluoromethane	0.20	< 0.20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.20	< 0.20	U
179601-23-1	m,p-Xylene	0.40	< 0.40	U
95-47-6	o-Xylene	0.20	< 0.20	U
95-50-1	1,2-Dichlorobenzene	0.20	< 0.20	U
541-73-1	1,3-Dichlorobenzene	0.20	< 0.20	U
106-46-7	1,4-Dichlorobenzene	0.20	< 0.20	U

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: MB-043014A**

METHOD BLANK

ANALYTICAL RESOURCES INCORPORATED

Lab Sample ID: MB-043014A
LIMS ID: 14-8150
Matrix: Water
Date Analyzed: 04/30/14 11:23

QC Report No: YI21-Joint Base Lewis McChord
Project: Logram

CAS Number	Analyte	LOQ	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Iodomethane	1.0	< 1.0	U
74-96-4	Bromoethane	0.20	< 0.20	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.20	< 0.20	U
74-95-3	Dibromomethane	0.20	< 0.20	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	< 0.20	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	< 0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	< 0.50	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.20	< 0.20	U
95-63-6	1,2,4-Trimethylbenzene	0.20	< 0.20	U
87-68-3	Hexachlorobutadiene	0.50	< 0.50	U
106-93-4	1,2-Dibromoethane	0.20	< 0.20	U
74-97-5	Bromochloromethane	0.20	< 0.20	U
594-20-7	2,2-Dichloropropane	0.20	< 0.20	U
142-28-9	1,3-Dichloropropane	0.20	< 0.20	U
98-82-8	Isopropylbenzene	0.20	< 0.20	U
103-65-1	n-Propylbenzene	0.20	< 0.20	U
108-86-1	Bromobenzene	0.20	< 0.20	U
95-49-8	2-Chlorotoluene	0.20	< 0.20	U
106-43-4	4-Chlorotoluene	0.20	< 0.20	U
98-06-6	tert-Butylbenzene	0.20	< 0.20	U
135-98-8	sec-Butylbenzene	0.20	< 0.20	U
99-87-6	4-Isopropyltoluene	0.20	< 0.20	U
104-51-8	n-Butylbenzene	0.20	< 0.20	U
120-82-1	1,2,4-Trichlorobenzene	0.50	< 0.50	U
91-20-3	Naphthalene	0.50	< 0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	< 0.50	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	103%
d8-Toluene	99.3%
Bromofluorobenzene	98.7%
d4-1,2-Dichlorobenzene	102%

ANALYTICAL RESOURCES INCORPORATED

VOA SURROGATE RECOVERY SUMMARY

Matrix: Water

QC Report No: YI21-Joint Base Lewis McChord
Project: Logram

ARI ID	Client ID	PV	DCE	TOL	BFB	DCB	TOT OUT
MB-043014A	Method Blank	10	103%	99.3%	98.7%	102%	0
LCS-043014A	Lab Control	10	96.1%	101%	96.5%	102%	0
LCSD-043014A	Lab Control Dup	10	107%	98.5%	98.5%	99.9%	0
YI21A	LGC14025EGDYI-1	10	101%	97.3%	97.5%	103%	0
YI21B	LGC14025EGDYE-1	10	102%	99.0%	98.6%	103%	0
YI21C	LGC140425I5I-1	10	102%	99.1%	97.2%	99.3%	0
YI21D	LGC140425I5E-1	10	103%	98.5%	95.7%	98.7%	0
YI21E	lgc140425SLAPI-1	10	104%	100%	97.7%	101%	0
YI21F	lgc140425SLAPE-1	10	108%	99.6%	97.4%	100%	0

SW8260C	LCS/MB LIMITS	QC LIMITS
(DCE) = d4-1,2-Dichloroethane	(80-120)	(80-130)
(TOL) = d8-Toluene	(80-120)	(80-120)
(BFB) = Bromofluorobenzene	(80-120)	(80-120)
(DCB) = d4-1,2-Dichlorobenzene	(80-120)	(80-120)

Prep Method: SW5030B
Log Number Range: 14-8150 to 14-8155

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LCS-043014A**
 LAB CONTROL SAMPLE

Lab Sample ID: LCS-043014A
LIMS ID: 14-8150
Matrix: Water
Data Release Authorized:
Reported: 05/01/14

QC Report No: YI21-Joint Base Lewis McChord
Project: Logram

Date Sampled: NA
Date Received: NA

Instrument/Analyst LCS: NT3/LH
LCSD: NT3/LH
Date Analyzed LCS: 04/30/14 09:58
LCSD: 04/30/14 10:26

Sample Amount LCS: 10.0 mL
LCSD: 10.0 mL
Purge Volume LCS: 10.0 mL
LCSD: 10.0 mL

Analyte	LCS	Spike Added-LCS	LCS Recovery	LCSD	Spike Added-LCSD	LCSD Recovery	RPD
Chloromethane	9.65	10.0	96.5%	9.58	10.0	95.8%	0.7%
Bromomethane	10.2	10.0	102%	10.4	10.0	104%	1.9%
Vinyl Chloride	9.96	10.0	99.6%	10.0	10.0	100%	0.4%
Chloroethane	10.4	10.0	104%	10.4	10.0	104%	0.0%
Methylene Chloride	9.49	10.0	94.9%	9.68	10.0	96.8%	2.0%
Acetone	47.6	50.0	95.2%	48.2	50.0	96.4%	1.3%
Carbon Disulfide	9.34	10.0	93.4%	9.82	10.0	98.2%	5.0%
1,1-Dichloroethene	8.46	10.0	84.6%	9.55	10.0	95.5%	12.1%
1,1-Dichloroethane	10.2	10.0	102%	9.87	10.0	98.7%	3.3%
trans-1,2-Dichloroethene	9.09	10.0	90.9%	9.77	10.0	97.7%	7.2%
cis-1,2-Dichloroethene	9.51	10.0	95.1%	9.98	10.0	99.8%	4.8%
Chloroform	9.12	10.0	91.2%	9.43	10.0	94.3%	3.3%
1,2-Dichloroethane	9.82	10.0	98.2%	9.86	10.0	98.6%	0.4%
2-Butanone	52.3	50.0	105%	52.4	50.0	105%	0.2%
1,1,1-Trichloroethane	9.95	10.0	99.5%	10.2	10.0	102%	2.5%
Carbon Tetrachloride	10.3	10.0	103%	10.1	10.0	101%	2.0%
Vinyl Acetate	10.4	10.0	104%	10.3	10.0	103%	1.0%
Bromodichloromethane	10.1	10.0	101%	10.1	10.0	101%	0.0%
1,2-Dichloropropane	9.87	10.0	98.7%	9.84	10.0	98.4%	0.3%
cis-1,3-Dichloropropene	10.8	10.0	108%	10.4	10.0	104%	3.8%
Trichloroethene	9.61	10.0	96.1%	9.68	10.0	96.8%	0.7%
Dibromochloromethane	10.4	10.0	104%	10.6	10.0	106%	1.9%
1,1,2-Trichloroethane	9.95	10.0	99.5%	10.1	10.0	101%	1.5%
Benzene	10.2	10.0	102%	10.0	10.0	100%	2.0%
trans-1,3-Dichloropropene	10.8	10.0	108%	10.7	10.0	107%	0.9%
2-Chloroethylvinylether	9.85	10.0	98.5%	10.2	10.0	102%	3.5%
Bromoform	11.2	10.0	112%	10.8	10.0	108%	3.6%
4-Methyl-2-Pentanone (MIBK)	54.4	50.0	109%	54.1	50.0	108%	0.6%
2-Hexanone	52.7	50.0	105%	54.1	50.0	108%	2.6%
Tetrachloroethene	9.74	10.0	97.4%	9.90	10.0	99.0%	1.6%
1,1,2,2-Tetrachloroethane	11.1	10.0	111%	10.8	10.0	108%	2.7%
Toluene	10.3	10.0	103%	10.0	10.0	100%	3.0%
Chlorobenzene	10.4	10.0	104%	10.4	10.0	104%	0.0%
Ethylbenzene	10.3	10.0	103%	10.5	10.0	105%	1.9%
Styrene	10.3	10.0	103%	10.7	10.0	107%	3.8%
Trichlorofluoromethane	10.3	10.0	103%	9.63	10.0	96.3%	6.7%
1,1,2-Trichloro-1,2,2-trifluoroetha	9.02	10.0	90.2%	9.76	10.0	97.6%	7.9%
m,p-Xylene	20.4	20.0	102%	21.4	20.0	107%	4.8%

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LCS-043014A**
 LAB CONTROL SAMPLE

Lab Sample ID: LCS-043014A QC Report No: YI21-Joint Base Lewis McChord
LIMS ID: 14-8150 Project: Logram
Matrix: Water

Analyte	LCS	Spike Added-LCS	LCS Recovery	LCSD	Spike Added-LCSD	LCSD Recovery	RPD
o-Xylene	10.0	10.0	100%	10.4	10.0	104%	3.9%
1,2-Dichlorobenzene	10.4	10.0	104%	10.0	10.0	100%	3.9%
1,3-Dichlorobenzene	10.3	10.0	103%	10.4	10.0	104%	1.0%
1,4-Dichlorobenzene	10.2	10.0	102%	10.2	10.0	102%	0.0%
Acrolein	85.6 Q	50.0	171%	89.7 Q	50.0	179%	4.7%
Iodomethane	10.1	10.0	101%	9.51	10.0	95.1%	6.0%
Bromoethane	9.42	10.0	94.2%	9.28	10.0	92.8%	1.5%
Acrylonitrile	9.88	10.0	98.8%	9.82	10.0	98.2%	0.6%
1,1-Dichloropropene	9.91	10.0	99.1%	9.93	10.0	99.3%	0.2%
Dibromomethane	9.48	10.0	94.8%	9.44	10.0	94.4%	0.4%
1,1,1,2-Tetrachloroethane	10.4	10.0	104%	10.6	10.0	106%	1.9%
1,2-Dibromo-3-chloropropane	10.9	10.0	109%	10.9	10.0	109%	0.0%
1,2,3-Trichloropropane	10.6	10.0	106%	10.3	10.0	103%	2.9%
trans-1,4-Dichloro-2-butene	10.5	10.0	105%	10.6	10.0	106%	0.9%
1,3,5-Trimethylbenzene	10.6	10.0	106%	10.4	10.0	104%	1.9%
1,2,4-Trimethylbenzene	10.6	10.0	106%	10.6	10.0	106%	0.0%
Hexachlorobutadiene	10.6	10.0	106%	10.8	10.0	108%	1.9%
1,2-Dibromoethane	10.3	10.0	103%	10.2	10.0	102%	1.0%
Bromochloromethane	10.0	10.0	100%	10.2	10.0	102%	2.0%
2,2-Dichloropropane	9.30	10.0	93.0%	9.17	10.0	91.7%	1.4%
1,3-Dichloropropane	10.1	10.0	101%	10.3	10.0	103%	2.0%
Isopropylbenzene	10.6	10.0	106%	10.4	10.0	104%	1.9%
n-Propylbenzene	10.9	10.0	109%	10.7	10.0	107%	1.9%
Bromobenzene	10.4	10.0	104%	10.1	10.0	101%	2.9%
2-Chlorotoluene	10.4	10.0	104%	10.0	10.0	100%	3.9%
4-Chlorotoluene	10.4	10.0	104%	10.5	10.0	105%	1.0%
tert-Butylbenzene	10.7	10.0	107%	10.6	10.0	106%	0.9%
sec-Butylbenzene	10.8	10.0	108%	10.7	10.0	107%	0.9%
4-Isopropyltoluene	10.6	10.0	106%	10.6	10.0	106%	0.0%
n-Butylbenzene	10.9	10.0	109%	10.8	10.0	108%	0.9%
1,2,4-Trichlorobenzene	10.9	10.0	109%	11.1	10.0	111%	1.8%
Naphthalene	12.1	10.0	121%	12.3	10.0	123%	1.6%
1,2,3-Trichlorobenzene	11.4	10.0	114%	11.3	10.0	113%	0.9%

Reported in µg/L (ppb)

RPD calculated using sample concentrations per SW846.

Volatile Surrogate Recovery

	LCS	LCSD
d4-1,2-Dichloroethane	96.1%	107%
d8-Toluene	101%	98.5%
Bromofluorobenzene	96.5%	98.5%
d4-1,2-Dichlorobenzene	102%	99.9%

THIRD QUARTER

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October 22, 2014 Analytical Report for Service Request No: K1410529

Scott Elkind
Sealaska Environmental Services, LLC
18743 Front Street NE
P.O. Box 869
Poulsbo, WA 98370

RE: TO 01 JBLM

Dear Scott:

Enclosed are the results of the samples submitted to our laboratory on September 26, 2014. For your reference, these analyses have been assigned our service request number K1410529.

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. The test results meet requirements of the current NELAP standards, where applicable, and except as noted in the laboratory case narrative provided. For a specific list of NELAP-accredited analytes, refer to the certifications section at www.alsglobal.com. All results are intended to be considered in their entirety, and ALS Group USA Corp. dba ALS Environmental (ALS) is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report.

Please call if you have any questions. My extension is 3376. You may also contact me via Email at Gregory.Salata@alsglobal.com.

Respectfully submitted,

ALS Group USA Corp. dba ALS Environmental

Gregory Salata

Gregory Salata, Ph.D.
Client Services Manager

GS/aj

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Acronyms

Qualifiers

State Certifications, Accreditations, And Licenses

Case Narrative

Chain Of Custody

Diesel Range Organics by Method NWTPH-Dx

Gasoline Range Organics by Method NWTPH-Gx

Volatile Organic Compounds by EPA Method 8260

Raw Data

Acronyms

ASTM	American Society for Testing and Materials
A2LA	American Association for Laboratory Accreditation
CARB	California Air Resources Board
CAS Number	Chemical Abstract Service registry Number
CFC	Chlorofluorocarbon
CFU	Colony-Forming Unit
DEC	Department of Environmental Conservation
DEQ	Department of Environmental Quality
DHS	Department of Health Services
DOE	Department of Ecology
DOH	Department of Health
EPA	U. S. Environmental Protection Agency
ELAP	Environmental Laboratory Accreditation Program
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
LOD	Limit of Detection
LOQ	Limit of Quantitation
LUFT	Leaking Underground Fuel Tank
M	Modified
MCL	Maximum Contaminant Level is the highest permissible concentration of a substance allowed in drinking water as established by the USEPA.
MDL	Method Detection Limit
MPN	Most Probable Number
MRL	Method Reporting Limit
NA	Not Applicable
NC	Not Calculated
NCASI	National Council of the Paper Industry for Air and Stream Improvement
ND	Not Detected
NIOSH	National Institute for Occupational Safety and Health
PQL	Practical Quantitation Limit
RCRA	Resource Conservation and Recovery Act
SIM	Selected Ion Monitoring
TPH	Total Petroleum Hydrocarbons
tr	Trace level is the concentration of an analyte that is less than the PQL but greater than or equal to the MDL.

Inorganic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable. See case narrative.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
E	The result is an estimate amount because the value exceeded the instrument calibration range.
J	The result is an estimated value.
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
i	The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
X	See case narrative.
Q	See case narrative. One or more quality control criteria was outside the limits.
H	The holding time for this test is immediately following sample collection. The samples were analyzed as soon as possible after receipt by the laboratory.

Metals Data Qualifiers

#	The control limit criteria is not applicable. See case narrative.
J	The result is an estimated value.
E	The percent difference for the serial dilution was greater than 10%, indicating a possible matrix interference in the sample.
M	The duplicate injection precision was not met.
N	The Matrix Spike sample recovery is not within control limits. See case narrative.
S	The reported value was determined by the Method of Standard Additions (MSA).
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
W	The post-digestion spike for furnace AA analysis is out of control limits, while sample absorbance is less than 50% of spike absorbance.
i	The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
X	See case narrative.
+	The correlation coefficient for the MSA is less than 0.995.
Q	See case narrative. One or more quality control criteria was outside the limits.

Organic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable. See case narrative.
A	A tentatively identified compound, a suspected aldol-condensation product.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
C	The analyte was qualitatively confirmed using GC/MS techniques, pattern recognition, or by comparing to historical data.
D	The reported result is from a dilution.
E	The result is an estimated value.
J	The result is an estimated value.
N	The result is presumptive. The analyte was tentatively identified, but a confirmation analysis was not performed.
P	The GC or HPLC confirmation criteria was exceeded. The relative percent difference is greater than 40% between the two analytical results.
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
i	The MRL/MDL or LOQ/LOD is elevated due to a chromatographic interference.
X	See case narrative.
Q	See case narrative. One or more quality control criteria was outside the limits.

Additional Petroleum Hydrocarbon Specific Qualifiers

F	The chromatographic fingerprint of the sample matches the elution pattern of the calibration standard.
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.
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.
O	The chromatographic fingerprint of the sample resembles an oil, but does not match the calibration standard.
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.

ALS Group USA Corp. dba ALS Environmental (ALS) - Kelso
State Certifications, Accreditations, and Licenses

Agency	Web Site	Number
Alaska DEC UST	http://dec.alaska.gov/applications/eh/ehllabreports/USTLabs.aspx	UST-040
Arizona DHS	http://www.azdhs.gov/lab/license/env.htm	AZ0339
Arkansas - DEQ	http://www.adeq.state.ar.us/techsvs/labcert.htm	88-0637
California DHS (ELAP)	http://www.cdph.ca.gov/certlic/labs/Pages/ELAP.aspx	2795
DOD ELAP	http://www.denix.osd.mil/edqw/Accreditation/AccreditedLabs.cfm	L14-51
Florida DOH	http://www.doh.state.fl.us/lab/EnvLabCert/WaterCert.htm	E87412
Hawaii DOH	Not available	-
Idaho DHW	http://www.healthandwelfare.idaho.gov/Health/Labs/CertificationDrinkingWaterLabs/tabid/1833/Default.aspx	-
ISO 17025	http://www.pjlabs.com/	L14-50
Louisiana DEQ	http://www.deq.louisiana.gov/portal/DIVISIONS/PublicParticipationandPermitSupport/LouisianaLaboratoryAccreditationProgram.aspx	03016
Maine DHS	Not available	WA01276
Michigan DEQ	http://www.michigan.gov/deq/0,1607,7-135-3307_4131_4156---,00.html	9949
Minnesota DOH	http://www.health.state.mn.us/accreditation	053-999-457
Montana DPHHS	http://www.dphhs.mt.gov/publichealth/	CERT0047
Nevada DEP	http://ndep.nv.gov/bsdw/labservice.htm	WA01276
New Jersey DEP	http://www.nj.gov/dep/oqa/	WA005
North Carolina DWQ	http://www.dwqlab.org/	605
Oklahoma DEQ	http://www.deq.state.ok.us/CSDnew/labcert.htm	9801
Oregon – DEQ (NELAP)	http://public.health.oregon.gov/LaboratoryServices/EnvironmentalLaboratoryAccreditation/Pages/index.aspx	WA100010
South Carolina DHEC	http://www.scdhec.gov/environment/envserv/	61002
Texas CEQ	http://www.tceq.texas.gov/field/qa/env_lab_accreditation.html	T104704427
Washington DOE	http://www.ecy.wa.gov/programs/eap/labs/lab-accreditation.html	C544
Wisconsin DNR	http://dnr.wi.gov/	998386840
Wyoming (EPA Region 8)	http://www.epa.gov/region8/water/dwhome/wyomingdi.html	-
Kelso Laboratory Website	www.alsglobal.com	NA

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. A complete listing of specific NELAP-certified analytes, can be found in the certification section at www.ALSGlobal.com or at the accreditation bodies web site.
Please refer to the certification and/or accreditation body's web site if samples are submitted for compliance purposes. The states highlighted above, require the analysis be listed on the state certification if used for compliance purposes and if the method/anlayte is offered by that state.

Case Narrative

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360)577-7222 Fax (360)636-1068
www.alsglobal.com

ALS ENVIRONMENTAL

Client:	Tetra Tech, Incorporated	**Service Request No.:**	K1410529
Project:	TO 01 JBLM	**Date Received:**	09/26/14
Sample Matrix:	Water		

Case Narrative

All analyses were performed consistent with the quality assurance program of ALS Environmental. This report contains analytical results for samples designated for Tier IV validation deliverables including summary forms and all of the associated raw data for each of the analyses. When appropriate to the method, method blank results have been reported with each analytical test.

Sample Receipt

Thirty-eight water samples were received for analysis at ALS Environmental on 09/26/14. The samples were received in good condition and consistent with the accompanying chain of custody form, except where noted on the cooler receipt and preservation form included in this report. The samples were stored in a refrigerator at 4ºC upon receipt at the laboratory.

Diesel Range Organics by Method NWTPH-Dx

Sample Notes and Discussion:
Insufficient sample volume was received to perform a Matrix Spike/Matrix Spike Duplicate (MS/MSD). A Laboratory Control Sample/Duplicate Laboratory Control Sample (LCS/DLCS) was analyzed and reported in lieu of the MS/MSD for these samples.

No other anomalies associated with the analysis of these samples were observed.

Gasoline Range Organics by Method NWTPH-Gx

Sample Notes and Discussion:
Manual integration of one or more chromatographic peaks was required to correct the integration performed by the automated data processing program. The manual integration was performed in accordance with ALS policy, which is consistent with the National Environmental Laboratory Accreditation Program (NELAP), Department of Defense (DOD), and other certifying agencies. Refer to the raw data for the compounds impacted by the manual integration.

No other anomalies associated with the analysis of these samples were observed.

Volatile Organic Compounds by EPA Method 8260

Calibration Verification Exceptions:
The following analytes were flagged as outside the control criterion for Continuing Calibration Verification (CCV) MS18\01003F008.D: Chloromethane, Bromomethane, Carbon Disulfide and cis-1,2-Dichloroethene. In accordance with the EPA Method, 80% or more of the CCV analytes must pass within 20% of the true value. The ALS SOP allows for 40% difference for the remaining analytes. The CCV met these criteria. The quality of the sample data was not significantly affected. No further corrective action was required.

Approved by_____

The following analytes were flagged as outside the control criterion for Continuing Calibration Verification (CCV) MS18\01004F009.D: Bromomethane, Carbon Disulfide, 2,2-Dichloropropane, 4-Methyl-2-pentanone and 1,1,2,2-Tetrachloroethane. In accordance with the EPA Method, 80% or more of the CCV analytes must pass within 20% of the true value. The ALS SOP allows for 40% difference for the remaining analytes. The CCV met these criteria. The quality of the sample data was not significantly affected. No further corrective action was required.

The following analytes were flagged as outside the control criterion for Continuing Calibration Verification (CCV) MS18\01006F003.D: Acetone, Carbon Disulfide, 2,2-Dichloropropane and 4-Methyl-2-pentanone. In accordance with the EPA Method, 80% or more of the CCV analytes must pass within 20% of the true value. The ALS SOP allows for 40% difference for the remaining analytes. The CCV met these criteria. The quality of the sample data was not significantly affected. No further corrective action was required.

The following analytes were flagged as outside the control criterion for Continuing Calibration Verification (CCV) MS18\01006F035.D: Acetone, Carbon Disulfide, 2-Butanone, trans-1,3-Dichloropropene and 2-Hexanone. In accordance with the EPA Method, 80% or more of the CCV analytes must pass within 20% of the true value. The ALS SOP allows for 40% difference for the remaining analytes. The CCV met these criteria. The quality of the sample data was not significantly affected. No further corrective action was required.

The ALS control criterion for the following analyte was not met in Continuing Calibration Verification (CCV) MS18\01006F035.D: 2,2-Dichloropropane and 4-Methyl-2-pentanone. In accordance with ALS standard operating procedures, an MRL check standard containing the analyte of concern was analyzed each day of analysis. The MRL check standard verifies instrument sensitivity was adequate to detect the analyte at the MRL on the day of analysis. Because the sensitivity was shown to be adequate to detect the compound in question the data quality has not been significantly affected. No further corrective action was taken.

Lab Control Sample Exceptions:
The control criterion was exceeded for Acetone in Laboratory Control Samples (LCS) KWG1413475-3, KWG1413488-3, KWG1413516-1 and KWG1413535-3. The recovery was within the marginal excceedance limits listed in DOD Quality Systems Manual 4.2. The data was flagged to indicate the issue. No further corrective action was required.

The control criterion was exceeded for 2,2-Dichloropropane in Laboratory Control Samples (LCS) KWG1413475-3,and KWG1413535-3. The recovery was within the marginal excceedance limits listed in DOD Quality Systems Manual 4.2. The data was flagged to indicate the issue. No further corrective action was required.

Matrix Spike Recovery Exceptions:
The matrix spike recovery of 2,2-Dichloropropane for sample AOC14092295A172 was outside control criteria. Positive detections in the parent sample are flagged, as per the DOD QAPP. No further corrective action was appropriate.

The matrix spike recovery of Chloroethane, 1,1-Dichloroethene, 2,2-Dichloropropane1,1-Dichloropropene and Benzene for sample LGC140924LC01-1 was outside control criteria. Positive detections in the parent sample are flagged, as per the DOD QAPP. No further corrective action was appropriate.

Sample Notes and Discussion:
Manual integration of one or more chromatographic peaks was required to correct the integration performed by the automated data processing program. The manual integration was performed in accordance with ALS policy, which is consistent with the National Environmental Laboratory Accreditation Program (NELAP), Department of Defense (DOD), and other certifying agencies. Refer to the raw data for the compounds impacted by the manual integration.

No other anomalies associated with the analysis of these samples were observed.

Approved by_____Gregory Salata_____

Chain of Custody

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360)577-7222 Fax (360)636-1068
www.alsglobal.com

ALS Environmental

CHAIN OF CUSTODY
52766

001

SR# 614105229

COC Set 1 of 5

COC#

1317 South 13th Ave, Kelso, WA 98626 Phone (360) 577-7222 / 800-695-7222 / FAX (360) 636-1068
www.alsglobal.com

Project Name: TO 01 JBLM	Project Number:
Project Manager: Scott. Elkind	
Company: Sealaska ENV SAE 001	
Address: 18743 Front St NE Poulsbo WA 98370	
Phone #: 360.930.3187	email: Scott.elkind@sealaskacorp.com
Sampler Signature: E Lyn P. Kercher	Sampler Printed Name: Elizabeth P. Kercher

CLIENT SAMPLE ID	LABID	SAMPLING Date	SAMPLING Time	Matrix	NUMBER OF CONTAINERS	6H: SM 9221 B / Tot Coli MT	48H: 300.0 / NO2	48H: 300.0 / NO3	48H: 300.0 / NO3 Diss	48H: SM 5210 B / BOD 5 Day	7D: SM 2540 C / TDS	14D: 8260C / VOC FP	14D: NWTPH-Dx / NW_TPH	14D: NWTPH-Gx / NW_GAS	14D: SM 2320 B / Alkalinity D	14D: SM 2320 B / Bicarb Alk	14D: SM 4500-CN- E / CN T	28D: 300.0 / Cl D	28D: 300.0 / SO4 D	28D: 353.2 / NO2 NO3 T	28D: 9060 / TOC T	28D: SM 4500-NH3 G / Ammonia	28D: SM 5220 C / COD T	180D: 200.7 / Metals D	180D: 200.7 / Metals T	1	2	3	Remarks
1. TB-140923		092314	1300	W	2							2																
2. LGC140923LC135-1		092314	1330	GW	3							3																
3. LGC140923LC10430-1		092314	1340	GW	3							3																
4. LG140923LC10860-1		092314	1350	GW	3							3																
5. LG140923LC10885-1		092314	1400	GW	3							3																
6. LG140923MT4-1		092314	1450	GW	3							3																
7. LGC140923MT3-1		092314	1510	GW	3							3																
8. LGC140923MT2-1		092314	1535	GW	3							3																
9. LG140923MT1-1		092314	1550	GW	3							3																
10. LGC140924FL1-1		092414	0955	GW	3							3																

Report Requirements

___ I. Routine Report: Method Blank, Surrogate, as required

___ II. Report Dup., MS, MSD as required

___ III. CLP Like Summary (no raw data)

___ IV. Data Validation Report

___ V. EDD

Invoice Information

P.O.#

Bill To:

Turnaround Requirements

___ 24 hr. ___ 48 hr.

___ 5 Day

___ Standard

Requested Report Date

Circle which metals are to be analyzed

Total Metals: Al As Sb Ba Be B Ca Cd Co Cr Cu Fe Pb Mg Mn Mo Ni K Ag Na Se Sr Tl Sn V Zn Hg

Dissolved Metals: Al As Sb Ba Be B Ca Cd Co Cr Cu Fe Pb Mg Mn Mo Ni K Ag Na Se Sr Tl Sn V Zn Hg

Special Instructions/Comments: * As Per Contract

*Indicate State Hydrocarbon Procedure: AK CA WI Northwest Other_____(Circle One)

Relinquished By:	Received By:	Relinquished By:	Received By:	Relinquished By:	Received By:
Signature: E Lyn Kercher	Signature	Signature	Signature: Paula Smith	Signature	Signature
Printed Name: Elizabeth Kercher	Printed Name	Printed Name	Printed Name: Paula Smith	Printed Name	Printed Name
Firm: Sealaska	Firm: ML Delivery	Firm: ML Delivery	Firm: ALS	Firm	Firm
Date/Time: 9/26/14 1000	Date/Time	Date/Time	Date/Time: 9/26/14 1130	Date/Time	Date/Time

ALS Environmental

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52766

001

SR# K1410529
COC Set 2 of 5
COC#

1317 South 13th Ave, Kelso, WA 98626 Phone (360) 577-7222 / 800-695-7222 / FAX (360) 636-1068
www.alsglobal.com

Project Name: TO 01 JBLM
Project Number:
Project Manager: Scott Elkind
Company: Sealaska ENV
Address: 18743 Front St Ste 201 Poulsbo
Phone #: 360.930.3187
email: Scott.Elkind@sealaska.com WA 98370
Sampler Signature: Eliz P. Kercher
Sampler Printed Name: Elizabeth P. Kercher

CLIENT SAMPLE ID	LABID	SAMPLING Date	SAMPLING Time	Matrix	NUMBER OF CONTAINERS	6H: SM 9221 B / Tot Coli MT	48H: 300.0 / NO2	48H: 300.0 / NO3	48H: 300.0 / NO3 Diss	48H: SM 5210 B / BOD 5 Day	7D: SM 2540 C / TDS	14D: 8260C / VOC FP	14D: NWTPH-Dx / NW_TPH	14D: NWTPH-Gx / NW_GAS	14D: SM 2320 B / Alkalinity D	14D: SM 2320 B / Bicarb Alk	14D: SM 4500-CN- E / CN T	28D: 300.0 / Cl D	28D: 300.0 / SO4 D	28D: 353.2 / NO2 NO3 T	28D: 9060 / TOC T	28D: SM 4500-NH3 G / Ammonia	28D: SM 5220 C / COD T	180D: 200.7 / Metals D	180D: 200.7 / Metals T	1	2	3	Remarks
1. LGC140924LC218-1		092414	1010	GW	3							3																	
2. LGC140924LC224-1		092414	1100	GW	3							3																	
3. LGC140924LC01-1		092414	1135	GW	6							6																	MS/MSD
4. LGC140924LC116B-1		092414	1200	GW	3							3																	
5. LG140924LC111B-1		092414	1210	GW	3							3																	
6. LG140924 85PA382-1		092414	1235	GW	3							3																	
7. LGC140924 85PA384-1		092414	1250	GW	3							3																	
8. LGC140924LC124-1		092414	1430	GW	3							3																	
9. LGC140924DUP2-1		092414	1435	GW	2							2																	
10. LG140924LC122B-1		092414	1455	GW	3							3																	

Report Requirements

___ I. Routine Report: Method Blank, Surrogate, as required
___ II. Report Dup., MS, MSD as required
___ III. CLP Like Summary (no raw data)
___ IV. Data Validation Report
___ V. EDD

Invoice Information

P.O.#
Bill To:

Turnaround Requirements

___ 24 hr. ___ 48 hr.
___ 5 Day
X Standard *

Requested Report Date

Circle which metals are to be analyzed

Total Metals: Al As Sb Ba Be B Ca Cd Co Cr Cu Fe Pb Mg Mn Mo Ni K Ag Na Se Sr Tl Sn V Zn Hg

Dissolved Metals: Al As Sb Ba Be B Ca Cd Co Cr Cu Fe Pb Mg Mn Mo Ni K Ag Na Se Sr Tl Sn V Zn Hg

Special Instructions/Comments: *As per Contract

*Indicate State Hydrocarbon Procedure: AK CA WI Northwest Other_____(Circle One)

Relinquished By:	Received By:	Relinquished By:	Received By:	Relinquished By:	Received By:
Signature: Eliz Kercher	Signature	Signature	Signature: Karla Smith	Signature	Signature
Printed Name: Elizabeth Kercher	Printed Name	Printed Name	Printed Name: Karla Smith	Printed Name	Printed Name
Firm: Sealaska	Firm: MC Delivery	Firm: MC Delivery	Firm: ALS	Firm	Firm
Date/Time: 9/26/14 1000	Date/Time	Date/Time	Date/Time: 9/26/14 1130	Date/Time	Date/Time

ALS Environmental

CHAIN OF CUSTODY
52766

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SR# KH410529

COC Set 3 of 5

COC#

1317 South 13th Ave, Kelso, WA 98626 Phone (360) 577-7222 / 800-695-7222 / FAX (360) 636-1068
www.alsglobal.com

Project Name	Project Number:
TOSI JOLN	
Project Manager: Scott Elkind	
Company: Sealaska Env	
Address: 1743 Front St NE Ste 201 Poulsbo WA	
Phone #: 360.930.3187	email: scott.elkind@sealaska.com
Sampler Signature: Elizabeth P. Kercher	Sampler Printed Name: Elizabeth P. Kercher

CLIENT SAMPLE ID	LABID	SAMPLING Date	SAMPLING Time	Matrix	NUMBER OF CONTAINERS	6H: SM 9221 B / Tot Coli MT	48H: 300.0 / NO2	48H: 300.0 / NO3	48H: 300.0 / NO3 Diss	48H: SM 5210 B / BOD 5 Day	7D: SM 2540 C / TDS	14D: 8260C / VOC FP	14D: NWTPH-Dx / NW_TPH	14D: NWTPH-Gx / NW_GAS	14D: SM 2320 B / Alkalinity D	14D: SM 2320 B / Bicarb Alk	14D: SM 4500-CN- E / CN T	28D: 300.0 / Cl D	28D: 300.0 / SO4 D	28D: 353.2 / NO2 NO3 T	28D: 9060 / TOC T	28D: SM 4500-NH3 G / Ammonia	28D: SM 5220 C / COD T	180D: 200.7 / Metals D	180D: 200.7 / Metals T	1	2	3	Remarks
1. LGC140924LC61B-1		092414	1525	GW	3							3																
2. LGC140924LC226-1		092414	1545	GW	3							3																
3. LGC140925SLAP5-1		092514	1122	GW	3							3																
4. LG140925SLAP4-1		092514	1129	GW	3							3																
5. LG140925SLAP3-1		092514	1142	GW	3							3																
6. LG140925SLAP1-1		092514	1153	GW	3							3																
7.																												
8.																												
9.																												
10																												

Report Requirements

___ I. Routine Report: Method Blank, Surrogate, as required

___ II. Report Dup., MS, MSD as required

___ III. CLP Like Summary (no raw data)

___ IV. Data Validation Report

___ V. EDD

Invoice Information

P.O.#

Bill To:

Turnaround Requirements

___ 24 hr. ___ 48 hr.

___ 5 Day

X Standard

Requested Report Date

Circle which metals are to be analyzed

Total Metals: Al As Sb Ba Be B Ca Cd Co Cr Cu Fe Pb Mg Mn Mo Ni K Ag Na Se Sr Tl Sn V Zn Hg

Dissolved Metals: Al As Sb Ba Be B Ca Cd Co Cr Cu Fe Pb Mg Mn Mo Ni K Ag Na Se Sr Tl Sn V Zn Hg

Special Instructions/Comments:

* As PER CONTRACT

*Indicate State Hydrocarbon Procedure: AK CA WI Northwest Other_____(Circle One)

Relinquished By:	Received By:	Relinquished By:	Received By:	Relinquished By:	Received By:
Signature: Elizabeth Kercher	Signature	Signature	Signature: Karla Smith	Signature	Signature
Printed Name: Elizabeth Kercher	Printed Name	Printed Name	Printed Name: Karla Smith	Printed Name	Printed Name
Firm: Sealaska	Firm: ML Delivery	Firm: ML Delivery	Firm: ALS	Firm	Firm
Date/Time: 9/26/14 1000	Date/Time	Date/Time	Date/Time: 9/26/14 1130	Date/Time	Date/Time

PC Hwy

Cooler Receipt and Preservation Form

Client / Project: SEATASKA Service Request K14 10529

Received: 9/26/14 1130 Opened: 9/26/14 By: MC Unloaded: 9/26/14 By: BK/KO

1. Samples were received via? *Mail* *Fed Ex* *UPS* *DHL* *PDX* *Courier* *Hand Delivered* (MC DELIVERY)
2. Samples were received in: (circle) (*Cooler*) *Box* *Envelope* *Other* _____ *NA*
3. Were custody seals on coolers? NA (Y) N If yes, how many and where? 1, FRONT 1, BACK
   If present, were custody seals intact? (Y) N If present, were they signed and dated? (Y) N

Raw Cooler Temp	Corrected. Cooler Temp	Raw Temp Blank	Corrected Temp Blank	Corr. Factor	Thermometer ID	Cooler/COC ID (NA)	Tracking Number NA	Filed
2.7	2.9	3.9	4.1	0.2	347			✓
0.7	0.6	3.5	3.4	-.1	328			
-1.0	-1.1	0.3	0.2	-.1	298			
2.8	2.7	1.7	1.6	-.1	345			

4. Packing material: *Inserts* (*Baggies*) (*Bubble Wrap*) (*Gel Packs*) *Wet Ice* *Dry Ice* *Sleeves* CARDBOARD
5. Were custody papers properly filled out (ink, signed, etc.)? NA (Y) N
6. Did all bottles arrive in good condition (unbroken)? *Indicate in the table below.* NA (Y) N
7. Were all sample labels complete (i.e analysis, preservation, etc.)? NA (Y) N
8. Did all sample labels and tags agree with custody papers? *Indicate major discrepancies in the table on page 2.* NA (Y) N
9. Were appropriate bottles/containers and volumes received for the tests indicated? NA (Y) N
10. Were the pH-preserved bottles (*see SMO GEN SOP*) received at the appropriate pH? *Indicate in the table below* (NA) Y N
11. Were VOA vials received without headspace? *Indicate in the table below.* NA Y (N)
12. Was C12/Res negative? (NA) Y N

Sample ID on Bottle	Sample ID on COC	Identified by:
A		

Sample ID	Bottle Count Bottle Type	Out of Temp	Head-space	Broke	pH	Reagent	Volume added	Reagent Lot Number	Initials	Time
A OC1409221 0A178	1		X							

Notes, Discrepancies, & Resolutions: WG C140925 SLAPH-1 is already on one of the chains I logged with the NWTPH-Dx job)

Volatile Organic Compounds

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360)577-7222 Fax (360)636-1068
www.alsglobal.com

Client: Sealaska Environmental Services, LLC **Service Request:** K1410529
Project: TO 01 JBLM

Cover Page - Organic Analysis Data Package
Volatile Organic Compounds

Sample Name	Lab Code	Date Collected	Date Received
TB-140923	K1410529-001	09/23/2014	09/26/2014
LGC140923LC135-1	K1410529-002	09/23/2014	09/26/2014
LGC140923LC10830-1	K1410529-003	09/23/2014	09/26/2014
LGC140923LC10860-1	K1410529-004	09/23/2014	09/26/2014
LGC140923LC10885-1	K1410529-005	09/23/2014	09/26/2014
LGC140923MT4-1	K1410529-006	09/23/2014	09/26/2014
LGC140923MT3-1	K1410529-007	09/23/2014	09/26/2014
LGC140923MT2-1	K1410529-008	09/23/2014	09/26/2014
LGC140923MT1-1	K1410529-009	09/23/2014	09/26/2014
LGC140924FL1-1	K1410529-010	09/24/2014	09/26/2014
LGC140924LC218-1	K1410529-011	09/24/2014	09/26/2014
LGC140924LC224-1	K1410529-012	09/24/2014	09/26/2014
LGC140924LC01-1	K1410529-013	09/24/2014	09/26/2014
LGC140924LC116B-1	K1410529-014	09/24/2014	09/26/2014
LG140924LC111B-1	K1410529-015	09/24/2014	09/26/2014
LG14092485PA382-1	K1410529-016	09/24/2014	09/26/2014
LGC14092485PA384-1	K1410529-017	09/24/2014	09/26/2014
LGC140924LC124-1	K1410529-018	09/24/2014	09/26/2014
LGC140924DUP2-1	K1410529-019	09/24/2014	09/26/2014
LG140924LC122B-1	K1410529-020	09/24/2014	09/26/2014
LGC140924LC61B-1	K1410529-021	09/24/2014	09/26/2014
LGC140924LC226-1	K1410529-022	09/24/2014	09/26/2014
LGC140925SLAP5-1	K1410529-023	09/25/2014	09/26/2014
LG140925SLAP4-1	K1410529-024	09/25/2014	09/26/2014
LG140925SLAP3-1	K1410529-025	09/25/2014	09/26/2014
LG140925SLAP1-1	K1410529-026	09/25/2014	09/26/2014
TB-140922	K1410529-031	09/22/2014	09/26/2014
AOC14092210A178	K1410529-032	09/22/2014	09/26/2014
AOC140922DUP2	K1410529-033	09/22/2014	09/26/2014
AOC14092295A172	K1410529-034	09/22/2014	09/26/2014
AOC14092307A177	K1410529-035	09/23/2014	09/26/2014
AOC14092395A173A	K1410529-036	09/23/2014	09/26/2014
AOC14092295A172MS	KWG1413475-1	09/22/2014	09/26/2014
AOC14092295A172DMS	KWG1413475-2	09/22/2014	09/26/2014
LGC140924LC01-1MS	KWG1413516-6	09/24/2014	09/26/2014
LGC140924LC01-1DMS	KWG1413516-7	09/24/2014	09/26/2014

Analytical Results

Client: Sealaska Environmental Services, LLC
Project: TO 01 JBLM
Sample Matrix: Water

Service Request: K1410529
Date Collected: 09/23/2014
Date Received: 09/26/2014

Volatile Organic Compounds

Sample Name: TB-140923
Lab Code: K1410529-001

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
Dichlorodifluoromethane	ND	U	0.50	0.20	0.13	1	10/04/14	10/04/14	KWG1413488	
Chloromethane	ND	U	0.50	0.20	0.068	1	10/04/14	10/04/14	KWG1413488	
Vinyl Chloride	ND	U	0.50	0.10	0.075	1	10/04/14	10/04/14	KWG1413488	
Bromomethane	ND	U	0.50	0.30	0.10	1	10/04/14	10/04/14	KWG1413488	*
Chloroethane	ND	U	0.50	0.20	0.16	1	10/04/14	10/04/14	KWG1413488	
Trichlorofluoromethane	ND	U	0.50	0.20	0.12	1	10/04/14	10/04/14	KWG1413488	
1,1-Dichloroethene	ND	U	0.50	0.20	0.080	1	10/04/14	10/04/14	KWG1413488	
Acetone	ND	U	20	10	3.3	1	10/04/14	10/04/14	KWG1413488	*
Carbon Disulfide	ND	U	0.50	0.20	0.069	1	10/04/14	10/04/14	KWG1413488	*
Methylene Chloride	**0.24**	J	2.0	0.20	0.10	1	10/04/14	10/04/14	KWG1413488	
Methyl tert-Butyl Ether	ND	U	0.50	0.30	0.11	1	10/04/14	10/04/14	KWG1413488	
trans-1,2-Dichloroethene	ND	U	0.50	0.20	0.072	1	10/04/14	10/04/14	KWG1413488	
1,1-Dichloroethane	ND	U	0.50	0.20	0.077	1	10/04/14	10/04/14	KWG1413488	
2,2-Dichloropropane	ND	U	0.50	0.20	0.060	1	10/04/14	10/04/14	KWG1413488	*
cis-1,2-Dichloroethene	ND	U	0.50	0.20	0.067	1	10/04/14	10/04/14	KWG1413488	
2-Butanone (MEK)	ND	U	20	4.0	1.9	1	10/04/14	10/04/14	KWG1413488	
Bromochloromethane	ND	U	0.50	0.20	0.16	1	10/04/14	10/04/14	KWG1413488	
Chloroform	ND	U	0.50	0.20	0.072	1	10/04/14	10/04/14	KWG1413488	
1,1,1-Trichloroethane (TCA)	ND	U	0.50	0.20	0.075	1	10/04/14	10/04/14	KWG1413488	
Carbon Tetrachloride	ND	U	0.50	0.20	0.096	1	10/04/14	10/04/14	KWG1413488	
1,1-Dichloropropene	ND	U	0.50	0.20	0.089	1	10/04/14	10/04/14	KWG1413488	
Benzene	ND	U	0.50	0.10	0.062	1	10/04/14	10/04/14	KWG1413488	
1,2-Dichloroethane (EDC)	ND	U	0.50	0.15	0.080	1	10/04/14	10/04/14	KWG1413488	
Trichloroethene (TCE)	ND	U	0.50	0.10	0.10	1	10/04/14	10/04/14	KWG1413488	
1,2-Dichloropropane	ND	U	0.50	0.20	0.095	1	10/04/14	10/04/14	KWG1413488	
Dibromomethane	ND	U	0.50	0.50	0.15	1	10/04/14	10/04/14	KWG1413488	
Bromodichloromethane	ND	U	0.50	0.30	0.091	1	10/04/14	10/04/14	KWG1413488	
cis-1,3-Dichloropropene	ND	U	0.50	0.20	0.18	1	10/04/14	10/04/14	KWG1413488	
4-Methyl-2-pentanone (MIBK)	ND	U	20	10	2.6	1	10/04/14	10/04/14	KWG1413488	
Toluene	ND	U	0.50	0.10	0.054	1	10/04/14	10/04/14	KWG1413488	
trans-1,3-Dichloropropene	ND	U	0.50	0.20	0.068	1	10/04/14	10/04/14	KWG1413488	
1,1,2-Trichloroethane	ND	U	0.50	0.40	0.14	1	10/04/14	10/04/14	KWG1413488	
Tetrachloroethene (PCE)	ND	U	0.50	0.20	0.099	1	10/04/14	10/04/14	KWG1413488	

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1410529
Project:	TO 01 JBLM	**Date Collected:**	09/23/2014
Sample Matrix:	Water	**Date Received:**	09/26/2014

Volatile Organic Compounds

Sample Name:	TB-140923	**Units:**	ug/L
Lab Code:	K1410529-001	**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
2-Hexanone	ND	U	20	10	2.7	1	10/04/14	10/04/14	KWG1413488	
1,3-Dichloropropane	ND	U	0.50	0.30	0.14	1	10/04/14	10/04/14	KWG1413488	
Dibromochloromethane	ND	U	0.50	0.50	0.14	1	10/04/14	10/04/14	KWG1413488	
1,2-Dibromoethane (EDB)	ND	U	2.0	0.20	0.10	1	10/04/14	10/04/14	KWG1413488	
Chlorobenzene	ND	U	0.50	0.20	0.11	1	10/04/14	10/04/14	KWG1413488	
Ethylbenzene	ND	U	0.50	0.10	0.050	1	10/04/14	10/04/14	KWG1413488	
1,1,1,2-Tetrachloroethane	ND	U	0.50	0.20	0.11	1	10/04/14	10/04/14	KWG1413488	
m,p-Xylenes	ND	U	0.50	0.20	0.11	1	10/04/14	10/04/14	KWG1413488	
o-Xylene	ND	U	0.50	0.20	0.074	1	10/04/14	10/04/14	KWG1413488	
Styrene	ND	U	0.50	0.20	0.089	1	10/04/14	10/04/14	KWG1413488	
Bromoform	ND	U	0.50	0.50	0.16	1	10/04/14	10/04/14	KWG1413488	
Isopropylbenzene	ND	U	2.0	0.20	0.051	1	10/04/14	10/04/14	KWG1413488	
1,1,2,2-Tetrachloroethane	ND	U	0.50	0.20	0.16	1	10/04/14	10/04/14	KWG1413488	
Bromobenzene	ND	U	2.0	0.20	0.12	1	10/04/14	10/04/14	KWG1413488	
n-Propylbenzene	ND	U	2.0	0.20	0.054	1	10/04/14	10/04/14	KWG1413488	
1,2,3-Trichloropropane	ND	U	0.50	0.50	0.20	1	10/04/14	10/04/14	KWG1413488	
2-Chlorotoluene	ND	U	2.0	0.20	0.10	1	10/04/14	10/04/14	KWG1413488	
1,3,5-Trimethylbenzene	ND	U	2.0	0.20	0.089	1	10/04/14	10/04/14	KWG1413488	
4-Chlorotoluene	ND	U	2.0	0.20	0.13	1	10/04/14	10/04/14	KWG1413488	
tert-Butylbenzene	ND	U	2.0	0.20	0.059	1	10/04/14	10/04/14	KWG1413488	
1,2,4-Trimethylbenzene	ND	U	2.0	0.20	0.069	1	10/04/14	10/04/14	KWG1413488	
sec-Butylbenzene	ND	U	2.0	0.10	0.062	1	10/04/14	10/04/14	KWG1413488	
4-Isopropyltoluene	ND	U	2.0	0.20	0.060	1	10/04/14	10/04/14	KWG1413488	
1,3-Dichlorobenzene	ND	U	0.50	0.20	0.10	1	10/04/14	10/04/14	KWG1413488	
1,4-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	10/04/14	10/04/14	KWG1413488	
n-Butylbenzene	ND	U	2.0	0.10	0.054	1	10/04/14	10/04/14	KWG1413488	
1,2-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	10/04/14	10/04/14	KWG1413488	
1,2-Dibromo-3-chloropropane	ND	U	2.0	0.80	0.20	1	10/04/14	10/04/14	KWG1413488	
1,2,4-Trichlorobenzene	ND	U	2.0	0.30	0.096	1	10/04/14	10/04/14	KWG1413488	
Hexachlorobutadiene	ND	U	2.0	0.30	0.11	1	10/04/14	10/04/14	KWG1413488	
Naphthalene	ND	U	2.0	0.30	0.088	1	10/04/14	10/04/14	KWG1413488	
1,2,3-Trichlorobenzene	ND	U	2.0	0.40	0.11	1	10/04/14	10/04/14	KWG1413488	

* See Case Narrative

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1410529
Project:	TO 01 JBLM	**Date Collected:**	09/23/2014
Sample Matrix:	Water	**Date Received:**	09/26/2014

Volatile Organic Compounds

Sample Name:	TB-140923	**Units:**	ug/L
Lab Code:	K1410529-001	**Basis:**	NA

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Dibromofluoromethane	95	85-115	10/04/14	Acceptable
1,2-Dichloroethane-d4	108	70-120	10/04/14	Acceptable
Toluene-d8	96	85-120	10/04/14	Acceptable
4-Bromofluorobenzene	92	75-120	10/04/14	Acceptable

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1410529
Project:	TO 01 JBLM	**Date Collected:**	09/23/2014
Sample Matrix:	Water	**Date Received:**	09/26/2014

Volatile Organic Compounds

Sample Name:	LGC140923LC135-1	**Units:**	ug/L
Lab Code:	K1410529-002	**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
Dichlorodifluoromethane	ND	U	0.50	0.20	0.13	1	10/04/14	10/04/14	KWG1413488	
Chloromethane	ND	U	0.50	0.20	0.068	1	10/04/14	10/04/14	KWG1413488	
Vinyl Chloride	ND	U	0.50	0.10	0.075	1	10/04/14	10/04/14	KWG1413488	
Bromomethane	ND	U	0.50	0.30	0.10	1	10/04/14	10/04/14	KWG1413488	*
Chloroethane	ND	U	0.50	0.20	0.16	1	10/04/14	10/04/14	KWG1413488	
Trichlorofluoromethane	ND	U	0.50	0.20	0.12	1	10/04/14	10/04/14	KWG1413488	
1,1-Dichloroethene	ND	U	0.50	0.20	0.080	1	10/04/14	10/04/14	KWG1413488	
Acetone	ND	U	20	10	3.3	1	10/04/14	10/04/14	KWG1413488	*
Carbon Disulfide	ND	U	0.50	0.20	0.069	1	10/04/14	10/04/14	KWG1413488	*
Methylene Chloride	ND	U	2.0	0.20	0.10	1	10/04/14	10/04/14	KWG1413488	
Methyl tert-Butyl Ether	ND	U	0.50	0.30	0.11	1	10/04/14	10/04/14	KWG1413488	
trans-1,2-Dichloroethene	ND	U	0.50	0.20	0.072	1	10/04/14	10/04/14	KWG1413488	
1,1-Dichloroethane	ND	U	0.50	0.20	0.077	1	10/04/14	10/04/14	KWG1413488	
2,2-Dichloropropane	ND	U	0.50	0.20	0.060	1	10/04/14	10/04/14	KWG1413488	*
cis-1,2-Dichloroethene	**0.46**	J	0.50	0.20	0.067	1	10/04/14	10/04/14	KWG1413488	
2-Butanone (MEK)	ND	U	20	4.0	1.9	1	10/04/14	10/04/14	KWG1413488	
Bromochloromethane	ND	U	0.50	0.20	0.16	1	10/04/14	10/04/14	KWG1413488	
Chloroform	ND	U	0.50	0.20	0.072	1	10/04/14	10/04/14	KWG1413488	
1,1,1-Trichloroethane (TCA)	ND	U	0.50	0.20	0.075	1	10/04/14	10/04/14	KWG1413488	
Carbon Tetrachloride	ND	U	0.50	0.20	0.096	1	10/04/14	10/04/14	KWG1413488	
1,1-Dichloropropene	ND	U	0.50	0.20	0.089	1	10/04/14	10/04/14	KWG1413488	
Benzene	ND	U	0.50	0.10	0.062	1	10/04/14	10/04/14	KWG1413488	
1,2-Dichloroethane (EDC)	ND	U	0.50	0.15	0.080	1	10/04/14	10/04/14	KWG1413488	
Trichloroethene (TCE)	**50**		0.50	0.10	0.10	1	10/04/14	10/04/14	KWG1413488	
1,2-Dichloropropane	ND	U	0.50	0.20	0.095	1	10/04/14	10/04/14	KWG1413488	
Dibromomethane	ND	U	0.50	0.50	0.15	1	10/04/14	10/04/14	KWG1413488	
Bromodichloromethane	ND	U	0.50	0.30	0.091	1	10/04/14	10/04/14	KWG1413488	
cis-1,3-Dichloropropene	ND	U	0.50	0.20	0.18	1	10/04/14	10/04/14	KWG1413488	
4-Methyl-2-pentanone (MIBK)	ND	U	20	10	2.6	1	10/04/14	10/04/14	KWG1413488	
Toluene	ND	U	0.50	0.10	0.054	1	10/04/14	10/04/14	KWG1413488	
trans-1,3-Dichloropropene	ND	U	0.50	0.20	0.068	1	10/04/14	10/04/14	KWG1413488	
1,1,2-Trichloroethane	ND	U	0.50	0.40	0.14	1	10/04/14	10/04/14	KWG1413488	
Tetrachloroethene (PCE)	ND	U	0.50	0.20	0.099	1	10/04/14	10/04/14	KWG1413488	

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1410529
Project:	TO 01 JBLM	**Date Collected:**	09/23/2014
Sample Matrix:	Water	**Date Received:**	09/26/2014

Volatile Organic Compounds

Sample Name:	LGC140923LC135-1	**Units:**	ug/L
Lab Code:	K1410529-002	**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
2-Hexanone	ND	U	20	10	2.7	1	10/04/14	10/04/14	KWG1413488	
1,3-Dichloropropane	ND	U	0.50	0.30	0.14	1	10/04/14	10/04/14	KWG1413488	
Dibromochloromethane	ND	U	0.50	0.50	0.14	1	10/04/14	10/04/14	KWG1413488	
1,2-Dibromoethane (EDB)	ND	U	2.0	0.20	0.10	1	10/04/14	10/04/14	KWG1413488	
Chlorobenzene	ND	U	0.50	0.20	0.11	1	10/04/14	10/04/14	KWG1413488	
Ethylbenzene	ND	U	0.50	0.10	0.050	1	10/04/14	10/04/14	KWG1413488	
1,1,1,2-Tetrachloroethane	ND	U	0.50	0.20	0.11	1	10/04/14	10/04/14	KWG1413488	
m,p-Xylenes	ND	U	0.50	0.20	0.11	1	10/04/14	10/04/14	KWG1413488	
o-Xylene	ND	U	0.50	0.20	0.074	1	10/04/14	10/04/14	KWG1413488	
Styrene	ND	U	0.50	0.20	0.089	1	10/04/14	10/04/14	KWG1413488	
Bromoform	ND	U	0.50	0.50	0.16	1	10/04/14	10/04/14	KWG1413488	
Isopropylbenzene	ND	U	2.0	0.20	0.051	1	10/04/14	10/04/14	KWG1413488	
1,1,2,2-Tetrachloroethane	ND	U	0.50	0.20	0.16	1	10/04/14	10/04/14	KWG1413488	
Bromobenzene	ND	U	2.0	0.20	0.12	1	10/04/14	10/04/14	KWG1413488	
n-Propylbenzene	ND	U	2.0	0.20	0.054	1	10/04/14	10/04/14	KWG1413488	
1,2,3-Trichloropropane	ND	U	0.50	0.50	0.20	1	10/04/14	10/04/14	KWG1413488	
2-Chlorotoluene	ND	U	2.0	0.20	0.10	1	10/04/14	10/04/14	KWG1413488	
1,3,5-Trimethylbenzene	ND	U	2.0	0.20	0.089	1	10/04/14	10/04/14	KWG1413488	
4-Chlorotoluene	ND	U	2.0	0.20	0.13	1	10/04/14	10/04/14	KWG1413488	
tert-Butylbenzene	ND	U	2.0	0.20	0.059	1	10/04/14	10/04/14	KWG1413488	
1,2,4-Trimethylbenzene	ND	U	2.0	0.20	0.069	1	10/04/14	10/04/14	KWG1413488	
sec-Butylbenzene	ND	U	2.0	0.10	0.062	1	10/04/14	10/04/14	KWG1413488	
4-Isopropyltoluene	ND	U	2.0	0.20	0.060	1	10/04/14	10/04/14	KWG1413488	
1,3-Dichlorobenzene	ND	U	0.50	0.20	0.10	1	10/04/14	10/04/14	KWG1413488	
1,4-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	10/04/14	10/04/14	KWG1413488	
n-Butylbenzene	ND	U	2.0	0.10	0.054	1	10/04/14	10/04/14	KWG1413488	
1,2-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	10/04/14	10/04/14	KWG1413488	
1,2-Dibromo-3-chloropropane	ND	U	2.0	0.80	0.20	1	10/04/14	10/04/14	KWG1413488	
1,2,4-Trichlorobenzene	ND	U	2.0	0.30	0.096	1	10/04/14	10/04/14	KWG1413488	
Hexachlorobutadiene	ND	U	2.0	0.30	0.11	1	10/04/14	10/04/14	KWG1413488	
Naphthalene	ND	U	2.0	0.30	0.088	1	10/04/14	10/04/14	KWG1413488	
1,2,3-Trichlorobenzene	ND	U	2.0	0.40	0.11	1	10/04/14	10/04/14	KWG1413488	

* See Case Narrative

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1410529
Project:	TO 01 JBLM	**Date Collected:**	09/23/2014
Sample Matrix:	Water	**Date Received:**	09/26/2014

Volatile Organic Compounds

Sample Name:	LGC140923LC135-1	**Units:**	ug/L
Lab Code:	K1410529-002	**Basis:**	NA

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Dibromofluoromethane	96	85-115	10/04/14	Acceptable
1,2-Dichloroethane-d4	108	70-120	10/04/14	Acceptable
Toluene-d8	97	85-120	10/04/14	Acceptable
4-Bromofluorobenzene	92	75-120	10/04/14	Acceptable

Comments:

Analytical Results

Client: Sealaska Environmental Services, LLC
Project: TO 01 JBLM
Sample Matrix: Water

Service Request: K1410529
Date Collected: 09/23/2014
Date Received: 09/26/2014

Volatile Organic Compounds

Sample Name: LGC140923LC10830-1
Lab Code: K1410529-003

Units: ug/L
Basis: NA

Extraction Method: EPA 5030B
Analysis Method: 8260C

Level: Low

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Dichlorodifluoromethane	ND	U	0.50	0.20	0.13	1	10/04/14	10/04/14	KWG1413488	
Chloromethane	ND	U	0.50	0.20	0.068	1	10/04/14	10/04/14	KWG1413488	
Vinyl Chloride	ND	U	0.50	0.10	0.075	1	10/04/14	10/04/14	KWG1413488	
Bromomethane	ND	U	0.50	0.30	0.10	1	10/04/14	10/04/14	KWG1413488	*
Chloroethane	ND	U	0.50	0.20	0.16	1	10/04/14	10/04/14	KWG1413488	
Trichlorofluoromethane	ND	U	0.50	0.20	0.12	1	10/04/14	10/04/14	KWG1413488	
1,1-Dichloroethene	ND	U	0.50	0.20	0.080	1	10/04/14	10/04/14	KWG1413488	
Acetone	ND	U	20	10	3.3	1	10/04/14	10/04/14	KWG1413488	*
Carbon Disulfide	ND	U	0.50	0.20	0.069	1	10/04/14	10/04/14	KWG1413488	*
Methylene Chloride	ND	U	2.0	0.20	0.10	1	10/04/14	10/04/14	KWG1413488	
Methyl tert-Butyl Ether	ND	U	0.50	0.30	0.11	1	10/04/14	10/04/14	KWG1413488	
trans-1,2-Dichloroethene	ND	U	0.50	0.20	0.072	1	10/04/14	10/04/14	KWG1413488	
1,1-Dichloroethane	ND	U	0.50	0.20	0.077	1	10/04/14	10/04/14	KWG1413488	
2,2-Dichloropropane	ND	U	0.50	0.20	0.060	1	10/04/14	10/04/14	KWG1413488	*
cis-1,2-Dichloroethene	**0.14**	J	0.50	0.20	0.067	1	10/04/14	10/04/14	KWG1413488	
2-Butanone (MEK)	ND	U	20	4.0	1.9	1	10/04/14	10/04/14	KWG1413488	
Bromochloromethane	ND	U	0.50	0.20	0.16	1	10/04/14	10/04/14	KWG1413488	
Chloroform	ND	U	0.50	0.20	0.072	1	10/04/14	10/04/14	KWG1413488	
1,1,1-Trichloroethane (TCA)	ND	U	0.50	0.20	0.075	1	10/04/14	10/04/14	KWG1413488	
Carbon Tetrachloride	ND	U	0.50	0.20	0.096	1	10/04/14	10/04/14	KWG1413488	
1,1-Dichloropropene	ND	U	0.50	0.20	0.089	1	10/04/14	10/04/14	KWG1413488	
Benzene	ND	U	0.50	0.10	0.062	1	10/04/14	10/04/14	KWG1413488	
1,2-Dichloroethane (EDC)	ND	U	0.50	0.15	0.080	1	10/04/14	10/04/14	KWG1413488	
Trichloroethene (TCE)	**8.1**		0.50	0.10	0.10	1	10/04/14	10/04/14	KWG1413488	
1,2-Dichloropropane	ND	U	0.50	0.20	0.095	1	10/04/14	10/04/14	KWG1413488	
Dibromomethane	ND	U	0.50	0.50	0.15	1	10/04/14	10/04/14	KWG1413488	
Bromodichloromethane	ND	U	0.50	0.30	0.091	1	10/04/14	10/04/14	KWG1413488	
cis-1,3-Dichloropropene	ND	U	0.50	0.20	0.18	1	10/04/14	10/04/14	KWG1413488	
4-Methyl-2-pentanone (MIBK)	ND	U	20	10	2.6	1	10/04/14	10/04/14	KWG1413488	
Toluene	ND	U	0.50	0.10	0.054	1	10/04/14	10/04/14	KWG1413488	
trans-1,3-Dichloropropene	ND	U	0.50	0.20	0.068	1	10/04/14	10/04/14	KWG1413488	
1,1,2-Trichloroethane	ND	U	0.50	0.40	0.14	1	10/04/14	10/04/14	KWG1413488	
Tetrachloroethene (PCE)	ND	U	0.50	0.20	0.099	1	10/04/14	10/04/14	KWG1413488	

Comments:

Analytical Results

Client: Sealaska Environmental Services, LLC
Project: TO 01 JBLM
Sample Matrix: Water

Service Request: K1410529
Date Collected: 09/23/2014
Date Received: 09/26/2014

Volatile Organic Compounds

Sample Name: LGC140923LC10830-1
Lab Code: K1410529-003

Units: ug/L
Basis: NA

Extraction Method: EPA 5030B
Analysis Method: 8260C

Level: Low

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
2-Hexanone	ND	U	20	10	2.7	1	10/04/14	10/04/14	KWG1413488	
1,3-Dichloropropane	ND	U	0.50	0.30	0.14	1	10/04/14	10/04/14	KWG1413488	
Dibromochloromethane	ND	U	0.50	0.50	0.14	1	10/04/14	10/04/14	KWG1413488	
1,2-Dibromoethane (EDB)	ND	U	2.0	0.20	0.10	1	10/04/14	10/04/14	KWG1413488	
Chlorobenzene	ND	U	0.50	0.20	0.11	1	10/04/14	10/04/14	KWG1413488	
Ethylbenzene	ND	U	0.50	0.10	0.050	1	10/04/14	10/04/14	KWG1413488	
1,1,1,2-Tetrachloroethane	ND	U	0.50	0.20	0.11	1	10/04/14	10/04/14	KWG1413488	
m,p-Xylenes	ND	U	0.50	0.20	0.11	1	10/04/14	10/04/14	KWG1413488	
o-Xylene	ND	U	0.50	0.20	0.074	1	10/04/14	10/04/14	KWG1413488	
Styrene	ND	U	0.50	0.20	0.089	1	10/04/14	10/04/14	KWG1413488	
Bromoform	ND	U	0.50	0.50	0.16	1	10/04/14	10/04/14	KWG1413488	
Isopropylbenzene	ND	U	2.0	0.20	0.051	1	10/04/14	10/04/14	KWG1413488	
1,1,2,2-Tetrachloroethane	ND	U	0.50	0.20	0.16	1	10/04/14	10/04/14	KWG1413488	
Bromobenzene	ND	U	2.0	0.20	0.12	1	10/04/14	10/04/14	KWG1413488	
n-Propylbenzene	ND	U	2.0	0.20	0.054	1	10/04/14	10/04/14	KWG1413488	
1,2,3-Trichloropropane	ND	U	0.50	0.50	0.20	1	10/04/14	10/04/14	KWG1413488	
2-Chlorotoluene	ND	U	2.0	0.20	0.10	1	10/04/14	10/04/14	KWG1413488	
1,3,5-Trimethylbenzene	ND	U	2.0	0.20	0.089	1	10/04/14	10/04/14	KWG1413488	
4-Chlorotoluene	ND	U	2.0	0.20	0.13	1	10/04/14	10/04/14	KWG1413488	
tert-Butylbenzene	ND	U	2.0	0.20	0.059	1	10/04/14	10/04/14	KWG1413488	
1,2,4-Trimethylbenzene	ND	U	2.0	0.20	0.069	1	10/04/14	10/04/14	KWG1413488	
sec-Butylbenzene	ND	U	2.0	0.10	0.062	1	10/04/14	10/04/14	KWG1413488	
4-Isopropyltoluene	ND	U	2.0	0.20	0.060	1	10/04/14	10/04/14	KWG1413488	
1,3-Dichlorobenzene	ND	U	0.50	0.20	0.10	1	10/04/14	10/04/14	KWG1413488	
1,4-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	10/04/14	10/04/14	KWG1413488	
n-Butylbenzene	ND	U	2.0	0.10	0.054	1	10/04/14	10/04/14	KWG1413488	
1,2-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	10/04/14	10/04/14	KWG1413488	
1,2-Dibromo-3-chloropropane	ND	U	2.0	0.80	0.20	1	10/04/14	10/04/14	KWG1413488	
1,2,4-Trichlorobenzene	ND	U	2.0	0.30	0.096	1	10/04/14	10/04/14	KWG1413488	
Hexachlorobutadiene	ND	U	2.0	0.30	0.11	1	10/04/14	10/04/14	KWG1413488	
Naphthalene	ND	U	2.0	0.30	0.088	1	10/04/14	10/04/14	KWG1413488	
1,2,3-Trichlorobenzene	ND	U	2.0	0.40	0.11	1	10/04/14	10/04/14	KWG1413488	

* See Case Narrative

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1410529
Project:	TO 01 JBLM	**Date Collected:**	09/23/2014
Sample Matrix:	Water	**Date Received:**	09/26/2014

Volatile Organic Compounds

Sample Name:	LGC140923LC10830-1	**Units:**	ug/L
Lab Code:	K1410529-003	**Basis:**	NA

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Dibromofluoromethane	94	85-115	10/04/14	Acceptable
1,2-Dichloroethane-d4	107	70-120	10/04/14	Acceptable
Toluene-d8	95	85-120	10/04/14	Acceptable
4-Bromofluorobenzene	93	75-120	10/04/14	Acceptable

Comments:

Analytical Results

Client: Sealaska Environmental Services, LLC
Project: TO 01 JBLM
Sample Matrix: Water

Service Request: K1410529
Date Collected: 09/23/2014
Date Received: 09/26/2014

Volatile Organic Compounds

Sample Name: LGC140923LC10860-1
Lab Code: K1410529-004

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
Dichlorodifluoromethane	ND	U	0.50	0.20	0.13	1	10/04/14	10/04/14	KWG1413488	
Chloromethane	ND	U	0.50	0.20	0.068	1	10/04/14	10/04/14	KWG1413488	
Vinyl Chloride	ND	U	0.50	0.10	0.075	1	10/04/14	10/04/14	KWG1413488	
Bromomethane	ND	U	0.50	0.30	0.10	1	10/04/14	10/04/14	KWG1413488	*
Chloroethane	ND	U	0.50	0.20	0.16	1	10/04/14	10/04/14	KWG1413488	
Trichlorofluoromethane	ND	U	0.50	0.20	0.12	1	10/04/14	10/04/14	KWG1413488	
1,1-Dichloroethene	ND	U	0.50	0.20	0.080	1	10/04/14	10/04/14	KWG1413488	
Acetone	ND	U	20	10	3.3	1	10/04/14	10/04/14	KWG1413488	*
Carbon Disulfide	ND	U	0.50	0.20	0.069	1	10/04/14	10/04/14	KWG1413488	*
Methylene Chloride	ND	U	2.0	0.20	0.10	1	10/04/14	10/04/14	KWG1413488	
Methyl tert-Butyl Ether	ND	U	0.50	0.30	0.11	1	10/04/14	10/04/14	KWG1413488	
trans-1,2-Dichloroethene	ND	U	0.50	0.20	0.072	1	10/04/14	10/04/14	KWG1413488	
1,1-Dichloroethane	ND	U	0.50	0.20	0.077	1	10/04/14	10/04/14	KWG1413488	
2,2-Dichloropropane	ND	U	0.50	0.20	0.060	1	10/04/14	10/04/14	KWG1413488	*
cis-1,2-Dichloroethene	ND	U	0.50	0.20	0.067	1	10/04/14	10/04/14	KWG1413488	
2-Butanone (MEK)	ND	U	20	4.0	1.9	1	10/04/14	10/04/14	KWG1413488	
Bromochloromethane	ND	U	0.50	0.20	0.16	1	10/04/14	10/04/14	KWG1413488	
Chloroform	ND	U	0.50	0.20	0.072	1	10/04/14	10/04/14	KWG1413488	
1,1,1-Trichloroethane (TCA)	ND	U	0.50	0.20	0.075	1	10/04/14	10/04/14	KWG1413488	
Carbon Tetrachloride	ND	U	0.50	0.20	0.096	1	10/04/14	10/04/14	KWG1413488	
1,1-Dichloropropene	ND	U	0.50	0.20	0.089	1	10/04/14	10/04/14	KWG1413488	
Benzene	ND	U	0.50	0.10	0.062	1	10/04/14	10/04/14	KWG1413488	
1,2-Dichloroethane (EDC)	ND	U	0.50	0.15	0.080	1	10/04/14	10/04/14	KWG1413488	
Trichloroethene (TCE)	**0.38**	J	0.50	0.10	0.10	1	10/04/14	10/04/14	KWG1413488	
1,2-Dichloropropane	ND	U	0.50	0.20	0.095	1	10/04/14	10/04/14	KWG1413488	
Dibromomethane	ND	U	0.50	0.50	0.15	1	10/04/14	10/04/14	KWG1413488	
Bromodichloromethane	ND	U	0.50	0.30	0.091	1	10/04/14	10/04/14	KWG1413488	
cis-1,3-Dichloropropene	ND	U	0.50	0.20	0.18	1	10/04/14	10/04/14	KWG1413488	
4-Methyl-2-pentanone (MIBK)	ND	U	20	10	2.6	1	10/04/14	10/04/14	KWG1413488	
Toluene	ND	U	0.50	0.10	0.054	1	10/04/14	10/04/14	KWG1413488	
trans-1,3-Dichloropropene	ND	U	0.50	0.20	0.068	1	10/04/14	10/04/14	KWG1413488	
1,1,2-Trichloroethane	ND	U	0.50	0.40	0.14	1	10/04/14	10/04/14	KWG1413488	
Tetrachloroethene (PCE)	ND	U	0.50	0.20	0.099	1	10/04/14	10/04/14	KWG1413488	

Comments:

Analytical Results

Client: Sealaska Environmental Services, LLC
Project: TO 01 JBLM
Sample Matrix: Water

Service Request: K1410529
Date Collected: 09/23/2014
Date Received: 09/26/2014

Volatile Organic Compounds

Sample Name: LGC140923LC10860-1
Lab Code: K1410529-004

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
2-Hexanone	ND	U	20	10	2.7	1	10/04/14	10/04/14	KWG1413488	
1,3-Dichloropropane	ND	U	0.50	0.30	0.14	1	10/04/14	10/04/14	KWG1413488	
Dibromochloromethane	ND	U	0.50	0.50	0.14	1	10/04/14	10/04/14	KWG1413488	
1,2-Dibromoethane (EDB)	ND	U	2.0	0.20	0.10	1	10/04/14	10/04/14	KWG1413488	
Chlorobenzene	ND	U	0.50	0.20	0.11	1	10/04/14	10/04/14	KWG1413488	
Ethylbenzene	ND	U	0.50	0.10	0.050	1	10/04/14	10/04/14	KWG1413488	
1,1,1,2-Tetrachloroethane	ND	U	0.50	0.20	0.11	1	10/04/14	10/04/14	KWG1413488	
m,p-Xylenes	ND	U	0.50	0.20	0.11	1	10/04/14	10/04/14	KWG1413488	
o-Xylene	ND	U	0.50	0.20	0.074	1	10/04/14	10/04/14	KWG1413488	
Styrene	ND	U	0.50	0.20	0.089	1	10/04/14	10/04/14	KWG1413488	
Bromoform	ND	U	0.50	0.50	0.16	1	10/04/14	10/04/14	KWG1413488	
Isopropylbenzene	ND	U	2.0	0.20	0.051	1	10/04/14	10/04/14	KWG1413488	
1,1,2,2-Tetrachloroethane	ND	U	0.50	0.20	0.16	1	10/04/14	10/04/14	KWG1413488	
Bromobenzene	ND	U	2.0	0.20	0.12	1	10/04/14	10/04/14	KWG1413488	
n-Propylbenzene	ND	U	2.0	0.20	0.054	1	10/04/14	10/04/14	KWG1413488	
1,2,3-Trichloropropane	ND	U	0.50	0.50	0.20	1	10/04/14	10/04/14	KWG1413488	
2-Chlorotoluene	ND	U	2.0	0.20	0.10	1	10/04/14	10/04/14	KWG1413488	
1,3,5-Trimethylbenzene	ND	U	2.0	0.20	0.089	1	10/04/14	10/04/14	KWG1413488	
4-Chlorotoluene	ND	U	2.0	0.20	0.13	1	10/04/14	10/04/14	KWG1413488	
tert-Butylbenzene	ND	U	2.0	0.20	0.059	1	10/04/14	10/04/14	KWG1413488	
1,2,4-Trimethylbenzene	ND	U	2.0	0.20	0.069	1	10/04/14	10/04/14	KWG1413488	
sec-Butylbenzene	ND	U	2.0	0.10	0.062	1	10/04/14	10/04/14	KWG1413488	
4-Isopropyltoluene	ND	U	2.0	0.20	0.060	1	10/04/14	10/04/14	KWG1413488	
1,3-Dichlorobenzene	ND	U	0.50	0.20	0.10	1	10/04/14	10/04/14	KWG1413488	
1,4-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	10/04/14	10/04/14	KWG1413488	
n-Butylbenzene	ND	U	2.0	0.10	0.054	1	10/04/14	10/04/14	KWG1413488	
1,2-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	10/04/14	10/04/14	KWG1413488	
1,2-Dibromo-3-chloropropane	ND	U	2.0	0.80	0.20	1	10/04/14	10/04/14	KWG1413488	
1,2,4-Trichlorobenzene	ND	U	2.0	0.30	0.096	1	10/04/14	10/04/14	KWG1413488	
Hexachlorobutadiene	ND	U	2.0	0.30	0.11	1	10/04/14	10/04/14	KWG1413488	
Naphthalene	ND	U	2.0	0.30	0.088	1	10/04/14	10/04/14	KWG1413488	
1,2,3-Trichlorobenzene	ND	U	2.0	0.40	0.11	1	10/04/14	10/04/14	KWG1413488	

* See Case Narrative

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1410529
Project:	TO 01 JBLM	**Date Collected:**	09/23/2014
Sample Matrix:	Water	**Date Received:**	09/26/2014

Volatile Organic Compounds

Sample Name:	LGC140923LC10860-1	**Units:**	ug/L
Lab Code:	K1410529-004	**Basis:**	NA

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Dibromofluoromethane	98	85-115	10/04/14	Acceptable
1,2-Dichloroethane-d4	108	70-120	10/04/14	Acceptable
Toluene-d8	97	85-120	10/04/14	Acceptable
4-Bromofluorobenzene	89	75-120	10/04/14	Acceptable

Comments:

Analytical Results

Client: Sealaska Environmental Services, LLC
Project: TO 01 JBLM
Sample Matrix: Water

Service Request: K1410529
Date Collected: 09/23/2014
Date Received: 09/26/2014

Volatile Organic Compounds

Sample Name: LGC140923LC10885-1
Lab Code: K1410529-005

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
Dichlorodifluoromethane	ND	U	0.50	0.20	0.13	1	10/04/14	10/04/14	KWG1413488	
Chloromethane	ND	U	0.50	0.20	0.068	1	10/04/14	10/04/14	KWG1413488	
Vinyl Chloride	ND	U	0.50	0.10	0.075	1	10/04/14	10/04/14	KWG1413488	
Bromomethane	ND	U	0.50	0.30	0.10	1	10/04/14	10/04/14	KWG1413488	*
Chloroethane	ND	U	0.50	0.20	0.16	1	10/04/14	10/04/14	KWG1413488	
Trichlorofluoromethane	ND	U	0.50	0.20	0.12	1	10/04/14	10/04/14	KWG1413488	
1,1-Dichloroethene	ND	U	0.50	0.20	0.080	1	10/04/14	10/04/14	KWG1413488	
Acetone	ND	U	20	10	3.3	1	10/04/14	10/04/14	KWG1413488	*
Carbon Disulfide	ND	U	0.50	0.20	0.069	1	10/04/14	10/04/14	KWG1413488	*
Methylene Chloride	ND	U	2.0	0.20	0.10	1	10/04/14	10/04/14	KWG1413488	
Methyl tert-Butyl Ether	ND	U	0.50	0.30	0.11	1	10/04/14	10/04/14	KWG1413488	
trans-1,2-Dichloroethene	ND	U	0.50	0.20	0.072	1	10/04/14	10/04/14	KWG1413488	
1,1-Dichloroethane	ND	U	0.50	0.20	0.077	1	10/04/14	10/04/14	KWG1413488	
2,2-Dichloropropane	ND	U	0.50	0.20	0.060	1	10/04/14	10/04/14	KWG1413488	*
cis-1,2-Dichloroethene	ND	U	0.50	0.20	0.067	1	10/04/14	10/04/14	KWG1413488	
2-Butanone (MEK)	ND	U	20	4.0	1.9	1	10/04/14	10/04/14	KWG1413488	
Bromochloromethane	ND	U	0.50	0.20	0.16	1	10/04/14	10/04/14	KWG1413488	
Chloroform	ND	U	0.50	0.20	0.072	1	10/04/14	10/04/14	KWG1413488	
1,1,1-Trichloroethane (TCA)	ND	U	0.50	0.20	0.075	1	10/04/14	10/04/14	KWG1413488	
Carbon Tetrachloride	ND	U	0.50	0.20	0.096	1	10/04/14	10/04/14	KWG1413488	
1,1-Dichloropropene	ND	U	0.50	0.20	0.089	1	10/04/14	10/04/14	KWG1413488	
Benzene	ND	U	0.50	0.10	0.062	1	10/04/14	10/04/14	KWG1413488	
1,2-Dichloroethane (EDC)	ND	U	0.50	0.15	0.080	1	10/04/14	10/04/14	KWG1413488	
Trichloroethene (TCE)	**0.32**	J	0.50	0.10	0.10	1	10/04/14	10/04/14	KWG1413488	
1,2-Dichloropropane	ND	U	0.50	0.20	0.095	1	10/04/14	10/04/14	KWG1413488	
Dibromomethane	ND	U	0.50	0.50	0.15	1	10/04/14	10/04/14	KWG1413488	
Bromodichloromethane	ND	U	0.50	0.30	0.091	1	10/04/14	10/04/14	KWG1413488	
cis-1,3-Dichloropropene	ND	U	0.50	0.20	0.18	1	10/04/14	10/04/14	KWG1413488	
4-Methyl-2-pentanone (MIBK)	ND	U	20	10	2.6	1	10/04/14	10/04/14	KWG1413488	
Toluene	ND	U	0.50	0.10	0.054	1	10/04/14	10/04/14	KWG1413488	
trans-1,3-Dichloropropene	ND	U	0.50	0.20	0.068	1	10/04/14	10/04/14	KWG1413488	
1,1,2-Trichloroethane	ND	U	0.50	0.40	0.14	1	10/04/14	10/04/14	KWG1413488	
Tetrachloroethene (PCE)	ND	U	0.50	0.20	0.099	1	10/04/14	10/04/14	KWG1413488	

Comments:

Analytical Results

Client: Sealaska Environmental Services, LLC
Project: TO 01 JBLM
Sample Matrix: Water

Service Request: K1410529
Date Collected: 09/23/2014
Date Received: 09/26/2014

Volatile Organic Compounds

Sample Name: LGC140923LC10885-1
Lab Code: K1410529-005

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
2-Hexanone	ND	U	20	10	2.7	1	10/04/14	10/04/14	KWG1413488	
1,3-Dichloropropane	ND	U	0.50	0.30	0.14	1	10/04/14	10/04/14	KWG1413488	
Dibromochloromethane	ND	U	0.50	0.50	0.14	1	10/04/14	10/04/14	KWG1413488	
1,2-Dibromoethane (EDB)	ND	U	2.0	0.20	0.10	1	10/04/14	10/04/14	KWG1413488	
Chlorobenzene	ND	U	0.50	0.20	0.11	1	10/04/14	10/04/14	KWG1413488	
Ethylbenzene	ND	U	0.50	0.10	0.050	1	10/04/14	10/04/14	KWG1413488	
1,1,1,2-Tetrachloroethane	ND	U	0.50	0.20	0.11	1	10/04/14	10/04/14	KWG1413488	
m,p-Xylenes	ND	U	0.50	0.20	0.11	1	10/04/14	10/04/14	KWG1413488	
o-Xylene	ND	U	0.50	0.20	0.074	1	10/04/14	10/04/14	KWG1413488	
Styrene	ND	U	0.50	0.20	0.089	1	10/04/14	10/04/14	KWG1413488	
Bromoform	ND	U	0.50	0.50	0.16	1	10/04/14	10/04/14	KWG1413488	
Isopropylbenzene	ND	U	2.0	0.20	0.051	1	10/04/14	10/04/14	KWG1413488	
1,1,2,2-Tetrachloroethane	ND	U	0.50	0.20	0.16	1	10/04/14	10/04/14	KWG1413488	
Bromobenzene	ND	U	2.0	0.20	0.12	1	10/04/14	10/04/14	KWG1413488	
n-Propylbenzene	ND	U	2.0	0.20	0.054	1	10/04/14	10/04/14	KWG1413488	
1,2,3-Trichloropropane	ND	U	0.50	0.50	0.20	1	10/04/14	10/04/14	KWG1413488	
2-Chlorotoluene	ND	U	2.0	0.20	0.10	1	10/04/14	10/04/14	KWG1413488	
1,3,5-Trimethylbenzene	ND	U	2.0	0.20	0.089	1	10/04/14	10/04/14	KWG1413488	
4-Chlorotoluene	ND	U	2.0	0.20	0.13	1	10/04/14	10/04/14	KWG1413488	
tert-Butylbenzene	ND	U	2.0	0.20	0.059	1	10/04/14	10/04/14	KWG1413488	
1,2,4-Trimethylbenzene	ND	U	2.0	0.20	0.069	1	10/04/14	10/04/14	KWG1413488	
sec-Butylbenzene	ND	U	2.0	0.10	0.062	1	10/04/14	10/04/14	KWG1413488	
4-Isopropyltoluene	ND	U	2.0	0.20	0.060	1	10/04/14	10/04/14	KWG1413488	
1,3-Dichlorobenzene	ND	U	0.50	0.20	0.10	1	10/04/14	10/04/14	KWG1413488	
1,4-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	10/04/14	10/04/14	KWG1413488	
n-Butylbenzene	ND	U	2.0	0.10	0.054	1	10/04/14	10/04/14	KWG1413488	
1,2-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	10/04/14	10/04/14	KWG1413488	
1,2-Dibromo-3-chloropropane	ND	U	2.0	0.80	0.20	1	10/04/14	10/04/14	KWG1413488	
1,2,4-Trichlorobenzene	ND	U	2.0	0.30	0.096	1	10/04/14	10/04/14	KWG1413488	
Hexachlorobutadiene	ND	U	2.0	0.30	0.11	1	10/04/14	10/04/14	KWG1413488	
Naphthalene	ND	U	2.0	0.30	0.088	1	10/04/14	10/04/14	KWG1413488	
1,2,3-Trichlorobenzene	ND	U	2.0	0.40	0.11	1	10/04/14	10/04/14	KWG1413488	

* See Case Narrative

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1410529
Project:	TO 01 JBLM	**Date Collected:**	09/23/2014
Sample Matrix:	Water	**Date Received:**	09/26/2014

Volatile Organic Compounds

Sample Name:	LGC140923LC10885-1	**Units:**	ug/L
Lab Code:	K1410529-005	**Basis:**	NA

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Dibromofluoromethane	94	85-115	10/04/14	Acceptable
1,2-Dichloroethane-d4	109	70-120	10/04/14	Acceptable
Toluene-d8	96	85-120	10/04/14	Acceptable
4-Bromofluorobenzene	93	75-120	10/04/14	Acceptable

Comments:

Analytical Results

Client: Sealaska Environmental Services, LLC
Project: TO 01 JBLM
Sample Matrix: Water

Service Request: K1410529
Date Collected: 09/23/2014
Date Received: 09/26/2014

Volatile Organic Compounds

Sample Name: LGC140923MT4-1
Lab Code: K1410529-006

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
Dichlorodifluoromethane	ND	U	0.50	0.20	0.13	1	10/04/14	10/04/14	KWG1413488	
Chloromethane	ND	U	0.50	0.20	0.068	1	10/04/14	10/04/14	KWG1413488	
Vinyl Chloride	ND	U	0.50	0.10	0.075	1	10/04/14	10/04/14	KWG1413488	
Bromomethane	ND	U	0.50	0.30	0.10	1	10/04/14	10/04/14	KWG1413488	*
Chloroethane	ND	U	0.50	0.20	0.16	1	10/04/14	10/04/14	KWG1413488	
Trichlorofluoromethane	ND	U	0.50	0.20	0.12	1	10/04/14	10/04/14	KWG1413488	
1,1-Dichloroethene	ND	U	0.50	0.20	0.080	1	10/04/14	10/04/14	KWG1413488	
Acetone	ND	U	20	10	3.3	1	10/04/14	10/04/14	KWG1413488	*
Carbon Disulfide	ND	U	0.50	0.20	0.069	1	10/04/14	10/04/14	KWG1413488	*
Methylene Chloride	ND	U	2.0	0.20	0.10	1	10/04/14	10/04/14	KWG1413488	
Methyl tert-Butyl Ether	ND	U	0.50	0.30	0.11	1	10/04/14	10/04/14	KWG1413488	
trans-1,2-Dichloroethene	ND	U	0.50	0.20	0.072	1	10/04/14	10/04/14	KWG1413488	
1,1-Dichloroethane	ND	U	0.50	0.20	0.077	1	10/04/14	10/04/14	KWG1413488	
2,2-Dichloropropane	ND	U	0.50	0.20	0.060	1	10/04/14	10/04/14	KWG1413488	*
cis-1,2-Dichloroethene	**0.20**	J	0.50	0.20	0.067	1	10/04/14	10/04/14	KWG1413488	
2-Butanone (MEK)	ND	U	20	4.0	1.9	1	10/04/14	10/04/14	KWG1413488	
Bromochloromethane	ND	U	0.50	0.20	0.16	1	10/04/14	10/04/14	KWG1413488	
Chloroform	ND	U	0.50	0.20	0.072	1	10/04/14	10/04/14	KWG1413488	
1,1,1-Trichloroethane (TCA)	ND	U	0.50	0.20	0.075	1	10/04/14	10/04/14	KWG1413488	
Carbon Tetrachloride	ND	U	0.50	0.20	0.096	1	10/04/14	10/04/14	KWG1413488	
1,1-Dichloropropene	ND	U	0.50	0.20	0.089	1	10/04/14	10/04/14	KWG1413488	
Benzene	ND	U	0.50	0.10	0.062	1	10/04/14	10/04/14	KWG1413488	
1,2-Dichloroethane (EDC)	ND	U	0.50	0.15	0.080	1	10/04/14	10/04/14	KWG1413488	
Trichloroethene (TCE)	**3.6**		0.50	0.10	0.10	1	10/04/14	10/04/14	KWG1413488	
1,2-Dichloropropane	ND	U	0.50	0.20	0.095	1	10/04/14	10/04/14	KWG1413488	
Dibromomethane	ND	U	0.50	0.50	0.15	1	10/04/14	10/04/14	KWG1413488	
Bromodichloromethane	ND	U	0.50	0.30	0.091	1	10/04/14	10/04/14	KWG1413488	
cis-1,3-Dichloropropene	ND	U	0.50	0.20	0.18	1	10/04/14	10/04/14	KWG1413488	
4-Methyl-2-pentanone (MIBK)	ND	U	20	10	2.6	1	10/04/14	10/04/14	KWG1413488	
Toluene	ND	U	0.50	0.10	0.054	1	10/04/14	10/04/14	KWG1413488	
trans-1,3-Dichloropropene	ND	U	0.50	0.20	0.068	1	10/04/14	10/04/14	KWG1413488	
1,1,2-Trichloroethane	ND	U	0.50	0.40	0.14	1	10/04/14	10/04/14	KWG1413488	
Tetrachloroethene (PCE)	ND	U	0.50	0.20	0.099	1	10/04/14	10/04/14	KWG1413488	

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1410529
Project:	TO 01 JBLM	**Date Collected:**	09/23/2014
Sample Matrix:	Water	**Date Received:**	09/26/2014

Volatile Organic Compounds

Sample Name:	LGC140923MT4-1	**Units:**	ug/L
Lab Code:	K1410529-006	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8260C		

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
2-Hexanone	ND	U	20	10	2.7	1	10/04/14	10/04/14	KWG1413488	
1,3-Dichloropropane	ND	U	0.50	0.30	0.14	1	10/04/14	10/04/14	KWG1413488	
Dibromochloromethane	ND	U	0.50	0.50	0.14	1	10/04/14	10/04/14	KWG1413488	
1,2-Dibromoethane (EDB)	ND	U	2.0	0.20	0.10	1	10/04/14	10/04/14	KWG1413488	
Chlorobenzene	ND	U	0.50	0.20	0.11	1	10/04/14	10/04/14	KWG1413488	
Ethylbenzene	ND	U	0.50	0.10	0.050	1	10/04/14	10/04/14	KWG1413488	
1,1,1,2-Tetrachloroethane	ND	U	0.50	0.20	0.11	1	10/04/14	10/04/14	KWG1413488	
m,p-Xylenes	ND	U	0.50	0.20	0.11	1	10/04/14	10/04/14	KWG1413488	
o-Xylene	ND	U	0.50	0.20	0.074	1	10/04/14	10/04/14	KWG1413488	
Styrene	ND	U	0.50	0.20	0.089	1	10/04/14	10/04/14	KWG1413488	
Bromoform	ND	U	0.50	0.50	0.16	1	10/04/14	10/04/14	KWG1413488	
Isopropylbenzene	ND	U	2.0	0.20	0.051	1	10/04/14	10/04/14	KWG1413488	
1,1,2,2-Tetrachloroethane	ND	U	0.50	0.20	0.16	1	10/04/14	10/04/14	KWG1413488	
Bromobenzene	ND	U	2.0	0.20	0.12	1	10/04/14	10/04/14	KWG1413488	
n-Propylbenzene	ND	U	2.0	0.20	0.054	1	10/04/14	10/04/14	KWG1413488	
1,2,3-Trichloropropane	ND	U	0.50	0.50	0.20	1	10/04/14	10/04/14	KWG1413488	
2-Chlorotoluene	ND	U	2.0	0.20	0.10	1	10/04/14	10/04/14	KWG1413488	
1,3,5-Trimethylbenzene	ND	U	2.0	0.20	0.089	1	10/04/14	10/04/14	KWG1413488	
4-Chlorotoluene	ND	U	2.0	0.20	0.13	1	10/04/14	10/04/14	KWG1413488	
tert-Butylbenzene	ND	U	2.0	0.20	0.059	1	10/04/14	10/04/14	KWG1413488	
1,2,4-Trimethylbenzene	ND	U	2.0	0.20	0.069	1	10/04/14	10/04/14	KWG1413488	
sec-Butylbenzene	ND	U	2.0	0.10	0.062	1	10/04/14	10/04/14	KWG1413488	
4-Isopropyltoluene	ND	U	2.0	0.20	0.060	1	10/04/14	10/04/14	KWG1413488	
1,3-Dichlorobenzene	ND	U	0.50	0.20	0.10	1	10/04/14	10/04/14	KWG1413488	
1,4-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	10/04/14	10/04/14	KWG1413488	
n-Butylbenzene	ND	U	2.0	0.10	0.054	1	10/04/14	10/04/14	KWG1413488	
1,2-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	10/04/14	10/04/14	KWG1413488	
1,2-Dibromo-3-chloropropane	ND	U	2.0	0.80	0.20	1	10/04/14	10/04/14	KWG1413488	
1,2,4-Trichlorobenzene	ND	U	2.0	0.30	0.096	1	10/04/14	10/04/14	KWG1413488	
Hexachlorobutadiene	ND	U	2.0	0.30	0.11	1	10/04/14	10/04/14	KWG1413488	
Naphthalene	ND	U	2.0	0.30	0.088	1	10/04/14	10/04/14	KWG1413488	
1,2,3-Trichlorobenzene	ND	U	2.0	0.40	0.11	1	10/04/14	10/04/14	KWG1413488	

* See Case Narrative

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1410529
Project:	TO 01 JBLM	**Date Collected:**	09/23/2014
Sample Matrix:	Water	**Date Received:**	09/26/2014

Volatile Organic Compounds

Sample Name:	LGC140923MT4-1	**Units:**	ug/L
Lab Code:	K1410529-006	**Basis:**	NA

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Dibromofluoromethane	92	85-115	10/04/14	Acceptable
1,2-Dichloroethane-d4	112	70-120	10/04/14	Acceptable
Toluene-d8	96	85-120	10/04/14	Acceptable
4-Bromofluorobenzene	92	75-120	10/04/14	Acceptable

Comments:

Analytical Results

Client: Sealaska Environmental Services, LLC
Project: TO 01 JBLM
Sample Matrix: Water

Service Request: K1410529
Date Collected: 09/23/2014
Date Received: 09/26/2014

Volatile Organic Compounds

Sample Name: LGC140923MT3-1
Lab Code: K1410529-007

Units: ug/L
Basis: NA

Extraction Method: EPA 5030B
Analysis Method: 8260C

Level: Low

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Dichlorodifluoromethane	ND	U	0.50	0.20	0.13	1	10/04/14	10/04/14	KWG1413488	
Chloromethane	ND	U	0.50	0.20	0.068	1	10/04/14	10/04/14	KWG1413488	
Vinyl Chloride	ND	U	0.50	0.10	0.075	1	10/04/14	10/04/14	KWG1413488	
Bromomethane	ND	U	0.50	0.30	0.10	1	10/04/14	10/04/14	KWG1413488	*
Chloroethane	ND	U	0.50	0.20	0.16	1	10/04/14	10/04/14	KWG1413488	
Trichlorofluoromethane	ND	U	0.50	0.20	0.12	1	10/04/14	10/04/14	KWG1413488	
1,1-Dichloroethene	ND	U	0.50	0.20	0.080	1	10/04/14	10/04/14	KWG1413488	
Acetone	ND	U	20	10	3.3	1	10/04/14	10/04/14	KWG1413488	*
Carbon Disulfide	ND	U	0.50	0.20	0.069	1	10/04/14	10/04/14	KWG1413488	*
Methylene Chloride	ND	U	2.0	0.20	0.10	1	10/04/14	10/04/14	KWG1413488	
Methyl tert-Butyl Ether	ND	U	0.50	0.30	0.11	1	10/04/14	10/04/14	KWG1413488	
trans-1,2-Dichloroethene	ND	U	0.50	0.20	0.072	1	10/04/14	10/04/14	KWG1413488	
1,1-Dichloroethane	ND	U	0.50	0.20	0.077	1	10/04/14	10/04/14	KWG1413488	
2,2-Dichloropropane	ND	U	0.50	0.20	0.060	1	10/04/14	10/04/14	KWG1413488	*
cis-1,2-Dichloroethene	**0.64**		0.50	0.20	0.067	1	10/04/14	10/04/14	KWG1413488	
2-Butanone (MEK)	ND	U	20	4.0	1.9	1	10/04/14	10/04/14	KWG1413488	
Bromochloromethane	ND	U	0.50	0.20	0.16	1	10/04/14	10/04/14	KWG1413488	
Chloroform	ND	U	0.50	0.20	0.072	1	10/04/14	10/04/14	KWG1413488	
1,1,1-Trichloroethane (TCA)	ND	U	0.50	0.20	0.075	1	10/04/14	10/04/14	KWG1413488	
Carbon Tetrachloride	ND	U	0.50	0.20	0.096	1	10/04/14	10/04/14	KWG1413488	
1,1-Dichloropropene	ND	U	0.50	0.20	0.089	1	10/04/14	10/04/14	KWG1413488	
Benzene	ND	U	0.50	0.10	0.062	1	10/04/14	10/04/14	KWG1413488	
1,2-Dichloroethane (EDC)	ND	U	0.50	0.15	0.080	1	10/04/14	10/04/14	KWG1413488	
Trichloroethene (TCE)	**12**		0.50	0.10	0.10	1	10/04/14	10/04/14	KWG1413488	
1,2-Dichloropropane	ND	U	0.50	0.20	0.095	1	10/04/14	10/04/14	KWG1413488	
Dibromomethane	ND	U	0.50	0.50	0.15	1	10/04/14	10/04/14	KWG1413488	
Bromodichloromethane	ND	U	0.50	0.30	0.091	1	10/04/14	10/04/14	KWG1413488	
cis-1,3-Dichloropropene	ND	U	0.50	0.20	0.18	1	10/04/14	10/04/14	KWG1413488	
4-Methyl-2-pentanone (MIBK)	ND	U	20	10	2.6	1	10/04/14	10/04/14	KWG1413488	
Toluene	ND	U	0.50	0.10	0.054	1	10/04/14	10/04/14	KWG1413488	
trans-1,3-Dichloropropene	ND	U	0.50	0.20	0.068	1	10/04/14	10/04/14	KWG1413488	
1,1,2-Trichloroethane	ND	U	0.50	0.40	0.14	1	10/04/14	10/04/14	KWG1413488	
Tetrachloroethene (PCE)	ND	U	0.50	0.20	0.099	1	10/04/14	10/04/14	KWG1413488	

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1410529
Project:	TO 01 JBLM	**Date Collected:**	09/23/2014
Sample Matrix:	Water	**Date Received:**	09/26/2014

Volatile Organic Compounds

Sample Name:	LGC140923MT3-1	**Units:**	ug/L
Lab Code:	K1410529-007	**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
2-Hexanone	ND	U	20	10	2.7	1	10/04/14	10/04/14	KWG1413488	
1,3-Dichloropropane	ND	U	0.50	0.30	0.14	1	10/04/14	10/04/14	KWG1413488	
Dibromochloromethane	ND	U	0.50	0.50	0.14	1	10/04/14	10/04/14	KWG1413488	
1,2-Dibromoethane (EDB)	ND	U	2.0	0.20	0.10	1	10/04/14	10/04/14	KWG1413488	
Chlorobenzene	ND	U	0.50	0.20	0.11	1	10/04/14	10/04/14	KWG1413488	
Ethylbenzene	ND	U	0.50	0.10	0.050	1	10/04/14	10/04/14	KWG1413488	
1,1,1,2-Tetrachloroethane	ND	U	0.50	0.20	0.11	1	10/04/14	10/04/14	KWG1413488	
m,p-Xylenes	ND	U	0.50	0.20	0.11	1	10/04/14	10/04/14	KWG1413488	
o-Xylene	ND	U	0.50	0.20	0.074	1	10/04/14	10/04/14	KWG1413488	
Styrene	ND	U	0.50	0.20	0.089	1	10/04/14	10/04/14	KWG1413488	
Bromoform	ND	U	0.50	0.50	0.16	1	10/04/14	10/04/14	KWG1413488	
Isopropylbenzene	ND	U	2.0	0.20	0.051	1	10/04/14	10/04/14	KWG1413488	
1,1,2,2-Tetrachloroethane	ND	U	0.50	0.20	0.16	1	10/04/14	10/04/14	KWG1413488	
Bromobenzene	ND	U	2.0	0.20	0.12	1	10/04/14	10/04/14	KWG1413488	
n-Propylbenzene	ND	U	2.0	0.20	0.054	1	10/04/14	10/04/14	KWG1413488	
1,2,3-Trichloropropane	ND	U	0.50	0.50	0.20	1	10/04/14	10/04/14	KWG1413488	
2-Chlorotoluene	ND	U	2.0	0.20	0.10	1	10/04/14	10/04/14	KWG1413488	
1,3,5-Trimethylbenzene	ND	U	2.0	0.20	0.089	1	10/04/14	10/04/14	KWG1413488	
4-Chlorotoluene	ND	U	2.0	0.20	0.13	1	10/04/14	10/04/14	KWG1413488	
tert-Butylbenzene	ND	U	2.0	0.20	0.059	1	10/04/14	10/04/14	KWG1413488	
1,2,4-Trimethylbenzene	ND	U	2.0	0.20	0.069	1	10/04/14	10/04/14	KWG1413488	
sec-Butylbenzene	ND	U	2.0	0.10	0.062	1	10/04/14	10/04/14	KWG1413488	
4-Isopropyltoluene	ND	U	2.0	0.20	0.060	1	10/04/14	10/04/14	KWG1413488	
1,3-Dichlorobenzene	ND	U	0.50	0.20	0.10	1	10/04/14	10/04/14	KWG1413488	
1,4-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	10/04/14	10/04/14	KWG1413488	
n-Butylbenzene	ND	U	2.0	0.10	0.054	1	10/04/14	10/04/14	KWG1413488	
1,2-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	10/04/14	10/04/14	KWG1413488	
1,2-Dibromo-3-chloropropane	ND	U	2.0	0.80	0.20	1	10/04/14	10/04/14	KWG1413488	
1,2,4-Trichlorobenzene	ND	U	2.0	0.30	0.096	1	10/04/14	10/04/14	KWG1413488	
Hexachlorobutadiene	ND	U	2.0	0.30	0.11	1	10/04/14	10/04/14	KWG1413488	
Naphthalene	ND	U	2.0	0.30	0.088	1	10/04/14	10/04/14	KWG1413488	
1,2,3-Trichlorobenzene	ND	U	2.0	0.40	0.11	1	10/04/14	10/04/14	KWG1413488	

* See Case Narrative

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1410529
Project:	TO 01 JBLM	**Date Collected:**	09/23/2014
Sample Matrix:	Water	**Date Received:**	09/26/2014

Volatile Organic Compounds

Sample Name:	LGC140923MT3-1	**Units:**	ug/L
Lab Code:	K1410529-007	**Basis:**	NA

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Dibromofluoromethane	94	85-115	10/04/14	Acceptable
1,2-Dichloroethane-d4	107	70-120	10/04/14	Acceptable
Toluene-d8	97	85-120	10/04/14	Acceptable
4-Bromofluorobenzene	92	75-120	10/04/14	Acceptable

Comments:

Analytical Results

Client: Sealaska Environmental Services, LLC
Project: TO 01 JBLM
Sample Matrix: Water

Service Request: K1410529
Date Collected: 09/23/2014
Date Received: 09/26/2014

Volatile Organic Compounds

Sample Name: LGC140923MT2-1
Lab Code: K1410529-008

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
Dichlorodifluoromethane	ND	U	0.50	0.20	0.13	1	10/04/14	10/04/14	KWG1413488	
Chloromethane	ND	U	0.50	0.20	0.068	1	10/04/14	10/04/14	KWG1413488	
Vinyl Chloride	ND	U	0.50	0.10	0.075	1	10/04/14	10/04/14	KWG1413488	
Bromomethane	ND	U	0.50	0.30	0.10	1	10/04/14	10/04/14	KWG1413488	*
Chloroethane	ND	U	0.50	0.20	0.16	1	10/04/14	10/04/14	KWG1413488	
Trichlorofluoromethane	ND	U	0.50	0.20	0.12	1	10/04/14	10/04/14	KWG1413488	
1,1-Dichloroethene	ND	U	0.50	0.20	0.080	1	10/04/14	10/04/14	KWG1413488	
Acetone	ND	U	20	10	3.3	1	10/04/14	10/04/14	KWG1413488	*
Carbon Disulfide	ND	U	0.50	0.20	0.069	1	10/04/14	10/04/14	KWG1413488	*
Methylene Chloride	ND	U	2.0	0.20	0.10	1	10/04/14	10/04/14	KWG1413488	
Methyl tert-Butyl Ether	ND	U	0.50	0.30	0.11	1	10/04/14	10/04/14	KWG1413488	
trans-1,2-Dichloroethene	**0.080**	J	0.50	0.20	0.072	1	10/04/14	10/04/14	KWG1413488	
1,1-Dichloroethane	ND	U	0.50	0.20	0.077	1	10/04/14	10/04/14	KWG1413488	
2,2-Dichloropropane	ND	U	0.50	0.20	0.060	1	10/04/14	10/04/14	KWG1413488	*
cis-1,2-Dichloroethene	**0.85**		0.50	0.20	0.067	1	10/04/14	10/04/14	KWG1413488	
2-Butanone (MEK)	ND	U	20	4.0	1.9	1	10/04/14	10/04/14	KWG1413488	
Bromochloromethane	ND	U	0.50	0.20	0.16	1	10/04/14	10/04/14	KWG1413488	
Chloroform	ND	U	0.50	0.20	0.072	1	10/04/14	10/04/14	KWG1413488	
1,1,1-Trichloroethane (TCA)	ND	U	0.50	0.20	0.075	1	10/04/14	10/04/14	KWG1413488	
Carbon Tetrachloride	ND	U	0.50	0.20	0.096	1	10/04/14	10/04/14	KWG1413488	
1,1-Dichloropropene	ND	U	0.50	0.20	0.089	1	10/04/14	10/04/14	KWG1413488	
Benzene	ND	U	0.50	0.10	0.062	1	10/04/14	10/04/14	KWG1413488	
1,2-Dichloroethane (EDC)	ND	U	0.50	0.15	0.080	1	10/04/14	10/04/14	KWG1413488	
Trichloroethene (TCE)	**11**		0.50	0.10	0.10	1	10/04/14	10/04/14	KWG1413488	
1,2-Dichloropropane	ND	U	0.50	0.20	0.095	1	10/04/14	10/04/14	KWG1413488	
Dibromomethane	ND	U	0.50	0.50	0.15	1	10/04/14	10/04/14	KWG1413488	
Bromodichloromethane	ND	U	0.50	0.30	0.091	1	10/04/14	10/04/14	KWG1413488	
cis-1,3-Dichloropropene	ND	U	0.50	0.20	0.18	1	10/04/14	10/04/14	KWG1413488	
4-Methyl-2-pentanone (MIBK)	ND	U	20	10	2.6	1	10/04/14	10/04/14	KWG1413488	
Toluene	ND	U	0.50	0.10	0.054	1	10/04/14	10/04/14	KWG1413488	
trans-1,3-Dichloropropene	ND	U	0.50	0.20	0.068	1	10/04/14	10/04/14	KWG1413488	
1,1,2-Trichloroethane	ND	U	0.50	0.40	0.14	1	10/04/14	10/04/14	KWG1413488	
Tetrachloroethene (PCE)	ND	U	0.50	0.20	0.099	1	10/04/14	10/04/14	KWG1413488	

Comments:

Analytical Results

Client: Sealaska Environmental Services, LLC
Project: TO 01 JBLM
Sample Matrix: Water

Service Request: K1410529
Date Collected: 09/23/2014
Date Received: 09/26/2014

Volatile Organic Compounds

Sample Name: LGC140923MT2-1
Lab Code: K1410529-008

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
2-Hexanone	ND	U	20	10	2.7	1	10/04/14	10/04/14	KWG1413488	
1,3-Dichloropropane	ND	U	0.50	0.30	0.14	1	10/04/14	10/04/14	KWG1413488	
Dibromochloromethane	ND	U	0.50	0.50	0.14	1	10/04/14	10/04/14	KWG1413488	
1,2-Dibromoethane (EDB)	ND	U	2.0	0.20	0.10	1	10/04/14	10/04/14	KWG1413488	
Chlorobenzene	ND	U	0.50	0.20	0.11	1	10/04/14	10/04/14	KWG1413488	
Ethylbenzene	ND	U	0.50	0.10	0.050	1	10/04/14	10/04/14	KWG1413488	
1,1,1,2-Tetrachloroethane	ND	U	0.50	0.20	0.11	1	10/04/14	10/04/14	KWG1413488	
m,p-Xylenes	ND	U	0.50	0.20	0.11	1	10/04/14	10/04/14	KWG1413488	
o-Xylene	ND	U	0.50	0.20	0.074	1	10/04/14	10/04/14	KWG1413488	
Styrene	ND	U	0.50	0.20	0.089	1	10/04/14	10/04/14	KWG1413488	
Bromoform	ND	U	0.50	0.50	0.16	1	10/04/14	10/04/14	KWG1413488	
Isopropylbenzene	ND	U	2.0	0.20	0.051	1	10/04/14	10/04/14	KWG1413488	
1,1,2,2-Tetrachloroethane	ND	U	0.50	0.20	0.16	1	10/04/14	10/04/14	KWG1413488	
Bromobenzene	ND	U	2.0	0.20	0.12	1	10/04/14	10/04/14	KWG1413488	
n-Propylbenzene	ND	U	2.0	0.20	0.054	1	10/04/14	10/04/14	KWG1413488	
1,2,3-Trichloropropane	ND	U	0.50	0.50	0.20	1	10/04/14	10/04/14	KWG1413488	
2-Chlorotoluene	ND	U	2.0	0.20	0.10	1	10/04/14	10/04/14	KWG1413488	
1,3,5-Trimethylbenzene	ND	U	2.0	0.20	0.089	1	10/04/14	10/04/14	KWG1413488	
4-Chlorotoluene	ND	U	2.0	0.20	0.13	1	10/04/14	10/04/14	KWG1413488	
tert-Butylbenzene	ND	U	2.0	0.20	0.059	1	10/04/14	10/04/14	KWG1413488	
1,2,4-Trimethylbenzene	ND	U	2.0	0.20	0.069	1	10/04/14	10/04/14	KWG1413488	
sec-Butylbenzene	ND	U	2.0	0.10	0.062	1	10/04/14	10/04/14	KWG1413488	
4-Isopropyltoluene	ND	U	2.0	0.20	0.060	1	10/04/14	10/04/14	KWG1413488	
1,3-Dichlorobenzene	ND	U	0.50	0.20	0.10	1	10/04/14	10/04/14	KWG1413488	
1,4-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	10/04/14	10/04/14	KWG1413488	
n-Butylbenzene	ND	U	2.0	0.10	0.054	1	10/04/14	10/04/14	KWG1413488	
1,2-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	10/04/14	10/04/14	KWG1413488	
1,2-Dibromo-3-chloropropane	ND	U	2.0	0.80	0.20	1	10/04/14	10/04/14	KWG1413488	
1,2,4-Trichlorobenzene	ND	U	2.0	0.30	0.096	1	10/04/14	10/04/14	KWG1413488	
Hexachlorobutadiene	ND	U	2.0	0.30	0.11	1	10/04/14	10/04/14	KWG1413488	
Naphthalene	ND	U	2.0	0.30	0.088	1	10/04/14	10/04/14	KWG1413488	
1,2,3-Trichlorobenzene	ND	U	2.0	0.40	0.11	1	10/04/14	10/04/14	KWG1413488	

* See Case Narrative

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1410529
Project:	TO 01 JBLM	**Date Collected:**	09/23/2014
Sample Matrix:	Water	**Date Received:**	09/26/2014

Volatile Organic Compounds

Sample Name:	LGC140923MT2-1	**Units:**	ug/L
Lab Code:	K1410529-008	**Basis:**	NA

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Dibromofluoromethane	91	85-115	10/04/14	Acceptable
1,2-Dichloroethane-d4	109	70-120	10/04/14	Acceptable
Toluene-d8	97	85-120	10/04/14	Acceptable
4-Bromofluorobenzene	90	75-120	10/04/14	Acceptable

Comments:

Analytical Results

Client: Sealaska Environmental Services, LLC
Project: TO 01 JBLM
Sample Matrix: Water

Service Request: K1410529
Date Collected: 09/23/2014
Date Received: 09/26/2014

Volatile Organic Compounds

Sample Name: LGC140923MT1-1
Lab Code: K1410529-009

Units: ug/L
Basis: NA

Extraction Method: EPA 5030B
Analysis Method: 8260C

Level: Low

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Dichlorodifluoromethane	ND	U	0.50	0.20	0.13	1	10/04/14	10/04/14	KWG1413488	
Chloromethane	ND	U	0.50	0.20	0.068	1	10/04/14	10/04/14	KWG1413488	
Vinyl Chloride	ND	U	0.50	0.10	0.075	1	10/04/14	10/04/14	KWG1413488	
Bromomethane	ND	U	0.50	0.30	0.10	1	10/04/14	10/04/14	KWG1413488	*
Chloroethane	ND	U	0.50	0.20	0.16	1	10/04/14	10/04/14	KWG1413488	
Trichlorofluoromethane	ND	U	0.50	0.20	0.12	1	10/04/14	10/04/14	KWG1413488	
1,1-Dichloroethene	ND	U	0.50	0.20	0.080	1	10/04/14	10/04/14	KWG1413488	
Acetone	ND	U	20	10	3.3	1	10/04/14	10/04/14	KWG1413488	*
Carbon Disulfide	ND	U	0.50	0.20	0.069	1	10/04/14	10/04/14	KWG1413488	*
Methylene Chloride	ND	U	2.0	0.20	0.10	1	10/04/14	10/04/14	KWG1413488	
Methyl tert-Butyl Ether	ND	U	0.50	0.30	0.11	1	10/04/14	10/04/14	KWG1413488	
trans-1,2-Dichloroethene	**0.36**	J	0.50	0.20	0.072	1	10/04/14	10/04/14	KWG1413488	
1,1-Dichloroethane	ND	U	0.50	0.20	0.077	1	10/04/14	10/04/14	KWG1413488	
2,2-Dichloropropane	ND	U	0.50	0.20	0.060	1	10/04/14	10/04/14	KWG1413488	*
cis-1,2-Dichloroethene	**0.83**		0.50	0.20	0.067	1	10/04/14	10/04/14	KWG1413488	
2-Butanone (MEK)	ND	U	20	4.0	1.9	1	10/04/14	10/04/14	KWG1413488	
Bromochloromethane	ND	U	0.50	0.20	0.16	1	10/04/14	10/04/14	KWG1413488	
Chloroform	ND	U	0.50	0.20	0.072	1	10/04/14	10/04/14	KWG1413488	
1,1,1-Trichloroethane (TCA)	ND	U	0.50	0.20	0.075	1	10/04/14	10/04/14	KWG1413488	
Carbon Tetrachloride	ND	U	0.50	0.20	0.096	1	10/04/14	10/04/14	KWG1413488	
1,1-Dichloropropene	ND	U	0.50	0.20	0.089	1	10/04/14	10/04/14	KWG1413488	
Benzene	ND	U	0.50	0.10	0.062	1	10/04/14	10/04/14	KWG1413488	
1,2-Dichloroethane (EDC)	ND	U	0.50	0.15	0.080	1	10/04/14	10/04/14	KWG1413488	
Trichloroethene (TCE)	**62**		0.50	0.10	0.10	1	10/04/14	10/04/14	KWG1413488	
1,2-Dichloropropane	ND	U	0.50	0.20	0.095	1	10/04/14	10/04/14	KWG1413488	
Dibromomethane	ND	U	0.50	0.50	0.15	1	10/04/14	10/04/14	KWG1413488	
Bromodichloromethane	ND	U	0.50	0.30	0.091	1	10/04/14	10/04/14	KWG1413488	
cis-1,3-Dichloropropene	ND	U	0.50	0.20	0.18	1	10/04/14	10/04/14	KWG1413488	
4-Methyl-2-pentanone (MIBK)	ND	U	20	10	2.6	1	10/04/14	10/04/14	KWG1413488	
Toluene	ND	U	0.50	0.10	0.054	1	10/04/14	10/04/14	KWG1413488	
trans-1,3-Dichloropropene	ND	U	0.50	0.20	0.068	1	10/04/14	10/04/14	KWG1413488	
1,1,2-Trichloroethane	ND	U	0.50	0.40	0.14	1	10/04/14	10/04/14	KWG1413488	
Tetrachloroethene (PCE)	ND	U	0.50	0.20	0.099	1	10/04/14	10/04/14	KWG1413488	

Comments:

Analytical Results

Client: Sealaska Environmental Services, LLC
Project: TO 01 JBLM
Sample Matrix: Water

Service Request: K1410529
Date Collected: 09/23/2014
Date Received: 09/26/2014

Volatile Organic Compounds

Sample Name: LGC140923MT1-1
Lab Code: K1410529-009

Units: ug/L
Basis: NA

Extraction Method: EPA 5030B
Analysis Method: 8260C

Level: Low

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
2-Hexanone	ND	U	20	10	2.7	1	10/04/14	10/04/14	KWG1413488	
1,3-Dichloropropane	ND	U	0.50	0.30	0.14	1	10/04/14	10/04/14	KWG1413488	
Dibromochloromethane	ND	U	0.50	0.50	0.14	1	10/04/14	10/04/14	KWG1413488	
1,2-Dibromoethane (EDB)	ND	U	2.0	0.20	0.10	1	10/04/14	10/04/14	KWG1413488	
Chlorobenzene	ND	U	0.50	0.20	0.11	1	10/04/14	10/04/14	KWG1413488	
Ethylbenzene	ND	U	0.50	0.10	0.050	1	10/04/14	10/04/14	KWG1413488	
1,1,1,2-Tetrachloroethane	ND	U	0.50	0.20	0.11	1	10/04/14	10/04/14	KWG1413488	
m,p-Xylenes	ND	U	0.50	0.20	0.11	1	10/04/14	10/04/14	KWG1413488	
o-Xylene	ND	U	0.50	0.20	0.074	1	10/04/14	10/04/14	KWG1413488	
Styrene	ND	U	0.50	0.20	0.089	1	10/04/14	10/04/14	KWG1413488	
Bromoform	ND	U	0.50	0.50	0.16	1	10/04/14	10/04/14	KWG1413488	
Isopropylbenzene	ND	U	2.0	0.20	0.051	1	10/04/14	10/04/14	KWG1413488	
1,1,2,2-Tetrachloroethane	ND	U	0.50	0.20	0.16	1	10/04/14	10/04/14	KWG1413488	
Bromobenzene	ND	U	2.0	0.20	0.12	1	10/04/14	10/04/14	KWG1413488	
n-Propylbenzene	ND	U	2.0	0.20	0.054	1	10/04/14	10/04/14	KWG1413488	
1,2,3-Trichloropropane	ND	U	0.50	0.50	0.20	1	10/04/14	10/04/14	KWG1413488	
2-Chlorotoluene	ND	U	2.0	0.20	0.10	1	10/04/14	10/04/14	KWG1413488	
1,3,5-Trimethylbenzene	ND	U	2.0	0.20	0.089	1	10/04/14	10/04/14	KWG1413488	
4-Chlorotoluene	ND	U	2.0	0.20	0.13	1	10/04/14	10/04/14	KWG1413488	
tert-Butylbenzene	ND	U	2.0	0.20	0.059	1	10/04/14	10/04/14	KWG1413488	
1,2,4-Trimethylbenzene	ND	U	2.0	0.20	0.069	1	10/04/14	10/04/14	KWG1413488	
sec-Butylbenzene	ND	U	2.0	0.10	0.062	1	10/04/14	10/04/14	KWG1413488	
4-Isopropyltoluene	ND	U	2.0	0.20	0.060	1	10/04/14	10/04/14	KWG1413488	
1,3-Dichlorobenzene	ND	U	0.50	0.20	0.10	1	10/04/14	10/04/14	KWG1413488	
1,4-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	10/04/14	10/04/14	KWG1413488	
n-Butylbenzene	ND	U	2.0	0.10	0.054	1	10/04/14	10/04/14	KWG1413488	
1,2-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	10/04/14	10/04/14	KWG1413488	
1,2-Dibromo-3-chloropropane	ND	U	2.0	0.80	0.20	1	10/04/14	10/04/14	KWG1413488	
1,2,4-Trichlorobenzene	ND	U	2.0	0.30	0.096	1	10/04/14	10/04/14	KWG1413488	
Hexachlorobutadiene	ND	U	2.0	0.30	0.11	1	10/04/14	10/04/14	KWG1413488	
Naphthalene	ND	U	2.0	0.30	0.088	1	10/04/14	10/04/14	KWG1413488	
1,2,3-Trichlorobenzene	ND	U	2.0	0.40	0.11	1	10/04/14	10/04/14	KWG1413488	

* See Case Narrative

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1410529
Project:	TO 01 JBLM	**Date Collected:**	09/23/2014
Sample Matrix:	Water	**Date Received:**	09/26/2014

Volatile Organic Compounds

Sample Name:	LGC140923MT1-1	**Units:**	ug/L
Lab Code:	K1410529-009	**Basis:**	NA

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Dibromofluoromethane	93	85-115	10/04/14	Acceptable
1,2-Dichloroethane-d4	107	70-120	10/04/14	Acceptable
Toluene-d8	97	85-120	10/04/14	Acceptable
4-Bromofluorobenzene	91	75-120	10/04/14	Acceptable

Comments:

Analytical Results

Client: Sealaska Environmental Services, LLC
Project: TO 01 JBLM
Sample Matrix: Water

Service Request: K1410529
Date Collected: 09/24/2014
Date Received: 09/26/2014

Volatile Organic Compounds

Sample Name: LGC140924FL1-1
Lab Code: K1410529-010

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
Dichlorodifluoromethane	ND	U	0.50	0.20	0.13	1	10/06/14	10/06/14	KWG1413516	
Chloromethane	ND	U	0.50	0.20	0.068	1	10/06/14	10/06/14	KWG1413516	
Vinyl Chloride	ND	U	0.50	0.10	0.075	1	10/06/14	10/06/14	KWG1413516	
Bromomethane	ND	U	0.50	0.30	0.10	1	10/06/14	10/06/14	KWG1413516	
Chloroethane	ND	U	0.50	0.20	0.16	1	10/06/14	10/06/14	KWG1413516	
Trichlorofluoromethane	ND	U	0.50	0.20	0.12	1	10/06/14	10/06/14	KWG1413516	
1,1-Dichloroethene	ND	U	0.50	0.20	0.080	1	10/06/14	10/06/14	KWG1413516	
Acetone	**3.3**	J	20	10	3.3	1	10/06/14	10/06/14	KWG1413516	*
Carbon Disulfide	ND	U	0.50	0.20	0.069	1	10/06/14	10/06/14	KWG1413516	*
Methylene Chloride	ND	U	2.0	0.20	0.10	1	10/06/14	10/06/14	KWG1413516	
Methyl tert-Butyl Ether	ND	U	0.50	0.30	0.11	1	10/06/14	10/06/14	KWG1413516	
trans-1,2-Dichloroethene	ND	U	0.50	0.20	0.072	1	10/06/14	10/06/14	KWG1413516	
1,1-Dichloroethane	ND	U	0.50	0.20	0.077	1	10/06/14	10/06/14	KWG1413516	
2,2-Dichloropropane	ND	U	0.50	0.20	0.060	1	10/06/14	10/06/14	KWG1413516	*
cis-1,2-Dichloroethene	**0.31**	J	0.50	0.20	0.067	1	10/06/14	10/06/14	KWG1413516	
2-Butanone (MEK)	ND	U	20	4.0	1.9	1	10/06/14	10/06/14	KWG1413516	
Bromochloromethane	ND	U	0.50	0.20	0.16	1	10/06/14	10/06/14	KWG1413516	
Chloroform	ND	U	0.50	0.20	0.072	1	10/06/14	10/06/14	KWG1413516	
1,1,1-Trichloroethane (TCA)	ND	U	0.50	0.20	0.075	1	10/06/14	10/06/14	KWG1413516	
Carbon Tetrachloride	ND	U	0.50	0.20	0.096	1	10/06/14	10/06/14	KWG1413516	
1,1-Dichloropropene	ND	U	0.50	0.20	0.089	1	10/06/14	10/06/14	KWG1413516	
Benzene	ND	U	0.50	0.10	0.062	1	10/06/14	10/06/14	KWG1413516	
1,2-Dichloroethane (EDC)	ND	U	0.50	0.15	0.080	1	10/06/14	10/06/14	KWG1413516	
Trichloroethene (TCE)	**11**		0.50	0.10	0.10	1	10/06/14	10/06/14	KWG1413516	
1,2-Dichloropropane	ND	U	0.50	0.20	0.095	1	10/06/14	10/06/14	KWG1413516	
Dibromomethane	ND	U	0.50	0.50	0.15	1	10/06/14	10/06/14	KWG1413516	
Bromodichloromethane	ND	U	0.50	0.30	0.091	1	10/06/14	10/06/14	KWG1413516	
cis-1,3-Dichloropropene	ND	U	0.50	0.20	0.18	1	10/06/14	10/06/14	KWG1413516	
4-Methyl-2-pentanone (MIBK)	ND	U	20	10	2.6	1	10/06/14	10/06/14	KWG1413516	
Toluene	ND	U	0.50	0.10	0.054	1	10/06/14	10/06/14	KWG1413516	
trans-1,3-Dichloropropene	ND	U	0.50	0.20	0.068	1	10/06/14	10/06/14	KWG1413516	
1,1,2-Trichloroethane	ND	U	0.50	0.40	0.14	1	10/06/14	10/06/14	KWG1413516	
Tetrachloroethene (PCE)	ND	U	0.50	0.20	0.099	1	10/06/14	10/06/14	KWG1413516	

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1410529
Project:	TO 01 JBLM	**Date Collected:**	09/24/2014
Sample Matrix:	Water	**Date Received:**	09/26/2014

Volatile Organic Compounds

Sample Name:	LGC140924FL1-1	**Units:**	ug/L
Lab Code:	K1410529-010	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8260C		

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
2-Hexanone	ND	U	20	10	2.7	1	10/06/14	10/06/14	KWG1413516	
1,3-Dichloropropane	ND	U	0.50	0.30	0.14	1	10/06/14	10/06/14	KWG1413516	
Dibromochloromethane	ND	U	0.50	0.50	0.14	1	10/06/14	10/06/14	KWG1413516	
1,2-Dibromoethane (EDB)	ND	U	2.0	0.20	0.10	1	10/06/14	10/06/14	KWG1413516	
Chlorobenzene	ND	U	0.50	0.20	0.11	1	10/06/14	10/06/14	KWG1413516	
Ethylbenzene	ND	U	0.50	0.10	0.050	1	10/06/14	10/06/14	KWG1413516	
1,1,1,2-Tetrachloroethane	ND	U	0.50	0.20	0.11	1	10/06/14	10/06/14	KWG1413516	
m,p-Xylenes	ND	U	0.50	0.20	0.11	1	10/06/14	10/06/14	KWG1413516	
o-Xylene	ND	U	0.50	0.20	0.074	1	10/06/14	10/06/14	KWG1413516	
Styrene	ND	U	0.50	0.20	0.089	1	10/06/14	10/06/14	KWG1413516	
Bromoform	ND	U	0.50	0.50	0.16	1	10/06/14	10/06/14	KWG1413516	
Isopropylbenzene	ND	U	2.0	0.20	0.051	1	10/06/14	10/06/14	KWG1413516	
1,1,2,2-Tetrachloroethane	ND	U	0.50	0.20	0.16	1	10/06/14	10/06/14	KWG1413516	
Bromobenzene	ND	U	2.0	0.20	0.12	1	10/06/14	10/06/14	KWG1413516	
n-Propylbenzene	ND	U	2.0	0.20	0.054	1	10/06/14	10/06/14	KWG1413516	
1,2,3-Trichloropropane	ND	U	0.50	0.50	0.20	1	10/06/14	10/06/14	KWG1413516	
2-Chlorotoluene	ND	U	2.0	0.20	0.10	1	10/06/14	10/06/14	KWG1413516	
1,3,5-Trimethylbenzene	ND	U	2.0	0.20	0.089	1	10/06/14	10/06/14	KWG1413516	
4-Chlorotoluene	ND	U	2.0	0.20	0.13	1	10/06/14	10/06/14	KWG1413516	
tert-Butylbenzene	ND	U	2.0	0.20	0.059	1	10/06/14	10/06/14	KWG1413516	
1,2,4-Trimethylbenzene	ND	U	2.0	0.20	0.069	1	10/06/14	10/06/14	KWG1413516	
sec-Butylbenzene	ND	U	2.0	0.10	0.062	1	10/06/14	10/06/14	KWG1413516	
4-Isopropyltoluene	ND	U	2.0	0.20	0.060	1	10/06/14	10/06/14	KWG1413516	
1,3-Dichlorobenzene	ND	U	0.50	0.20	0.10	1	10/06/14	10/06/14	KWG1413516	
1,4-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	10/06/14	10/06/14	KWG1413516	
n-Butylbenzene	ND	U	2.0	0.10	0.054	1	10/06/14	10/06/14	KWG1413516	
1,2-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	10/06/14	10/06/14	KWG1413516	
1,2-Dibromo-3-chloropropane	ND	U	2.0	0.80	0.20	1	10/06/14	10/06/14	KWG1413516	
1,2,4-Trichlorobenzene	ND	U	2.0	0.30	0.096	1	10/06/14	10/06/14	KWG1413516	
Hexachlorobutadiene	ND	U	2.0	0.30	0.11	1	10/06/14	10/06/14	KWG1413516	
Naphthalene	ND	U	2.0	0.30	0.088	1	10/06/14	10/06/14	KWG1413516	
1,2,3-Trichlorobenzene	ND	U	2.0	0.40	0.11	1	10/06/14	10/06/14	KWG1413516	

* See Case Narrative

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1410529
Project:	TO 01 JBLM	**Date Collected:**	09/24/2014
Sample Matrix:	Water	**Date Received:**	09/26/2014

Volatile Organic Compounds

Sample Name:	LGC140924FL1-1	**Units:**	ug/L
Lab Code:	K1410529-010	**Basis:**	NA

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Dibromofluoromethane	93	85-115	10/06/14	Acceptable
1,2-Dichloroethane-d4	109	70-120	10/06/14	Acceptable
Toluene-d8	96	85-120	10/06/14	Acceptable
4-Bromofluorobenzene	93	75-120	10/06/14	Acceptable

Comments:

Analytical Results

Client: Sealaska Environmental Services, LLC
Project: TO 01 JBLM
Sample Matrix: Water

Service Request: K1410529
Date Collected: 09/24/2014
Date Received: 09/26/2014

Volatile Organic Compounds

Sample Name: LGC140924LC218-1
Lab Code: K1410529-011

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
Dichlorodifluoromethane	ND	U	0.50	0.20	0.13	1	10/06/14	10/06/14	KWG1413516	
Chloromethane	ND	U	0.50	0.20	0.068	1	10/06/14	10/06/14	KWG1413516	
Vinyl Chloride	ND	U	0.50	0.10	0.075	1	10/06/14	10/06/14	KWG1413516	
Bromomethane	ND	U	0.50	0.30	0.10	1	10/06/14	10/06/14	KWG1413516	
Chloroethane	ND	U	0.50	0.20	0.16	1	10/06/14	10/06/14	KWG1413516	
Trichlorofluoromethane	ND	U	0.50	0.20	0.12	1	10/06/14	10/06/14	KWG1413516	
1,1-Dichloroethene	ND	U	0.50	0.20	0.080	1	10/06/14	10/06/14	KWG1413516	
Acetone	ND	U	20	10	3.3	1	10/06/14	10/06/14	KWG1413516	*
Carbon Disulfide	ND	U	0.50	0.20	0.069	1	10/06/14	10/06/14	KWG1413516	*
Methylene Chloride	ND	U	2.0	0.20	0.10	1	10/06/14	10/06/14	KWG1413516	
Methyl tert-Butyl Ether	ND	U	0.50	0.30	0.11	1	10/06/14	10/06/14	KWG1413516	
trans-1,2-Dichloroethene	ND	U	0.50	0.20	0.072	1	10/06/14	10/06/14	KWG1413516	
1,1-Dichloroethane	ND	U	0.50	0.20	0.077	1	10/06/14	10/06/14	KWG1413516	
2,2-Dichloropropane	ND	U	0.50	0.20	0.060	1	10/06/14	10/06/14	KWG1413516	*
cis-1,2-Dichloroethene	**0.51**		0.50	0.20	0.067	1	10/06/14	10/06/14	KWG1413516	
2-Butanone (MEK)	ND	U	20	4.0	1.9	1	10/06/14	10/06/14	KWG1413516	
Bromochloromethane	ND	U	0.50	0.20	0.16	1	10/06/14	10/06/14	KWG1413516	
Chloroform	ND	U	0.50	0.20	0.072	1	10/06/14	10/06/14	KWG1413516	
1,1,1-Trichloroethane (TCA)	ND	U	0.50	0.20	0.075	1	10/06/14	10/06/14	KWG1413516	
Carbon Tetrachloride	ND	U	0.50	0.20	0.096	1	10/06/14	10/06/14	KWG1413516	
1,1-Dichloropropene	ND	U	0.50	0.20	0.089	1	10/06/14	10/06/14	KWG1413516	
Benzene	ND	U	0.50	0.10	0.062	1	10/06/14	10/06/14	KWG1413516	
1,2-Dichloroethane (EDC)	ND	U	0.50	0.15	0.080	1	10/06/14	10/06/14	KWG1413516	
Trichloroethene (TCE)	**33**		0.50	0.10	0.10	1	10/06/14	10/06/14	KWG1413516	
1,2-Dichloropropane	ND	U	0.50	0.20	0.095	1	10/06/14	10/06/14	KWG1413516	
Dibromomethane	ND	U	0.50	0.50	0.15	1	10/06/14	10/06/14	KWG1413516	
Bromodichloromethane	ND	U	0.50	0.30	0.091	1	10/06/14	10/06/14	KWG1413516	
cis-1,3-Dichloropropene	ND	U	0.50	0.20	0.18	1	10/06/14	10/06/14	KWG1413516	
4-Methyl-2-pentanone (MIBK)	ND	U	20	10	2.6	1	10/06/14	10/06/14	KWG1413516	
Toluene	ND	U	0.50	0.10	0.054	1	10/06/14	10/06/14	KWG1413516	
trans-1,3-Dichloropropene	ND	U	0.50	0.20	0.068	1	10/06/14	10/06/14	KWG1413516	
1,1,2-Trichloroethane	ND	U	0.50	0.40	0.14	1	10/06/14	10/06/14	KWG1413516	
Tetrachloroethene (PCE)	ND	U	0.50	0.20	0.099	1	10/06/14	10/06/14	KWG1413516	

Comments:

Analytical Results

Client: Sealaska Environmental Services, LLC
Project: TO 01 JBLM
Sample Matrix: Water

Service Request: K1410529
Date Collected: 09/24/2014
Date Received: 09/26/2014

Volatile Organic Compounds

Sample Name: LGC140924LC218-1
Lab Code: K1410529-011

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
2-Hexanone	ND	U	20	10	2.7	1	10/06/14	10/06/14	KWG1413516	
1,3-Dichloropropane	ND	U	0.50	0.30	0.14	1	10/06/14	10/06/14	KWG1413516	
Dibromochloromethane	ND	U	0.50	0.50	0.14	1	10/06/14	10/06/14	KWG1413516	
1,2-Dibromoethane (EDB)	ND	U	2.0	0.20	0.10	1	10/06/14	10/06/14	KWG1413516	
Chlorobenzene	ND	U	0.50	0.20	0.11	1	10/06/14	10/06/14	KWG1413516	
Ethylbenzene	ND	U	0.50	0.10	0.050	1	10/06/14	10/06/14	KWG1413516	
1,1,1,2-Tetrachloroethane	ND	U	0.50	0.20	0.11	1	10/06/14	10/06/14	KWG1413516	
m,p-Xylenes	ND	U	0.50	0.20	0.11	1	10/06/14	10/06/14	KWG1413516	
o-Xylene	ND	U	0.50	0.20	0.074	1	10/06/14	10/06/14	KWG1413516	
Styrene	ND	U	0.50	0.20	0.089	1	10/06/14	10/06/14	KWG1413516	
Bromoform	ND	U	0.50	0.50	0.16	1	10/06/14	10/06/14	KWG1413516	
Isopropylbenzene	ND	U	2.0	0.20	0.051	1	10/06/14	10/06/14	KWG1413516	
1,1,2,2-Tetrachloroethane	ND	U	0.50	0.20	0.16	1	10/06/14	10/06/14	KWG1413516	
Bromobenzene	ND	U	2.0	0.20	0.12	1	10/06/14	10/06/14	KWG1413516	
n-Propylbenzene	ND	U	2.0	0.20	0.054	1	10/06/14	10/06/14	KWG1413516	
1,2,3-Trichloropropane	ND	U	0.50	0.50	0.20	1	10/06/14	10/06/14	KWG1413516	
2-Chlorotoluene	ND	U	2.0	0.20	0.10	1	10/06/14	10/06/14	KWG1413516	
1,3,5-Trimethylbenzene	ND	U	2.0	0.20	0.089	1	10/06/14	10/06/14	KWG1413516	
4-Chlorotoluene	ND	U	2.0	0.20	0.13	1	10/06/14	10/06/14	KWG1413516	
tert-Butylbenzene	ND	U	2.0	0.20	0.059	1	10/06/14	10/06/14	KWG1413516	
1,2,4-Trimethylbenzene	ND	U	2.0	0.20	0.069	1	10/06/14	10/06/14	KWG1413516	
sec-Butylbenzene	ND	U	2.0	0.10	0.062	1	10/06/14	10/06/14	KWG1413516	
4-Isopropyltoluene	ND	U	2.0	0.20	0.060	1	10/06/14	10/06/14	KWG1413516	
1,3-Dichlorobenzene	ND	U	0.50	0.20	0.10	1	10/06/14	10/06/14	KWG1413516	
1,4-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	10/06/14	10/06/14	KWG1413516	
n-Butylbenzene	ND	U	2.0	0.10	0.054	1	10/06/14	10/06/14	KWG1413516	
1,2-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	10/06/14	10/06/14	KWG1413516	
1,2-Dibromo-3-chloropropane	ND	U	2.0	0.80	0.20	1	10/06/14	10/06/14	KWG1413516	
1,2,4-Trichlorobenzene	ND	U	2.0	0.30	0.096	1	10/06/14	10/06/14	KWG1413516	
Hexachlorobutadiene	ND	U	2.0	0.30	0.11	1	10/06/14	10/06/14	KWG1413516	
Naphthalene	ND	U	2.0	0.30	0.088	1	10/06/14	10/06/14	KWG1413516	
1,2,3-Trichlorobenzene	ND	U	2.0	0.40	0.11	1	10/06/14	10/06/14	KWG1413516	

* See Case Narrative

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1410529
Project:	TO 01 JBLM	**Date Collected:**	09/24/2014
Sample Matrix:	Water	**Date Received:**	09/26/2014

Volatile Organic Compounds

Sample Name:	LGC140924LC218-1	**Units:**	ug/L
Lab Code:	K1410529-011	**Basis:**	NA

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Dibromofluoromethane	94	85-115	10/06/14	Acceptable
1,2-Dichloroethane-d4	108	70-120	10/06/14	Acceptable
Toluene-d8	99	85-120	10/06/14	Acceptable
4-Bromofluorobenzene	89	75-120	10/06/14	Acceptable

Comments:

Analytical Results

Client: Sealaska Environmental Services, LLC
Project: TO 01 JBLM
Sample Matrix: Water

Service Request: K1410529
Date Collected: 09/24/2014
Date Received: 09/26/2014

Volatile Organic Compounds

Sample Name: LGC140924LC224-1
Lab Code: K1410529-012

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
Dichlorodifluoromethane	ND	U	0.50	0.20	0.13	1	10/06/14	10/06/14	KWG1413516	
Chloromethane	ND	U	0.50	0.20	0.068	1	10/06/14	10/06/14	KWG1413516	
Vinyl Chloride	ND	U	0.50	0.10	0.075	1	10/06/14	10/06/14	KWG1413516	
Bromomethane	ND	U	0.50	0.30	0.10	1	10/06/14	10/06/14	KWG1413516	
Chloroethane	ND	U	0.50	0.20	0.16	1	10/06/14	10/06/14	KWG1413516	
Trichlorofluoromethane	ND	U	0.50	0.20	0.12	1	10/06/14	10/06/14	KWG1413516	
1,1-Dichloroethene	ND	U	0.50	0.20	0.080	1	10/06/14	10/06/14	KWG1413516	
Acetone	ND	U	20	10	3.3	1	10/06/14	10/06/14	KWG1413516	*
Carbon Disulfide	ND	U	0.50	0.20	0.069	1	10/06/14	10/06/14	KWG1413516	*
Methylene Chloride	ND	U	2.0	0.20	0.10	1	10/06/14	10/06/14	KWG1413516	
Methyl tert-Butyl Ether	ND	U	0.50	0.30	0.11	1	10/06/14	10/06/14	KWG1413516	
trans-1,2-Dichloroethene	ND	U	0.50	0.20	0.072	1	10/06/14	10/06/14	KWG1413516	
1,1-Dichloroethane	ND	U	0.50	0.20	0.077	1	10/06/14	10/06/14	KWG1413516	
2,2-Dichloropropane	ND	U	0.50	0.20	0.060	1	10/06/14	10/06/14	KWG1413516	*
cis-1,2-Dichloroethene	**0.37**	J	0.50	0.20	0.067	1	10/06/14	10/06/14	KWG1413516	
2-Butanone (MEK)	ND	U	20	4.0	1.9	1	10/06/14	10/06/14	KWG1413516	
Bromochloromethane	ND	U	0.50	0.20	0.16	1	10/06/14	10/06/14	KWG1413516	
Chloroform	ND	U	0.50	0.20	0.072	1	10/06/14	10/06/14	KWG1413516	
1,1,1-Trichloroethane (TCA)	ND	U	0.50	0.20	0.075	1	10/06/14	10/06/14	KWG1413516	
Carbon Tetrachloride	ND	U	0.50	0.20	0.096	1	10/06/14	10/06/14	KWG1413516	
1,1-Dichloropropene	ND	U	0.50	0.20	0.089	1	10/06/14	10/06/14	KWG1413516	
Benzene	ND	U	0.50	0.10	0.062	1	10/06/14	10/06/14	KWG1413516	
1,2-Dichloroethane (EDC)	ND	U	0.50	0.15	0.080	1	10/06/14	10/06/14	KWG1413516	
Trichloroethene (TCE)	**19**		0.50	0.10	0.10	1	10/06/14	10/06/14	KWG1413516	
1,2-Dichloropropane	ND	U	0.50	0.20	0.095	1	10/06/14	10/06/14	KWG1413516	
Dibromomethane	ND	U	0.50	0.50	0.15	1	10/06/14	10/06/14	KWG1413516	
Bromodichloromethane	ND	U	0.50	0.30	0.091	1	10/06/14	10/06/14	KWG1413516	
cis-1,3-Dichloropropene	ND	U	0.50	0.20	0.18	1	10/06/14	10/06/14	KWG1413516	
4-Methyl-2-pentanone (MIBK)	ND	U	20	10	2.6	1	10/06/14	10/06/14	KWG1413516	
Toluene	ND	U	0.50	0.10	0.054	1	10/06/14	10/06/14	KWG1413516	
trans-1,3-Dichloropropene	ND	U	0.50	0.20	0.068	1	10/06/14	10/06/14	KWG1413516	
1,1,2-Trichloroethane	ND	U	0.50	0.40	0.14	1	10/06/14	10/06/14	KWG1413516	
Tetrachloroethene (PCE)	ND	U	0.50	0.20	0.099	1	10/06/14	10/06/14	KWG1413516	

Comments:

Analytical Results

Client: Sealaska Environmental Services, LLC
Project: TO 01 JBLM
Sample Matrix: Water

Service Request: K1410529
Date Collected: 09/24/2014
Date Received: 09/26/2014

Volatile Organic Compounds

Sample Name: LGC140924LC224-1
Lab Code: K1410529-012

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
2-Hexanone	ND	U	20	10	2.7	1	10/06/14	10/06/14	KWG1413516	
1,3-Dichloropropane	ND	U	0.50	0.30	0.14	1	10/06/14	10/06/14	KWG1413516	
Dibromochloromethane	ND	U	0.50	0.50	0.14	1	10/06/14	10/06/14	KWG1413516	
1,2-Dibromoethane (EDB)	ND	U	2.0	0.20	0.10	1	10/06/14	10/06/14	KWG1413516	
Chlorobenzene	ND	U	0.50	0.20	0.11	1	10/06/14	10/06/14	KWG1413516	
Ethylbenzene	ND	U	0.50	0.10	0.050	1	10/06/14	10/06/14	KWG1413516	
1,1,1,2-Tetrachloroethane	ND	U	0.50	0.20	0.11	1	10/06/14	10/06/14	KWG1413516	
m,p-Xylenes	ND	U	0.50	0.20	0.11	1	10/06/14	10/06/14	KWG1413516	
o-Xylene	ND	U	0.50	0.20	0.074	1	10/06/14	10/06/14	KWG1413516	
Styrene	ND	U	0.50	0.20	0.089	1	10/06/14	10/06/14	KWG1413516	
Bromoform	ND	U	0.50	0.50	0.16	1	10/06/14	10/06/14	KWG1413516	
Isopropylbenzene	ND	U	2.0	0.20	0.051	1	10/06/14	10/06/14	KWG1413516	
1,1,2,2-Tetrachloroethane	ND	U	0.50	0.20	0.16	1	10/06/14	10/06/14	KWG1413516	
Bromobenzene	ND	U	2.0	0.20	0.12	1	10/06/14	10/06/14	KWG1413516	
n-Propylbenzene	ND	U	2.0	0.20	0.054	1	10/06/14	10/06/14	KWG1413516	
1,2,3-Trichloropropane	ND	U	0.50	0.50	0.20	1	10/06/14	10/06/14	KWG1413516	
2-Chlorotoluene	ND	U	2.0	0.20	0.10	1	10/06/14	10/06/14	KWG1413516	
1,3,5-Trimethylbenzene	ND	U	2.0	0.20	0.089	1	10/06/14	10/06/14	KWG1413516	
4-Chlorotoluene	ND	U	2.0	0.20	0.13	1	10/06/14	10/06/14	KWG1413516	
tert-Butylbenzene	ND	U	2.0	0.20	0.059	1	10/06/14	10/06/14	KWG1413516	
1,2,4-Trimethylbenzene	ND	U	2.0	0.20	0.069	1	10/06/14	10/06/14	KWG1413516	
sec-Butylbenzene	ND	U	2.0	0.10	0.062	1	10/06/14	10/06/14	KWG1413516	
4-Isopropyltoluene	ND	U	2.0	0.20	0.060	1	10/06/14	10/06/14	KWG1413516	
1,3-Dichlorobenzene	ND	U	0.50	0.20	0.10	1	10/06/14	10/06/14	KWG1413516	
1,4-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	10/06/14	10/06/14	KWG1413516	
n-Butylbenzene	ND	U	2.0	0.10	0.054	1	10/06/14	10/06/14	KWG1413516	
1,2-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	10/06/14	10/06/14	KWG1413516	
1,2-Dibromo-3-chloropropane	ND	U	2.0	0.80	0.20	1	10/06/14	10/06/14	KWG1413516	
1,2,4-Trichlorobenzene	ND	U	2.0	0.30	0.096	1	10/06/14	10/06/14	KWG1413516	
Hexachlorobutadiene	ND	U	2.0	0.30	0.11	1	10/06/14	10/06/14	KWG1413516	
Naphthalene	ND	U	2.0	0.30	0.088	1	10/06/14	10/06/14	KWG1413516	
1,2,3-Trichlorobenzene	ND	U	2.0	0.40	0.11	1	10/06/14	10/06/14	KWG1413516	

* See Case Narrative

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1410529
Project:	TO 01 JBLM	**Date Collected:**	09/24/2014
Sample Matrix:	Water	**Date Received:**	09/26/2014

Volatile Organic Compounds

Sample Name:	LGC140924LC224-1	**Units:**	ug/L
Lab Code:	K1410529-012	**Basis:**	NA

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Dibromofluoromethane	95	85-115	10/06/14	Acceptable
1,2-Dichloroethane-d4	110	70-120	10/06/14	Acceptable
Toluene-d8	98	85-120	10/06/14	Acceptable
4-Bromofluorobenzene	91	75-120	10/06/14	Acceptable

Comments:

Analytical Results

Client: Sealaska Environmental Services, LLC
Project: TO 01 JBLM
Sample Matrix: Water

Service Request: K1410529
Date Collected: 09/24/2014
Date Received: 09/26/2014

Volatile Organic Compounds

Sample Name: LGC140924LC01-1
Lab Code: K1410529-013

Units: ug/L
Basis: NA

Extraction Method: EPA 5030B
Analysis Method: 8260C

Level: Low

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Dichlorodifluoromethane	ND	U	0.50	0.20	0.13	1	10/06/14	10/06/14	KWG1413516	
Chloromethane	ND	U	0.50	0.20	0.068	1	10/06/14	10/06/14	KWG1413516	
Vinyl Chloride	ND	U	0.50	0.10	0.075	1	10/06/14	10/06/14	KWG1413516	
Bromomethane	ND	U	0.50	0.30	0.10	1	10/06/14	10/06/14	KWG1413516	
Chloroethane	ND	U	0.50	0.20	0.16	1	10/06/14	10/06/14	KWG1413516	
Trichlorofluoromethane	ND	U	0.50	0.20	0.12	1	10/06/14	10/06/14	KWG1413516	
1,1-Dichloroethene	ND	U	0.50	0.20	0.080	1	10/06/14	10/06/14	KWG1413516	
Acetone	ND	U	20	10	3.3	1	10/06/14	10/06/14	KWG1413516	*
Carbon Disulfide	ND	U	0.50	0.20	0.069	1	10/06/14	10/06/14	KWG1413516	*
Methylene Chloride	ND	U	2.0	0.20	0.10	1	10/06/14	10/06/14	KWG1413516	
Methyl tert-Butyl Ether	ND	U	0.50	0.30	0.11	1	10/06/14	10/06/14	KWG1413516	
trans-1,2-Dichloroethene	ND	U	0.50	0.20	0.072	1	10/06/14	10/06/14	KWG1413516	
1,1-Dichloroethane	ND	U	0.50	0.20	0.077	1	10/06/14	10/06/14	KWG1413516	
2,2-Dichloropropane	ND	U	0.50	0.20	0.060	1	10/06/14	10/06/14	KWG1413516	*
cis-1,2-Dichloroethene	ND	U	0.50	0.20	0.067	1	10/06/14	10/06/14	KWG1413516	
2-Butanone (MEK)	ND	U	20	4.0	1.9	1	10/06/14	10/06/14	KWG1413516	
Bromochloromethane	ND	U	0.50	0.20	0.16	1	10/06/14	10/06/14	KWG1413516	
Chloroform	ND	U	0.50	0.20	0.072	1	10/06/14	10/06/14	KWG1413516	
1,1,1-Trichloroethane (TCA)	ND	U	0.50	0.20	0.075	1	10/06/14	10/06/14	KWG1413516	
Carbon Tetrachloride	ND	U	0.50	0.20	0.096	1	10/06/14	10/06/14	KWG1413516	
1,1-Dichloropropene	ND	U	0.50	0.20	0.089	1	10/06/14	10/06/14	KWG1413516	
Benzene	ND	U	0.50	0.10	0.062	1	10/06/14	10/06/14	KWG1413516	
1,2-Dichloroethane (EDC)	ND	U	0.50	0.15	0.080	1	10/06/14	10/06/14	KWG1413516	
Trichloroethene (TCE)	ND	U	0.50	0.10	0.10	1	10/06/14	10/06/14	KWG1413516	
1,2-Dichloropropane	ND	U	0.50	0.20	0.095	1	10/06/14	10/06/14	KWG1413516	
Dibromomethane	ND	U	0.50	0.50	0.15	1	10/06/14	10/06/14	KWG1413516	
Bromodichloromethane	ND	U	0.50	0.30	0.091	1	10/06/14	10/06/14	KWG1413516	
cis-1,3-Dichloropropene	ND	U	0.50	0.20	0.18	1	10/06/14	10/06/14	KWG1413516	
4-Methyl-2-pentanone (MIBK)	ND	U	20	10	2.6	1	10/06/14	10/06/14	KWG1413516	
Toluene	ND	U	0.50	0.10	0.054	1	10/06/14	10/06/14	KWG1413516	
trans-1,3-Dichloropropene	ND	U	0.50	0.20	0.068	1	10/06/14	10/06/14	KWG1413516	
1,1,2-Trichloroethane	ND	U	0.50	0.40	0.14	1	10/06/14	10/06/14	KWG1413516	
Tetrachloroethene (PCE)	ND	U	0.50	0.20	0.099	1	10/06/14	10/06/14	KWG1413516	

Comments:

Analytical Results

Client: Sealaska Environmental Services, LLC
Project: TO 01 JBLM
Sample Matrix: Water

Service Request: K1410529
Date Collected: 09/24/2014
Date Received: 09/26/2014

Volatile Organic Compounds

Sample Name: LGC140924LC01-1
Lab Code: K1410529-013

Units: ug/L
Basis: NA

Extraction Method: EPA 5030B
Analysis Method: 8260C

Level: Low

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
2-Hexanone	ND	U	20	10	2.7	1	10/06/14	10/06/14	KWG1413516	
1,3-Dichloropropane	ND	U	0.50	0.30	0.14	1	10/06/14	10/06/14	KWG1413516	
Dibromochloromethane	ND	U	0.50	0.50	0.14	1	10/06/14	10/06/14	KWG1413516	
1,2-Dibromoethane (EDB)	ND	U	2.0	0.20	0.10	1	10/06/14	10/06/14	KWG1413516	
Chlorobenzene	ND	U	0.50	0.20	0.11	1	10/06/14	10/06/14	KWG1413516	
Ethylbenzene	ND	U	0.50	0.10	0.050	1	10/06/14	10/06/14	KWG1413516	
1,1,1,2-Tetrachloroethane	ND	U	0.50	0.20	0.11	1	10/06/14	10/06/14	KWG1413516	
m,p-Xylenes	ND	U	0.50	0.20	0.11	1	10/06/14	10/06/14	KWG1413516	
o-Xylene	ND	U	0.50	0.20	0.074	1	10/06/14	10/06/14	KWG1413516	
Styrene	ND	U	0.50	0.20	0.089	1	10/06/14	10/06/14	KWG1413516	
Bromoform	ND	U	0.50	0.50	0.16	1	10/06/14	10/06/14	KWG1413516	
Isopropylbenzene	ND	U	2.0	0.20	0.051	1	10/06/14	10/06/14	KWG1413516	
1,1,2,2-Tetrachloroethane	ND	U	0.50	0.20	0.16	1	10/06/14	10/06/14	KWG1413516	
Bromobenzene	ND	U	2.0	0.20	0.12	1	10/06/14	10/06/14	KWG1413516	
n-Propylbenzene	ND	U	2.0	0.20	0.054	1	10/06/14	10/06/14	KWG1413516	
1,2,3-Trichloropropane	ND	U	0.50	0.50	0.20	1	10/06/14	10/06/14	KWG1413516	
2-Chlorotoluene	ND	U	2.0	0.20	0.10	1	10/06/14	10/06/14	KWG1413516	
1,3,5-Trimethylbenzene	ND	U	2.0	0.20	0.089	1	10/06/14	10/06/14	KWG1413516	
4-Chlorotoluene	ND	U	2.0	0.20	0.13	1	10/06/14	10/06/14	KWG1413516	
tert-Butylbenzene	ND	U	2.0	0.20	0.059	1	10/06/14	10/06/14	KWG1413516	
1,2,4-Trimethylbenzene	ND	U	2.0	0.20	0.069	1	10/06/14	10/06/14	KWG1413516	
sec-Butylbenzene	ND	U	2.0	0.10	0.062	1	10/06/14	10/06/14	KWG1413516	
4-Isopropyltoluene	ND	U	2.0	0.20	0.060	1	10/06/14	10/06/14	KWG1413516	
1,3-Dichlorobenzene	ND	U	0.50	0.20	0.10	1	10/06/14	10/06/14	KWG1413516	
1,4-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	10/06/14	10/06/14	KWG1413516	
n-Butylbenzene	ND	U	2.0	0.10	0.054	1	10/06/14	10/06/14	KWG1413516	
1,2-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	10/06/14	10/06/14	KWG1413516	
1,2-Dibromo-3-chloropropane	ND	U	2.0	0.80	0.20	1	10/06/14	10/06/14	KWG1413516	
1,2,4-Trichlorobenzene	ND	U	2.0	0.30	0.096	1	10/06/14	10/06/14	KWG1413516	
Hexachlorobutadiene	ND	U	2.0	0.30	0.11	1	10/06/14	10/06/14	KWG1413516	
Naphthalene	ND	U	2.0	0.30	0.088	1	10/06/14	10/06/14	KWG1413516	
1,2,3-Trichlorobenzene	ND	U	2.0	0.40	0.11	1	10/06/14	10/06/14	KWG1413516	

* See Case Narrative

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1410529
Project:	TO 01 JBLM	**Date Collected:**	09/24/2014
Sample Matrix:	Water	**Date Received:**	09/26/2014

Volatile Organic Compounds

Sample Name:	LGC140924LC01-1	**Units:**	ug/L
Lab Code:	K1410529-013	**Basis:**	NA

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Dibromofluoromethane	95	85-115	10/06/14	Acceptable
1,2-Dichloroethane-d4	109	70-120	10/06/14	Acceptable
Toluene-d8	98	85-120	10/06/14	Acceptable
4-Bromofluorobenzene	89	75-120	10/06/14	Acceptable

Comments:

Analytical Results

Client: Sealaska Environmental Services, LLC
Project: TO 01 JBLM
Sample Matrix: Water

Service Request: K1410529
Date Collected: 09/24/2014
Date Received: 09/26/2014

Volatile Organic Compounds

Sample Name: LGC140924LC116B-1
Lab Code: K1410529-014

Units: ug/L
Basis: NA

Extraction Method: EPA 5030B
Analysis Method: 8260C

Level: Low

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Dichlorodifluoromethane	ND	U	0.50	0.20	0.13	1	10/06/14	10/06/14	KWG1413516	
Chloromethane	ND	U	0.50	0.20	0.068	1	10/06/14	10/06/14	KWG1413516	
Vinyl Chloride	ND	U	0.50	0.10	0.075	1	10/06/14	10/06/14	KWG1413516	
Bromomethane	ND	U	0.50	0.30	0.10	1	10/06/14	10/06/14	KWG1413516	
Chloroethane	ND	U	0.50	0.20	0.16	1	10/06/14	10/06/14	KWG1413516	
Trichlorofluoromethane	ND	U	0.50	0.20	0.12	1	10/06/14	10/06/14	KWG1413516	
1,1-Dichloroethene	ND	U	0.50	0.20	0.080	1	10/06/14	10/06/14	KWG1413516	
Acetone	**3.3**	J	20	10	3.3	1	10/06/14	10/06/14	KWG1413516	*
Carbon Disulfide	ND	U	0.50	0.20	0.069	1	10/06/14	10/06/14	KWG1413516	*
Methylene Chloride	ND	U	2.0	0.20	0.10	1	10/06/14	10/06/14	KWG1413516	
Methyl tert-Butyl Ether	ND	U	0.50	0.30	0.11	1	10/06/14	10/06/14	KWG1413516	
trans-1,2-Dichloroethene	ND	U	0.50	0.20	0.072	1	10/06/14	10/06/14	KWG1413516	
1,1-Dichloroethane	ND	U	0.50	0.20	0.077	1	10/06/14	10/06/14	KWG1413516	
2,2-Dichloropropane	ND	U	0.50	0.20	0.060	1	10/06/14	10/06/14	KWG1413516	*
cis-1,2-Dichloroethene	**1.6**		0.50	0.20	0.067	1	10/06/14	10/06/14	KWG1413516	
2-Butanone (MEK)	ND	U	20	4.0	1.9	1	10/06/14	10/06/14	KWG1413516	
Bromochloromethane	ND	U	0.50	0.20	0.16	1	10/06/14	10/06/14	KWG1413516	
Chloroform	**0.22**	J	0.50	0.20	0.072	1	10/06/14	10/06/14	KWG1413516	
1,1,1-Trichloroethane (TCA)	**0.12**	J	0.50	0.20	0.075	1	10/06/14	10/06/14	KWG1413516	
Carbon Tetrachloride	**0.11**	J	0.50	0.20	0.096	1	10/06/14	10/06/14	KWG1413516	
1,1-Dichloropropene	ND	U	0.50	0.20	0.089	1	10/06/14	10/06/14	KWG1413516	
Benzene	ND	U	0.50	0.10	0.062	1	10/06/14	10/06/14	KWG1413516	
1,2-Dichloroethane (EDC)	ND	U	0.50	0.15	0.080	1	10/06/14	10/06/14	KWG1413516	
Trichloroethene (TCE)	**49**		0.50	0.10	0.10	1	10/06/14	10/06/14	KWG1413516	
1,2-Dichloropropane	ND	U	0.50	0.20	0.095	1	10/06/14	10/06/14	KWG1413516	
Dibromomethane	ND	U	0.50	0.50	0.15	1	10/06/14	10/06/14	KWG1413516	
Bromodichloromethane	ND	U	0.50	0.30	0.091	1	10/06/14	10/06/14	KWG1413516	
cis-1,3-Dichloropropene	ND	U	0.50	0.20	0.18	1	10/06/14	10/06/14	KWG1413516	
4-Methyl-2-pentanone (MIBK)	ND	U	20	10	2.6	1	10/06/14	10/06/14	KWG1413516	
Toluene	ND	U	0.50	0.10	0.054	1	10/06/14	10/06/14	KWG1413516	
trans-1,3-Dichloropropene	ND	U	0.50	0.20	0.068	1	10/06/14	10/06/14	KWG1413516	
1,1,2-Trichloroethane	ND	U	0.50	0.40	0.14	1	10/06/14	10/06/14	KWG1413516	
Tetrachloroethene (PCE)	ND	U	0.50	0.20	0.099	1	10/06/14	10/06/14	KWG1413516	

Comments:

Analytical Results

Client: Sealaska Environmental Services, LLC
Project: TO 01 JBLM
Sample Matrix: Water

Service Request: K1410529
Date Collected: 09/24/2014
Date Received: 09/26/2014

Volatile Organic Compounds

Sample Name: LGC140924LC116B-1
Lab Code: K1410529-014

Units: ug/L
Basis: NA

Extraction Method: EPA 5030B
Analysis Method: 8260C

Level: Low

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
2-Hexanone	ND	U	20	10	2.7	1	10/06/14	10/06/14	KWG1413516	
1,3-Dichloropropane	ND	U	0.50	0.30	0.14	1	10/06/14	10/06/14	KWG1413516	
Dibromochloromethane	ND	U	0.50	0.50	0.14	1	10/06/14	10/06/14	KWG1413516	
1,2-Dibromoethane (EDB)	ND	U	2.0	0.20	0.10	1	10/06/14	10/06/14	KWG1413516	
Chlorobenzene	ND	U	0.50	0.20	0.11	1	10/06/14	10/06/14	KWG1413516	
Ethylbenzene	ND	U	0.50	0.10	0.050	1	10/06/14	10/06/14	KWG1413516	
1,1,1,2-Tetrachloroethane	ND	U	0.50	0.20	0.11	1	10/06/14	10/06/14	KWG1413516	
m,p-Xylenes	ND	U	0.50	0.20	0.11	1	10/06/14	10/06/14	KWG1413516	
o-Xylene	ND	U	0.50	0.20	0.074	1	10/06/14	10/06/14	KWG1413516	
Styrene	ND	U	0.50	0.20	0.089	1	10/06/14	10/06/14	KWG1413516	
Bromoform	ND	U	0.50	0.50	0.16	1	10/06/14	10/06/14	KWG1413516	
Isopropylbenzene	ND	U	2.0	0.20	0.051	1	10/06/14	10/06/14	KWG1413516	
1,1,2,2-Tetrachloroethane	ND	U	0.50	0.20	0.16	1	10/06/14	10/06/14	KWG1413516	
Bromobenzene	ND	U	2.0	0.20	0.12	1	10/06/14	10/06/14	KWG1413516	
n-Propylbenzene	ND	U	2.0	0.20	0.054	1	10/06/14	10/06/14	KWG1413516	
1,2,3-Trichloropropane	ND	U	0.50	0.50	0.20	1	10/06/14	10/06/14	KWG1413516	
2-Chlorotoluene	ND	U	2.0	0.20	0.10	1	10/06/14	10/06/14	KWG1413516	
1,3,5-Trimethylbenzene	ND	U	2.0	0.20	0.089	1	10/06/14	10/06/14	KWG1413516	
4-Chlorotoluene	ND	U	2.0	0.20	0.13	1	10/06/14	10/06/14	KWG1413516	
tert-Butylbenzene	ND	U	2.0	0.20	0.059	1	10/06/14	10/06/14	KWG1413516	
1,2,4-Trimethylbenzene	ND	U	2.0	0.20	0.069	1	10/06/14	10/06/14	KWG1413516	
sec-Butylbenzene	ND	U	2.0	0.10	0.062	1	10/06/14	10/06/14	KWG1413516	
4-Isopropyltoluene	ND	U	2.0	0.20	0.060	1	10/06/14	10/06/14	KWG1413516	
1,3-Dichlorobenzene	ND	U	0.50	0.20	0.10	1	10/06/14	10/06/14	KWG1413516	
1,4-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	10/06/14	10/06/14	KWG1413516	
n-Butylbenzene	ND	U	2.0	0.10	0.054	1	10/06/14	10/06/14	KWG1413516	
1,2-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	10/06/14	10/06/14	KWG1413516	
1,2-Dibromo-3-chloropropane	ND	U	2.0	0.80	0.20	1	10/06/14	10/06/14	KWG1413516	
1,2,4-Trichlorobenzene	ND	U	2.0	0.30	0.096	1	10/06/14	10/06/14	KWG1413516	
Hexachlorobutadiene	ND	U	2.0	0.30	0.11	1	10/06/14	10/06/14	KWG1413516	
Naphthalene	ND	U	2.0	0.30	0.088	1	10/06/14	10/06/14	KWG1413516	
1,2,3-Trichlorobenzene	ND	U	2.0	0.40	0.11	1	10/06/14	10/06/14	KWG1413516	

* See Case Narrative

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1410529
Project:	TO 01 JBLM	**Date Collected:**	09/24/2014
Sample Matrix:	Water	**Date Received:**	09/26/2014

Volatile Organic Compounds

Sample Name:	LGC140924LC116B-1	**Units:**	ug/L
Lab Code:	K1410529-014	**Basis:**	NA

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Dibromofluoromethane	94	85-115	10/06/14	Acceptable
1,2-Dichloroethane-d4	111	70-120	10/06/14	Acceptable
Toluene-d8	95	85-120	10/06/14	Acceptable
4-Bromofluorobenzene	92	75-120	10/06/14	Acceptable

Comments:

Analytical Results

Client: Sealaska Environmental Services, LLC
Project: TO 01 JBLM
Sample Matrix: Water

Service Request: K1410529
Date Collected: 09/24/2014
Date Received: 09/26/2014

Volatile Organic Compounds

Sample Name: LG140924LC111B-1
Lab Code: K1410529-015

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
Dichlorodifluoromethane	ND	U	0.50	0.20	0.13	1	10/06/14	10/06/14	KWG1413516	
Chloromethane	ND	U	0.50	0.20	0.068	1	10/06/14	10/06/14	KWG1413516	
Vinyl Chloride	ND	U	0.50	0.10	0.075	1	10/06/14	10/06/14	KWG1413516	
Bromomethane	ND	U	0.50	0.30	0.10	1	10/06/14	10/06/14	KWG1413516	
Chloroethane	ND	U	0.50	0.20	0.16	1	10/06/14	10/06/14	KWG1413516	
Trichlorofluoromethane	ND	U	0.50	0.20	0.12	1	10/06/14	10/06/14	KWG1413516	
1,1-Dichloroethene	**0.090**	J	0.50	0.20	0.080	1	10/06/14	10/06/14	KWG1413516	
Acetone	ND	U	20	10	3.3	1	10/06/14	10/06/14	KWG1413516	*
Carbon Disulfide	ND	U	0.50	0.20	0.069	1	10/06/14	10/06/14	KWG1413516	*
Methylene Chloride	ND	U	2.0	0.20	0.10	1	10/06/14	10/06/14	KWG1413516	
Methyl tert-Butyl Ether	ND	U	0.50	0.30	0.11	1	10/06/14	10/06/14	KWG1413516	
trans-1,2-Dichloroethene	ND	U	0.50	0.20	0.072	1	10/06/14	10/06/14	KWG1413516	
1,1-Dichloroethane	**0.11**	J	0.50	0.20	0.077	1	10/06/14	10/06/14	KWG1413516	
2,2-Dichloropropane	ND	U	0.50	0.20	0.060	1	10/06/14	10/06/14	KWG1413516	*
cis-1,2-Dichloroethene	**2.0**		0.50	0.20	0.067	1	10/06/14	10/06/14	KWG1413516	
2-Butanone (MEK)	ND	U	20	4.0	1.9	1	10/06/14	10/06/14	KWG1413516	
Bromochloromethane	ND	U	0.50	0.20	0.16	1	10/06/14	10/06/14	KWG1413516	
Chloroform	**0.41**	J	0.50	0.20	0.072	1	10/06/14	10/06/14	KWG1413516	
1,1,1-Trichloroethane (TCA)	**0.31**	J	0.50	0.20	0.075	1	10/06/14	10/06/14	KWG1413516	
Carbon Tetrachloride	**1.0**		0.50	0.20	0.096	1	10/06/14	10/06/14	KWG1413516	
1,1-Dichloropropene	ND	U	0.50	0.20	0.089	1	10/06/14	10/06/14	KWG1413516	
Benzene	ND	U	0.50	0.10	0.062	1	10/06/14	10/06/14	KWG1413516	
1,2-Dichloroethane (EDC)	ND	U	0.50	0.15	0.080	1	10/06/14	10/06/14	KWG1413516	
Trichloroethene (TCE)	**10**		0.50	0.10	0.10	1	10/06/14	10/06/14	KWG1413516	
1,2-Dichloropropane	**0.57**		0.50	0.20	0.095	1	10/06/14	10/06/14	KWG1413516	
Dibromomethane	ND	U	0.50	0.50	0.15	1	10/06/14	10/06/14	KWG1413516	
Bromodichloromethane	ND	U	0.50	0.30	0.091	1	10/06/14	10/06/14	KWG1413516	
cis-1,3-Dichloropropene	ND	U	0.50	0.20	0.18	1	10/06/14	10/06/14	KWG1413516	
4-Methyl-2-pentanone (MIBK)	ND	U	20	10	2.6	1	10/06/14	10/06/14	KWG1413516	
Toluene	ND	U	0.50	0.10	0.054	1	10/06/14	10/06/14	KWG1413516	
trans-1,3-Dichloropropene	ND	U	0.50	0.20	0.068	1	10/06/14	10/06/14	KWG1413516	
1,1,2-Trichloroethane	ND	U	0.50	0.40	0.14	1	10/06/14	10/06/14	KWG1413516	
Tetrachloroethene (PCE)	ND	U	0.50	0.20	0.099	1	10/06/14	10/06/14	KWG1413516	

Comments:

Analytical Results

Client: Sealaska Environmental Services, LLC
Project: TO 01 JBLM
Sample Matrix: Water

Service Request: K1410529
Date Collected: 09/24/2014
Date Received: 09/26/2014

Volatile Organic Compounds

Sample Name: LG140924LC111B-1
Lab Code: K1410529-015

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
2-Hexanone	ND	U	20	10	2.7	1	10/06/14	10/06/14	KWG1413516	
1,3-Dichloropropane	ND	U	0.50	0.30	0.14	1	10/06/14	10/06/14	KWG1413516	
Dibromochloromethane	ND	U	0.50	0.50	0.14	1	10/06/14	10/06/14	KWG1413516	
1,2-Dibromoethane (EDB)	ND	U	2.0	0.20	0.10	1	10/06/14	10/06/14	KWG1413516	
Chlorobenzene	ND	U	0.50	0.20	0.11	1	10/06/14	10/06/14	KWG1413516	
Ethylbenzene	ND	U	0.50	0.10	0.050	1	10/06/14	10/06/14	KWG1413516	
1,1,1,2-Tetrachloroethane	ND	U	0.50	0.20	0.11	1	10/06/14	10/06/14	KWG1413516	
m,p-Xylenes	ND	U	0.50	0.20	0.11	1	10/06/14	10/06/14	KWG1413516	
o-Xylene	ND	U	0.50	0.20	0.074	1	10/06/14	10/06/14	KWG1413516	
Styrene	ND	U	0.50	0.20	0.089	1	10/06/14	10/06/14	KWG1413516	
Bromoform	ND	U	0.50	0.50	0.16	1	10/06/14	10/06/14	KWG1413516	
Isopropylbenzene	ND	U	2.0	0.20	0.051	1	10/06/14	10/06/14	KWG1413516	
1,1,2,2-Tetrachloroethane	ND	U	0.50	0.20	0.16	1	10/06/14	10/06/14	KWG1413516	
Bromobenzene	ND	U	2.0	0.20	0.12	1	10/06/14	10/06/14	KWG1413516	
n-Propylbenzene	ND	U	2.0	0.20	0.054	1	10/06/14	10/06/14	KWG1413516	
1,2,3-Trichloropropane	ND	U	0.50	0.50	0.20	1	10/06/14	10/06/14	KWG1413516	
2-Chlorotoluene	ND	U	2.0	0.20	0.10	1	10/06/14	10/06/14	KWG1413516	
1,3,5-Trimethylbenzene	ND	U	2.0	0.20	0.089	1	10/06/14	10/06/14	KWG1413516	
4-Chlorotoluene	ND	U	2.0	0.20	0.13	1	10/06/14	10/06/14	KWG1413516	
tert-Butylbenzene	ND	U	2.0	0.20	0.059	1	10/06/14	10/06/14	KWG1413516	
1,2,4-Trimethylbenzene	ND	U	2.0	0.20	0.069	1	10/06/14	10/06/14	KWG1413516	
sec-Butylbenzene	ND	U	2.0	0.10	0.062	1	10/06/14	10/06/14	KWG1413516	
4-Isopropyltoluene	ND	U	2.0	0.20	0.060	1	10/06/14	10/06/14	KWG1413516	
1,3-Dichlorobenzene	ND	U	0.50	0.20	0.10	1	10/06/14	10/06/14	KWG1413516	
1,4-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	10/06/14	10/06/14	KWG1413516	
n-Butylbenzene	ND	U	2.0	0.10	0.054	1	10/06/14	10/06/14	KWG1413516	
1,2-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	10/06/14	10/06/14	KWG1413516	
1,2-Dibromo-3-chloropropane	ND	U	2.0	0.80	0.20	1	10/06/14	10/06/14	KWG1413516	
1,2,4-Trichlorobenzene	ND	U	2.0	0.30	0.096	1	10/06/14	10/06/14	KWG1413516	
Hexachlorobutadiene	ND	U	2.0	0.30	0.11	1	10/06/14	10/06/14	KWG1413516	
Naphthalene	ND	U	2.0	0.30	0.088	1	10/06/14	10/06/14	KWG1413516	
1,2,3-Trichlorobenzene	ND	U	2.0	0.40	0.11	1	10/06/14	10/06/14	KWG1413516	

* See Case Narrative

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1410529
Project:	TO 01 JBLM	**Date Collected:**	09/24/2014
Sample Matrix:	Water	**Date Received:**	09/26/2014

Volatile Organic Compounds

Sample Name:	LG140924LC111B-1	**Units:**	ug/L
Lab Code:	K1410529-015	**Basis:**	NA

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Dibromofluoromethane	94	85-115	10/06/14	Acceptable
1,2-Dichloroethane-d4	109	70-120	10/06/14	Acceptable
Toluene-d8	94	85-120	10/06/14	Acceptable
4-Bromofluorobenzene	89	75-120	10/06/14	Acceptable

Comments:

Analytical Results

Client: Sealaska Environmental Services, LLC
Project: TO 01 JBLM
Sample Matrix: Water

Service Request: K1410529
Date Collected: 09/24/2014
Date Received: 09/26/2014

Volatile Organic Compounds

Sample Name: LG14092485PA382-1
Lab Code: K1410529-016

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
Dichlorodifluoromethane	ND	U	0.50	0.20	0.13	1	10/06/14	10/06/14	KWG1413516	
Chloromethane	ND	U	0.50	0.20	0.068	1	10/06/14	10/06/14	KWG1413516	
Vinyl Chloride	ND	U	0.50	0.10	0.075	1	10/06/14	10/06/14	KWG1413516	
Bromomethane	ND	U	0.50	0.30	0.10	1	10/06/14	10/06/14	KWG1413516	
Chloroethane	ND	U	0.50	0.20	0.16	1	10/06/14	10/06/14	KWG1413516	
Trichlorofluoromethane	ND	U	0.50	0.20	0.12	1	10/06/14	10/06/14	KWG1413516	
1,1-Dichloroethene	ND	U	0.50	0.20	0.080	1	10/06/14	10/06/14	KWG1413516	
Acetone	ND	U	20	10	3.3	1	10/06/14	10/06/14	KWG1413516	*
Carbon Disulfide	ND	U	0.50	0.20	0.069	1	10/06/14	10/06/14	KWG1413516	*
Methylene Chloride	ND	U	2.0	0.20	0.10	1	10/06/14	10/06/14	KWG1413516	
Methyl tert-Butyl Ether	ND	U	0.50	0.30	0.11	1	10/06/14	10/06/14	KWG1413516	
trans-1,2-Dichloroethene	ND	U	0.50	0.20	0.072	1	10/06/14	10/06/14	KWG1413516	
1,1-Dichloroethane	ND	U	0.50	0.20	0.077	1	10/06/14	10/06/14	KWG1413516	
2,2-Dichloropropane	ND	U	0.50	0.20	0.060	1	10/06/14	10/06/14	KWG1413516	*
cis-1,2-Dichloroethene	**0.26**	J	0.50	0.20	0.067	1	10/06/14	10/06/14	KWG1413516	
2-Butanone (MEK)	ND	U	20	4.0	1.9	1	10/06/14	10/06/14	KWG1413516	
Bromochloromethane	ND	U	0.50	0.20	0.16	1	10/06/14	10/06/14	KWG1413516	
Chloroform	**0.10**	J	0.50	0.20	0.072	1	10/06/14	10/06/14	KWG1413516	
1,1,1-Trichloroethane (TCA)	ND	U	0.50	0.20	0.075	1	10/06/14	10/06/14	KWG1413516	
Carbon Tetrachloride	ND	U	0.50	0.20	0.096	1	10/06/14	10/06/14	KWG1413516	
1,1-Dichloropropene	ND	U	0.50	0.20	0.089	1	10/06/14	10/06/14	KWG1413516	
Benzene	ND	U	0.50	0.10	0.062	1	10/06/14	10/06/14	KWG1413516	
1,2-Dichloroethane (EDC)	ND	U	0.50	0.15	0.080	1	10/06/14	10/06/14	KWG1413516	
Trichloroethene (TCE)	**10**		0.50	0.10	0.10	1	10/06/14	10/06/14	KWG1413516	
1,2-Dichloropropane	ND	U	0.50	0.20	0.095	1	10/06/14	10/06/14	KWG1413516	
Dibromomethane	ND	U	0.50	0.50	0.15	1	10/06/14	10/06/14	KWG1413516	
Bromodichloromethane	ND	U	0.50	0.30	0.091	1	10/06/14	10/06/14	KWG1413516	
cis-1,3-Dichloropropene	ND	U	0.50	0.20	0.18	1	10/06/14	10/06/14	KWG1413516	
4-Methyl-2-pentanone (MIBK)	ND	U	20	10	2.6	1	10/06/14	10/06/14	KWG1413516	
Toluene	ND	U	0.50	0.10	0.054	1	10/06/14	10/06/14	KWG1413516	
trans-1,3-Dichloropropene	ND	U	0.50	0.20	0.068	1	10/06/14	10/06/14	KWG1413516	
1,1,2-Trichloroethane	ND	U	0.50	0.40	0.14	1	10/06/14	10/06/14	KWG1413516	
Tetrachloroethene (PCE)	ND	U	0.50	0.20	0.099	1	10/06/14	10/06/14	KWG1413516	

Comments:

Analytical Results

Client: Sealaska Environmental Services, LLC
Project: TO 01 JBLM
Sample Matrix: Water

Service Request: K1410529
Date Collected: 09/24/2014
Date Received: 09/26/2014

Volatile Organic Compounds

Sample Name: LG14092485PA382-1
Lab Code: K1410529-016

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
2-Hexanone	ND	U	20	10	2.7	1	10/06/14	10/06/14	KWG1413516	
1,3-Dichloropropane	ND	U	0.50	0.30	0.14	1	10/06/14	10/06/14	KWG1413516	
Dibromochloromethane	ND	U	0.50	0.50	0.14	1	10/06/14	10/06/14	KWG1413516	
1,2-Dibromoethane (EDB)	ND	U	2.0	0.20	0.10	1	10/06/14	10/06/14	KWG1413516	
Chlorobenzene	ND	U	0.50	0.20	0.11	1	10/06/14	10/06/14	KWG1413516	
Ethylbenzene	ND	U	0.50	0.10	0.050	1	10/06/14	10/06/14	KWG1413516	
1,1,1,2-Tetrachloroethane	ND	U	0.50	0.20	0.11	1	10/06/14	10/06/14	KWG1413516	
m,p-Xylenes	ND	U	0.50	0.20	0.11	1	10/06/14	10/06/14	KWG1413516	
o-Xylene	ND	U	0.50	0.20	0.074	1	10/06/14	10/06/14	KWG1413516	
Styrene	ND	U	0.50	0.20	0.089	1	10/06/14	10/06/14	KWG1413516	
Bromoform	ND	U	0.50	0.50	0.16	1	10/06/14	10/06/14	KWG1413516	
Isopropylbenzene	ND	U	2.0	0.20	0.051	1	10/06/14	10/06/14	KWG1413516	
1,1,2,2-Tetrachloroethane	ND	U	0.50	0.20	0.16	1	10/06/14	10/06/14	KWG1413516	
Bromobenzene	ND	U	2.0	0.20	0.12	1	10/06/14	10/06/14	KWG1413516	
n-Propylbenzene	ND	U	2.0	0.20	0.054	1	10/06/14	10/06/14	KWG1413516	
1,2,3-Trichloropropane	ND	U	0.50	0.50	0.20	1	10/06/14	10/06/14	KWG1413516	
2-Chlorotoluene	ND	U	2.0	0.20	0.10	1	10/06/14	10/06/14	KWG1413516	
1,3,5-Trimethylbenzene	ND	U	2.0	0.20	0.089	1	10/06/14	10/06/14	KWG1413516	
4-Chlorotoluene	ND	U	2.0	0.20	0.13	1	10/06/14	10/06/14	KWG1413516	
tert-Butylbenzene	ND	U	2.0	0.20	0.059	1	10/06/14	10/06/14	KWG1413516	
1,2,4-Trimethylbenzene	ND	U	2.0	0.20	0.069	1	10/06/14	10/06/14	KWG1413516	
sec-Butylbenzene	ND	U	2.0	0.10	0.062	1	10/06/14	10/06/14	KWG1413516	
4-Isopropyltoluene	ND	U	2.0	0.20	0.060	1	10/06/14	10/06/14	KWG1413516	
1,3-Dichlorobenzene	ND	U	0.50	0.20	0.10	1	10/06/14	10/06/14	KWG1413516	
1,4-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	10/06/14	10/06/14	KWG1413516	
n-Butylbenzene	ND	U	2.0	0.10	0.054	1	10/06/14	10/06/14	KWG1413516	
1,2-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	10/06/14	10/06/14	KWG1413516	
1,2-Dibromo-3-chloropropane	ND	U	2.0	0.80	0.20	1	10/06/14	10/06/14	KWG1413516	
1,2,4-Trichlorobenzene	ND	U	2.0	0.30	0.096	1	10/06/14	10/06/14	KWG1413516	
Hexachlorobutadiene	ND	U	2.0	0.30	0.11	1	10/06/14	10/06/14	KWG1413516	
Naphthalene	ND	U	2.0	0.30	0.088	1	10/06/14	10/06/14	KWG1413516	
1,2,3-Trichlorobenzene	ND	U	2.0	0.40	0.11	1	10/06/14	10/06/14	KWG1413516	

* See Case Narrative

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1410529
Project:	TO 01 JBLM	**Date Collected:**	09/24/2014
Sample Matrix:	Water	**Date Received:**	09/26/2014

Volatile Organic Compounds

Sample Name:	LG14092485PA382-1	**Units:**	ug/L
Lab Code:	K1410529-016	**Basis:**	NA

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Dibromofluoromethane	96	85-115	10/06/14	Acceptable
1,2-Dichloroethane-d4	109	70-120	10/06/14	Acceptable
Toluene-d8	97	85-120	10/06/14	Acceptable
4-Bromofluorobenzene	91	75-120	10/06/14	Acceptable

Comments:

Analytical Results

Client: Sealaska Environmental Services, LLC
Project: TO 01 JBLM
Sample Matrix: Water

Service Request: K1410529
Date Collected: 09/24/2014
Date Received: 09/26/2014

Volatile Organic Compounds

Sample Name: LGC14092485PA384-1
Lab Code: K1410529-017

Units: ug/L
Basis: NA

Extraction Method: EPA 5030B
Analysis Method: 8260C

Level: Low

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Dichlorodifluoromethane	ND	U	0.50	0.20	0.13	1	10/06/14	10/06/14	KWG1413516	
Chloromethane	ND	U	0.50	0.20	0.068	1	10/06/14	10/06/14	KWG1413516	
Vinyl Chloride	ND	U	0.50	0.10	0.075	1	10/06/14	10/06/14	KWG1413516	
Bromomethane	ND	U	0.50	0.30	0.10	1	10/06/14	10/06/14	KWG1413516	
Chloroethane	ND	U	0.50	0.20	0.16	1	10/06/14	10/06/14	KWG1413516	
Trichlorofluoromethane	ND	U	0.50	0.20	0.12	1	10/06/14	10/06/14	KWG1413516	
1,1-Dichloroethene	ND	U	0.50	0.20	0.080	1	10/06/14	10/06/14	KWG1413516	
Acetone	ND	U	20	10	3.3	1	10/06/14	10/06/14	KWG1413516	*
Carbon Disulfide	ND	U	0.50	0.20	0.069	1	10/06/14	10/06/14	KWG1413516	*
Methylene Chloride	ND	U	2.0	0.20	0.10	1	10/06/14	10/06/14	KWG1413516	
Methyl tert-Butyl Ether	ND	U	0.50	0.30	0.11	1	10/06/14	10/06/14	KWG1413516	
trans-1,2-Dichloroethene	ND	U	0.50	0.20	0.072	1	10/06/14	10/06/14	KWG1413516	
1,1-Dichloroethane	ND	U	0.50	0.20	0.077	1	10/06/14	10/06/14	KWG1413516	
2,2-Dichloropropane	ND	U	0.50	0.20	0.060	1	10/06/14	10/06/14	KWG1413516	*
cis-1,2-Dichloroethene	ND	U	0.50	0.20	0.067	1	10/06/14	10/06/14	KWG1413516	
2-Butanone (MEK)	ND	U	20	4.0	1.9	1	10/06/14	10/06/14	KWG1413516	
Bromochloromethane	ND	U	0.50	0.20	0.16	1	10/06/14	10/06/14	KWG1413516	
Chloroform	ND	U	0.50	0.20	0.072	1	10/06/14	10/06/14	KWG1413516	
1,1,1-Trichloroethane (TCA)	ND	U	0.50	0.20	0.075	1	10/06/14	10/06/14	KWG1413516	
Carbon Tetrachloride	ND	U	0.50	0.20	0.096	1	10/06/14	10/06/14	KWG1413516	
1,1-Dichloropropene	ND	U	0.50	0.20	0.089	1	10/06/14	10/06/14	KWG1413516	
Benzene	ND	U	0.50	0.10	0.062	1	10/06/14	10/06/14	KWG1413516	
1,2-Dichloroethane (EDC)	ND	U	0.50	0.15	0.080	1	10/06/14	10/06/14	KWG1413516	
Trichloroethene (TCE)	**0.20**	J	0.50	0.10	0.10	1	10/06/14	10/06/14	KWG1413516	
1,2-Dichloropropane	ND	U	0.50	0.20	0.095	1	10/06/14	10/06/14	KWG1413516	
Dibromomethane	ND	U	0.50	0.50	0.15	1	10/06/14	10/06/14	KWG1413516	
Bromodichloromethane	ND	U	0.50	0.30	0.091	1	10/06/14	10/06/14	KWG1413516	
cis-1,3-Dichloropropene	ND	U	0.50	0.20	0.18	1	10/06/14	10/06/14	KWG1413516	
4-Methyl-2-pentanone (MIBK)	ND	U	20	10	2.6	1	10/06/14	10/06/14	KWG1413516	
Toluene	ND	U	0.50	0.10	0.054	1	10/06/14	10/06/14	KWG1413516	
trans-1,3-Dichloropropene	ND	U	0.50	0.20	0.068	1	10/06/14	10/06/14	KWG1413516	
1,1,2-Trichloroethane	ND	U	0.50	0.40	0.14	1	10/06/14	10/06/14	KWG1413516	
Tetrachloroethene (PCE)	ND	U	0.50	0.20	0.099	1	10/06/14	10/06/14	KWG1413516	

Comments:

Analytical Results

Client: Sealaska Environmental Services, LLC
Project: TO 01 JBLM
Sample Matrix: Water

Service Request: K1410529
Date Collected: 09/24/2014
Date Received: 09/26/2014

Volatile Organic Compounds

Sample Name: LGC14092485PA384-1
Lab Code: K1410529-017

Units: ug/L
Basis: NA

Extraction Method: EPA 5030B
Analysis Method: 8260C

Level: Low

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
2-Hexanone	ND	U	20	10	2.7	1	10/06/14	10/06/14	KWG1413516	
1,3-Dichloropropane	ND	U	0.50	0.30	0.14	1	10/06/14	10/06/14	KWG1413516	
Dibromochloromethane	ND	U	0.50	0.50	0.14	1	10/06/14	10/06/14	KWG1413516	
1,2-Dibromoethane (EDB)	ND	U	2.0	0.20	0.10	1	10/06/14	10/06/14	KWG1413516	
Chlorobenzene	ND	U	0.50	0.20	0.11	1	10/06/14	10/06/14	KWG1413516	
Ethylbenzene	ND	U	0.50	0.10	0.050	1	10/06/14	10/06/14	KWG1413516	
1,1,1,2-Tetrachloroethane	ND	U	0.50	0.20	0.11	1	10/06/14	10/06/14	KWG1413516	
m,p-Xylenes	ND	U	0.50	0.20	0.11	1	10/06/14	10/06/14	KWG1413516	
o-Xylene	ND	U	0.50	0.20	0.074	1	10/06/14	10/06/14	KWG1413516	
Styrene	ND	U	0.50	0.20	0.089	1	10/06/14	10/06/14	KWG1413516	
Bromoform	ND	U	0.50	0.50	0.16	1	10/06/14	10/06/14	KWG1413516	
Isopropylbenzene	ND	U	2.0	0.20	0.051	1	10/06/14	10/06/14	KWG1413516	
1,1,2,2-Tetrachloroethane	ND	U	0.50	0.20	0.16	1	10/06/14	10/06/14	KWG1413516	
Bromobenzene	ND	U	2.0	0.20	0.12	1	10/06/14	10/06/14	KWG1413516	
n-Propylbenzene	ND	U	2.0	0.20	0.054	1	10/06/14	10/06/14	KWG1413516	
1,2,3-Trichloropropane	ND	U	0.50	0.50	0.20	1	10/06/14	10/06/14	KWG1413516	
2-Chlorotoluene	ND	U	2.0	0.20	0.10	1	10/06/14	10/06/14	KWG1413516	
1,3,5-Trimethylbenzene	ND	U	2.0	0.20	0.089	1	10/06/14	10/06/14	KWG1413516	
4-Chlorotoluene	ND	U	2.0	0.20	0.13	1	10/06/14	10/06/14	KWG1413516	
tert-Butylbenzene	ND	U	2.0	0.20	0.059	1	10/06/14	10/06/14	KWG1413516	
1,2,4-Trimethylbenzene	ND	U	2.0	0.20	0.069	1	10/06/14	10/06/14	KWG1413516	
sec-Butylbenzene	ND	U	2.0	0.10	0.062	1	10/06/14	10/06/14	KWG1413516	
4-Isopropyltoluene	ND	U	2.0	0.20	0.060	1	10/06/14	10/06/14	KWG1413516	
1,3-Dichlorobenzene	ND	U	0.50	0.20	0.10	1	10/06/14	10/06/14	KWG1413516	
1,4-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	10/06/14	10/06/14	KWG1413516	
n-Butylbenzene	ND	U	2.0	0.10	0.054	1	10/06/14	10/06/14	KWG1413516	
1,2-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	10/06/14	10/06/14	KWG1413516	
1,2-Dibromo-3-chloropropane	ND	U	2.0	0.80	0.20	1	10/06/14	10/06/14	KWG1413516	
1,2,4-Trichlorobenzene	ND	U	2.0	0.30	0.096	1	10/06/14	10/06/14	KWG1413516	
Hexachlorobutadiene	ND	U	2.0	0.30	0.11	1	10/06/14	10/06/14	KWG1413516	
Naphthalene	ND	U	2.0	0.30	0.088	1	10/06/14	10/06/14	KWG1413516	
1,2,3-Trichlorobenzene	ND	U	2.0	0.40	0.11	1	10/06/14	10/06/14	KWG1413516	

* See Case Narrative

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1410529
Project:	TO 01 JBLM	**Date Collected:**	09/24/2014
Sample Matrix:	Water	**Date Received:**	09/26/2014

Volatile Organic Compounds

Sample Name:	LGC14092485PA384-1	**Units:**	ug/L
Lab Code:	K1410529-017	**Basis:**	NA

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Dibromofluoromethane	95	85-115	10/06/14	Acceptable
1,2-Dichloroethane-d4	112	70-120	10/06/14	Acceptable
Toluene-d8	97	85-120	10/06/14	Acceptable
4-Bromofluorobenzene	91	75-120	10/06/14	Acceptable

Comments:

Analytical Results

Client: Sealaska Environmental Services, LLC
Project: TO 01 JBLM
Sample Matrix: Water

Service Request: K1410529
Date Collected: 09/24/2014
Date Received: 09/26/2014

Volatile Organic Compounds

Sample Name: LGC140924LC124-1
Lab Code: K1410529-018

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
Dichlorodifluoromethane	ND	U	0.50	0.20	0.13	1	10/06/14	10/06/14	KWG1413516	
Chloromethane	ND	U	0.50	0.20	0.068	1	10/06/14	10/06/14	KWG1413516	
Vinyl Chloride	ND	U	0.50	0.10	0.075	1	10/06/14	10/06/14	KWG1413516	
Bromomethane	ND	U	0.50	0.30	0.10	1	10/06/14	10/06/14	KWG1413516	
Chloroethane	ND	U	0.50	0.20	0.16	1	10/06/14	10/06/14	KWG1413516	
Trichlorofluoromethane	ND	U	0.50	0.20	0.12	1	10/06/14	10/06/14	KWG1413516	
1,1-Dichloroethene	ND	U	0.50	0.20	0.080	1	10/06/14	10/06/14	KWG1413516	
Acetone	ND	U	20	10	3.3	1	10/06/14	10/06/14	KWG1413516	*
Carbon Disulfide	ND	U	0.50	0.20	0.069	1	10/06/14	10/06/14	KWG1413516	*
Methylene Chloride	ND	U	2.0	0.20	0.10	1	10/06/14	10/06/14	KWG1413516	
Methyl tert-Butyl Ether	ND	U	0.50	0.30	0.11	1	10/06/14	10/06/14	KWG1413516	
trans-1,2-Dichloroethene	ND	U	0.50	0.20	0.072	1	10/06/14	10/06/14	KWG1413516	
1,1-Dichloroethane	ND	U	0.50	0.20	0.077	1	10/06/14	10/06/14	KWG1413516	
2,2-Dichloropropane	ND	U	0.50	0.20	0.060	1	10/06/14	10/06/14	KWG1413516	*
cis-1,2-Dichloroethene	ND	U	0.50	0.20	0.067	1	10/06/14	10/06/14	KWG1413516	
2-Butanone (MEK)	ND	U	20	4.0	1.9	1	10/06/14	10/06/14	KWG1413516	
Bromochloromethane	ND	U	0.50	0.20	0.16	1	10/06/14	10/06/14	KWG1413516	
Chloroform	ND	U	0.50	0.20	0.072	1	10/06/14	10/06/14	KWG1413516	
1,1,1-Trichloroethane (TCA)	ND	U	0.50	0.20	0.075	1	10/06/14	10/06/14	KWG1413516	
Carbon Tetrachloride	ND	U	0.50	0.20	0.096	1	10/06/14	10/06/14	KWG1413516	
1,1-Dichloropropene	ND	U	0.50	0.20	0.089	1	10/06/14	10/06/14	KWG1413516	
Benzene	ND	U	0.50	0.10	0.062	1	10/06/14	10/06/14	KWG1413516	
1,2-Dichloroethane (EDC)	ND	U	0.50	0.15	0.080	1	10/06/14	10/06/14	KWG1413516	
Trichloroethene (TCE)	**2.3**		0.50	0.10	0.10	1	10/06/14	10/06/14	KWG1413516	
1,2-Dichloropropane	ND	U	0.50	0.20	0.095	1	10/06/14	10/06/14	KWG1413516	
Dibromomethane	ND	U	0.50	0.50	0.15	1	10/06/14	10/06/14	KWG1413516	
Bromodichloromethane	ND	U	0.50	0.30	0.091	1	10/06/14	10/06/14	KWG1413516	
cis-1,3-Dichloropropene	ND	U	0.50	0.20	0.18	1	10/06/14	10/06/14	KWG1413516	
4-Methyl-2-pentanone (MIBK)	ND	U	20	10	2.6	1	10/06/14	10/06/14	KWG1413516	
Toluene	ND	U	0.50	0.10	0.054	1	10/06/14	10/06/14	KWG1413516	
trans-1,3-Dichloropropene	ND	U	0.50	0.20	0.068	1	10/06/14	10/06/14	KWG1413516	
1,1,2-Trichloroethane	ND	U	0.50	0.40	0.14	1	10/06/14	10/06/14	KWG1413516	
Tetrachloroethene (PCE)	ND	U	0.50	0.20	0.099	1	10/06/14	10/06/14	KWG1413516	

Comments:

Analytical Results

Client: Sealaska Environmental Services, LLC
Project: TO 01 JBLM
Sample Matrix: Water

Service Request: K1410529
Date Collected: 09/24/2014
Date Received: 09/26/2014

Volatile Organic Compounds

Sample Name: LGC140924LC124-1
Lab Code: K1410529-018

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
2-Hexanone	ND	U	20	10	2.7	1	10/06/14	10/06/14	KWG1413516	
1,3-Dichloropropane	ND	U	0.50	0.30	0.14	1	10/06/14	10/06/14	KWG1413516	
Dibromochloromethane	ND	U	0.50	0.50	0.14	1	10/06/14	10/06/14	KWG1413516	
1,2-Dibromoethane (EDB)	ND	U	2.0	0.20	0.10	1	10/06/14	10/06/14	KWG1413516	
Chlorobenzene	ND	U	0.50	0.20	0.11	1	10/06/14	10/06/14	KWG1413516	
Ethylbenzene	ND	U	0.50	0.10	0.050	1	10/06/14	10/06/14	KWG1413516	
1,1,1,2-Tetrachloroethane	ND	U	0.50	0.20	0.11	1	10/06/14	10/06/14	KWG1413516	
m,p-Xylenes	ND	U	0.50	0.20	0.11	1	10/06/14	10/06/14	KWG1413516	
o-Xylene	ND	U	0.50	0.20	0.074	1	10/06/14	10/06/14	KWG1413516	
Styrene	ND	U	0.50	0.20	0.089	1	10/06/14	10/06/14	KWG1413516	
Bromoform	ND	U	0.50	0.50	0.16	1	10/06/14	10/06/14	KWG1413516	
Isopropylbenzene	ND	U	2.0	0.20	0.051	1	10/06/14	10/06/14	KWG1413516	
1,1,2,2-Tetrachloroethane	ND	U	0.50	0.20	0.16	1	10/06/14	10/06/14	KWG1413516	
Bromobenzene	ND	U	2.0	0.20	0.12	1	10/06/14	10/06/14	KWG1413516	
n-Propylbenzene	ND	U	2.0	0.20	0.054	1	10/06/14	10/06/14	KWG1413516	
1,2,3-Trichloropropane	ND	U	0.50	0.50	0.20	1	10/06/14	10/06/14	KWG1413516	
2-Chlorotoluene	ND	U	2.0	0.20	0.10	1	10/06/14	10/06/14	KWG1413516	
1,3,5-Trimethylbenzene	ND	U	2.0	0.20	0.089	1	10/06/14	10/06/14	KWG1413516	
4-Chlorotoluene	ND	U	2.0	0.20	0.13	1	10/06/14	10/06/14	KWG1413516	
tert-Butylbenzene	ND	U	2.0	0.20	0.059	1	10/06/14	10/06/14	KWG1413516	
1,2,4-Trimethylbenzene	ND	U	2.0	0.20	0.069	1	10/06/14	10/06/14	KWG1413516	
sec-Butylbenzene	ND	U	2.0	0.10	0.062	1	10/06/14	10/06/14	KWG1413516	
4-Isopropyltoluene	ND	U	2.0	0.20	0.060	1	10/06/14	10/06/14	KWG1413516	
1,3-Dichlorobenzene	ND	U	0.50	0.20	0.10	1	10/06/14	10/06/14	KWG1413516	
1,4-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	10/06/14	10/06/14	KWG1413516	
n-Butylbenzene	ND	U	2.0	0.10	0.054	1	10/06/14	10/06/14	KWG1413516	
1,2-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	10/06/14	10/06/14	KWG1413516	
1,2-Dibromo-3-chloropropane	ND	U	2.0	0.80	0.20	1	10/06/14	10/06/14	KWG1413516	
1,2,4-Trichlorobenzene	ND	U	2.0	0.30	0.096	1	10/06/14	10/06/14	KWG1413516	
Hexachlorobutadiene	ND	U	2.0	0.30	0.11	1	10/06/14	10/06/14	KWG1413516	
Naphthalene	ND	U	2.0	0.30	0.088	1	10/06/14	10/06/14	KWG1413516	
1,2,3-Trichlorobenzene	ND	U	2.0	0.40	0.11	1	10/06/14	10/06/14	KWG1413516	

* See Case Narrative

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1410529
Project:	TO 01 JBLM	**Date Collected:**	09/24/2014
Sample Matrix:	Water	**Date Received:**	09/26/2014

Volatile Organic Compounds

Sample Name:	LGC140924LC124-1	**Units:**	ug/L
Lab Code:	K1410529-018	**Basis:**	NA

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Dibromofluoromethane	93	85-115	10/06/14	Acceptable
1,2-Dichloroethane-d4	108	70-120	10/06/14	Acceptable
Toluene-d8	96	85-120	10/06/14	Acceptable
4-Bromofluorobenzene	91	75-120	10/06/14	Acceptable

Comments:

Analytical Results

Client: Sealaska Environmental Services, LLC
Project: TO 01 JBLM
Sample Matrix: Water

Service Request: K1410529
Date Collected: 09/24/2014
Date Received: 09/26/2014

Volatile Organic Compounds

Sample Name: LGC140924DUP2-1
Lab Code: K1410529-019

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
Dichlorodifluoromethane	ND	U	0.50	0.20	0.13	1	10/06/14	10/06/14	KWG1413516	
Chloromethane	ND	U	0.50	0.20	0.068	1	10/06/14	10/06/14	KWG1413516	
Vinyl Chloride	ND	U	0.50	0.10	0.075	1	10/06/14	10/06/14	KWG1413516	
Bromomethane	ND	U	0.50	0.30	0.10	1	10/06/14	10/06/14	KWG1413516	
Chloroethane	ND	U	0.50	0.20	0.16	1	10/06/14	10/06/14	KWG1413516	
Trichlorofluoromethane	ND	U	0.50	0.20	0.12	1	10/06/14	10/06/14	KWG1413516	
1,1-Dichloroethene	ND	U	0.50	0.20	0.080	1	10/06/14	10/06/14	KWG1413516	
Acetone	ND	U	20	10	3.3	1	10/06/14	10/06/14	KWG1413516	*
Carbon Disulfide	ND	U	0.50	0.20	0.069	1	10/06/14	10/06/14	KWG1413516	*
Methylene Chloride	ND	U	2.0	0.20	0.10	1	10/06/14	10/06/14	KWG1413516	
Methyl tert-Butyl Ether	ND	U	0.50	0.30	0.11	1	10/06/14	10/06/14	KWG1413516	
trans-1,2-Dichloroethene	ND	U	0.50	0.20	0.072	1	10/06/14	10/06/14	KWG1413516	
1,1-Dichloroethane	ND	U	0.50	0.20	0.077	1	10/06/14	10/06/14	KWG1413516	
2,2-Dichloropropane	ND	U	0.50	0.20	0.060	1	10/06/14	10/06/14	KWG1413516	*
cis-1,2-Dichloroethene	ND	U	0.50	0.20	0.067	1	10/06/14	10/06/14	KWG1413516	
2-Butanone (MEK)	ND	U	20	4.0	1.9	1	10/06/14	10/06/14	KWG1413516	
Bromochloromethane	ND	U	0.50	0.20	0.16	1	10/06/14	10/06/14	KWG1413516	
Chloroform	**0.090**	J	0.50	0.20	0.072	1	10/06/14	10/06/14	KWG1413516	
1,1,1-Trichloroethane (TCA)	ND	U	0.50	0.20	0.075	1	10/06/14	10/06/14	KWG1413516	
Carbon Tetrachloride	ND	U	0.50	0.20	0.096	1	10/06/14	10/06/14	KWG1413516	
1,1-Dichloropropene	ND	U	0.50	0.20	0.089	1	10/06/14	10/06/14	KWG1413516	
Benzene	ND	U	0.50	0.10	0.062	1	10/06/14	10/06/14	KWG1413516	
1,2-Dichloroethane (EDC)	ND	U	0.50	0.15	0.080	1	10/06/14	10/06/14	KWG1413516	
Trichloroethene (TCE)	**2.6**		0.50	0.10	0.10	1	10/06/14	10/06/14	KWG1413516	
1,2-Dichloropropane	ND	U	0.50	0.20	0.095	1	10/06/14	10/06/14	KWG1413516	
Dibromomethane	ND	U	0.50	0.50	0.15	1	10/06/14	10/06/14	KWG1413516	
Bromodichloromethane	ND	U	0.50	0.30	0.091	1	10/06/14	10/06/14	KWG1413516	
cis-1,3-Dichloropropene	ND	U	0.50	0.20	0.18	1	10/06/14	10/06/14	KWG1413516	
4-Methyl-2-pentanone (MIBK)	ND	U	20	10	2.6	1	10/06/14	10/06/14	KWG1413516	
Toluene	ND	U	0.50	0.10	0.054	1	10/06/14	10/06/14	KWG1413516	
trans-1,3-Dichloropropene	ND	U	0.50	0.20	0.068	1	10/06/14	10/06/14	KWG1413516	
1,1,2-Trichloroethane	ND	U	0.50	0.40	0.14	1	10/06/14	10/06/14	KWG1413516	
Tetrachloroethene (PCE)	ND	U	0.50	0.20	0.099	1	10/06/14	10/06/14	KWG1413516	

Comments:

Analytical Results

Client: Sealaska Environmental Services, LLC
Project: TO 01 JBLM
Sample Matrix: Water

Service Request: K1410529
Date Collected: 09/24/2014
Date Received: 09/26/2014

Volatile Organic Compounds

Sample Name: LGC140924DUP2-1
Lab Code: K1410529-019

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
2-Hexanone	ND	U	20	10	2.7	1	10/06/14	10/06/14	KWG1413516	
1,3-Dichloropropane	ND	U	0.50	0.30	0.14	1	10/06/14	10/06/14	KWG1413516	
Dibromochloromethane	ND	U	0.50	0.50	0.14	1	10/06/14	10/06/14	KWG1413516	
1,2-Dibromoethane (EDB)	ND	U	2.0	0.20	0.10	1	10/06/14	10/06/14	KWG1413516	
Chlorobenzene	ND	U	0.50	0.20	0.11	1	10/06/14	10/06/14	KWG1413516	
Ethylbenzene	ND	U	0.50	0.10	0.050	1	10/06/14	10/06/14	KWG1413516	
1,1,1,2-Tetrachloroethane	ND	U	0.50	0.20	0.11	1	10/06/14	10/06/14	KWG1413516	
m,p-Xylenes	ND	U	0.50	0.20	0.11	1	10/06/14	10/06/14	KWG1413516	
o-Xylene	ND	U	0.50	0.20	0.074	1	10/06/14	10/06/14	KWG1413516	
Styrene	ND	U	0.50	0.20	0.089	1	10/06/14	10/06/14	KWG1413516	
Bromoform	ND	U	0.50	0.50	0.16	1	10/06/14	10/06/14	KWG1413516	
Isopropylbenzene	ND	U	2.0	0.20	0.051	1	10/06/14	10/06/14	KWG1413516	
1,1,2,2-Tetrachloroethane	ND	U	0.50	0.20	0.16	1	10/06/14	10/06/14	KWG1413516	
Bromobenzene	ND	U	2.0	0.20	0.12	1	10/06/14	10/06/14	KWG1413516	
n-Propylbenzene	ND	U	2.0	0.20	0.054	1	10/06/14	10/06/14	KWG1413516	
1,2,3-Trichloropropane	ND	U	0.50	0.50	0.20	1	10/06/14	10/06/14	KWG1413516	
2-Chlorotoluene	ND	U	2.0	0.20	0.10	1	10/06/14	10/06/14	KWG1413516	
1,3,5-Trimethylbenzene	ND	U	2.0	0.20	0.089	1	10/06/14	10/06/14	KWG1413516	
4-Chlorotoluene	ND	U	2.0	0.20	0.13	1	10/06/14	10/06/14	KWG1413516	
tert-Butylbenzene	ND	U	2.0	0.20	0.059	1	10/06/14	10/06/14	KWG1413516	
1,2,4-Trimethylbenzene	ND	U	2.0	0.20	0.069	1	10/06/14	10/06/14	KWG1413516	
sec-Butylbenzene	ND	U	2.0	0.10	0.062	1	10/06/14	10/06/14	KWG1413516	
4-Isopropyltoluene	ND	U	2.0	0.20	0.060	1	10/06/14	10/06/14	KWG1413516	
1,3-Dichlorobenzene	ND	U	0.50	0.20	0.10	1	10/06/14	10/06/14	KWG1413516	
1,4-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	10/06/14	10/06/14	KWG1413516	
n-Butylbenzene	ND	U	2.0	0.10	0.054	1	10/06/14	10/06/14	KWG1413516	
1,2-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	10/06/14	10/06/14	KWG1413516	
1,2-Dibromo-3-chloropropane	ND	U	2.0	0.80	0.20	1	10/06/14	10/06/14	KWG1413516	
1,2,4-Trichlorobenzene	ND	U	2.0	0.30	0.096	1	10/06/14	10/06/14	KWG1413516	
Hexachlorobutadiene	ND	U	2.0	0.30	0.11	1	10/06/14	10/06/14	KWG1413516	
Naphthalene	ND	U	2.0	0.30	0.088	1	10/06/14	10/06/14	KWG1413516	
1,2,3-Trichlorobenzene	ND	U	2.0	0.40	0.11	1	10/06/14	10/06/14	KWG1413516	

* See Case Narrative

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1410529
Project:	TO 01 JBLM	**Date Collected:**	09/24/2014
Sample Matrix:	Water	**Date Received:**	09/26/2014

Volatile Organic Compounds

Sample Name:	LGC140924DUP2-1	**Units:**	ug/L
Lab Code:	K1410529-019	**Basis:**	NA

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Dibromofluoromethane	94	85-115	10/06/14	Acceptable
1,2-Dichloroethane-d4	110	70-120	10/06/14	Acceptable
Toluene-d8	97	85-120	10/06/14	Acceptable
4-Bromofluorobenzene	92	75-120	10/06/14	Acceptable

Comments:

Analytical Results

Client: Sealaska Environmental Services, LLC
Project: TO 01 JBLM
Sample Matrix: Water

Service Request: K1410529
Date Collected: 09/24/2014
Date Received: 09/26/2014

Volatile Organic Compounds

Sample Name: LG140924LC122B-1
Lab Code: K1410529-020

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
Dichlorodifluoromethane	ND	U	0.50	0.20	0.13	1	10/06/14	10/06/14	KWG1413516	
Chloromethane	**0.070**	J	0.50	0.20	0.068	1	10/06/14	10/06/14	KWG1413516	
Vinyl Chloride	ND	U	0.50	0.10	0.075	1	10/06/14	10/06/14	KWG1413516	
Bromomethane	ND	U	0.50	0.30	0.10	1	10/06/14	10/06/14	KWG1413516	
Chloroethane	ND	U	0.50	0.20	0.16	1	10/06/14	10/06/14	KWG1413516	
Trichlorofluoromethane	ND	U	0.50	0.20	0.12	1	10/06/14	10/06/14	KWG1413516	
1,1-Dichloroethene	ND	U	0.50	0.20	0.080	1	10/06/14	10/06/14	KWG1413516	
Acetone	ND	U	20	10	3.3	1	10/06/14	10/06/14	KWG1413516	*
Carbon Disulfide	**0.27**	J	0.50	0.20	0.069	1	10/06/14	10/06/14	KWG1413516	*
Methylene Chloride	ND	U	2.0	0.20	0.10	1	10/06/14	10/06/14	KWG1413516	
Methyl tert-Butyl Ether	ND	U	0.50	0.30	0.11	1	10/06/14	10/06/14	KWG1413516	
trans-1,2-Dichloroethene	ND	U	0.50	0.20	0.072	1	10/06/14	10/06/14	KWG1413516	
1,1-Dichloroethane	ND	U	0.50	0.20	0.077	1	10/06/14	10/06/14	KWG1413516	
2,2-Dichloropropane	ND	U	0.50	0.20	0.060	1	10/06/14	10/06/14	KWG1413516	*
cis-1,2-Dichloroethene	ND	U	0.50	0.20	0.067	1	10/06/14	10/06/14	KWG1413516	
2-Butanone (MEK)	ND	U	20	4.0	1.9	1	10/06/14	10/06/14	KWG1413516	
Bromochloromethane	ND	U	0.50	0.20	0.16	1	10/06/14	10/06/14	KWG1413516	
Chloroform	ND	U	0.50	0.20	0.072	1	10/06/14	10/06/14	KWG1413516	
1,1,1-Trichloroethane (TCA)	ND	U	0.50	0.20	0.075	1	10/06/14	10/06/14	KWG1413516	
Carbon Tetrachloride	ND	U	0.50	0.20	0.096	1	10/06/14	10/06/14	KWG1413516	
1,1-Dichloropropene	ND	U	0.50	0.20	0.089	1	10/06/14	10/06/14	KWG1413516	
Benzene	ND	U	0.50	0.10	0.062	1	10/06/14	10/06/14	KWG1413516	
1,2-Dichloroethane (EDC)	ND	U	0.50	0.15	0.080	1	10/06/14	10/06/14	KWG1413516	
Trichloroethene (TCE)	ND	U	0.50	0.10	0.10	1	10/06/14	10/06/14	KWG1413516	
1,2-Dichloropropane	ND	U	0.50	0.20	0.095	1	10/06/14	10/06/14	KWG1413516	
Dibromomethane	ND	U	0.50	0.50	0.15	1	10/06/14	10/06/14	KWG1413516	
Bromodichloromethane	ND	U	0.50	0.30	0.091	1	10/06/14	10/06/14	KWG1413516	
cis-1,3-Dichloropropene	ND	U	0.50	0.20	0.18	1	10/06/14	10/06/14	KWG1413516	
4-Methyl-2-pentanone (MIBK)	ND	U	20	10	2.6	1	10/06/14	10/06/14	KWG1413516	
Toluene	ND	U	0.50	0.10	0.054	1	10/06/14	10/06/14	KWG1413516	
trans-1,3-Dichloropropene	ND	U	0.50	0.20	0.068	1	10/06/14	10/06/14	KWG1413516	
1,1,2-Trichloroethane	ND	U	0.50	0.40	0.14	1	10/06/14	10/06/14	KWG1413516	
Tetrachloroethene (PCE)	ND	U	0.50	0.20	0.099	1	10/06/14	10/06/14	KWG1413516	

Comments:

Analytical Results

Client: Sealaska Environmental Services, LLC
Project: TO 01 JBLM
Sample Matrix: Water

Service Request: K1410529
Date Collected: 09/24/2014
Date Received: 09/26/2014

Volatile Organic Compounds

Sample Name: LG140924LC122B-1
Lab Code: K1410529-020

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
2-Hexanone	ND	U	20	10	2.7	1	10/06/14	10/06/14	KWG1413516	
1,3-Dichloropropane	ND	U	0.50	0.30	0.14	1	10/06/14	10/06/14	KWG1413516	
Dibromochloromethane	ND	U	0.50	0.50	0.14	1	10/06/14	10/06/14	KWG1413516	
1,2-Dibromoethane (EDB)	ND	U	2.0	0.20	0.10	1	10/06/14	10/06/14	KWG1413516	
Chlorobenzene	ND	U	0.50	0.20	0.11	1	10/06/14	10/06/14	KWG1413516	
Ethylbenzene	ND	U	0.50	0.10	0.050	1	10/06/14	10/06/14	KWG1413516	
1,1,1,2-Tetrachloroethane	ND	U	0.50	0.20	0.11	1	10/06/14	10/06/14	KWG1413516	
m,p-Xylenes	ND	U	0.50	0.20	0.11	1	10/06/14	10/06/14	KWG1413516	
o-Xylene	ND	U	0.50	0.20	0.074	1	10/06/14	10/06/14	KWG1413516	
Styrene	ND	U	0.50	0.20	0.089	1	10/06/14	10/06/14	KWG1413516	
Bromoform	ND	U	0.50	0.50	0.16	1	10/06/14	10/06/14	KWG1413516	
Isopropylbenzene	ND	U	2.0	0.20	0.051	1	10/06/14	10/06/14	KWG1413516	
1,1,2,2-Tetrachloroethane	ND	U	0.50	0.20	0.16	1	10/06/14	10/06/14	KWG1413516	
Bromobenzene	ND	U	2.0	0.20	0.12	1	10/06/14	10/06/14	KWG1413516	
n-Propylbenzene	ND	U	2.0	0.20	0.054	1	10/06/14	10/06/14	KWG1413516	
1,2,3-Trichloropropane	ND	U	0.50	0.50	0.20	1	10/06/14	10/06/14	KWG1413516	
2-Chlorotoluene	ND	U	2.0	0.20	0.10	1	10/06/14	10/06/14	KWG1413516	
1,3,5-Trimethylbenzene	ND	U	2.0	0.20	0.089	1	10/06/14	10/06/14	KWG1413516	
4-Chlorotoluene	ND	U	2.0	0.20	0.13	1	10/06/14	10/06/14	KWG1413516	
tert-Butylbenzene	ND	U	2.0	0.20	0.059	1	10/06/14	10/06/14	KWG1413516	
1,2,4-Trimethylbenzene	ND	U	2.0	0.20	0.069	1	10/06/14	10/06/14	KWG1413516	
sec-Butylbenzene	ND	U	2.0	0.10	0.062	1	10/06/14	10/06/14	KWG1413516	
4-Isopropyltoluene	ND	U	2.0	0.20	0.060	1	10/06/14	10/06/14	KWG1413516	
1,3-Dichlorobenzene	ND	U	0.50	0.20	0.10	1	10/06/14	10/06/14	KWG1413516	
1,4-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	10/06/14	10/06/14	KWG1413516	
n-Butylbenzene	ND	U	2.0	0.10	0.054	1	10/06/14	10/06/14	KWG1413516	
1,2-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	10/06/14	10/06/14	KWG1413516	
1,2-Dibromo-3-chloropropane	ND	U	2.0	0.80	0.20	1	10/06/14	10/06/14	KWG1413516	
1,2,4-Trichlorobenzene	ND	U	2.0	0.30	0.096	1	10/06/14	10/06/14	KWG1413516	
Hexachlorobutadiene	ND	U	2.0	0.30	0.11	1	10/06/14	10/06/14	KWG1413516	
Naphthalene	ND	U	2.0	0.30	0.088	1	10/06/14	10/06/14	KWG1413516	
1,2,3-Trichlorobenzene	ND	U	2.0	0.40	0.11	1	10/06/14	10/06/14	KWG1413516	

* See Case Narrative

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1410529
Project:	TO 01 JBLM	**Date Collected:**	09/24/2014
Sample Matrix:	Water	**Date Received:**	09/26/2014

Volatile Organic Compounds

Sample Name:	LG140924LC122B-1	**Units:**	ug/L
Lab Code:	K1410529-020	**Basis:**	NA

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Dibromofluoromethane	96	85-115	10/06/14	Acceptable
1,2-Dichloroethane-d4	111	70-120	10/06/14	Acceptable
Toluene-d8	99	85-120	10/06/14	Acceptable
4-Bromofluorobenzene	93	75-120	10/06/14	Acceptable

Comments:

Analytical Results

Client: Sealaska Environmental Services, LLC
Project: TO 01 JBLM
Sample Matrix: Water

Service Request: K1410529
Date Collected: 09/24/2014
Date Received: 09/26/2014

Volatile Organic Compounds

Sample Name: LGC140924LC61B-1
Lab Code: K1410529-021

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
Dichlorodifluoromethane	ND	U	0.50	0.20	0.13	1	10/06/14	10/06/14	KWG1413516	
Chloromethane	ND	U	0.50	0.20	0.068	1	10/06/14	10/06/14	KWG1413516	
Vinyl Chloride	ND	U	0.50	0.10	0.075	1	10/06/14	10/06/14	KWG1413516	
Bromomethane	ND	U	0.50	0.30	0.10	1	10/06/14	10/06/14	KWG1413516	
Chloroethane	ND	U	0.50	0.20	0.16	1	10/06/14	10/06/14	KWG1413516	
Trichlorofluoromethane	ND	U	0.50	0.20	0.12	1	10/06/14	10/06/14	KWG1413516	
1,1-Dichloroethene	ND	U	0.50	0.20	0.080	1	10/06/14	10/06/14	KWG1413516	
Acetone	**5.3**	J	20	10	3.3	1	10/06/14	10/06/14	KWG1413516	*
Carbon Disulfide	ND	U	0.50	0.20	0.069	1	10/06/14	10/06/14	KWG1413516	*
Methylene Chloride	ND	U	2.0	0.20	0.10	1	10/06/14	10/06/14	KWG1413516	
Methyl tert-Butyl Ether	ND	U	0.50	0.30	0.11	1	10/06/14	10/06/14	KWG1413516	
trans-1,2-Dichloroethene	ND	U	0.50	0.20	0.072	1	10/06/14	10/06/14	KWG1413516	
1,1-Dichloroethane	ND	U	0.50	0.20	0.077	1	10/06/14	10/06/14	KWG1413516	
2,2-Dichloropropane	ND	U	0.50	0.20	0.060	1	10/06/14	10/06/14	KWG1413516	*
cis-1,2-Dichloroethene	ND	U	0.50	0.20	0.067	1	10/06/14	10/06/14	KWG1413516	
2-Butanone (MEK)	ND	U	20	4.0	1.9	1	10/06/14	10/06/14	KWG1413516	
Bromochloromethane	ND	U	0.50	0.20	0.16	1	10/06/14	10/06/14	KWG1413516	
Chloroform	ND	U	0.50	0.20	0.072	1	10/06/14	10/06/14	KWG1413516	
1,1,1-Trichloroethane (TCA)	ND	U	0.50	0.20	0.075	1	10/06/14	10/06/14	KWG1413516	
Carbon Tetrachloride	ND	U	0.50	0.20	0.096	1	10/06/14	10/06/14	KWG1413516	
1,1-Dichloropropene	ND	U	0.50	0.20	0.089	1	10/06/14	10/06/14	KWG1413516	
Benzene	ND	U	0.50	0.10	0.062	1	10/06/14	10/06/14	KWG1413516	
1,2-Dichloroethane (EDC)	ND	U	0.50	0.15	0.080	1	10/06/14	10/06/14	KWG1413516	
Trichloroethene (TCE)	**0.45**	J	0.50	0.10	0.10	1	10/06/14	10/06/14	KWG1413516	
1,2-Dichloropropane	ND	U	0.50	0.20	0.095	1	10/06/14	10/06/14	KWG1413516	
Dibromomethane	ND	U	0.50	0.50	0.15	1	10/06/14	10/06/14	KWG1413516	
Bromodichloromethane	ND	U	0.50	0.30	0.091	1	10/06/14	10/06/14	KWG1413516	
cis-1,3-Dichloropropene	ND	U	0.50	0.20	0.18	1	10/06/14	10/06/14	KWG1413516	
4-Methyl-2-pentanone (MIBK)	ND	U	20	10	2.6	1	10/06/14	10/06/14	KWG1413516	
Toluene	ND	U	0.50	0.10	0.054	1	10/06/14	10/06/14	KWG1413516	
trans-1,3-Dichloropropene	ND	U	0.50	0.20	0.068	1	10/06/14	10/06/14	KWG1413516	
1,1,2-Trichloroethane	ND	U	0.50	0.40	0.14	1	10/06/14	10/06/14	KWG1413516	
Tetrachloroethene (PCE)	ND	U	0.50	0.20	0.099	1	10/06/14	10/06/14	KWG1413516	

Comments:

Analytical Results

Client: Sealaska Environmental Services, LLC
Project: TO 01 JBLM
Sample Matrix: Water

Service Request: K1410529
Date Collected: 09/24/2014
Date Received: 09/26/2014

Volatile Organic Compounds

Sample Name: LGC140924LC61B-1
Lab Code: K1410529-021

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
2-Hexanone	ND	U	20	10	2.7	1	10/06/14	10/06/14	KWG1413516	
1,3-Dichloropropane	ND	U	0.50	0.30	0.14	1	10/06/14	10/06/14	KWG1413516	
Dibromochloromethane	ND	U	0.50	0.50	0.14	1	10/06/14	10/06/14	KWG1413516	
1,2-Dibromoethane (EDB)	ND	U	2.0	0.20	0.10	1	10/06/14	10/06/14	KWG1413516	
Chlorobenzene	ND	U	0.50	0.20	0.11	1	10/06/14	10/06/14	KWG1413516	
Ethylbenzene	ND	U	0.50	0.10	0.050	1	10/06/14	10/06/14	KWG1413516	
1,1,1,2-Tetrachloroethane	ND	U	0.50	0.20	0.11	1	10/06/14	10/06/14	KWG1413516	
m,p-Xylenes	ND	U	0.50	0.20	0.11	1	10/06/14	10/06/14	KWG1413516	
o-Xylene	ND	U	0.50	0.20	0.074	1	10/06/14	10/06/14	KWG1413516	
Styrene	ND	U	0.50	0.20	0.089	1	10/06/14	10/06/14	KWG1413516	
Bromoform	ND	U	0.50	0.50	0.16	1	10/06/14	10/06/14	KWG1413516	
Isopropylbenzene	ND	U	2.0	0.20	0.051	1	10/06/14	10/06/14	KWG1413516	
1,1,2,2-Tetrachloroethane	ND	U	0.50	0.20	0.16	1	10/06/14	10/06/14	KWG1413516	
Bromobenzene	ND	U	2.0	0.20	0.12	1	10/06/14	10/06/14	KWG1413516	
n-Propylbenzene	ND	U	2.0	0.20	0.054	1	10/06/14	10/06/14	KWG1413516	
1,2,3-Trichloropropane	ND	U	0.50	0.50	0.20	1	10/06/14	10/06/14	KWG1413516	
2-Chlorotoluene	ND	U	2.0	0.20	0.10	1	10/06/14	10/06/14	KWG1413516	
1,3,5-Trimethylbenzene	ND	U	2.0	0.20	0.089	1	10/06/14	10/06/14	KWG1413516	
4-Chlorotoluene	ND	U	2.0	0.20	0.13	1	10/06/14	10/06/14	KWG1413516	
tert-Butylbenzene	ND	U	2.0	0.20	0.059	1	10/06/14	10/06/14	KWG1413516	
1,2,4-Trimethylbenzene	ND	U	2.0	0.20	0.069	1	10/06/14	10/06/14	KWG1413516	
sec-Butylbenzene	ND	U	2.0	0.10	0.062	1	10/06/14	10/06/14	KWG1413516	
4-Isopropyltoluene	ND	U	2.0	0.20	0.060	1	10/06/14	10/06/14	KWG1413516	
1,3-Dichlorobenzene	ND	U	0.50	0.20	0.10	1	10/06/14	10/06/14	KWG1413516	
1,4-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	10/06/14	10/06/14	KWG1413516	
n-Butylbenzene	ND	U	2.0	0.10	0.054	1	10/06/14	10/06/14	KWG1413516	
1,2-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	10/06/14	10/06/14	KWG1413516	
1,2-Dibromo-3-chloropropane	ND	U	2.0	0.80	0.20	1	10/06/14	10/06/14	KWG1413516	
1,2,4-Trichlorobenzene	ND	U	2.0	0.30	0.096	1	10/06/14	10/06/14	KWG1413516	
Hexachlorobutadiene	ND	U	2.0	0.30	0.11	1	10/06/14	10/06/14	KWG1413516	
Naphthalene	ND	U	2.0	0.30	0.088	1	10/06/14	10/06/14	KWG1413516	
1,2,3-Trichlorobenzene	ND	U	2.0	0.40	0.11	1	10/06/14	10/06/14	KWG1413516	

* See Case Narrative

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1410529
Project:	TO 01 JBLM	**Date Collected:**	09/24/2014
Sample Matrix:	Water	**Date Received:**	09/26/2014

Volatile Organic Compounds

Sample Name:	LGC140924LC61B-1	**Units:**	ug/L
Lab Code:	K1410529-021	**Basis:**	NA

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Dibromofluoromethane	96	85-115	10/06/14	Acceptable
1,2-Dichloroethane-d4	115	70-120	10/06/14	Acceptable
Toluene-d8	99	85-120	10/06/14	Acceptable
4-Bromofluorobenzene	91	75-120	10/06/14	Acceptable

Comments:

Analytical Results

Client: Sealaska Environmental Services, LLC
Project: TO 01 JBLM
Sample Matrix: Water

Service Request: K1410529
Date Collected: 09/24/2014
Date Received: 09/26/2014

Volatile Organic Compounds

Sample Name: LGC140924LC226-1
Lab Code: K1410529-022

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
Dichlorodifluoromethane	ND	U	0.50	0.20	0.13	1	10/06/14	10/06/14	KWG1413516	
Chloromethane	ND	U	0.50	0.20	0.068	1	10/06/14	10/06/14	KWG1413516	
Vinyl Chloride	ND	U	0.50	0.10	0.075	1	10/06/14	10/06/14	KWG1413516	
Bromomethane	ND	U	0.50	0.30	0.10	1	10/06/14	10/06/14	KWG1413516	
Chloroethane	ND	U	0.50	0.20	0.16	1	10/06/14	10/06/14	KWG1413516	
Trichlorofluoromethane	ND	U	0.50	0.20	0.12	1	10/06/14	10/06/14	KWG1413516	
1,1-Dichloroethene	**0.36**	J	0.50	0.20	0.080	1	10/06/14	10/06/14	KWG1413516	
Acetone	**4.5**	J	20	10	3.3	1	10/06/14	10/06/14	KWG1413516	*
Carbon Disulfide	ND	U	0.50	0.20	0.069	1	10/06/14	10/06/14	KWG1413516	*
Methylene Chloride	ND	U	2.0	0.20	0.10	1	10/06/14	10/06/14	KWG1413516	
Methyl tert-Butyl Ether	ND	U	0.50	0.30	0.11	1	10/06/14	10/06/14	KWG1413516	
trans-1,2-Dichloroethene	ND	U	0.50	0.20	0.072	1	10/06/14	10/06/14	KWG1413516	
1,1-Dichloroethane	ND	U	0.50	0.20	0.077	1	10/06/14	10/06/14	KWG1413516	
2,2-Dichloropropane	ND	U	0.50	0.20	0.060	1	10/06/14	10/06/14	KWG1413516	*
cis-1,2-Dichloroethene	**1.8**		0.50	0.20	0.067	1	10/06/14	10/06/14	KWG1413516	
2-Butanone (MEK)	ND	U	20	4.0	1.9	1	10/06/14	10/06/14	KWG1413516	
Bromochloromethane	ND	U	0.50	0.20	0.16	1	10/06/14	10/06/14	KWG1413516	
Chloroform	**0.28**	J	0.50	0.20	0.072	1	10/06/14	10/06/14	KWG1413516	
1,1,1-Trichloroethane (TCA)	**1.8**		0.50	0.20	0.075	1	10/06/14	10/06/14	KWG1413516	
Carbon Tetrachloride	**0.15**	J	0.50	0.20	0.096	1	10/06/14	10/06/14	KWG1413516	
1,1-Dichloropropene	ND	U	0.50	0.20	0.089	1	10/06/14	10/06/14	KWG1413516	
Benzene	ND	U	0.50	0.10	0.062	1	10/06/14	10/06/14	KWG1413516	
1,2-Dichloroethane (EDC)	ND	U	0.50	0.15	0.080	1	10/06/14	10/06/14	KWG1413516	
Trichloroethene (TCE)	**5.7**		0.50	0.10	0.10	1	10/06/14	10/06/14	KWG1413516	
1,2-Dichloropropane	ND	U	0.50	0.20	0.095	1	10/06/14	10/06/14	KWG1413516	
Dibromomethane	ND	U	0.50	0.50	0.15	1	10/06/14	10/06/14	KWG1413516	
Bromodichloromethane	ND	U	0.50	0.30	0.091	1	10/06/14	10/06/14	KWG1413516	
cis-1,3-Dichloropropene	ND	U	0.50	0.20	0.18	1	10/06/14	10/06/14	KWG1413516	
4-Methyl-2-pentanone (MIBK)	ND	U	20	10	2.6	1	10/06/14	10/06/14	KWG1413516	
Toluene	ND	U	0.50	0.10	0.054	1	10/06/14	10/06/14	KWG1413516	
trans-1,3-Dichloropropene	ND	U	0.50	0.20	0.068	1	10/06/14	10/06/14	KWG1413516	
1,1,2-Trichloroethane	ND	U	0.50	0.40	0.14	1	10/06/14	10/06/14	KWG1413516	
Tetrachloroethene (PCE)	ND	U	0.50	0.20	0.099	1	10/06/14	10/06/14	KWG1413516	

Comments:

Analytical Results

Client: Sealaska Environmental Services, LLC
Project: TO 01 JBLM
Sample Matrix: Water

Service Request: K1410529
Date Collected: 09/24/2014
Date Received: 09/26/2014

Volatile Organic Compounds

Sample Name: LGC140924LC226-1
Lab Code: K1410529-022

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
2-Hexanone	ND	U	20	10	2.7	1	10/06/14	10/06/14	KWG1413516	
1,3-Dichloropropane	ND	U	0.50	0.30	0.14	1	10/06/14	10/06/14	KWG1413516	
Dibromochloromethane	ND	U	0.50	0.50	0.14	1	10/06/14	10/06/14	KWG1413516	
1,2-Dibromoethane (EDB)	ND	U	2.0	0.20	0.10	1	10/06/14	10/06/14	KWG1413516	
Chlorobenzene	ND	U	0.50	0.20	0.11	1	10/06/14	10/06/14	KWG1413516	
Ethylbenzene	ND	U	0.50	0.10	0.050	1	10/06/14	10/06/14	KWG1413516	
1,1,1,2-Tetrachloroethane	ND	U	0.50	0.20	0.11	1	10/06/14	10/06/14	KWG1413516	
m,p-Xylenes	ND	U	0.50	0.20	0.11	1	10/06/14	10/06/14	KWG1413516	
o-Xylene	ND	U	0.50	0.20	0.074	1	10/06/14	10/06/14	KWG1413516	
Styrene	ND	U	0.50	0.20	0.089	1	10/06/14	10/06/14	KWG1413516	
Bromoform	ND	U	0.50	0.50	0.16	1	10/06/14	10/06/14	KWG1413516	
Isopropylbenzene	ND	U	2.0	0.20	0.051	1	10/06/14	10/06/14	KWG1413516	
1,1,2,2-Tetrachloroethane	ND	U	0.50	0.20	0.16	1	10/06/14	10/06/14	KWG1413516	
Bromobenzene	ND	U	2.0	0.20	0.12	1	10/06/14	10/06/14	KWG1413516	
n-Propylbenzene	ND	U	2.0	0.20	0.054	1	10/06/14	10/06/14	KWG1413516	
1,2,3-Trichloropropane	ND	U	0.50	0.50	0.20	1	10/06/14	10/06/14	KWG1413516	
2-Chlorotoluene	ND	U	2.0	0.20	0.10	1	10/06/14	10/06/14	KWG1413516	
1,3,5-Trimethylbenzene	ND	U	2.0	0.20	0.089	1	10/06/14	10/06/14	KWG1413516	
4-Chlorotoluene	ND	U	2.0	0.20	0.13	1	10/06/14	10/06/14	KWG1413516	
tert-Butylbenzene	ND	U	2.0	0.20	0.059	1	10/06/14	10/06/14	KWG1413516	
1,2,4-Trimethylbenzene	ND	U	2.0	0.20	0.069	1	10/06/14	10/06/14	KWG1413516	
sec-Butylbenzene	ND	U	2.0	0.10	0.062	1	10/06/14	10/06/14	KWG1413516	
4-Isopropyltoluene	ND	U	2.0	0.20	0.060	1	10/06/14	10/06/14	KWG1413516	
1,3-Dichlorobenzene	ND	U	0.50	0.20	0.10	1	10/06/14	10/06/14	KWG1413516	
1,4-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	10/06/14	10/06/14	KWG1413516	
n-Butylbenzene	ND	U	2.0	0.10	0.054	1	10/06/14	10/06/14	KWG1413516	
1,2-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	10/06/14	10/06/14	KWG1413516	
1,2-Dibromo-3-chloropropane	ND	U	2.0	0.80	0.20	1	10/06/14	10/06/14	KWG1413516	
1,2,4-Trichlorobenzene	ND	U	2.0	0.30	0.096	1	10/06/14	10/06/14	KWG1413516	
Hexachlorobutadiene	ND	U	2.0	0.30	0.11	1	10/06/14	10/06/14	KWG1413516	
Naphthalene	ND	U	2.0	0.30	0.088	1	10/06/14	10/06/14	KWG1413516	
1,2,3-Trichlorobenzene	ND	U	2.0	0.40	0.11	1	10/06/14	10/06/14	KWG1413516	

* See Case Narrative

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1410529
Project:	TO 01 JBLM	**Date Collected:**	09/24/2014
Sample Matrix:	Water	**Date Received:**	09/26/2014

Volatile Organic Compounds

Sample Name:	LGC140924LC226-1	**Units:**	ug/L
Lab Code:	K1410529-022	**Basis:**	NA

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Dibromofluoromethane	96	85-115	10/06/14	Acceptable
1,2-Dichloroethane-d4	110	70-120	10/06/14	Acceptable
Toluene-d8	97	85-120	10/06/14	Acceptable
4-Bromofluorobenzene	93	75-120	10/06/14	Acceptable

Comments:

Analytical Results

Client: Sealaska Environmental Services, LLC
Project: TO 01 JBLM
Sample Matrix: Water

Service Request: K1410529
Date Collected: 09/25/2014
Date Received: 09/26/2014

Volatile Organic Compounds

Sample Name: LGC140925SLAP5-1
Lab Code: K1410529-023

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
Dichlorodifluoromethane	ND	U	0.50	0.20	0.13	1	10/06/14	10/06/14	KWG1413516	
Chloromethane	**0.22**	J	0.50	0.20	0.068	1	10/06/14	10/06/14	KWG1413516	
Vinyl Chloride	ND	U	0.50	0.10	0.075	1	10/06/14	10/06/14	KWG1413516	
Bromomethane	ND	U	0.50	0.30	0.10	1	10/06/14	10/06/14	KWG1413516	
Chloroethane	ND	U	0.50	0.20	0.16	1	10/06/14	10/06/14	KWG1413516	
Trichlorofluoromethane	ND	U	0.50	0.20	0.12	1	10/06/14	10/06/14	KWG1413516	
1,1-Dichloroethene	ND	U	0.50	0.20	0.080	1	10/06/14	10/06/14	KWG1413516	
Acetone	ND	U	20	10	3.3	1	10/06/14	10/06/14	KWG1413516	*
Carbon Disulfide	ND	U	0.50	0.20	0.069	1	10/06/14	10/06/14	KWG1413516	*
Methylene Chloride	ND	U	2.0	0.20	0.10	1	10/06/14	10/06/14	KWG1413516	
Methyl tert-Butyl Ether	ND	U	0.50	0.30	0.11	1	10/06/14	10/06/14	KWG1413516	
trans-1,2-Dichloroethene	ND	U	0.50	0.20	0.072	1	10/06/14	10/06/14	KWG1413516	
1,1-Dichloroethane	ND	U	0.50	0.20	0.077	1	10/06/14	10/06/14	KWG1413516	
2,2-Dichloropropane	ND	U	0.50	0.20	0.060	1	10/06/14	10/06/14	KWG1413516	*
cis-1,2-Dichloroethene	**0.25**	J	0.50	0.20	0.067	1	10/06/14	10/06/14	KWG1413516	
2-Butanone (MEK)	ND	U	20	4.0	1.9	1	10/06/14	10/06/14	KWG1413516	
Bromochloromethane	ND	U	0.50	0.20	0.16	1	10/06/14	10/06/14	KWG1413516	
Chloroform	ND	U	0.50	0.20	0.072	1	10/06/14	10/06/14	KWG1413516	
1,1,1-Trichloroethane (TCA)	ND	U	0.50	0.20	0.075	1	10/06/14	10/06/14	KWG1413516	
Carbon Tetrachloride	ND	U	0.50	0.20	0.096	1	10/06/14	10/06/14	KWG1413516	
1,1-Dichloropropene	ND	U	0.50	0.20	0.089	1	10/06/14	10/06/14	KWG1413516	
Benzene	ND	U	0.50	0.10	0.062	1	10/06/14	10/06/14	KWG1413516	
1,2-Dichloroethane (EDC)	ND	U	0.50	0.15	0.080	1	10/06/14	10/06/14	KWG1413516	
Trichloroethene (TCE)	**11**		0.50	0.10	0.10	1	10/06/14	10/06/14	KWG1413516	
1,2-Dichloropropane	ND	U	0.50	0.20	0.095	1	10/06/14	10/06/14	KWG1413516	
Dibromomethane	ND	U	0.50	0.50	0.15	1	10/06/14	10/06/14	KWG1413516	
Bromodichloromethane	ND	U	0.50	0.30	0.091	1	10/06/14	10/06/14	KWG1413516	
cis-1,3-Dichloropropene	ND	U	0.50	0.20	0.18	1	10/06/14	10/06/14	KWG1413516	
4-Methyl-2-pentanone (MIBK)	ND	U	20	10	2.6	1	10/06/14	10/06/14	KWG1413516	
Toluene	ND	U	0.50	0.10	0.054	1	10/06/14	10/06/14	KWG1413516	
trans-1,3-Dichloropropene	ND	U	0.50	0.20	0.068	1	10/06/14	10/06/14	KWG1413516	
1,1,2-Trichloroethane	ND	U	0.50	0.40	0.14	1	10/06/14	10/06/14	KWG1413516	
Tetrachloroethene (PCE)	ND	U	0.50	0.20	0.099	1	10/06/14	10/06/14	KWG1413516	

Comments:

Analytical Results

Client: Sealaska Environmental Services, LLC
Project: TO 01 JBLM
Sample Matrix: Water

Service Request: K1410529
Date Collected: 09/25/2014
Date Received: 09/26/2014

Volatile Organic Compounds

Sample Name: LGC140925SLAP5-1
Lab Code: K1410529-023

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
2-Hexanone	ND	U	20	10	2.7	1	10/06/14	10/06/14	KWG1413516	
1,3-Dichloropropane	ND	U	0.50	0.30	0.14	1	10/06/14	10/06/14	KWG1413516	
Dibromochloromethane	ND	U	0.50	0.50	0.14	1	10/06/14	10/06/14	KWG1413516	
1,2-Dibromoethane (EDB)	ND	U	2.0	0.20	0.10	1	10/06/14	10/06/14	KWG1413516	
Chlorobenzene	ND	U	0.50	0.20	0.11	1	10/06/14	10/06/14	KWG1413516	
Ethylbenzene	ND	U	0.50	0.10	0.050	1	10/06/14	10/06/14	KWG1413516	
1,1,1,2-Tetrachloroethane	ND	U	0.50	0.20	0.11	1	10/06/14	10/06/14	KWG1413516	
m,p-Xylenes	ND	U	0.50	0.20	0.11	1	10/06/14	10/06/14	KWG1413516	
o-Xylene	ND	U	0.50	0.20	0.074	1	10/06/14	10/06/14	KWG1413516	
Styrene	ND	U	0.50	0.20	0.089	1	10/06/14	10/06/14	KWG1413516	
Bromoform	ND	U	0.50	0.50	0.16	1	10/06/14	10/06/14	KWG1413516	
Isopropylbenzene	ND	U	2.0	0.20	0.051	1	10/06/14	10/06/14	KWG1413516	
1,1,2,2-Tetrachloroethane	ND	U	0.50	0.20	0.16	1	10/06/14	10/06/14	KWG1413516	
Bromobenzene	ND	U	2.0	0.20	0.12	1	10/06/14	10/06/14	KWG1413516	
n-Propylbenzene	ND	U	2.0	0.20	0.054	1	10/06/14	10/06/14	KWG1413516	
1,2,3-Trichloropropane	ND	U	0.50	0.50	0.20	1	10/06/14	10/06/14	KWG1413516	
2-Chlorotoluene	ND	U	2.0	0.20	0.10	1	10/06/14	10/06/14	KWG1413516	
1,3,5-Trimethylbenzene	ND	U	2.0	0.20	0.089	1	10/06/14	10/06/14	KWG1413516	
4-Chlorotoluene	ND	U	2.0	0.20	0.13	1	10/06/14	10/06/14	KWG1413516	
tert-Butylbenzene	ND	U	2.0	0.20	0.059	1	10/06/14	10/06/14	KWG1413516	
1,2,4-Trimethylbenzene	ND	U	2.0	0.20	0.069	1	10/06/14	10/06/14	KWG1413516	
sec-Butylbenzene	ND	U	2.0	0.10	0.062	1	10/06/14	10/06/14	KWG1413516	
4-Isopropyltoluene	ND	U	2.0	0.20	0.060	1	10/06/14	10/06/14	KWG1413516	
1,3-Dichlorobenzene	ND	U	0.50	0.20	0.10	1	10/06/14	10/06/14	KWG1413516	
1,4-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	10/06/14	10/06/14	KWG1413516	
n-Butylbenzene	ND	U	2.0	0.10	0.054	1	10/06/14	10/06/14	KWG1413516	
1,2-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	10/06/14	10/06/14	KWG1413516	
1,2-Dibromo-3-chloropropane	ND	U	2.0	0.80	0.20	1	10/06/14	10/06/14	KWG1413516	
1,2,4-Trichlorobenzene	ND	U	2.0	0.30	0.096	1	10/06/14	10/06/14	KWG1413516	
Hexachlorobutadiene	ND	U	2.0	0.30	0.11	1	10/06/14	10/06/14	KWG1413516	
Naphthalene	ND	U	2.0	0.30	0.088	1	10/06/14	10/06/14	KWG1413516	
1,2,3-Trichlorobenzene	ND	U	2.0	0.40	0.11	1	10/06/14	10/06/14	KWG1413516	

* See Case Narrative

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1410529
Project:	TO 01 JBLM	**Date Collected:**	09/25/2014
Sample Matrix:	Water	**Date Received:**	09/26/2014

Volatile Organic Compounds

Sample Name:	LGC140925SLAP5-1	**Units:**	ug/L
Lab Code:	K1410529-023	**Basis:**	NA

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Dibromofluoromethane	98	85-115	10/06/14	Acceptable
1,2-Dichloroethane-d4	112	70-120	10/06/14	Acceptable
Toluene-d8	98	85-120	10/06/14	Acceptable
4-Bromofluorobenzene	90	75-120	10/06/14	Acceptable

Comments:

Analytical Results

Client: Sealaska Environmental Services, LLC
Project: TO 01 JBLM
Sample Matrix: Water

Service Request: K1410529
Date Collected: 09/25/2014
Date Received: 09/26/2014

Volatile Organic Compounds

Sample Name: LG140925SLAP4-1
Lab Code: K1410529-024

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
Dichlorodifluoromethane	ND	U	0.50	0.20	0.13	1	10/07/14	10/07/14	KWG1413535	
Chloromethane	**0.19**	J	0.50	0.20	0.068	1	10/07/14	10/07/14	KWG1413535	
Vinyl Chloride	ND	U	0.50	0.10	0.075	1	10/07/14	10/07/14	KWG1413535	
Bromomethane	ND	U	0.50	0.30	0.10	1	10/07/14	10/07/14	KWG1413535	
Chloroethane	ND	U	0.50	0.20	0.16	1	10/07/14	10/07/14	KWG1413535	
Trichlorofluoromethane	ND	U	0.50	0.20	0.12	1	10/07/14	10/07/14	KWG1413535	
1,1-Dichloroethene	ND	U	0.50	0.20	0.080	1	10/07/14	10/07/14	KWG1413535	
Acetone	ND	U	20	10	3.3	1	10/07/14	10/07/14	KWG1413535	*
Carbon Disulfide	ND	U	0.50	0.20	0.069	1	10/07/14	10/07/14	KWG1413535	*
Methylene Chloride	ND	U	2.0	0.20	0.10	1	10/07/14	10/07/14	KWG1413535	
Methyl tert-Butyl Ether	ND	U	0.50	0.30	0.11	1	10/07/14	10/07/14	KWG1413535	
trans-1,2-Dichloroethene	ND	U	0.50	0.20	0.072	1	10/07/14	10/07/14	KWG1413535	
1,1-Dichloroethane	ND	U	0.50	0.20	0.077	1	10/07/14	10/07/14	KWG1413535	
2,2-Dichloropropane	ND	U	0.50	0.20	0.060	1	10/07/14	10/07/14	KWG1413535	*
cis-1,2-Dichloroethene	**0.56**		0.50	0.20	0.067	1	10/07/14	10/07/14	KWG1413535	
2-Butanone (MEK)	ND	U	20	4.0	1.9	1	10/07/14	10/07/14	KWG1413535	
Bromochloromethane	ND	U	0.50	0.20	0.16	1	10/07/14	10/07/14	KWG1413535	
Chloroform	**0.12**	J	0.50	0.20	0.072	1	10/07/14	10/07/14	KWG1413535	
1,1,1-Trichloroethane (TCA)	**0.080**	J	0.50	0.20	0.075	1	10/07/14	10/07/14	KWG1413535	
Carbon Tetrachloride	ND	U	0.50	0.20	0.096	1	10/07/14	10/07/14	KWG1413535	
1,1-Dichloropropene	ND	U	0.50	0.20	0.089	1	10/07/14	10/07/14	KWG1413535	
Benzene	ND	U	0.50	0.10	0.062	1	10/07/14	10/07/14	KWG1413535	
1,2-Dichloroethane (EDC)	ND	U	0.50	0.15	0.080	1	10/07/14	10/07/14	KWG1413535	
Trichloroethene (TCE)	**33**		0.50	0.10	0.10	1	10/07/14	10/07/14	KWG1413535	
1,2-Dichloropropane	ND	U	0.50	0.20	0.095	1	10/07/14	10/07/14	KWG1413535	
Dibromomethane	ND	U	0.50	0.50	0.15	1	10/07/14	10/07/14	KWG1413535	
Bromodichloromethane	ND	U	0.50	0.30	0.091	1	10/07/14	10/07/14	KWG1413535	
cis-1,3-Dichloropropene	ND	U	0.50	0.20	0.18	1	10/07/14	10/07/14	KWG1413535	
4-Methyl-2-pentanone (MIBK)	ND	U	20	10	2.6	1	10/07/14	10/07/14	KWG1413535	
Toluene	ND	U	0.50	0.10	0.054	1	10/07/14	10/07/14	KWG1413535	
trans-1,3-Dichloropropene	ND	U	0.50	0.20	0.068	1	10/07/14	10/07/14	KWG1413535	*
1,1,2-Trichloroethane	ND	U	0.50	0.40	0.14	1	10/07/14	10/07/14	KWG1413535	
Tetrachloroethene (PCE)	ND	U	0.50	0.20	0.099	1	10/07/14	10/07/14	KWG1413535	

Comments:

Analytical Results

Client: Sealaska Environmental Services, LLC
Project: TO 01 JBLM
Sample Matrix: Water

Service Request: K1410529
Date Collected: 09/25/2014
Date Received: 09/26/2014

Volatile Organic Compounds

Sample Name: LG140925SLAP4-1
Lab Code: K1410529-024

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
2-Hexanone	ND	U	20	10	2.7	1	10/07/14	10/07/14	KWG1413535	
1,3-Dichloropropane	ND	U	0.50	0.30	0.14	1	10/07/14	10/07/14	KWG1413535	
Dibromochloromethane	ND	U	0.50	0.50	0.14	1	10/07/14	10/07/14	KWG1413535	
1,2-Dibromoethane (EDB)	ND	U	2.0	0.20	0.10	1	10/07/14	10/07/14	KWG1413535	
Chlorobenzene	ND	U	0.50	0.20	0.11	1	10/07/14	10/07/14	KWG1413535	
Ethylbenzene	ND	U	0.50	0.10	0.050	1	10/07/14	10/07/14	KWG1413535	
1,1,1,2-Tetrachloroethane	ND	U	0.50	0.20	0.11	1	10/07/14	10/07/14	KWG1413535	
m,p-Xylenes	ND	U	0.50	0.20	0.11	1	10/07/14	10/07/14	KWG1413535	
o-Xylene	ND	U	0.50	0.20	0.074	1	10/07/14	10/07/14	KWG1413535	
Styrene	ND	U	0.50	0.20	0.089	1	10/07/14	10/07/14	KWG1413535	
Bromoform	ND	U	0.50	0.50	0.16	1	10/07/14	10/07/14	KWG1413535	
Isopropylbenzene	ND	U	2.0	0.20	0.051	1	10/07/14	10/07/14	KWG1413535	
1,1,2,2-Tetrachloroethane	ND	U	0.50	0.20	0.16	1	10/07/14	10/07/14	KWG1413535	
Bromobenzene	ND	U	2.0	0.20	0.12	1	10/07/14	10/07/14	KWG1413535	
n-Propylbenzene	ND	U	2.0	0.20	0.054	1	10/07/14	10/07/14	KWG1413535	
1,2,3-Trichloropropane	ND	U	0.50	0.50	0.20	1	10/07/14	10/07/14	KWG1413535	
2-Chlorotoluene	ND	U	2.0	0.20	0.10	1	10/07/14	10/07/14	KWG1413535	
1,3,5-Trimethylbenzene	ND	U	2.0	0.20	0.089	1	10/07/14	10/07/14	KWG1413535	
4-Chlorotoluene	ND	U	2.0	0.20	0.13	1	10/07/14	10/07/14	KWG1413535	
tert-Butylbenzene	ND	U	2.0	0.20	0.059	1	10/07/14	10/07/14	KWG1413535	
1,2,4-Trimethylbenzene	ND	U	2.0	0.20	0.069	1	10/07/14	10/07/14	KWG1413535	
sec-Butylbenzene	ND	U	2.0	0.10	0.062	1	10/07/14	10/07/14	KWG1413535	
4-Isopropyltoluene	ND	U	2.0	0.20	0.060	1	10/07/14	10/07/14	KWG1413535	
1,3-Dichlorobenzene	ND	U	0.50	0.20	0.10	1	10/07/14	10/07/14	KWG1413535	
1,4-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	10/07/14	10/07/14	KWG1413535	
n-Butylbenzene	ND	U	2.0	0.10	0.054	1	10/07/14	10/07/14	KWG1413535	
1,2-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	10/07/14	10/07/14	KWG1413535	
1,2-Dibromo-3-chloropropane	ND	U	2.0	0.80	0.20	1	10/07/14	10/07/14	KWG1413535	
1,2,4-Trichlorobenzene	ND	U	2.0	0.30	0.096	1	10/07/14	10/07/14	KWG1413535	
Hexachlorobutadiene	ND	U	2.0	0.30	0.11	1	10/07/14	10/07/14	KWG1413535	
Naphthalene	ND	U	2.0	0.30	0.088	1	10/07/14	10/07/14	KWG1413535	
1,2,3-Trichlorobenzene	ND	U	2.0	0.40	0.11	1	10/07/14	10/07/14	KWG1413535	

* See Case Narrative

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1410529
Project:	TO 01 JBLM	**Date Collected:**	09/25/2014
Sample Matrix:	Water	**Date Received:**	09/26/2014

Volatile Organic Compounds

Sample Name:	LG140925SLAP4-1	**Units:**	ug/L
Lab Code:	K1410529-024	**Basis:**	NA

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Dibromofluoromethane	94	85-115	10/07/14	Acceptable
1,2-Dichloroethane-d4	109	70-120	10/07/14	Acceptable
Toluene-d8	97	85-120	10/07/14	Acceptable
4-Bromofluorobenzene	93	75-120	10/07/14	Acceptable

Comments:

Analytical Results

Client: Sealaska Environmental Services, LLC
Project: TO 01 JBLM
Sample Matrix: Water

Service Request: K1410529
Date Collected: 09/25/2014
Date Received: 09/26/2014

Volatile Organic Compounds

Sample Name: LG140925SLAP3-1
Lab Code: K1410529-025

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
Dichlorodifluoromethane	ND	U	0.50	0.20	0.13	1	10/07/14	10/07/14	KWG1413535	
Chloromethane	**0.18**	J	0.50	0.20	0.068	1	10/07/14	10/07/14	KWG1413535	
Vinyl Chloride	ND	U	0.50	0.10	0.075	1	10/07/14	10/07/14	KWG1413535	
Bromomethane	ND	U	0.50	0.30	0.10	1	10/07/14	10/07/14	KWG1413535	
Chloroethane	ND	U	0.50	0.20	0.16	1	10/07/14	10/07/14	KWG1413535	
Trichlorofluoromethane	ND	U	0.50	0.20	0.12	1	10/07/14	10/07/14	KWG1413535	
1,1-Dichloroethene	ND	U	0.50	0.20	0.080	1	10/07/14	10/07/14	KWG1413535	
Acetone	ND	U	20	10	3.3	1	10/07/14	10/07/14	KWG1413535	*
Carbon Disulfide	ND	U	0.50	0.20	0.069	1	10/07/14	10/07/14	KWG1413535	*
Methylene Chloride	ND	U	2.0	0.20	0.10	1	10/07/14	10/07/14	KWG1413535	
Methyl tert-Butyl Ether	ND	U	0.50	0.30	0.11	1	10/07/14	10/07/14	KWG1413535	
trans-1,2-Dichloroethene	ND	U	0.50	0.20	0.072	1	10/07/14	10/07/14	KWG1413535	
1,1-Dichloroethane	ND	U	0.50	0.20	0.077	1	10/07/14	10/07/14	KWG1413535	
2,2-Dichloropropane	ND	U	0.50	0.20	0.060	1	10/07/14	10/07/14	KWG1413535	*
cis-1,2-Dichloroethene	**0.90**		0.50	0.20	0.067	1	10/07/14	10/07/14	KWG1413535	
2-Butanone (MEK)	ND	U	20	4.0	1.9	1	10/07/14	10/07/14	KWG1413535	
Bromochloromethane	ND	U	0.50	0.20	0.16	1	10/07/14	10/07/14	KWG1413535	
Chloroform	**0.14**	J	0.50	0.20	0.072	1	10/07/14	10/07/14	KWG1413535	
1,1,1-Trichloroethane (TCA)	**0.23**	J	0.50	0.20	0.075	1	10/07/14	10/07/14	KWG1413535	
Carbon Tetrachloride	**0.13**	J	0.50	0.20	0.096	1	10/07/14	10/07/14	KWG1413535	
1,1-Dichloropropene	ND	U	0.50	0.20	0.089	1	10/07/14	10/07/14	KWG1413535	
Benzene	ND	U	0.50	0.10	0.062	1	10/07/14	10/07/14	KWG1413535	
1,2-Dichloroethane (EDC)	ND	U	0.50	0.15	0.080	1	10/07/14	10/07/14	KWG1413535	
Trichloroethene (TCE)	**30**		0.50	0.10	0.10	1	10/07/14	10/07/14	KWG1413535	
1,2-Dichloropropane	ND	U	0.50	0.20	0.095	1	10/07/14	10/07/14	KWG1413535	
Dibromomethane	ND	U	0.50	0.50	0.15	1	10/07/14	10/07/14	KWG1413535	
Bromodichloromethane	ND	U	0.50	0.30	0.091	1	10/07/14	10/07/14	KWG1413535	
cis-1,3-Dichloropropene	ND	U	0.50	0.20	0.18	1	10/07/14	10/07/14	KWG1413535	
4-Methyl-2-pentanone (MIBK)	ND	U	20	10	2.6	1	10/07/14	10/07/14	KWG1413535	
Toluene	ND	U	0.50	0.10	0.054	1	10/07/14	10/07/14	KWG1413535	
trans-1,3-Dichloropropene	ND	U	0.50	0.20	0.068	1	10/07/14	10/07/14	KWG1413535	*
1,1,2-Trichloroethane	ND	U	0.50	0.40	0.14	1	10/07/14	10/07/14	KWG1413535	
Tetrachloroethene (PCE)	ND	U	0.50	0.20	0.099	1	10/07/14	10/07/14	KWG1413535	

Comments:

Analytical Results

Client: Sealaska Environmental Services, LLC
Project: TO 01 JBLM
Sample Matrix: Water

Service Request: K1410529
Date Collected: 09/25/2014
Date Received: 09/26/2014

Volatile Organic Compounds

Sample Name: LG140925SLAP3-1
Lab Code: K1410529-025

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
2-Hexanone	ND	U	20	10	2.7	1	10/07/14	10/07/14	KWG1413535	
1,3-Dichloropropane	ND	U	0.50	0.30	0.14	1	10/07/14	10/07/14	KWG1413535	
Dibromochloromethane	ND	U	0.50	0.50	0.14	1	10/07/14	10/07/14	KWG1413535	
1,2-Dibromoethane (EDB)	ND	U	2.0	0.20	0.10	1	10/07/14	10/07/14	KWG1413535	
Chlorobenzene	ND	U	0.50	0.20	0.11	1	10/07/14	10/07/14	KWG1413535	
Ethylbenzene	ND	U	0.50	0.10	0.050	1	10/07/14	10/07/14	KWG1413535	
1,1,1,2-Tetrachloroethane	ND	U	0.50	0.20	0.11	1	10/07/14	10/07/14	KWG1413535	
m,p-Xylenes	ND	U	0.50	0.20	0.11	1	10/07/14	10/07/14	KWG1413535	
o-Xylene	ND	U	0.50	0.20	0.074	1	10/07/14	10/07/14	KWG1413535	
Styrene	ND	U	0.50	0.20	0.089	1	10/07/14	10/07/14	KWG1413535	
Bromoform	ND	U	0.50	0.50	0.16	1	10/07/14	10/07/14	KWG1413535	
Isopropylbenzene	ND	U	2.0	0.20	0.051	1	10/07/14	10/07/14	KWG1413535	
1,1,2,2-Tetrachloroethane	ND	U	0.50	0.20	0.16	1	10/07/14	10/07/14	KWG1413535	
Bromobenzene	ND	U	2.0	0.20	0.12	1	10/07/14	10/07/14	KWG1413535	
n-Propylbenzene	ND	U	2.0	0.20	0.054	1	10/07/14	10/07/14	KWG1413535	
1,2,3-Trichloropropane	ND	U	0.50	0.50	0.20	1	10/07/14	10/07/14	KWG1413535	
2-Chlorotoluene	ND	U	2.0	0.20	0.10	1	10/07/14	10/07/14	KWG1413535	
1,3,5-Trimethylbenzene	ND	U	2.0	0.20	0.089	1	10/07/14	10/07/14	KWG1413535	
4-Chlorotoluene	ND	U	2.0	0.20	0.13	1	10/07/14	10/07/14	KWG1413535	
tert-Butylbenzene	ND	U	2.0	0.20	0.059	1	10/07/14	10/07/14	KWG1413535	
1,2,4-Trimethylbenzene	ND	U	2.0	0.20	0.069	1	10/07/14	10/07/14	KWG1413535	
sec-Butylbenzene	ND	U	2.0	0.10	0.062	1	10/07/14	10/07/14	KWG1413535	
4-Isopropyltoluene	ND	U	2.0	0.20	0.060	1	10/07/14	10/07/14	KWG1413535	
1,3-Dichlorobenzene	ND	U	0.50	0.20	0.10	1	10/07/14	10/07/14	KWG1413535	
1,4-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	10/07/14	10/07/14	KWG1413535	
n-Butylbenzene	ND	U	2.0	0.10	0.054	1	10/07/14	10/07/14	KWG1413535	
1,2-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	10/07/14	10/07/14	KWG1413535	
1,2-Dibromo-3-chloropropane	ND	U	2.0	0.80	0.20	1	10/07/14	10/07/14	KWG1413535	
1,2,4-Trichlorobenzene	ND	U	2.0	0.30	0.096	1	10/07/14	10/07/14	KWG1413535	
Hexachlorobutadiene	ND	U	2.0	0.30	0.11	1	10/07/14	10/07/14	KWG1413535	
Naphthalene	ND	U	2.0	0.30	0.088	1	10/07/14	10/07/14	KWG1413535	
1,2,3-Trichlorobenzene	ND	U	2.0	0.40	0.11	1	10/07/14	10/07/14	KWG1413535	

* See Case Narrative

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1410529
Project:	TO 01 JBLM	**Date Collected:**	09/25/2014
Sample Matrix:	Water	**Date Received:**	09/26/2014

Volatile Organic Compounds

Sample Name:	LG140925SLAP3-1	**Units:**	ug/L
Lab Code:	K1410529-025	**Basis:**	NA

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Dibromofluoromethane	97	85-115	10/07/14	Acceptable
1,2-Dichloroethane-d4	112	70-120	10/07/14	Acceptable
Toluene-d8	97	85-120	10/07/14	Acceptable
4-Bromofluorobenzene	91	75-120	10/07/14	Acceptable

Comments:

Analytical Results

Client: Sealaska Environmental Services, LLC
Project: TO 01 JBLM
Sample Matrix: Water

Service Request: K1410529
Date Collected: 09/25/2014
Date Received: 09/26/2014

Volatile Organic Compounds

Sample Name: LG140925SLAP1-1
Lab Code: K1410529-026

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
Dichlorodifluoromethane	ND	U	0.50	0.20	0.13	1	10/07/14	10/07/14	KWG1413535	
Chloromethane	**0.27**	J	0.50	0.20	0.068	1	10/07/14	10/07/14	KWG1413535	
Vinyl Chloride	ND	U	0.50	0.10	0.075	1	10/07/14	10/07/14	KWG1413535	
Bromomethane	ND	U	0.50	0.30	0.10	1	10/07/14	10/07/14	KWG1413535	
Chloroethane	ND	U	0.50	0.20	0.16	1	10/07/14	10/07/14	KWG1413535	
Trichlorofluoromethane	ND	U	0.50	0.20	0.12	1	10/07/14	10/07/14	KWG1413535	
1,1-Dichloroethene	ND	U	0.50	0.20	0.080	1	10/07/14	10/07/14	KWG1413535	
Acetone	ND	U	20	10	3.3	1	10/07/14	10/07/14	KWG1413535	*
Carbon Disulfide	ND	U	0.50	0.20	0.069	1	10/07/14	10/07/14	KWG1413535	*
Methylene Chloride	ND	U	2.0	0.20	0.10	1	10/07/14	10/07/14	KWG1413535	
Methyl tert-Butyl Ether	ND	U	0.50	0.30	0.11	1	10/07/14	10/07/14	KWG1413535	
trans-1,2-Dichloroethene	ND	U	0.50	0.20	0.072	1	10/07/14	10/07/14	KWG1413535	
1,1-Dichloroethane	ND	U	0.50	0.20	0.077	1	10/07/14	10/07/14	KWG1413535	
2,2-Dichloropropane	ND	U	0.50	0.20	0.060	1	10/07/14	10/07/14	KWG1413535	*
cis-1,2-Dichloroethene	**0.58**		0.50	0.20	0.067	1	10/07/14	10/07/14	KWG1413535	
2-Butanone (MEK)	ND	U	20	4.0	1.9	1	10/07/14	10/07/14	KWG1413535	
Bromochloromethane	ND	U	0.50	0.20	0.16	1	10/07/14	10/07/14	KWG1413535	
Chloroform	**0.10**	J	0.50	0.20	0.072	1	10/07/14	10/07/14	KWG1413535	
1,1,1-Trichloroethane (TCA)	**0.18**	J	0.50	0.20	0.075	1	10/07/14	10/07/14	KWG1413535	
Carbon Tetrachloride	**0.13**	J	0.50	0.20	0.096	1	10/07/14	10/07/14	KWG1413535	
1,1-Dichloropropene	ND	U	0.50	0.20	0.089	1	10/07/14	10/07/14	KWG1413535	
Benzene	ND	U	0.50	0.10	0.062	1	10/07/14	10/07/14	KWG1413535	
1,2-Dichloroethane (EDC)	ND	U	0.50	0.15	0.080	1	10/07/14	10/07/14	KWG1413535	
Trichloroethene (TCE)	**6.6**		0.50	0.10	0.10	1	10/07/14	10/07/14	KWG1413535	
1,2-Dichloropropane	ND	U	0.50	0.20	0.095	1	10/07/14	10/07/14	KWG1413535	
Dibromomethane	ND	U	0.50	0.50	0.15	1	10/07/14	10/07/14	KWG1413535	
Bromodichloromethane	ND	U	0.50	0.30	0.091	1	10/07/14	10/07/14	KWG1413535	
cis-1,3-Dichloropropene	ND	U	0.50	0.20	0.18	1	10/07/14	10/07/14	KWG1413535	
4-Methyl-2-pentanone (MIBK)	ND	U	20	10	2.6	1	10/07/14	10/07/14	KWG1413535	
Toluene	**0.070**	J	0.50	0.10	0.054	1	10/07/14	10/07/14	KWG1413535	
trans-1,3-Dichloropropene	ND	U	0.50	0.20	0.068	1	10/07/14	10/07/14	KWG1413535	*
1,1,2-Trichloroethane	ND	U	0.50	0.40	0.14	1	10/07/14	10/07/14	KWG1413535	
Tetrachloroethene (PCE)	ND	U	0.50	0.20	0.099	1	10/07/14	10/07/14	KWG1413535	

Comments:

Analytical Results

Client: Sealaska Environmental Services, LLC
Project: TO 01 JBLM
Sample Matrix: Water

Service Request: K1410529
Date Collected: 09/25/2014
Date Received: 09/26/2014

Volatile Organic Compounds

Sample Name: LG140925SLAP1-1
Lab Code: K1410529-026

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
2-Hexanone	ND	U	20	10	2.7	1	10/07/14	10/07/14	KWG1413535	
1,3-Dichloropropane	ND	U	0.50	0.30	0.14	1	10/07/14	10/07/14	KWG1413535	
Dibromochloromethane	ND	U	0.50	0.50	0.14	1	10/07/14	10/07/14	KWG1413535	
1,2-Dibromoethane (EDB)	ND	U	2.0	0.20	0.10	1	10/07/14	10/07/14	KWG1413535	
Chlorobenzene	ND	U	0.50	0.20	0.11	1	10/07/14	10/07/14	KWG1413535	
Ethylbenzene	ND	U	0.50	0.10	0.050	1	10/07/14	10/07/14	KWG1413535	
1,1,1,2-Tetrachloroethane	ND	U	0.50	0.20	0.11	1	10/07/14	10/07/14	KWG1413535	
m,p-Xylenes	ND	U	0.50	0.20	0.11	1	10/07/14	10/07/14	KWG1413535	
o-Xylene	ND	U	0.50	0.20	0.074	1	10/07/14	10/07/14	KWG1413535	
Styrene	ND	U	0.50	0.20	0.089	1	10/07/14	10/07/14	KWG1413535	
Bromoform	ND	U	0.50	0.50	0.16	1	10/07/14	10/07/14	KWG1413535	
Isopropylbenzene	ND	U	2.0	0.20	0.051	1	10/07/14	10/07/14	KWG1413535	
1,1,2,2-Tetrachloroethane	ND	U	0.50	0.20	0.16	1	10/07/14	10/07/14	KWG1413535	
Bromobenzene	ND	U	2.0	0.20	0.12	1	10/07/14	10/07/14	KWG1413535	
n-Propylbenzene	ND	U	2.0	0.20	0.054	1	10/07/14	10/07/14	KWG1413535	
1,2,3-Trichloropropane	ND	U	0.50	0.50	0.20	1	10/07/14	10/07/14	KWG1413535	
2-Chlorotoluene	ND	U	2.0	0.20	0.10	1	10/07/14	10/07/14	KWG1413535	
1,3,5-Trimethylbenzene	ND	U	2.0	0.20	0.089	1	10/07/14	10/07/14	KWG1413535	
4-Chlorotoluene	ND	U	2.0	0.20	0.13	1	10/07/14	10/07/14	KWG1413535	
tert-Butylbenzene	ND	U	2.0	0.20	0.059	1	10/07/14	10/07/14	KWG1413535	
1,2,4-Trimethylbenzene	ND	U	2.0	0.20	0.069	1	10/07/14	10/07/14	KWG1413535	
sec-Butylbenzene	ND	U	2.0	0.10	0.062	1	10/07/14	10/07/14	KWG1413535	
4-Isopropyltoluene	ND	U	2.0	0.20	0.060	1	10/07/14	10/07/14	KWG1413535	
1,3-Dichlorobenzene	ND	U	0.50	0.20	0.10	1	10/07/14	10/07/14	KWG1413535	
1,4-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	10/07/14	10/07/14	KWG1413535	
n-Butylbenzene	ND	U	2.0	0.10	0.054	1	10/07/14	10/07/14	KWG1413535	
1,2-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	10/07/14	10/07/14	KWG1413535	
1,2-Dibromo-3-chloropropane	ND	U	2.0	0.80	0.20	1	10/07/14	10/07/14	KWG1413535	
1,2,4-Trichlorobenzene	ND	U	2.0	0.30	0.096	1	10/07/14	10/07/14	KWG1413535	
Hexachlorobutadiene	ND	U	2.0	0.30	0.11	1	10/07/14	10/07/14	KWG1413535	
Naphthalene	ND	U	2.0	0.30	0.088	1	10/07/14	10/07/14	KWG1413535	
1,2,3-Trichlorobenzene	ND	U	2.0	0.40	0.11	1	10/07/14	10/07/14	KWG1413535	

* See Case Narrative

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1410529
Project:	TO 01 JBLM	**Date Collected:**	09/25/2014
Sample Matrix:	Water	**Date Received:**	09/26/2014

Volatile Organic Compounds

Sample Name:	LG140925SLAP1-1	**Units:**	ug/L
Lab Code:	K1410529-026	**Basis:**	NA

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Dibromofluoromethane	100	85-115	10/07/14	Acceptable
1,2-Dichloroethane-d4	109	70-120	10/07/14	Acceptable
Toluene-d8	96	85-120	10/07/14	Acceptable
4-Bromofluorobenzene	92	75-120	10/07/14	Acceptable

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1410529
Project:	TO 01 JBLM	**Date Collected:**	09/22/2014
Sample Matrix:	Water	**Date Received:**	09/26/2014

Volatile Organic Compounds

Sample Name:	TB-140922	**Units:**	ug/L
Lab Code:	K1410529-031	**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
Dichlorodifluoromethane	ND	U	0.50	0.20	0.13	1	10/03/14	10/03/14	KWG1413475	
Chloromethane	ND	U	0.50	0.20	0.068	1	10/03/14	10/03/14	KWG1413475	
Vinyl Chloride	ND	U	0.50	0.10	0.075	1	10/03/14	10/03/14	KWG1413475	
Bromomethane	ND	U	0.50	0.30	0.10	1	10/03/14	10/03/14	KWG1413475	*
Chloroethane	ND	U	0.50	0.20	0.16	1	10/03/14	10/03/14	KWG1413475	
Trichlorofluoromethane	ND	U	0.50	0.20	0.12	1	10/03/14	10/03/14	KWG1413475	
1,1-Dichloroethene	ND	U	0.50	0.20	0.080	1	10/03/14	10/03/14	KWG1413475	
Acetone	ND	U	20	10	3.3	1	10/03/14	10/03/14	KWG1413475	*
Carbon Disulfide	ND	U	0.50	0.20	0.069	1	10/03/14	10/03/14	KWG1413475	*
Methylene Chloride	**0.32**	J	2.0	0.20	0.10	1	10/03/14	10/03/14	KWG1413475	
Methyl tert-Butyl Ether	ND	U	0.50	0.30	0.11	1	10/03/14	10/03/14	KWG1413475	
trans-1,2-Dichloroethene	ND	U	0.50	0.20	0.072	1	10/03/14	10/03/14	KWG1413475	
1,1-Dichloroethane	ND	U	0.50	0.20	0.077	1	10/03/14	10/03/14	KWG1413475	
2,2-Dichloropropane	ND	U	0.50	0.20	0.060	1	10/03/14	10/03/14	KWG1413475	*
cis-1,2-Dichloroethene	ND	U	0.50	0.20	0.067	1	10/03/14	10/03/14	KWG1413475	
2-Butanone (MEK)	ND	U	20	4.0	1.9	1	10/03/14	10/03/14	KWG1413475	
Bromochloromethane	ND	U	0.50	0.20	0.16	1	10/03/14	10/03/14	KWG1413475	
Chloroform	ND	U	0.50	0.20	0.072	1	10/03/14	10/03/14	KWG1413475	
1,1,1-Trichloroethane (TCA)	ND	U	0.50	0.20	0.075	1	10/03/14	10/03/14	KWG1413475	
Carbon Tetrachloride	ND	U	0.50	0.20	0.096	1	10/03/14	10/03/14	KWG1413475	
1,1-Dichloropropene	ND	U	0.50	0.20	0.089	1	10/03/14	10/03/14	KWG1413475	
Benzene	ND	U	0.50	0.10	0.062	1	10/03/14	10/03/14	KWG1413475	
1,2-Dichloroethane (EDC)	ND	U	0.50	0.15	0.080	1	10/03/14	10/03/14	KWG1413475	
Trichloroethene (TCE)	ND	U	0.50	0.10	0.10	1	10/03/14	10/03/14	KWG1413475	
1,2-Dichloropropane	ND	U	0.50	0.20	0.095	1	10/03/14	10/03/14	KWG1413475	
Dibromomethane	ND	U	0.50	0.50	0.15	1	10/03/14	10/03/14	KWG1413475	
Bromodichloromethane	ND	U	0.50	0.30	0.091	1	10/03/14	10/03/14	KWG1413475	
cis-1,3-Dichloropropene	ND	U	0.50	0.20	0.18	1	10/03/14	10/03/14	KWG1413475	
4-Methyl-2-pentanone (MIBK)	ND	U	20	10	2.6	1	10/03/14	10/03/14	KWG1413475	
Toluene	ND	U	0.50	0.10	0.054	1	10/03/14	10/03/14	KWG1413475	
trans-1,3-Dichloropropene	ND	U	0.50	0.20	0.068	1	10/03/14	10/03/14	KWG1413475	
1,1,2-Trichloroethane	ND	U	0.50	0.40	0.14	1	10/03/14	10/03/14	KWG1413475	
Tetrachloroethene (PCE)	ND	U	0.50	0.20	0.099	1	10/03/14	10/03/14	KWG1413475	

Comments:

Analytical Results

Client: Sealaska Environmental Services, LLC
Project: TO 01 JBLM
Sample Matrix: Water

Service Request: K1410529
Date Collected: 09/22/2014
Date Received: 09/26/2014

Volatile Organic Compounds

Sample Name: TB-140922
Lab Code: K1410529-031

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
2-Hexanone	ND	U	20	10	2.7	1	10/03/14	10/03/14	KWG1413475	
1,3-Dichloropropane	ND	U	0.50	0.30	0.14	1	10/03/14	10/03/14	KWG1413475	
Dibromochloromethane	ND	U	0.50	0.50	0.14	1	10/03/14	10/03/14	KWG1413475	
1,2-Dibromoethane (EDB)	ND	U	2.0	0.20	0.10	1	10/03/14	10/03/14	KWG1413475	
Chlorobenzene	ND	U	0.50	0.20	0.11	1	10/03/14	10/03/14	KWG1413475	
Ethylbenzene	ND	U	0.50	0.10	0.050	1	10/03/14	10/03/14	KWG1413475	
1,1,1,2-Tetrachloroethane	ND	U	0.50	0.20	0.11	1	10/03/14	10/03/14	KWG1413475	
m,p-Xylenes	ND	U	0.50	0.20	0.11	1	10/03/14	10/03/14	KWG1413475	
o-Xylene	ND	U	0.50	0.20	0.074	1	10/03/14	10/03/14	KWG1413475	
Styrene	ND	U	0.50	0.20	0.089	1	10/03/14	10/03/14	KWG1413475	
Bromoform	ND	U	0.50	0.50	0.16	1	10/03/14	10/03/14	KWG1413475	
Isopropylbenzene	ND	U	2.0	0.20	0.051	1	10/03/14	10/03/14	KWG1413475	
1,1,2,2-Tetrachloroethane	ND	U	0.50	0.20	0.16	1	10/03/14	10/03/14	KWG1413475	
Bromobenzene	ND	U	2.0	0.20	0.12	1	10/03/14	10/03/14	KWG1413475	
n-Propylbenzene	ND	U	2.0	0.20	0.054	1	10/03/14	10/03/14	KWG1413475	
1,2,3-Trichloropropane	ND	U	0.50	0.50	0.20	1	10/03/14	10/03/14	KWG1413475	
2-Chlorotoluene	ND	U	2.0	0.20	0.10	1	10/03/14	10/03/14	KWG1413475	
1,3,5-Trimethylbenzene	ND	U	2.0	0.20	0.089	1	10/03/14	10/03/14	KWG1413475	
4-Chlorotoluene	ND	U	2.0	0.20	0.13	1	10/03/14	10/03/14	KWG1413475	
tert-Butylbenzene	ND	U	2.0	0.20	0.059	1	10/03/14	10/03/14	KWG1413475	
1,2,4-Trimethylbenzene	ND	U	2.0	0.20	0.069	1	10/03/14	10/03/14	KWG1413475	
sec-Butylbenzene	ND	U	2.0	0.10	0.062	1	10/03/14	10/03/14	KWG1413475	
4-Isopropyltoluene	ND	U	2.0	0.20	0.060	1	10/03/14	10/03/14	KWG1413475	
1,3-Dichlorobenzene	ND	U	0.50	0.20	0.10	1	10/03/14	10/03/14	KWG1413475	
1,4-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	10/03/14	10/03/14	KWG1413475	
n-Butylbenzene	ND	U	2.0	0.10	0.054	1	10/03/14	10/03/14	KWG1413475	
1,2-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	10/03/14	10/03/14	KWG1413475	
1,2-Dibromo-3-chloropropane	ND	U	2.0	0.80	0.20	1	10/03/14	10/03/14	KWG1413475	
1,2,4-Trichlorobenzene	ND	U	2.0	0.30	0.096	1	10/03/14	10/03/14	KWG1413475	
Hexachlorobutadiene	ND	U	2.0	0.30	0.11	1	10/03/14	10/03/14	KWG1413475	
Naphthalene	ND	U	2.0	0.30	0.088	1	10/03/14	10/03/14	KWG1413475	
1,2,3-Trichlorobenzene	ND	U	2.0	0.40	0.11	1	10/03/14	10/03/14	KWG1413475	

* See Case Narrative

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1410529
Project:	TO 01 JBLM	**Date Collected:**	09/22/2014
Sample Matrix:	Water	**Date Received:**	09/26/2014

Volatile Organic Compounds

Sample Name:	TB-140922	**Units:**	ug/L
Lab Code:	K1410529-031	**Basis:**	NA

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Dibromofluoromethane	93	85-115	10/03/14	Acceptable
1,2-Dichloroethane-d4	107	70-120	10/03/14	Acceptable
Toluene-d8	96	85-120	10/03/14	Acceptable
4-Bromofluorobenzene	94	75-120	10/03/14	Acceptable

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1410529
Project:	TO 01 JBLM	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA

Volatile Organic Compounds

Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	KWG1413475-4	**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
Dichlorodifluoromethane	ND	U	0.50	0.20	0.13	1	10/03/14	10/03/14	KWG1413475	
Chloromethane	ND	U	0.50	0.20	0.068	1	10/03/14	10/03/14	KWG1413475	
Vinyl Chloride	ND	U	0.50	0.10	0.075	1	10/03/14	10/03/14	KWG1413475	
Bromomethane	ND	U	0.50	0.30	0.10	1	10/03/14	10/03/14	KWG1413475	*
Chloroethane	ND	U	0.50	0.20	0.16	1	10/03/14	10/03/14	KWG1413475	
Trichlorofluoromethane	ND	U	0.50	0.20	0.12	1	10/03/14	10/03/14	KWG1413475	
1,1-Dichloroethene	ND	U	0.50	0.20	0.080	1	10/03/14	10/03/14	KWG1413475	
Acetone	ND	U	20	10	3.3	1	10/03/14	10/03/14	KWG1413475	*
Carbon Disulfide	ND	U	0.50	0.20	0.069	1	10/03/14	10/03/14	KWG1413475	*
Methylene Chloride	**0.42**	J	2.0	0.20	0.10	1	10/03/14	10/03/14	KWG1413475	
Methyl tert-Butyl Ether	ND	U	0.50	0.30	0.11	1	10/03/14	10/03/14	KWG1413475	
trans-1,2-Dichloroethene	ND	U	0.50	0.20	0.072	1	10/03/14	10/03/14	KWG1413475	
1,1-Dichloroethane	ND	U	0.50	0.20	0.077	1	10/03/14	10/03/14	KWG1413475	
2,2-Dichloropropane	ND	U	0.50	0.20	0.060	1	10/03/14	10/03/14	KWG1413475	*
cis-1,2-Dichloroethene	ND	U	0.50	0.20	0.067	1	10/03/14	10/03/14	KWG1413475	
2-Butanone (MEK)	ND	U	20	4.0	1.9	1	10/03/14	10/03/14	KWG1413475	
Bromochloromethane	ND	U	0.50	0.20	0.16	1	10/03/14	10/03/14	KWG1413475	
Chloroform	ND	U	0.50	0.20	0.072	1	10/03/14	10/03/14	KWG1413475	
1,1,1-Trichloroethane (TCA)	ND	U	0.50	0.20	0.075	1	10/03/14	10/03/14	KWG1413475	
Carbon Tetrachloride	ND	U	0.50	0.20	0.096	1	10/03/14	10/03/14	KWG1413475	
1,1-Dichloropropene	ND	U	0.50	0.20	0.089	1	10/03/14	10/03/14	KWG1413475	
Benzene	ND	U	0.50	0.10	0.062	1	10/03/14	10/03/14	KWG1413475	
1,2-Dichloroethane (EDC)	ND	U	0.50	0.15	0.080	1	10/03/14	10/03/14	KWG1413475	
Trichloroethene (TCE)	ND	U	0.50	0.10	0.10	1	10/03/14	10/03/14	KWG1413475	
1,2-Dichloropropane	ND	U	0.50	0.20	0.095	1	10/03/14	10/03/14	KWG1413475	
Dibromomethane	ND	U	0.50	0.50	0.15	1	10/03/14	10/03/14	KWG1413475	
Bromodichloromethane	ND	U	0.50	0.30	0.091	1	10/03/14	10/03/14	KWG1413475	
cis-1,3-Dichloropropene	ND	U	0.50	0.20	0.18	1	10/03/14	10/03/14	KWG1413475	
4-Methyl-2-pentanone (MIBK)	ND	U	20	10	2.6	1	10/03/14	10/03/14	KWG1413475	
Toluene	ND	U	0.50	0.10	0.054	1	10/03/14	10/03/14	KWG1413475	
trans-1,3-Dichloropropene	ND	U	0.50	0.20	0.068	1	10/03/14	10/03/14	KWG1413475	
1,1,2-Trichloroethane	ND	U	0.50	0.40	0.14	1	10/03/14	10/03/14	KWG1413475	
Tetrachloroethene (PCE)	ND	U	0.50	0.20	0.099	1	10/03/14	10/03/14	KWG1413475	

Comments:

Analytical Results

Client: Sealaska Environmental Services, LLC
Project: TO 01 JBLM
Sample Matrix: Water

Service Request: K1410529
Date Collected: NA
Date Received: NA

Volatile Organic Compounds

Sample Name: Method Blank
Lab Code: KWG1413475-4

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
2-Hexanone	ND	U	20	10	2.7	1	10/03/14	10/03/14	KWG1413475	
1,3-Dichloropropane	ND	U	0.50	0.30	0.14	1	10/03/14	10/03/14	KWG1413475	
Dibromochloromethane	ND	U	0.50	0.50	0.14	1	10/03/14	10/03/14	KWG1413475	
1,2-Dibromoethane (EDB)	ND	U	2.0	0.20	0.10	1	10/03/14	10/03/14	KWG1413475	
Chlorobenzene	ND	U	0.50	0.20	0.11	1	10/03/14	10/03/14	KWG1413475	
Ethylbenzene	ND	U	0.50	0.10	0.050	1	10/03/14	10/03/14	KWG1413475	
1,1,1,2-Tetrachloroethane	ND	U	0.50	0.20	0.11	1	10/03/14	10/03/14	KWG1413475	
m,p-Xylenes	ND	U	0.50	0.20	0.11	1	10/03/14	10/03/14	KWG1413475	
o-Xylene	ND	U	0.50	0.20	0.074	1	10/03/14	10/03/14	KWG1413475	
Styrene	ND	U	0.50	0.20	0.089	1	10/03/14	10/03/14	KWG1413475	
Bromoform	ND	U	0.50	0.50	0.16	1	10/03/14	10/03/14	KWG1413475	
Isopropylbenzene	ND	U	2.0	0.20	0.051	1	10/03/14	10/03/14	KWG1413475	
1,1,2,2-Tetrachloroethane	ND	U	0.50	0.20	0.16	1	10/03/14	10/03/14	KWG1413475	
Bromobenzene	ND	U	2.0	0.20	0.12	1	10/03/14	10/03/14	KWG1413475	
n-Propylbenzene	ND	U	2.0	0.20	0.054	1	10/03/14	10/03/14	KWG1413475	
1,2,3-Trichloropropane	ND	U	0.50	0.50	0.20	1	10/03/14	10/03/14	KWG1413475	
2-Chlorotoluene	ND	U	2.0	0.20	0.10	1	10/03/14	10/03/14	KWG1413475	
1,3,5-Trimethylbenzene	ND	U	2.0	0.20	0.089	1	10/03/14	10/03/14	KWG1413475	
4-Chlorotoluene	ND	U	2.0	0.20	0.13	1	10/03/14	10/03/14	KWG1413475	
tert-Butylbenzene	ND	U	2.0	0.20	0.059	1	10/03/14	10/03/14	KWG1413475	
1,2,4-Trimethylbenzene	ND	U	2.0	0.20	0.069	1	10/03/14	10/03/14	KWG1413475	
sec-Butylbenzene	ND	U	2.0	0.10	0.062	1	10/03/14	10/03/14	KWG1413475	
4-Isopropyltoluene	ND	U	2.0	0.20	0.060	1	10/03/14	10/03/14	KWG1413475	
1,3-Dichlorobenzene	ND	U	0.50	0.20	0.10	1	10/03/14	10/03/14	KWG1413475	
1,4-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	10/03/14	10/03/14	KWG1413475	
n-Butylbenzene	**0.060**	J	2.0	0.10	0.054	1	10/03/14	10/03/14	KWG1413475	
1,2-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	10/03/14	10/03/14	KWG1413475	
1,2-Dibromo-3-chloropropane	ND	U	2.0	0.80	0.20	1	10/03/14	10/03/14	KWG1413475	
1,2,4-Trichlorobenzene	**0.17**	J	2.0	0.30	0.096	1	10/03/14	10/03/14	KWG1413475	
Hexachlorobutadiene	**0.12**	J	2.0	0.30	0.11	1	10/03/14	10/03/14	KWG1413475	
Naphthalene	**0.11**	J	2.0	0.30	0.088	1	10/03/14	10/03/14	KWG1413475	
1,2,3-Trichlorobenzene	**0.16**	J	2.0	0.40	0.11	1	10/03/14	10/03/14	KWG1413475	

* See Case Narrative

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1410529
Project:	TO 01 JBLM	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA

Volatile Organic Compounds

Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	KWG1413475-4	**Basis:**	NA

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Dibromofluoromethane	97	85-115	10/03/14	Acceptable
1,2-Dichloroethane-d4	109	70-120	10/03/14	Acceptable
Toluene-d8	99	85-120	10/03/14	Acceptable
4-Bromofluorobenzene	94	75-120	10/03/14	Acceptable

Comments:

Analytical Results

Client: Sealaska Environmental Services, LLC
Project: TO 01 JBLM
Sample Matrix: Water

Service Request: K1410529
Date Collected: NA
Date Received: NA

Volatile Organic Compounds

Sample Name: Method Blank
Lab Code: KWG1413488-4

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
Dichlorodifluoromethane	ND	U	0.50	0.20	0.13	1	10/04/14	10/04/14	KWG1413488	
Chloromethane	ND	U	0.50	0.20	0.068	1	10/04/14	10/04/14	KWG1413488	
Vinyl Chloride	ND	U	0.50	0.10	0.075	1	10/04/14	10/04/14	KWG1413488	
Bromomethane	ND	U	0.50	0.30	0.10	1	10/04/14	10/04/14	KWG1413488	*
Chloroethane	ND	U	0.50	0.20	0.16	1	10/04/14	10/04/14	KWG1413488	
Trichlorofluoromethane	ND	U	0.50	0.20	0.12	1	10/04/14	10/04/14	KWG1413488	
1,1-Dichloroethene	ND	U	0.50	0.20	0.080	1	10/04/14	10/04/14	KWG1413488	
Acetone	ND	U	20	10	3.3	1	10/04/14	10/04/14	KWG1413488	*
Carbon Disulfide	ND	U	0.50	0.20	0.069	1	10/04/14	10/04/14	KWG1413488	*
Methylene Chloride	**0.25**	J	2.0	0.20	0.10	1	10/04/14	10/04/14	KWG1413488	
Methyl tert-Butyl Ether	ND	U	0.50	0.30	0.11	1	10/04/14	10/04/14	KWG1413488	
trans-1,2-Dichloroethene	ND	U	0.50	0.20	0.072	1	10/04/14	10/04/14	KWG1413488	
1,1-Dichloroethane	ND	U	0.50	0.20	0.077	1	10/04/14	10/04/14	KWG1413488	
2,2-Dichloropropane	ND	U	0.50	0.20	0.060	1	10/04/14	10/04/14	KWG1413488	*
cis-1,2-Dichloroethene	ND	U	0.50	0.20	0.067	1	10/04/14	10/04/14	KWG1413488	
2-Butanone (MEK)	ND	U	20	4.0	1.9	1	10/04/14	10/04/14	KWG1413488	
Bromochloromethane	ND	U	0.50	0.20	0.16	1	10/04/14	10/04/14	KWG1413488	
Chloroform	ND	U	0.50	0.20	0.072	1	10/04/14	10/04/14	KWG1413488	
1,1,1-Trichloroethane (TCA)	ND	U	0.50	0.20	0.075	1	10/04/14	10/04/14	KWG1413488	
Carbon Tetrachloride	ND	U	0.50	0.20	0.096	1	10/04/14	10/04/14	KWG1413488	
1,1-Dichloropropene	ND	U	0.50	0.20	0.089	1	10/04/14	10/04/14	KWG1413488	
Benzene	ND	U	0.50	0.10	0.062	1	10/04/14	10/04/14	KWG1413488	
1,2-Dichloroethane (EDC)	ND	U	0.50	0.15	0.080	1	10/04/14	10/04/14	KWG1413488	
Trichloroethene (TCE)	**0.11**	J	0.50	0.10	0.10	1	10/04/14	10/04/14	KWG1413488	
1,2-Dichloropropane	ND	U	0.50	0.20	0.095	1	10/04/14	10/04/14	KWG1413488	
Dibromomethane	ND	U	0.50	0.50	0.15	1	10/04/14	10/04/14	KWG1413488	
Bromodichloromethane	ND	U	0.50	0.30	0.091	1	10/04/14	10/04/14	KWG1413488	
cis-1,3-Dichloropropene	ND	U	0.50	0.20	0.18	1	10/04/14	10/04/14	KWG1413488	
4-Methyl-2-pentanone (MIBK)	ND	U	20	10	2.6	1	10/04/14	10/04/14	KWG1413488	
Toluene	ND	U	0.50	0.10	0.054	1	10/04/14	10/04/14	KWG1413488	
trans-1,3-Dichloropropene	ND	U	0.50	0.20	0.068	1	10/04/14	10/04/14	KWG1413488	
1,1,2-Trichloroethane	ND	U	0.50	0.40	0.14	1	10/04/14	10/04/14	KWG1413488	
Tetrachloroethene (PCE)	ND	U	0.50	0.20	0.099	1	10/04/14	10/04/14	KWG1413488	

Comments:

Analytical Results

Client: Sealaska Environmental Services, LLC
Project: TO 01 JBLM
Sample Matrix: Water

Service Request: K1410529
Date Collected: NA
Date Received: NA

Volatile Organic Compounds

Sample Name: Method Blank
Lab Code: KWG1413488-4

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
2-Hexanone	ND	U	20	10	2.7	1	10/04/14	10/04/14	KWG1413488	
1,3-Dichloropropane	ND	U	0.50	0.30	0.14	1	10/04/14	10/04/14	KWG1413488	
Dibromochloromethane	ND	U	0.50	0.50	0.14	1	10/04/14	10/04/14	KWG1413488	
1,2-Dibromoethane (EDB)	ND	U	2.0	0.20	0.10	1	10/04/14	10/04/14	KWG1413488	
Chlorobenzene	ND	U	0.50	0.20	0.11	1	10/04/14	10/04/14	KWG1413488	
Ethylbenzene	ND	U	0.50	0.10	0.050	1	10/04/14	10/04/14	KWG1413488	
1,1,1,2-Tetrachloroethane	ND	U	0.50	0.20	0.11	1	10/04/14	10/04/14	KWG1413488	
m,p-Xylenes	ND	U	0.50	0.20	0.11	1	10/04/14	10/04/14	KWG1413488	
o-Xylene	ND	U	0.50	0.20	0.074	1	10/04/14	10/04/14	KWG1413488	
Styrene	ND	U	0.50	0.20	0.089	1	10/04/14	10/04/14	KWG1413488	
Bromoform	ND	U	0.50	0.50	0.16	1	10/04/14	10/04/14	KWG1413488	
Isopropylbenzene	ND	U	2.0	0.20	0.051	1	10/04/14	10/04/14	KWG1413488	
1,1,2,2-Tetrachloroethane	ND	U	0.50	0.20	0.16	1	10/04/14	10/04/14	KWG1413488	
Bromobenzene	ND	U	2.0	0.20	0.12	1	10/04/14	10/04/14	KWG1413488	
n-Propylbenzene	ND	U	2.0	0.20	0.054	1	10/04/14	10/04/14	KWG1413488	
1,2,3-Trichloropropane	ND	U	0.50	0.50	0.20	1	10/04/14	10/04/14	KWG1413488	
2-Chlorotoluene	ND	U	2.0	0.20	0.10	1	10/04/14	10/04/14	KWG1413488	
1,3,5-Trimethylbenzene	ND	U	2.0	0.20	0.089	1	10/04/14	10/04/14	KWG1413488	
4-Chlorotoluene	ND	U	2.0	0.20	0.13	1	10/04/14	10/04/14	KWG1413488	
tert-Butylbenzene	ND	U	2.0	0.20	0.059	1	10/04/14	10/04/14	KWG1413488	
1,2,4-Trimethylbenzene	ND	U	2.0	0.20	0.069	1	10/04/14	10/04/14	KWG1413488	
sec-Butylbenzene	ND	U	2.0	0.10	0.062	1	10/04/14	10/04/14	KWG1413488	
4-Isopropyltoluene	ND	U	2.0	0.20	0.060	1	10/04/14	10/04/14	KWG1413488	
1,3-Dichlorobenzene	ND	U	0.50	0.20	0.10	1	10/04/14	10/04/14	KWG1413488	
1,4-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	10/04/14	10/04/14	KWG1413488	
n-Butylbenzene	ND	U	2.0	0.10	0.054	1	10/04/14	10/04/14	KWG1413488	
1,2-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	10/04/14	10/04/14	KWG1413488	
1,2-Dibromo-3-chloropropane	ND	U	2.0	0.80	0.20	1	10/04/14	10/04/14	KWG1413488	
1,2,4-Trichlorobenzene	ND	U	2.0	0.30	0.096	1	10/04/14	10/04/14	KWG1413488	
Hexachlorobutadiene	**0.11**	J	2.0	0.30	0.11	1	10/04/14	10/04/14	KWG1413488	
Naphthalene	ND	U	2.0	0.30	0.088	1	10/04/14	10/04/14	KWG1413488	
1,2,3-Trichlorobenzene	**0.13**	J	2.0	0.40	0.11	1	10/04/14	10/04/14	KWG1413488	

* See Case Narrative

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1410529
Project:	TO 01 JBLM	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA

Volatile Organic Compounds

Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	KWG1413488-4	**Basis:**	NA

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Dibromofluoromethane	94	85-115	10/04/14	Acceptable
1,2-Dichloroethane-d4	108	70-120	10/04/14	Acceptable
Toluene-d8	95	85-120	10/04/14	Acceptable
4-Bromofluorobenzene	92	75-120	10/04/14	Acceptable

Comments:

Analytical Results

Client: Sealaska Environmental Services, LLC
Project: TO 01 JBLM
Sample Matrix: Water

Service Request: K1410529
Date Collected: NA
Date Received: NA

Volatile Organic Compounds

Sample Name: Method Blank
Lab Code: KWG1413516-3

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
Dichlorodifluoromethane	ND	U	0.50	0.20	0.13	1	10/06/14	10/06/14	KWG1413516	
Chloromethane	ND	U	0.50	0.20	0.068	1	10/06/14	10/06/14	KWG1413516	
Vinyl Chloride	ND	U	0.50	0.10	0.075	1	10/06/14	10/06/14	KWG1413516	
Bromomethane	ND	U	0.50	0.30	0.10	1	10/06/14	10/06/14	KWG1413516	
Chloroethane	ND	U	0.50	0.20	0.16	1	10/06/14	10/06/14	KWG1413516	
Trichlorofluoromethane	ND	U	0.50	0.20	0.12	1	10/06/14	10/06/14	KWG1413516	
1,1-Dichloroethene	ND	U	0.50	0.20	0.080	1	10/06/14	10/06/14	KWG1413516	
Acetone	**3.5**	J	20	10	3.3	1	10/06/14	10/06/14	KWG1413516	*
Carbon Disulfide	ND	U	0.50	0.20	0.069	1	10/06/14	10/06/14	KWG1413516	*
Methylene Chloride	**0.48**	J	2.0	0.20	0.10	1	10/06/14	10/06/14	KWG1413516	
Methyl tert-Butyl Ether	ND	U	0.50	0.30	0.11	1	10/06/14	10/06/14	KWG1413516	
trans-1,2-Dichloroethene	ND	U	0.50	0.20	0.072	1	10/06/14	10/06/14	KWG1413516	
1,1-Dichloroethane	ND	U	0.50	0.20	0.077	1	10/06/14	10/06/14	KWG1413516	
2,2-Dichloropropane	ND	U	0.50	0.20	0.060	1	10/06/14	10/06/14	KWG1413516	*
cis-1,2-Dichloroethene	ND	U	0.50	0.20	0.067	1	10/06/14	10/06/14	KWG1413516	
2-Butanone (MEK)	**2.1**	J	20	4.0	1.9	1	10/06/14	10/06/14	KWG1413516	
Bromochloromethane	ND	U	0.50	0.20	0.16	1	10/06/14	10/06/14	KWG1413516	
Chloroform	ND	U	0.50	0.20	0.072	1	10/06/14	10/06/14	KWG1413516	
1,1,1-Trichloroethane (TCA)	ND	U	0.50	0.20	0.075	1	10/06/14	10/06/14	KWG1413516	
Carbon Tetrachloride	ND	U	0.50	0.20	0.096	1	10/06/14	10/06/14	KWG1413516	
1,1-Dichloropropene	ND	U	0.50	0.20	0.089	1	10/06/14	10/06/14	KWG1413516	
Benzene	ND	U	0.50	0.10	0.062	1	10/06/14	10/06/14	KWG1413516	
1,2-Dichloroethane (EDC)	ND	U	0.50	0.15	0.080	1	10/06/14	10/06/14	KWG1413516	
Trichloroethene (TCE)	ND	U	0.50	0.10	0.10	1	10/06/14	10/06/14	KWG1413516	
1,2-Dichloropropane	ND	U	0.50	0.20	0.095	1	10/06/14	10/06/14	KWG1413516	
Dibromomethane	ND	U	0.50	0.50	0.15	1	10/06/14	10/06/14	KWG1413516	
Bromodichloromethane	ND	U	0.50	0.30	0.091	1	10/06/14	10/06/14	KWG1413516	
cis-1,3-Dichloropropene	ND	U	0.50	0.20	0.18	1	10/06/14	10/06/14	KWG1413516	
4-Methyl-2-pentanone (MIBK)	ND	U	20	10	2.6	1	10/06/14	10/06/14	KWG1413516	
Toluene	ND	U	0.50	0.10	0.054	1	10/06/14	10/06/14	KWG1413516	
trans-1,3-Dichloropropene	ND	U	0.50	0.20	0.068	1	10/06/14	10/06/14	KWG1413516	
1,1,2-Trichloroethane	ND	U	0.50	0.40	0.14	1	10/06/14	10/06/14	KWG1413516	
Tetrachloroethene (PCE)	ND	U	0.50	0.20	0.099	1	10/06/14	10/06/14	KWG1413516	

Comments:

Analytical Results

Client: Sealaska Environmental Services, LLC
Project: TO 01 JBLM
Sample Matrix: Water

Service Request: K1410529
Date Collected: NA
Date Received: NA

Volatile Organic Compounds

Sample Name: Method Blank
Lab Code: KWG1413516-3

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
2-Hexanone	ND	U	20	10	2.7	1	10/06/14	10/06/14	KWG1413516	
1,3-Dichloropropane	ND	U	0.50	0.30	0.14	1	10/06/14	10/06/14	KWG1413516	
Dibromochloromethane	ND	U	0.50	0.50	0.14	1	10/06/14	10/06/14	KWG1413516	
1,2-Dibromoethane (EDB)	ND	U	2.0	0.20	0.10	1	10/06/14	10/06/14	KWG1413516	
Chlorobenzene	ND	U	0.50	0.20	0.11	1	10/06/14	10/06/14	KWG1413516	
Ethylbenzene	ND	U	0.50	0.10	0.050	1	10/06/14	10/06/14	KWG1413516	
1,1,1,2-Tetrachloroethane	ND	U	0.50	0.20	0.11	1	10/06/14	10/06/14	KWG1413516	
m,p-Xylenes	ND	U	0.50	0.20	0.11	1	10/06/14	10/06/14	KWG1413516	
o-Xylene	ND	U	0.50	0.20	0.074	1	10/06/14	10/06/14	KWG1413516	
Styrene	ND	U	0.50	0.20	0.089	1	10/06/14	10/06/14	KWG1413516	
Bromoform	ND	U	0.50	0.50	0.16	1	10/06/14	10/06/14	KWG1413516	
Isopropylbenzene	ND	U	2.0	0.20	0.051	1	10/06/14	10/06/14	KWG1413516	
1,1,2,2-Tetrachloroethane	ND	U	0.50	0.20	0.16	1	10/06/14	10/06/14	KWG1413516	
Bromobenzene	ND	U	2.0	0.20	0.12	1	10/06/14	10/06/14	KWG1413516	
n-Propylbenzene	ND	U	2.0	0.20	0.054	1	10/06/14	10/06/14	KWG1413516	
1,2,3-Trichloropropane	ND	U	0.50	0.50	0.20	1	10/06/14	10/06/14	KWG1413516	
2-Chlorotoluene	ND	U	2.0	0.20	0.10	1	10/06/14	10/06/14	KWG1413516	
1,3,5-Trimethylbenzene	ND	U	2.0	0.20	0.089	1	10/06/14	10/06/14	KWG1413516	
4-Chlorotoluene	ND	U	2.0	0.20	0.13	1	10/06/14	10/06/14	KWG1413516	
tert-Butylbenzene	ND	U	2.0	0.20	0.059	1	10/06/14	10/06/14	KWG1413516	
1,2,4-Trimethylbenzene	ND	U	2.0	0.20	0.069	1	10/06/14	10/06/14	KWG1413516	
sec-Butylbenzene	ND	U	2.0	0.10	0.062	1	10/06/14	10/06/14	KWG1413516	
4-Isopropyltoluene	ND	U	2.0	0.20	0.060	1	10/06/14	10/06/14	KWG1413516	
1,3-Dichlorobenzene	ND	U	0.50	0.20	0.10	1	10/06/14	10/06/14	KWG1413516	
1,4-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	10/06/14	10/06/14	KWG1413516	
n-Butylbenzene	ND	U	2.0	0.10	0.054	1	10/06/14	10/06/14	KWG1413516	
1,2-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	10/06/14	10/06/14	KWG1413516	
1,2-Dibromo-3-chloropropane	ND	U	2.0	0.80	0.20	1	10/06/14	10/06/14	KWG1413516	
1,2,4-Trichlorobenzene	ND	U	2.0	0.30	0.096	1	10/06/14	10/06/14	KWG1413516	
Hexachlorobutadiene	ND	U	2.0	0.30	0.11	1	10/06/14	10/06/14	KWG1413516	
Naphthalene	ND	U	2.0	0.30	0.088	1	10/06/14	10/06/14	KWG1413516	
1,2,3-Trichlorobenzene	ND	U	2.0	0.40	0.11	1	10/06/14	10/06/14	KWG1413516	

* See Case Narrative

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1410529
Project:	TO 01 JBLM	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA

Volatile Organic Compounds

Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	KWG1413516-3	**Basis:**	NA

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Dibromofluoromethane	94	85-115	10/06/14	Acceptable
1,2-Dichloroethane-d4	108	70-120	10/06/14	Acceptable
Toluene-d8	96	85-120	10/06/14	Acceptable
4-Bromofluorobenzene	91	75-120	10/06/14	Acceptable

Comments:

Analytical Results

Client: Sealaska Environmental Services, LLC
Project: TO 01 JBLM
Sample Matrix: Water

Service Request: K1410529
Date Collected: NA
Date Received: NA

Volatile Organic Compounds

Sample Name: Method Blank
Lab Code: KWG1413535-5

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
Dichlorodifluoromethane	ND	U	0.50	0.20	0.13	1	10/06/14	10/06/14	KWG1413535	
Chloromethane	ND	U	0.50	0.20	0.068	1	10/06/14	10/06/14	KWG1413535	
Vinyl Chloride	ND	U	0.50	0.10	0.075	1	10/06/14	10/06/14	KWG1413535	
Bromomethane	ND	U	0.50	0.30	0.10	1	10/06/14	10/06/14	KWG1413535	
Chloroethane	ND	U	0.50	0.20	0.16	1	10/06/14	10/06/14	KWG1413535	
Trichlorofluoromethane	ND	U	0.50	0.20	0.12	1	10/06/14	10/06/14	KWG1413535	
1,1-Dichloroethene	ND	U	0.50	0.20	0.080	1	10/06/14	10/06/14	KWG1413535	
Acetone	ND	U	20	10	3.3	1	10/06/14	10/06/14	KWG1413535	*
Carbon Disulfide	ND	U	0.50	0.20	0.069	1	10/06/14	10/06/14	KWG1413535	*
Methylene Chloride	**0.22**	J	2.0	0.20	0.10	1	10/06/14	10/06/14	KWG1413535	
Methyl tert-Butyl Ether	ND	U	0.50	0.30	0.11	1	10/06/14	10/06/14	KWG1413535	
trans-1,2-Dichloroethene	ND	U	0.50	0.20	0.072	1	10/06/14	10/06/14	KWG1413535	
1,1-Dichloroethane	ND	U	0.50	0.20	0.077	1	10/06/14	10/06/14	KWG1413535	
2,2-Dichloropropane	ND	U	0.50	0.20	0.060	1	10/06/14	10/06/14	KWG1413535	*
cis-1,2-Dichloroethene	ND	U	0.50	0.20	0.067	1	10/06/14	10/06/14	KWG1413535	
2-Butanone (MEK)	ND	U	20	4.0	1.9	1	10/06/14	10/06/14	KWG1413535	
Bromochloromethane	ND	U	0.50	0.20	0.16	1	10/06/14	10/06/14	KWG1413535	
Chloroform	ND	U	0.50	0.20	0.072	1	10/06/14	10/06/14	KWG1413535	
1,1,1-Trichloroethane (TCA)	ND	U	0.50	0.20	0.075	1	10/06/14	10/06/14	KWG1413535	
Carbon Tetrachloride	ND	U	0.50	0.20	0.096	1	10/06/14	10/06/14	KWG1413535	
1,1-Dichloropropene	ND	U	0.50	0.20	0.089	1	10/06/14	10/06/14	KWG1413535	
Benzene	ND	U	0.50	0.10	0.062	1	10/06/14	10/06/14	KWG1413535	
1,2-Dichloroethane (EDC)	ND	U	0.50	0.15	0.080	1	10/06/14	10/06/14	KWG1413535	
Trichloroethene (TCE)	ND	U	0.50	0.10	0.10	1	10/06/14	10/06/14	KWG1413535	
1,2-Dichloropropane	ND	U	0.50	0.20	0.095	1	10/06/14	10/06/14	KWG1413535	
Dibromomethane	ND	U	0.50	0.50	0.15	1	10/06/14	10/06/14	KWG1413535	
Bromodichloromethane	ND	U	0.50	0.30	0.091	1	10/06/14	10/06/14	KWG1413535	
cis-1,3-Dichloropropene	ND	U	0.50	0.20	0.18	1	10/06/14	10/06/14	KWG1413535	
4-Methyl-2-pentanone (MIBK)	ND	U	20	10	2.6	1	10/06/14	10/06/14	KWG1413535	
Toluene	ND	U	0.50	0.10	0.054	1	10/06/14	10/06/14	KWG1413535	
trans-1,3-Dichloropropene	ND	U	0.50	0.20	0.068	1	10/06/14	10/06/14	KWG1413535	*
1,1,2-Trichloroethane	ND	U	0.50	0.40	0.14	1	10/06/14	10/06/14	KWG1413535	
Tetrachloroethene (PCE)	ND	U	0.50	0.20	0.099	1	10/06/14	10/06/14	KWG1413535	

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1410529
Project:	TO 01 JBLM	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA

Volatile Organic Compounds

Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	KWG1413535-5	**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
2-Hexanone	ND	U	20	10	2.7	1	10/06/14	10/06/14	KWG1413535	
1,3-Dichloropropane	ND	U	0.50	0.30	0.14	1	10/06/14	10/06/14	KWG1413535	
Dibromochloromethane	ND	U	0.50	0.50	0.14	1	10/06/14	10/06/14	KWG1413535	
1,2-Dibromoethane (EDB)	ND	U	2.0	0.20	0.10	1	10/06/14	10/06/14	KWG1413535	
Chlorobenzene	ND	U	0.50	0.20	0.11	1	10/06/14	10/06/14	KWG1413535	
Ethylbenzene	ND	U	0.50	0.10	0.050	1	10/06/14	10/06/14	KWG1413535	
1,1,1,2-Tetrachloroethane	ND	U	0.50	0.20	0.11	1	10/06/14	10/06/14	KWG1413535	
m,p-Xylenes	ND	U	0.50	0.20	0.11	1	10/06/14	10/06/14	KWG1413535	
o-Xylene	ND	U	0.50	0.20	0.074	1	10/06/14	10/06/14	KWG1413535	
Styrene	ND	U	0.50	0.20	0.089	1	10/06/14	10/06/14	KWG1413535	
Bromoform	ND	U	0.50	0.50	0.16	1	10/06/14	10/06/14	KWG1413535	
Isopropylbenzene	ND	U	2.0	0.20	0.051	1	10/06/14	10/06/14	KWG1413535	
1,1,2,2-Tetrachloroethane	ND	U	0.50	0.20	0.16	1	10/06/14	10/06/14	KWG1413535	
Bromobenzene	ND	U	2.0	0.20	0.12	1	10/06/14	10/06/14	KWG1413535	
n-Propylbenzene	ND	U	2.0	0.20	0.054	1	10/06/14	10/06/14	KWG1413535	
1,2,3-Trichloropropane	ND	U	0.50	0.50	0.20	1	10/06/14	10/06/14	KWG1413535	
2-Chlorotoluene	ND	U	2.0	0.20	0.10	1	10/06/14	10/06/14	KWG1413535	
1,3,5-Trimethylbenzene	ND	U	2.0	0.20	0.089	1	10/06/14	10/06/14	KWG1413535	
4-Chlorotoluene	ND	U	2.0	0.20	0.13	1	10/06/14	10/06/14	KWG1413535	
tert-Butylbenzene	ND	U	2.0	0.20	0.059	1	10/06/14	10/06/14	KWG1413535	
1,2,4-Trimethylbenzene	ND	U	2.0	0.20	0.069	1	10/06/14	10/06/14	KWG1413535	
sec-Butylbenzene	ND	U	2.0	0.10	0.062	1	10/06/14	10/06/14	KWG1413535	
4-Isopropyltoluene	ND	U	2.0	0.20	0.060	1	10/06/14	10/06/14	KWG1413535	
1,3-Dichlorobenzene	ND	U	0.50	0.20	0.10	1	10/06/14	10/06/14	KWG1413535	
1,4-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	10/06/14	10/06/14	KWG1413535	
n-Butylbenzene	ND	U	2.0	0.10	0.054	1	10/06/14	10/06/14	KWG1413535	
1,2-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	10/06/14	10/06/14	KWG1413535	
1,2-Dibromo-3-chloropropane	ND	U	2.0	0.80	0.20	1	10/06/14	10/06/14	KWG1413535	
1,2,4-Trichlorobenzene	**0.11**	J	2.0	0.30	0.096	1	10/06/14	10/06/14	KWG1413535	
Hexachlorobutadiene	ND	U	2.0	0.30	0.11	1	10/06/14	10/06/14	KWG1413535	
Naphthalene	ND	U	2.0	0.30	0.088	1	10/06/14	10/06/14	KWG1413535	
1,2,3-Trichlorobenzene	ND	U	2.0	0.40	0.11	1	10/06/14	10/06/14	KWG1413535	

* See Case Narrative

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1410529
Project:	TO 01 JBLM	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA

Volatile Organic Compounds

Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	KWG1413535-5	**Basis:**	NA

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Dibromofluoromethane	95	85-115	10/06/14	Acceptable
1,2-Dichloroethane-d4	106	70-120	10/06/14	Acceptable
Toluene-d8	96	85-120	10/06/14	Acceptable
4-Bromofluorobenzene	93	75-120	10/06/14	Acceptable

Comments:

Client: Sealaska Environmental Services, LLC **Service Request:** K1410529
Project: TO 01 JBLM
Sample Matrix: Water

Surrogate Recovery Summary
Volatile Organic Compounds

Extraction Method: EPA 5030B **Units:** Percent
Analysis Method: 8260C **Level:** Low

Sample Name	Lab Code	Sur1	Sur2	Sur3	Sur4
TB-140923	K1410529-001	95	108	96	92
LGC140923LC135-1	K1410529-002	96	108	97	92
LGC140923LC10830-1	K1410529-003	94	107	95	93
LGC140923LC10860-1	K1410529-004	98	108	97	89
LGC140923LC10885-1	K1410529-005	94	109	96	93
LGC140923MT4-1	K1410529-006	92	112	96	92
LGC140923MT3-1	K1410529-007	94	107	97	92
LGC140923MT2-1	K1410529-008	91	109	97	90
LGC140923MT1-1	K1410529-009	93	107	97	91
LGC140924FL1-1	K1410529-010	93	109	96	93
LGC140924LC218-1	K1410529-011	94	108	99	89
LGC140924LC224-1	K1410529-012	95	110	98	91
LGC140924LC01-1	K1410529-013	95	109	98	89
LGC140924LC116B-1	K1410529-014	94	111	95	92
LG140924LC111B-1	K1410529-015	94	109	94	89
LG14092485PA382-1	K1410529-016	96	109	97	91
LGC14092485PA384-1	K1410529-017	95	112	97	91
LGC140924LC124-1	K1410529-018	93	108	96	91
LGC140924DUP2-1	K1410529-019	94	110	97	92
LG140924LC122B-1	K1410529-020	96	111	99	93
LGC140924LC61B-1	K1410529-021	96	115	99	91
LGC140924LC226-1	K1410529-022	96	110	97	93
LGC140925SLAP5-1	K1410529-023	98	112	98	90
LG140925SLAP4-1	K1410529-024	94	109	97	93
LG140925SLAP3-1	K1410529-025	97	112	97	91
LG140925SLAP1-1	K1410529-026	100	109	96	92
TB-140922	K1410529-031	93	107	96	94
AOC14092210A178	K1410529-032	91	106	101	94
AOC140922DUP2	K1410529-033	91	105	101	96
AOC14092295A172	K1410529-034	96	106	96	95
AOC14092307A177	K1410529-035	95	108	97	91
AOC14092395A173A	K1410529-036	91	106	100	94
Method Blank	KWG1413475-4	97	109	99	94
Method Blank	KWG1413488-4	94	108	95	92

Surrogate Recovery Control Limits (%)

Sur1	= Dibromofluoromethane	85-115
Sur2	= 1,2-Dichloroethane-d4	70-120
Sur3	= Toluene-d8	85-120
Sur4	= 4-Bromofluorobenzene	75-120

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Client: Sealaska Environmental Services, LLC **Service Request:** K1410529
Project: TO 01 JBLM
Sample Matrix: Water

Surrogate Recovery Summary
Volatile Organic Compounds

Extraction Method: EPA 5030B **Units:** Percent
Analysis Method: 8260C **Level:** Low

Sample Name	Lab Code	Sur1	Sur2	Sur3	Sur4
Method Blank	KWG1413516-3	94	108	96	91
Method Blank	KWG1413535-5	95	106	96	93
AOC14092295A172MS	KWG1413475-1	100	102	99	97
AOC14092295A172DMS	KWG1413475-2	97	105	98	96
LGC140924LC01-1MS	KWG1413516-6	102	106	99	93
LGC140924LC01-1DMS	KWG1413516-7	99	104	98	97
Lab Control Sample	KWG1413475-3	98	104	99	93
Lab Control Sample	KWG1413488-3	101	103	99	95
Lab Control Sample	KWG1413516-1	97	105	98	96
Lab Control Sample	KWG1413535-3	96	104	98	97

Surrogate Recovery Control Limits (%)

Sur1	= Dibromofluoromethane	85-115
Sur2	= 1,2-Dichloroethane-d4	70-120
Sur3	= Toluene-d8	85-120
Sur4	= 4-Bromofluorobenzene	75-120

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1410529
Project:	TO 01 JBLM	**Date Analyzed:**	10/03/2014
		Time Analyzed:	15:41

Internal Standard Area and RT Summary
Volatile Organic Compounds

File ID:	J:\MS18\DATA\100314\1003F008.D	**Lab Code:**	KWG1413468-2
Instrument ID:	GC-MS 18	**Analysis Lot:**	KWG1413468
Analysis Method:	8260C		

		Fluorobenzene		Chlorobenzene-d5	
		Area	**RT**	**Area**	**RT**
	Results ==>	286,758	6.31	120,363	9.64
	Upper Limit ==>	573,516	6.81	240,726	10.14
	Lower Limit ==>	143,379	5.81	60,182	9.14
	ICAL Result ==>	325,249	6.32	135,589	9.64
Associated Analyses					
Lab Control Sample	KWG1413475-3	285,934	6.32	123,431	9.64
AOC14092295A172MS	KWG1413475-1	285,604	6.32	119,017	9.64
AOC14092295A172DMS	KWG1413475-2	286,414	6.32	119,491	9.64
Method Blank	KWG1413475-4	264,787	6.32	114,189	9.64
TB-140922	K1410529-031	271,332	6.32	112,866	9.64
AOC14092295A172	K1410529-034	265,007	6.32	110,175	9.64
AOC14092210A178DL	K1410529-032	259,171	6.32	108,982	9.64
AOC140922DUP2DL	K1410529-033	260,569	6.32	110,043	9.64
AOC140922DUP2DL	K1410529-033	263,720	6.32	115,568	9.64
AOC14092210A178	K1410529-032	277,194	6.32	119,987	9.64

Results flagged with an asterisk (*) indicate values outside control criteria.

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1410529
Project:	TO 01 JBLM	**Date Analyzed:**	10/04/2014
		Time Analyzed:	13:04

Internal Standard Area and RT Summary
Volatile Organic Compounds

File ID:	J:\MS18\DATA\100414\1004F009.D	**Lab Code:**	KWG1413485-3
Instrument ID:	GC-MS 18	**Analysis Lot:**	KWG1413485
Analysis Method:	8260C		

		Fluorobenzene		Chlorobenzene-d5		1,4-Dichlorobenzene-d4	
		Area	**RT**	**Area**	**RT**	**Area**	**RT**
	Results ==>	319,571	6.32	135,914	9.64	130,722	12.05
	Upper Limit ==>	639,142	6.82	271,828	10.14	261,444	12.55
	Lower Limit ==>	159,786	5.82	67,957	9.14	65,361	11.55
	ICAL Result ==>	325,249	6.32	135,589	9.64	130,777	12.05
Associated Analyses							
Lab Control Sample	KWG1413488-3	317,598	6.32	135,732	9.64	129,418	12.05
Method Blank	KWG1413488-4	305,866	6.32	128,946	9.64	116,018	12.05
TB-140923	K1410529-001	304,946	6.32	128,567	9.64	116,317	12.05
LGC140923LC135-1	K1410529-002	298,280	6.32	125,975	9.64	115,544	12.05
LGC140923LC10830-1	K1410529-003	300,001	6.32	127,049	9.64	116,481	12.05
LGC140923LC10860-1	K1410529-004	293,888	6.32	127,608	9.64	111,381	12.05
LGC140923LC10885-1	K1410529-005	294,219	6.32	125,719	9.64	112,206	12.05
LGC140923MT4-1	K1410529-006	291,981	6.32	124,509	9.64	112,439	12.05
LGC140923MT3-1	K1410529-007	293,148	6.32	125,285	9.64	112,972	12.05
LGC140923MT2-1	K1410529-008	292,941	6.32	124,353	9.64	110,017	12.05
LGC140923MT1-1	K1410529-009	292,682	6.32	125,735	9.64	112,177	12.05
AOC14092307A177	K1410529-035	290,932	6.32	124,986	9.64	110,675	12.05
AOC14092395A173A	K1410529-036	301,981	6.32	129,628	9.64	124,845	12.05
AOC140922DUP2	K1410529-033	311,950	6.32	131,350	9.64	132,367	12.05

Results flagged with an asterisk (*) indicate values outside control criteria.

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1410529
Project:	TO 01 JBLM	**Date Analyzed:**	10/06/2014
		Time Analyzed:	09:31

Internal Standard Area and RT Summary
Volatile Organic Compounds

File ID:	J:\MS18\DATA\100614\1006F003.D	**Lab Code:**	KWG1413506-2
Instrument ID:	GC-MS 18	**Analysis Lot:**	KWG1413506
Analysis Method:	8260C		

		Fluorobenzene		Chlorobenzene-d5		1,4-Dichlorobenzene-d4	
		Area	**RT**	**Area**	**RT**	**Area**	**RT**
	Results ==>	307,377	6.31	129,922	9.64	123,555	12.05
	Upper Limit ==>	614,754	6.81	259,844	10.14	247,110	12.55
	Lower Limit ==>	153,689	5.81	64,961	9.14	61,778	11.55
	ICAL Result ==>	325,249	6.32	135,589	9.64	130,777	12.05
Associated Analyses							
Lab Control Sample	KWG1413516-1	313,865	6.31	130,928	9.64	124,122	12.05
Method Blank	KWG1413516-3	299,670	6.32	126,223	9.64	115,012	12.05
LGC140924FL1-1	K1410529-010	293,745	6.32	123,568	9.64	112,596	12.05
LGC140924LC218-1	K1410529-011	285,223	6.32	125,478	9.64	108,695	12.05
LGC140924LC224-1	K1410529-012	286,750	6.32	122,481	9.64	109,341	12.05
LGC140924LC01-1	K1410529-013	287,198	6.32	124,316	9.64	109,310	12.05
LG140924LC111B-1	K1410529-015	296,755	6.32	124,653	9.64	111,277	12.05
LG14092485PA382-1	K1410529-016	283,995	6.32	121,002	9.64	106,557	12.05
LGC14092485PA384-1	K1410529-017	285,256	6.32	122,431	9.64	108,773	12.05
LGC140924LC124-1	K1410529-018	288,154	6.32	121,083	9.64	108,538	12.05
LGC140924DUP2-1	K1410529-019	284,663	6.32	122,778	9.64	109,241	12.05
LG140924LC122B-1	K1410529-020	286,783	6.32	121,906	9.64	107,918	12.05
LGC140924LC61B-1	K1410529-021	277,624	6.32	118,188	9.64	104,814	12.05
LGC140924LC226-1	K1410529-022	285,358	6.32	120,059	9.64	108,075	12.05
LGC140925SLAP5-1	K1410529-023	277,803	6.32	118,750	9.64	106,490	12.05
LGC140924LC116B-1	K1410529-014	284,732	6.32	120,974	9.64	106,107	12.05
LGC140924LC01-1MS	KWG1413516-6	298,488	6.32	125,230	9.64	122,208	12.05
LGC140924LC01-1DMS	KWG1413516-7	307,246	6.32	131,225	9.64	126,134	12.05

Results flagged with an asterisk (*) indicate values outside control criteria.

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1410529
Project:	TO 01 JBLM	**Date Analyzed:**	10/06/2014
		Time Analyzed:	21:27

Internal Standard Area and RT Summary
Volatile Organic Compounds

File ID:	J:\MS18\DATA\100614\1006F035.D	**Lab Code:**	KWG1413536-2
Instrument ID:	GC-MS 18	**Analysis Lot:**	KWG1413536
Analysis Method:	8260C		

		Fluorobenzene		Chlorobenzene-d5		1,4-Dichlorobenzene-d4	
		Area	**RT**	**Area**	**RT**	**Area**	**RT**
	Results ==>	301,811	6.32	130,439	9.64	122,453	12.05
	Upper Limit ==>	603,622	6.82	260,878	10.14	244,906	12.55
	Lower Limit ==>	150,906	5.82	65,220	9.14	61,227	11.55
	ICAL Result ==>	325,249	6.32	135,589	9.64	130,777	12.05
Associated Analyses							
Lab Control Sample	KWG1413535-3	308,648	6.32	128,402	9.64	124,107	12.05
Method Blank	KWG1413535-5	294,367	6.32	122,184	9.64	111,974	12.05
LG140925SLAP4-1	K1410529-024	288,671	6.32	121,682	9.64	109,157	12.05
LG140925SLAP3-1	K1410529-025	286,219	6.32	122,711	9.64	109,858	12.05
LG140925SLAP1-1	K1410529-026	288,498	6.32	121,522	9.64	113,009	12.05

Results flagged with an asterisk (*) indicate values outside control criteria.

QA/QC Report

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1410529
Project:	TO 01 JBLM	**Date Extracted:**	10/06/2014
Sample Matrix:	Water	**Date Analyzed:**	10/06/2014

Matrix Spike/Duplicate Matrix Spike Summary
Volatile Organic Compounds

Sample Name:	LGC140924LC01-1	**Units:**	ug/L
Lab Code:	K1410529-013	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8260C	**Extraction Lot:**	KWG1413516

		LGC140924LC01-1MS KWG1413516-6 Matrix Spike			LGC140924LC01-1DMS KWG1413516-7 Duplicate Matrix Spike					
Analyte Name	**Sample Result**	**Result**	**Spike Amount**	**%Rec**	**Result**	**Spike Amount**	**%Rec**	**%Rec Limits**	**RPD**	**RPD Limit**
Dichlorodifluoromethane	ND	10.2	10.0	102	9.76	10.0	98	30-155	4	30
Chloromethane	ND	11.5	10.0	115	11.0	10.0	110	40-125	4	30
Vinyl Chloride	ND	13.2	10.0	132	12.7	10.0	127	50-145	4	30
Bromomethane	ND	6.51	10.0	65	6.93	10.0	69	30-145	6	30
Chloroethane	ND	15.3	10.0	153 *	14.5	10.0	145 *	60-135	6	30
Trichlorofluoromethane	ND	10.8	10.0	108	10.4	10.0	104	60-145	3	30
1,1-Dichloroethene	ND	13.9	10.0	139 *	13.6	10.0	136 *	70-130	2	30
Acetone	ND	69.0	50.0	138	69.9	50.0	140	40-140	1	30
Carbon Disulfide	ND	26.2	20.0	131	25.4	20.0	127	35-160	3	30
Methylene Chloride	ND	10.2	10.0	102	10.1	10.0	101	55-140	1	30
Methyl tert-Butyl Ether	ND	9.12	10.0	91	9.10	10.0	91	65-125	0	30
trans-1,2-Dichloroethene	ND	12.5	10.0	125	12.4	10.0	124	60-140	1	30
1,1-Dichloroethane	ND	13.0	10.0	130	13.2	10.0	132	70-135	1	30
2,2-Dichloropropane	ND	6.85	10.0	69 *	6.85	10.0	69 *	70-135	0	30
cis-1,2-Dichloroethene	ND	11.9	10.0	119	11.4	10.0	114	70-125	4	30
2-Butanone (MEK)	ND	64.1	50.0	128	64.1	50.0	128	30-150	0	30
Bromochloromethane	ND	11.7	10.0	117	11.8	10.0	118	65-130	1	30
Chloroform	ND	11.9	10.0	119	11.7	10.0	117	65-135	2	30
1,1,1-Trichloroethane (TCA)	ND	10.8	10.0	108	10.7	10.0	107	65-130	0	30
Carbon Tetrachloride	ND	11.3	10.0	113	11.2	10.0	112	65-140	1	30
1,1-Dichloropropene	ND	13.6	10.0	136 *	13.1	10.0	131 *	75-130	4	30
Benzene	ND	12.5	10.0	125 *	12.2	10.0	122 *	80-120	3	30
1,2-Dichloroethane (EDC)	ND	12.1	10.0	121	12.2	10.0	122	70-130	1	30
Trichloroethene (TCE)	ND	12.4	10.0	124	11.8	10.0	118	70-125	4	30
1,2-Dichloropropane	ND	11.9	10.0	119	11.8	10.0	118	75-125	1	30
Dibromomethane	ND	11.7	10.0	117	11.7	10.0	117	75-125	0	30
Bromodichloromethane	ND	11.1	10.0	111	10.9	10.0	109	75-120	2	30
cis-1,3-Dichloropropene	ND	9.02	10.0	90	9.32	10.0	93	70-130	3	30
4-Methyl-2-pentanone (MIBK)	ND	64.6	50.0	129	64.3	50.0	129	60-135	0	30
Toluene	ND	12.0	10.0	120	11.6	10.0	116	75-120	3	30
trans-1,3-Dichloropropene	ND	7.54	10.0	75	7.60	10.0	76	55-140	1	30
1,1,2-Trichloroethane	ND	11.9	10.0	119	11.3	10.0	113	75-125	5	30
Tetrachloroethene (PCE)	ND	11.8	10.0	118	11.3	10.0	113	45-150	5	30

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

QA/QC Report

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1410529
Project:	TO 01 JBLM	**Date Extracted:**	10/06/2014
Sample Matrix:	Water	**Date Analyzed:**	10/06/2014

Matrix Spike/Duplicate Matrix Spike Summary
Volatile Organic Compounds

Sample Name:	LGC140924LC01-1	**Units:**	ug/L
Lab Code:	K1410529-013	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8260C	**Extraction Lot:**	KWG1413516

		LGC140924LC01-1MS KWG1413516-6 Matrix Spike			LGC140924LC01-1DMS KWG1413516-7 Duplicate Matrix Spike					
Analyte Name	**Sample Result**	**Result**	**Spike Amount**	**%Rec**	**Result**	**Spike Amount**	**%Rec**	**%Rec Limits**	**RPD**	**RPD Limit**
2-Hexanone	ND	63.1	50.0	126	59.4	50.0	119	55-130	6	30
1,3-Dichloropropane	ND	12.4	10.0	124	11.8	10.0	118	75-125	5	30
Dibromochloromethane	ND	10.8	10.0	108	10.6	10.0	106	60-135	2	30
1,2-Dibromoethane (EDB)	ND	11.5	10.0	115	10.7	10.0	107	80-120	7	30
Chlorobenzene	ND	12.0	10.0	120	11.3	10.0	113	80-120	5	30
Ethylbenzene	ND	11.6	10.0	116	11.5	10.0	115	75-125	1	30
1,1,1,2-Tetrachloroethane	ND	10.1	10.0	101	9.95	10.0	100	80-130	1	30
m,p-Xylenes	ND	24.4	20.0	122	23.4	20.0	117	75-130	4	30
o-Xylene	ND	11.7	10.0	117	11.3	10.0	113	80-120	4	30
Styrene	ND	12.1	10.0	121	11.3	10.0	113	65-135	7	30
Bromoform	ND	9.47	10.0	95	9.17	10.0	92	70-130	3	30
Isopropylbenzene	ND	12.2	10.0	122	11.7	10.0	117	75-125	4	30
1,1,2,2-Tetrachloroethane	ND	12.6	10.0	126	12.4	10.0	124	65-130	2	30
Bromobenzene	ND	11.4	10.0	114	10.9	10.0	109	75-125	4	30
n-Propylbenzene	ND	12.1	10.0	121	11.9	10.0	119	70-130	1	30
1,2,3-Trichloropropane	ND	11.8	10.0	118	11.1	10.0	111	75-125	6	30
2-Chlorotoluene	ND	12.0	10.0	120	11.6	10.0	116	75-125	3	30
1,3,5-Trimethylbenzene	ND	12.4	10.0	124	12.2	10.0	122	75-130	1	30
4-Chlorotoluene	ND	11.9	10.0	119	11.7	10.0	117	75-130	1	30
tert-Butylbenzene	ND	12.2	10.0	122	12.0	10.0	120	70-130	2	30
1,2,4-Trimethylbenzene	ND	12.2	10.0	122	11.9	10.0	119	75-130	2	30
sec-Butylbenzene	ND	12.2	10.0	122	12.0	10.0	120	70-125	2	30
4-Isopropyltoluene	ND	12.3	10.0	123	12.1	10.0	121	75-130	1	30
1,3-Dichlorobenzene	ND	11.5	10.0	115	11.3	10.0	113	75-125	1	30
1,4-Dichlorobenzene	ND	11.5	10.0	115	11.3	10.0	113	75-125	2	30
n-Butylbenzene	ND	12.3	10.0	123	12.2	10.0	122	70-135	1	30
1,2-Dichlorobenzene	ND	11.7	10.0	117	11.6	10.0	116	70-120	1	30
1,2-Dibromo-3-chloropropane	ND	9.03	10.0	90	9.66	10.0	97	50-130	7	30
1,2,4-Trichlorobenzene	ND	11.1	10.0	111	11.1	10.0	111	65-135	0	30
Hexachlorobutadiene	ND	11.2	10.0	112	11.3	10.0	113	50-140	1	30
Naphthalene	ND	12.5	10.0	125	12.4	10.0	124	55-140	1	30
1,2,3-Trichlorobenzene	ND	11.9	10.0	119	11.6	10.0	116	55-140	2	30

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

QA/QC Report

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1410529
Project:	TO 01 JBLM	**Date Extracted:**	10/03/2014
Sample Matrix:	Water	**Date Analyzed:**	10/03/2014

Lab Control Spike Summary
Volatile Organic Compounds

Extraction Method:	EPA 5030B	**Units:**	ug/L
Analysis Method:	8260C	**Basis:**	NA
		Level:	Low
		Extraction Lot:	KWG1413475

Lab Control Sample
KWG1413475-3
Lab Control Spike

Analyte Name	Result	Spike Amount	%Rec		%Rec Limits
Dichlorodifluoromethane	6.30	10.0	63		30-155
Chloromethane	8.88	10.0	89		40-125
Vinyl Chloride	9.75	10.0	98		50-145
Bromomethane	3.68	10.0	37		30-145
Chloroethane	12.2	10.0	122		60-135
Trichlorofluoromethane	8.37	10.0	84		60-145
1,1-Dichloroethene	10.8	10.0	108		70-130
Acetone	70.6	50.0	141	*	40-140
Carbon Disulfide	19.8	20.0	99		35-160
Methylene Chloride	9.10	10.0	91		55-140
Methyl tert-Butyl Ether	8.68	10.0	87		65-125
trans-1,2-Dichloroethene	10.3	10.0	103		60-140
1,1-Dichloroethane	10.9	10.0	109		70-135
2,2-Dichloropropane	6.35	10.0	64	*	70-135
cis-1,2-Dichloroethene	9.73	10.0	97		70-125
2-Butanone (MEK)	62.8	50.0	126		30-150
Bromochloromethane	10.5	10.0	105		65-130
Chloroform	9.77	10.0	98		65-135
1,1,1-Trichloroethane (TCA)	8.52	10.0	85		65-130
Carbon Tetrachloride	8.65	10.0	87		65-140
1,1-Dichloropropene	10.6	10.0	106		75-130
Benzene	10.1	10.0	101		80-120
1,2-Dichloroethane (EDC)	10.0	10.0	100		70-130
Trichloroethene (TCE)	9.79	10.0	98		70-125
1,2-Dichloropropane	9.81	10.0	98		75-125
Dibromomethane	10.1	10.0	101		75-125
Bromodichloromethane	9.26	10.0	93		75-120
cis-1,3-Dichloropropene	8.09	10.0	81		70-130
4-Methyl-2-pentanone (MIBK)	57.4	50.0	115		60-135
Toluene	9.93	10.0	99		75-120
trans-1,3-Dichloropropene	6.77	10.0	68		55-140
1,1,2-Trichloroethane	9.89	10.0	99		75-125
Tetrachloroethene (PCE)	9.50	10.0	95		45-150
2-Hexanone	57.2	50.0	114		55-130
1,3-Dichloropropane	10.2	10.0	102		75-125

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1410529
Project:	TO 01 JBLM	**Date Extracted:**	10/03/2014
Sample Matrix:	Water	**Date Analyzed:**	10/03/2014

Lab Control Spike Summary
Volatile Organic Compounds

Extraction Method:	EPA 5030B	**Units:**	ug/L
Analysis Method:	8260C	**Basis:**	NA
		Level:	Low
		Extraction Lot:	KWG1413475

Lab Control Sample
KWG1413475-3
Lab Control Spike

Analyte Name	Result	Spike Amount	%Rec	%Rec Limits
Dibromochloromethane	8.94	10.0	89	60-135
1,2-Dibromoethane (EDB)	9.72	10.0	97	80-120
Chlorobenzene	9.56	10.0	96	80-120
Ethylbenzene	9.43	10.0	94	75-125
1,1,1,2-Tetrachloroethane	8.21	10.0	82	80-130
m,p-Xylenes	19.5	20.0	98	75-130
o-Xylene	9.51	10.0	95	80-120
Styrene	9.74	10.0	97	65-135
Bromoform	7.78	10.0	78	70-130
Isopropylbenzene	9.51	10.0	95	75-125
1,1,2,2-Tetrachloroethane	10.4	10.0	104	65-130
Bromobenzene	9.48	10.0	95	75-125
n-Propylbenzene	9.68	10.0	97	70-130
1,2,3-Trichloropropane	10.1	10.0	101	75-125
2-Chlorotoluene	9.70	10.0	97	75-125
1,3,5-Trimethylbenzene	9.89	10.0	99	75-130
4-Chlorotoluene	9.71	10.0	97	75-130
tert-Butylbenzene	9.86	10.0	99	70-130
1,2,4-Trimethylbenzene	9.85	10.0	99	75-130
sec-Butylbenzene	9.60	10.0	96	70-125
4-Isopropyltoluene	9.95	10.0	100	75-130
1,3-Dichlorobenzene	9.68	10.0	97	75-125
1,4-Dichlorobenzene	9.64	10.0	96	75-125
n-Butylbenzene	10.0	10.0	100	70-135
1,2-Dichlorobenzene	9.81	10.0	98	70-120
1,2-Dibromo-3-chloropropane	8.43	10.0	84	50-130
1,2,4-Trichlorobenzene	9.88	10.0	99	65-135
Hexachlorobutadiene	9.49	10.0	95	50-140
Naphthalene	10.9	10.0	109	55-140
1,2,3-Trichlorobenzene	10.6	10.0	106	55-140

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

QA/QC Report

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1410529
Project:	TO 01 JBLM	**Date Extracted:**	10/04/2014
Sample Matrix:	Water	**Date Analyzed:**	10/04/2014

Lab Control Spike Summary
Volatile Organic Compounds

Extraction Method:	EPA 5030B	**Units:**	ug/L
Analysis Method:	8260C	**Basis:**	NA
		Level:	Low
		Extraction Lot:	KWG1413488

Lab Control Sample
KWG1413488-3
Lab Control Spike

Analyte Name	Result	Spike Amount	%Rec	%Rec Limits
Dichlorodifluoromethane	8.53	10.0	85	30-155
Chloromethane	9.82	10.0	98	40-125
Vinyl Chloride	10.6	10.0	106	50-145
Bromomethane	4.27	10.0	43	30-145
Chloroethane	12.5	10.0	125	60-135
Trichlorofluoromethane	9.12	10.0	91	60-145
1,1-Dichloroethene	11.7	10.0	117	70-130
Acetone	70.4	50.0	141 *	40-140
Carbon Disulfide	21.8	20.0	109	35-160
Methylene Chloride	9.75	10.0	98	55-140
Methyl tert-Butyl Ether	9.02	10.0	90	65-125
trans-1,2-Dichloroethene	11.1	10.0	111	60-140
1,1-Dichloroethane	11.7	10.0	117	70-135
2,2-Dichloropropane	7.26	10.0	73	70-135
cis-1,2-Dichloroethene	10.6	10.0	106	70-125
2-Butanone (MEK)	64.4	50.0	129	30-150
Bromochloromethane	10.7	10.0	107	65-130
Chloroform	10.9	10.0	109	65-135
1,1,1-Trichloroethane (TCA)	9.52	10.0	95	65-130
Carbon Tetrachloride	9.59	10.0	96	65-140
1,1-Dichloropropene	11.1	10.0	111	75-130
Benzene	11.0	10.0	110	80-120
1,2-Dichloroethane (EDC)	11.0	10.0	110	70-130
Trichloroethene (TCE)	10.5	10.0	105	70-125
1,2-Dichloropropane	10.9	10.0	109	75-125
Dibromomethane	10.6	10.0	106	75-125
Bromodichloromethane	10.1	10.0	101	75-120
cis-1,3-Dichloropropene	9.30	10.0	93	70-130
4-Methyl-2-pentanone (MIBK)	59.8	50.0	120	60-135
Toluene	10.7	10.0	107	75-120
trans-1,3-Dichloropropene	7.61	10.0	76	55-140
1,1,2-Trichloroethane	10.5	10.0	105	75-125
Tetrachloroethene (PCE)	10.0	10.0	100	45-150
2-Hexanone	57.4	50.0	115	55-130
1,3-Dichloropropane	11.0	10.0	110	75-125

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1410529
Project:	TO 01 JBLM	**Date Extracted:**	10/04/2014
Sample Matrix:	Water	**Date Analyzed:**	10/04/2014

Lab Control Spike Summary
Volatile Organic Compounds

Extraction Method:	EPA 5030B	**Units:**	ug/L
Analysis Method:	8260C	**Basis:**	NA
		Level:	Low
		Extraction Lot:	KWG1413488

Lab Control Sample
KWG1413488-3
Lab Control Spike

Analyte Name	Result	Spike Amount	%Rec	%Rec Limits
Dibromochloromethane	9.82	10.0	98	60-135
1,2-Dibromoethane (EDB)	10.4	10.0	104	80-120
Chlorobenzene	10.5	10.0	105	80-120
Ethylbenzene	10.2	10.0	102	75-125
1,1,1,2-Tetrachloroethane	9.28	10.0	93	80-130
m,p-Xylenes	21.0	20.0	105	75-130
o-Xylene	10.3	10.0	103	80-120
Styrene	10.6	10.0	106	65-135
Bromoform	8.78	10.0	88	70-130
Isopropylbenzene	10.4	10.0	104	75-125
1,1,2,2-Tetrachloroethane	11.0	10.0	110	65-130
Bromobenzene	10.5	10.0	105	75-125
n-Propylbenzene	10.6	10.0	106	70-130
1,2,3-Trichloropropane	10.4	10.0	104	75-125
2-Chlorotoluene	10.5	10.0	105	75-125
1,3,5-Trimethylbenzene	10.9	10.0	109	75-130
4-Chlorotoluene	10.8	10.0	108	75-130
tert-Butylbenzene	10.8	10.0	108	70-130
1,2,4-Trimethylbenzene	10.8	10.0	108	75-130
sec-Butylbenzene	10.6	10.0	106	70-125
4-Isopropyltoluene	10.8	10.0	108	75-130
1,3-Dichlorobenzene	10.7	10.0	107	75-125
1,4-Dichlorobenzene	10.6	10.0	106	75-125
n-Butylbenzene	11.1	10.0	111	70-135
1,2-Dichlorobenzene	10.6	10.0	106	70-120
1,2-Dibromo-3-chloropropane	9.28	10.0	93	50-130
1,2,4-Trichlorobenzene	10.6	10.0	106	65-135
Hexachlorobutadiene	9.90	10.0	99	50-140
Naphthalene	11.6	10.0	116	55-140
1,2,3-Trichlorobenzene	10.9	10.0	109	55-140

Results flagged with an asterisk (*) indicate values outside control criteria.

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ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1410529
Project:	TO 01 JBLM	**Date Extracted:**	10/06/2014
Sample Matrix:	Water	**Date Analyzed:**	10/06/2014

Lab Control Spike Summary
Volatile Organic Compounds

Extraction Method:	EPA 5030B	**Units:**	ug/L
Analysis Method:	8260C	**Basis:**	NA
		Level:	Low
		Extraction Lot:	KWG1413516

Lab Control Sample
KWG1413516-1
Lab Control Spike

Analyte Name	Result	Spike Amount	%Rec	%Rec Limits
Dichlorodifluoromethane	9.27	10.0	93	30-155
Chloromethane	10.6	10.0	106	40-125
Vinyl Chloride	11.6	10.0	116	50-145
Bromomethane	5.44	10.0	54	30-145
Chloroethane	13.5	10.0	135	60-135
Trichlorofluoromethane	10.0	10.0	100	60-145
1,1-Dichloroethene	12.8	10.0	128	70-130
Acetone	75.0	50.0	150 *	40-140
Carbon Disulfide	24.5	20.0	123	35-160
Methylene Chloride	10.2	10.0	102	55-140
Methyl tert-Butyl Ether	9.10	10.0	91	65-125
trans-1,2-Dichloroethene	11.8	10.0	118	60-140
1,1-Dichloroethane	12.3	10.0	123	70-135
2,2-Dichloropropane	7.88	10.0	79	70-135
cis-1,2-Dichloroethene	10.8	10.0	108	70-125
2-Butanone (MEK)	65.6	50.0	131	30-150
Bromochloromethane	11.5	10.0	115	65-130
Chloroform	11.2	10.0	112	65-135
1,1,1-Trichloroethane (TCA)	10.3	10.0	103	65-130
Carbon Tetrachloride	10.3	10.0	103	65-140
1,1-Dichloropropene	12.4	10.0	124	75-130
Benzene	11.4	10.0	114	80-120
1,2-Dichloroethane (EDC)	11.6	10.0	116	70-130
Trichloroethene (TCE)	11.5	10.0	115	70-125
1,2-Dichloropropane	11.0	10.0	110	75-125
Dibromomethane	11.1	10.0	111	75-125
Bromodichloromethane	10.9	10.0	109	75-120
cis-1,3-Dichloropropene	9.44	10.0	94	70-130
4-Methyl-2-pentanone (MIBK)	59.9	50.0	120	60-135
Toluene	11.1	10.0	111	75-120
trans-1,3-Dichloropropene	8.07	10.0	81	55-140
1,1,2-Trichloroethane	11.0	10.0	110	75-125
Tetrachloroethene (PCE)	10.5	10.0	105	45-150
2-Hexanone	57.9	50.0	116	55-130
1,3-Dichloropropane	11.4	10.0	114	75-125

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1410529
Project:	TO 01 JBLM	**Date Extracted:**	10/06/2014
Sample Matrix:	Water	**Date Analyzed:**	10/06/2014

Lab Control Spike Summary
Volatile Organic Compounds

Extraction Method:	EPA 5030B	**Units:**	ug/L
Analysis Method:	8260C	**Basis:**	NA
		Level:	Low
		Extraction Lot:	KWG1413516

Lab Control Sample
KWG1413516-1
Lab Control Spike

Analyte Name	Result	Spike Amount	%Rec	%Rec Limits
Dibromochloromethane	10.6	10.0	106	60-135
1,2-Dibromoethane (EDB)	10.4	10.0	104	80-120
Chlorobenzene	10.9	10.0	109	80-120
Ethylbenzene	10.9	10.0	109	75-125
1,1,1,2-Tetrachloroethane	9.87	10.0	99	80-130
m,p-Xylenes	22.1	20.0	111	75-130
o-Xylene	11.0	10.0	110	80-120
Styrene	11.3	10.0	113	65-135
Bromoform	9.16	10.0	92	70-130
Isopropylbenzene	11.0	10.0	110	75-125
1,1,2,2-Tetrachloroethane	11.3	10.0	113	65-130
Bromobenzene	10.9	10.0	109	75-125
n-Propylbenzene	11.5	10.0	115	70-130
1,2,3-Trichloropropane	10.8	10.0	108	75-125
2-Chlorotoluene	11.1	10.0	111	75-125
1,3,5-Trimethylbenzene	11.8	10.0	118	75-130
4-Chlorotoluene	11.3	10.0	113	75-130
tert-Butylbenzene	11.6	10.0	116	70-130
1,2,4-Trimethylbenzene	11.6	10.0	116	75-130
sec-Butylbenzene	11.5	10.0	115	70-125
4-Isopropyltoluene	11.8	10.0	118	75-130
1,3-Dichlorobenzene	11.1	10.0	111	75-125
1,4-Dichlorobenzene	11.1	10.0	111	75-125
n-Butylbenzene	11.8	10.0	118	70-135
1,2-Dichlorobenzene	11.1	10.0	111	70-120
1,2-Dibromo-3-chloropropane	9.59	10.0	96	50-130
1,2,4-Trichlorobenzene	10.9	10.0	109	65-135
Hexachlorobutadiene	10.8	10.0	108	50-140
Naphthalene	11.7	10.0	117	55-140
1,2,3-Trichlorobenzene	11.6	10.0	116	55-140

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1410529
Project:	TO 01 JBLM	**Date Extracted:**	10/06/2014
Sample Matrix:	Water	**Date Analyzed:**	10/06/2014

Lab Control Spike Summary
Volatile Organic Compounds

Extraction Method:	EPA 5030B	**Units:**	ug/L
Analysis Method:	8260C	**Basis:**	NA
		Level:	Low
		Extraction Lot:	KWG1413535

Lab Control Sample
KWG1413535-3
Lab Control Spike

Analyte Name	Result	Spike Amount	%Rec		%Rec Limits
Dichlorodifluoromethane	8.56	10.0	86		30-155
Chloromethane	10.4	10.0	104		40-125
Vinyl Chloride	11.3	10.0	113		50-145
Bromomethane	6.36	10.0	64		30-145
Chloroethane	13.0	10.0	130		60-135
Trichlorofluoromethane	9.59	10.0	96		60-145
1,1-Dichloroethene	12.3	10.0	123		70-130
Acetone	72.7	50.0	145	*	40-140
Carbon Disulfide	22.3	20.0	111		35-160
Methylene Chloride	9.90	10.0	99		55-140
Methyl tert-Butyl Ether	8.54	10.0	85		65-125
trans-1,2-Dichloroethene	11.1	10.0	111		60-140
1,1-Dichloroethane	12.4	10.0	124		70-135
2,2-Dichloropropane	6.17	10.0	62	*	70-135
cis-1,2-Dichloroethene	10.8	10.0	108		70-125
2-Butanone (MEK)	62.0	50.0	124		30-150
Bromochloromethane	11.5	10.0	115		65-130
Chloroform	11.0	10.0	110		65-135
1,1,1-Trichloroethane (TCA)	9.72	10.0	97		65-130
Carbon Tetrachloride	9.86	10.0	99		65-140
1,1-Dichloropropene	12.0	10.0	120		75-130
Benzene	11.3	10.0	113		80-120
1,2-Dichloroethane (EDC)	11.4	10.0	114		70-130
Trichloroethene (TCE)	11.1	10.0	111		70-125
1,2-Dichloropropane	10.9	10.0	109		75-125
Dibromomethane	11.0	10.0	110		75-125
Bromodichloromethane	10.2	10.0	102		75-120
cis-1,3-Dichloropropene	8.87	10.0	89		70-130
4-Methyl-2-pentanone (MIBK)	59.8	50.0	120		60-135
Toluene	10.7	10.0	107		75-120
trans-1,3-Dichloropropene	7.39	10.0	74		55-140
1,1,2-Trichloroethane	11.4	10.0	114		75-125
Tetrachloroethene (PCE)	10.3	10.0	103		45-150
2-Hexanone	58.8	50.0	118		55-130
1,3-Dichloropropane	11.8	10.0	118		75-125

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

QA/QC Report

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1410529
Project:	TO 01 JBLM	**Date Extracted:**	10/06/2014
Sample Matrix:	Water	**Date Analyzed:**	10/06/2014

Lab Control Spike Summary
Volatile Organic Compounds

Extraction Method:	EPA 5030B	**Units:**	ug/L
Analysis Method:	8260C	**Basis:**	NA
		Level:	Low
		Extraction Lot:	KWG1413535

Lab Control Sample
KWG1413535-3
Lab Control Spike

Analyte Name	Result	Spike Amount	%Rec	%Rec Limits
Dibromochloromethane	9.94	10.0	99	60-135
1,2-Dibromoethane (EDB)	10.7	10.0	107	80-120
Chlorobenzene	10.8	10.0	108	80-120
Ethylbenzene	10.8	10.0	108	75-125
1,1,1,2-Tetrachloroethane	9.45	10.0	95	80-130
m,p-Xylenes	21.7	20.0	109	75-130
o-Xylene	10.8	10.0	108	80-120
Styrene	11.1	10.0	111	65-135
Bromoform	8.80	10.0	88	70-130
Isopropylbenzene	10.8	10.0	108	75-125
1,1,2,2-Tetrachloroethane	11.6	10.0	116	65-130
Bromobenzene	10.3	10.0	103	75-125
n-Propylbenzene	10.9	10.0	109	70-130
1,2,3-Trichloropropane	10.6	10.0	106	75-125
2-Chlorotoluene	10.8	10.0	108	75-125
1,3,5-Trimethylbenzene	11.2	10.0	112	75-130
4-Chlorotoluene	10.8	10.0	108	75-130
tert-Butylbenzene	11.1	10.0	111	70-130
1,2,4-Trimethylbenzene	11.2	10.0	112	75-130
sec-Butylbenzene	10.9	10.0	109	70-125
4-Isopropyltoluene	11.0	10.0	110	75-130
1,3-Dichlorobenzene	10.6	10.0	106	75-125
1,4-Dichlorobenzene	10.7	10.0	107	75-125
n-Butylbenzene	11.2	10.0	112	70-135
1,2-Dichlorobenzene	11.0	10.0	110	70-120
1,2-Dibromo-3-chloropropane	9.06	10.0	91	50-130
1,2,4-Trichlorobenzene	10.5	10.0	105	65-135
Hexachlorobutadiene	10.2	10.0	102	50-140
Naphthalene	12.1	10.0	121	55-140
1,2,3-Trichlorobenzene	11.0	10.0	110	55-140

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

QA/QC Report

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1410529
Project:	TO 01 JBLM	**Date Extracted:**	10/03/2014
Sample Matrix:	Water	**Date Analyzed:**	10/03/2014
		Time Analyzed:	18:17

Method Blank Summary
Volatile Organic Compounds

Sample Name:	Method Blank	**Instrument ID:**	GC-MS 18
Lab Code:	KWG1413475-4	**File ID:**	J:\MS18\DATA\100314\1003F015.D
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8260C	**Extraction Lot:**	KWG1413475

This Method Blank applies to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
Lab Control Sample	KWG1413475-3	J:\MS18\DATA\100314\1003F009.D	10/03/14	16:02
AOC14092295A172MS	KWG1413475-1	J:\MS18\DATA\100314\1003F010.D	10/03/14	16:31
AOC14092295A172DMS	KWG1413475-2	J:\MS18\DATA\100314\1003F011.D	10/03/14	16:52
TB-140922	K1410529-031	J:\MS18\DATA\100314\1003F016.D	10/03/14	18:38
AOC14092295A172	K1410529-034	J:\MS18\DATA\100314\1003F018.D	10/03/14	19:21
AOC14092210A178	K1410529-032	J:\MS18\DATA\100314\1003F034.D	10/04/14	01:03
AOC140922DUP2	K1410529-033	J:\MS18\DATA\100314\1003F035.D	10/04/14	01:24
AOC140922DUP2	K1410529-033	J:\MS18\DATA\100314\1003F036.D	10/04/14	01:46
AOC14092210A178	K1410529-032	J:\MS18\DATA\100314\1003F037.D	10/04/14	02:07

QA/QC Report

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1410529
Project:	TO 01 JBLM	**Date Extracted:**	10/04/2014
Sample Matrix:	Water	**Date Analyzed:**	10/04/2014
		Time Analyzed:	15:24

Method Blank Summary
Volatile Organic Compounds

Sample Name:	Method Blank	**Instrument ID:**	GC-MS 18
Lab Code:	KWG1413488-4	**File ID:**	J:\MS18\DATA\100414\1004F015.D
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8260C	**Extraction Lot:**	KWG1413488

This Method Blank applies to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
Lab Control Sample	KWG1413488-3	J:\MS18\DATA\100414\1004F010.D	10/04/14	13:38
TB-140923	K1410529-001	J:\MS18\DATA\100414\1004F017.D	10/04/14	16:06
LGC140923LC135-1	K1410529-002	J:\MS18\DATA\100414\1004F018.D	10/04/14	16:28
LGC140923LC10830-1	K1410529-003	J:\MS18\DATA\100414\1004F019.D	10/04/14	16:49
LGC140923LC10860-1	K1410529-004	J:\MS18\DATA\100414\1004F020.D	10/04/14	17:10
LGC140923LC10885-1	K1410529-005	J:\MS18\DATA\100414\1004F021.D	10/04/14	17:31
LGC140923MT4-1	K1410529-006	J:\MS18\DATA\100414\1004F022.D	10/04/14	17:53
LGC140923MT3-1	K1410529-007	J:\MS18\DATA\100414\1004F023.D	10/04/14	18:14
LGC140923MT2-1	K1410529-008	J:\MS18\DATA\100414\1004F024.D	10/04/14	18:37
LGC140923MT1-1	K1410529-009	J:\MS18\DATA\100414\1004F025.D	10/04/14	18:58
AOC14092307A177	K1410529-035	J:\MS18\DATA\100414\1004F026.D	10/04/14	19:20
AOC14092395A173A	K1410529-036	J:\MS18\DATA\100414\1004F032.D	10/04/14	21:27
AOC140922DUP2	K1410529-033	J:\MS18\DATA\100414\1004F034.D	10/04/14	22:10

QA/QC Report

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1410529
Project:	TO 01 JBLM	**Date Extracted:**	10/06/2014
Sample Matrix:	Water	**Date Analyzed:**	10/06/2014
		Time Analyzed:	11:50

Method Blank Summary
Volatile Organic Compounds

Sample Name:	Method Blank	**Instrument ID:**	GC-MS 18
Lab Code:	KWG1413516-3	**File ID:**	J:\MS18\DATA\100614\1006F008.D
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8260C	**Extraction Lot:**	KWG1413516

This Method Blank applies to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
Lab Control Sample	KWG1413516-1	J:\MS18\DATA\100614\1006F004.D	10/06/14	10:14
LGC140924FL1-1	K1410529-010	J:\MS18\DATA\100614\1006F014.D	10/06/14	13:58
LGC140924LC218-1	K1410529-011	J:\MS18\DATA\100614\1006F015.D	10/06/14	14:20
LGC140924LC224-1	K1410529-012	J:\MS18\DATA\100614\1006F016.D	10/06/14	14:41
LGC140924LC01-1	K1410529-013	J:\MS18\DATA\100614\1006F017.D	10/06/14	15:02
LG140924LC111B-1	K1410529-015	J:\MS18\DATA\100614\1006F018.D	10/06/14	15:24
LG14092485PA382-1	K1410529-016	J:\MS18\DATA\100614\1006F019.D	10/06/14	15:45
LGC14092485PA384-1	K1410529-017	J:\MS18\DATA\100614\1006F020.D	10/06/14	16:06
LGC140924LC124-1	K1410529-018	J:\MS18\DATA\100614\1006F021.D	10/06/14	16:28
LGC140924DUP2-1	K1410529-019	J:\MS18\DATA\100614\1006F022.D	10/06/14	16:49
LG140924LC122B-1	K1410529-020	J:\MS18\DATA\100614\1006F023.D	10/06/14	17:10
LGC140924LC61B-1	K1410529-021	J:\MS18\DATA\100614\1006F024.D	10/06/14	17:32
LGC140924LC226-1	K1410529-022	J:\MS18\DATA\100614\1006F025.D	10/06/14	17:53
LGC140925SLAP5-1	K1410529-023	J:\MS18\DATA\100614\1006F026.D	10/06/14	18:15
LGC140924LC116B-1	K1410529-014	J:\MS18\DATA\100614\1006F027.D	10/06/14	18:36
LGC140924LC01-1MS	KWG1413516-6	J:\MS18\DATA\100614\1006F028.D	10/06/14	18:57
LGC140924LC01-1DMS	KWG1413516-7	J:\MS18\DATA\100614\1006F029.D	10/06/14	19:19

QA/QC Report

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1410529
Project:	TO 01 JBLM	**Date Extracted:**	10/06/2014
Sample Matrix:	Water	**Date Analyzed:**	10/06/2014
		Time Analyzed:	23:57

Method Blank Summary
Volatile Organic Compounds

Sample Name:	Method Blank	**Instrument ID:**	GC-MS 18
Lab Code:	KWG1413535-5	**File ID:**	J:\MS18\DATA\100614\1006F042.D
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8260C	**Extraction Lot:**	KWG1413535

This Method Blank applies to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
Lab Control Sample	KWG1413535-3	J:\MS18\DATA\100614\1006F037.D	10/06/14	22:10
LG140925SLAP4-1	K1410529-024	J:\MS18\DATA\100614\1006F043.D	10/07/14	00:19
LG140925SLAP3-1	K1410529-025	J:\MS18\DATA\100614\1006F044.D	10/07/14	00:40
LG140925SLAP1-1	K1410529-026	J:\MS18\DATA\100614\1006F045.D	10/07/14	01:02

QA/QC Report

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1410529
Project:	TO 01 JBLM	**Date Extracted:**	10/03/2014
Sample Matrix:	Water	**Date Analyzed:**	10/03/2014
		Time Analyzed:	16:02

Lab Control Sample Summary
Volatile Organic Compounds

Sample Name:	Lab Control Sample	**Instrument ID:**	GC-MS 18
Lab Code:	KWG1413475-3	**File ID:**	J:\MS18\DATA\100314\1003F009.D
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8260C	**Extraction Lot:**	KWG1413475

This Lab Control Sample applies to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
AOC14092295A172MS	KWG1413475-1	J:\MS18\DATA\100314\1003F010.D	10/03/14	16:31
AOC14092295A172DMS	KWG1413475-2	J:\MS18\DATA\100314\1003F011.D	10/03/14	16:52
Method Blank	KWG1413475-4	J:\MS18\DATA\100314\1003F015.D	10/03/14	18:17
TB-140922	K1410529-031	J:\MS18\DATA\100314\1003F016.D	10/03/14	18:38
AOC14092295A172	K1410529-034	J:\MS18\DATA\100314\1003F018.D	10/03/14	19:21
AOC14092210A178	K1410529-032	J:\MS18\DATA\100314\1003F034.D	10/04/14	01:03
AOC140922DUP2	K1410529-033	J:\MS18\DATA\100314\1003F035.D	10/04/14	01:24
AOC140922DUP2	K1410529-033	J:\MS18\DATA\100314\1003F036.D	10/04/14	01:46
AOC14092210A178	K1410529-032	J:\MS18\DATA\100314\1003F037.D	10/04/14	02:07

QA/QC Report

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1410529
Project:	TO 01 JBLM	**Date Extracted:**	10/04/2014
Sample Matrix:	Water	**Date Analyzed:**	10/04/2014
		Time Analyzed:	13:38

Lab Control Sample Summary
Volatile Organic Compounds

Sample Name:	Lab Control Sample	**Instrument ID:**	GC-MS 18
Lab Code:	KWG1413488-3	**File ID:**	J:\MS18\DATA\100414\1004F010.D
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8260C	**Extraction Lot:**	KWG1413488

This Lab Control Sample applies to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
Method Blank	KWG1413488-4	J:\MS18\DATA\100414\1004F015.D	10/04/14	15:24
TB-140923	K1410529-001	J:\MS18\DATA\100414\1004F017.D	10/04/14	16:06
LGC140923LC135-1	K1410529-002	J:\MS18\DATA\100414\1004F018.D	10/04/14	16:28
LGC140923LC10830-1	K1410529-003	J:\MS18\DATA\100414\1004F019.D	10/04/14	16:49
LGC140923LC10860-1	K1410529-004	J:\MS18\DATA\100414\1004F020.D	10/04/14	17:10
LGC140923LC10885-1	K1410529-005	J:\MS18\DATA\100414\1004F021.D	10/04/14	17:31
LGC140923MT4-1	K1410529-006	J:\MS18\DATA\100414\1004F022.D	10/04/14	17:53
LGC140923MT3-1	K1410529-007	J:\MS18\DATA\100414\1004F023.D	10/04/14	18:14
LGC140923MT2-1	K1410529-008	J:\MS18\DATA\100414\1004F024.D	10/04/14	18:37
LGC140923MT1-1	K1410529-009	J:\MS18\DATA\100414\1004F025.D	10/04/14	18:58
AOC14092307A177	K1410529-035	J:\MS18\DATA\100414\1004F026.D	10/04/14	19:20
AOC14092395A173A	K1410529-036	J:\MS18\DATA\100414\1004F032.D	10/04/14	21:27
AOC140922DUP2	K1410529-033	J:\MS18\DATA\100414\1004F034.D	10/04/14	22:10

QA/QC Report

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1410529
Project:	TO 01 JBLM	**Date Extracted:**	10/06/2014
Sample Matrix:	Water	**Date Analyzed:**	10/06/2014
		Time Analyzed:	10:14

Lab Control Sample Summary
Volatile Organic Compounds

Sample Name:	Lab Control Sample	**Instrument ID:**	GC-MS 18
Lab Code:	KWG1413516-1	**File ID:**	J:\MS18\DATA\100614\1006F004.D
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8260C	**Extraction Lot:**	KWG1413516

This Lab Control Sample applies to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
Method Blank	KWG1413516-3	J:\MS18\DATA\100614\1006F008.D	10/06/14	11:50
LGC140924FL1-1	K1410529-010	J:\MS18\DATA\100614\1006F014.D	10/06/14	13:58
LGC140924LC218-1	K1410529-011	J:\MS18\DATA\100614\1006F015.D	10/06/14	14:20
LGC140924LC224-1	K1410529-012	J:\MS18\DATA\100614\1006F016.D	10/06/14	14:41
LGC140924LC01-1	K1410529-013	J:\MS18\DATA\100614\1006F017.D	10/06/14	15:02
LG140924LC111B-1	K1410529-015	J:\MS18\DATA\100614\1006F018.D	10/06/14	15:24
LG14092485PA382-1	K1410529-016	J:\MS18\DATA\100614\1006F019.D	10/06/14	15:45
LGC14092485PA384-1	K1410529-017	J:\MS18\DATA\100614\1006F020.D	10/06/14	16:06
LGC140924LC124-1	K1410529-018	J:\MS18\DATA\100614\1006F021.D	10/06/14	16:28
LGC140924DUP2-1	K1410529-019	J:\MS18\DATA\100614\1006F022.D	10/06/14	16:49
LG140924LC122B-1	K1410529-020	J:\MS18\DATA\100614\1006F023.D	10/06/14	17:10
LGC140924LC61B-1	K1410529-021	J:\MS18\DATA\100614\1006F024.D	10/06/14	17:32
LGC140924LC226-1	K1410529-022	J:\MS18\DATA\100614\1006F025.D	10/06/14	17:53
LGC140925SLAP5-1	K1410529-023	J:\MS18\DATA\100614\1006F026.D	10/06/14	18:15
LGC140924LC116B-1	K1410529-014	J:\MS18\DATA\100614\1006F027.D	10/06/14	18:36
LGC140924LC01-1MS	KWG1413516-6	J:\MS18\DATA\100614\1006F028.D	10/06/14	18:57
LGC140924LC01-1DMS	KWG1413516-7	J:\MS18\DATA\100614\1006F029.D	10/06/14	19:19

QA/QC Report

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1410529
Project:	TO 01 JBLM	**Date Extracted:**	10/06/2014
Sample Matrix:	Water	**Date Analyzed:**	10/06/2014
		Time Analyzed:	22:10

Lab Control Sample Summary
Volatile Organic Compounds

Sample Name:	Lab Control Sample	**Instrument ID:**	GC-MS 18
Lab Code:	KWG1413535-3	**File ID:**	J:\MS18\DATA\100614\1006F037.D
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8260C	**Extraction Lot:**	KWG1413535

This Lab Control Sample applies to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
Method Blank	KWG1413535-5	J:\MS18\DATA\100614\1006F042.D	10/06/14	23:57
LG140925SLAP4-1	K1410529-024	J:\MS18\DATA\100614\1006F043.D	10/07/14	00:19
LG140925SLAP3-1	K1410529-025	J:\MS18\DATA\100614\1006F044.D	10/07/14	00:40
LG140925SLAP1-1	K1410529-026	J:\MS18\DATA\100614\1006F045.D	10/07/14	01:02

ALS Group USA, Corp. dba ALS Environmental

QA/QC Results

Client: Sealaska Environmental Services, LLC
Project: TO 01 JBLM

Service Request: K1410529
Date Analyzed: 10/03/2014
Time Analyzed: 14:35

Tune Summary
Volatile Organic Compounds

File ID: J:\MS18\DATA\100314\1003F006.D
Instrument ID: GC-MS 18
Column:

Analysis Method: 8260C
Analysis Lot: KWG1413468

Target Mass	Relative to Mass	Lower Limit%	Upper Limit%	Relative Abundance %	Raw Abundance	Result Pass/Fail
50	95	15	40	20.4	11319	PASS
75	95	30	60	51.2	28448	PASS
95	95	100	100	100.0	55581	PASS
96	95	5	9	6.9	3822	PASS
173	174	0	2	0.9	409	PASS
174	95	50	120	80.8	44904	PASS
175	174	5	9	6.0	2700	PASS
176	174	95	101	96.2	43208	PASS
177	176	5	9	6.3	2729	PASS

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed	Q
Continuing Calibration Verification	KWG1413468-2	J:\MS18\DATA\100314\1003F008.D	10/03/2014	15:41	
Lab Control Sample	KWG1413475-3	J:\MS18\DATA\100314\1003F009.D	10/03/2014	16:02	
AOC14092295A172MS	KWG1413475-1	J:\MS18\DATA\100314\1003F010.D	10/03/2014	16:31	
AOC14092295A172DMS	KWG1413475-2	J:\MS18\DATA\100314\1003F011.D	10/03/2014	16:52	
Method Blank	KWG1413475-4	J:\MS18\DATA\100314\1003F015.D	10/03/2014	18:17	
TB-140922	K1410529-031	J:\MS18\DATA\100314\1003F016.D	10/03/2014	18:38	
AOC14092295A172	K1410529-034	J:\MS18\DATA\100314\1003F018.D	10/03/2014	19:21	
AOC14092210A178	K1410529-032	J:\MS18\DATA\100314\1003F034.D	10/04/2014	01:03	
AOC140922DUP2	K1410529-033	J:\MS18\DATA\100314\1003F035.D	10/04/2014	01:24	
AOC140922DUP2	K1410529-033	J:\MS18\DATA\100314\1003F036.D	10/04/2014	01:46	
AOC14092210A178	K1410529-032	J:\MS18\DATA\100314\1003F037.D	10/04/2014	02:07	

Results flagged with an asterisk (*) indicate the analysis performed outside specified tune window

ALS Group USA, Corp. dba ALS Environmental

QA/QC Results

Client: Sealaska Environmental Services, LLC
Project: TO 01 JBLM

Service Request: K1410529
Date Analyzed: 10/04/2014
Time Analyzed: 12:16

Tune Summary
Volatile Organic Compounds

File ID: J:\MS18\DATA\100414\1004F007.D
Instrument ID: GC-MS 18
Column:

Analysis Method: 8260C
Analysis Lot: KWG1413485

Target Mass	Relative to Mass	Lower Limit%	Upper Limit%	Relative Abundance %	Raw Abundance	Result Pass/Fail
50	95	15	40	19.0	12610	PASS
75	95	30	60	50.8	33664	PASS
95	95	100	100	100.0	66290	PASS
96	95	5	9	7.0	4651	PASS
173	174	0	2	0.5	243	PASS
174	95	50	120	76.2	50482	PASS
175	174	5	9	6.9	3492	PASS
176	174	95	101	95.6	48269	PASS
177	176	5	9	6.5	3146	PASS

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed	Q
Continuing Calibration Verification	KWG1413485-3	J:\MS18\DATA\100414\1004F009.D	10/04/2014	13:04	
Lab Control Sample	KWG1413488-3	J:\MS18\DATA\100414\1004F010.D	10/04/2014	13:38	
Method Blank	KWG1413488-4	J:\MS18\DATA\100414\1004F015.D	10/04/2014	15:24	
TB-140923	K1410529-001	J:\MS18\DATA\100414\1004F017.D	10/04/2014	16:06	
LGC140923LC135-1	K1410529-002	J:\MS18\DATA\100414\1004F018.D	10/04/2014	16:28	
LGC140923LC10830-1	K1410529-003	J:\MS18\DATA\100414\1004F019.D	10/04/2014	16:49	
LGC140923LC10860-1	K1410529-004	J:\MS18\DATA\100414\1004F020.D	10/04/2014	17:10	
LGC140923LC10885-1	K1410529-005	J:\MS18\DATA\100414\1004F021.D	10/04/2014	17:31	
LGC140923MT4-1	K1410529-006	J:\MS18\DATA\100414\1004F022.D	10/04/2014	17:53	
LGC140923MT3-1	K1410529-007	J:\MS18\DATA\100414\1004F023.D	10/04/2014	18:14	
LGC140923MT2-1	K1410529-008	J:\MS18\DATA\100414\1004F024.D	10/04/2014	18:37	
LGC140923MT1-1	K1410529-009	J:\MS18\DATA\100414\1004F025.D	10/04/2014	18:58	
AOC14092307A177	K1410529-035	J:\MS18\DATA\100414\1004F026.D	10/04/2014	19:20	
AOC14092395A173A	K1410529-036	J:\MS18\DATA\100414\1004F032.D	10/04/2014	21:27	
AOC140922DUP2	K1410529-033	J:\MS18\DATA\100414\1004F034.D	10/04/2014	22:10	

Results flagged with an asterisk (*) indicate the analysis performed outside specified tune window

ALS Group USA, Corp. dba ALS Environmental

QA/QC Results

Client: Sealaska Environmental Services, LLC
Project: TO 01 JBLM

Service Request: K1410529
Date Analyzed: 10/06/2014
Time Analyzed: 08:58

Tune Summary
Volatile Organic Compounds

File ID: J:\MS18\DATA\100614\1006F002.D
Instrument ID: GC-MS 18
Column:

Analysis Method: 8260C
Analysis Lot: KWG1413506

Target Mass	Relative to Mass	Lower Limit%	Upper Limit%	Relative Abundance %	Raw Abundance	Result Pass/Fail
50	95	15	40	20.6	12443	PASS
75	95	30	60	52.6	31712	PASS
95	95	100	100	100.0	60301	PASS
96	95	5	9	7.0	4207	PASS
173	174	0	2	0.5	212	PASS
174	95	50	120	77.9	46954	PASS
175	174	5	9	6.5	3065	PASS
176	174	95	101	98.0	46034	PASS
177	176	5	9	6.7	3089	PASS

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed	Q
Continuing Calibration Verification	KWG1413506-2	J:\MS18\DATA\100614\1006F003.D	10/06/2014	09:31	
Lab Control Sample	KWG1413516-1	J:\MS18\DATA\100614\1006F004.D	10/06/2014	10:14	
Method Blank	KWG1413516-3	J:\MS18\DATA\100614\1006F008.D	10/06/2014	11:50	
LGC140924FL1-1	K1410529-010	J:\MS18\DATA\100614\1006F014.D	10/06/2014	13:58	
LGC140924LC218-1	K1410529-011	J:\MS18\DATA\100614\1006F015.D	10/06/2014	14:20	
LGC140924LC224-1	K1410529-012	J:\MS18\DATA\100614\1006F016.D	10/06/2014	14:41	
LGC140924LC01-1	K1410529-013	J:\MS18\DATA\100614\1006F017.D	10/06/2014	15:02	
LG140924LC111B-1	K1410529-015	J:\MS18\DATA\100614\1006F018.D	10/06/2014	15:24	
LG14092485PA382-1	K1410529-016	J:\MS18\DATA\100614\1006F019.D	10/06/2014	15:45	
LGC14092485PA384-1	K1410529-017	J:\MS18\DATA\100614\1006F020.D	10/06/2014	16:06	
LGC140924LC124-1	K1410529-018	J:\MS18\DATA\100614\1006F021.D	10/06/2014	16:28	
LGC140924DUP2-1	K1410529-019	J:\MS18\DATA\100614\1006F022.D	10/06/2014	16:49	
LG140924LC122B-1	K1410529-020	J:\MS18\DATA\100614\1006F023.D	10/06/2014	17:10	
LGC140924LC61B-1	K1410529-021	J:\MS18\DATA\100614\1006F024.D	10/06/2014	17:32	
LGC140924LC226-1	K1410529-022	J:\MS18\DATA\100614\1006F025.D	10/06/2014	17:53	
LGC140925SLAP5-1	K1410529-023	J:\MS18\DATA\100614\1006F026.D	10/06/2014	18:15	
LGC140924LC116B-1	K1410529-014	J:\MS18\DATA\100614\1006F027.D	10/06/2014	18:36	
LGC140924LC01-1MS	KWG1413516-6	J:\MS18\DATA\100614\1006F028.D	10/06/2014	18:57	
LGC140924LC01-1DMS	KWG1413516-7	J:\MS18\DATA\100614\1006F029.D	10/06/2014	19:19	

Results flagged with an asterisk (*) indicate the analysis performed outside specified tune window

QA/QC Results

Client: Sealaska Environmental Services, LLC
Project: TO 01 JBLM

Service Request: K1410529
Date Analyzed: 10/06/2014
Time Analyzed: 21:06

Tune Summary
Volatile Organic Compounds

File ID: J:\MS18\DATA\100614\1006F034.D
Instrument ID: GC-MS 18
Column:

Analysis Method: 8260C
Analysis Lot: KWG1413536

Target Mass	Relative to Mass	Lower Limit%	Upper Limit%	Relative Abundance %	Raw Abundance	Result Pass/Fail
50	95	15	40	22.0	11264	PASS
75	95	30	60	55.6	28501	PASS
95	95	100	100	100.0	51306	PASS
96	95	5	9	7.6	3879	PASS
173	174	0	2	0.3	127	PASS
174	95	50	120	78.5	40261	PASS
175	174	5	9	7.7	3086	PASS
176	174	95	101	96.1	38709	PASS
177	176	5	9	7.0	2727	PASS

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed	Q
Continuing Calibration Verification	KWG1413536-2	J:\MS18\DATA\100614\1006F035.D	10/06/2014	21:27	
Lab Control Sample	KWG1413535-3	J:\MS18\DATA\100614\1006F037.D	10/06/2014	22:10	
Method Blank	KWG1413535-5	J:\MS18\DATA\100614\1006F042.D	10/06/2014	23:57	
LG140925SLAP4-1	K1410529-024	J:\MS18\DATA\100614\1006F043.D	10/07/2014	00:19	
LG140925SLAP3-1	K1410529-025	J:\MS18\DATA\100614\1006F044.D	10/07/2014	00:40	
LG140925SLAP1-1	K1410529-026	J:\MS18\DATA\100614\1006F045.D	10/07/2014	01:02	

Results flagged with an asterisk (*) indicate the analysis performed outside specified tune window

QA/QC Results

Client: Sealaska Environmental Services, LLC **Service Request:** K1410529
Project: TO 01 JBLM **Calibration Date:** 09/17/2014

Initial Calibration Summary
Volatile Organic Compounds

Calibration ID: CAL13556 **Column:** MS
Instrument ID: GC-MS 18

Level ID	File ID	Level ID	File ID
A	J:\MS18\DATA\091714\0917F008.D	G	J:\MS18\DATA\091714\0917F014.D
B	J:\MS18\DATA\091714\0917F009.D	H	J:\MS18\DATA\091714\0917F015.D
C	J:\MS18\DATA\091714\0917F010.D	I	J:\MS18\DATA\091714\0917F016.D
D	J:\MS18\DATA\091714\0917F011.D	J	J:\MS18\DATA\091714\0917F017.D
E	J:\MS18\DATA\091714\0917F012.D	K	J:\MS18\DATA\091714\0917F018.D
F	J:\MS18\DATA\091714\0917F013.D		

Analyte Name	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF
Dichlorodifluoromethane				B	0.20	0.247	C	0.50	0.320	D	1.0	0.335	E	2.0	0.303
	F	5.0	0.416	G	10	0.365	H	20	0.349	I	40	0.347	J	60	0.360
	K	80	0.365												
Chloromethane	A	0.10	0.453	B	0.20	0.416	C	0.50	0.373	D	1.0	0.394	E	2.0	0.343
	F	5.0	0.426	G	10	0.366	H	20	0.356	I	40	0.380	J	60	0.391
	K	80	0.395												
Vinyl Chloride	A	0.10	0.268	B	0.20	0.358	C	0.50	0.363	D	1.0	0.368	E	2.0	0.343
	F	5.0	0.462	G	10	0.397	H	20	0.388	I	40	0.384	J	60	0.397
	K	80	0.395												
Bromomethane							C	0.50	0.373	D	1.0	0.355	E	2.0	0.288
	F	5.0	0.336	G	10	0.250	H	20	0.214	I	40	0.232	J	60	0.254
	K	80	0.272												
Chloroethane							C	0.50	0.222	D	1.0	0.216	E	2.0	0.186
	F	5.0	0.251	G	10	0.210	H	20	0.203	I	40	0.208	J	60	0.210
	K	80	0.212												
Trichlorofluoromethane	A	0.10	0.386	B	0.20	0.443	C	0.50	0.471	D	1.0	0.528	E	2.0	0.459
	F	5.0	0.634	G	10	0.540	H	20	0.526	I	40	0.520	J	60	0.543
	K	80	0.562												
1,1-Dichloroethene	A	0.10	0.164	B	0.20	0.204	C	0.50	0.213	D	1.0	0.225	E	2.0	0.197
	F	5.0	0.264	G	10	0.224	H	20	0.218	I	40	0.223	J	60	0.236
	K	80	0.236												
Acetone				B	8.0	0.0487	C	20	0.0484	D	40	0.0477	E	80	0.0448
	F	100	0.0419	G	200	0.0490	H	400	0.0491	I	800	0.0462	J	1600	0.0496
	K	2000	0.0501												
Carbon Disulfide	A	0.10	0.541	B	0.20	0.611	C	0.50	0.695	D	1.0	0.695	E	2.0	0.624
	F	5.0	0.877	G	10	0.769	H	20	0.790	I	40	0.831	J	60	0.878
	K	80	0.884												
Methylene Chloride							C	0.50	0.411	D	1.0	0.356	E	2.0	0.289
	F	5.0	0.351	G	10	0.284	H	20	0.276	I	40	0.286	J	60	0.291
	K	80	0.293												

Results flagged with an asterisk (*) indicate values outside control criteria.

† SPCC Compound **‡ CCC Compound**

Client: Sealaska Environmental Services, LLC **Service Request:** K1410529
Project: TO 01 JBLM **Calibration Date:** 09/17/2014

Initial Calibration Summary
Volatile Organic Compounds

Calibration ID: CAL13556 **Column:** MS
Instrument ID: GC-MS 18

Analyte Name	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF
Methyl tert-Butyl Ether	A	0.20	0.630	B	0.40	0.655	C	1.0	0.594	D	2.0	0.670	E	4.0	0.611
	F	10	0.796	G	20	0.669	H	40	0.696	I	80	0.692	J	120	0.738
	K	160	0.733												
trans-1,2-Dichloroethene	A	0.10	0.271	B	0.20	0.264	C	0.50	0.250	D	1.0	0.269	E	2.0	0.237
	F	5.0	0.317	G	10	0.270	H	20	0.266	I	40	0.280	J	60	0.285
	K	80	0.290												
1,1-Dichloroethane	A	0.10	0.421	B	0.20	0.438	C	0.50	0.478	D	1.0	0.468	E	2.0	0.416
	F	5.0	0.567	G	10	0.484	H	20	0.485	I	40	0.493	J	60	0.506
	K	80	0.506												
2,2-Dichloropropane				B	0.20	0.360	C	0.50	0.370	D	1.0	0.353	E	2.0	0.338
	F	5.0	0.445	G	10	0.385	H	20	0.384	I	40	0.406	J	60	0.425
	K	80	0.430												
cis-1,2-Dichloroethene				B	0.20	0.285	C	0.50	0.303	D	1.0	0.331	E	2.0	0.293
	F	5.0	0.361	G	10	0.311	H	20	0.323	I	40	0.334	J	60	0.335
	K	80	0.336												
2-Butanone (MEK)	A	4.0	0.0150	B	8.0	0.0185	C	20	0.0186	D	40	0.0196	E	80	0.0180
	F	100	0.0176	G	200	0.0203	H	400	0.0208	I	800	0.0199	J	1600	0.0222
	K	2000	0.0221												
Bromochloromethane				B	0.20	0.114	C	0.50	0.135	D	1.0	0.137	E	2.0	0.120
	F	5.0	0.167	G	10	0.143	H	20	0.144	I	40	0.141	J	60	0.136
	K	80	0.129												
Chloroform				B	0.20	0.444	C	0.50	0.485	D	1.0	0.488	E	2.0	0.439
	F	5.0	0.592	G	10	0.505	H	20	0.508	I	40	0.531	J	60	0.534
	K	80	0.535												
1,1,1-Trichloroethane (TCA)	A	0.10	0.316	B	0.20	0.347	C	0.50	0.398	D	1.0	0.402	E	2.0	0.354
	F	5.0	0.512	G	10	0.431	H	20	0.439	I	40	0.460	J	60	0.481
	K	80	0.483												
Carbon Tetrachloride	A	0.10	0.242	B	0.20	0.284	C	0.50	0.327	D	1.0	0.334	E	2.0	0.304
	F	5.0	0.434	G	10	0.372	H	20	0.375	I	40	0.398	J	60	0.412
	K	80	0.428												
1,1-Dichloropropene	A	0.10	0.288	B	0.20	0.342	C	0.50	0.367	D	1.0	0.372	E	2.0	0.346
	F	5.0	0.462	G	10	0.395	H	20	0.392	I	40	0.400	J	60	0.417
	K	80	0.412												
Benzene	A	0.10	1.11	B	0.20	1.22	C	0.50	1.21	D	1.0	1.20	E	2.0	1.11
	F	5.0	1.46	G	10	1.23	H	20	1.22	I	40	1.27	J	60	1.30
	K	80	1.30												

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† SPCC Compound **‡ CCC Compound**

Client: Sealaska Environmental Services, LLC **Service Request:** K1410529
Project: TO 01 JBLM **Calibration Date:** 09/17/2014

Initial Calibration Summary
Volatile Organic Compounds

Calibration ID: CAL13556 **Column:** MS
Instrument ID: GC-MS 18

Analyte Name	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF
1,2-Dichloroethane (EDC)				B	0.20	0.373	C	0.50	0.367	D	1.0	0.378	E	2.0	0.355
	F	5.0	0.461	G	10	0.393	H	20	0.386	I	40	0.395	J	60	0.402
	K	80	0.400												
Trichloroethene (TCE)	A	0.10	0.220	B	0.20	0.275	C	0.50	0.247	D	1.0	0.294	E	2.0	0.254
	F	5.0	0.356	G	10	0.290	H	20	0.302	I	40	0.311	J	60	0.319
	K	80	0.312												
1,2-Dichloropropane				B	0.20	0.293	C	0.50	0.270	D	1.0	0.285	E	2.0	0.257
	F	5.0	0.344	G	10	0.303	H	20	0.301	I	40	0.318	J	60	0.320
	K	80	0.321												
Dibromomethane				B	0.20	0.143	C	0.50	0.139	D	1.0	0.155	E	2.0	0.152
	F	5.0	0.188	G	10	0.155	H	20	0.158	I	40	0.164	J	60	0.171
	K	80	0.171												
Bromodichloromethane	A	0.10	0.351	B	0.20	0.269	C	0.50	0.310	D	1.0	0.290	E	2.0	0.292
	F	5.0	0.404	G	10	0.349	H	20	0.368	I	40	0.394	J	60	0.402
	K	80	0.409												
cis-1,3-Dichloropropene	A	0.10	0.312	B	0.20	0.322	C	0.50	0.377	D	1.0	0.369	E	2.0	0.357
	F	5.0	0.494	G	10	0.442	H	20	0.463	I	40	0.494	J	60	0.506
	K	80	0.517												
4-Methyl-2-pentanone (MIBK)	A	4.0	0.0523	B	8.0	0.0585	C	20	0.0641	D	40	0.0650	E	80	0.0612
	F	100	0.0602	G	200	0.0712	H	400	0.0752	I	800	0.0714			
Toluene	A	0.10	0.798	B	0.20	0.776	C	0.50	0.743	D	1.0	0.784	E	2.0	0.714
	F	5.0	0.986	G	10	0.832	H	20	0.839	I	40	0.868	J	60	0.898
	K	80	0.898												
trans-1,3-Dichloropropene	A	0.10	0.675	B	0.20	0.627	C	0.50	0.745	D	1.0	0.742	E	2.0	0.670
	F	5.0	0.976	G	10	0.843	H	20	0.910	I	40	0.985	J	60	1.03
	K	80	1.06												
1,1,2-Trichloroethane	A	0.10	0.442	B	0.20	0.497	C	0.50	0.473	D	1.0	0.468	E	2.0	0.406
	F	5.0	0.552	G	10	0.467	H	20	0.482	I	40	0.491	J	60	0.503
	K	80	0.507												
Tetrachloroethene (PCE)	A	0.10	0.558	B	0.20	0.566	C	0.50	0.542	D	1.0	0.597	E	2.0	0.533
	F	5.0	0.709	G	10	0.615	H	20	0.620	I	40	0.664	J	60	0.665
	K	80	0.668												
2-Hexanone				B	8.0	0.0448	C	20	0.0496	D	40	0.0521	E	80	0.0494
	F	100	0.0488	G	200	0.0578	H	400	0.0598	I	800	0.0575			

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† SPCC Compound **‡ CCC Compound**

Client: Sealaska Environmental Services, LLC **Service Request:** K1410529
Project: TO 01 JBLM **Calibration Date:** 09/17/2014

Initial Calibration Summary
Volatile Organic Compounds

Calibration ID: CAL13556 **Column:** MS
Instrument ID: GC-MS 18

Analyte Name	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF
1,3-Dichloropropane	A	0.10	0.849	B	0.20	1.02	C	0.50	0.977	D	1.0	1.07	E	2.0	0.914
	F	5.0	1.23	G	10	1.07	H	20	1.07	I	40	1.10	J	60	1.11
	K	80	1.11												
Dibromochloromethane				B	0.20	0.400	C	0.50	0.476	D	1.0	0.483	E	2.0	0.435
	F	5.0	0.634	G	10	0.560	H	20	0.611	I	40	0.679			
1,2-Dibromoethane (EDB)	A	0.10	0.456	B	0.20	0.477	C	0.50	0.527	D	1.0	0.498	E	2.0	0.456
	F	5.0	0.625	G	10	0.538	H	20	0.558	I	40	0.579	J	60	0.595
	K	80	0.598												
Chlorobenzene	A	0.10	1.90	B	0.20	1.90	C	0.50	2.10	D	1.0	2.18	E	2.0	1.92
	F	5.0	2.66	G	10	2.25	H	20	2.27	I	40	2.39	J	60	2.39
	K	80	2.40												
Ethylbenzene	A	0.10	0.858	B	0.20	1.01	C	0.50	1.16	D	1.0	1.19	E	2.0	1.05
	F	5.0	1.48	G	10	1.25	H	20	1.26	I	40	1.32	J	60	1.34
	K	80	1.36												
1,1,1,2-Tetrachloroethane	A	0.10	0.577	B	0.20	0.626	C	0.50	0.545	D	1.0	0.615	E	2.0	0.555
	F	5.0	0.796	G	10	0.715	H	20	0.735	I	40	0.805	J	60	0.822
	K	80	0.839												
m,p-Xylenes	A	0.20	1.19	B	0.40	1.29	C	1.0	1.37	D	2.0	1.41	E	4.0	1.24
	F	10	1.79	G	20	1.55	H	40	1.55	I	80	1.64	J	120	1.67
	K	160	1.68												
o-Xylene	A	0.10	1.31	B	0.20	1.26	C	0.50	1.33	D	1.0	1.39	E	2.0	1.21
	F	5.0	1.77	G	10	1.48	H	20	1.52	I	40	1.60	J	60	1.61
	K	80	1.62												
Styrene				B	0.20	0.804	C	0.50	0.950	D	1.0	0.928	E	2.0	0.864
	F	5.0	1.29	G	10	1.14	H	20	1.17	I	40	1.26	J	60	1.28
	K	80	1.29												
Bromoform							C	0.50	0.247	D	1.0	0.224	E	2.0	0.221
	F	5.0	0.316	G	10	0.285	H	20	0.323	I	40	0.361	J	60	0.399
Isopropylbenzene	A	0.10	2.85	B	0.20	3.09	C	0.50	3.29	D	1.0	3.56	E	2.0	3.17
	F	5.0	4.53	G	10	3.87	H	20	3.88	I	40	4.09	J	60	4.15
	K	80	4.20												
1,1,2,2-Tetrachloroethane				B	0.20	0.558	C	0.50	0.552	D	1.0	0.601	E	2.0	0.543
	F	5.0	0.735	G	10	0.632	H	20	0.613	I	40	0.623	J	60	0.642
	K	80	0.633												

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† SPCC Compound **‡ CCC Compound**

Client: Sealaska Environmental Services, LLC **Service Request:** K1410529
Project: TO 01 JBLM **Calibration Date:** 09/17/2014

Initial Calibration Summary
Volatile Organic Compounds

Calibration ID: CAL13556 **Column:** MS
Instrument ID: GC-MS 18

Analyte Name	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF
Bromobenzene	A	0.10	0.812	B	0.20	0.899	C	0.50	0.960	D	1.0	0.903	E	2.0	0.868
	F	5.0	1.13	G	10	0.976	H	20	0.971	I	40	1.01	J	60	1.01
	K	80	0.989												
n-Propylbenzene				B	0.20	3.88	C	0.50	4.11	D	1.0	4.22	E	2.0	3.86
	F	5.0	5.45	G	10	4.65	H	20	4.53	I	40	4.71	J	60	4.73
	K	80	4.69												
1,2,3-Trichloropropane							C	0.50	0.224	D	1.0	0.223	E	2.0	0.183
	F	5.0	0.240	G	10	0.215	H	20	0.199	I	40	0.206	J	60	0.213
	K	80	0.209												
2-Chlorotoluene							C	0.50	2.65	D	1.0	2.73	E	2.0	2.46
	F	5.0	3.25	G	10	2.75	H	20	2.67	I	40	2.79	J	60	2.76
	K	80	2.72												
1,3,5-Trimethylbenzene	A	0.10	2.35	B	0.20	2.51	C	0.50	2.72	D	1.0	2.98	E	2.0	2.67
	F	5.0	3.85	G	10	3.32	H	20	3.24	I	40	3.42	J	60	3.42
	K	80	3.41												
4-Chlorotoluene	A	0.10	2.81	B	0.20	2.78	C	0.50	3.07	D	1.0	3.13	E	2.0	2.84
	F	5.0	3.83	G	10	3.25	H	20	3.19	I	40	3.32	J	60	3.31
	K	80	3.28												
tert-Butylbenzene	A	0.10	2.08	B	0.20	2.36	C	0.50	2.69	D	1.0	2.67	E	2.0	2.55
	F	5.0	3.48	G	10	3.00	H	20	2.89	I	40	3.01	J	60	3.01
	K	80	2.99												
1,2,4-Trimethylbenzene	A	0.10	2.49	B	0.20	2.52	C	0.50	2.78	D	1.0	2.96	E	2.0	2.69
	F	5.0	3.94	G	10	3.35	H	20	3.29	I	40	3.47	J	60	3.49
	K	80	3.47												
sec-Butylbenzene	A	0.10	3.19	B	0.20	3.27	C	0.50	3.52	D	1.0	3.80	E	2.0	3.39
	F	5.0	4.91	G	10	4.23	H	20	4.10	I	40	4.26	J	60	4.31
	K	80	4.31												
4-Isopropyltoluene				B	0.20	2.23	C	0.50	2.63	D	1.0	2.92	E	2.0	2.74
	F	5.0	4.05	G	10	3.50	H	20	3.42	I	40	3.61	J	60	3.64
	K	80	3.64												
1,3-Dichlorobenzene	A	0.10	1.82	B	0.20	1.65	C	0.50	1.76	D	1.0	1.80	E	2.0	1.58
	F	5.0	2.17	G	10	1.85	H	20	1.81	I	40	1.92	J	60	1.90
	K	80	1.90												
1,4-Dichlorobenzene				B	0.20	1.80	C	0.50	1.80	D	1.0	1.78	E	2.0	1.65
	F	5.0	2.22	G	10	1.91	H	20	1.87	I	40	1.95	J	60	1.96
	K	80	1.92												

Results flagged with an asterisk (*) indicate values outside control criteria.

† SPCC Compound **‡ CCC Compound**

Client: Sealaska Environmental Services, LLC **Service Request:** K1410529
Project: TO 01 JBLM **Calibration Date:** 09/17/2014

Initial Calibration Summary
Volatile Organic Compounds

Calibration ID: CAL13556 **Column:** MS
Instrument ID: GC-MS 18

Analyte Name	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF
n-Butylbenzene	A	0.10	2.53	B	0.20	2.24	C	0.50	2.42	D	1.0	2.50	E	2.0	2.27
	F	5.0	3.40	G	10	2.95	H	20	2.90	I	40	3.06	J	60	3.13
	K	80	3.16												
1,2-Dichlorobenzene	A	0.10	1.49	B	0.20	1.51	C	0.50	1.65	D	1.0	1.70	E	2.0	1.53
	F	5.0	2.04	G	10	1.75	H	20	1.71	I	40	1.79	J	60	1.80
	K	80	1.79												
1,2-Dibromo-3-chloropropane							C	0.50	0.0510	D	1.0	0.0643	E	2.0	0.0551
	F	5.0	0.0747	G	10	0.0690	H	20	0.0697	I	40	0.0787	J	60	0.0849
	K	80	0.0868												
1,2,4-Trichlorobenzene				B	0.20	1.10	C	0.50	0.881	D	1.0	0.869	E	2.0	0.782
	F	5.0	1.06	G	10	0.928	H	20	0.907	I	40	0.968	J	60	0.987
	K	80	0.991												
Hexachlorobutadiene				B	0.20	0.449	C	0.50	0.400	D	1.0	0.411	E	2.0	0.356
	F	5.0	0.470	G	10	0.403	H	20	0.393	I	40	0.427	J	60	0.435
	K	80	0.445												
Naphthalene				B	0.20	1.31	C	0.50	1.28	D	1.0	1.36	E	2.0	1.21
	F	5.0	1.75	G	10	1.53	H	20	1.54	I	40	1.64	J	60	1.72
	K	80	1.75												
1,2,3-Trichlorobenzene				B	0.20	0.637	C	0.50	0.651	D	1.0	0.685	E	2.0	0.558
	F	5.0	0.766	G	10	0.671	H	20	0.669	I	40	0.691	J	60	0.739
	K	80	0.741												
Dibromofluoromethane	A	10	0.213	B	10	0.215	C	10	0.205	D	10	0.212	E	10	0.221
	F	10	0.219	G	10	0.217	H	10	0.227	I	10	0.226	J	10	0.226
	K	10	0.233												
1,2-Dichloroethane-d4	A	10	0.263	B	10	0.265	C	10	0.252	D	10	0.260	E	10	0.262
	F	10	0.262	G	10	0.263	H	10	0.258	I	10	0.243	J	10	0.254
	K	10	0.261												
Toluene-d8	A	10	1.00	B	10	1.00	C	10	0.972	D	10	1.01	E	10	1.01
	F	10	0.988	G	10	1.02	H	10	1.02	I	10	1.02	J	10	1.03
	K	10	1.03												
4-Bromofluorobenzene	A	10	0.886	B	10	0.891	C	10	0.885	D	10	0.876	E	10	0.877
	F	10	0.897	G	10	0.907	H	10	0.910	I	10	0.925	J	10	0.935
	K	10	0.931												

Results flagged with an asterisk (*) indicate values outside control criteria.

† SPCC Compound **‡ CCC Compound**

Client: Sealaska Environmental Services, LLC **Service Request:** K1410529
Project: TO 01 JBLM **Calibration Date:** 09/17/2014

Initial Calibration Summary
Volatile Organic Compounds

Calibration ID: CAL13556 **Column:** MS
Instrument ID: GC-MS 18

		Calibration Evaluation					RRF Evaluation		
Analyte Name	**Compound Type**	**Fit Type**	**Eval.**	**Eval. Result**	**Q**	**Control Criteria**	**Average RRF**	**Q**	**Minimum RRF**
Dichlorodifluoromethane	MS	AverageRF	% RSD	13.1		≤ 20	0.341		0.100
Chloromethane	MS	AverageRF	% RSD	8.2		≤ 20	0.390		0.100
Vinyl Chloride	MS	AverageRF	% RSD	12.6		≤ 20	0.375		0.100
Bromomethane	MS	AverageRF	% RSD	19.7		≤ 20	0.286		0.100
Chloroethane	MS	AverageRF	% RSD	8.1		≤ 20	0.213		0.100
Trichlorofluoromethane	MS	AverageRF	% RSD	13.1		≤ 20	0.510		0.100
1,1-Dichloroethene	MS	AverageRF	% RSD	11.6		≤ 20	0.219		.100
Acetone	MS	AverageRF	% RSD	5.3		≤ 20	0.0476		0.01
Carbon Disulfide	MS	AverageRF	% RSD	16.1		≤ 20	0.745		0.100
Methylene Chloride	MS	AverageRF	% RSD	14.7		≤ 20	0.315		0.100
Methyl tert-Butyl Ether	MS	AverageRF	% RSD	8.8		≤ 20	0.680		0.100
trans-1,2-Dichloroethene	MS	AverageRF	% RSD	7.6		≤ 20	0.273		0.100
1,1-Dichloroethane	MS	AverageRF	% RSD	9.0		≤ 20	0.478		.200
2,2-Dichloropropane	MS	AverageRF	% RSD	9.2		≤ 20	0.390		0.01
cis-1,2-Dichloroethene	MS	AverageRF	% RSD	7.2		≤ 20	0.321		0.100
2-Butanone (MEK)	MS	AverageRF	% RSD	10.9		≤ 20	0.0193		0.01
Bromochloromethane	MS	AverageRF	% RSD	10.7		≤ 20	0.137		0.01
Chloroform	MS	AverageRF	% RSD	9.0		≤ 20	0.506		0.200
1,1,1-Trichloroethane (TCA)	MS	AverageRF	% RSD	14.9		≤ 20	0.420		.100
Carbon Tetrachloride	MS	AverageRF	% RSD	17.6		≤ 20	0.355		0.100
1,1-Dichloropropene	MS	AverageRF	% RSD	12.1		≤ 20	0.381		0.01
Benzene	MS	AverageRF	% RSD	7.7		≤ 20	1.24		0.500
1,2-Dichloroethane (EDC)	MS	AverageRF	% RSD	7.4		≤ 20	0.391		0.100
Trichloroethene (TCE)	MS	AverageRF	% RSD	13.2		≤ 20	0.289		0.200
1,2-Dichloropropane	MS	AverageRF	% RSD	8.7		≤ 20	0.301		0.100
Dibromomethane	MS	AverageRF	% RSD	9.0		≤ 20	0.160		0.01
Bromodichloromethane	MS	AverageRF	% RSD	14.8		≤ 20	0.349		0.200
cis-1,3-Dichloropropene	MS	AverageRF	% RSD	18.2		≤ 20	0.423		0.200
4-Methyl-2-pentanone (MIBK)	MS	AverageRF	% RSD	11.3		≤ 20	0.0643		0.01
Toluene	MS	AverageRF	% RSD	9.5		≤ 20	0.831		0.400
trans-1,3-Dichloropropene	MS	AverageRF	% RSD	18.6		≤ 20	0.841		0.100
1,1,2-Trichloroethane	MS	AverageRF	% RSD	7.9		≤ 20	0.481		.100
Tetrachloroethene (PCE)	MS	AverageRF	% RSD	9.6		≤ 20	0.613		0.200
2-Hexanone	MS	AverageRF	% RSD	10.1		≤ 20	0.0525		0.015
1,3-Dichloropropane	MS	AverageRF	% RSD	9.9		≤ 20	1.05		0.01
Dibromochloromethane	MS	AverageRF	% RSD	18.9		≤ 20	0.535		0.100
1,2-Dibromoethane (EDB)	MS	AverageRF	% RSD	11.1		≤ 20	0.537		0.100
Chlorobenzene	MS	AverageRF	% RSD	11.0		≤ 20	2.21		0.500
Ethylbenzene	MS	AverageRF	% RSD	14.8		≤ 20	1.21		0.100
1,1,1,2-Tetrachloroethane	MS	AverageRF	% RSD	16.4		≤ 20	0.694		.01
m,p-Xylenes	MS	AverageRF	% RSD	13.4		≤ 20	1.49		0.100
o-Xylene	MS	AverageRF	% RSD	12.0		≤ 20	1.46		0.300

Results flagged with an asterisk (*) indicate values outside control criteria.

† SPCC Compound **‡ CCC Compound**

Client: Sealaska Environmental Services, LLC **Service Request:** K1410529
Project: TO 01 JBLM **Calibration Date:** 09/17/2014

Initial Calibration Summary
Volatile Organic Compounds

Calibration ID: CAL13556 **Column:** MS
Instrument ID: GC-MS 18

		Calibration Evaluation					RRF Evaluation		
Analyte Name	**Compound Type**	**Fit Type**	**Eval.**	**Eval. Result**	**Q**	**Control Criteria**	**Average RRF**	**Q**	**Minimum RRF**
Styrene	MS	AverageRF	% RSD	17.5		≤ 20	1.10		0.300
Bromoform	MS	Quadratic(0,0)	COD	1.000		≥ 0.990	0.297		0.100
Isopropylbenzene	MS	AverageRF	% RSD	14.6		≤ 20	3.70		0.100
1,1,2,2-Tetrachloroethane	MS	AverageRF	% RSD	9.1		≤ 20	0.613		.300
Bromobenzene	MS	AverageRF	% RSD	8.8		≤ 20	0.956		0.01
n-Propylbenzene	MS	AverageRF	% RSD	10.7		≤ 20	4.48		0.01
1,2,3-Trichloropropane	MS	AverageRF	% RSD	7.6		≤ 20	0.212		0.01
2-Chlorotoluene	MS	AverageRF	% RSD	7.6		≤ 20	2.75		0.01
1,3,5-Trimethylbenzene	MS	AverageRF	% RSD	15.1		≤ 20	3.08		0.01
4-Chlorotoluene	MS	AverageRF	% RSD	9.5		≤ 20	3.16		0.01
tert-Butylbenzene	MS	AverageRF	% RSD	13.5		≤ 20	2.79		0.01
1,2,4-Trimethylbenzene	MS	AverageRF	% RSD	15.0		≤ 20	3.13		0.01
sec-Butylbenzene	MS	AverageRF	% RSD	13.8		≤ 20	3.94		0.01
4-Isopropyltoluene	MS	AverageRF	% RSD	17.7		≤ 20	3.24		0.01
1,3-Dichlorobenzene	MS	AverageRF	% RSD	8.3		≤ 20	1.83		0.600
1,4-Dichlorobenzene	MS	AverageRF	% RSD	8.0		≤ 20	1.88		0.500
n-Butylbenzene	MS	AverageRF	% RSD	14.4		≤ 20	2.78		0.01
1,2-Dichlorobenzene	MS	AverageRF	% RSD	9.4		≤ 20	1.71		0.400
1,2-Dibromo-3-chloropropane	MS	AverageRF	% RSD	17.5		≤ 20	0.0705		0.025
1,2,4-Trichlorobenzene	MS	AverageRF	% RSD	9.9		≤ 20	0.947		0.200
Hexachlorobutadiene	MS	AverageRF	% RSD	7.9		≤ 20	0.419		0.01
Naphthalene	MS	AverageRF	% RSD	13.7		≤ 20	1.51		0.01
1,2,3-Trichlorobenzene	MS	AverageRF	% RSD	8.8		≤ 20	0.681		0.01
Dibromofluoromethane	SURR	AverageRF	% RSD	3.6		≤ 20	0.219		0.01
1,2-Dichloroethane-d4	SURR	AverageRF	% RSD	2.5		≤ 20	0.258		0.01
Toluene-d8	SURR	AverageRF	% RSD	1.8		≤ 20	1.01		0.01
4-Bromofluorobenzene	SURR	AverageRF	% RSD	2.4		≤ 20	0.902		0.01

Results flagged with an asterisk (*) indicate values outside control criteria.

† SPCC Compound **‡ CCC Compound**

QA/QC Results

Client: Sealaska Environmental Services, LLC
Project: TO 01 JBLM

Service Request: K1410529
Calibration Date: 09/17/2014
Date Analyzed: 09/17/2014 - 09/18/2014

Second Source Calibration Verification
Volatile Organic Compounds

Calibration Type: Internal Standard
Analysis Method: 8260C

Calibration ID: CAL13556
Units: PPB

File ID: J:\MS18\DATA\091714\0917F021.D
J:\MS18\DATA\091814\0918F003.D

Analyte Name	Expected	Result	Average RF	SSV RF	%D	%Drift	Criteria	Curve Fit
Dichlorodifluoromethane	10	9.7	0.341	0.331	-3	NA	± 30 %	AverageRF
Chloromethane	10	9.4	0.390	0.368	-6	NA	± 30 %	AverageRF
Vinyl Chloride	10	11	0.375	0.399	6	NA	± 30 %	AverageRF
Bromomethane	10	10	0.286	0.296	4	NA	± 30 %	AverageRF
Chloroethane	10	12	0.213	0.254	19	NA	± 30 %	AverageRF
Trichlorofluoromethane	10	9.4	0.510	0.477	-6	NA	± 30 %	AverageRF
1,1-Dichloroethene	10	12	0.219	0.257	17	NA	± 30 %	AverageRF
Acetone	50	51	0.0476	0.0487	2	NA	± 30 %	AverageRF
Carbon Disulfide	20	22	0.745	0.806	8	NA	± 30 %	AverageRF
Methylene Chloride	10	8.8	0.315	0.278	-12	NA	± 30 %	AverageRF
Methyl tert-Butyl Ether	10	9.9	0.680	0.671	-1	NA	± 30 %	AverageRF
trans-1,2-Dichloroethene	10	11	0.273	0.308	13	NA	± 30 %	AverageRF
1,1-Dichloroethane	10	11	0.478	0.549	15	NA	± 30 %	AverageRF
2,2-Dichloropropane	10	10	0.390	0.391	0	NA	± 30 %	AverageRF
cis-1,2-Dichloroethene	10	11	0.321	0.341	6	NA	± 30 %	AverageRF
2-Butanone (MEK)	50	55	0.0193	0.0211	9	NA	± 30 %	AverageRF
Bromochloromethane	10	10	0.137	0.136	0	NA	± 30 %	AverageRF
Chloroform	10	11	0.506	0.544	7	NA	± 30 %	AverageRF
1,1,1-Trichloroethane (TCA)	10	11	0.420	0.464	11	NA	± 30 %	AverageRF
Carbon Tetrachloride	10	11	0.355	0.396	11	NA	± 30 %	AverageRF
1,1-Dichloropropene	10	11	0.381	0.423	11	NA	± 30 %	AverageRF
Benzene	10	11	1.24	1.32	7	NA	± 30 %	AverageRF
1,2-Dichloroethane (EDC)	10	10	0.391	0.406	4	NA	± 30 %	AverageRF
Trichloroethene (TCE)	10	11	0.289	0.312	8	NA	± 30 %	AverageRF
1,2-Dichloropropane	10	10	0.301	0.309	3	NA	± 30 %	AverageRF
Dibromomethane	10	10	0.160	0.166	4	NA	± 30 %	AverageRF
Bromodichloromethane	10	11	0.349	0.371	6	NA	± 30 %	AverageRF
cis-1,3-Dichloropropene	10	11	0.423	0.456	8	NA	± 30 %	AverageRF
4-Methyl-2-pentanone (MIBK)	50	57	0.0643	0.0728	13	NA	± 30 %	AverageRF
Toluene	10	11	0.831	0.886	7	NA	± 30 %	AverageRF
trans-1,3-Dichloropropene	10	9.8	0.841	0.821	-2	NA	± 30 %	AverageRF
1,1,2-Trichloroethane	10	10	0.481	0.496	3	NA	± 30 %	AverageRF
Tetrachloroethene (PCE)	10	11	0.613	0.658	7	NA	± 30 %	AverageRF
2-Hexanone	50	54	0.0525	0.0571	9	NA	± 30 %	AverageRF
1,3-Dichloropropane	10	10	1.05	1.10	5	NA	± 30 %	AverageRF
Dibromochloromethane	10	11	0.535	0.601	12	NA	± 30 %	AverageRF
1,2-Dibromoethane (EDB)	10	11	0.537	0.565	5	NA	± 30 %	AverageRF
Chlorobenzene	10	11	2.21	2.39	8	NA	± 30 %	AverageRF
Ethylbenzene	10	11	1.21	1.31	9	NA	± 30 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† SPCC Compound **‡ CCC Compound**

Client: Sealaska Environmental Services, LLC
Project: TO 01 JBLM

Service Request: K1410529
Calibration Date: 09/17/2014
Date Analyzed: 09/17/2014 - 09/18/2014

Second Source Calibration Verification
Volatile Organic Compounds

Calibration Type: Internal Standard
Analysis Method: 8260C

Calibration ID: CAL13556
Units: PPB

Analyte Name	Expected	Result	Average RF	SSV RF	%D	%Drift	Criteria	Curve Fit
1,1,1,2-Tetrachloroethane	10	11	0.694	0.735	6	NA	± 30 %	AverageRF
m,p-Xylenes	20	22	1.49	1.63	10	NA	± 30 %	AverageRF
o-Xylene	10	11	1.46	1.58	8	NA	± 30 %	AverageRF
Styrene	10	11	1.10	1.20	9	NA	± 30 %	AverageRF
Bromoform	10	10	0.297	0.312	NA	3	± 30 %	Quadratic(0,0
Isopropylbenzene	10	11	3.70	4.03	9	NA	± 30 %	AverageRF
1,1,2,2-Tetrachloroethane	10	10	0.613	0.633	3	NA	± 30 %	AverageRF
Bromobenzene	10	11	0.956	1.03	8	NA	± 30 %	AverageRF
n-Propylbenzene	10	11	4.48	4.84	8	NA	± 30 %	AverageRF
1,2,3-Trichloropropane	10	10	0.212	0.214	1	NA	± 30 %	AverageRF
2-Chlorotoluene	10	11	2.75	2.92	6	NA	± 30 %	AverageRF
1,3,5-Trimethylbenzene	10	11	3.08	3.46	12	NA	± 30 %	AverageRF
4-Chlorotoluene	10	11	3.16	3.39	7	NA	± 30 %	AverageRF
tert-Butylbenzene	10	11	2.79	3.07	10	NA	± 30 %	AverageRF
1,2,4-Trimethylbenzene	10	11	3.13	3.47	11	NA	± 30 %	AverageRF
sec-Butylbenzene	10	11	3.94	4.22	7	NA	± 30 %	AverageRF
4-Isopropyltoluene	10	11	3.24	3.62	12	NA	± 30 %	AverageRF
1,3-Dichlorobenzene	10	11	1.83	1.99	8	NA	± 30 %	AverageRF
1,4-Dichlorobenzene	10	11	1.88	2.01	7	NA	± 30 %	AverageRF
n-Butylbenzene	10	11	2.78	3.04	9	NA	± 30 %	AverageRF
1,2-Dichlorobenzene	10	11	1.71	1.83	7	NA	± 30 %	AverageRF
1,2-Dibromo-3-chloropropane	10	10	0.0705	0.0706	0	NA	± 30 %	AverageRF
1,2,4-Trichlorobenzene	10	10	0.947	0.978	3	NA	± 30 %	AverageRF
Hexachlorobutadiene	10	10	0.419	0.437	4	NA	± 30 %	AverageRF
Naphthalene	10	10	1.51	1.55	3	NA	± 30 %	AverageRF
1,2,3-Trichlorobenzene	10	10	0.681	0.700	3	NA	± 30 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† SPCC Compound **‡ CCC Compound**

Client: Sealaska Environmental Services, LLC
Project: TO 01 JBLM

Service Request: K1410529
Date Analyzed: 10/03/2014

Continuing Calibration Verification Summary
Volatile Organic Compounds

Calibration Type: Internal Standard
Analysis Method: 8260C

Calibration Date: 09/17/2014
Calibration ID: CAL13556
Analysis Lot: KWG1413468
Units: PPB

File ID: J:\MS18\DATA\100314\1003F008.D

Analyte Name	Expected	Result	Min RF	Average RF	CCV RF	%D		%Drift	Criteria	Curve Fit
Dichlorodifluoromethane	10	11	0.100	0.341	0.369	8		NA	± 20	AverageRF
Chloromethane	10	13	0.100	0.390	0.517	32	*	NA	± 20	AverageRF
Vinyl Chloride	10	12	0.100	0.375	0.431	15		NA	± 20	AverageRF
Bromomethane	10	7.1	0.100	0.286	0.202	-29	*	NA	± 20	AverageRF
Chloroethane	10	11	0.100	0.213	0.227	6		NA	± 20	AverageRF
Trichlorofluoromethane	10	10	0.100	0.510	0.518	2		NA	± 20	AverageRF
1,1-Dichloroethene	10	9.9	.100	0.219	0.216	-1		NA	± 20	AverageRF
Acetone	200	210	0.01	0.0476	0.0510	7		NA	± 20	AverageRF
Carbon Disulfide	10	6.5	0.100	0.745	0.480	-36	*	NA	± 20	AverageRF
Methylene Chloride	10	9.6	0.100	0.315	0.303	-4		NA	± 20	AverageRF
Methyl tert-Butyl Ether	20	17	0.100	0.680	0.567	-17		NA	± 20	AverageRF
trans-1,2-Dichloroethene	10	9.8	0.100	0.273	0.266	-2		NA	± 20	AverageRF
1,1-Dichloroethane	10	10	.200	0.478	0.489	2		NA	± 20	AverageRF
2,2-Dichloropropane	10	6.7	0.01	0.390	0.262	-33	*	NA	± 20	AverageRF
cis-1,2-Dichloroethene	10	10	0.100	0.321	0.322	0		NA	± 20	AverageRF
2-Butanone (MEK)	200	200	0.01	0.0193	0.0194	0		NA	± 20	AverageRF
Bromochloromethane	10	11	0.01	0.137	0.143	5		NA	± 20	AverageRF
Chloroform	10	9.9	0.200	0.506	0.503	-1		NA	± 20	AverageRF
1,1,1-Trichloroethane (TCA)	10	8.9	.100	0.420	0.372	-11		NA	± 20	AverageRF
Carbon Tetrachloride	10	8.5	0.100	0.355	0.303	-15		NA	± 20	AverageRF
1,1-Dichloropropene	10	10	0.01	0.381	0.386	1		NA	± 20	AverageRF
Benzene	10	10	0.500	1.24	1.27	2		NA	± 20	AverageRF
1,2-Dichloroethane (EDC)	10	10	0.100	0.391	0.400	2		NA	± 20	AverageRF
Trichloroethene (TCE)	10	9.9	0.200	0.289	0.287	-1		NA	± 20	AverageRF
1,2-Dichloropropane	10	10	0.100	0.301	0.311	3		NA	± 20	AverageRF
Dibromomethane	10	10	0.01	0.160	0.160	1		NA	± 20	AverageRF
Bromodichloromethane	10	9.4	0.200	0.349	0.329	-6		NA	± 20	AverageRF
cis-1,3-Dichloropropene	10	9.1	0.200	0.423	0.384	-9		NA	± 20	AverageRF
4-Methyl-2-pentanone (MIBK)	200	210	0.01	0.0643	0.0684	6		NA	± 20	AverageRF
Toluene	10	10	0.400	0.831	0.830	0		NA	± 20	AverageRF
trans-1,3-Dichloropropene	10	8.1	0.100	0.841	0.678	-19		NA	± 20	AverageRF
1,1,2-Trichloroethane	10	10	.100	0.481	0.500	4		NA	± 20	AverageRF
Tetrachloroethene (PCE)	10	9.7	0.200	0.613	0.597	-3		NA	± 20	AverageRF
2-Hexanone	200	210	0.015	0.0525	0.0543	3		NA	± 20	AverageRF
1,3-Dichloropropane	10	10	0.01	1.05	1.09	4		NA	± 20	AverageRF
Dibromochloromethane	10	9.6	0.100	0.535	0.511	-5		NA	± 20	AverageRF
1,2-Dibromoethane (EDB)	10	9.6	0.100	0.537	0.516	-4		NA	± 20	AverageRF
Chlorobenzene	10	10	0.500	2.21	2.28	3		NA	± 20	AverageRF
Ethylbenzene	10	10	0.100	1.21	1.24	2		NA	± 20	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† SPCC Compound **‡ CCC Compound**

Client: Sealaska Environmental Services, LLC
Project: TO 01 JBLM

Service Request: K1410529
Date Analyzed: 10/03/2014

Continuing Calibration Verification Summary
Volatile Organic Compounds

Calibration Type: Internal Standard
Analysis Method: 8260C

Calibration Date: 09/17/2014
Calibration ID: CAL13556
Analysis Lot: KWG1413468
Units: PPB

Analyte Name	Expected	Result	Min RF	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
1,1,1,2-Tetrachloroethane	10	9.0	.01	0.694	0.624	-10	NA	± 20	AverageRF
m,p-Xylenes	20	21	0.100	1.49	1.53	3	NA	± 20	AverageRF
o-Xylene	10	10	0.300	1.46	1.47	1	NA	± 20	AverageRF
Styrene	10	10	0.300	1.10	1.15	5	NA	± 20	AverageRF
Bromoform	10	8.1	0.100	0.297	0.240	NA	-19	± 20	Quadratic(0,0)
Isopropylbenzene	10	10	0.100	3.70	3.78	2	NA	± 20	AverageRF
1,1,2,2-Tetrachloroethane	10	11	.300	0.613	0.666	9	NA	± 20	AverageRF
Bromobenzene	10	10	0.01	0.956	0.972	2	NA	± 20	AverageRF
n-Propylbenzene	10	11	0.01	4.48	4.77	6	NA	± 20	AverageRF
1,2,3-Trichloropropane	10	10	0.01	0.212	0.219	3	NA	± 20	AverageRF
2-Chlorotoluene	10	10	0.01	2.75	2.83	3	NA	± 20	AverageRF
1,3,5-Trimethylbenzene	10	11	0.01	3.08	3.29	7	NA	± 20	AverageRF
4-Chlorotoluene	10	11	0.01	3.16	3.35	6	NA	± 20	AverageRF
tert-Butylbenzene	10	10	0.01	2.79	2.90	4	NA	± 20	AverageRF
1,2,4-Trimethylbenzene	10	11	0.01	3.13	3.31	6	NA	± 20	AverageRF
sec-Butylbenzene	10	11	0.01	3.94	4.21	7	NA	± 20	AverageRF
4-Isopropyltoluene	10	11	0.01	3.24	3.42	6	NA	± 20	AverageRF
1,3-Dichlorobenzene	10	10	0.600	1.83	1.87	2	NA	± 20	AverageRF
1,4-Dichlorobenzene	10	10	0.500	1.88	1.90	1	NA	± 20	AverageRF
n-Butylbenzene	10	11	0.01	2.78	2.97	7	NA	± 20	AverageRF
1,2-Dichlorobenzene	10	10	0.400	1.71	1.76	3	NA	± 20	AverageRF
1,2-Dibromo-3-chloropropane	10	8.9	0.025	0.0705	0.0628	-11	NA	± 20	AverageRF
1,2,4-Trichlorobenzene	10	10	0.200	0.947	0.964	2	NA	± 20	AverageRF
Hexachlorobutadiene	10	9.6	0.01	0.419	0.403	-4	NA	± 20	AverageRF
Naphthalene	10	11	0.01	1.51	1.64	9	NA	± 20	AverageRF
1,2,3-Trichlorobenzene	10	11	0.01	0.681	0.736	8	NA	± 20	AverageRF
Dibromofluoromethane	10	10	0.01	0.219	0.220	0	NA	± 20	AverageRF
1,2-Dichloroethane-d4	10	10	0.01	0.258	0.263	2	NA	± 20	AverageRF
Toluene-d8	10	9.9	0.01	1.01	1.00	-1	NA	± 20	AverageRF
4-Bromofluorobenzene	10	9.9	0.01	0.902	0.895	-1	NA	± 20	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† SPCC Compound **‡ CCC Compound**

QA/QC Results

Client: Sealaska Environmental Services, LLC
Project: TO 01 JBLM

Service Request: K1410529
Date Analyzed: 10/04/2014

Continuing Calibration Verification Summary
Volatile Organic Compounds

Calibration Type: Internal Standard
Analysis Method: 8260C

Calibration Date: 09/17/2014
Calibration ID: CAL13556
Analysis Lot: KWG1413485
Units: PPB

File ID: J:\MS18\DATA\100414\1004F009.D

Analyte Name	Expected	Result	Min RF	Average RF	CCV RF	%D		%Drift	Criteria	Curve Fit
Dichlorodifluoromethane	10	9.1	0.100	0.341	0.311	-9		NA	± 20	AverageRF
Chloromethane	10	12	0.100	0.390	0.450	15		NA	± 20	AverageRF
Vinyl Chloride	10	10	0.100	0.375	0.393	5		NA	± 20	AverageRF
Bromomethane	10	7.6	0.100	0.286	0.217	-24	*	NA	± 20	AverageRF
Chloroethane	10	10	0.100	0.213	0.216	1		NA	± 20	AverageRF
Trichlorofluoromethane	10	9.4	0.100	0.510	0.480	-6		NA	± 20	AverageRF
1,1-Dichloroethene	10	9.6	.100	0.219	0.210	-4		NA	± 20	AverageRF
Acetone	200	230	0.01	0.0476	0.0553	16		NA	± 20	AverageRF
Carbon Disulfide	10	6.2	0.100	0.745	0.460	-38	*	NA	± 20	AverageRF
Methylene Chloride	10	10	0.100	0.315	0.317	0		NA	± 20	AverageRF
Methyl tert-Butyl Ether	20	19	0.100	0.680	0.647	-5		NA	± 20	AverageRF
trans-1,2-Dichloroethene	10	9.8	0.100	0.273	0.267	-2		NA	± 20	AverageRF
1,1-Dichloroethane	10	11	.200	0.478	0.504	5		NA	± 20	AverageRF
2,2-Dichloropropane	10	6.6	0.01	0.390	0.256	-34	*	NA	± 20	AverageRF
cis-1,2-Dichloroethene	10	9.9	0.100	0.321	0.319	-1		NA	± 20	AverageRF
2-Butanone (MEK)	200	230	0.01	0.0193	0.0221	14		NA	± 20	AverageRF
Bromochloromethane	10	10	0.01	0.137	0.142	4		NA	± 20	AverageRF
Chloroform	10	10	0.200	0.506	0.510	1		NA	± 20	AverageRF
1,1,1-Trichloroethane (TCA)	10	8.7	.100	0.420	0.364	-13		NA	± 20	AverageRF
Carbon Tetrachloride	10	8.4	0.100	0.355	0.299	-16		NA	± 20	AverageRF
1,1-Dichloropropene	10	10	0.01	0.381	0.383	1		NA	± 20	AverageRF
Benzene	10	10	0.500	1.24	1.27	3		NA	± 20	AverageRF
1,2-Dichloroethane (EDC)	10	11	0.100	0.391	0.437	12		NA	± 20	AverageRF
Trichloroethene (TCE)	10	10	0.200	0.289	0.296	3		NA	± 20	AverageRF
1,2-Dichloropropane	10	11	0.100	0.301	0.324	7		NA	± 20	AverageRF
Dibromomethane	10	11	0.01	0.160	0.174	9		NA	± 20	AverageRF
Bromodichloromethane	10	9.9	0.200	0.349	0.347	-1		NA	± 20	AverageRF
cis-1,3-Dichloropropene	10	9.8	0.200	0.423	0.415	-2		NA	± 20	AverageRF
4-Methyl-2-pentanone (MIBK)	200	240	0.01	0.0643	0.0783	22	*	NA	± 20	AverageRF
Toluene	10	10	0.400	0.831	0.861	4		NA	± 20	AverageRF
trans-1,3-Dichloropropene	10	8.7	0.100	0.841	0.734	-13		NA	± 20	AverageRF
1,1,2-Trichloroethane	10	11	.100	0.481	0.522	9		NA	± 20	AverageRF
Tetrachloroethene (PCE)	10	9.3	0.200	0.613	0.570	-7		NA	± 20	AverageRF
2-Hexanone	200	230	0.015	0.0525	0.0616	17		NA	± 20	AverageRF
1,3-Dichloropropane	10	11	0.01	1.05	1.20	15		NA	± 20	AverageRF
Dibromochloromethane	10	10	0.100	0.535	0.543	2		NA	± 20	AverageRF
1,2-Dibromoethane (EDB)	10	11	0.100	0.537	0.582	8		NA	± 20	AverageRF
Chlorobenzene	10	10	0.500	2.21	2.31	5		NA	± 20	AverageRF
Ethylbenzene	10	10	0.100	1.21	1.24	2		NA	± 20	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† SPCC Compound **‡ CCC Compound**

Client: Sealaska Environmental Services, LLC
Project: TO 01 JBLM

Service Request: K1410529
Date Analyzed: 10/04/2014

Continuing Calibration Verification Summary
Volatile Organic Compounds

Calibration Type: Internal Standard
Analysis Method: 8260C

Calibration Date: 09/17/2014
Calibration ID: CAL13556
Analysis Lot: KWG1413485
Units: PPB

Analyte Name	Expected	Result	Min RF	Average RF	CCV RF	%D		%Drift	Criteria	Curve Fit
1,1,1,2-Tetrachloroethane	10	9.6	.01	0.694	0.664	-4		NA	± 20	AverageRF
m,p-Xylenes	20	21	0.100	1.49	1.54	4		NA	± 20	AverageRF
o-Xylene	10	10	0.300	1.46	1.48	1		NA	± 20	AverageRF
Styrene	10	11	0.300	1.10	1.19	9		NA	± 20	AverageRF
Bromoform	10	9.3	0.100	0.297	0.278	NA		-7	± 20	Quadratic(0,0)
Isopropylbenzene	10	10	0.100	3.70	3.82	3		NA	± 20	AverageRF
1,1,2,2-Tetrachloroethane	10	12	.300	0.613	0.749	22	*	NA	± 20	AverageRF
Bromobenzene	10	10	0.01	0.956	0.997	4		NA	± 20	AverageRF
n-Propylbenzene	10	11	0.01	4.48	4.73	6		NA	± 20	AverageRF
1,2,3-Trichloropropane	10	11	0.01	0.212	0.244	15		NA	± 20	AverageRF
2-Chlorotoluene	10	10	0.01	2.75	2.88	5		NA	± 20	AverageRF
1,3,5-Trimethylbenzene	10	11	0.01	3.08	3.34	8		NA	± 20	AverageRF
4-Chlorotoluene	10	11	0.01	3.16	3.38	7		NA	± 20	AverageRF
tert-Butylbenzene	10	10	0.01	2.79	2.86	2		NA	± 20	AverageRF
1,2,4-Trimethylbenzene	10	11	0.01	3.13	3.41	9		NA	± 20	AverageRF
sec-Butylbenzene	10	10	0.01	3.94	4.09	4		NA	± 20	AverageRF
4-Isopropyltoluene	10	11	0.01	3.24	3.41	5		NA	± 20	AverageRF
1,3-Dichlorobenzene	10	11	0.600	1.83	1.94	6		NA	± 20	AverageRF
1,4-Dichlorobenzene	10	11	0.500	1.88	2.00	6		NA	± 20	AverageRF
n-Butylbenzene	10	11	0.01	2.78	2.98	7		NA	± 20	AverageRF
1,2-Dichlorobenzene	10	11	0.400	1.71	1.81	6		NA	± 20	AverageRF
1,2-Dibromo-3-chloropropane	10	9.3	0.025	0.0705	0.0654	-7		NA	± 20	AverageRF
1,2,4-Trichlorobenzene	10	11	0.200	0.947	1.02	7		NA	± 20	AverageRF
Hexachlorobutadiene	10	9.9	0.01	0.419	0.416	-1		NA	± 20	AverageRF
Naphthalene	10	12	0.01	1.51	1.79	18		NA	± 20	AverageRF
1,2,3-Trichlorobenzene	10	11	0.01	0.681	0.770	13		NA	± 20	AverageRF
Dibromofluoromethane	10	9.9	0.01	0.219	0.216	-2		NA	± 20	AverageRF
1,2-Dichloroethane-d4	10	11	0.01	0.258	0.273	6		NA	± 20	AverageRF
Toluene-d8	10	10	0.01	1.01	1.02	1		NA	± 20	AverageRF
4-Bromofluorobenzene	10	9.9	0.01	0.902	0.893	-1		NA	± 20	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† SPCC Compound **‡ CCC Compound**

QA/QC Results

Client: Sealaska Environmental Services, LLC
Project: TO 01 JBLM

Service Request: K1410529
Date Analyzed: 10/06/2014

Continuing Calibration Verification Summary
Volatile Organic Compounds

Calibration Type: Internal Standard
Analysis Method: 8260C

Calibration Date: 09/17/2014
Calibration ID: CAL13556
Analysis Lot: KWG1413506
Units: PPB

File ID: J:\MS18\DATA\100614\1006F003.D

Analyte Name	Expected	Result	Min RF	Average RF	CCV RF	%D		%Drift	Criteria	Curve Fit
Dichlorodifluoromethane	10	9.8	0.100	0.341	0.334	-2		NA	± 20	AverageRF
Chloromethane	10	11	0.100	0.390	0.440	13		NA	± 20	AverageRF
Vinyl Chloride	10	12	0.100	0.375	0.438	17		NA	± 20	AverageRF
Bromomethane	10	8.7	0.100	0.286	0.248	-13		NA	± 20	AverageRF
Chloroethane	10	11	0.100	0.213	0.234	10		NA	± 20	AverageRF
Trichlorofluoromethane	10	11	0.100	0.510	0.537	5		NA	± 20	AverageRF
1,1-Dichloroethene	10	10	.100	0.219	0.221	1		NA	± 20	AverageRF
Acetone	200	250	0.01	0.0476	0.0587	23	*	NA	± 20	AverageRF
Carbon Disulfide	10	7.0	0.100	0.745	0.520	-30	*	NA	± 20	AverageRF
Methylene Chloride	10	10	0.100	0.315	0.324	3		NA	± 20	AverageRF
Methyl tert-Butyl Ether	20	18	0.100	0.680	0.614	-10		NA	± 20	AverageRF
trans-1,2-Dichloroethene	10	10	0.100	0.273	0.274	1		NA	± 20	AverageRF
1,1-Dichloroethane	10	11	.200	0.478	0.509	6		NA	± 20	AverageRF
2,2-Dichloropropane	10	7.5	0.01	0.390	0.291	-25	*	NA	± 20	AverageRF
cis-1,2-Dichloroethene	10	10	0.100	0.321	0.333	4		NA	± 20	AverageRF
2-Butanone (MEK)	200	230	0.01	0.0193	0.0227	17		NA	± 20	AverageRF
Bromochloromethane	10	11	0.01	0.137	0.144	5		NA	± 20	AverageRF
Chloroform	10	11	0.200	0.506	0.543	7		NA	± 20	AverageRF
1,1,1-Trichloroethane (TCA)	10	9.3	.100	0.420	0.392	-7		NA	± 20	AverageRF
Carbon Tetrachloride	10	9.5	0.100	0.355	0.339	-5		NA	± 20	AverageRF
1,1-Dichloropropene	10	11	0.01	0.381	0.400	5		NA	± 20	AverageRF
Benzene	10	11	0.500	1.24	1.31	5		NA	± 20	AverageRF
1,2-Dichloroethane (EDC)	10	11	0.100	0.391	0.414	6		NA	± 20	AverageRF
Trichloroethene (TCE)	10	11	0.200	0.289	0.314	8		NA	± 20	AverageRF
1,2-Dichloropropane	10	11	0.100	0.301	0.321	6		NA	± 20	AverageRF
Dibromomethane	10	11	0.01	0.160	0.170	7		NA	± 20	AverageRF
Bromodichloromethane	10	10	0.200	0.349	0.357	2		NA	± 20	AverageRF
cis-1,3-Dichloropropene	10	9.9	0.200	0.423	0.418	-1		NA	± 20	AverageRF
4-Methyl-2-pentanone (MIBK)	200	250	0.01	0.0643	0.0807	25	*	NA	± 20	AverageRF
Toluene	10	11	0.400	0.831	0.876	5		NA	± 20	AverageRF
trans-1,3-Dichloropropene	10	8.7	0.100	0.841	0.729	-13		NA	± 20	AverageRF
1,1,2-Trichloroethane	10	10	.100	0.481	0.501	4		NA	± 20	AverageRF
Tetrachloroethene (PCE)	10	9.8	0.200	0.613	0.601	-2		NA	± 20	AverageRF
2-Hexanone	200	240	0.015	0.0525	0.0629	20		NA	± 20	AverageRF
1,3-Dichloropropane	10	11	0.01	1.05	1.17	12		NA	± 20	AverageRF
Dibromochloromethane	10	10	0.100	0.535	0.553	3		NA	± 20	AverageRF
1,2-Dibromoethane (EDB)	10	10	0.100	0.537	0.548	2		NA	± 20	AverageRF
Chlorobenzene	10	11	0.500	2.21	2.35	6		NA	± 20	AverageRF
Ethylbenzene	10	11	0.100	1.21	1.28	6		NA	± 20	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† SPCC Compound **‡ CCC Compound**

QA/QC Results

Client: Sealaska Environmental Services, LLC
Project: TO 01 JBLM

Service Request: K1410529
Date Analyzed: 10/06/2014

Continuing Calibration Verification Summary
Volatile Organic Compounds

Calibration Type: Internal Standard
Analysis Method: 8260C

Calibration Date: 09/17/2014
Calibration ID: CAL13556
Analysis Lot: KWG1413506
Units: PPB

Analyte Name	Expected	Result	Min RF	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
1,1,1,2-Tetrachloroethane	10	9.3	.01	0.694	0.648	-7	NA	± 20	AverageRF
m,p-Xylenes	20	21	0.100	1.49	1.60	7	NA	± 20	AverageRF
o-Xylene	10	10	0.300	1.46	1.53	4	NA	± 20	AverageRF
Styrene	10	10	0.300	1.10	1.13	3	NA	± 20	AverageRF
Bromoform	10	9.0	0.100	0.297	0.269	NA	-10	± 20	Quadratic(0,0)
Isopropylbenzene	10	11	0.100	3.70	3.96	7	NA	± 20	AverageRF
1,1,2,2-Tetrachloroethane	10	12	.300	0.613	0.709	16	NA	± 20	AverageRF
Bromobenzene	10	10	0.01	0.956	1.00	5	NA	± 20	AverageRF
n-Propylbenzene	10	11	0.01	4.48	5.02	12	NA	± 20	AverageRF
1,2,3-Trichloropropane	10	10	0.01	0.212	0.222	5	NA	± 20	AverageRF
2-Chlorotoluene	10	11	0.01	2.75	2.95	7	NA	± 20	AverageRF
1,3,5-Trimethylbenzene	10	11	0.01	3.08	3.45	12	NA	± 20	AverageRF
4-Chlorotoluene	10	11	0.01	3.16	3.48	10	NA	± 20	AverageRF
tert-Butylbenzene	10	11	0.01	2.79	3.06	9	NA	± 20	AverageRF
1,2,4-Trimethylbenzene	10	11	0.01	3.13	3.50	12	NA	± 20	AverageRF
sec-Butylbenzene	10	11	0.01	3.94	4.39	11	NA	± 20	AverageRF
4-Isopropyltoluene	10	11	0.01	3.24	3.55	10	NA	± 20	AverageRF
1,3-Dichlorobenzene	10	11	0.600	1.83	1.96	7	NA	± 20	AverageRF
1,4-Dichlorobenzene	10	11	0.500	1.88	1.99	5	NA	± 20	AverageRF
n-Butylbenzene	10	11	0.01	2.78	3.06	10	NA	± 20	AverageRF
1,2-Dichlorobenzene	10	11	0.400	1.71	1.83	7	NA	± 20	AverageRF
1,2-Dibromo-3-chloropropane	10	9.5	0.025	0.0705	0.0670	-5	NA	± 20	AverageRF
1,2,4-Trichlorobenzene	10	10	0.200	0.947	0.972	3	NA	± 20	AverageRF
Hexachlorobutadiene	10	10	0.01	0.419	0.425	2	NA	± 20	AverageRF
Naphthalene	10	11	0.01	1.51	1.65	9	NA	± 20	AverageRF
1,2,3-Trichlorobenzene	10	11	0.01	0.681	0.725	6	NA	± 20	AverageRF
Dibromofluoromethane	10	10	0.01	0.219	0.221	1	NA	± 20	AverageRF
1,2-Dichloroethane-d4	10	11	0.01	0.258	0.277	7	NA	± 20	AverageRF
Toluene-d8	10	10	0.01	1.01	1.02	1	NA	± 20	AverageRF
4-Bromofluorobenzene	10	10	0.01	0.902	0.909	1	NA	± 20	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† SPCC Compound **‡ CCC Compound**

QA/QC Results

Client: Sealaska Environmental Services, LLC
Project: TO 01 JBLM

Service Request: K1410529
Date Analyzed: 10/06/2014

Continuing Calibration Verification Summary
Volatile Organic Compounds

Calibration Type: Internal Standard
Analysis Method: 8260C

Calibration Date: 09/17/2014
Calibration ID: CAL13556
Analysis Lot: KWG1413536
Units: PPB

File ID: J:\MS18\DATA\100614\1006F035.D

Analyte Name	Expected	Result	Min RF	Average RF	CCV RF	%D		%Drift	Criteria	Curve Fit
Dichlorodifluoromethane	10	8.5	0.100	0.341	0.289	-15		NA	± 20	AverageRF
Chloromethane	10	10	0.100	0.390	0.405	4		NA	± 20	AverageRF
Vinyl Chloride	10	11	0.100	0.375	0.403	7		NA	± 20	AverageRF
Bromomethane	10	9.2	0.100	0.286	0.262	-8		NA	± 20	AverageRF
Chloroethane	10	11	0.100	0.213	0.230	8		NA	± 20	AverageRF
Trichlorofluoromethane	10	9.9	0.100	0.510	0.503	-1		NA	± 20	AverageRF
1,1-Dichloroethene	10	9.6	.100	0.219	0.210	-4		NA	± 20	AverageRF
Acetone	200	270	0.01	0.0476	0.0646	36	*	NA	± 20	AverageRF
Carbon Disulfide	10	6.0	0.100	0.745	0.449	-40	*	NA	± 20	AverageRF
Methylene Chloride	10	9.4	0.100	0.315	0.295	-6		NA	± 20	AverageRF
Methyl tert-Butyl Ether	20	17	0.100	0.680	0.583	-14		NA	± 20	AverageRF
trans-1,2-Dichloroethene	10	9.8	0.100	0.273	0.268	-2		NA	± 20	AverageRF
1,1-Dichloroethane	10	10	.200	0.478	0.490	2		NA	± 20	AverageRF
2,2-Dichloropropane	10	5.6	0.01	0.390	0.216	-45	*	NA	± 20	AverageRF
cis-1,2-Dichloroethene	10	9.5	0.100	0.321	0.305	-5		NA	± 20	AverageRF
2-Butanone (MEK)	200	260	0.01	0.0193	0.0247	28	*	NA	± 20	AverageRF
Bromochloromethane	10	10	0.01	0.137	0.137	0		NA	± 20	AverageRF
Chloroform	10	10	0.200	0.506	0.505	0		NA	± 20	AverageRF
1,1,1-Trichloroethane (TCA)	10	8.6	.100	0.420	0.360	-14		NA	± 20	AverageRF
Carbon Tetrachloride	10	8.7	0.100	0.355	0.308	-13		NA	± 20	AverageRF
1,1-Dichloropropene	10	10	0.01	0.381	0.399	5		NA	± 20	AverageRF
Benzene	10	10	0.500	1.24	1.24	0		NA	± 20	AverageRF
1,2-Dichloroethane (EDC)	10	11	0.100	0.391	0.419	7		NA	± 20	AverageRF
Trichloroethene (TCE)	10	10	0.200	0.289	0.301	4		NA	± 20	AverageRF
1,2-Dichloropropane	10	10	0.100	0.301	0.304	1		NA	± 20	AverageRF
Dibromomethane	10	10	0.01	0.160	0.165	3		NA	± 20	AverageRF
Bromodichloromethane	10	9.5	0.200	0.349	0.331	-5		NA	± 20	AverageRF
cis-1,3-Dichloropropene	10	8.7	0.200	0.423	0.366	-13		NA	± 20	AverageRF
4-Methyl-2-pentanone (MIBK)	200	280	0.01	0.0643	0.0913	42	*	NA	± 20	AverageRF
Toluene	10	10	0.400	0.831	0.838	1		NA	± 20	AverageRF
trans-1,3-Dichloropropene	10	7.2	0.100	0.841	0.603	-28	*	NA	± 20	AverageRF
1,1,2-Trichloroethane	10	10	.100	0.481	0.488	1		NA	± 20	AverageRF
Tetrachloroethene (PCE)	10	9.2	0.200	0.613	0.563	-8		NA	± 20	AverageRF
2-Hexanone	200	260	0.015	0.0525	0.0693	32	*	NA	± 20	AverageRF
1,3-Dichloropropane	10	11	0.01	1.05	1.14	9		NA	± 20	AverageRF
Dibromochloromethane	10	9.2	0.100	0.535	0.490	-8		NA	± 20	AverageRF
1,2-Dibromoethane (EDB)	10	9.7	0.100	0.537	0.521	-3		NA	± 20	AverageRF
Chlorobenzene	10	9.8	0.500	2.21	2.17	-2		NA	± 20	AverageRF
Ethylbenzene	10	9.9	0.100	1.21	1.20	-1		NA	± 20	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† SPCC Compound **‡ CCC Compound**

Client: Sealaska Environmental Services, LLC
Project: TO 01 JBLM

Service Request: K1410529
Date Analyzed: 10/06/2014

Continuing Calibration Verification Summary
Volatile Organic Compounds

Calibration Type: Internal Standard
Analysis Method: 8260C

Calibration Date: 09/17/2014
Calibration ID: CAL13556
Analysis Lot: KWG1413536
Units: PPB

Analyte Name	Expected	Result	Min RF	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
1,1,1,2-Tetrachloroethane	10	8.8	.01	0.694	0.608	-12	NA	± 20	AverageRF
m,p-Xylenes	20	20	0.100	1.49	1.47	-2	NA	± 20	AverageRF
o-Xylene	10	9.7	0.300	1.46	1.42	-3	NA	± 20	AverageRF
Styrene	10	9.6	0.300	1.10	1.05	-4	NA	± 20	AverageRF
Bromoform	10	8.3	0.100	0.297	0.247	NA	-17	± 20	Quadratic(0,0)
Isopropylbenzene	10	9.9	0.100	3.70	3.67	-1	NA	± 20	AverageRF
1,1,2,2-Tetrachloroethane	10	12	.300	0.613	0.724	18	NA	± 20	AverageRF
Bromobenzene	10	9.8	0.01	0.956	0.940	-2	NA	± 20	AverageRF
n-Propylbenzene	10	10	0.01	4.48	4.67	4	NA	± 20	AverageRF
1,2,3-Trichloropropane	10	11	0.01	0.212	0.228	8	NA	± 20	AverageRF
2-Chlorotoluene	10	10	0.01	2.75	2.78	1	NA	± 20	AverageRF
1,3,5-Trimethylbenzene	10	11	0.01	3.08	3.25	5	NA	± 20	AverageRF
4-Chlorotoluene	10	10	0.01	3.16	3.24	2	NA	± 20	AverageRF
tert-Butylbenzene	10	10	0.01	2.79	2.89	3	NA	± 20	AverageRF
1,2,4-Trimethylbenzene	10	11	0.01	3.13	3.30	5	NA	± 20	AverageRF
sec-Butylbenzene	10	11	0.01	3.94	4.14	5	NA	± 20	AverageRF
4-Isopropyltoluene	10	10	0.01	3.24	3.34	3	NA	± 20	AverageRF
1,3-Dichlorobenzene	10	9.9	0.600	1.83	1.82	-1	NA	± 20	AverageRF
1,4-Dichlorobenzene	10	10	0.500	1.88	1.89	0	NA	± 20	AverageRF
n-Butylbenzene	10	10	0.01	2.78	2.85	2	NA	± 20	AverageRF
1,2-Dichlorobenzene	10	10	0.400	1.71	1.72	1	NA	± 20	AverageRF
1,2-Dibromo-3-chloropropane	10	8.8	0.025	0.0705	0.0622	-12	NA	± 20	AverageRF
1,2,4-Trichlorobenzene	10	9.9	0.200	0.947	0.939	-1	NA	± 20	AverageRF
Hexachlorobutadiene	10	9.3	0.01	0.419	0.389	-7	NA	± 20	AverageRF
Naphthalene	10	11	0.01	1.51	1.72	14	NA	± 20	AverageRF
1,2,3-Trichlorobenzene	10	10	0.01	0.681	0.712	5	NA	± 20	AverageRF
Dibromofluoromethane	10	10	0.01	0.219	0.222	1	NA	± 20	AverageRF
1,2-Dichloroethane-d4	10	11	0.01	0.258	0.276	7	NA	± 20	AverageRF
Toluene-d8	10	10	0.01	1.01	1.03	2	NA	± 20	AverageRF
4-Bromofluorobenzene	10	9.8	0.01	0.902	0.883	-2	NA	± 20	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† SPCC Compound **‡ CCC Compound**

ALS Group USA, Corp. dba ALS Environmental

QA/QC Results

Client: Sealaska Environmental Services, LLC **Service Request:** K1410529
Project: TO 01 JBLM

Analysis Run Log
Volatile Organic Compounds

Analysis Method: 8260C **Analysis Lot:** KWG1413468
Instrument ID: GC-MS 18

File ID	Sample Name	Lab Code	Date Analysis Started	Start Time	Q	Date Analysis Finished	Finish Time
1003F006.D	GC/MS Tuning - Bromofluorobenzene	KWG1413468-1	10/3/2014	14:35		10/3/2014	14:51
1003F008.D	Continuing Calibration Verification	KWG1413468-2	10/3/2014	15:41		10/3/2014	15:57
1003F009.D	Lab Control Sample	KWG1413475-3	10/3/2014	16:02		10/3/2014	16:18
1003F010.D	AOC14092295A172MS	KWG1413475-1	10/3/2014	16:31		10/3/2014	16:47
1003F011.D	AOC14092295A172DMS	KWG1413475-2	10/3/2014	16:52		10/3/2014	17:08
1003F012.D	ZZZZZZ	ZZZZZZ	10/3/2014	17:13		10/3/2014	17:29
1003F013.D	ZZZZZZ	ZZZZZZ	10/3/2014	17:34		10/3/2014	17:50
1003F015.D	Method Blank	KWG1413475-4	10/3/2014	18:17		10/3/2014	18:33
1003F016.D	TB-140922	K1410529-031	10/3/2014	18:38		10/3/2014	18:54
1003F017.D	ZZZZZZ	ZZZZZZ	10/3/2014	19:00		10/3/2014	19:16
1003F018.D	AOC14092295A172	K1410529-034	10/3/2014	19:21		10/3/2014	19:37
1003F019.D	ZZZZZZ	ZZZZZZ	10/3/2014	19:42		10/3/2014	19:58
1003F020.D	ZZZZZZ	ZZZZZZ	10/3/2014	20:03		10/3/2014	20:19
1003F021.D	ZZZZZZ	ZZZZZZ	10/3/2014	20:25		10/3/2014	20:41
1003F022.D	ZZZZZZ	ZZZZZZ	10/3/2014	20:46		10/3/2014	21:02
1003F023.D	ZZZZZZ	ZZZZZZ	10/3/2014	21:07		10/3/2014	21:23
1003F024.D	ZZZZZZ	ZZZZZZ	10/3/2014	21:30		10/3/2014	21:46
1003F025.D	ZZZZZZ	ZZZZZZ	10/3/2014	21:51		10/3/2014	22:07
1003F026.D	ZZZZZZ	ZZZZZZ	10/3/2014	22:13		10/3/2014	22:29
1003F027.D	ZZZZZZ	ZZZZZZ	10/3/2014	22:34		10/3/2014	22:50
1003F028.D	ZZZZZZ	ZZZZZZ	10/3/2014	22:55		10/3/2014	23:11
1003F029.D	ZZZZZZ	ZZZZZZ	10/3/2014	23:16		10/3/2014	23:32
1003F030.D	ZZZZZZ	ZZZZZZ	10/3/2014	23:38		10/3/2014	23:54
1003F031.D	ZZZZZZ	ZZZZZZ	10/3/2014	23:59		10/4/2014	00:15
1003F032.D	ZZZZZZ	ZZZZZZ	10/4/2014	00:20		10/4/2014	00:36
1003F033.D	ZZZZZZ	ZZZZZZ	10/4/2014	00:42		10/4/2014	00:58
1003F034.D	AOC14092210A178	K1410529-032	10/4/2014	01:03		10/4/2014	01:19
1003F035.D	AOC140922DUP2	K1410529-033	10/4/2014	01:24		10/4/2014	01:40
1003F036.D	AOC140922DUP2	K1410529-033	10/4/2014	01:46		10/4/2014	02:02
1003F037.D	AOC14092210A178	K1410529-032	10/4/2014	02:07		10/4/2014	02:23

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

ALS Group USA, Corp. dba ALS Environmental

QA/QC Results

Client: Sealaska Environmental Services, LLC **Service Request:** K1410529
Project: TO 01 JBLM

Analysis Run Log
Volatile Organic Compounds

Analysis Method: 8260C **Analysis Lot:** KWG1413485
Instrument ID: GC-MS 18

File ID	Sample Name	Lab Code	Date Analysis Started	Start Time	Q	Date Analysis Finished	Finish Time
1004F007.D	GC/MS Tuning - Bromofluorobenzene	KWG1413485-1	10/4/2014	12:16		10/4/2014	12:32
1004F009.D	Continuing Calibration Verification	KWG1413485-3	10/4/2014	13:04		10/4/2014	13:20
1004F010.D	Lab Control Sample	KWG1413488-3	10/4/2014	13:38		10/4/2014	13:54
1004F011.D	ZZZZZZ	ZZZZZZ	10/4/2014	13:59		10/4/2014	14:15
1004F012.D	ZZZZZZ	ZZZZZZ	10/4/2014	14:20		10/4/2014	14:36
1004F015.D	Method Blank	KWG1413488-4	10/4/2014	15:24		10/4/2014	15:40
1004F016.D	ZZZZZZ	ZZZZZZ	10/4/2014	15:45		10/4/2014	16:01
1004F017.D	TB-140923	K1410529-001	10/4/2014	16:06		10/4/2014	16:22
1004F018.D	LGC140923LC135-1	K1410529-002	10/4/2014	16:28		10/4/2014	16:44
1004F019.D	LGC140923LC10830-1	K1410529-003	10/4/2014	16:49		10/4/2014	17:05
1004F020.D	LGC140923LC10860-1	K1410529-004	10/4/2014	17:10		10/4/2014	17:26
1004F021.D	LGC140923LC10885-1	K1410529-005	10/4/2014	17:31		10/4/2014	17:47
1004F022.D	LGC140923MT4-1	K1410529-006	10/4/2014	17:53		10/4/2014	18:09
1004F023.D	LGC140923MT3-1	K1410529-007	10/4/2014	18:14		10/4/2014	18:30
1004F024.D	LGC140923MT2-1	K1410529-008	10/4/2014	18:37		10/4/2014	18:53
1004F025.D	LGC140923MT1-1	K1410529-009	10/4/2014	18:58		10/4/2014	19:14
1004F026.D	AOC14092307A177	K1410529-035	10/4/2014	19:20		10/4/2014	19:36
1004F027.D	ZZZZZZ	ZZZZZZ	10/4/2014	19:41		10/4/2014	19:57
1004F028.D	ZZZZZZ	ZZZZZZ	10/4/2014	20:02		10/4/2014	20:18
1004F029.D	ZZZZZZ	ZZZZZZ	10/4/2014	20:24		10/4/2014	20:40
1004F030.D	ZZZZZZ	ZZZZZZ	10/4/2014	20:45		10/4/2014	21:01
1004F031.D	ZZZZZZ	ZZZZZZ	10/4/2014	21:06		10/4/2014	21:22
1004F032.D	AOC14092395A173A	K1410529-036	10/4/2014	21:27		10/4/2014	21:43
1004F033.D	ZZZZZZ	ZZZZZZ	10/4/2014	21:49		10/4/2014	22:05
1004F034.D	AOC140922DUP2	K1410529-033	10/4/2014	22:10		10/4/2014	22:26
1004F035.D	ZZZZZZ	ZZZZZZ	10/4/2014	22:31		10/4/2014	22:47
1004F036.D	ZZZZZZ	ZZZZZZ	10/4/2014	22:53		10/4/2014	23:09
1004F037.D	ZZZZZZ	ZZZZZZ	10/4/2014	23:14		10/4/2014	23:30
1004F038.D	ZZZZZZ	ZZZZZZ	10/4/2014	23:36		10/4/2014	23:52
1004F039.D	ZZZZZZ	ZZZZZZ	10/4/2014	23:57		10/5/2014	00:13

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

Client: Sealaska Environmental Services, LLC **Service Request:** K1410529
Project: TO 01 JBLM

Analysis Run Log
Volatile Organic Compounds

Analysis Method: 8260C **Analysis Lot:** KWG1413506
Instrument ID: GC-MS 18

File ID	Sample Name	Lab Code	Date Analysis Started	Start Time	Q	Date Analysis Finished	Finish Time
1006F002.D	GC/MS Tuning - Bromofluorobenzene	KWG1413506-1	10/6/2014	08:58		10/6/2014	09:14
1006F003.D	Continuing Calibration Verification	KWG1413506-2	10/6/2014	09:31		10/6/2014	09:47
1006F004.D	Lab Control Sample	KWG1413516-1	10/6/2014	10:14		10/6/2014	10:30
1006F008.D	Method Blank	KWG1413516-3	10/6/2014	11:50		10/6/2014	12:06
1006F009.D	ZZZZZZ	ZZZZZZ	10/6/2014	12:11		10/6/2014	12:27
1006F010.D	ZZZZZZ	ZZZZZZ	10/6/2014	12:33		10/6/2014	12:49
1006F011.D	ZZZZZZ	ZZZZZZ	10/6/2014	12:54		10/6/2014	13:10
1006F012.D	ZZZZZZ	ZZZZZZ	10/6/2014	13:16		10/6/2014	13:32
1006F013.D	ZZZZZZ	ZZZZZZ	10/6/2014	13:37		10/6/2014	13:53
1006F014.D	LGC140924FL1-1	K1410529-010	10/6/2014	13:58		10/6/2014	14:14
1006F015.D	LGC140924LC218-1	K1410529-011	10/6/2014	14:20		10/6/2014	14:36
1006F016.D	LGC140924LC224-1	K1410529-012	10/6/2014	14:41		10/6/2014	14:57
1006F017.D	LGC140924LC01-1	K1410529-013	10/6/2014	15:02		10/6/2014	15:18
1006F018.D	LG140924LC111B-1	K1410529-015	10/6/2014	15:24		10/6/2014	15:40
1006F019.D	LG14092485PA382-1	K1410529-016	10/6/2014	15:45		10/6/2014	16:01
1006F020.D	LGC14092485PA384-1	K1410529-017	10/6/2014	16:06		10/6/2014	16:22
1006F021.D	LGC140924LC124-1	K1410529-018	10/6/2014	16:28		10/6/2014	16:44
1006F022.D	LGC140924DUP2-1	K1410529-019	10/6/2014	16:49		10/6/2014	17:05
1006F023.D	LG140924LC122B-1	K1410529-020	10/6/2014	17:10		10/6/2014	17:26
1006F024.D	LGC140924LC61B-1	K1410529-021	10/6/2014	17:32		10/6/2014	17:48
1006F025.D	LGC140924LC226-1	K1410529-022	10/6/2014	17:53		10/6/2014	18:09
1006F026.D	LGC140925SLAP5-1	K1410529-023	10/6/2014	18:15		10/6/2014	18:31
1006F027.D	LGC140924LC116B-1	K1410529-014	10/6/2014	18:36		10/6/2014	18:52
1006F028.D	LGC140924LC01-1MS	KWG1413516-6	10/6/2014	18:57		10/6/2014	19:13
1006F029.D	LGC140924LC01-1DMS	KWG1413516-7	10/6/2014	19:19		10/6/2014	19:35
1006F030.D	ZZZZZZ	ZZZZZZ	10/6/2014	19:40		10/6/2014	19:56
1006F031.D	ZZZZZZ	ZZZZZZ	10/6/2014	20:01		10/6/2014	20:17

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

QA/QC Results

Client: Sealaska Environmental Services, LLC **Service Request:** K1410529
Project: TO 01 JBLM

Analysis Run Log
Volatile Organic Compounds

Analysis Method: 8260C **Analysis Lot:** KWG1413536
Instrument ID: GC-MS 18

File ID	Sample Name	Lab Code	Date Analysis Started	Start Time	Q	Date Analysis Finished	Finish Time
1006F034.D	GC/MS Tuning - Bromofluorobenzene	KWG1413536-1	10/6/2014	21:06		10/6/2014	21:22
1006F035.D	Continuing Calibration Verification	KWG1413536-2	10/6/2014	21:27		10/6/2014	21:43
1006F037.D	Lab Control Sample	KWG1413535-3	10/6/2014	22:10		10/6/2014	22:26
1006F038.D	ZZZZZZ	ZZZZZZ	10/6/2014	22:32		10/6/2014	22:48
1006F039.D	ZZZZZZ	ZZZZZZ	10/6/2014	22:53		10/6/2014	23:09
1006F042.D	Method Blank	KWG1413535-5	10/6/2014	23:57		10/7/2014	00:13
1006F043.D	LG140925SLAP4-1	K1410529-024	10/7/2014	00:19		10/7/2014	00:35
1006F044.D	LG140925SLAP3-1	K1410529-025	10/7/2014	00:40		10/7/2014	00:56
1006F045.D	LG140925SLAP1-1	K1410529-026	10/7/2014	01:02		10/7/2014	01:18
1006F046.D	ZZZZZZ	ZZZZZZ	10/7/2014	01:23		10/7/2014	01:39
1006F047.D	ZZZZZZ	ZZZZZZ	10/7/2014	01:44		10/7/2014	02:00
1006F048.D	ZZZZZZ	ZZZZZZ	10/7/2014	02:06		10/7/2014	02:22
1006F049.D	ZZZZZZ	ZZZZZZ	10/7/2014	02:27		10/7/2014	02:43
1006F050.D	ZZZZZZ	ZZZZZZ	10/7/2014	02:48		10/7/2014	03:04
1006F051.D	ZZZZZZ	ZZZZZZ	10/7/2014	03:10		10/7/2014	03:26
1006F052.D	ZZZZZZ	ZZZZZZ	10/7/2014	03:31		10/7/2014	03:47
1006F053.D	ZZZZZZ	ZZZZZZ	10/7/2014	03:52		10/7/2014	04:08
1006F054.D	ZZZZZZ	ZZZZZZ	10/7/2014	04:14		10/7/2014	04:30
1006F055.D	ZZZZZZ	ZZZZZZ	10/7/2014	04:35		10/7/2014	04:51
1006F056.D	ZZZZZZ	ZZZZZZ	10/7/2014	04:56		10/7/2014	05:12
1006F057.D	ZZZZZZ	ZZZZZZ	10/7/2014	05:18		10/7/2014	05:34
1006F058.D	ZZZZZZ	ZZZZZZ	10/7/2014	05:39		10/7/2014	05:55
1006F059.D	ZZZZZZ	ZZZZZZ	10/7/2014	06:01		10/7/2014	06:17
1006F060.D	ZZZZZZ	ZZZZZZ	10/7/2014	06:22		10/7/2014	06:38
1006F061.D	ZZZZZZ	ZZZZZZ	10/7/2014	06:43		10/7/2014	06:59
1006F062.D	ZZZZZZ	ZZZZZZ	10/7/2014	07:05		10/7/2014	07:21

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

QA/QC Results

Client: Sealaska Environmental Services, LLC
Project: TO 01 JBLM
Sample Matrix: Water

Service Request: K1410529
Date Extracted: 10/03/2014

Extraction Prep Log
Volatile Organic Compounds

Extraction Method: EPA 5030B
Analysis Method: 8260C

Extraction Lot: KWG1413475
Level: Low

Sample Name	Lab Code	Date Collected	Date Received	Sample Amount	Final Volume	% Solids	Note
TB-140922	K1410529-031	09/22/14	09/26/14	10ml	10ml	NA	
AOC14092210A178	K1410529-032	09/22/14	09/26/14	10ml	10ml	NA	
AOC14092210A178DL	K1410529-032	09/22/14	09/26/14	10ml	10ml	NA	
AOC140922DUP2DL	K1410529-033	09/22/14	09/26/14	10ml	10ml	NA	
AOC14092295A172	K1410529-034	09/22/14	09/26/14	10ml	10ml	NA	
Method Blank	KWG1413475-4	NA	NA	10ml	10ml	NA	
AOC14092295A172MS	KWG1413475-1	09/22/14	09/26/14	10ml	10ml	NA	
AOC14092295A172DMS	KWG1413475-2	09/22/14	09/26/14	10ml	10ml	NA	
Lab Control Sample	KWG1413475-3	NA	NA	10ml	10ml	NA	

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

QA/QC Results

Client: Sealaska Environmental Services, LLC
Project: TO 01 JBLM
Sample Matrix: Water

Service Request: K1410529
Date Extracted: 10/04/2014

Extraction Prep Log
Volatile Organic Compounds

Extraction Method: EPA 5030B
Analysis Method: 8260C

Extraction Lot: KWG1413488
Level: Low

Sample Name	Lab Code	Date Collected	Date Received	Sample Amount	Final Volume	% Solids	Note
TB-140923	K1410529-001	09/23/14	09/26/14	10ml	10ml	NA	
LGC140923LC135-1	K1410529-002	09/23/14	09/26/14	10ml	10ml	NA	
LGC140923LC10830-1	K1410529-003	09/23/14	09/26/14	10ml	10ml	NA	
LGC140923LC10860-1	K1410529-004	09/23/14	09/26/14	10ml	10ml	NA	
LGC140923LC10885-1	K1410529-005	09/23/14	09/26/14	10ml	10ml	NA	
LGC140923MT4-1	K1410529-006	09/23/14	09/26/14	10ml	10ml	NA	
LGC140923MT3-1	K1410529-007	09/23/14	09/26/14	10ml	10ml	NA	
LGC140923MT2-1	K1410529-008	09/23/14	09/26/14	10ml	10ml	NA	
LGC140923MT1-1	K1410529-009	09/23/14	09/26/14	10ml	10ml	NA	
AOC140922DUP2	K1410529-033	09/22/14	09/26/14	10ml	10ml	NA	
AOC14092307A177	K1410529-035	09/23/14	09/26/14	10ml	10ml	NA	
AOC14092395A173A	K1410529-036	09/23/14	09/26/14	10ml	10ml	NA	
Method Blank	KWG1413488-4	NA	NA	10ml	10ml	NA	
Lab Control Sample	KWG1413488-3	NA	NA	10ml	10ml	NA	

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

QA/QC Results

Client: Sealaska Environmental Services, LLC
Project: TO 01 JBLM
Sample Matrix: Water

Service Request: K1410529
Date Extracted: 10/06/2014

Extraction Prep Log
Volatile Organic Compounds

Extraction Method: EPA 5030B
Analysis Method: 8260C

Extraction Lot: KWG1413516
Level: Low

Sample Name	Lab Code	Date Collected	Date Received	Sample Amount	Final Volume	% Solids	Note
LGC140924FL1-1	K1410529-010	09/24/14	09/26/14	10ml	10ml	NA	
LGC140924LC218-1	K1410529-011	09/24/14	09/26/14	10ml	10ml	NA	
LGC140924LC224-1	K1410529-012	09/24/14	09/26/14	10ml	10ml	NA	
LGC140924LC01-1	K1410529-013	09/24/14	09/26/14	10ml	10ml	NA	
LGC140924LC116B-1	K1410529-014	09/24/14	09/26/14	10ml	10ml	NA	
LG140924LC111B-1	K1410529-015	09/24/14	09/26/14	10ml	10ml	NA	
LG14092485PA382-1	K1410529-016	09/24/14	09/26/14	10ml	10ml	NA	
LGC14092485PA384-1	K1410529-017	09/24/14	09/26/14	10ml	10ml	NA	
LGC140924LC124-1	K1410529-018	09/24/14	09/26/14	10ml	10ml	NA	
LGC140924DUP2-1	K1410529-019	09/24/14	09/26/14	10ml	10ml	NA	
LG140924LC122B-1	K1410529-020	09/24/14	09/26/14	10ml	10ml	NA	
LGC140924LC61B-1	K1410529-021	09/24/14	09/26/14	10ml	10ml	NA	
LGC140924LC226-1	K1410529-022	09/24/14	09/26/14	10ml	10ml	NA	
LGC140925SLAP5-1	K1410529-023	09/25/14	09/26/14	10ml	10ml	NA	
Method Blank	KWG1413516-3	NA	NA	10ml	10ml	NA	
LGC140924LC01-1MS	KWG1413516-6	09/24/14	09/26/14	10ml	10ml	NA	
LGC140924LC01-1DMS	KWG1413516-7	09/24/14	09/26/14	10ml	10ml	NA	
Lab Control Sample	KWG1413516-1	NA	NA	10ml	10ml	NA	

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

QA/QC Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1410529
Project:	TO 01 JBLM	**Date Extracted:**	10/07/2014
Sample Matrix:	Water		

Extraction Prep Log
Volatile Organic Compounds

Extraction Method:	EPA 5030B	**Extraction Lot:**	KWG1413535
Analysis Method:	8260C	**Level:**	Low

Sample Name	Lab Code	Date Collected	Date Received	Sample Amount	Final Volume	% Solids	Note
LG140925SLAP4-1	K1410529-024	09/25/14	09/26/14	10ml	10ml	NA	
LG140925SLAP3-1	K1410529-025	09/25/14	09/26/14	10ml	10ml	NA	
LG140925SLAP1-1	K1410529-026	09/25/14	09/26/14	10ml	10ml	NA	
Method Blank	KWG1413535-5	NA	NA	10ml	10ml	NA	
Lab Control Sample	KWG1413535-3	NA	NA	10ml	10ml	NA	

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

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October 24, 2014 Analytical Report for Service Request No: K1410537

Scott Elkind
Sealaska Environmental Services, LLC
18743 Front Street NE
P.O. Box 869
Poulsbo, WA 98370

RE: TO 01 JBLM

Dear Scott:

Enclosed are the results of the samples submitted to our laboratory on September 26, 2014. For your reference, these analyses have been assigned our service request number K1410537.

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. The test results meet requirements of the current NELAP standards, where applicable, and except as noted in the laboratory case narrative provided. For a specific list of NELAP-accredited analytes, refer to the certifications section at www.alsglobal.com. All results are intended to be considered in their entirety, and ALS Group USA Corp. dba ALS Environmental (ALS) is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report.

Please call if you have any questions. My extension is 3376. You may also contact me via Email at Gregory.Salata@alsglobal.com.

Respectfully submitted,

ALS Group USA Corp. dba ALS Environmental

Gregory Salata

Gregory Salata, Ph.D.
Client Services Manager

GS/aj

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Acronyms

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Volatile Organic Compounds By EPA Method 8260

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Acronyms

ASTM	American Society for Testing and Materials
A2LA	American Association for Laboratory Accreditation
CARB	California Air Resources Board
CAS Number	Chemical Abstract Service registry Number
CFC	Chlorofluorocarbon
CFU	Colony-Forming Unit
DEC	Department of Environmental Conservation
DEQ	Department of Environmental Quality
DHS	Department of Health Services
DOE	Department of Ecology
DOH	Department of Health
EPA	U. S. Environmental Protection Agency
ELAP	Environmental Laboratory Accreditation Program
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
LOD	Limit of Detection
LOQ	Limit of Quantitation
LUFT	Leaking Underground Fuel Tank
M	Modified
MCL	Maximum Contaminant Level is the highest permissible concentration of a substance allowed in drinking water as established by the USEPA.
MDL	Method Detection Limit
MPN	Most Probable Number
MRL	Method Reporting Limit
NA	Not Applicable
NC	Not Calculated
NCASI	National Council of the Paper Industry for Air and Stream Improvement
ND	Not Detected
NIOSH	National Institute for Occupational Safety and Health
PQL	Practical Quantitation Limit
RCRA	Resource Conservation and Recovery Act
SIM	Selected Ion Monitoring
TPH	Total Petroleum Hydrocarbons
tr	Trace level is the concentration of an analyte that is less than the PQL but greater than or equal to the MDL.

Inorganic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable. See case narrative.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
E	The result is an estimate amount because the value exceeded the instrument calibration range.
J	The result is an estimated value.
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
i	The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
X	See case narrative.
Q	See case narrative. One or more quality control criteria was outside the limits.
H	The holding time for this test is immediately following sample collection. The samples were analyzed as soon as possible after receipt by the laboratory.

Metals Data Qualifiers

#	The control limit criteria is not applicable. See case narrative.
J	The result is an estimated value.
E	The percent difference for the serial dilution was greater than 10%, indicating a possible matrix interference in the sample.
M	The duplicate injection precision was not met.
N	The Matrix Spike sample recovery is not within control limits. See case narrative.
S	The reported value was determined by the Method of Standard Additions (MSA).
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
W	The post-digestion spike for furnace AA analysis is out of control limits, while sample absorbance is less than 50% of spike absorbance.
i	The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
X	See case narrative.
+	The correlation coefficient for the MSA is less than 0.995.
Q	See case narrative. One or more quality control criteria was outside the limits.

Organic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable. See case narrative.
A	A tentatively identified compound, a suspected aldol-condensation product.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
C	The analyte was qualitatively confirmed using GC/MS techniques, pattern recognition, or by comparing to historical data.
D	The reported result is from a dilution.
E	The result is an estimated value.
J	The result is an estimated value.
N	The result is presumptive. The analyte was tentatively identified, but a confirmation analysis was not performed.
P	The GC or HPLC confirmation criteria was exceeded. The relative percent difference is greater than 40% between the two analytical results.
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
i	The MRL/MDL or LOQ/LOD is elevated due to a chromatographic interference.
X	See case narrative.
Q	See case narrative. One or more quality control criteria was outside the limits.

Additional Petroleum Hydrocarbon Specific Qualifiers

F	The chromatographic fingerprint of the sample matches the elution pattern of the calibration standard.
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.
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.
O	The chromatographic fingerprint of the sample resembles an oil, but does not match the calibration standard.
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.

ALS Group USA Corp. dba ALS Environmental (ALS) - Kelso
State Certifications, Accreditations, and Licenses

Agency	Web Site	Number
Alaska DEC UST	http://dec.alaska.gov/applications/eh/ehllabreports/USTLabs.aspx	UST-040
Arizona DHS	http://www.azdhs.gov/lab/license/env.htm	AZ0339
Arkansas - DEQ	http://www.adeq.state.ar.us/techsvs/labcert.htm	88-0637
California DHS (ELAP)	http://www.cdph.ca.gov/certlic/labs/Pages/ELAP.aspx	2795
DOD ELAP	http://www.denix.osd.mil/edqw/Accreditation/AccreditedLabs.cfm	L14-51
Florida DOH	http://www.doh.state.fl.us/lab/EnvLabCert/WaterCert.htm	E87412
Hawaii DOH	Not available	-
Idaho DHW	http://www.healthandwelfare.idaho.gov/Health/Labs/CertificationDrinkingWaterLabs/tabid/1833/Default.aspx	-
ISO 17025	http://www.pjlabs.com/	L14-50
Louisiana DEQ	http://www.deq.louisiana.gov/portal/DIVISIONS/PublicParticipationandPermitSupport/LouisianaLaboratoryAccreditationProgram.aspx	03016
Maine DHS	Not available	WA01276
Michigan DEQ	http://www.michigan.gov/deq/0,1607,7-135-3307_4131_4156---,00.html	9949
Minnesota DOH	http://www.health.state.mn.us/accreditation	053-999-457
Montana DPHHS	http://www.dphhs.mt.gov/publichealth/	CERT0047
Nevada DEP	http://ndep.nv.gov/bsdw/labservice.htm	WA01276
New Jersey DEP	http://www.nj.gov/dep/oqa/	WA005
North Carolina DWQ	http://www.dwqlab.org/	605
Oklahoma DEQ	http://www.deq.state.ok.us/CSDnew/labcert.htm	9801
Oregon – DEQ (NELAP)	http://public.health.oregon.gov/LaboratoryServices/EnvironmentalLaboratoryAccreditation/Pages/index.aspx	WA100010
South Carolina DHEC	http://www.scdhec.gov/environment/envserv/	61002
Texas CEQ	http://www.tceq.texas.gov/field/qa/env_lab_accreditation.html	T104704427
Washington DOE	http://www.ecy.wa.gov/programs/eap/labs/lab-accreditation.html	C544
Wisconsin DNR	http://dnr.wi.gov/	998386840
Wyoming (EPA Region 8)	http://www.epa.gov/region8/water/dwhome/wyomingdi.html	-
Kelso Laboratory Website	www.alsglobal.com	NA

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. A complete listing of specific NELAP-certified analytes, can be found in the certification section at www.ALSGlobal.com or at the accreditation bodies web site.
Please refer to the certification and/or accreditation body's web site if samples are submitted for compliance purposes. The states highlighted above, require the analysis be listed on the state certification if used for compliance purposes and if the method/anlayte is offered by that state.

Case Narrative

ALS Environmental—Kelso Laboratory
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Phone (360)577-7222 Fax (360)636-1068
www.alsglobal.com

ALS ENVIRONMENTAL

Client:	Sealaska Environmental Services, LLC	**Service Request No.:**	K1410537
Project:	TO 01 JBLM	**Date Received:**	09/26/14
Sample Matrix:	Water		

Case Narrative

All analyses were performed consistent with the quality assurance program of ALS Environmental. This report contains analytical results for samples designated for Tier IV validation deliverables including summary forms and all of the associated raw data for each of the analyses. When appropriate to the method, method blank results have been reported with each analytical test.

Sample Receipt

Thirty-five water samples were received for analysis at ALS Environmental on 09/26/14. The samples were received in good condition and consistent with the accompanying chain of custody form. The samples were stored in a refrigerator at 4ºC upon receipt at the laboratory.

Volatile Organic Compounds by EPA Method 8260

Calibration Verification Exceptions:
The following analytes were flagged as outside the control criterion for Continuing Calibration Verification (CCV) MS18\1006F035.D: Acetone, Carbon Disulfide, 2-Butanone, trans-1,3-Dichloropropene and 2-Hexanone. In accordance with the EPA Method, 80% or more of the CCV analytes must pass within 20% of the true value. The ALS SOP allows for 40% difference for the remaining analytes. The CCV met these criteria. The quality of the sample data was not significantly affected. No further corrective action was required.

The following analytes were flagged as outside the control criterion for Continuing Calibration Verification (CCV) MS18\1007F007.D: Acetone, Carbon Disulfide, 4-Methyl-2-pentanone, trans-1,3-Dichloropropene, 2-Hexanone and Bromoform. In accordance with the EPA Method, 80% or more of the CCV analytes must pass within 20% of the true value. The ALS SOP allows for 40% difference for the remaining analytes. The CCV met these criteria. The quality of the sample data was not significantly affected. No further corrective action was required.

The following analyte was flagged as outside the control criterion for Continuing Calibration Verification (CCV) MS18\1008F002.D: Dichlorodifluoromethane, Chloromethane, Vinyl Chloride, Methyl tert-Butyl Ether, 2,2-Dichloropropane and trans-1,3-Dichloropropene. In accordance with the EPA Method, 80% or more of the CCV analytes must pass within 20% of the true value. The ALS SOP allows for 40% difference for the remaining analytes. The CCV met these criteria. The quality of the sample data was not significantly affected. No further corrective action was required.

The ALS control criterion for the following analyte was not met in Continuing Calibration Verification (CCV) MS18\1006F035.D: 2,2-Dichloropropane and 4-Methyl-2-pentanone. In accordance with ALS standard operating procedures, an MRL check standard containing the analyte of concern was analyzed each day of analysis. The MRL check standard verifies instrument sensitivity was adequate to detect the analyte at the MRL on the day of analysis. Because the sensitivity was shown to be adequate to detect the compound in question, the data quality has not been significantly affected. No further corrective action was taken.

Approved by_____

The ALS control criterion for the following analyte was not met in Continuing Calibration Verification (CCV) MS18\1007F007.D: Bromomethane and 2,2-Dichloropropane. In accordance with ALS standard operating procedures, an MRL check standard containing the analyte of concern was analyzed each day of analysis. The MRL check standard verifies instrument sensitivity was adequate to detect the analyte at the MRL on the day of analysis. Because the sensitivity was shown to be adequate to detect the compound in question, the data quality has not been significantly affected. No further corrective action was taken.

Lab Control Sample Exceptions:
The control criterion was exceeded for Acetone and 2,2-Dichloropropane in Laboratory Control Sample (LCS) KWG1413535-3. The recovery was within the marginal excceedance limits listed in DOD Quality Systems Manual 4.2. The data was flagged to indicate the issue. No further corrective action was required.

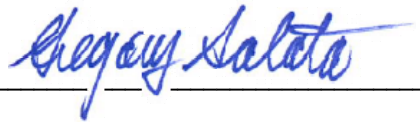
The control criterion was exceeded for 2,2-Dichloropropane in Laboratory Control Sample (LCS) KWG1413599-1. The recovery was within the marginal excceedance limits listed in DOD Quality Systems Manual 4.2. The data was flagged to indicate the issue. No further corrective action was required.

Matrix Spike Recovery Exceptions:
The matrix spike recovery of several analytes for sample LGC140925SLAPI-1 were outside control criteria. Positive detections in the parent sample are flagged, as per the DOD QAPP. No further corrective action was appropriate.

The matrix spike recovery of several analytes for sample LGC140925MAMC4-1 were outside control criteria. Positive detections in the parent sample are flagged, as per the DOD QAPP. No further corrective action was appropriate.

Sample Notes and Discussion:
Manual integration of one or more chromatographic peaks was required to correct the integration performed by the automated data processing program. The manual integration was performed in accordance with ALS policy, which is consistent with the National Environmental Laboratory Accreditation Program (NELAP), Department of Defense (DOD), and other certifying agencies. Refer to the raw data for the compounds impacted by the manual integration.

No other anomalies associated with the analysis of these samples were observed.

Approved by 

Chain of Custody

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SR# Y1141053-7

COC Set 1 of 5

COC#

1317 South 13th Ave, Kelso, WA 98626 Phone (360) 577-7222 / 800-695-7222 / FAX (360) 636-1068
www.alsglobal.com

Project Name: TOA JBLM	Project Number:
Project Manager: Scott Elkind	
Company: Sealtska ENV	
Address: 18743 front St NE Ste 201 Poulsbo WA	
Phone #: 360.930.3187	email: Scott.elkind@sealtska.com
Sampler Signature: Elizabeth Kercher	Sampler Printed Name: Elizabeth Kercher

CLIENT SAMPLE ID	LABID	SAMPLING Date	Time	Matrix	NUMBER OF CONTAINERS	6H: SM 9221 B / Tot Coli MT	48H: 300.0 / NO2	48H: 300.0 / NO3	48H: 300.0 / NO3 Diss	48H: SM 5210 B / BOD 5 Day	7D: SM 2540 C / TDS	14D: 8260C / VOC FP	14D: NWTPH-Dx / NW_TPH	14D: NWTPH-Gx / NW_GAS	14D: SM 2320 B / Alkalinity D	14D: SM 2320 B / Bicarb Alk	14D: SM 4500-CN- E / CN T	28D: 300.0 / Cl D	28D: 300.0 / SO4 D	28D: 353.2 / NO2 NO3 T	28D: 9060 / TOC T	28D: SM 4500-NH3 G / Ammonia	28D: SM 5220 C / COD T	180D: 200.7 / Metals D	180D: 200.7 / Metals T	1	2	3	Remarks
1 LGC140925I5LX2-1		9/25/14	1808	GW	3							3																
2 LGC140925I5LX3-1		9/25/14	1804	GW	3							3																
3 LGC140925I5LX4-1		9/25/14	1800	GW	3							3																
4 LGC140925I5LX5-1		9/25/14	1753	GW	3							3																
5 LGC140925I5LX6-1		9/25/14	1745	GW	3							3																
6 LGC140925I5LX7-1		9/25/14	1742	GW	3							3																
7 LGC140925I5LX9-1		9/25/14	1733	GW	3							3																
8 LGC140925I5LX11-1		9/25/14	1635	GW	3							3																
9 LGC140925I5LX12-1		9/25/14	1631	GW	3							3																
10 LGC140925I5LX13-1		9/25/14	1628	GW	3							3																

Report Requirements

___ I. Routine Report: Method Blank, Surrogate, as required

___ II. Report Dup., MS, MSD as required

___ III. CLP Like Summary (no raw data)

___ IV. Data Validation Report

___ V. EDD

Invoice Information

P.O.#_____

Bill To:_____

Turnaround Requirements

___ 24 hr. ___ 48 hr.

___ 5 Day

X Standard *

Requested Report Date

Circle which metals are to be analyzed

Total Metals: Al As Sb Ba Be B Ca Cd Co Cr Cu Fe Pb Mg Mn Mo Ni K Ag Na Se Sr Tl Sn V Zn Hg

Dissolved Metals: Al As Sb Ba Be B Ca Cd Co Cr Cu Fe Pb Mg Mn Mo Ni K Ag Na Se Sr Tl Sn V Zn Hg

Special Instructions/Comments:

* As Per Contract

*Indicate State Hydrocarbon Procedure: AK CA WI Northwest Other_____(Circle One)

Relinquished By:	Received By:	Relinquished By:	Received By:	Relinquished By:	Received By:
Signature: Elizabeth Kercher	Signature: MC Delivery	Signature: MC Delivery	Signature: Karla Smith	Signature:	Signature:
Printed Name: Elizabeth Kercher	Printed Name:	Printed Name:	Printed Name: Karla Smith	Printed Name:	Printed Name:
Firm: Sealtska	Firm:	Firm:	Firm: ALS	Firm:	Firm:
Date/Time: 9/26/14 1300	Date/Time:	Date/Time:	Date/Time: 9/26/14 1130	Date/Time:	Date/Time:

ALS Environmental

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SR# 1141025371

COC Set 2 of 2 &S

COC# ISPR

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Project Name: TO 01 JBLM	Project Number:
Project Manager: Scott Elkind	
Company: Sealaska ENV.	
Address: 18743 Front St NE Ste 201 Poulsbo WA	
Phone: 360.930.3187	email: Scott.Elkind@Sealaska.com
Sampler Signature: Elizabeth Kercher	Sampler Printed Name: Elizabeth Kercher

CLIENT SAMPLE ID	LABID	SAMPLING Date	Time	Matrix	NUMBER OF CONTAINERS	6H: SM 9221 B / Tot Coli MT	48H: 300.0 / NO2	48H: 300.0 / NO3	48H: 300.0 / NO3 Diss	48H: SM 5210 B / BOD 5 Day	7D: SM 2540 C / TDS	14D: 8260C / VOC FP	14D: NWTPH-Dx / NW_TPH	14D: NWTPH-Gx / NW_GAS	14D: SM 2320 B / Alkalinity D	14D: SM 2320 B / Bicarb Alk	14D: SM 4500-CN- E / CN T	28D: 300.0 / Cl D	28D: 300.0 / SO4 D	28D: 353.2 / NO2 NO3 T	28D: 9060 / TOC T	28D: SM 4500-NH3 G / Ammonia	28D: SM 5220 C / COD T	180D: 200.7 / Metals D	180D: 200.7 / Metals T	1	2	3	Remarks
1 LGC140925I5LX14-1		9/25/14	1625	GW	3							3																
2 LGC140925I5LX15-1		9/25/14	1621	GW	3							3																
3 LGC140925DUPG-1		9/25/14	1200	GW	3							3																
4 LGC140925I5I-1		9/25/14	1612	GW	3							3																
5 LGC140925I5E-1		9/25/14	1614	GW	3							3																
6.																												
7.																												
8. RMI																												
9.																												
10.																												

Report Requirements

___ I. Routine Report: Method Blank, Surrogate, as required

___ II. Report Dup., MS, MSD as required

___ III. CLP Like Summary (no raw data)

___ IV. Data Validation Report

___ V. EDD

Invoice Information

P.O.#_____

Bill To:_____

Turnaround Requirements

___ 24 hr. ___ 48 hr.

___ 5 Day

X Standard

Requested Report Date

Circle which metals are to be analyzed

Total Metals: Al As Sb Ba Be B Ca Cd Co Cr Cu Fe Pb Mg Mn Mo Ni K Ag Na Se Sr Tl Sn V Zn Hg

Dissolved Metals: Al As Sb Ba Be B Ca Cd Co Cr Cu Fe Pb Mg Mn Mo Ni K Ag Na Se Sr Tl Sn V Zn Hg

Special Instructions/Comments: *As per contract

*Indicate State Hydrocarbon Procedure: AK CA WI Northwest Other_____(Circle One)

Relinquished By:	Received By:	Relinquished By:	Received By:	Relinquished By:	Received By:
Signature: Elizabeth Kercher	Signature: MC Delivery	Signature: MC Delivery	Signature: Kayla Smith	Signature	Signature
Printed Name: Elizabeth Kercher	Printed Name	Printed Name	Printed Name: Kayla Smith	Printed Name	Printed Name
Firm: Sealaska	Firm	Firm	Firm: ALS	Firm	Firm
Date/Time: 9/26/14 1000	Date/Time	Date/Time	Date/Time: 9/26/14 1130	Date/Time	Date/Time

ALS Environmental

CHAIN OF CUSTODY
52766

001

SR# K1411227
COC Set 3 of 5
COC#

1317 South 13th Ave, Kelso, WA 98626 Phone (360) 577-7222 / 800-695-7222 / FAX (360) 636-1068
www.alsglobal.com

Project Name: 10 01 JBLM
Project Number:
Project Manager: Scott Elkind
Company: Sealaska ENV
Address: 18743 Front St. Ste 201 Poulsbo WA
Phone #: 360 930-3187
email: Scott.Elkind@Sealaska.com
Sampler Signature: Eliz Kercher
Sampler Printed Name: Elizabeth Kercher

CLIENT SAMPLE ID	LABID	SAMPLING Date Time	Matrix	NUMBER OF CONTAINERS	6H SM 9221 B / Tot Coli MT	48H 300.0 / NO2	300.0 / NO3	300.0 / NO3 Diss	SM 5210 B / BOD 5 Day	7D SM 2540 C / TDS	14D 8260C / VOC FP	NWTPH-Dx / NW_TPH	NWTPH-Gx / NW_GAS	SM 2320 B / Alkalinity D	SM 2320 B / Bicarb Alk	SM 4500-CN- E / CN T	28D 300.0 / Cl D	300.0 / SO4 D	353.2 / NO2 NO3 T	9060 / TOC T	SM 4500-NH3 G / Ammonia	SM 5220 C / COD T	180D 200.7 / Metals D	200.7 / Metals T	1	2	3	Remarks
1 LGC140925SLAP1-1		9/25/14 1153	GW	3							3																	
2 ~~LGC140925SLAP3-1~~		~~9/25/14 1142~~	~~GW~~	~~3~~							~~3~~																	
3 ~~LGC140925SLAP4-1~~		~~9/25/14 1129~~	~~GW~~	~~3~~							~~3~~																	
4 ~~LGC140925SLAP5-1~~		~~9/25/14 1122~~	~~GW~~	~~3~~							~~3~~																	
5 ~~LGC140925SLAP6-1~~		~~9/25/14 0945~~	~~GW~~	~~3~~							~~3~~																	
6 LGC140925SLAPE-1		9/25/14 0933	GW	3							3																	
7 LGC140925SLAPE-1		9/25/14 0935	GW	3							3																	
8 LGC140925MAMC3-1		9/25/14 1022	GW	3							3																	
9 LGC140925MAMC4-1		9/25/14 1031	GW	3							3																	
10.		RMT																										

Report Requirements

___ I. Routine Report: Method Blank, Surrogate, as required
___ II. Report Dup., MS, MSD as required
___ III. CLP Like Summary (no raw data)
___ IV. Data Validation Report
___ V. EDD

Invoice Information
P.O.#
Bill To:

Turnaround Requirements
___ 24 hr. ___ 48 hr.
___ 5 Day
___ Standard

Requested Report Date

Circle which metals are to be analyzed

Total Metals: Al As Sb Ba Be B Ca Cd Co Cr Cu Fe Pb Mg Mn Mo Ni K Ag Na Se Sr Tl Sn V Zn Hg

Dissolved Metals: Al As Sb Ba Be B Ca Cd Co Cr Cu Fe Pb Mg Mn Mo Ni K Ag Na Se Sr Tl Sn V Zn Hg

Special Instructions/Comments:

*Indicate State Hydrocarbon Procedure: AK CA WI Northwest Other_____(Circle One)

Relinquished By:	Received By:	Relinquished By:	Received By:	Relinquished By:	Received By:
Signature: Eliz P. Kercher	Signature: MC Delivery	Signature: MC Delivery	Signature: Karla Smith	Signature	Signature
Printed Name: Elizabeth Kercher	Printed Name	Printed Name	Printed Name: ALS	Printed Name	Printed Name
Firm: Sealaska	Firm	Firm	Firm: 9/26/14 1130	Firm	Firm
Date/Time: 9/26/14 1000	Date/Time	Date/Time	Date/Time	Date/Time	Date/Time

ALS Environmental

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52766

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SR# N1410527 BTK
COC Set 4 of 5
COC#

1317 South 13th Ave, Kelso, WA 98626 Phone (360) 577-7222 / 800-695-7222 / FAX (360) 636-1068
www.alsglobal.com

Project Name: TO01 JBLM
Project Number:
Project Manager: Scott Elkind
Company: Seaska ENV
Address: 18743 Front St NE Ste 201 Poulsbo WA
Phone #: 360.930.3187
email: scott.elkind@sealask.com
Sampler Signature: Eliz Kercher
Sampler Printed Name: Elizabeth Kercher

CLIENT SAMPLE ID	LABID	SAMPLING Date Time	Matrix	NUMBER OF CONTAINERS	6H: SM 9221 B / Tot Coli MT	48H: 300.0 / NO2	48H: 300.0 / NO3	48H: 300.0 / NO3 Diss	48H: SM 5210 B / BOD 5 Day	7D: SM 2540 C / TDS	14D: 8260C VOC FP	14D: NWTPH-Dx / NW_TPH	14D: NWTPH-Gx / NW_GAS	14D: SM 2320 B / Alkalinity D	14D: SM 2320 B / Bicarb Alk	14D: SM 4500-CN- E / CN T	28D: 300.0 / Cl D	28D: 300.0 / SO4 D	28D: 353.2 / NO2 NO3 T	28D: 9060 / TOC T	28D: SM 4500-NH3 G / Ammonia	28D: SM 5220 C / COD T	180D: 200.7 / Metals D	180D: 200.7 / Metals T	1	2	3	Remarks
1. LGC140925DUP7-1		9/25/14 1508	GW	3							3																	
2. LGC140925LC99D-1		9/25/14 1150	GW	3							3																	
3. LGC140925LC74D-1		9/25/14 1140	GW	3							3																	
4. LGC140925LC96D-1		9/25/14 1117	GW	3							3																	
5. LGC140925SIAP6-1		9/25/14 0945	GW	3							3																	
6. TB092514		092514 0800	~~8~~ GW	3							3																	
7.																												
8.																												
9.																												
10.																												

Report Requirements

___ I. Routine Report: Method Blank, Surrogate, as required
___ II. Report Dup., MS, MSD as required
___ III. CLP Like Summary (no raw data)
___ IV. Data Validation Report
___ V. EDD

Invoice Information

P.O.#_____
Bill To:_____

Turnaround Requirements

___ 24 hr. ___ 48 hr.
___ 5 Day
___ Standard

Requested Report Date

Circle which metals are to be analyzed

Total Metals: Al As Sb Ba Be B Ca Cd Co Cr Cu Fe Pb Mg Mn Mo Ni K Ag Na Se Sr Tl Sn V Zn Hg

Dissolved Metals: Al As Sb Ba Be B Ca Cd Co Cr Cu Fe Pb Mg Mn Mo Ni K Ag Na Se Sr Tl Sn V Zn Hg

Special Instructions/Comments:

*Indicate State Hydrocarbon Procedure: AK CA WI Northwest Other_____(Circle One)

Relinquished By:	Received By:	Relinquished By:	Received By:	Relinquished By:	Received By:
Signature: Eliz P. Kercher	Signature: MC Delivery	Signature: MC Delivery	Signature: Karla Smith	Signature	Signature
Printed Name: Elizabeth Kercher	Printed Name	Printed Name	Printed Name: ALS	Printed Name	Printed Name
Firm: Sealaska	Firm	Firm	Firm: 9/26/14 1130	Firm	Firm
Date/Time: 9/26/14 1000	Date/Time	Date/Time	Date/Time	Date/Time	Date/Time

ALS Environmental

CHAIN OF CUSTODY
52766

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SR# K1410537

COC Set 5 of 5

COC# _____

1317 South 13th Ave, Kelso, WA 98626 Phone (360) 577-7222 / 800-695-7222 / FAX (360) 636-1068
www.alsglobal.com

Project Name: 7801 JBLM | Project Number:

Project Manager: Scott Elkind

Company: Seelaska ENV.

Address: 18743 Front St. NE Ste 201 Poulsbo

Phone #: 360.930.3187 | email: Scott.elkind@seelaska.com

Sampler Signature: Elizabeth Kercher | Sampler Printed Name: Elizabeth Kercher

CLIENT SAMPLE ID	LABID	SAMPLING Date	Time	Matrix	NUMBER OF CONTAINERS	6H	48H				7D	14D						28D							180D					Remarks
						SM 9221 B / Tot Coli MT	300.0 / NO2	300.0 / NO3	300.0 / NO3 Diss	SM 5210 B / BOD 5 Day	SM 2540 C / TDS	8260C / VOC FP	NWTPH-Dx / NW_TPH	NWTPH-Gx / NW_GAS	SM 2320 B / Alkalinity D	SM 2320 B / Bicarb Alk	SM 4500-CN- E / CN T	300.0 / Cl D	300.0 / SO4 D	353.2 / NO2 NO3 T	9060 / TOC T	SM 4500-NH3 G / Ammonia	SM 5220 C / COD T	200.7 / Metals D	200.7 / Metals T	1	2	3	
1 LGC140925EGDYPW1-1		9/25/14	1411	GW	3							3																	
2 LGC140925EGDYPW2-1		9/25/14	1428	GW	3							3																	
3 LGC140925EGDYPW3-1		9/25/14	1435	GW	3							3																	
4 LGC140925EGDYPW4-1		9/25/14	1441	GW	3							3																	
5 LGC140925EGDYPW5-1		9/25/14	1448	GW	3							3																	
6 LGC140925EGDYPW6-1		9/25/14	1452	GW	3							3																	
7 LGC140925EGDYPW7-1		9/25/14	1455	GW	3							3																	
8 LGC140925EGDYPW8-1		9/25/14	1500	GW	3							3																	
9 LGC140925EGDYE-1		9/25/14	1628	GW	3							3																	
10 LGC140925EGDYE-1		9/25/14	1628	GW	3							3																	

Report Requirements

___ I. Routine Report: Method Blank, Surrogate, as required

___ II. Report Dup., MS, MSD as required

___ III. CLP Like Summary (no raw data)

___ IV. Data Validation Report

___ V. EDD

Invoice Information

P.O.# _____

Bill To: _____

Turnaround Requirements

___ 24 hr. ___ 48 hr.

___ 5 Day

___ Standard

Requested Report Date

Circle which metals are to be analyzed

Total Metals: Al As Sb Ba Be B Ca Cd Co Cr Cu Fe Pb Mg Mn Mo Ni K Ag Na Se Sr Tl Sn V Zn Hg

Dissolved Metals: Al As Sb Ba Be B Ca Cd Co Cr Cu Fe Pb Mg Mn Mo Ni K Ag Na Se Sr Tl Sn V Zn Hg

Special Instructions/Comments:

*Indicate State Hydrocarbon Procedure: AK CA WI Northwest Other_____(Circle One)

Relinquished By:	Received By:	Relinquished By:	Received By:	Relinquished By:	Received By:
Signature: Elizabeth P. Kercher	Signature: MC Delivery	Signature: MC Delivery	Signature: Karla Smith	Signature:	Signature:
Printed Name: Seelaska	Printed Name:	Printed Name:	Printed Name: Karla Smith	Printed Name:	Printed Name:
Firm: Seelaska	Firm:	Firm:	Firm: ALS	Firm:	Firm:
Date/Time: 9/26/14 1000	Date/Time:	Date/Time:	Date/Time: 9/26/14 1130	Date/Time:	Date/Time:

ALS

PC Greg

Cooler Receipt and Preservation Form

Client / Project: SEALASKA Service Request K14 10537

Received: 9/26/14 1130 Opened: 9/26/14 By: AL Unloaded: BK/19/26/14 By: BK/KG

1. Samples were received via? *Mail* *Fed Ex* *UPS* *DHL* *PDX* *Courier* *Hand Delivered* McDELIVERY
2. Samples were received in: (circle) *Cooler* *Box* *Envelope* *Other* _____ *NA*
3. Were custody seals on coolers? NA Y N If yes, how many and where? 1, Front 1, Back

   If present, were custody seals intact? Y N If present, were they signed and dated? Y N

Raw Cooler Temp	Corrected. Cooler Temp	Raw Temp Blank	Corrected Temp Blank	Corr. Factor	Thermometer ID	Cooler/COC ID NA	Tracking Number NA	Filed
2.7	2.9	3.9	4.1	0.2	347			✓
0.7	0.6	3.5	3.4	-.1	328			
-1.0	-1.1	0.3	0.2	-.1	298			
2.8	2.7	1.7	1.6	-.1	345			

4. Packing material: *Inserts* *Baggies* *Bubble Wrap* *Gel Packs* *Wet Ice* *Dry Ice* *Sleeves* CARDBOARD
5. Were custody papers properly filled out (ink, signed, etc.)? NA Y N
6. Did all bottles arrive in good condition (unbroken)? *Indicate in the table below.* NA Y N
7. Were all sample labels complete (i.e analysis, preservation, etc.)? NA Y N
8. Did all sample labels and tags agree with custody papers? *Indicate major discrepancies in the table on page 2.* NA Y N
9. Were appropriate bottles/containers and volumes received for the tests indicated? NA Y N
10. Were the pH-preserved bottles (*see SMO GEN SOP*) received at the appropriate pH? *Indicate in the table below* NA Y N
11. Were VOA vials received without headspace? *Indicate in the table below.* NA Y N
12. Was C12/Res negative? NA Y N

Sample ID on Bottle	Sample ID on COC	Identified by:
LGC140925EGDYDUP7-1	LGC140925DUP7-1	time

Sample ID	Bottle Count Bottle Type	Out of Temp	Head-space	Broke	pH	Reagent	Volume added	Reagent Lot Number	Initials	Time

Notes, Discrepancies, & Resolutions: * LGC140925SLAPI-1 is already on one of the chains (logged with the NWTPH-Dx job)

LGC140925SLAPE-1 time on container (0923 instead of 0933)

LGC140925EGDYE-1 time on container (1400 instead of 1629)

LGC140925EGDYI-1 time on container: 1350 instead of 1628

Rec'd only 2-voas for TB092514 instead of 3 on the COC.

Page ____ *of* ____

Volatile Organic Compounds

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360)577-7222 Fax (360)636-1068
www.alsglobal.com

Client: Sealaska Environmental Services, LLC **Service Request:** K1410537
Project: TO 01 JBLM

Cover Page - Organic Analysis Data Package
Volatile Organic Compounds

Sample Name	Lab Code	Date Collected	Date Received
LGC140925ISLX2-1	K1410537-001	09/25/2014	09/26/2014
LGC140925ISLX3-1	K1410537-002	09/25/2014	09/26/2014
LGC140925ISLX4-1	K1410537-003	09/25/2014	09/26/2014
LGC140925ISLX5-1	K1410537-004	09/25/2014	09/26/2014
LGC140925ISLX6-1	K1410537-005	09/25/2014	09/26/2014
LGC140925ISLX7-1	K1410537-006	09/25/2014	09/26/2014
LGC140925ISLX9-1	K1410537-007	09/25/2014	09/26/2014
LGC140925ISLX11-1	K1410537-008	09/25/2014	09/26/2014
LGC140925ISLX12-1	K1410537-009	09/25/2014	09/26/2014
LGC140925ISLX13-1	K1410537-010	09/25/2014	09/26/2014
LGC140925ISLX14-1	K1410537-011	09/25/2014	09/26/2014
LGC140925ISLX15-1	K1410537-012	09/25/2014	09/26/2014
LGC140925DUP6-1	K1410537-013	09/25/2014	09/26/2014
LGC140925ISI-1	K1410537-014	09/25/2014	09/26/2014
LGC140925ISE-1	K1410537-015	09/25/2014	09/26/2014
LGC140925SLAPE-1	K1410537-016	09/25/2014	09/26/2014
LGC140925SLAPI-1	K1410537-017	09/25/2014	09/26/2014
LGC140925MAMC3-1	K1410537-018	09/25/2014	09/26/2014
LGC140925MAMC4-1	K1410537-019	09/25/2014	09/26/2014
LGC140925DUP7-1	K1410537-020	09/25/2014	09/26/2014
LGC140925LC99D-1	K1410537-021	09/25/2014	09/26/2014
LGC140925LC74D-1	K1410537-022	09/25/2014	09/26/2014
LGC140925LC96D-1	K1410537-023	09/25/2014	09/26/2014
LGC140925SLAP6-1	K1410537-024	09/25/2014	09/26/2014
TB092514	K1410537-025	09/25/2014	09/26/2014
LGC140925EGDYPW1-1	K1410537-026	09/25/2014	09/26/2014
LGC140925EGDYPW2-1	K1410537-027	09/25/2014	09/26/2014
LGC140925EGDYPW3-1	K1410537-028	09/25/2014	09/26/2014
LGC140925EGDYPW4-1	K1410537-029	09/25/2014	09/26/2014
LGC140925EGDYPW5-1	K1410537-030	09/25/2014	09/26/2014
LGC140925EGDYPW6-1	K1410537-031	09/25/2014	09/26/2014
LGC140925EGDYPW7-1	K1410537-032	09/25/2014	09/26/2014
LGC140925EGDYPW8-1	K1410537-033	09/25/2014	09/26/2014
LGC140925EGDYE-1	K1410537-034	09/25/2014	09/26/2014
LGC140925EGDYI-1	K1410537-035	09/25/2014	09/26/2014
LGC140925SLAPI-1MS	KWG1413535-1	09/25/2014	09/26/2014
LGC140925SLAPI-1DMS	KWG1413535-2	09/25/2014	09/26/2014
LGC140925MAMC4-1MS	KWG1413599-4	09/25/2014	09/26/2014
LGC140925MAMC4-1DMS	KWG1413599-5	09/25/2014	09/26/2014

Analytical Results

Client: Sealaska Environmental Services, LLC
Project: TO 01 JBLM
Sample Matrix: Water

Service Request: K1410537
Date Collected: 09/25/2014
Date Received: 09/26/2014

Volatile Organic Compounds

Sample Name: LGC140925ISLX2-1
Lab Code: K1410537-001

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
Dichlorodifluoromethane	ND	U	0.50	0.20	0.13	1	10/07/14	10/07/14	KWG1413535	
Chloromethane	ND	U	0.50	0.20	0.068	1	10/07/14	10/07/14	KWG1413535	
Vinyl Chloride	ND	U	0.50	0.10	0.075	1	10/07/14	10/07/14	KWG1413535	
Bromomethane	ND	U	0.50	0.30	0.10	1	10/07/14	10/07/14	KWG1413535	
Chloroethane	ND	U	0.50	0.20	0.16	1	10/07/14	10/07/14	KWG1413535	
Trichlorofluoromethane	ND	U	0.50	0.20	0.12	1	10/07/14	10/07/14	KWG1413535	
1,1-Dichloroethene	ND	U	0.50	0.20	0.080	1	10/07/14	10/07/14	KWG1413535	
Acetone	ND	U	20	10	3.3	1	10/07/14	10/07/14	KWG1413535	*
Carbon Disulfide	ND	U	0.50	0.20	0.069	1	10/07/14	10/07/14	KWG1413535	*
Methylene Chloride	ND	U	2.0	0.20	0.10	1	10/07/14	10/07/14	KWG1413535	
Methyl tert-Butyl Ether	ND	U	0.50	0.30	0.11	1	10/07/14	10/07/14	KWG1413535	
trans-1,2-Dichloroethene	ND	U	0.50	0.20	0.072	1	10/07/14	10/07/14	KWG1413535	
1,1-Dichloroethane	ND	U	0.50	0.20	0.077	1	10/07/14	10/07/14	KWG1413535	
2,2-Dichloropropane	ND	U	0.50	0.20	0.060	1	10/07/14	10/07/14	KWG1413535	*
cis-1,2-Dichloroethene	**0.15**	J	0.50	0.20	0.067	1	10/07/14	10/07/14	KWG1413535	
2-Butanone (MEK)	ND	U	20	4.0	1.9	1	10/07/14	10/07/14	KWG1413535	
Bromochloromethane	ND	U	0.50	0.20	0.16	1	10/07/14	10/07/14	KWG1413535	
Chloroform	ND	U	0.50	0.20	0.072	1	10/07/14	10/07/14	KWG1413535	
1,1,1-Trichloroethane (TCA)	ND	U	0.50	0.20	0.075	1	10/07/14	10/07/14	KWG1413535	
Carbon Tetrachloride	ND	U	0.50	0.20	0.096	1	10/07/14	10/07/14	KWG1413535	
1,1-Dichloropropene	ND	U	0.50	0.20	0.089	1	10/07/14	10/07/14	KWG1413535	
Benzene	ND	U	0.50	0.10	0.062	1	10/07/14	10/07/14	KWG1413535	
1,2-Dichloroethane (EDC)	ND	U	0.50	0.15	0.080	1	10/07/14	10/07/14	KWG1413535	
Trichloroethene (TCE)	**5.5**		0.50	0.10	0.10	1	10/07/14	10/07/14	KWG1413535	
1,2-Dichloropropane	ND	U	0.50	0.20	0.095	1	10/07/14	10/07/14	KWG1413535	
Dibromomethane	ND	U	0.50	0.50	0.15	1	10/07/14	10/07/14	KWG1413535	
Bromodichloromethane	ND	U	0.50	0.30	0.091	1	10/07/14	10/07/14	KWG1413535	
cis-1,3-Dichloropropene	ND	U	0.50	0.20	0.18	1	10/07/14	10/07/14	KWG1413535	
4-Methyl-2-pentanone (MIBK)	ND	U	20	10	2.6	1	10/07/14	10/07/14	KWG1413535	
Toluene	ND	U	0.50	0.10	0.054	1	10/07/14	10/07/14	KWG1413535	
trans-1,3-Dichloropropene	ND	U	0.50	0.20	0.068	1	10/07/14	10/07/14	KWG1413535	*
1,1,2-Trichloroethane	ND	U	0.50	0.40	0.14	1	10/07/14	10/07/14	KWG1413535	
Tetrachloroethene (PCE)	ND	U	0.50	0.20	0.099	1	10/07/14	10/07/14	KWG1413535	

Comments:

Analytical Results

Client: Sealaska Environmental Services, LLC
Project: TO 01 JBLM
Sample Matrix: Water

Service Request: K1410537
Date Collected: 09/25/2014
Date Received: 09/26/2014

Volatile Organic Compounds

Sample Name: LGC140925ISLX2-1
Lab Code: K1410537-001

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
2-Hexanone	ND	U	20	10	2.7	1	10/07/14	10/07/14	KWG1413535	
1,3-Dichloropropane	ND	U	0.50	0.30	0.14	1	10/07/14	10/07/14	KWG1413535	
Dibromochloromethane	ND	U	0.50	0.50	0.14	1	10/07/14	10/07/14	KWG1413535	
1,2-Dibromoethane (EDB)	ND	U	2.0	0.20	0.10	1	10/07/14	10/07/14	KWG1413535	
Chlorobenzene	ND	U	0.50	0.20	0.11	1	10/07/14	10/07/14	KWG1413535	
Ethylbenzene	ND	U	0.50	0.10	0.050	1	10/07/14	10/07/14	KWG1413535	
1,1,1,2-Tetrachloroethane	ND	U	0.50	0.20	0.11	1	10/07/14	10/07/14	KWG1413535	
m,p-Xylenes	ND	U	0.50	0.20	0.11	1	10/07/14	10/07/14	KWG1413535	
o-Xylene	ND	U	0.50	0.20	0.074	1	10/07/14	10/07/14	KWG1413535	
Styrene	ND	U	0.50	0.20	0.089	1	10/07/14	10/07/14	KWG1413535	
Bromoform	ND	U	0.50	0.50	0.16	1	10/07/14	10/07/14	KWG1413535	
Isopropylbenzene	ND	U	2.0	0.20	0.051	1	10/07/14	10/07/14	KWG1413535	
1,1,2,2-Tetrachloroethane	ND	U	0.50	0.20	0.16	1	10/07/14	10/07/14	KWG1413535	
Bromobenzene	ND	U	2.0	0.20	0.12	1	10/07/14	10/07/14	KWG1413535	
n-Propylbenzene	ND	U	2.0	0.20	0.054	1	10/07/14	10/07/14	KWG1413535	
1,2,3-Trichloropropane	ND	U	0.50	0.50	0.20	1	10/07/14	10/07/14	KWG1413535	
2-Chlorotoluene	ND	U	2.0	0.20	0.10	1	10/07/14	10/07/14	KWG1413535	
1,3,5-Trimethylbenzene	ND	U	2.0	0.20	0.089	1	10/07/14	10/07/14	KWG1413535	
4-Chlorotoluene	ND	U	2.0	0.20	0.13	1	10/07/14	10/07/14	KWG1413535	
tert-Butylbenzene	ND	U	2.0	0.20	0.059	1	10/07/14	10/07/14	KWG1413535	
1,2,4-Trimethylbenzene	ND	U	2.0	0.20	0.069	1	10/07/14	10/07/14	KWG1413535	
sec-Butylbenzene	ND	U	2.0	0.10	0.062	1	10/07/14	10/07/14	KWG1413535	
4-Isopropyltoluene	ND	U	2.0	0.20	0.060	1	10/07/14	10/07/14	KWG1413535	
1,3-Dichlorobenzene	ND	U	0.50	0.20	0.10	1	10/07/14	10/07/14	KWG1413535	
1,4-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	10/07/14	10/07/14	KWG1413535	
n-Butylbenzene	ND	U	2.0	0.10	0.054	1	10/07/14	10/07/14	KWG1413535	
1,2-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	10/07/14	10/07/14	KWG1413535	
1,2-Dibromo-3-chloropropane	ND	U	2.0	0.80	0.20	1	10/07/14	10/07/14	KWG1413535	
1,2,4-Trichlorobenzene	ND	U	2.0	0.30	0.096	1	10/07/14	10/07/14	KWG1413535	
Hexachlorobutadiene	ND	U	2.0	0.30	0.11	1	10/07/14	10/07/14	KWG1413535	
Naphthalene	ND	U	2.0	0.30	0.088	1	10/07/14	10/07/14	KWG1413535	
1,2,3-Trichlorobenzene	ND	U	2.0	0.40	0.11	1	10/07/14	10/07/14	KWG1413535	

* See Case Narrative

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1410537
Project:	TO 01 JBLM	**Date Collected:**	09/25/2014
Sample Matrix:	Water	**Date Received:**	09/26/2014

Volatile Organic Compounds

Sample Name:	LGC140925ISLX2-1	**Units:**	ug/L
Lab Code:	K1410537-001	**Basis:**	NA

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Dibromofluoromethane	95	85-115	10/07/14	Acceptable
1,2-Dichloroethane-d4	112	70-120	10/07/14	Acceptable
Toluene-d8	95	85-120	10/07/14	Acceptable
4-Bromofluorobenzene	92	75-120	10/07/14	Acceptable

Comments:

Analytical Results

Client: Sealaska Environmental Services, LLC
Project: TO 01 JBLM
Sample Matrix: Water

Service Request: K1410537
Date Collected: 09/25/2014
Date Received: 09/26/2014

Volatile Organic Compounds

Sample Name: LGC140925ISLX3-1
Lab Code: K1410537-002

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
Dichlorodifluoromethane	ND	U	0.50	0.20	0.13	1	10/07/14	10/07/14	KWG1413535	
Chloromethane	ND	U	0.50	0.20	0.068	1	10/07/14	10/07/14	KWG1413535	
Vinyl Chloride	ND	U	0.50	0.10	0.075	1	10/07/14	10/07/14	KWG1413535	
Bromomethane	ND	U	0.50	0.30	0.10	1	10/07/14	10/07/14	KWG1413535	
Chloroethane	ND	U	0.50	0.20	0.16	1	10/07/14	10/07/14	KWG1413535	
Trichlorofluoromethane	ND	U	0.50	0.20	0.12	1	10/07/14	10/07/14	KWG1413535	
1,1-Dichloroethene	ND	U	0.50	0.20	0.080	1	10/07/14	10/07/14	KWG1413535	
Acetone	ND	U	20	10	3.3	1	10/07/14	10/07/14	KWG1413535	*
Carbon Disulfide	ND	U	0.50	0.20	0.069	1	10/07/14	10/07/14	KWG1413535	*
Methylene Chloride	ND	U	2.0	0.20	0.10	1	10/07/14	10/07/14	KWG1413535	
Methyl tert-Butyl Ether	ND	U	0.50	0.30	0.11	1	10/07/14	10/07/14	KWG1413535	
trans-1,2-Dichloroethene	ND	U	0.50	0.20	0.072	1	10/07/14	10/07/14	KWG1413535	
1,1-Dichloroethane	ND	U	0.50	0.20	0.077	1	10/07/14	10/07/14	KWG1413535	
2,2-Dichloropropane	ND	U	0.50	0.20	0.060	1	10/07/14	10/07/14	KWG1413535	*
cis-1,2-Dichloroethene	**0.53**		0.50	0.20	0.067	1	10/07/14	10/07/14	KWG1413535	
2-Butanone (MEK)	ND	U	20	4.0	1.9	1	10/07/14	10/07/14	KWG1413535	
Bromochloromethane	ND	U	0.50	0.20	0.16	1	10/07/14	10/07/14	KWG1413535	
Chloroform	**0.080**	J	0.50	0.20	0.072	1	10/07/14	10/07/14	KWG1413535	
1,1,1-Trichloroethane (TCA)	**0.19**	J	0.50	0.20	0.075	1	10/07/14	10/07/14	KWG1413535	
Carbon Tetrachloride	**0.12**	J	0.50	0.20	0.096	1	10/07/14	10/07/14	KWG1413535	
1,1-Dichloropropene	ND	U	0.50	0.20	0.089	1	10/07/14	10/07/14	KWG1413535	
Benzene	ND	U	0.50	0.10	0.062	1	10/07/14	10/07/14	KWG1413535	
1,2-Dichloroethane (EDC)	ND	U	0.50	0.15	0.080	1	10/07/14	10/07/14	KWG1413535	
Trichloroethene (TCE)	**12**		0.50	0.10	0.10	1	10/07/14	10/07/14	KWG1413535	
1,2-Dichloropropane	ND	U	0.50	0.20	0.095	1	10/07/14	10/07/14	KWG1413535	
Dibromomethane	ND	U	0.50	0.50	0.15	1	10/07/14	10/07/14	KWG1413535	
Bromodichloromethane	ND	U	0.50	0.30	0.091	1	10/07/14	10/07/14	KWG1413535	
cis-1,3-Dichloropropene	ND	U	0.50	0.20	0.18	1	10/07/14	10/07/14	KWG1413535	
4-Methyl-2-pentanone (MIBK)	ND	U	20	10	2.6	1	10/07/14	10/07/14	KWG1413535	
Toluene	ND	U	0.50	0.10	0.054	1	10/07/14	10/07/14	KWG1413535	
trans-1,3-Dichloropropene	ND	U	0.50	0.20	0.068	1	10/07/14	10/07/14	KWG1413535	*
1,1,2-Trichloroethane	ND	U	0.50	0.40	0.14	1	10/07/14	10/07/14	KWG1413535	
Tetrachloroethene (PCE)	ND	U	0.50	0.20	0.099	1	10/07/14	10/07/14	KWG1413535	

Comments:

Analytical Results

Client: Sealaska Environmental Services, LLC
Project: TO 01 JBLM
Sample Matrix: Water

Service Request: K1410537
Date Collected: 09/25/2014
Date Received: 09/26/2014

Volatile Organic Compounds

Sample Name: LGC140925ISLX3-1
Lab Code: K1410537-002

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
2-Hexanone	ND	U	20	10	2.7	1	10/07/14	10/07/14	KWG1413535	
1,3-Dichloropropane	ND	U	0.50	0.30	0.14	1	10/07/14	10/07/14	KWG1413535	
Dibromochloromethane	ND	U	0.50	0.50	0.14	1	10/07/14	10/07/14	KWG1413535	
1,2-Dibromoethane (EDB)	ND	U	2.0	0.20	0.10	1	10/07/14	10/07/14	KWG1413535	
Chlorobenzene	ND	U	0.50	0.20	0.11	1	10/07/14	10/07/14	KWG1413535	
Ethylbenzene	ND	U	0.50	0.10	0.050	1	10/07/14	10/07/14	KWG1413535	
1,1,1,2-Tetrachloroethane	ND	U	0.50	0.20	0.11	1	10/07/14	10/07/14	KWG1413535	
m,p-Xylenes	ND	U	0.50	0.20	0.11	1	10/07/14	10/07/14	KWG1413535	
o-Xylene	ND	U	0.50	0.20	0.074	1	10/07/14	10/07/14	KWG1413535	
Styrene	ND	U	0.50	0.20	0.089	1	10/07/14	10/07/14	KWG1413535	
Bromoform	ND	U	0.50	0.50	0.16	1	10/07/14	10/07/14	KWG1413535	
Isopropylbenzene	ND	U	2.0	0.20	0.051	1	10/07/14	10/07/14	KWG1413535	
1,1,2,2-Tetrachloroethane	ND	U	0.50	0.20	0.16	1	10/07/14	10/07/14	KWG1413535	
Bromobenzene	ND	U	2.0	0.20	0.12	1	10/07/14	10/07/14	KWG1413535	
n-Propylbenzene	ND	U	2.0	0.20	0.054	1	10/07/14	10/07/14	KWG1413535	
1,2,3-Trichloropropane	ND	U	0.50	0.50	0.20	1	10/07/14	10/07/14	KWG1413535	
2-Chlorotoluene	ND	U	2.0	0.20	0.10	1	10/07/14	10/07/14	KWG1413535	
1,3,5-Trimethylbenzene	ND	U	2.0	0.20	0.089	1	10/07/14	10/07/14	KWG1413535	
4-Chlorotoluene	ND	U	2.0	0.20	0.13	1	10/07/14	10/07/14	KWG1413535	
tert-Butylbenzene	ND	U	2.0	0.20	0.059	1	10/07/14	10/07/14	KWG1413535	
1,2,4-Trimethylbenzene	ND	U	2.0	0.20	0.069	1	10/07/14	10/07/14	KWG1413535	
sec-Butylbenzene	ND	U	2.0	0.10	0.062	1	10/07/14	10/07/14	KWG1413535	
4-Isopropyltoluene	ND	U	2.0	0.20	0.060	1	10/07/14	10/07/14	KWG1413535	
1,3-Dichlorobenzene	ND	U	0.50	0.20	0.10	1	10/07/14	10/07/14	KWG1413535	
1,4-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	10/07/14	10/07/14	KWG1413535	
n-Butylbenzene	ND	U	2.0	0.10	0.054	1	10/07/14	10/07/14	KWG1413535	
1,2-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	10/07/14	10/07/14	KWG1413535	
1,2-Dibromo-3-chloropropane	ND	U	2.0	0.80	0.20	1	10/07/14	10/07/14	KWG1413535	
1,2,4-Trichlorobenzene	ND	U	2.0	0.30	0.096	1	10/07/14	10/07/14	KWG1413535	
Hexachlorobutadiene	ND	U	2.0	0.30	0.11	1	10/07/14	10/07/14	KWG1413535	
Naphthalene	ND	U	2.0	0.30	0.088	1	10/07/14	10/07/14	KWG1413535	
1,2,3-Trichlorobenzene	ND	U	2.0	0.40	0.11	1	10/07/14	10/07/14	KWG1413535	

* See Case Narrative

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1410537
Project:	TO 01 JBLM	**Date Collected:**	09/25/2014
Sample Matrix:	Water	**Date Received:**	09/26/2014

Volatile Organic Compounds

Sample Name:	LGC140925ISLX3-1	**Units:**	ug/L
Lab Code:	K1410537-002	**Basis:**	NA

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Dibromofluoromethane	98	85-115	10/07/14	Acceptable
1,2-Dichloroethane-d4	110	70-120	10/07/14	Acceptable
Toluene-d8	97	85-120	10/07/14	Acceptable
4-Bromofluorobenzene	90	75-120	10/07/14	Acceptable

Comments:

Analytical Results

Client: Sealaska Environmental Services, LLC
Project: TO 01 JBLM
Sample Matrix: Water

Service Request: K1410537
Date Collected: 09/25/2014
Date Received: 09/26/2014

Volatile Organic Compounds

Sample Name: LGC140925ISLX4-1
Lab Code: K1410537-003

Units: ug/L
Basis: NA

Extraction Method: EPA 5030B
Analysis Method: 8260C

Level: Low

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Dichlorodifluoromethane	ND	U	0.50	0.20	0.13	1	10/07/14	10/07/14	KWG1413535	
Chloromethane	ND	U	0.50	0.20	0.068	1	10/07/14	10/07/14	KWG1413535	
Vinyl Chloride	ND	U	0.50	0.10	0.075	1	10/07/14	10/07/14	KWG1413535	
Bromomethane	ND	U	0.50	0.30	0.10	1	10/07/14	10/07/14	KWG1413535	
Chloroethane	ND	U	0.50	0.20	0.16	1	10/07/14	10/07/14	KWG1413535	
Trichlorofluoromethane	ND	U	0.50	0.20	0.12	1	10/07/14	10/07/14	KWG1413535	
1,1-Dichloroethene	ND	U	0.50	0.20	0.080	1	10/07/14	10/07/14	KWG1413535	
Acetone	ND	U	20	10	3.3	1	10/07/14	10/07/14	KWG1413535	*
Carbon Disulfide	ND	U	0.50	0.20	0.069	1	10/07/14	10/07/14	KWG1413535	*
Methylene Chloride	ND	U	2.0	0.20	0.10	1	10/07/14	10/07/14	KWG1413535	
Methyl tert-Butyl Ether	ND	U	0.50	0.30	0.11	1	10/07/14	10/07/14	KWG1413535	
trans-1,2-Dichloroethene	ND	U	0.50	0.20	0.072	1	10/07/14	10/07/14	KWG1413535	
1,1-Dichloroethane	ND	U	0.50	0.20	0.077	1	10/07/14	10/07/14	KWG1413535	
2,2-Dichloropropane	ND	U	0.50	0.20	0.060	1	10/07/14	10/07/14	KWG1413535	*
cis-1,2-Dichloroethene	**0.65**		0.50	0.20	0.067	1	10/07/14	10/07/14	KWG1413535	
2-Butanone (MEK)	ND	U	20	4.0	1.9	1	10/07/14	10/07/14	KWG1413535	
Bromochloromethane	ND	U	0.50	0.20	0.16	1	10/07/14	10/07/14	KWG1413535	
Chloroform	**0.15**	J	0.50	0.20	0.072	1	10/07/14	10/07/14	KWG1413535	
1,1,1-Trichloroethane (TCA)	**0.45**	J	0.50	0.20	0.075	1	10/07/14	10/07/14	KWG1413535	
Carbon Tetrachloride	ND	U	0.50	0.20	0.096	1	10/07/14	10/07/14	KWG1413535	
1,1-Dichloropropene	ND	U	0.50	0.20	0.089	1	10/07/14	10/07/14	KWG1413535	
Benzene	ND	U	0.50	0.10	0.062	1	10/07/14	10/07/14	KWG1413535	
1,2-Dichloroethane (EDC)	ND	U	0.50	0.15	0.080	1	10/07/14	10/07/14	KWG1413535	
Trichloroethene (TCE)	**28**		0.50	0.10	0.10	1	10/07/14	10/07/14	KWG1413535	
1,2-Dichloropropane	ND	U	0.50	0.20	0.095	1	10/07/14	10/07/14	KWG1413535	
Dibromomethane	ND	U	0.50	0.50	0.15	1	10/07/14	10/07/14	KWG1413535	
Bromodichloromethane	ND	U	0.50	0.30	0.091	1	10/07/14	10/07/14	KWG1413535	
cis-1,3-Dichloropropene	ND	U	0.50	0.20	0.18	1	10/07/14	10/07/14	KWG1413535	
4-Methyl-2-pentanone (MIBK)	ND	U	20	10	2.6	1	10/07/14	10/07/14	KWG1413535	
Toluene	ND	U	0.50	0.10	0.054	1	10/07/14	10/07/14	KWG1413535	
trans-1,3-Dichloropropene	ND	U	0.50	0.20	0.068	1	10/07/14	10/07/14	KWG1413535	*
1,1,2-Trichloroethane	ND	U	0.50	0.40	0.14	1	10/07/14	10/07/14	KWG1413535	
Tetrachloroethene (PCE)	ND	U	0.50	0.20	0.099	1	10/07/14	10/07/14	KWG1413535	

Comments:

Analytical Results

Client: Sealaska Environmental Services, LLC
Project: TO 01 JBLM
Sample Matrix: Water

Service Request: K1410537
Date Collected: 09/25/2014
Date Received: 09/26/2014

Volatile Organic Compounds

Sample Name: LGC140925ISLX4-1
Lab Code: K1410537-003

Units: ug/L
Basis: NA

Extraction Method: EPA 5030B
Analysis Method: 8260C

Level: Low

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
2-Hexanone	ND	U	20	10	2.7	1	10/07/14	10/07/14	KWG1413535	
1,3-Dichloropropane	ND	U	0.50	0.30	0.14	1	10/07/14	10/07/14	KWG1413535	
Dibromochloromethane	ND	U	0.50	0.50	0.14	1	10/07/14	10/07/14	KWG1413535	
1,2-Dibromoethane (EDB)	ND	U	2.0	0.20	0.10	1	10/07/14	10/07/14	KWG1413535	
Chlorobenzene	ND	U	0.50	0.20	0.11	1	10/07/14	10/07/14	KWG1413535	
Ethylbenzene	ND	U	0.50	0.10	0.050	1	10/07/14	10/07/14	KWG1413535	
1,1,1,2-Tetrachloroethane	ND	U	0.50	0.20	0.11	1	10/07/14	10/07/14	KWG1413535	
m,p-Xylenes	ND	U	0.50	0.20	0.11	1	10/07/14	10/07/14	KWG1413535	
o-Xylene	ND	U	0.50	0.20	0.074	1	10/07/14	10/07/14	KWG1413535	
Styrene	ND	U	0.50	0.20	0.089	1	10/07/14	10/07/14	KWG1413535	
Bromoform	ND	U	0.50	0.50	0.16	1	10/07/14	10/07/14	KWG1413535	
Isopropylbenzene	ND	U	2.0	0.20	0.051	1	10/07/14	10/07/14	KWG1413535	
1,1,2,2-Tetrachloroethane	ND	U	0.50	0.20	0.16	1	10/07/14	10/07/14	KWG1413535	
Bromobenzene	ND	U	2.0	0.20	0.12	1	10/07/14	10/07/14	KWG1413535	
n-Propylbenzene	ND	U	2.0	0.20	0.054	1	10/07/14	10/07/14	KWG1413535	
1,2,3-Trichloropropane	ND	U	0.50	0.50	0.20	1	10/07/14	10/07/14	KWG1413535	
2-Chlorotoluene	ND	U	2.0	0.20	0.10	1	10/07/14	10/07/14	KWG1413535	
1,3,5-Trimethylbenzene	ND	U	2.0	0.20	0.089	1	10/07/14	10/07/14	KWG1413535	
4-Chlorotoluene	ND	U	2.0	0.20	0.13	1	10/07/14	10/07/14	KWG1413535	
tert-Butylbenzene	ND	U	2.0	0.20	0.059	1	10/07/14	10/07/14	KWG1413535	
1,2,4-Trimethylbenzene	ND	U	2.0	0.20	0.069	1	10/07/14	10/07/14	KWG1413535	
sec-Butylbenzene	ND	U	2.0	0.10	0.062	1	10/07/14	10/07/14	KWG1413535	
4-Isopropyltoluene	ND	U	2.0	0.20	0.060	1	10/07/14	10/07/14	KWG1413535	
1,3-Dichlorobenzene	ND	U	0.50	0.20	0.10	1	10/07/14	10/07/14	KWG1413535	
1,4-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	10/07/14	10/07/14	KWG1413535	
n-Butylbenzene	ND	U	2.0	0.10	0.054	1	10/07/14	10/07/14	KWG1413535	
1,2-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	10/07/14	10/07/14	KWG1413535	
1,2-Dibromo-3-chloropropane	ND	U	2.0	0.80	0.20	1	10/07/14	10/07/14	KWG1413535	
1,2,4-Trichlorobenzene	ND	U	2.0	0.30	0.096	1	10/07/14	10/07/14	KWG1413535	
Hexachlorobutadiene	ND	U	2.0	0.30	0.11	1	10/07/14	10/07/14	KWG1413535	
Naphthalene	ND	U	2.0	0.30	0.088	1	10/07/14	10/07/14	KWG1413535	
1,2,3-Trichlorobenzene	ND	U	2.0	0.40	0.11	1	10/07/14	10/07/14	KWG1413535	

* See Case Narrative

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1410537
Project:	TO 01 JBLM	**Date Collected:**	09/25/2014
Sample Matrix:	Water	**Date Received:**	09/26/2014

Volatile Organic Compounds

Sample Name:	LGC140925ISLX4-1	**Units:**	ug/L
Lab Code:	K1410537-003	**Basis:**	NA

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Dibromofluoromethane	95	85-115	10/07/14	Acceptable
1,2-Dichloroethane-d4	111	70-120	10/07/14	Acceptable
Toluene-d8	94	85-120	10/07/14	Acceptable
4-Bromofluorobenzene	91	75-120	10/07/14	Acceptable

Comments:

Analytical Results

Client: Sealaska Environmental Services, LLC
Project: TO 01 JBLM
Sample Matrix: Water

Service Request: K1410537
Date Collected: 09/25/2014
Date Received: 09/26/2014

Volatile Organic Compounds

Sample Name: LGC140925ISLX5-1
Lab Code: K1410537-004

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
Dichlorodifluoromethane	ND	U	0.50	0.20	0.13	1	10/07/14	10/07/14	KWG1413535	
Chloromethane	ND	U	0.50	0.20	0.068	1	10/07/14	10/07/14	KWG1413535	
Vinyl Chloride	ND	U	0.50	0.10	0.075	1	10/07/14	10/07/14	KWG1413535	
Bromomethane	ND	U	0.50	0.30	0.10	1	10/07/14	10/07/14	KWG1413535	
Chloroethane	ND	U	0.50	0.20	0.16	1	10/07/14	10/07/14	KWG1413535	
Trichlorofluoromethane	ND	U	0.50	0.20	0.12	1	10/07/14	10/07/14	KWG1413535	
1,1-Dichloroethene	**0.11**	J	0.50	0.20	0.080	1	10/07/14	10/07/14	KWG1413535	
Acetone	ND	U	20	10	3.3	1	10/07/14	10/07/14	KWG1413535	*
Carbon Disulfide	ND	U	0.50	0.20	0.069	1	10/07/14	10/07/14	KWG1413535	*
Methylene Chloride	ND	U	2.0	0.20	0.10	1	10/07/14	10/07/14	KWG1413535	
Methyl tert-Butyl Ether	ND	U	0.50	0.30	0.11	1	10/07/14	10/07/14	KWG1413535	
trans-1,2-Dichloroethene	ND	U	0.50	0.20	0.072	1	10/07/14	10/07/14	KWG1413535	
1,1-Dichloroethane	ND	U	0.50	0.20	0.077	1	10/07/14	10/07/14	KWG1413535	
2,2-Dichloropropane	ND	U	0.50	0.20	0.060	1	10/07/14	10/07/14	KWG1413535	*
cis-1,2-Dichloroethene	**1.4**		0.50	0.20	0.067	1	10/07/14	10/07/14	KWG1413535	
2-Butanone (MEK)	ND	U	20	4.0	1.9	1	10/07/14	10/07/14	KWG1413535	
Bromochloromethane	ND	U	0.50	0.20	0.16	1	10/07/14	10/07/14	KWG1413535	
Chloroform	**0.20**	J	0.50	0.20	0.072	1	10/07/14	10/07/14	KWG1413535	
1,1,1-Trichloroethane (TCA)	**0.38**	J	0.50	0.20	0.075	1	10/07/14	10/07/14	KWG1413535	
Carbon Tetrachloride	ND	U	0.50	0.20	0.096	1	10/07/14	10/07/14	KWG1413535	
1,1-Dichloropropene	ND	U	0.50	0.20	0.089	1	10/07/14	10/07/14	KWG1413535	
Benzene	ND	U	0.50	0.10	0.062	1	10/07/14	10/07/14	KWG1413535	
1,2-Dichloroethane (EDC)	ND	U	0.50	0.15	0.080	1	10/07/14	10/07/14	KWG1413535	
Trichloroethene (TCE)	**49**		0.50	0.10	0.10	1	10/07/14	10/07/14	KWG1413535	
1,2-Dichloropropane	ND	U	0.50	0.20	0.095	1	10/07/14	10/07/14	KWG1413535	
Dibromomethane	ND	U	0.50	0.50	0.15	1	10/07/14	10/07/14	KWG1413535	
Bromodichloromethane	ND	U	0.50	0.30	0.091	1	10/07/14	10/07/14	KWG1413535	
cis-1,3-Dichloropropene	ND	U	0.50	0.20	0.18	1	10/07/14	10/07/14	KWG1413535	
4-Methyl-2-pentanone (MIBK)	ND	U	20	10	2.6	1	10/07/14	10/07/14	KWG1413535	
Toluene	ND	U	0.50	0.10	0.054	1	10/07/14	10/07/14	KWG1413535	
trans-1,3-Dichloropropene	ND	U	0.50	0.20	0.068	1	10/07/14	10/07/14	KWG1413535	*
1,1,2-Trichloroethane	ND	U	0.50	0.40	0.14	1	10/07/14	10/07/14	KWG1413535	
Tetrachloroethene (PCE)	ND	U	0.50	0.20	0.099	1	10/07/14	10/07/14	KWG1413535	

Comments:

Analytical Results

Client: Sealaska Environmental Services, LLC
Project: TO 01 JBLM
Sample Matrix: Water

Service Request: K1410537
Date Collected: 09/25/2014
Date Received: 09/26/2014

Volatile Organic Compounds

Sample Name: LGC140925ISLX5-1
Lab Code: K1410537-004

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
2-Hexanone	ND	U	20	10	2.7	1	10/07/14	10/07/14	KWG1413535	
1,3-Dichloropropane	ND	U	0.50	0.30	0.14	1	10/07/14	10/07/14	KWG1413535	
Dibromochloromethane	ND	U	0.50	0.50	0.14	1	10/07/14	10/07/14	KWG1413535	
1,2-Dibromoethane (EDB)	ND	U	2.0	0.20	0.10	1	10/07/14	10/07/14	KWG1413535	
Chlorobenzene	ND	U	0.50	0.20	0.11	1	10/07/14	10/07/14	KWG1413535	
Ethylbenzene	ND	U	0.50	0.10	0.050	1	10/07/14	10/07/14	KWG1413535	
1,1,1,2-Tetrachloroethane	ND	U	0.50	0.20	0.11	1	10/07/14	10/07/14	KWG1413535	
m,p-Xylenes	ND	U	0.50	0.20	0.11	1	10/07/14	10/07/14	KWG1413535	
o-Xylene	ND	U	0.50	0.20	0.074	1	10/07/14	10/07/14	KWG1413535	
Styrene	ND	U	0.50	0.20	0.089	1	10/07/14	10/07/14	KWG1413535	
Bromoform	ND	U	0.50	0.50	0.16	1	10/07/14	10/07/14	KWG1413535	
Isopropylbenzene	ND	U	2.0	0.20	0.051	1	10/07/14	10/07/14	KWG1413535	
1,1,2,2-Tetrachloroethane	ND	U	0.50	0.20	0.16	1	10/07/14	10/07/14	KWG1413535	
Bromobenzene	ND	U	2.0	0.20	0.12	1	10/07/14	10/07/14	KWG1413535	
n-Propylbenzene	ND	U	2.0	0.20	0.054	1	10/07/14	10/07/14	KWG1413535	
1,2,3-Trichloropropane	ND	U	0.50	0.50	0.20	1	10/07/14	10/07/14	KWG1413535	
2-Chlorotoluene	ND	U	2.0	0.20	0.10	1	10/07/14	10/07/14	KWG1413535	
1,3,5-Trimethylbenzene	ND	U	2.0	0.20	0.089	1	10/07/14	10/07/14	KWG1413535	
4-Chlorotoluene	ND	U	2.0	0.20	0.13	1	10/07/14	10/07/14	KWG1413535	
tert-Butylbenzene	ND	U	2.0	0.20	0.059	1	10/07/14	10/07/14	KWG1413535	
1,2,4-Trimethylbenzene	ND	U	2.0	0.20	0.069	1	10/07/14	10/07/14	KWG1413535	
sec-Butylbenzene	ND	U	2.0	0.10	0.062	1	10/07/14	10/07/14	KWG1413535	
4-Isopropyltoluene	ND	U	2.0	0.20	0.060	1	10/07/14	10/07/14	KWG1413535	
1,3-Dichlorobenzene	ND	U	0.50	0.20	0.10	1	10/07/14	10/07/14	KWG1413535	
1,4-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	10/07/14	10/07/14	KWG1413535	
n-Butylbenzene	ND	U	2.0	0.10	0.054	1	10/07/14	10/07/14	KWG1413535	
1,2-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	10/07/14	10/07/14	KWG1413535	
1,2-Dibromo-3-chloropropane	ND	U	2.0	0.80	0.20	1	10/07/14	10/07/14	KWG1413535	
1,2,4-Trichlorobenzene	ND	U	2.0	0.30	0.096	1	10/07/14	10/07/14	KWG1413535	
Hexachlorobutadiene	ND	U	2.0	0.30	0.11	1	10/07/14	10/07/14	KWG1413535	
Naphthalene	ND	U	2.0	0.30	0.088	1	10/07/14	10/07/14	KWG1413535	
1,2,3-Trichlorobenzene	ND	U	2.0	0.40	0.11	1	10/07/14	10/07/14	KWG1413535	

* See Case Narrative

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1410537
Project:	TO 01 JBLM	**Date Collected:**	09/25/2014
Sample Matrix:	Water	**Date Received:**	09/26/2014

Volatile Organic Compounds

Sample Name:	LGC140925ISLX5-1	**Units:**	ug/L
Lab Code:	K1410537-004	**Basis:**	NA

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Dibromofluoromethane	94	85-115	10/07/14	Acceptable
1,2-Dichloroethane-d4	110	70-120	10/07/14	Acceptable
Toluene-d8	97	85-120	10/07/14	Acceptable
4-Bromofluorobenzene	92	75-120	10/07/14	Acceptable

Comments:

Analytical Results

Client: Sealaska Environmental Services, LLC
Project: TO 01 JBLM
Sample Matrix: Water

Service Request: K1410537
Date Collected: 09/25/2014
Date Received: 09/26/2014

Volatile Organic Compounds

Sample Name: LGC140925ISLX6-1
Lab Code: K1410537-005

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
Dichlorodifluoromethane	ND	U	0.50	0.20	0.13	1	10/07/14	10/07/14	KWG1413535	
Chloromethane	ND	U	0.50	0.20	0.068	1	10/07/14	10/07/14	KWG1413535	
Vinyl Chloride	ND	U	0.50	0.10	0.075	1	10/07/14	10/07/14	KWG1413535	
Bromomethane	ND	U	0.50	0.30	0.10	1	10/07/14	10/07/14	KWG1413535	
Chloroethane	ND	U	0.50	0.20	0.16	1	10/07/14	10/07/14	KWG1413535	
Trichlorofluoromethane	ND	U	0.50	0.20	0.12	1	10/07/14	10/07/14	KWG1413535	
1,1-Dichloroethene	ND	U	0.50	0.20	0.080	1	10/07/14	10/07/14	KWG1413535	
Acetone	ND	U	20	10	3.3	1	10/07/14	10/07/14	KWG1413535	*
Carbon Disulfide	ND	U	0.50	0.20	0.069	1	10/07/14	10/07/14	KWG1413535	*
Methylene Chloride	ND	U	2.0	0.20	0.10	1	10/07/14	10/07/14	KWG1413535	
Methyl tert-Butyl Ether	ND	U	0.50	0.30	0.11	1	10/07/14	10/07/14	KWG1413535	
trans-1,2-Dichloroethene	ND	U	0.50	0.20	0.072	1	10/07/14	10/07/14	KWG1413535	
1,1-Dichloroethane	ND	U	0.50	0.20	0.077	1	10/07/14	10/07/14	KWG1413535	
2,2-Dichloropropane	ND	U	0.50	0.20	0.060	1	10/07/14	10/07/14	KWG1413535	*
cis-1,2-Dichloroethene	**1.1**		0.50	0.20	0.067	1	10/07/14	10/07/14	KWG1413535	
2-Butanone (MEK)	ND	U	20	4.0	1.9	1	10/07/14	10/07/14	KWG1413535	
Bromochloromethane	ND	U	0.50	0.20	0.16	1	10/07/14	10/07/14	KWG1413535	
Chloroform	**1.0**		0.50	0.20	0.072	1	10/07/14	10/07/14	KWG1413535	
1,1,1-Trichloroethane (TCA)	**0.53**		0.50	0.20	0.075	1	10/07/14	10/07/14	KWG1413535	
Carbon Tetrachloride	ND	U	0.50	0.20	0.096	1	10/07/14	10/07/14	KWG1413535	
1,1-Dichloropropene	ND	U	0.50	0.20	0.089	1	10/07/14	10/07/14	KWG1413535	
Benzene	ND	U	0.50	0.10	0.062	1	10/07/14	10/07/14	KWG1413535	
1,2-Dichloroethane (EDC)	ND	U	0.50	0.15	0.080	1	10/07/14	10/07/14	KWG1413535	
Trichloroethene (TCE)	**56**		0.50	0.10	0.10	1	10/07/14	10/07/14	KWG1413535	
1,2-Dichloropropane	ND	U	0.50	0.20	0.095	1	10/07/14	10/07/14	KWG1413535	
Dibromomethane	ND	U	0.50	0.50	0.15	1	10/07/14	10/07/14	KWG1413535	
Bromodichloromethane	**0.10**	J	0.50	0.30	0.091	1	10/07/14	10/07/14	KWG1413535	
cis-1,3-Dichloropropene	ND	U	0.50	0.20	0.18	1	10/07/14	10/07/14	KWG1413535	
4-Methyl-2-pentanone (MIBK)	ND	U	20	10	2.6	1	10/07/14	10/07/14	KWG1413535	
Toluene	ND	U	0.50	0.10	0.054	1	10/07/14	10/07/14	KWG1413535	
trans-1,3-Dichloropropene	ND	U	0.50	0.20	0.068	1	10/07/14	10/07/14	KWG1413535	*
1,1,2-Trichloroethane	ND	U	0.50	0.40	0.14	1	10/07/14	10/07/14	KWG1413535	
Tetrachloroethene (PCE)	**0.20**	J	0.50	0.20	0.099	1	10/07/14	10/07/14	KWG1413535	

Comments:

Analytical Results

Client: Sealaska Environmental Services, LLC
Project: TO 01 JBLM
Sample Matrix: Water

Service Request: K1410537
Date Collected: 09/25/2014
Date Received: 09/26/2014

Volatile Organic Compounds

Sample Name: LGC140925ISLX6-1
Lab Code: K1410537-005

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
2-Hexanone	ND	U	20	10	2.7	1	10/07/14	10/07/14	KWG1413535	
1,3-Dichloropropane	ND	U	0.50	0.30	0.14	1	10/07/14	10/07/14	KWG1413535	
Dibromochloromethane	ND	U	0.50	0.50	0.14	1	10/07/14	10/07/14	KWG1413535	
1,2-Dibromoethane (EDB)	ND	U	2.0	0.20	0.10	1	10/07/14	10/07/14	KWG1413535	
Chlorobenzene	ND	U	0.50	0.20	0.11	1	10/07/14	10/07/14	KWG1413535	
Ethylbenzene	ND	U	0.50	0.10	0.050	1	10/07/14	10/07/14	KWG1413535	
1,1,1,2-Tetrachloroethane	ND	U	0.50	0.20	0.11	1	10/07/14	10/07/14	KWG1413535	
m,p-Xylenes	ND	U	0.50	0.20	0.11	1	10/07/14	10/07/14	KWG1413535	
o-Xylene	ND	U	0.50	0.20	0.074	1	10/07/14	10/07/14	KWG1413535	
Styrene	ND	U	0.50	0.20	0.089	1	10/07/14	10/07/14	KWG1413535	
Bromoform	ND	U	0.50	0.50	0.16	1	10/07/14	10/07/14	KWG1413535	
Isopropylbenzene	ND	U	2.0	0.20	0.051	1	10/07/14	10/07/14	KWG1413535	
1,1,2,2-Tetrachloroethane	ND	U	0.50	0.20	0.16	1	10/07/14	10/07/14	KWG1413535	
Bromobenzene	ND	U	2.0	0.20	0.12	1	10/07/14	10/07/14	KWG1413535	
n-Propylbenzene	ND	U	2.0	0.20	0.054	1	10/07/14	10/07/14	KWG1413535	
1,2,3-Trichloropropane	ND	U	0.50	0.50	0.20	1	10/07/14	10/07/14	KWG1413535	
2-Chlorotoluene	ND	U	2.0	0.20	0.10	1	10/07/14	10/07/14	KWG1413535	
1,3,5-Trimethylbenzene	ND	U	2.0	0.20	0.089	1	10/07/14	10/07/14	KWG1413535	
4-Chlorotoluene	ND	U	2.0	0.20	0.13	1	10/07/14	10/07/14	KWG1413535	
tert-Butylbenzene	ND	U	2.0	0.20	0.059	1	10/07/14	10/07/14	KWG1413535	
1,2,4-Trimethylbenzene	ND	U	2.0	0.20	0.069	1	10/07/14	10/07/14	KWG1413535	
sec-Butylbenzene	ND	U	2.0	0.10	0.062	1	10/07/14	10/07/14	KWG1413535	
4-Isopropyltoluene	ND	U	2.0	0.20	0.060	1	10/07/14	10/07/14	KWG1413535	
1,3-Dichlorobenzene	ND	U	0.50	0.20	0.10	1	10/07/14	10/07/14	KWG1413535	
1,4-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	10/07/14	10/07/14	KWG1413535	
n-Butylbenzene	ND	U	2.0	0.10	0.054	1	10/07/14	10/07/14	KWG1413535	
1,2-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	10/07/14	10/07/14	KWG1413535	
1,2-Dibromo-3-chloropropane	ND	U	2.0	0.80	0.20	1	10/07/14	10/07/14	KWG1413535	
1,2,4-Trichlorobenzene	ND	U	2.0	0.30	0.096	1	10/07/14	10/07/14	KWG1413535	
Hexachlorobutadiene	ND	U	2.0	0.30	0.11	1	10/07/14	10/07/14	KWG1413535	
Naphthalene	ND	U	2.0	0.30	0.088	1	10/07/14	10/07/14	KWG1413535	
1,2,3-Trichlorobenzene	ND	U	2.0	0.40	0.11	1	10/07/14	10/07/14	KWG1413535	

* See Case Narrative

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1410537
Project:	TO 01 JBLM	**Date Collected:**	09/25/2014
Sample Matrix:	Water	**Date Received:**	09/26/2014

Volatile Organic Compounds

Sample Name:	LGC140925ISLX6-1	**Units:**	ug/L
Lab Code:	K1410537-005	**Basis:**	NA

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Dibromofluoromethane	95	85-115	10/07/14	Acceptable
1,2-Dichloroethane-d4	109	70-120	10/07/14	Acceptable
Toluene-d8	96	85-120	10/07/14	Acceptable
4-Bromofluorobenzene	92	75-120	10/07/14	Acceptable

Comments:

Analytical Results

Client: Sealaska Environmental Services, LLC
Project: TO 01 JBLM
Sample Matrix: Water

Service Request: K1410537
Date Collected: 09/25/2014
Date Received: 09/26/2014

Volatile Organic Compounds

Sample Name: LGC140925ISLX7-1
Lab Code: K1410537-006

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
Dichlorodifluoromethane	ND	U	0.50	0.20	0.13	1	10/07/14	10/07/14	KWG1413535	
Chloromethane	ND	U	0.50	0.20	0.068	1	10/07/14	10/07/14	KWG1413535	
Vinyl Chloride	ND	U	0.50	0.10	0.075	1	10/07/14	10/07/14	KWG1413535	
Bromomethane	ND	U	0.50	0.30	0.10	1	10/07/14	10/07/14	KWG1413535	
Chloroethane	ND	U	0.50	0.20	0.16	1	10/07/14	10/07/14	KWG1413535	
Trichlorofluoromethane	ND	U	0.50	0.20	0.12	1	10/07/14	10/07/14	KWG1413535	
1,1-Dichloroethene	ND	U	0.50	0.20	0.080	1	10/07/14	10/07/14	KWG1413535	
Acetone	ND	U	20	10	3.3	1	10/07/14	10/07/14	KWG1413535	*
Carbon Disulfide	ND	U	0.50	0.20	0.069	1	10/07/14	10/07/14	KWG1413535	*
Methylene Chloride	ND	U	2.0	0.20	0.10	1	10/07/14	10/07/14	KWG1413535	
Methyl tert-Butyl Ether	ND	U	0.50	0.30	0.11	1	10/07/14	10/07/14	KWG1413535	
trans-1,2-Dichloroethene	ND	U	0.50	0.20	0.072	1	10/07/14	10/07/14	KWG1413535	
1,1-Dichloroethane	ND	U	0.50	0.20	0.077	1	10/07/14	10/07/14	KWG1413535	
2,2-Dichloropropane	ND	U	0.50	0.20	0.060	1	10/07/14	10/07/14	KWG1413535	*
cis-1,2-Dichloroethene	**1.2**		0.50	0.20	0.067	1	10/07/14	10/07/14	KWG1413535	
2-Butanone (MEK)	ND	U	20	4.0	1.9	1	10/07/14	10/07/14	KWG1413535	
Bromochloromethane	ND	U	0.50	0.20	0.16	1	10/07/14	10/07/14	KWG1413535	
Chloroform	**0.57**		0.50	0.20	0.072	1	10/07/14	10/07/14	KWG1413535	
1,1,1-Trichloroethane (TCA)	**0.19**	J	0.50	0.20	0.075	1	10/07/14	10/07/14	KWG1413535	
Carbon Tetrachloride	**0.11**	J	0.50	0.20	0.096	1	10/07/14	10/07/14	KWG1413535	
1,1-Dichloropropene	ND	U	0.50	0.20	0.089	1	10/07/14	10/07/14	KWG1413535	
Benzene	ND	U	0.50	0.10	0.062	1	10/07/14	10/07/14	KWG1413535	
1,2-Dichloroethane (EDC)	ND	U	0.50	0.15	0.080	1	10/07/14	10/07/14	KWG1413535	
Trichloroethene (TCE)	**64**		0.50	0.10	0.10	1	10/07/14	10/07/14	KWG1413535	
1,2-Dichloropropane	ND	U	0.50	0.20	0.095	1	10/07/14	10/07/14	KWG1413535	
Dibromomethane	ND	U	0.50	0.50	0.15	1	10/07/14	10/07/14	KWG1413535	
Bromodichloromethane	ND	U	0.50	0.30	0.091	1	10/07/14	10/07/14	KWG1413535	
cis-1,3-Dichloropropene	ND	U	0.50	0.20	0.18	1	10/07/14	10/07/14	KWG1413535	
4-Methyl-2-pentanone (MIBK)	ND	U	20	10	2.6	1	10/07/14	10/07/14	KWG1413535	
Toluene	ND	U	0.50	0.10	0.054	1	10/07/14	10/07/14	KWG1413535	
trans-1,3-Dichloropropene	ND	U	0.50	0.20	0.068	1	10/07/14	10/07/14	KWG1413535	*
1,1,2-Trichloroethane	ND	U	0.50	0.40	0.14	1	10/07/14	10/07/14	KWG1413535	
Tetrachloroethene (PCE)	**0.21**	J	0.50	0.20	0.099	1	10/07/14	10/07/14	KWG1413535	

Comments:

Analytical Results

Client: Sealaska Environmental Services, LLC
Project: TO 01 JBLM
Sample Matrix: Water

Service Request: K1410537
Date Collected: 09/25/2014
Date Received: 09/26/2014

Volatile Organic Compounds

Sample Name: LGC140925ISLX7-1
Lab Code: K1410537-006

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
2-Hexanone	ND	U	20	10	2.7	1	10/07/14	10/07/14	KWG1413535	
1,3-Dichloropropane	ND	U	0.50	0.30	0.14	1	10/07/14	10/07/14	KWG1413535	
Dibromochloromethane	ND	U	0.50	0.50	0.14	1	10/07/14	10/07/14	KWG1413535	
1,2-Dibromoethane (EDB)	ND	U	2.0	0.20	0.10	1	10/07/14	10/07/14	KWG1413535	
Chlorobenzene	ND	U	0.50	0.20	0.11	1	10/07/14	10/07/14	KWG1413535	
Ethylbenzene	ND	U	0.50	0.10	0.050	1	10/07/14	10/07/14	KWG1413535	
1,1,1,2-Tetrachloroethane	ND	U	0.50	0.20	0.11	1	10/07/14	10/07/14	KWG1413535	
m,p-Xylenes	ND	U	0.50	0.20	0.11	1	10/07/14	10/07/14	KWG1413535	
o-Xylene	ND	U	0.50	0.20	0.074	1	10/07/14	10/07/14	KWG1413535	
Styrene	ND	U	0.50	0.20	0.089	1	10/07/14	10/07/14	KWG1413535	
Bromoform	ND	U	0.50	0.50	0.16	1	10/07/14	10/07/14	KWG1413535	
Isopropylbenzene	ND	U	2.0	0.20	0.051	1	10/07/14	10/07/14	KWG1413535	
1,1,2,2-Tetrachloroethane	ND	U	0.50	0.20	0.16	1	10/07/14	10/07/14	KWG1413535	
Bromobenzene	ND	U	2.0	0.20	0.12	1	10/07/14	10/07/14	KWG1413535	
n-Propylbenzene	ND	U	2.0	0.20	0.054	1	10/07/14	10/07/14	KWG1413535	
1,2,3-Trichloropropane	ND	U	0.50	0.50	0.20	1	10/07/14	10/07/14	KWG1413535	
2-Chlorotoluene	ND	U	2.0	0.20	0.10	1	10/07/14	10/07/14	KWG1413535	
1,3,5-Trimethylbenzene	ND	U	2.0	0.20	0.089	1	10/07/14	10/07/14	KWG1413535	
4-Chlorotoluene	ND	U	2.0	0.20	0.13	1	10/07/14	10/07/14	KWG1413535	
tert-Butylbenzene	ND	U	2.0	0.20	0.059	1	10/07/14	10/07/14	KWG1413535	
1,2,4-Trimethylbenzene	ND	U	2.0	0.20	0.069	1	10/07/14	10/07/14	KWG1413535	
sec-Butylbenzene	ND	U	2.0	0.10	0.062	1	10/07/14	10/07/14	KWG1413535	
4-Isopropyltoluene	ND	U	2.0	0.20	0.060	1	10/07/14	10/07/14	KWG1413535	
1,3-Dichlorobenzene	ND	U	0.50	0.20	0.10	1	10/07/14	10/07/14	KWG1413535	
1,4-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	10/07/14	10/07/14	KWG1413535	
n-Butylbenzene	ND	U	2.0	0.10	0.054	1	10/07/14	10/07/14	KWG1413535	
1,2-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	10/07/14	10/07/14	KWG1413535	
1,2-Dibromo-3-chloropropane	ND	U	2.0	0.80	0.20	1	10/07/14	10/07/14	KWG1413535	
1,2,4-Trichlorobenzene	ND	U	2.0	0.30	0.096	1	10/07/14	10/07/14	KWG1413535	
Hexachlorobutadiene	ND	U	2.0	0.30	0.11	1	10/07/14	10/07/14	KWG1413535	
Naphthalene	ND	U	2.0	0.30	0.088	1	10/07/14	10/07/14	KWG1413535	
1,2,3-Trichlorobenzene	ND	U	2.0	0.40	0.11	1	10/07/14	10/07/14	KWG1413535	

* See Case Narrative

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1410537
Project:	TO 01 JBLM	**Date Collected:**	09/25/2014
Sample Matrix:	Water	**Date Received:**	09/26/2014

Volatile Organic Compounds

Sample Name:	LGC140925ISLX7-1	**Units:**	ug/L
Lab Code:	K1410537-006	**Basis:**	NA

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Dibromofluoromethane	96	85-115	10/07/14	Acceptable
1,2-Dichloroethane-d4	110	70-120	10/07/14	Acceptable
Toluene-d8	97	85-120	10/07/14	Acceptable
4-Bromofluorobenzene	90	75-120	10/07/14	Acceptable

Comments:

Analytical Results

Client: Sealaska Environmental Services, LLC
Project: TO 01 JBLM
Sample Matrix: Water

Service Request: K1410537
Date Collected: 09/25/2014
Date Received: 09/26/2014

Volatile Organic Compounds

Sample Name: LGC140925ISLX9-1
Lab Code: K1410537-007

Units: ug/L
Basis: NA

Extraction Method: EPA 5030B
Analysis Method: 8260C

Level: Low

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Dichlorodifluoromethane	ND	U	0.50	0.20	0.13	1	10/07/14	10/07/14	KWG1413535	
Chloromethane	ND	U	0.50	0.20	0.068	1	10/07/14	10/07/14	KWG1413535	
Vinyl Chloride	ND	U	0.50	0.10	0.075	1	10/07/14	10/07/14	KWG1413535	
Bromomethane	ND	U	0.50	0.30	0.10	1	10/07/14	10/07/14	KWG1413535	
Chloroethane	ND	U	0.50	0.20	0.16	1	10/07/14	10/07/14	KWG1413535	
Trichlorofluoromethane	ND	U	0.50	0.20	0.12	1	10/07/14	10/07/14	KWG1413535	
1,1-Dichloroethene	ND	U	0.50	0.20	0.080	1	10/07/14	10/07/14	KWG1413535	
Acetone	ND	U	20	10	3.3	1	10/07/14	10/07/14	KWG1413535	*
Carbon Disulfide	ND	U	0.50	0.20	0.069	1	10/07/14	10/07/14	KWG1413535	*
Methylene Chloride	ND	U	2.0	0.20	0.10	1	10/07/14	10/07/14	KWG1413535	
Methyl tert-Butyl Ether	ND	U	0.50	0.30	0.11	1	10/07/14	10/07/14	KWG1413535	
trans-1,2-Dichloroethene	ND	U	0.50	0.20	0.072	1	10/07/14	10/07/14	KWG1413535	
1,1-Dichloroethane	ND	U	0.50	0.20	0.077	1	10/07/14	10/07/14	KWG1413535	
2,2-Dichloropropane	ND	U	0.50	0.20	0.060	1	10/07/14	10/07/14	KWG1413535	*
cis-1,2-Dichloroethene	**1.1**		0.50	0.20	0.067	1	10/07/14	10/07/14	KWG1413535	
2-Butanone (MEK)	ND	U	20	4.0	1.9	1	10/07/14	10/07/14	KWG1413535	
Bromochloromethane	ND	U	0.50	0.20	0.16	1	10/07/14	10/07/14	KWG1413535	
Chloroform	**0.53**		0.50	0.20	0.072	1	10/07/14	10/07/14	KWG1413535	
1,1,1-Trichloroethane (TCA)	**0.10**	J	0.50	0.20	0.075	1	10/07/14	10/07/14	KWG1413535	
Carbon Tetrachloride	**0.10**	J	0.50	0.20	0.096	1	10/07/14	10/07/14	KWG1413535	
1,1-Dichloropropene	ND	U	0.50	0.20	0.089	1	10/07/14	10/07/14	KWG1413535	
Benzene	ND	U	0.50	0.10	0.062	1	10/07/14	10/07/14	KWG1413535	
1,2-Dichloroethane (EDC)	ND	U	0.50	0.15	0.080	1	10/07/14	10/07/14	KWG1413535	
Trichloroethene (TCE)	**45**		0.50	0.10	0.10	1	10/07/14	10/07/14	KWG1413535	
1,2-Dichloropropane	ND	U	0.50	0.20	0.095	1	10/07/14	10/07/14	KWG1413535	
Dibromomethane	ND	U	0.50	0.50	0.15	1	10/07/14	10/07/14	KWG1413535	
Bromodichloromethane	ND	U	0.50	0.30	0.091	1	10/07/14	10/07/14	KWG1413535	
cis-1,3-Dichloropropene	ND	U	0.50	0.20	0.18	1	10/07/14	10/07/14	KWG1413535	
4-Methyl-2-pentanone (MIBK)	ND	U	20	10	2.6	1	10/07/14	10/07/14	KWG1413535	
Toluene	ND	U	0.50	0.10	0.054	1	10/07/14	10/07/14	KWG1413535	
trans-1,3-Dichloropropene	ND	U	0.50	0.20	0.068	1	10/07/14	10/07/14	KWG1413535	*
1,1,2-Trichloroethane	ND	U	0.50	0.40	0.14	1	10/07/14	10/07/14	KWG1413535	
Tetrachloroethene (PCE)	**0.18**	J	0.50	0.20	0.099	1	10/07/14	10/07/14	KWG1413535	

Comments:

Analytical Results

Client: Sealaska Environmental Services, LLC
Project: TO 01 JBLM
Sample Matrix: Water

Service Request: K1410537
Date Collected: 09/25/2014
Date Received: 09/26/2014

Volatile Organic Compounds

Sample Name: LGC140925ISLX9-1
Lab Code: K1410537-007

Units: ug/L
Basis: NA

Extraction Method: EPA 5030B
Analysis Method: 8260C

Level: Low

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
2-Hexanone	ND	U	20	10	2.7	1	10/07/14	10/07/14	KWG1413535	
1,3-Dichloropropane	ND	U	0.50	0.30	0.14	1	10/07/14	10/07/14	KWG1413535	
Dibromochloromethane	ND	U	0.50	0.50	0.14	1	10/07/14	10/07/14	KWG1413535	
1,2-Dibromoethane (EDB)	ND	U	2.0	0.20	0.10	1	10/07/14	10/07/14	KWG1413535	
Chlorobenzene	ND	U	0.50	0.20	0.11	1	10/07/14	10/07/14	KWG1413535	
Ethylbenzene	ND	U	0.50	0.10	0.050	1	10/07/14	10/07/14	KWG1413535	
1,1,1,2-Tetrachloroethane	ND	U	0.50	0.20	0.11	1	10/07/14	10/07/14	KWG1413535	
m,p-Xylenes	ND	U	0.50	0.20	0.11	1	10/07/14	10/07/14	KWG1413535	
o-Xylene	ND	U	0.50	0.20	0.074	1	10/07/14	10/07/14	KWG1413535	
Styrene	ND	U	0.50	0.20	0.089	1	10/07/14	10/07/14	KWG1413535	
Bromoform	ND	U	0.50	0.50	0.16	1	10/07/14	10/07/14	KWG1413535	
Isopropylbenzene	ND	U	2.0	0.20	0.051	1	10/07/14	10/07/14	KWG1413535	
1,1,2,2-Tetrachloroethane	ND	U	0.50	0.20	0.16	1	10/07/14	10/07/14	KWG1413535	
Bromobenzene	ND	U	2.0	0.20	0.12	1	10/07/14	10/07/14	KWG1413535	
n-Propylbenzene	ND	U	2.0	0.20	0.054	1	10/07/14	10/07/14	KWG1413535	
1,2,3-Trichloropropane	ND	U	0.50	0.50	0.20	1	10/07/14	10/07/14	KWG1413535	
2-Chlorotoluene	ND	U	2.0	0.20	0.10	1	10/07/14	10/07/14	KWG1413535	
1,3,5-Trimethylbenzene	ND	U	2.0	0.20	0.089	1	10/07/14	10/07/14	KWG1413535	
4-Chlorotoluene	ND	U	2.0	0.20	0.13	1	10/07/14	10/07/14	KWG1413535	
tert-Butylbenzene	ND	U	2.0	0.20	0.059	1	10/07/14	10/07/14	KWG1413535	
1,2,4-Trimethylbenzene	ND	U	2.0	0.20	0.069	1	10/07/14	10/07/14	KWG1413535	
sec-Butylbenzene	ND	U	2.0	0.10	0.062	1	10/07/14	10/07/14	KWG1413535	
4-Isopropyltoluene	ND	U	2.0	0.20	0.060	1	10/07/14	10/07/14	KWG1413535	
1,3-Dichlorobenzene	ND	U	0.50	0.20	0.10	1	10/07/14	10/07/14	KWG1413535	
1,4-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	10/07/14	10/07/14	KWG1413535	
n-Butylbenzene	ND	U	2.0	0.10	0.054	1	10/07/14	10/07/14	KWG1413535	
1,2-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	10/07/14	10/07/14	KWG1413535	
1,2-Dibromo-3-chloropropane	ND	U	2.0	0.80	0.20	1	10/07/14	10/07/14	KWG1413535	
1,2,4-Trichlorobenzene	ND	U	2.0	0.30	0.096	1	10/07/14	10/07/14	KWG1413535	
Hexachlorobutadiene	ND	U	2.0	0.30	0.11	1	10/07/14	10/07/14	KWG1413535	
Naphthalene	ND	U	2.0	0.30	0.088	1	10/07/14	10/07/14	KWG1413535	
1,2,3-Trichlorobenzene	ND	U	2.0	0.40	0.11	1	10/07/14	10/07/14	KWG1413535	

* See Case Narrative

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1410537
Project:	TO 01 JBLM	**Date Collected:**	09/25/2014
Sample Matrix:	Water	**Date Received:**	09/26/2014

Volatile Organic Compounds

Sample Name:	LGC140925ISLX9-1	**Units:**	ug/L
Lab Code:	K1410537-007	**Basis:**	NA

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Dibromofluoromethane	95	85-115	10/07/14	Acceptable
1,2-Dichloroethane-d4	111	70-120	10/07/14	Acceptable
Toluene-d8	95	85-120	10/07/14	Acceptable
4-Bromofluorobenzene	87	75-120	10/07/14	Acceptable

Comments:

Analytical Results

Client: Sealaska Environmental Services, LLC
Project: TO 01 JBLM
Sample Matrix: Water

Service Request: K1410537
Date Collected: 09/25/2014
Date Received: 09/26/2014

Volatile Organic Compounds

Sample Name: LGC140925ISLX11-1
Lab Code: K1410537-008

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
Dichlorodifluoromethane	ND	U	0.50	0.20	0.13	1	10/07/14	10/07/14	KWG1413535	
Chloromethane	ND	U	0.50	0.20	0.068	1	10/07/14	10/07/14	KWG1413535	
Vinyl Chloride	ND	U	0.50	0.10	0.075	1	10/07/14	10/07/14	KWG1413535	
Bromomethane	ND	U	0.50	0.30	0.10	1	10/07/14	10/07/14	KWG1413535	
Chloroethane	ND	U	0.50	0.20	0.16	1	10/07/14	10/07/14	KWG1413535	
Trichlorofluoromethane	ND	U	0.50	0.20	0.12	1	10/07/14	10/07/14	KWG1413535	
1,1-Dichloroethene	ND	U	0.50	0.20	0.080	1	10/07/14	10/07/14	KWG1413535	
Acetone	ND	U	20	10	3.3	1	10/07/14	10/07/14	KWG1413535	*
Carbon Disulfide	ND	U	0.50	0.20	0.069	1	10/07/14	10/07/14	KWG1413535	*
Methylene Chloride	ND	U	2.0	0.20	0.10	1	10/07/14	10/07/14	KWG1413535	
Methyl tert-Butyl Ether	ND	U	0.50	0.30	0.11	1	10/07/14	10/07/14	KWG1413535	
trans-1,2-Dichloroethene	ND	U	0.50	0.20	0.072	1	10/07/14	10/07/14	KWG1413535	
1,1-Dichloroethane	ND	U	0.50	0.20	0.077	1	10/07/14	10/07/14	KWG1413535	
2,2-Dichloropropane	ND	U	0.50	0.20	0.060	1	10/07/14	10/07/14	KWG1413535	*
cis-1,2-Dichloroethene	**0.82**		0.50	0.20	0.067	1	10/07/14	10/07/14	KWG1413535	
2-Butanone (MEK)	ND	U	20	4.0	1.9	1	10/07/14	10/07/14	KWG1413535	
Bromochloromethane	ND	U	0.50	0.20	0.16	1	10/07/14	10/07/14	KWG1413535	
Chloroform	**0.41**	J	0.50	0.20	0.072	1	10/07/14	10/07/14	KWG1413535	
1,1,1-Trichloroethane (TCA)	ND	U	0.50	0.20	0.075	1	10/07/14	10/07/14	KWG1413535	
Carbon Tetrachloride	ND	U	0.50	0.20	0.096	1	10/07/14	10/07/14	KWG1413535	
1,1-Dichloropropene	ND	U	0.50	0.20	0.089	1	10/07/14	10/07/14	KWG1413535	
Benzene	ND	U	0.50	0.10	0.062	1	10/07/14	10/07/14	KWG1413535	
1,2-Dichloroethane (EDC)	ND	U	0.50	0.15	0.080	1	10/07/14	10/07/14	KWG1413535	
Trichloroethene (TCE)	**36**		0.50	0.10	0.10	1	10/07/14	10/07/14	KWG1413535	
1,2-Dichloropropane	ND	U	0.50	0.20	0.095	1	10/07/14	10/07/14	KWG1413535	
Dibromomethane	ND	U	0.50	0.50	0.15	1	10/07/14	10/07/14	KWG1413535	
Bromodichloromethane	ND	U	0.50	0.30	0.091	1	10/07/14	10/07/14	KWG1413535	
cis-1,3-Dichloropropene	ND	U	0.50	0.20	0.18	1	10/07/14	10/07/14	KWG1413535	
4-Methyl-2-pentanone (MIBK)	ND	U	20	10	2.6	1	10/07/14	10/07/14	KWG1413535	
Toluene	ND	U	0.50	0.10	0.054	1	10/07/14	10/07/14	KWG1413535	
trans-1,3-Dichloropropene	ND	U	0.50	0.20	0.068	1	10/07/14	10/07/14	KWG1413535	*
1,1,2-Trichloroethane	ND	U	0.50	0.40	0.14	1	10/07/14	10/07/14	KWG1413535	
Tetrachloroethene (PCE)	**0.10**	J	0.50	0.20	0.099	1	10/07/14	10/07/14	KWG1413535	

Comments:

Analytical Results

Client: Sealaska Environmental Services, LLC
Project: TO 01 JBLM
Sample Matrix: Water

Service Request: K1410537
Date Collected: 09/25/2014
Date Received: 09/26/2014

Volatile Organic Compounds

Sample Name: LGC140925ISLX11-1
Lab Code: K1410537-008

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
2-Hexanone	ND	U	20	10	2.7	1	10/07/14	10/07/14	KWG1413535	
1,3-Dichloropropane	ND	U	0.50	0.30	0.14	1	10/07/14	10/07/14	KWG1413535	
Dibromochloromethane	ND	U	0.50	0.50	0.14	1	10/07/14	10/07/14	KWG1413535	
1,2-Dibromoethane (EDB)	ND	U	2.0	0.20	0.10	1	10/07/14	10/07/14	KWG1413535	
Chlorobenzene	ND	U	0.50	0.20	0.11	1	10/07/14	10/07/14	KWG1413535	
Ethylbenzene	ND	U	0.50	0.10	0.050	1	10/07/14	10/07/14	KWG1413535	
1,1,1,2-Tetrachloroethane	ND	U	0.50	0.20	0.11	1	10/07/14	10/07/14	KWG1413535	
m,p-Xylenes	ND	U	0.50	0.20	0.11	1	10/07/14	10/07/14	KWG1413535	
o-Xylene	ND	U	0.50	0.20	0.074	1	10/07/14	10/07/14	KWG1413535	
Styrene	ND	U	0.50	0.20	0.089	1	10/07/14	10/07/14	KWG1413535	
Bromoform	ND	U	0.50	0.50	0.16	1	10/07/14	10/07/14	KWG1413535	
Isopropylbenzene	ND	U	2.0	0.20	0.051	1	10/07/14	10/07/14	KWG1413535	
1,1,2,2-Tetrachloroethane	ND	U	0.50	0.20	0.16	1	10/07/14	10/07/14	KWG1413535	
Bromobenzene	ND	U	2.0	0.20	0.12	1	10/07/14	10/07/14	KWG1413535	
n-Propylbenzene	ND	U	2.0	0.20	0.054	1	10/07/14	10/07/14	KWG1413535	
1,2,3-Trichloropropane	ND	U	0.50	0.50	0.20	1	10/07/14	10/07/14	KWG1413535	
2-Chlorotoluene	ND	U	2.0	0.20	0.10	1	10/07/14	10/07/14	KWG1413535	
1,3,5-Trimethylbenzene	ND	U	2.0	0.20	0.089	1	10/07/14	10/07/14	KWG1413535	
4-Chlorotoluene	ND	U	2.0	0.20	0.13	1	10/07/14	10/07/14	KWG1413535	
tert-Butylbenzene	ND	U	2.0	0.20	0.059	1	10/07/14	10/07/14	KWG1413535	
1,2,4-Trimethylbenzene	ND	U	2.0	0.20	0.069	1	10/07/14	10/07/14	KWG1413535	
sec-Butylbenzene	ND	U	2.0	0.10	0.062	1	10/07/14	10/07/14	KWG1413535	
4-Isopropyltoluene	ND	U	2.0	0.20	0.060	1	10/07/14	10/07/14	KWG1413535	
1,3-Dichlorobenzene	ND	U	0.50	0.20	0.10	1	10/07/14	10/07/14	KWG1413535	
1,4-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	10/07/14	10/07/14	KWG1413535	
n-Butylbenzene	ND	U	2.0	0.10	0.054	1	10/07/14	10/07/14	KWG1413535	
1,2-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	10/07/14	10/07/14	KWG1413535	
1,2-Dibromo-3-chloropropane	ND	U	2.0	0.80	0.20	1	10/07/14	10/07/14	KWG1413535	
1,2,4-Trichlorobenzene	ND	U	2.0	0.30	0.096	1	10/07/14	10/07/14	KWG1413535	
Hexachlorobutadiene	ND	U	2.0	0.30	0.11	1	10/07/14	10/07/14	KWG1413535	
Naphthalene	ND	U	2.0	0.30	0.088	1	10/07/14	10/07/14	KWG1413535	
1,2,3-Trichlorobenzene	ND	U	2.0	0.40	0.11	1	10/07/14	10/07/14	KWG1413535	

* See Case Narrative

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1410537
Project:	TO 01 JBLM	**Date Collected:**	09/25/2014
Sample Matrix:	Water	**Date Received:**	09/26/2014

Volatile Organic Compounds

Sample Name:	LGC140925ISLX11-1	**Units:**	ug/L
Lab Code:	K1410537-008	**Basis:**	NA

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Dibromofluoromethane	96	85-115	10/07/14	Acceptable
1,2-Dichloroethane-d4	113	70-120	10/07/14	Acceptable
Toluene-d8	97	85-120	10/07/14	Acceptable
4-Bromofluorobenzene	92	75-120	10/07/14	Acceptable

Comments:

Analytical Results

Client: Sealaska Environmental Services, LLC
Project: TO 01 JBLM
Sample Matrix: Water

Service Request: K1410537
Date Collected: 09/25/2014
Date Received: 09/26/2014

Volatile Organic Compounds

Sample Name: LGC140925ISLX12-1
Lab Code: K1410537-009

Units: ug/L
Basis: NA

Extraction Method: EPA 5030B
Analysis Method: 8260C

Level: Low

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Dichlorodifluoromethane	ND	U	0.50	0.20	0.13	1	10/07/14	10/07/14	KWG1413535	
Chloromethane	ND	U	0.50	0.20	0.068	1	10/07/14	10/07/14	KWG1413535	
Vinyl Chloride	ND	U	0.50	0.10	0.075	1	10/07/14	10/07/14	KWG1413535	
Bromomethane	ND	U	0.50	0.30	0.10	1	10/07/14	10/07/14	KWG1413535	
Chloroethane	ND	U	0.50	0.20	0.16	1	10/07/14	10/07/14	KWG1413535	
Trichlorofluoromethane	ND	U	0.50	0.20	0.12	1	10/07/14	10/07/14	KWG1413535	
1,1-Dichloroethene	ND	U	0.50	0.20	0.080	1	10/07/14	10/07/14	KWG1413535	
Acetone	ND	U	20	10	3.3	1	10/07/14	10/07/14	KWG1413535	*
Carbon Disulfide	ND	U	0.50	0.20	0.069	1	10/07/14	10/07/14	KWG1413535	*
Methylene Chloride	ND	U	2.0	0.20	0.10	1	10/07/14	10/07/14	KWG1413535	
Methyl tert-Butyl Ether	ND	U	0.50	0.30	0.11	1	10/07/14	10/07/14	KWG1413535	
trans-1,2-Dichloroethene	ND	U	0.50	0.20	0.072	1	10/07/14	10/07/14	KWG1413535	
1,1-Dichloroethane	ND	U	0.50	0.20	0.077	1	10/07/14	10/07/14	KWG1413535	
2,2-Dichloropropane	ND	U	0.50	0.20	0.060	1	10/07/14	10/07/14	KWG1413535	*
cis-1,2-Dichloroethene	**0.52**		0.50	0.20	0.067	1	10/07/14	10/07/14	KWG1413535	
2-Butanone (MEK)	ND	U	20	4.0	1.9	1	10/07/14	10/07/14	KWG1413535	
Bromochloromethane	ND	U	0.50	0.20	0.16	1	10/07/14	10/07/14	KWG1413535	
Chloroform	**0.30**	J	0.50	0.20	0.072	1	10/07/14	10/07/14	KWG1413535	
1,1,1-Trichloroethane (TCA)	ND	U	0.50	0.20	0.075	1	10/07/14	10/07/14	KWG1413535	
Carbon Tetrachloride	ND	U	0.50	0.20	0.096	1	10/07/14	10/07/14	KWG1413535	
1,1-Dichloropropene	ND	U	0.50	0.20	0.089	1	10/07/14	10/07/14	KWG1413535	
Benzene	ND	U	0.50	0.10	0.062	1	10/07/14	10/07/14	KWG1413535	
1,2-Dichloroethane (EDC)	ND	U	0.50	0.15	0.080	1	10/07/14	10/07/14	KWG1413535	
Trichloroethene (TCE)	**27**		0.50	0.10	0.10	1	10/07/14	10/07/14	KWG1413535	
1,2-Dichloropropane	ND	U	0.50	0.20	0.095	1	10/07/14	10/07/14	KWG1413535	
Dibromomethane	ND	U	0.50	0.50	0.15	1	10/07/14	10/07/14	KWG1413535	
Bromodichloromethane	ND	U	0.50	0.30	0.091	1	10/07/14	10/07/14	KWG1413535	
cis-1,3-Dichloropropene	ND	U	0.50	0.20	0.18	1	10/07/14	10/07/14	KWG1413535	
4-Methyl-2-pentanone (MIBK)	ND	U	20	10	2.6	1	10/07/14	10/07/14	KWG1413535	
Toluene	ND	U	0.50	0.10	0.054	1	10/07/14	10/07/14	KWG1413535	
trans-1,3-Dichloropropene	ND	U	0.50	0.20	0.068	1	10/07/14	10/07/14	KWG1413535	*
1,1,2-Trichloroethane	ND	U	0.50	0.40	0.14	1	10/07/14	10/07/14	KWG1413535	
Tetrachloroethene (PCE)	**0.10**	J	0.50	0.20	0.099	1	10/07/14	10/07/14	KWG1413535	

Comments:

Analytical Results

Client: Sealaska Environmental Services, LLC
Project: TO 01 JBLM
Sample Matrix: Water

Service Request: K1410537
Date Collected: 09/25/2014
Date Received: 09/26/2014

Volatile Organic Compounds

Sample Name: LGC140925ISLX12-1
Lab Code: K1410537-009

Units: ug/L
Basis: NA

Extraction Method: EPA 5030B
Analysis Method: 8260C

Level: Low

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
2-Hexanone	ND	U	20	10	2.7	1	10/07/14	10/07/14	KWG1413535	
1,3-Dichloropropane	ND	U	0.50	0.30	0.14	1	10/07/14	10/07/14	KWG1413535	
Dibromochloromethane	ND	U	0.50	0.50	0.14	1	10/07/14	10/07/14	KWG1413535	
1,2-Dibromoethane (EDB)	ND	U	2.0	0.20	0.10	1	10/07/14	10/07/14	KWG1413535	
Chlorobenzene	ND	U	0.50	0.20	0.11	1	10/07/14	10/07/14	KWG1413535	
Ethylbenzene	ND	U	0.50	0.10	0.050	1	10/07/14	10/07/14	KWG1413535	
1,1,1,2-Tetrachloroethane	ND	U	0.50	0.20	0.11	1	10/07/14	10/07/14	KWG1413535	
m,p-Xylenes	ND	U	0.50	0.20	0.11	1	10/07/14	10/07/14	KWG1413535	
o-Xylene	ND	U	0.50	0.20	0.074	1	10/07/14	10/07/14	KWG1413535	
Styrene	ND	U	0.50	0.20	0.089	1	10/07/14	10/07/14	KWG1413535	
Bromoform	ND	U	0.50	0.50	0.16	1	10/07/14	10/07/14	KWG1413535	
Isopropylbenzene	ND	U	2.0	0.20	0.051	1	10/07/14	10/07/14	KWG1413535	
1,1,2,2-Tetrachloroethane	ND	U	0.50	0.20	0.16	1	10/07/14	10/07/14	KWG1413535	
Bromobenzene	ND	U	2.0	0.20	0.12	1	10/07/14	10/07/14	KWG1413535	
n-Propylbenzene	ND	U	2.0	0.20	0.054	1	10/07/14	10/07/14	KWG1413535	
1,2,3-Trichloropropane	ND	U	0.50	0.50	0.20	1	10/07/14	10/07/14	KWG1413535	
2-Chlorotoluene	ND	U	2.0	0.20	0.10	1	10/07/14	10/07/14	KWG1413535	
1,3,5-Trimethylbenzene	ND	U	2.0	0.20	0.089	1	10/07/14	10/07/14	KWG1413535	
4-Chlorotoluene	ND	U	2.0	0.20	0.13	1	10/07/14	10/07/14	KWG1413535	
tert-Butylbenzene	ND	U	2.0	0.20	0.059	1	10/07/14	10/07/14	KWG1413535	
1,2,4-Trimethylbenzene	ND	U	2.0	0.20	0.069	1	10/07/14	10/07/14	KWG1413535	
sec-Butylbenzene	ND	U	2.0	0.10	0.062	1	10/07/14	10/07/14	KWG1413535	
4-Isopropyltoluene	ND	U	2.0	0.20	0.060	1	10/07/14	10/07/14	KWG1413535	
1,3-Dichlorobenzene	ND	U	0.50	0.20	0.10	1	10/07/14	10/07/14	KWG1413535	
1,4-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	10/07/14	10/07/14	KWG1413535	
n-Butylbenzene	ND	U	2.0	0.10	0.054	1	10/07/14	10/07/14	KWG1413535	
1,2-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	10/07/14	10/07/14	KWG1413535	
1,2-Dibromo-3-chloropropane	ND	U	2.0	0.80	0.20	1	10/07/14	10/07/14	KWG1413535	
1,2,4-Trichlorobenzene	ND	U	2.0	0.30	0.096	1	10/07/14	10/07/14	KWG1413535	
Hexachlorobutadiene	ND	U	2.0	0.30	0.11	1	10/07/14	10/07/14	KWG1413535	
Naphthalene	ND	U	2.0	0.30	0.088	1	10/07/14	10/07/14	KWG1413535	
1,2,3-Trichlorobenzene	ND	U	2.0	0.40	0.11	1	10/07/14	10/07/14	KWG1413535	

* See Case Narrative

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1410537
Project:	TO 01 JBLM	**Date Collected:**	09/25/2014
Sample Matrix:	Water	**Date Received:**	09/26/2014

Volatile Organic Compounds

Sample Name:	LGC140925ISLX12-1	**Units:**	ug/L
Lab Code:	K1410537-009	**Basis:**	NA

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Dibromofluoromethane	96	85-115	10/07/14	Acceptable
1,2-Dichloroethane-d4	112	70-120	10/07/14	Acceptable
Toluene-d8	97	85-120	10/07/14	Acceptable
4-Bromofluorobenzene	92	75-120	10/07/14	Acceptable

Comments:

Analytical Results

Client: Sealaska Environmental Services, LLC
Project: TO 01 JBLM
Sample Matrix: Water

Service Request: K1410537
Date Collected: 09/25/2014
Date Received: 09/26/2014

Volatile Organic Compounds

Sample Name: LGC140925ISLX13-1
Lab Code: K1410537-010

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
Dichlorodifluoromethane	ND	U	0.50	0.20	0.13	1	10/07/14	10/07/14	KWG1413535	
Chloromethane	ND	U	0.50	0.20	0.068	1	10/07/14	10/07/14	KWG1413535	
Vinyl Chloride	ND	U	0.50	0.10	0.075	1	10/07/14	10/07/14	KWG1413535	
Bromomethane	ND	U	0.50	0.30	0.10	1	10/07/14	10/07/14	KWG1413535	
Chloroethane	ND	U	0.50	0.20	0.16	1	10/07/14	10/07/14	KWG1413535	
Trichlorofluoromethane	ND	U	0.50	0.20	0.12	1	10/07/14	10/07/14	KWG1413535	
1,1-Dichloroethene	ND	U	0.50	0.20	0.080	1	10/07/14	10/07/14	KWG1413535	
Acetone	ND	U	20	10	3.3	1	10/07/14	10/07/14	KWG1413535	*
Carbon Disulfide	ND	U	0.50	0.20	0.069	1	10/07/14	10/07/14	KWG1413535	*
Methylene Chloride	ND	U	2.0	0.20	0.10	1	10/07/14	10/07/14	KWG1413535	
Methyl tert-Butyl Ether	ND	U	0.50	0.30	0.11	1	10/07/14	10/07/14	KWG1413535	
trans-1,2-Dichloroethene	ND	U	0.50	0.20	0.072	1	10/07/14	10/07/14	KWG1413535	
1,1-Dichloroethane	ND	U	0.50	0.20	0.077	1	10/07/14	10/07/14	KWG1413535	
2,2-Dichloropropane	ND	U	0.50	0.20	0.060	1	10/07/14	10/07/14	KWG1413535	*
cis-1,2-Dichloroethene	**0.35**	J	0.50	0.20	0.067	1	10/07/14	10/07/14	KWG1413535	
2-Butanone (MEK)	ND	U	20	4.0	1.9	1	10/07/14	10/07/14	KWG1413535	
Bromochloromethane	ND	U	0.50	0.20	0.16	1	10/07/14	10/07/14	KWG1413535	
Chloroform	ND	U	0.50	0.20	0.072	1	10/07/14	10/07/14	KWG1413535	
1,1,1-Trichloroethane (TCA)	ND	U	0.50	0.20	0.075	1	10/07/14	10/07/14	KWG1413535	
Carbon Tetrachloride	ND	U	0.50	0.20	0.096	1	10/07/14	10/07/14	KWG1413535	
1,1-Dichloropropene	ND	U	0.50	0.20	0.089	1	10/07/14	10/07/14	KWG1413535	
Benzene	ND	U	0.50	0.10	0.062	1	10/07/14	10/07/14	KWG1413535	
1,2-Dichloroethane (EDC)	ND	U	0.50	0.15	0.080	1	10/07/14	10/07/14	KWG1413535	
Trichloroethene (TCE)	**8.6**		0.50	0.10	0.10	1	10/07/14	10/07/14	KWG1413535	
1,2-Dichloropropane	ND	U	0.50	0.20	0.095	1	10/07/14	10/07/14	KWG1413535	
Dibromomethane	ND	U	0.50	0.50	0.15	1	10/07/14	10/07/14	KWG1413535	
Bromodichloromethane	ND	U	0.50	0.30	0.091	1	10/07/14	10/07/14	KWG1413535	
cis-1,3-Dichloropropene	ND	U	0.50	0.20	0.18	1	10/07/14	10/07/14	KWG1413535	
4-Methyl-2-pentanone (MIBK)	ND	U	20	10	2.6	1	10/07/14	10/07/14	KWG1413535	
Toluene	ND	U	0.50	0.10	0.054	1	10/07/14	10/07/14	KWG1413535	
trans-1,3-Dichloropropene	ND	U	0.50	0.20	0.068	1	10/07/14	10/07/14	KWG1413535	*
1,1,2-Trichloroethane	ND	U	0.50	0.40	0.14	1	10/07/14	10/07/14	KWG1413535	
Tetrachloroethene (PCE)	ND	U	0.50	0.20	0.099	1	10/07/14	10/07/14	KWG1413535	

Comments:

Analytical Results

Client: Sealaska Environmental Services, LLC
Project: TO 01 JBLM
Sample Matrix: Water

Service Request: K1410537
Date Collected: 09/25/2014
Date Received: 09/26/2014

Volatile Organic Compounds

Sample Name: LGC140925ISLX13-1
Lab Code: K1410537-010

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
2-Hexanone	ND	U	20	10	2.7	1	10/07/14	10/07/14	KWG1413535	
1,3-Dichloropropane	ND	U	0.50	0.30	0.14	1	10/07/14	10/07/14	KWG1413535	
Dibromochloromethane	ND	U	0.50	0.50	0.14	1	10/07/14	10/07/14	KWG1413535	
1,2-Dibromoethane (EDB)	ND	U	2.0	0.20	0.10	1	10/07/14	10/07/14	KWG1413535	
Chlorobenzene	ND	U	0.50	0.20	0.11	1	10/07/14	10/07/14	KWG1413535	
Ethylbenzene	ND	U	0.50	0.10	0.050	1	10/07/14	10/07/14	KWG1413535	
1,1,1,2-Tetrachloroethane	ND	U	0.50	0.20	0.11	1	10/07/14	10/07/14	KWG1413535	
m,p-Xylenes	ND	U	0.50	0.20	0.11	1	10/07/14	10/07/14	KWG1413535	
o-Xylene	ND	U	0.50	0.20	0.074	1	10/07/14	10/07/14	KWG1413535	
Styrene	ND	U	0.50	0.20	0.089	1	10/07/14	10/07/14	KWG1413535	
Bromoform	ND	U	0.50	0.50	0.16	1	10/07/14	10/07/14	KWG1413535	
Isopropylbenzene	ND	U	2.0	0.20	0.051	1	10/07/14	10/07/14	KWG1413535	
1,1,2,2-Tetrachloroethane	ND	U	0.50	0.20	0.16	1	10/07/14	10/07/14	KWG1413535	
Bromobenzene	ND	U	2.0	0.20	0.12	1	10/07/14	10/07/14	KWG1413535	
n-Propylbenzene	ND	U	2.0	0.20	0.054	1	10/07/14	10/07/14	KWG1413535	
1,2,3-Trichloropropane	ND	U	0.50	0.50	0.20	1	10/07/14	10/07/14	KWG1413535	
2-Chlorotoluene	ND	U	2.0	0.20	0.10	1	10/07/14	10/07/14	KWG1413535	
1,3,5-Trimethylbenzene	ND	U	2.0	0.20	0.089	1	10/07/14	10/07/14	KWG1413535	
4-Chlorotoluene	ND	U	2.0	0.20	0.13	1	10/07/14	10/07/14	KWG1413535	
tert-Butylbenzene	ND	U	2.0	0.20	0.059	1	10/07/14	10/07/14	KWG1413535	
1,2,4-Trimethylbenzene	ND	U	2.0	0.20	0.069	1	10/07/14	10/07/14	KWG1413535	
sec-Butylbenzene	ND	U	2.0	0.10	0.062	1	10/07/14	10/07/14	KWG1413535	
4-Isopropyltoluene	ND	U	2.0	0.20	0.060	1	10/07/14	10/07/14	KWG1413535	
1,3-Dichlorobenzene	ND	U	0.50	0.20	0.10	1	10/07/14	10/07/14	KWG1413535	
1,4-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	10/07/14	10/07/14	KWG1413535	
n-Butylbenzene	ND	U	2.0	0.10	0.054	1	10/07/14	10/07/14	KWG1413535	
1,2-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	10/07/14	10/07/14	KWG1413535	
1,2-Dibromo-3-chloropropane	ND	U	2.0	0.80	0.20	1	10/07/14	10/07/14	KWG1413535	
1,2,4-Trichlorobenzene	ND	U	2.0	0.30	0.096	1	10/07/14	10/07/14	KWG1413535	
Hexachlorobutadiene	ND	U	2.0	0.30	0.11	1	10/07/14	10/07/14	KWG1413535	
Naphthalene	ND	U	2.0	0.30	0.088	1	10/07/14	10/07/14	KWG1413535	
1,2,3-Trichlorobenzene	ND	U	2.0	0.40	0.11	1	10/07/14	10/07/14	KWG1413535	

* See Case Narrative

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1410537
Project:	TO 01 JBLM	**Date Collected:**	09/25/2014
Sample Matrix:	Water	**Date Received:**	09/26/2014

Volatile Organic Compounds

Sample Name:	LGC140925ISLX13-1	**Units:**	ug/L
Lab Code:	K1410537-010	**Basis:**	NA

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Dibromofluoromethane	99	85-115	10/07/14	Acceptable
1,2-Dichloroethane-d4	113	70-120	10/07/14	Acceptable
Toluene-d8	96	85-120	10/07/14	Acceptable
4-Bromofluorobenzene	90	75-120	10/07/14	Acceptable

Comments:

Analytical Results

Client: Sealaska Environmental Services, LLC
Project: TO 01 JBLM
Sample Matrix: Water

Service Request: K1410537
Date Collected: 09/25/2014
Date Received: 09/26/2014

Volatile Organic Compounds

Sample Name: LGC140925ISLX14-1
Lab Code: K1410537-011

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
Dichlorodifluoromethane	ND	U	0.50	0.20	0.13	1	10/07/14	10/07/14	KWG1413535	
Chloromethane	ND	U	0.50	0.20	0.068	1	10/07/14	10/07/14	KWG1413535	
Vinyl Chloride	ND	U	0.50	0.10	0.075	1	10/07/14	10/07/14	KWG1413535	
Bromomethane	ND	U	0.50	0.30	0.10	1	10/07/14	10/07/14	KWG1413535	
Chloroethane	ND	U	0.50	0.20	0.16	1	10/07/14	10/07/14	KWG1413535	
Trichlorofluoromethane	ND	U	0.50	0.20	0.12	1	10/07/14	10/07/14	KWG1413535	
1,1-Dichloroethene	ND	U	0.50	0.20	0.080	1	10/07/14	10/07/14	KWG1413535	
Acetone	ND	U	20	10	3.3	1	10/07/14	10/07/14	KWG1413535	*
Carbon Disulfide	ND	U	0.50	0.20	0.069	1	10/07/14	10/07/14	KWG1413535	*
Methylene Chloride	ND	U	2.0	0.20	0.10	1	10/07/14	10/07/14	KWG1413535	
Methyl tert-Butyl Ether	ND	U	0.50	0.30	0.11	1	10/07/14	10/07/14	KWG1413535	
trans-1,2-Dichloroethene	ND	U	0.50	0.20	0.072	1	10/07/14	10/07/14	KWG1413535	
1,1-Dichloroethane	ND	U	0.50	0.20	0.077	1	10/07/14	10/07/14	KWG1413535	
2,2-Dichloropropane	ND	U	0.50	0.20	0.060	1	10/07/14	10/07/14	KWG1413535	*
cis-1,2-Dichloroethene	**0.19**	J	0.50	0.20	0.067	1	10/07/14	10/07/14	KWG1413535	
2-Butanone (MEK)	ND	U	20	4.0	1.9	1	10/07/14	10/07/14	KWG1413535	
Bromochloromethane	ND	U	0.50	0.20	0.16	1	10/07/14	10/07/14	KWG1413535	
Chloroform	**0.14**	J	0.50	0.20	0.072	1	10/07/14	10/07/14	KWG1413535	
1,1,1-Trichloroethane (TCA)	ND	U	0.50	0.20	0.075	1	10/07/14	10/07/14	KWG1413535	
Carbon Tetrachloride	ND	U	0.50	0.20	0.096	1	10/07/14	10/07/14	KWG1413535	
1,1-Dichloropropene	ND	U	0.50	0.20	0.089	1	10/07/14	10/07/14	KWG1413535	
Benzene	ND	U	0.50	0.10	0.062	1	10/07/14	10/07/14	KWG1413535	
1,2-Dichloroethane (EDC)	ND	U	0.50	0.15	0.080	1	10/07/14	10/07/14	KWG1413535	
Trichloroethene (TCE)	**8.2**		0.50	0.10	0.10	1	10/07/14	10/07/14	KWG1413535	
1,2-Dichloropropane	ND	U	0.50	0.20	0.095	1	10/07/14	10/07/14	KWG1413535	
Dibromomethane	ND	U	0.50	0.50	0.15	1	10/07/14	10/07/14	KWG1413535	
Bromodichloromethane	ND	U	0.50	0.30	0.091	1	10/07/14	10/07/14	KWG1413535	
cis-1,3-Dichloropropene	ND	U	0.50	0.20	0.18	1	10/07/14	10/07/14	KWG1413535	
4-Methyl-2-pentanone (MIBK)	ND	U	20	10	2.6	1	10/07/14	10/07/14	KWG1413535	
Toluene	ND	U	0.50	0.10	0.054	1	10/07/14	10/07/14	KWG1413535	
trans-1,3-Dichloropropene	ND	U	0.50	0.20	0.068	1	10/07/14	10/07/14	KWG1413535	*
1,1,2-Trichloroethane	ND	U	0.50	0.40	0.14	1	10/07/14	10/07/14	KWG1413535	
Tetrachloroethene (PCE)	ND	U	0.50	0.20	0.099	1	10/07/14	10/07/14	KWG1413535	

Comments:

Analytical Results

Client: Sealaska Environmental Services, LLC
Project: TO 01 JBLM
Sample Matrix: Water

Service Request: K1410537
Date Collected: 09/25/2014
Date Received: 09/26/2014

Volatile Organic Compounds

Sample Name: LGC140925ISLX14-1
Lab Code: K1410537-011

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
2-Hexanone	ND	U	20	10	2.7	1	10/07/14	10/07/14	KWG1413535	
1,3-Dichloropropane	ND	U	0.50	0.30	0.14	1	10/07/14	10/07/14	KWG1413535	
Dibromochloromethane	ND	U	0.50	0.50	0.14	1	10/07/14	10/07/14	KWG1413535	
1,2-Dibromoethane (EDB)	ND	U	2.0	0.20	0.10	1	10/07/14	10/07/14	KWG1413535	
Chlorobenzene	ND	U	0.50	0.20	0.11	1	10/07/14	10/07/14	KWG1413535	
Ethylbenzene	ND	U	0.50	0.10	0.050	1	10/07/14	10/07/14	KWG1413535	
1,1,1,2-Tetrachloroethane	ND	U	0.50	0.20	0.11	1	10/07/14	10/07/14	KWG1413535	
m,p-Xylenes	ND	U	0.50	0.20	0.11	1	10/07/14	10/07/14	KWG1413535	
o-Xylene	ND	U	0.50	0.20	0.074	1	10/07/14	10/07/14	KWG1413535	
Styrene	ND	U	0.50	0.20	0.089	1	10/07/14	10/07/14	KWG1413535	
Bromoform	ND	U	0.50	0.50	0.16	1	10/07/14	10/07/14	KWG1413535	
Isopropylbenzene	ND	U	2.0	0.20	0.051	1	10/07/14	10/07/14	KWG1413535	
1,1,2,2-Tetrachloroethane	ND	U	0.50	0.20	0.16	1	10/07/14	10/07/14	KWG1413535	
Bromobenzene	ND	U	2.0	0.20	0.12	1	10/07/14	10/07/14	KWG1413535	
n-Propylbenzene	ND	U	2.0	0.20	0.054	1	10/07/14	10/07/14	KWG1413535	
1,2,3-Trichloropropane	ND	U	0.50	0.50	0.20	1	10/07/14	10/07/14	KWG1413535	
2-Chlorotoluene	ND	U	2.0	0.20	0.10	1	10/07/14	10/07/14	KWG1413535	
1,3,5-Trimethylbenzene	ND	U	2.0	0.20	0.089	1	10/07/14	10/07/14	KWG1413535	
4-Chlorotoluene	ND	U	2.0	0.20	0.13	1	10/07/14	10/07/14	KWG1413535	
tert-Butylbenzene	ND	U	2.0	0.20	0.059	1	10/07/14	10/07/14	KWG1413535	
1,2,4-Trimethylbenzene	ND	U	2.0	0.20	0.069	1	10/07/14	10/07/14	KWG1413535	
sec-Butylbenzene	ND	U	2.0	0.10	0.062	1	10/07/14	10/07/14	KWG1413535	
4-Isopropyltoluene	ND	U	2.0	0.20	0.060	1	10/07/14	10/07/14	KWG1413535	
1,3-Dichlorobenzene	ND	U	0.50	0.20	0.10	1	10/07/14	10/07/14	KWG1413535	
1,4-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	10/07/14	10/07/14	KWG1413535	
n-Butylbenzene	ND	U	2.0	0.10	0.054	1	10/07/14	10/07/14	KWG1413535	
1,2-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	10/07/14	10/07/14	KWG1413535	
1,2-Dibromo-3-chloropropane	ND	U	2.0	0.80	0.20	1	10/07/14	10/07/14	KWG1413535	
1,2,4-Trichlorobenzene	ND	U	2.0	0.30	0.096	1	10/07/14	10/07/14	KWG1413535	
Hexachlorobutadiene	ND	U	2.0	0.30	0.11	1	10/07/14	10/07/14	KWG1413535	
Naphthalene	ND	U	2.0	0.30	0.088	1	10/07/14	10/07/14	KWG1413535	
1,2,3-Trichlorobenzene	ND	U	2.0	0.40	0.11	1	10/07/14	10/07/14	KWG1413535	

* See Case Narrative

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1410537
Project:	TO 01 JBLM	**Date Collected:**	09/25/2014
Sample Matrix:	Water	**Date Received:**	09/26/2014

Volatile Organic Compounds

Sample Name:	LGC140925ISLX14-1	**Units:**	ug/L
Lab Code:	K1410537-011	**Basis:**	NA

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Dibromofluoromethane	96	85-115	10/07/14	Acceptable
1,2-Dichloroethane-d4	111	70-120	10/07/14	Acceptable
Toluene-d8	96	85-120	10/07/14	Acceptable
4-Bromofluorobenzene	90	75-120	10/07/14	Acceptable

Comments:

ALS Group USA, Corp. dba ALS Environmental

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1410537
Project:	TO 01 JBLM	**Date Collected:**	09/25/2014
Sample Matrix:	Water	**Date Received:**	09/26/2014

Volatile Organic Compounds

Sample Name:	LGC140925ISLX15-1	**Units:**	ug/L
Lab Code:	K1410537-012	**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
Dichlorodifluoromethane	ND	U	0.50	0.20	0.13	1	10/07/14	10/07/14	KWG1413535	
Chloromethane	ND	U	0.50	0.20	0.068	1	10/07/14	10/07/14	KWG1413535	
Vinyl Chloride	ND	U	0.50	0.10	0.075	1	10/07/14	10/07/14	KWG1413535	
Bromomethane	ND	U	0.50	0.30	0.10	1	10/07/14	10/07/14	KWG1413535	
Chloroethane	ND	U	0.50	0.20	0.16	1	10/07/14	10/07/14	KWG1413535	
Trichlorofluoromethane	ND	U	0.50	0.20	0.12	1	10/07/14	10/07/14	KWG1413535	
1,1-Dichloroethene	ND	U	0.50	0.20	0.080	1	10/07/14	10/07/14	KWG1413535	
Acetone	ND	U	20	10	3.3	1	10/07/14	10/07/14	KWG1413535	*
Carbon Disulfide	ND	U	0.50	0.20	0.069	1	10/07/14	10/07/14	KWG1413535	*
Methylene Chloride	ND	U	2.0	0.20	0.10	1	10/07/14	10/07/14	KWG1413535	
Methyl tert-Butyl Ether	ND	U	0.50	0.30	0.11	1	10/07/14	10/07/14	KWG1413535	
trans-1,2-Dichloroethene	ND	U	0.50	0.20	0.072	1	10/07/14	10/07/14	KWG1413535	
1,1-Dichloroethane	ND	U	0.50	0.20	0.077	1	10/07/14	10/07/14	KWG1413535	
2,2-Dichloropropane	ND	U	0.50	0.20	0.060	1	10/07/14	10/07/14	KWG1413535	*
cis-1,2-Dichloroethene	ND	U	0.50	0.20	0.067	1	10/07/14	10/07/14	KWG1413535	
2-Butanone (MEK)	ND	U	20	4.0	1.9	1	10/07/14	10/07/14	KWG1413535	
Bromochloromethane	ND	U	0.50	0.20	0.16	1	10/07/14	10/07/14	KWG1413535	
Chloroform	**0.090**	J	0.50	0.20	0.072	1	10/07/14	10/07/14	KWG1413535	
1,1,1-Trichloroethane (TCA)	ND	U	0.50	0.20	0.075	1	10/07/14	10/07/14	KWG1413535	
Carbon Tetrachloride	ND	U	0.50	0.20	0.096	1	10/07/14	10/07/14	KWG1413535	
1,1-Dichloropropene	ND	U	0.50	0.20	0.089	1	10/07/14	10/07/14	KWG1413535	
Benzene	ND	U	0.50	0.10	0.062	1	10/07/14	10/07/14	KWG1413535	
1,2-Dichloroethane (EDC)	ND	U	0.50	0.15	0.080	1	10/07/14	10/07/14	KWG1413535	
Trichloroethene (TCE)	**4.8**		0.50	0.10	0.10	1	10/07/14	10/07/14	KWG1413535	
1,2-Dichloropropane	ND	U	0.50	0.20	0.095	1	10/07/14	10/07/14	KWG1413535	
Dibromomethane	ND	U	0.50	0.50	0.15	1	10/07/14	10/07/14	KWG1413535	
Bromodichloromethane	ND	U	0.50	0.30	0.091	1	10/07/14	10/07/14	KWG1413535	
cis-1,3-Dichloropropene	ND	U	0.50	0.20	0.18	1	10/07/14	10/07/14	KWG1413535	
4-Methyl-2-pentanone (MIBK)	ND	U	20	10	2.6	1	10/07/14	10/07/14	KWG1413535	
Toluene	ND	U	0.50	0.10	0.054	1	10/07/14	10/07/14	KWG1413535	
trans-1,3-Dichloropropene	ND	U	0.50	0.20	0.068	1	10/07/14	10/07/14	KWG1413535	*
1,1,2-Trichloroethane	ND	U	0.50	0.40	0.14	1	10/07/14	10/07/14	KWG1413535	
Tetrachloroethene (PCE)	ND	U	0.50	0.20	0.099	1	10/07/14	10/07/14	KWG1413535	

Comments:

Analytical Results

Client: Sealaska Environmental Services, LLC
Project: TO 01 JBLM
Sample Matrix: Water

Service Request: K1410537
Date Collected: 09/25/2014
Date Received: 09/26/2014

Volatile Organic Compounds

Sample Name: LGC140925ISLX15-1
Lab Code: K1410537-012

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
2-Hexanone	ND	U	20	10	2.7	1	10/07/14	10/07/14	KWG1413535	
1,3-Dichloropropane	ND	U	0.50	0.30	0.14	1	10/07/14	10/07/14	KWG1413535	
Dibromochloromethane	ND	U	0.50	0.50	0.14	1	10/07/14	10/07/14	KWG1413535	
1,2-Dibromoethane (EDB)	ND	U	2.0	0.20	0.10	1	10/07/14	10/07/14	KWG1413535	
Chlorobenzene	ND	U	0.50	0.20	0.11	1	10/07/14	10/07/14	KWG1413535	
Ethylbenzene	ND	U	0.50	0.10	0.050	1	10/07/14	10/07/14	KWG1413535	
1,1,1,2-Tetrachloroethane	ND	U	0.50	0.20	0.11	1	10/07/14	10/07/14	KWG1413535	
m,p-Xylenes	ND	U	0.50	0.20	0.11	1	10/07/14	10/07/14	KWG1413535	
o-Xylene	ND	U	0.50	0.20	0.074	1	10/07/14	10/07/14	KWG1413535	
Styrene	ND	U	0.50	0.20	0.089	1	10/07/14	10/07/14	KWG1413535	
Bromoform	ND	U	0.50	0.50	0.16	1	10/07/14	10/07/14	KWG1413535	
Isopropylbenzene	ND	U	2.0	0.20	0.051	1	10/07/14	10/07/14	KWG1413535	
1,1,2,2-Tetrachloroethane	ND	U	0.50	0.20	0.16	1	10/07/14	10/07/14	KWG1413535	
Bromobenzene	ND	U	2.0	0.20	0.12	1	10/07/14	10/07/14	KWG1413535	
n-Propylbenzene	ND	U	2.0	0.20	0.054	1	10/07/14	10/07/14	KWG1413535	
1,2,3-Trichloropropane	ND	U	0.50	0.50	0.20	1	10/07/14	10/07/14	KWG1413535	
2-Chlorotoluene	ND	U	2.0	0.20	0.10	1	10/07/14	10/07/14	KWG1413535	
1,3,5-Trimethylbenzene	ND	U	2.0	0.20	0.089	1	10/07/14	10/07/14	KWG1413535	
4-Chlorotoluene	ND	U	2.0	0.20	0.13	1	10/07/14	10/07/14	KWG1413535	
tert-Butylbenzene	ND	U	2.0	0.20	0.059	1	10/07/14	10/07/14	KWG1413535	
1,2,4-Trimethylbenzene	ND	U	2.0	0.20	0.069	1	10/07/14	10/07/14	KWG1413535	
sec-Butylbenzene	ND	U	2.0	0.10	0.062	1	10/07/14	10/07/14	KWG1413535	
4-Isopropyltoluene	ND	U	2.0	0.20	0.060	1	10/07/14	10/07/14	KWG1413535	
1,3-Dichlorobenzene	ND	U	0.50	0.20	0.10	1	10/07/14	10/07/14	KWG1413535	
1,4-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	10/07/14	10/07/14	KWG1413535	
n-Butylbenzene	ND	U	2.0	0.10	0.054	1	10/07/14	10/07/14	KWG1413535	
1,2-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	10/07/14	10/07/14	KWG1413535	
1,2-Dibromo-3-chloropropane	ND	U	2.0	0.80	0.20	1	10/07/14	10/07/14	KWG1413535	
1,2,4-Trichlorobenzene	ND	U	2.0	0.30	0.096	1	10/07/14	10/07/14	KWG1413535	
Hexachlorobutadiene	ND	U	2.0	0.30	0.11	1	10/07/14	10/07/14	KWG1413535	
Naphthalene	ND	U	2.0	0.30	0.088	1	10/07/14	10/07/14	KWG1413535	
1,2,3-Trichlorobenzene	ND	U	2.0	0.40	0.11	1	10/07/14	10/07/14	KWG1413535	

* See Case Narrative

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1410537
Project:	TO 01 JBLM	**Date Collected:**	09/25/2014
Sample Matrix:	Water	**Date Received:**	09/26/2014

Volatile Organic Compounds

Sample Name:	LGC140925ISLX15-1	**Units:**	ug/L
Lab Code:	K1410537-012	**Basis:**	NA

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Dibromofluoromethane	94	85-115	10/07/14	Acceptable
1,2-Dichloroethane-d4	112	70-120	10/07/14	Acceptable
Toluene-d8	96	85-120	10/07/14	Acceptable
4-Bromofluorobenzene	93	75-120	10/07/14	Acceptable

Comments:

Analytical Results

Client: Sealaska Environmental Services, LLC
Project: TO 01 JBLM
Sample Matrix: Water

Service Request: K1410537
Date Collected: 09/25/2014
Date Received: 09/26/2014

Volatile Organic Compounds

Sample Name: LGC140925DUP6-1
Lab Code: K1410537-013

Units: ug/L
Basis: NA

Extraction Method: EPA 5030B
Analysis Method: 8260C

Level: Low

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Dichlorodifluoromethane	ND	U	0.50	0.20	0.13	1	10/07/14	10/07/14	KWG1413535	
Chloromethane	ND	U	0.50	0.20	0.068	1	10/07/14	10/07/14	KWG1413535	
Vinyl Chloride	ND	U	0.50	0.10	0.075	1	10/07/14	10/07/14	KWG1413535	
Bromomethane	ND	U	0.50	0.30	0.10	1	10/07/14	10/07/14	KWG1413535	
Chloroethane	ND	U	0.50	0.20	0.16	1	10/07/14	10/07/14	KWG1413535	
Trichlorofluoromethane	ND	U	0.50	0.20	0.12	1	10/07/14	10/07/14	KWG1413535	
1,1-Dichloroethene	ND	U	0.50	0.20	0.080	1	10/07/14	10/07/14	KWG1413535	
Acetone	ND	U	20	10	3.3	1	10/07/14	10/07/14	KWG1413535	*
Carbon Disulfide	ND	U	0.50	0.20	0.069	1	10/07/14	10/07/14	KWG1413535	*
Methylene Chloride	ND	U	2.0	0.20	0.10	1	10/07/14	10/07/14	KWG1413535	
Methyl tert-Butyl Ether	ND	U	0.50	0.30	0.11	1	10/07/14	10/07/14	KWG1413535	
trans-1,2-Dichloroethene	ND	U	0.50	0.20	0.072	1	10/07/14	10/07/14	KWG1413535	
1,1-Dichloroethane	ND	U	0.50	0.20	0.077	1	10/07/14	10/07/14	KWG1413535	
2,2-Dichloropropane	ND	U	0.50	0.20	0.060	1	10/07/14	10/07/14	KWG1413535	*
cis-1,2-Dichloroethene	**1.0**		0.50	0.20	0.067	1	10/07/14	10/07/14	KWG1413535	
2-Butanone (MEK)	ND	U	20	4.0	1.9	1	10/07/14	10/07/14	KWG1413535	
Bromochloromethane	ND	U	0.50	0.20	0.16	1	10/07/14	10/07/14	KWG1413535	
Chloroform	**1.0**		0.50	0.20	0.072	1	10/07/14	10/07/14	KWG1413535	
1,1,1-Trichloroethane (TCA)	**0.56**		0.50	0.20	0.075	1	10/07/14	10/07/14	KWG1413535	
Carbon Tetrachloride	ND	U	0.50	0.20	0.096	1	10/07/14	10/07/14	KWG1413535	
1,1-Dichloropropene	ND	U	0.50	0.20	0.089	1	10/07/14	10/07/14	KWG1413535	
Benzene	ND	U	0.50	0.10	0.062	1	10/07/14	10/07/14	KWG1413535	
1,2-Dichloroethane (EDC)	ND	U	0.50	0.15	0.080	1	10/07/14	10/07/14	KWG1413535	
Trichloroethene (TCE)	**56**		0.50	0.10	0.10	1	10/07/14	10/07/14	KWG1413535	
1,2-Dichloropropane	ND	U	0.50	0.20	0.095	1	10/07/14	10/07/14	KWG1413535	
Dibromomethane	ND	U	0.50	0.50	0.15	1	10/07/14	10/07/14	KWG1413535	
Bromodichloromethane	**0.12**	J	0.50	0.30	0.091	1	10/07/14	10/07/14	KWG1413535	
cis-1,3-Dichloropropene	ND	U	0.50	0.20	0.18	1	10/07/14	10/07/14	KWG1413535	
4-Methyl-2-pentanone (MIBK)	ND	U	20	10	2.6	1	10/07/14	10/07/14	KWG1413535	
Toluene	ND	U	0.50	0.10	0.054	1	10/07/14	10/07/14	KWG1413535	
trans-1,3-Dichloropropene	ND	U	0.50	0.20	0.068	1	10/07/14	10/07/14	KWG1413535	*
1,1,2-Trichloroethane	ND	U	0.50	0.40	0.14	1	10/07/14	10/07/14	KWG1413535	
Tetrachloroethene (PCE)	**0.19**	J	0.50	0.20	0.099	1	10/07/14	10/07/14	KWG1413535	

Comments:

Analytical Results

Client: Sealaska Environmental Services, LLC
Project: TO 01 JBLM
Sample Matrix: Water

Service Request: K1410537
Date Collected: 09/25/2014
Date Received: 09/26/2014

Volatile Organic Compounds

Sample Name: LGC140925DUP6-1
Lab Code: K1410537-013

Units: ug/L
Basis: NA

Extraction Method: EPA 5030B
Analysis Method: 8260C

Level: Low

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
2-Hexanone	ND	U	20	10	2.7	1	10/07/14	10/07/14	KWG1413535	
1,3-Dichloropropane	ND	U	0.50	0.30	0.14	1	10/07/14	10/07/14	KWG1413535	
Dibromochloromethane	ND	U	0.50	0.50	0.14	1	10/07/14	10/07/14	KWG1413535	
1,2-Dibromoethane (EDB)	ND	U	2.0	0.20	0.10	1	10/07/14	10/07/14	KWG1413535	
Chlorobenzene	ND	U	0.50	0.20	0.11	1	10/07/14	10/07/14	KWG1413535	
Ethylbenzene	ND	U	0.50	0.10	0.050	1	10/07/14	10/07/14	KWG1413535	
1,1,1,2-Tetrachloroethane	ND	U	0.50	0.20	0.11	1	10/07/14	10/07/14	KWG1413535	
m,p-Xylenes	ND	U	0.50	0.20	0.11	1	10/07/14	10/07/14	KWG1413535	
o-Xylene	ND	U	0.50	0.20	0.074	1	10/07/14	10/07/14	KWG1413535	
Styrene	ND	U	0.50	0.20	0.089	1	10/07/14	10/07/14	KWG1413535	
Bromoform	ND	U	0.50	0.50	0.16	1	10/07/14	10/07/14	KWG1413535	
Isopropylbenzene	ND	U	2.0	0.20	0.051	1	10/07/14	10/07/14	KWG1413535	
1,1,2,2-Tetrachloroethane	ND	U	0.50	0.20	0.16	1	10/07/14	10/07/14	KWG1413535	
Bromobenzene	ND	U	2.0	0.20	0.12	1	10/07/14	10/07/14	KWG1413535	
n-Propylbenzene	ND	U	2.0	0.20	0.054	1	10/07/14	10/07/14	KWG1413535	
1,2,3-Trichloropropane	ND	U	0.50	0.50	0.20	1	10/07/14	10/07/14	KWG1413535	
2-Chlorotoluene	ND	U	2.0	0.20	0.10	1	10/07/14	10/07/14	KWG1413535	
1,3,5-Trimethylbenzene	ND	U	2.0	0.20	0.089	1	10/07/14	10/07/14	KWG1413535	
4-Chlorotoluene	ND	U	2.0	0.20	0.13	1	10/07/14	10/07/14	KWG1413535	
tert-Butylbenzene	ND	U	2.0	0.20	0.059	1	10/07/14	10/07/14	KWG1413535	
1,2,4-Trimethylbenzene	ND	U	2.0	0.20	0.069	1	10/07/14	10/07/14	KWG1413535	
sec-Butylbenzene	ND	U	2.0	0.10	0.062	1	10/07/14	10/07/14	KWG1413535	
4-Isopropyltoluene	ND	U	2.0	0.20	0.060	1	10/07/14	10/07/14	KWG1413535	
1,3-Dichlorobenzene	ND	U	0.50	0.20	0.10	1	10/07/14	10/07/14	KWG1413535	
1,4-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	10/07/14	10/07/14	KWG1413535	
n-Butylbenzene	ND	U	2.0	0.10	0.054	1	10/07/14	10/07/14	KWG1413535	
1,2-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	10/07/14	10/07/14	KWG1413535	
1,2-Dibromo-3-chloropropane	ND	U	2.0	0.80	0.20	1	10/07/14	10/07/14	KWG1413535	
1,2,4-Trichlorobenzene	ND	U	2.0	0.30	0.096	1	10/07/14	10/07/14	KWG1413535	
Hexachlorobutadiene	ND	U	2.0	0.30	0.11	1	10/07/14	10/07/14	KWG1413535	
Naphthalene	ND	U	2.0	0.30	0.088	1	10/07/14	10/07/14	KWG1413535	
1,2,3-Trichlorobenzene	ND	U	2.0	0.40	0.11	1	10/07/14	10/07/14	KWG1413535	

* See Case Narrative

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1410537
Project:	TO 01 JBLM	**Date Collected:**	09/25/2014
Sample Matrix:	Water	**Date Received:**	09/26/2014

Volatile Organic Compounds

Sample Name:	LGC140925DUP6-1	**Units:**	ug/L
Lab Code:	K1410537-013	**Basis:**	NA

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Dibromofluoromethane	96	85-115	10/07/14	Acceptable
1,2-Dichloroethane-d4	112	70-120	10/07/14	Acceptable
Toluene-d8	98	85-120	10/07/14	Acceptable
4-Bromofluorobenzene	91	75-120	10/07/14	Acceptable

Comments:

Analytical Results

Client: Sealaska Environmental Services, LLC
Project: TO 01 JBLM
Sample Matrix: Water

Service Request: K1410537
Date Collected: 09/25/2014
Date Received: 09/26/2014

Volatile Organic Compounds

Sample Name: LGC140925ISI-1
Lab Code: K1410537-014

Units: ug/L
Basis: NA

Extraction Method: EPA 5030B
Analysis Method: 8260C

Level: Low

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Dichlorodifluoromethane	ND	U	0.50	0.20	0.13	1	10/07/14	10/07/14	KWG1413535	
Chloromethane	ND	U	0.50	0.20	0.068	1	10/07/14	10/07/14	KWG1413535	
Vinyl Chloride	ND	U	0.50	0.10	0.075	1	10/07/14	10/07/14	KWG1413535	
Bromomethane	ND	U	0.50	0.30	0.10	1	10/07/14	10/07/14	KWG1413535	
Chloroethane	ND	U	0.50	0.20	0.16	1	10/07/14	10/07/14	KWG1413535	
Trichlorofluoromethane	ND	U	0.50	0.20	0.12	1	10/07/14	10/07/14	KWG1413535	
1,1-Dichloroethene	ND	U	0.50	0.20	0.080	1	10/07/14	10/07/14	KWG1413535	
Acetone	ND	U	20	10	3.3	1	10/07/14	10/07/14	KWG1413535	*
Carbon Disulfide	ND	U	0.50	0.20	0.069	1	10/07/14	10/07/14	KWG1413535	*
Methylene Chloride	ND	U	2.0	0.20	0.10	1	10/07/14	10/07/14	KWG1413535	
Methyl tert-Butyl Ether	ND	U	0.50	0.30	0.11	1	10/07/14	10/07/14	KWG1413535	
trans-1,2-Dichloroethene	ND	U	0.50	0.20	0.072	1	10/07/14	10/07/14	KWG1413535	
1,1-Dichloroethane	ND	U	0.50	0.20	0.077	1	10/07/14	10/07/14	KWG1413535	
2,2-Dichloropropane	ND	U	0.50	0.20	0.060	1	10/07/14	10/07/14	KWG1413535	*
cis-1,2-Dichloroethene	**0.80**		0.50	0.20	0.067	1	10/07/14	10/07/14	KWG1413535	
2-Butanone (MEK)	ND	U	20	4.0	1.9	1	10/07/14	10/07/14	KWG1413535	
Bromochloromethane	ND	U	0.50	0.20	0.16	1	10/07/14	10/07/14	KWG1413535	
Chloroform	**0.38**	J	0.50	0.20	0.072	1	10/07/14	10/07/14	KWG1413535	
1,1,1-Trichloroethane (TCA)	**0.25**	J	0.50	0.20	0.075	1	10/07/14	10/07/14	KWG1413535	
Carbon Tetrachloride	ND	U	0.50	0.20	0.096	1	10/07/14	10/07/14	KWG1413535	
1,1-Dichloropropene	ND	U	0.50	0.20	0.089	1	10/07/14	10/07/14	KWG1413535	
Benzene	ND	U	0.50	0.10	0.062	1	10/07/14	10/07/14	KWG1413535	
1,2-Dichloroethane (EDC)	ND	U	0.50	0.15	0.080	1	10/07/14	10/07/14	KWG1413535	
Trichloroethene (TCE)	**34**		0.50	0.10	0.10	1	10/07/14	10/07/14	KWG1413535	
1,2-Dichloropropane	ND	U	0.50	0.20	0.095	1	10/07/14	10/07/14	KWG1413535	
Dibromomethane	ND	U	0.50	0.50	0.15	1	10/07/14	10/07/14	KWG1413535	
Bromodichloromethane	ND	U	0.50	0.30	0.091	1	10/07/14	10/07/14	KWG1413535	
cis-1,3-Dichloropropene	ND	U	0.50	0.20	0.18	1	10/07/14	10/07/14	KWG1413535	
4-Methyl-2-pentanone (MIBK)	ND	U	20	10	2.6	1	10/07/14	10/07/14	KWG1413535	
Toluene	ND	U	0.50	0.10	0.054	1	10/07/14	10/07/14	KWG1413535	
trans-1,3-Dichloropropene	ND	U	0.50	0.20	0.068	1	10/07/14	10/07/14	KWG1413535	*
1,1,2-Trichloroethane	ND	U	0.50	0.40	0.14	1	10/07/14	10/07/14	KWG1413535	
Tetrachloroethene (PCE)	**0.11**	J	0.50	0.20	0.099	1	10/07/14	10/07/14	KWG1413535	

Comments:

Analytical Results

Client: Sealaska Environmental Services, LLC
Project: TO 01 JBLM
Sample Matrix: Water

Service Request: K1410537
Date Collected: 09/25/2014
Date Received: 09/26/2014

Volatile Organic Compounds

Sample Name: LGC140925ISI-1
Lab Code: K1410537-014

Units: ug/L
Basis: NA

Extraction Method: EPA 5030B
Analysis Method: 8260C

Level: Low

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
2-Hexanone	ND	U	20	10	2.7	1	10/07/14	10/07/14	KWG1413535	
1,3-Dichloropropane	ND	U	0.50	0.30	0.14	1	10/07/14	10/07/14	KWG1413535	
Dibromochloromethane	ND	U	0.50	0.50	0.14	1	10/07/14	10/07/14	KWG1413535	
1,2-Dibromoethane (EDB)	ND	U	2.0	0.20	0.10	1	10/07/14	10/07/14	KWG1413535	
Chlorobenzene	ND	U	0.50	0.20	0.11	1	10/07/14	10/07/14	KWG1413535	
Ethylbenzene	ND	U	0.50	0.10	0.050	1	10/07/14	10/07/14	KWG1413535	
1,1,1,2-Tetrachloroethane	ND	U	0.50	0.20	0.11	1	10/07/14	10/07/14	KWG1413535	
m,p-Xylenes	ND	U	0.50	0.20	0.11	1	10/07/14	10/07/14	KWG1413535	
o-Xylene	ND	U	0.50	0.20	0.074	1	10/07/14	10/07/14	KWG1413535	
Styrene	ND	U	0.50	0.20	0.089	1	10/07/14	10/07/14	KWG1413535	
Bromoform	ND	U	0.50	0.50	0.16	1	10/07/14	10/07/14	KWG1413535	
Isopropylbenzene	ND	U	2.0	0.20	0.051	1	10/07/14	10/07/14	KWG1413535	
1,1,2,2-Tetrachloroethane	ND	U	0.50	0.20	0.16	1	10/07/14	10/07/14	KWG1413535	
Bromobenzene	ND	U	2.0	0.20	0.12	1	10/07/14	10/07/14	KWG1413535	
n-Propylbenzene	ND	U	2.0	0.20	0.054	1	10/07/14	10/07/14	KWG1413535	
1,2,3-Trichloropropane	ND	U	0.50	0.50	0.20	1	10/07/14	10/07/14	KWG1413535	
2-Chlorotoluene	ND	U	2.0	0.20	0.10	1	10/07/14	10/07/14	KWG1413535	
1,3,5-Trimethylbenzene	ND	U	2.0	0.20	0.089	1	10/07/14	10/07/14	KWG1413535	
4-Chlorotoluene	ND	U	2.0	0.20	0.13	1	10/07/14	10/07/14	KWG1413535	
tert-Butylbenzene	ND	U	2.0	0.20	0.059	1	10/07/14	10/07/14	KWG1413535	
1,2,4-Trimethylbenzene	ND	U	2.0	0.20	0.069	1	10/07/14	10/07/14	KWG1413535	
sec-Butylbenzene	ND	U	2.0	0.10	0.062	1	10/07/14	10/07/14	KWG1413535	
4-Isopropyltoluene	ND	U	2.0	0.20	0.060	1	10/07/14	10/07/14	KWG1413535	
1,3-Dichlorobenzene	ND	U	0.50	0.20	0.10	1	10/07/14	10/07/14	KWG1413535	
1,4-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	10/07/14	10/07/14	KWG1413535	
n-Butylbenzene	ND	U	2.0	0.10	0.054	1	10/07/14	10/07/14	KWG1413535	
1,2-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	10/07/14	10/07/14	KWG1413535	
1,2-Dibromo-3-chloropropane	ND	U	2.0	0.80	0.20	1	10/07/14	10/07/14	KWG1413535	
1,2,4-Trichlorobenzene	ND	U	2.0	0.30	0.096	1	10/07/14	10/07/14	KWG1413535	
Hexachlorobutadiene	ND	U	2.0	0.30	0.11	1	10/07/14	10/07/14	KWG1413535	
Naphthalene	ND	U	2.0	0.30	0.088	1	10/07/14	10/07/14	KWG1413535	
1,2,3-Trichlorobenzene	ND	U	2.0	0.40	0.11	1	10/07/14	10/07/14	KWG1413535	

* See Case Narrative

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1410537
Project:	TO 01 JBLM	**Date Collected:**	09/25/2014
Sample Matrix:	Water	**Date Received:**	09/26/2014

Volatile Organic Compounds

Sample Name:	LGC140925ISI-1	**Units:**	ug/L
Lab Code:	K1410537-014	**Basis:**	NA

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Dibromofluoromethane	96	85-115	10/07/14	Acceptable
1,2-Dichloroethane-d4	113	70-120	10/07/14	Acceptable
Toluene-d8	96	85-120	10/07/14	Acceptable
4-Bromofluorobenzene	91	75-120	10/07/14	Acceptable

Comments:

Analytical Results

Client: Sealaska Environmental Services, LLC
Project: TO 01 JBLM
Sample Matrix: Water

Service Request: K1410537
Date Collected: 09/25/2014
Date Received: 09/26/2014

Volatile Organic Compounds

Sample Name: LGC140925ISE-1
Lab Code: K1410537-015

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
Dichlorodifluoromethane	ND	U	0.50	0.20	0.13	1	10/07/14	10/07/14	KWG1413535	
Chloromethane	ND	U	0.50	0.20	0.068	1	10/07/14	10/07/14	KWG1413535	
Vinyl Chloride	ND	U	0.50	0.10	0.075	1	10/07/14	10/07/14	KWG1413535	
Bromomethane	ND	U	0.50	0.30	0.10	1	10/07/14	10/07/14	KWG1413535	
Chloroethane	ND	U	0.50	0.20	0.16	1	10/07/14	10/07/14	KWG1413535	
Trichlorofluoromethane	ND	U	0.50	0.20	0.12	1	10/07/14	10/07/14	KWG1413535	
1,1-Dichloroethene	ND	U	0.50	0.20	0.080	1	10/07/14	10/07/14	KWG1413535	
Acetone	ND	U	20	10	3.3	1	10/07/14	10/07/14	KWG1413535	*
Carbon Disulfide	ND	U	0.50	0.20	0.069	1	10/07/14	10/07/14	KWG1413535	*
Methylene Chloride	ND	U	2.0	0.20	0.10	1	10/07/14	10/07/14	KWG1413535	
Methyl tert-Butyl Ether	ND	U	0.50	0.30	0.11	1	10/07/14	10/07/14	KWG1413535	
trans-1,2-Dichloroethene	ND	U	0.50	0.20	0.072	1	10/07/14	10/07/14	KWG1413535	
1,1-Dichloroethane	ND	U	0.50	0.20	0.077	1	10/07/14	10/07/14	KWG1413535	
2,2-Dichloropropane	ND	U	0.50	0.20	0.060	1	10/07/14	10/07/14	KWG1413535	*
cis-1,2-Dichloroethene	ND	U	0.50	0.20	0.067	1	10/07/14	10/07/14	KWG1413535	
2-Butanone (MEK)	ND	U	20	4.0	1.9	1	10/07/14	10/07/14	KWG1413535	
Bromochloromethane	ND	U	0.50	0.20	0.16	1	10/07/14	10/07/14	KWG1413535	
Chloroform	ND	U	0.50	0.20	0.072	1	10/07/14	10/07/14	KWG1413535	
1,1,1-Trichloroethane (TCA)	ND	U	0.50	0.20	0.075	1	10/07/14	10/07/14	KWG1413535	
Carbon Tetrachloride	ND	U	0.50	0.20	0.096	1	10/07/14	10/07/14	KWG1413535	
1,1-Dichloropropene	ND	U	0.50	0.20	0.089	1	10/07/14	10/07/14	KWG1413535	
Benzene	ND	U	0.50	0.10	0.062	1	10/07/14	10/07/14	KWG1413535	
1,2-Dichloroethane (EDC)	ND	U	0.50	0.15	0.080	1	10/07/14	10/07/14	KWG1413535	
Trichloroethene (TCE)	**0.41**	J	0.50	0.10	0.10	1	10/07/14	10/07/14	KWG1413535	
1,2-Dichloropropane	ND	U	0.50	0.20	0.095	1	10/07/14	10/07/14	KWG1413535	
Dibromomethane	ND	U	0.50	0.50	0.15	1	10/07/14	10/07/14	KWG1413535	
Bromodichloromethane	ND	U	0.50	0.30	0.091	1	10/07/14	10/07/14	KWG1413535	
cis-1,3-Dichloropropene	ND	U	0.50	0.20	0.18	1	10/07/14	10/07/14	KWG1413535	
4-Methyl-2-pentanone (MIBK)	ND	U	20	10	2.6	1	10/07/14	10/07/14	KWG1413535	
Toluene	**0.19**	J	0.50	0.10	0.054	1	10/07/14	10/07/14	KWG1413535	
trans-1,3-Dichloropropene	ND	U	0.50	0.20	0.068	1	10/07/14	10/07/14	KWG1413535	*
1,1,2-Trichloroethane	ND	U	0.50	0.40	0.14	1	10/07/14	10/07/14	KWG1413535	
Tetrachloroethene (PCE)	ND	U	0.50	0.20	0.099	1	10/07/14	10/07/14	KWG1413535	

Comments:

Analytical Results

Client: Sealaska Environmental Services, LLC
Project: TO 01 JBLM
Sample Matrix: Water

Service Request: K1410537
Date Collected: 09/25/2014
Date Received: 09/26/2014

Volatile Organic Compounds

Sample Name: LGC140925ISE-1
Lab Code: K1410537-015

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
2-Hexanone	ND	U	20	10	2.7	1	10/07/14	10/07/14	KWG1413535	
1,3-Dichloropropane	ND	U	0.50	0.30	0.14	1	10/07/14	10/07/14	KWG1413535	
Dibromochloromethane	ND	U	0.50	0.50	0.14	1	10/07/14	10/07/14	KWG1413535	
1,2-Dibromoethane (EDB)	ND	U	2.0	0.20	0.10	1	10/07/14	10/07/14	KWG1413535	
Chlorobenzene	ND	U	0.50	0.20	0.11	1	10/07/14	10/07/14	KWG1413535	
Ethylbenzene	ND	U	0.50	0.10	0.050	1	10/07/14	10/07/14	KWG1413535	
1,1,1,2-Tetrachloroethane	ND	U	0.50	0.20	0.11	1	10/07/14	10/07/14	KWG1413535	
m,p-Xylenes	ND	U	0.50	0.20	0.11	1	10/07/14	10/07/14	KWG1413535	
o-Xylene	ND	U	0.50	0.20	0.074	1	10/07/14	10/07/14	KWG1413535	
Styrene	ND	U	0.50	0.20	0.089	1	10/07/14	10/07/14	KWG1413535	
Bromoform	ND	U	0.50	0.50	0.16	1	10/07/14	10/07/14	KWG1413535	
Isopropylbenzene	ND	U	2.0	0.20	0.051	1	10/07/14	10/07/14	KWG1413535	
1,1,2,2-Tetrachloroethane	ND	U	0.50	0.20	0.16	1	10/07/14	10/07/14	KWG1413535	
Bromobenzene	ND	U	2.0	0.20	0.12	1	10/07/14	10/07/14	KWG1413535	
n-Propylbenzene	ND	U	2.0	0.20	0.054	1	10/07/14	10/07/14	KWG1413535	
1,2,3-Trichloropropane	ND	U	0.50	0.50	0.20	1	10/07/14	10/07/14	KWG1413535	
2-Chlorotoluene	ND	U	2.0	0.20	0.10	1	10/07/14	10/07/14	KWG1413535	
1,3,5-Trimethylbenzene	ND	U	2.0	0.20	0.089	1	10/07/14	10/07/14	KWG1413535	
4-Chlorotoluene	ND	U	2.0	0.20	0.13	1	10/07/14	10/07/14	KWG1413535	
tert-Butylbenzene	ND	U	2.0	0.20	0.059	1	10/07/14	10/07/14	KWG1413535	
1,2,4-Trimethylbenzene	ND	U	2.0	0.20	0.069	1	10/07/14	10/07/14	KWG1413535	
sec-Butylbenzene	ND	U	2.0	0.10	0.062	1	10/07/14	10/07/14	KWG1413535	
4-Isopropyltoluene	ND	U	2.0	0.20	0.060	1	10/07/14	10/07/14	KWG1413535	
1,3-Dichlorobenzene	ND	U	0.50	0.20	0.10	1	10/07/14	10/07/14	KWG1413535	
1,4-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	10/07/14	10/07/14	KWG1413535	
n-Butylbenzene	ND	U	2.0	0.10	0.054	1	10/07/14	10/07/14	KWG1413535	
1,2-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	10/07/14	10/07/14	KWG1413535	
1,2-Dibromo-3-chloropropane	ND	U	2.0	0.80	0.20	1	10/07/14	10/07/14	KWG1413535	
1,2,4-Trichlorobenzene	ND	U	2.0	0.30	0.096	1	10/07/14	10/07/14	KWG1413535	
Hexachlorobutadiene	ND	U	2.0	0.30	0.11	1	10/07/14	10/07/14	KWG1413535	
Naphthalene	ND	U	2.0	0.30	0.088	1	10/07/14	10/07/14	KWG1413535	
1,2,3-Trichlorobenzene	ND	U	2.0	0.40	0.11	1	10/07/14	10/07/14	KWG1413535	

* See Case Narrative

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1410537
Project:	TO 01 JBLM	**Date Collected:**	09/25/2014
Sample Matrix:	Water	**Date Received:**	09/26/2014

Volatile Organic Compounds

Sample Name:	LGC140925ISE-1	**Units:**	ug/L
Lab Code:	K1410537-015	**Basis:**	NA

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Dibromofluoromethane	97	85-115	10/07/14	Acceptable
1,2-Dichloroethane-d4	112	70-120	10/07/14	Acceptable
Toluene-d8	95	85-120	10/07/14	Acceptable
4-Bromofluorobenzene	92	75-120	10/07/14	Acceptable

Comments:

Analytical Results

Client: Sealaska Environmental Services, LLC
Project: TO 01 JBLM
Sample Matrix: Water

Service Request: K1410537
Date Collected: 09/25/2014
Date Received: 09/26/2014

Volatile Organic Compounds

Sample Name: LGC140925SLAPE-1
Lab Code: K1410537-016

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
Dichlorodifluoromethane	ND	U	0.50	0.20	0.13	1	10/07/14	10/07/14	KWG1413535	
Chloromethane	**0.17**	J	0.50	0.20	0.068	1	10/07/14	10/07/14	KWG1413535	
Vinyl Chloride	ND	U	0.50	0.10	0.075	1	10/07/14	10/07/14	KWG1413535	
Bromomethane	ND	U	0.50	0.30	0.10	1	10/07/14	10/07/14	KWG1413535	
Chloroethane	ND	U	0.50	0.20	0.16	1	10/07/14	10/07/14	KWG1413535	
Trichlorofluoromethane	ND	U	0.50	0.20	0.12	1	10/07/14	10/07/14	KWG1413535	
1,1-Dichloroethene	ND	U	0.50	0.20	0.080	1	10/07/14	10/07/14	KWG1413535	
Acetone	ND	U	20	10	3.3	1	10/07/14	10/07/14	KWG1413535	*
Carbon Disulfide	ND	U	0.50	0.20	0.069	1	10/07/14	10/07/14	KWG1413535	*
Methylene Chloride	ND	U	2.0	0.20	0.10	1	10/07/14	10/07/14	KWG1413535	
Methyl tert-Butyl Ether	ND	U	0.50	0.30	0.11	1	10/07/14	10/07/14	KWG1413535	
trans-1,2-Dichloroethene	ND	U	0.50	0.20	0.072	1	10/07/14	10/07/14	KWG1413535	
1,1-Dichloroethane	ND	U	0.50	0.20	0.077	1	10/07/14	10/07/14	KWG1413535	
2,2-Dichloropropane	ND	U	0.50	0.20	0.060	1	10/07/14	10/07/14	KWG1413535	*
cis-1,2-Dichloroethene	ND	U	0.50	0.20	0.067	1	10/07/14	10/07/14	KWG1413535	
2-Butanone (MEK)	ND	U	20	4.0	1.9	1	10/07/14	10/07/14	KWG1413535	
Bromochloromethane	ND	U	0.50	0.20	0.16	1	10/07/14	10/07/14	KWG1413535	
Chloroform	ND	U	0.50	0.20	0.072	1	10/07/14	10/07/14	KWG1413535	
1,1,1-Trichloroethane (TCA)	ND	U	0.50	0.20	0.075	1	10/07/14	10/07/14	KWG1413535	
Carbon Tetrachloride	ND	U	0.50	0.20	0.096	1	10/07/14	10/07/14	KWG1413535	
1,1-Dichloropropene	ND	U	0.50	0.20	0.089	1	10/07/14	10/07/14	KWG1413535	
Benzene	ND	U	0.50	0.10	0.062	1	10/07/14	10/07/14	KWG1413535	
1,2-Dichloroethane (EDC)	ND	U	0.50	0.15	0.080	1	10/07/14	10/07/14	KWG1413535	
Trichloroethene (TCE)	**0.59**		0.50	0.10	0.10	1	10/07/14	10/07/14	KWG1413535	
1,2-Dichloropropane	ND	U	0.50	0.20	0.095	1	10/07/14	10/07/14	KWG1413535	
Dibromomethane	ND	U	0.50	0.50	0.15	1	10/07/14	10/07/14	KWG1413535	
Bromodichloromethane	ND	U	0.50	0.30	0.091	1	10/07/14	10/07/14	KWG1413535	
cis-1,3-Dichloropropene	ND	U	0.50	0.20	0.18	1	10/07/14	10/07/14	KWG1413535	
4-Methyl-2-pentanone (MIBK)	ND	U	20	10	2.6	1	10/07/14	10/07/14	KWG1413535	
Toluene	ND	U	0.50	0.10	0.054	1	10/07/14	10/07/14	KWG1413535	
trans-1,3-Dichloropropene	ND	U	0.50	0.20	0.068	1	10/07/14	10/07/14	KWG1413535	*
1,1,2-Trichloroethane	ND	U	0.50	0.40	0.14	1	10/07/14	10/07/14	KWG1413535	
Tetrachloroethene (PCE)	ND	U	0.50	0.20	0.099	1	10/07/14	10/07/14	KWG1413535	

Comments:

Analytical Results

Client: Sealaska Environmental Services, LLC
Project: TO 01 JBLM
Sample Matrix: Water

Service Request: K1410537
Date Collected: 09/25/2014
Date Received: 09/26/2014

Volatile Organic Compounds

Sample Name: LGC140925SLAPE-1
Lab Code: K1410537-016

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
2-Hexanone	ND	U	20	10	2.7	1	10/07/14	10/07/14	KWG1413535	
1,3-Dichloropropane	ND	U	0.50	0.30	0.14	1	10/07/14	10/07/14	KWG1413535	
Dibromochloromethane	ND	U	0.50	0.50	0.14	1	10/07/14	10/07/14	KWG1413535	
1,2-Dibromoethane (EDB)	ND	U	2.0	0.20	0.10	1	10/07/14	10/07/14	KWG1413535	
Chlorobenzene	ND	U	0.50	0.20	0.11	1	10/07/14	10/07/14	KWG1413535	
Ethylbenzene	ND	U	0.50	0.10	0.050	1	10/07/14	10/07/14	KWG1413535	
1,1,1,2-Tetrachloroethane	ND	U	0.50	0.20	0.11	1	10/07/14	10/07/14	KWG1413535	
m,p-Xylenes	ND	U	0.50	0.20	0.11	1	10/07/14	10/07/14	KWG1413535	
o-Xylene	ND	U	0.50	0.20	0.074	1	10/07/14	10/07/14	KWG1413535	
Styrene	ND	U	0.50	0.20	0.089	1	10/07/14	10/07/14	KWG1413535	
Bromoform	ND	U	0.50	0.50	0.16	1	10/07/14	10/07/14	KWG1413535	
Isopropylbenzene	ND	U	2.0	0.20	0.051	1	10/07/14	10/07/14	KWG1413535	
1,1,2,2-Tetrachloroethane	ND	U	0.50	0.20	0.16	1	10/07/14	10/07/14	KWG1413535	
Bromobenzene	ND	U	2.0	0.20	0.12	1	10/07/14	10/07/14	KWG1413535	
n-Propylbenzene	ND	U	2.0	0.20	0.054	1	10/07/14	10/07/14	KWG1413535	
1,2,3-Trichloropropane	ND	U	0.50	0.50	0.20	1	10/07/14	10/07/14	KWG1413535	
2-Chlorotoluene	ND	U	2.0	0.20	0.10	1	10/07/14	10/07/14	KWG1413535	
1,3,5-Trimethylbenzene	ND	U	2.0	0.20	0.089	1	10/07/14	10/07/14	KWG1413535	
4-Chlorotoluene	ND	U	2.0	0.20	0.13	1	10/07/14	10/07/14	KWG1413535	
tert-Butylbenzene	ND	U	2.0	0.20	0.059	1	10/07/14	10/07/14	KWG1413535	
1,2,4-Trimethylbenzene	ND	U	2.0	0.20	0.069	1	10/07/14	10/07/14	KWG1413535	
sec-Butylbenzene	ND	U	2.0	0.10	0.062	1	10/07/14	10/07/14	KWG1413535	
4-Isopropyltoluene	ND	U	2.0	0.20	0.060	1	10/07/14	10/07/14	KWG1413535	
1,3-Dichlorobenzene	ND	U	0.50	0.20	0.10	1	10/07/14	10/07/14	KWG1413535	
1,4-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	10/07/14	10/07/14	KWG1413535	
n-Butylbenzene	ND	U	2.0	0.10	0.054	1	10/07/14	10/07/14	KWG1413535	
1,2-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	10/07/14	10/07/14	KWG1413535	
1,2-Dibromo-3-chloropropane	ND	U	2.0	0.80	0.20	1	10/07/14	10/07/14	KWG1413535	
1,2,4-Trichlorobenzene	ND	U	2.0	0.30	0.096	1	10/07/14	10/07/14	KWG1413535	
Hexachlorobutadiene	ND	U	2.0	0.30	0.11	1	10/07/14	10/07/14	KWG1413535	
Naphthalene	ND	U	2.0	0.30	0.088	1	10/07/14	10/07/14	KWG1413535	
1,2,3-Trichlorobenzene	ND	U	2.0	0.40	0.11	1	10/07/14	10/07/14	KWG1413535	

* See Case Narrative

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1410537
Project:	TO 01 JBLM	**Date Collected:**	09/25/2014
Sample Matrix:	Water	**Date Received:**	09/26/2014

Volatile Organic Compounds

Sample Name:	LGC140925SLAPE-1	**Units:**	ug/L
Lab Code:	K1410537-016	**Basis:**	NA

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Dibromofluoromethane	95	85-115	10/07/14	Acceptable
1,2-Dichloroethane-d4	113	70-120	10/07/14	Acceptable
Toluene-d8	96	85-120	10/07/14	Acceptable
4-Bromofluorobenzene	91	75-120	10/07/14	Acceptable

Comments:

Analytical Results

Client: Sealaska Environmental Services, LLC
Project: TO 01 JBLM
Sample Matrix: Water

Service Request: K1410537
Date Collected: 09/25/2014
Date Received: 09/26/2014

Volatile Organic Compounds

Sample Name: LGC140925SLAPI-1
Lab Code: K1410537-017

Units: ug/L
Basis: NA

Extraction Method: EPA 5030B
Analysis Method: 8260C

Level: Low

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Dichlorodifluoromethane	ND	U	0.50	0.20	0.13	1	10/07/14	10/07/14	KWG1413535	
Chloromethane	**0.18**	J	0.50	0.20	0.068	1	10/07/14	10/07/14	KWG1413535	
Vinyl Chloride	ND	U	0.50	0.10	0.075	1	10/07/14	10/07/14	KWG1413535	
Bromomethane	ND	U	0.50	0.30	0.10	1	10/07/14	10/07/14	KWG1413535	
Chloroethane	ND	U	0.50	0.20	0.16	1	10/07/14	10/07/14	KWG1413535	
Trichlorofluoromethane	ND	U	0.50	0.20	0.12	1	10/07/14	10/07/14	KWG1413535	
1,1-Dichloroethene	ND	U	0.50	0.20	0.080	1	10/07/14	10/07/14	KWG1413535	
Acetone	ND	U	20	10	3.3	1	10/07/14	10/07/14	KWG1413535	*
Carbon Disulfide	ND	U	0.50	0.20	0.069	1	10/07/14	10/07/14	KWG1413535	*
Methylene Chloride	ND	U	2.0	0.20	0.10	1	10/07/14	10/07/14	KWG1413535	
Methyl tert-Butyl Ether	ND	U	0.50	0.30	0.11	1	10/07/14	10/07/14	KWG1413535	
trans-1,2-Dichloroethene	ND	U	0.50	0.20	0.072	1	10/07/14	10/07/14	KWG1413535	
1,1-Dichloroethane	ND	U	0.50	0.20	0.077	1	10/07/14	10/07/14	KWG1413535	
2,2-Dichloropropane	ND	U	0.50	0.20	0.060	1	10/07/14	10/07/14	KWG1413535	*
cis-1,2-Dichloroethene	**0.47**	J	0.50	0.20	0.067	1	10/07/14	10/07/14	KWG1413535	
2-Butanone (MEK)	ND	U	20	4.0	1.9	1	10/07/14	10/07/14	KWG1413535	
Bromochloromethane	ND	U	0.50	0.20	0.16	1	10/07/14	10/07/14	KWG1413535	
Chloroform	**0.11**	J	0.50	0.20	0.072	1	10/07/14	10/07/14	KWG1413535	
1,1,1-Trichloroethane (TCA)	**0.090**	J	0.50	0.20	0.075	1	10/07/14	10/07/14	KWG1413535	
Carbon Tetrachloride	ND	U	0.50	0.20	0.096	1	10/07/14	10/07/14	KWG1413535	
1,1-Dichloropropene	ND	U	0.50	0.20	0.089	1	10/07/14	10/07/14	KWG1413535	
Benzene	ND	U	0.50	0.10	0.062	1	10/07/14	10/07/14	KWG1413535	
1,2-Dichloroethane (EDC)	ND	U	0.50	0.15	0.080	1	10/07/14	10/07/14	KWG1413535	
Trichloroethene (TCE)	**20**	J	0.50	0.10	0.10	1	10/07/14	10/07/14	KWG1413535	
1,2-Dichloropropane	ND	U	0.50	0.20	0.095	1	10/07/14	10/07/14	KWG1413535	
Dibromomethane	ND	U	0.50	0.50	0.15	1	10/07/14	10/07/14	KWG1413535	
Bromodichloromethane	ND	U	0.50	0.30	0.091	1	10/07/14	10/07/14	KWG1413535	
cis-1,3-Dichloropropene	ND	U	0.50	0.20	0.18	1	10/07/14	10/07/14	KWG1413535	
4-Methyl-2-pentanone (MIBK)	ND	U	20	10	2.6	1	10/07/14	10/07/14	KWG1413535	
Toluene	ND	U	0.50	0.10	0.054	1	10/07/14	10/07/14	KWG1413535	
trans-1,3-Dichloropropene	ND	U	0.50	0.20	0.068	1	10/07/14	10/07/14	KWG1413535	*
1,1,2-Trichloroethane	ND	U	0.50	0.40	0.14	1	10/07/14	10/07/14	KWG1413535	
Tetrachloroethene (PCE)	ND	U	0.50	0.20	0.099	1	10/07/14	10/07/14	KWG1413535	

Comments:

Analytical Results

Client: Sealaska Environmental Services, LLC
Project: TO 01 JBLM
Sample Matrix: Water

Service Request: K1410537
Date Collected: 09/25/2014
Date Received: 09/26/2014

Volatile Organic Compounds

Sample Name: LGC140925SLAPI-1
Lab Code: K1410537-017

Units: ug/L
Basis: NA

Extraction Method: EPA 5030B
Analysis Method: 8260C

Level: Low

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
2-Hexanone	ND	U	20	10	2.7	1	10/07/14	10/07/14	KWG1413535	
1,3-Dichloropropane	ND	U	0.50	0.30	0.14	1	10/07/14	10/07/14	KWG1413535	
Dibromochloromethane	ND	U	0.50	0.50	0.14	1	10/07/14	10/07/14	KWG1413535	
1,2-Dibromoethane (EDB)	ND	U	2.0	0.20	0.10	1	10/07/14	10/07/14	KWG1413535	
Chlorobenzene	ND	U	0.50	0.20	0.11	1	10/07/14	10/07/14	KWG1413535	
Ethylbenzene	ND	U	0.50	0.10	0.050	1	10/07/14	10/07/14	KWG1413535	
1,1,1,2-Tetrachloroethane	ND	U	0.50	0.20	0.11	1	10/07/14	10/07/14	KWG1413535	
m,p-Xylenes	ND	U	0.50	0.20	0.11	1	10/07/14	10/07/14	KWG1413535	
o-Xylene	ND	U	0.50	0.20	0.074	1	10/07/14	10/07/14	KWG1413535	
Styrene	ND	U	0.50	0.20	0.089	1	10/07/14	10/07/14	KWG1413535	
Bromoform	ND	U	0.50	0.50	0.16	1	10/07/14	10/07/14	KWG1413535	
Isopropylbenzene	ND	U	2.0	0.20	0.051	1	10/07/14	10/07/14	KWG1413535	
1,1,2,2-Tetrachloroethane	ND	U	0.50	0.20	0.16	1	10/07/14	10/07/14	KWG1413535	
Bromobenzene	ND	U	2.0	0.20	0.12	1	10/07/14	10/07/14	KWG1413535	
n-Propylbenzene	ND	U	2.0	0.20	0.054	1	10/07/14	10/07/14	KWG1413535	
1,2,3-Trichloropropane	ND	U	0.50	0.50	0.20	1	10/07/14	10/07/14	KWG1413535	
2-Chlorotoluene	ND	U	2.0	0.20	0.10	1	10/07/14	10/07/14	KWG1413535	
1,3,5-Trimethylbenzene	ND	U	2.0	0.20	0.089	1	10/07/14	10/07/14	KWG1413535	
4-Chlorotoluene	ND	U	2.0	0.20	0.13	1	10/07/14	10/07/14	KWG1413535	
tert-Butylbenzene	ND	U	2.0	0.20	0.059	1	10/07/14	10/07/14	KWG1413535	
1,2,4-Trimethylbenzene	ND	U	2.0	0.20	0.069	1	10/07/14	10/07/14	KWG1413535	
sec-Butylbenzene	ND	U	2.0	0.10	0.062	1	10/07/14	10/07/14	KWG1413535	
4-Isopropyltoluene	ND	U	2.0	0.20	0.060	1	10/07/14	10/07/14	KWG1413535	
1,3-Dichlorobenzene	ND	U	0.50	0.20	0.10	1	10/07/14	10/07/14	KWG1413535	
1,4-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	10/07/14	10/07/14	KWG1413535	
n-Butylbenzene	ND	U	2.0	0.10	0.054	1	10/07/14	10/07/14	KWG1413535	
1,2-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	10/07/14	10/07/14	KWG1413535	
1,2-Dibromo-3-chloropropane	ND	U	2.0	0.80	0.20	1	10/07/14	10/07/14	KWG1413535	
1,2,4-Trichlorobenzene	ND	U	2.0	0.30	0.096	1	10/07/14	10/07/14	KWG1413535	
Hexachlorobutadiene	ND	U	2.0	0.30	0.11	1	10/07/14	10/07/14	KWG1413535	
Naphthalene	ND	U	2.0	0.30	0.088	1	10/07/14	10/07/14	KWG1413535	
1,2,3-Trichlorobenzene	ND	U	2.0	0.40	0.11	1	10/07/14	10/07/14	KWG1413535	

* See Case Narrative

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1410537
Project:	TO 01 JBLM	**Date Collected:**	09/25/2014
Sample Matrix:	Water	**Date Received:**	09/26/2014

Volatile Organic Compounds

Sample Name:	LGC140925SLAPI-1	**Units:**	ug/L
Lab Code:	K1410537-017	**Basis:**	NA

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Dibromofluoromethane	94	85-115	10/07/14	Acceptable
1,2-Dichloroethane-d4	112	70-120	10/07/14	Acceptable
Toluene-d8	97	85-120	10/07/14	Acceptable
4-Bromofluorobenzene	89	75-120	10/07/14	Acceptable

Comments:

Analytical Results

Client: Sealaska Environmental Services, LLC
Project: TO 01 JBLM
Sample Matrix: Water

Service Request: K1410537
Date Collected: 09/25/2014
Date Received: 09/26/2014

Volatile Organic Compounds

Sample Name: LGC140925MAMC3-1
Lab Code: K1410537-018

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
Dichlorodifluoromethane	ND	U	0.50	0.20	0.13	1	10/07/14	10/07/14	KWG1413599	
Chloromethane	**0.14**	J	0.50	0.20	0.068	1	10/07/14	10/07/14	KWG1413599	
Vinyl Chloride	ND	U	0.50	0.10	0.075	1	10/07/14	10/07/14	KWG1413599	
Bromomethane	ND	U	0.50	0.30	0.10	1	10/07/14	10/07/14	KWG1413599	*
Chloroethane	ND	U	0.50	0.20	0.16	1	10/07/14	10/07/14	KWG1413599	
Trichlorofluoromethane	ND	U	0.50	0.20	0.12	1	10/07/14	10/07/14	KWG1413599	
1,1-Dichloroethene	ND	U	0.50	0.20	0.080	1	10/07/14	10/07/14	KWG1413599	
Acetone	ND	U	20	10	3.3	1	10/07/14	10/07/14	KWG1413599	
Carbon Disulfide	ND	U	0.50	0.20	0.069	1	10/07/14	10/07/14	KWG1413599	*
Methylene Chloride	ND	U	2.0	0.20	0.10	1	10/07/14	10/07/14	KWG1413599	
Methyl tert-Butyl Ether	ND	U	0.50	0.30	0.11	1	10/07/14	10/07/14	KWG1413599	
trans-1,2-Dichloroethene	ND	U	0.50	0.20	0.072	1	10/07/14	10/07/14	KWG1413599	
1,1-Dichloroethane	ND	U	0.50	0.20	0.077	1	10/07/14	10/07/14	KWG1413599	
2,2-Dichloropropane	ND	U	0.50	0.20	0.060	1	10/07/14	10/07/14	KWG1413599	*
cis-1,2-Dichloroethene	**0.080**	J	0.50	0.20	0.067	1	10/07/14	10/07/14	KWG1413599	
2-Butanone (MEK)	ND	U	20	4.0	1.9	1	10/07/14	10/07/14	KWG1413599	
Bromochloromethane	ND	U	0.50	0.20	0.16	1	10/07/14	10/07/14	KWG1413599	
Chloroform	ND	U	0.50	0.20	0.072	1	10/07/14	10/07/14	KWG1413599	
1,1,1-Trichloroethane (TCA)	ND	U	0.50	0.20	0.075	1	10/07/14	10/07/14	KWG1413599	
Carbon Tetrachloride	ND	U	0.50	0.20	0.096	1	10/07/14	10/07/14	KWG1413599	
1,1-Dichloropropene	ND	U	0.50	0.20	0.089	1	10/07/14	10/07/14	KWG1413599	
Benzene	ND	U	0.50	0.10	0.062	1	10/07/14	10/07/14	KWG1413599	
1,2-Dichloroethane (EDC)	ND	U	0.50	0.15	0.080	1	10/07/14	10/07/14	KWG1413599	
Trichloroethene (TCE)	**1.9**		0.50	0.10	0.10	1	10/07/14	10/07/14	KWG1413599	
1,2-Dichloropropane	ND	U	0.50	0.20	0.095	1	10/07/14	10/07/14	KWG1413599	
Dibromomethane	ND	U	0.50	0.50	0.15	1	10/07/14	10/07/14	KWG1413599	
Bromodichloromethane	ND	U	0.50	0.30	0.091	1	10/07/14	10/07/14	KWG1413599	
cis-1,3-Dichloropropene	ND	U	0.50	0.20	0.18	1	10/07/14	10/07/14	KWG1413599	
4-Methyl-2-pentanone (MIBK)	ND	U	20	10	2.6	1	10/07/14	10/07/14	KWG1413599	
Toluene	ND	U	0.50	0.10	0.054	1	10/07/14	10/07/14	KWG1413599	
trans-1,3-Dichloropropene	ND	U	0.50	0.20	0.068	1	10/07/14	10/07/14	KWG1413599	*
1,1,2-Trichloroethane	ND	U	0.50	0.40	0.14	1	10/07/14	10/07/14	KWG1413599	
Tetrachloroethene (PCE)	ND	U	0.50	0.20	0.099	1	10/07/14	10/07/14	KWG1413599	

Comments:

Analytical Results

Client: Sealaska Environmental Services, LLC
Project: TO 01 JBLM
Sample Matrix: Water

Service Request: K1410537
Date Collected: 09/25/2014
Date Received: 09/26/2014

Volatile Organic Compounds

Sample Name: LGC140925MAMC3-1
Lab Code: K1410537-018

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
2-Hexanone	ND	U	20	10	2.7	1	10/07/14	10/07/14	KWG1413599	
1,3-Dichloropropane	ND	U	0.50	0.30	0.14	1	10/07/14	10/07/14	KWG1413599	
Dibromochloromethane	ND	U	0.50	0.50	0.14	1	10/07/14	10/07/14	KWG1413599	
1,2-Dibromoethane (EDB)	ND	U	2.0	0.20	0.10	1	10/07/14	10/07/14	KWG1413599	
Chlorobenzene	ND	U	0.50	0.20	0.11	1	10/07/14	10/07/14	KWG1413599	
Ethylbenzene	ND	U	0.50	0.10	0.050	1	10/07/14	10/07/14	KWG1413599	
1,1,1,2-Tetrachloroethane	ND	U	0.50	0.20	0.11	1	10/07/14	10/07/14	KWG1413599	
m,p-Xylenes	ND	U	0.50	0.20	0.11	1	10/07/14	10/07/14	KWG1413599	
o-Xylene	ND	U	0.50	0.20	0.074	1	10/07/14	10/07/14	KWG1413599	
Styrene	ND	U	0.50	0.20	0.089	1	10/07/14	10/07/14	KWG1413599	
Bromoform	ND	U	0.50	0.50	0.16	1	10/07/14	10/07/14	KWG1413599	*
Isopropylbenzene	ND	U	2.0	0.20	0.051	1	10/07/14	10/07/14	KWG1413599	
1,1,2,2-Tetrachloroethane	ND	U	0.50	0.20	0.16	1	10/07/14	10/07/14	KWG1413599	
Bromobenzene	ND	U	2.0	0.20	0.12	1	10/07/14	10/07/14	KWG1413599	
n-Propylbenzene	ND	U	2.0	0.20	0.054	1	10/07/14	10/07/14	KWG1413599	
1,2,3-Trichloropropane	ND	U	0.50	0.50	0.20	1	10/07/14	10/07/14	KWG1413599	
2-Chlorotoluene	ND	U	2.0	0.20	0.10	1	10/07/14	10/07/14	KWG1413599	
1,3,5-Trimethylbenzene	ND	U	2.0	0.20	0.089	1	10/07/14	10/07/14	KWG1413599	
4-Chlorotoluene	ND	U	2.0	0.20	0.13	1	10/07/14	10/07/14	KWG1413599	
tert-Butylbenzene	ND	U	2.0	0.20	0.059	1	10/07/14	10/07/14	KWG1413599	
1,2,4-Trimethylbenzene	ND	U	2.0	0.20	0.069	1	10/07/14	10/07/14	KWG1413599	
sec-Butylbenzene	ND	U	2.0	0.10	0.062	1	10/07/14	10/07/14	KWG1413599	
4-Isopropyltoluene	ND	U	2.0	0.20	0.060	1	10/07/14	10/07/14	KWG1413599	
1,3-Dichlorobenzene	ND	U	0.50	0.20	0.10	1	10/07/14	10/07/14	KWG1413599	
1,4-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	10/07/14	10/07/14	KWG1413599	
n-Butylbenzene	ND	U	2.0	0.10	0.054	1	10/07/14	10/07/14	KWG1413599	
1,2-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	10/07/14	10/07/14	KWG1413599	
1,2-Dibromo-3-chloropropane	ND	U	2.0	0.80	0.20	1	10/07/14	10/07/14	KWG1413599	
1,2,4-Trichlorobenzene	ND	U	2.0	0.30	0.096	1	10/07/14	10/07/14	KWG1413599	
Hexachlorobutadiene	ND	U	2.0	0.30	0.11	1	10/07/14	10/07/14	KWG1413599	
Naphthalene	ND	U	2.0	0.30	0.088	1	10/07/14	10/07/14	KWG1413599	
1,2,3-Trichlorobenzene	ND	U	2.0	0.40	0.11	1	10/07/14	10/07/14	KWG1413599	

* See Case Narrative

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1410537
Project:	TO 01 JBLM	**Date Collected:**	09/25/2014
Sample Matrix:	Water	**Date Received:**	09/26/2014

Volatile Organic Compounds

Sample Name:	LGC140925MAMC3-1	**Units:**	ug/L
Lab Code:	K1410537-018	**Basis:**	NA

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Dibromofluoromethane	98	85-115	10/07/14	Acceptable
1,2-Dichloroethane-d4	113	70-120	10/07/14	Acceptable
Toluene-d8	95	85-120	10/07/14	Acceptable
4-Bromofluorobenzene	91	75-120	10/07/14	Acceptable

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1410537
Project:	TO 01 JBLM	**Date Collected:**	09/25/2014
Sample Matrix:	Water	**Date Received:**	09/26/2014

Volatile Organic Compounds

Sample Name:	LGC140925MAMC4-1	**Units:**	ug/L
Lab Code:	K1410537-019	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8260C		

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Dichlorodifluoromethane	ND	U	0.50	0.20	0.13	1	10/07/14	10/07/14	KWG1413599	
Chloromethane	**0.20**	J	0.50	0.20	0.068	1	10/07/14	10/07/14	KWG1413599	
Vinyl Chloride	ND	U	0.50	0.10	0.075	1	10/07/14	10/07/14	KWG1413599	
Bromomethane	ND	U	0.50	0.30	0.10	1	10/07/14	10/07/14	KWG1413599	*
Chloroethane	ND	U	0.50	0.20	0.16	1	10/07/14	10/07/14	KWG1413599	
Trichlorofluoromethane	ND	U	0.50	0.20	0.12	1	10/07/14	10/07/14	KWG1413599	
1,1-Dichloroethene	ND	U	0.50	0.20	0.080	1	10/07/14	10/07/14	KWG1413599	
Acetone	ND	U	20	10	3.3	1	10/07/14	10/07/14	KWG1413599	
Carbon Disulfide	ND	U	0.50	0.20	0.069	1	10/07/14	10/07/14	KWG1413599	*
Methylene Chloride	ND	U	2.0	0.20	0.10	1	10/07/14	10/07/14	KWG1413599	
Methyl tert-Butyl Ether	ND	U	0.50	0.30	0.11	1	10/07/14	10/07/14	KWG1413599	
trans-1,2-Dichloroethene	ND	U	0.50	0.20	0.072	1	10/07/14	10/07/14	KWG1413599	
1,1-Dichloroethane	ND	U	0.50	0.20	0.077	1	10/07/14	10/07/14	KWG1413599	
2,2-Dichloropropane	ND	U	0.50	0.20	0.060	1	10/07/14	10/07/14	KWG1413599	*
cis-1,2-Dichloroethene	ND	U	0.50	0.20	0.067	1	10/07/14	10/07/14	KWG1413599	
2-Butanone (MEK)	ND	U	20	4.0	1.9	1	10/07/14	10/07/14	KWG1413599	
Bromochloromethane	ND	U	0.50	0.20	0.16	1	10/07/14	10/07/14	KWG1413599	
Chloroform	ND	U	0.50	0.20	0.072	1	10/07/14	10/07/14	KWG1413599	
1,1,1-Trichloroethane (TCA)	ND	U	0.50	0.20	0.075	1	10/07/14	10/07/14	KWG1413599	
Carbon Tetrachloride	ND	U	0.50	0.20	0.096	1	10/07/14	10/07/14	KWG1413599	
1,1-Dichloropropene	ND	U	0.50	0.20	0.089	1	10/07/14	10/07/14	KWG1413599	
Benzene	ND	U	0.50	0.10	0.062	1	10/07/14	10/07/14	KWG1413599	
1,2-Dichloroethane (EDC)	ND	U	0.50	0.15	0.080	1	10/07/14	10/07/14	KWG1413599	
Trichloroethene (TCE)	ND	U	0.50	0.10	0.10	1	10/07/14	10/07/14	KWG1413599	
1,2-Dichloropropane	ND	U	0.50	0.20	0.095	1	10/07/14	10/07/14	KWG1413599	
Dibromomethane	ND	U	0.50	0.50	0.15	1	10/07/14	10/07/14	KWG1413599	
Bromodichloromethane	ND	U	0.50	0.30	0.091	1	10/07/14	10/07/14	KWG1413599	
cis-1,3-Dichloropropene	ND	U	0.50	0.20	0.18	1	10/07/14	10/07/14	KWG1413599	
4-Methyl-2-pentanone (MIBK)	ND	U	20	10	2.6	1	10/07/14	10/07/14	KWG1413599	
Toluene	ND	U	0.50	0.10	0.054	1	10/07/14	10/07/14	KWG1413599	
trans-1,3-Dichloropropene	ND	U	0.50	0.20	0.068	1	10/07/14	10/07/14	KWG1413599	*
1,1,2-Trichloroethane	ND	U	0.50	0.40	0.14	1	10/07/14	10/07/14	KWG1413599	
Tetrachloroethene (PCE)	ND	U	0.50	0.20	0.099	1	10/07/14	10/07/14	KWG1413599	

Comments:

Analytical Results

Client: Sealaska Environmental Services, LLC
Project: TO 01 JBLM
Sample Matrix: Water

Service Request: K1410537
Date Collected: 09/25/2014
Date Received: 09/26/2014

Volatile Organic Compounds

Sample Name: LGC140925MAMC4-1
Lab Code: K1410537-019

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
2-Hexanone	ND	U	20	10	2.7	1	10/07/14	10/07/14	KWG1413599	
1,3-Dichloropropane	ND	U	0.50	0.30	0.14	1	10/07/14	10/07/14	KWG1413599	
Dibromochloromethane	ND	U	0.50	0.50	0.14	1	10/07/14	10/07/14	KWG1413599	
1,2-Dibromoethane (EDB)	ND	U	2.0	0.20	0.10	1	10/07/14	10/07/14	KWG1413599	
Chlorobenzene	ND	U	0.50	0.20	0.11	1	10/07/14	10/07/14	KWG1413599	
Ethylbenzene	ND	U	0.50	0.10	0.050	1	10/07/14	10/07/14	KWG1413599	
1,1,1,2-Tetrachloroethane	ND	U	0.50	0.20	0.11	1	10/07/14	10/07/14	KWG1413599	
m,p-Xylenes	ND	U	0.50	0.20	0.11	1	10/07/14	10/07/14	KWG1413599	
o-Xylene	ND	U	0.50	0.20	0.074	1	10/07/14	10/07/14	KWG1413599	
Styrene	ND	U	0.50	0.20	0.089	1	10/07/14	10/07/14	KWG1413599	
Bromoform	ND	U	0.50	0.50	0.16	1	10/07/14	10/07/14	KWG1413599	*
Isopropylbenzene	ND	U	2.0	0.20	0.051	1	10/07/14	10/07/14	KWG1413599	
1,1,2,2-Tetrachloroethane	ND	U	0.50	0.20	0.16	1	10/07/14	10/07/14	KWG1413599	
Bromobenzene	ND	U	2.0	0.20	0.12	1	10/07/14	10/07/14	KWG1413599	
n-Propylbenzene	ND	U	2.0	0.20	0.054	1	10/07/14	10/07/14	KWG1413599	
1,2,3-Trichloropropane	ND	U	0.50	0.50	0.20	1	10/07/14	10/07/14	KWG1413599	
2-Chlorotoluene	ND	U	2.0	0.20	0.10	1	10/07/14	10/07/14	KWG1413599	
1,3,5-Trimethylbenzene	ND	U	2.0	0.20	0.089	1	10/07/14	10/07/14	KWG1413599	
4-Chlorotoluene	ND	U	2.0	0.20	0.13	1	10/07/14	10/07/14	KWG1413599	
tert-Butylbenzene	ND	U	2.0	0.20	0.059	1	10/07/14	10/07/14	KWG1413599	
1,2,4-Trimethylbenzene	ND	U	2.0	0.20	0.069	1	10/07/14	10/07/14	KWG1413599	
sec-Butylbenzene	ND	U	2.0	0.10	0.062	1	10/07/14	10/07/14	KWG1413599	
4-Isopropyltoluene	ND	U	2.0	0.20	0.060	1	10/07/14	10/07/14	KWG1413599	
1,3-Dichlorobenzene	ND	U	0.50	0.20	0.10	1	10/07/14	10/07/14	KWG1413599	
1,4-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	10/07/14	10/07/14	KWG1413599	
n-Butylbenzene	ND	U	2.0	0.10	0.054	1	10/07/14	10/07/14	KWG1413599	
1,2-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	10/07/14	10/07/14	KWG1413599	
1,2-Dibromo-3-chloropropane	ND	U	2.0	0.80	0.20	1	10/07/14	10/07/14	KWG1413599	
1,2,4-Trichlorobenzene	ND	U	2.0	0.30	0.096	1	10/07/14	10/07/14	KWG1413599	
Hexachlorobutadiene	ND	U	2.0	0.30	0.11	1	10/07/14	10/07/14	KWG1413599	
Naphthalene	ND	U	2.0	0.30	0.088	1	10/07/14	10/07/14	KWG1413599	
1,2,3-Trichlorobenzene	ND	U	2.0	0.40	0.11	1	10/07/14	10/07/14	KWG1413599	

* See Case Narrative

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1410537
Project:	TO 01 JBLM	**Date Collected:**	09/25/2014
Sample Matrix:	Water	**Date Received:**	09/26/2014

Volatile Organic Compounds

Sample Name:	LGC140925MAMC4-1	**Units:**	ug/L
Lab Code:	K1410537-019	**Basis:**	NA

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Dibromofluoromethane	94	85-115	10/07/14	Acceptable
1,2-Dichloroethane-d4	113	70-120	10/07/14	Acceptable
Toluene-d8	95	85-120	10/07/14	Acceptable
4-Bromofluorobenzene	88	75-120	10/07/14	Acceptable

Comments:

Analytical Results

Client: Sealaska Environmental Services, LLC
Project: TO 01 JBLM
Sample Matrix: Water

Service Request: K1410537
Date Collected: 09/25/2014
Date Received: 09/26/2014

Volatile Organic Compounds

Sample Name: LGC140925DUP7-1
Lab Code: K1410537-020

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
Dichlorodifluoromethane	ND	U	0.50	0.20	0.13	1	10/07/14	10/07/14	KWG1413599	
Chloromethane	ND	U	0.50	0.20	0.068	1	10/07/14	10/07/14	KWG1413599	
Vinyl Chloride	**0.30**	J	0.50	0.10	0.075	1	10/07/14	10/07/14	KWG1413599	
Bromomethane	ND	U	0.50	0.30	0.10	1	10/07/14	10/07/14	KWG1413599	*
Chloroethane	ND	U	0.50	0.20	0.16	1	10/07/14	10/07/14	KWG1413599	
Trichlorofluoromethane	ND	U	0.50	0.20	0.12	1	10/07/14	10/07/14	KWG1413599	
1,1-Dichloroethene	ND	U	0.50	0.20	0.080	1	10/07/14	10/07/14	KWG1413599	
Acetone	ND	U	20	10	3.3	1	10/07/14	10/07/14	KWG1413599	
Carbon Disulfide	ND	U	0.50	0.20	0.069	1	10/07/14	10/07/14	KWG1413599	*
Methylene Chloride	ND	U	2.0	0.20	0.10	1	10/07/14	10/07/14	KWG1413599	
Methyl tert-Butyl Ether	ND	U	0.50	0.30	0.11	1	10/07/14	10/07/14	KWG1413599	
trans-1,2-Dichloroethene	**0.62**		0.50	0.20	0.072	1	10/07/14	10/07/14	KWG1413599	
1,1-Dichloroethane	ND	U	0.50	0.20	0.077	1	10/07/14	10/07/14	KWG1413599	
2,2-Dichloropropane	ND	U	0.50	0.20	0.060	1	10/07/14	10/07/14	KWG1413599	*
cis-1,2-Dichloroethene	**26**		0.50	0.20	0.067	1	10/07/14	10/07/14	KWG1413599	
2-Butanone (MEK)	ND	U	20	4.0	1.9	1	10/07/14	10/07/14	KWG1413599	
Bromochloromethane	ND	U	0.50	0.20	0.16	1	10/07/14	10/07/14	KWG1413599	
Chloroform	ND	U	0.50	0.20	0.072	1	10/07/14	10/07/14	KWG1413599	
1,1,1-Trichloroethane (TCA)	ND	U	0.50	0.20	0.075	1	10/07/14	10/07/14	KWG1413599	
Carbon Tetrachloride	ND	U	0.50	0.20	0.096	1	10/07/14	10/07/14	KWG1413599	
1,1-Dichloropropene	ND	U	0.50	0.20	0.089	1	10/07/14	10/07/14	KWG1413599	
Benzene	ND	U	0.50	0.10	0.062	1	10/07/14	10/07/14	KWG1413599	
1,2-Dichloroethane (EDC)	ND	U	0.50	0.15	0.080	1	10/07/14	10/07/14	KWG1413599	
Trichloroethene (TCE)	**150**	D	5.0	1.0	1.0	10	10/07/14	10/07/14	KWG1413599	
1,2-Dichloropropane	ND	U	0.50	0.20	0.095	1	10/07/14	10/07/14	KWG1413599	
Dibromomethane	ND	U	0.50	0.50	0.15	1	10/07/14	10/07/14	KWG1413599	
Bromodichloromethane	ND	U	0.50	0.30	0.091	1	10/07/14	10/07/14	KWG1413599	
cis-1,3-Dichloropropene	ND	U	0.50	0.20	0.18	1	10/07/14	10/07/14	KWG1413599	
4-Methyl-2-pentanone (MIBK)	ND	U	20	10	2.6	1	10/07/14	10/07/14	KWG1413599	
Toluene	ND	U	0.50	0.10	0.054	1	10/07/14	10/07/14	KWG1413599	
trans-1,3-Dichloropropene	ND	U	0.50	0.20	0.068	1	10/07/14	10/07/14	KWG1413599	*
1,1,2-Trichloroethane	ND	U	0.50	0.40	0.14	1	10/07/14	10/07/14	KWG1413599	
Tetrachloroethene (PCE)	**0.20**	J	0.50	0.20	0.099	1	10/07/14	10/07/14	KWG1413599	

Comments:

Analytical Results

Client: Sealaska Environmental Services, LLC
Project: TO 01 JBLM
Sample Matrix: Water

Service Request: K1410537
Date Collected: 09/25/2014
Date Received: 09/26/2014

Volatile Organic Compounds

Sample Name: LGC140925DUP7-1
Lab Code: K1410537-020

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
2-Hexanone	ND	U	20	10	2.7	1	10/07/14	10/07/14	KWG1413599	
1,3-Dichloropropane	ND	U	0.50	0.30	0.14	1	10/07/14	10/07/14	KWG1413599	
Dibromochloromethane	ND	U	0.50	0.50	0.14	1	10/07/14	10/07/14	KWG1413599	
1,2-Dibromoethane (EDB)	ND	U	2.0	0.20	0.10	1	10/07/14	10/07/14	KWG1413599	
Chlorobenzene	ND	U	0.50	0.20	0.11	1	10/07/14	10/07/14	KWG1413599	
Ethylbenzene	ND	U	0.50	0.10	0.050	1	10/07/14	10/07/14	KWG1413599	
1,1,1,2-Tetrachloroethane	ND	U	0.50	0.20	0.11	1	10/07/14	10/07/14	KWG1413599	
m,p-Xylenes	ND	U	0.50	0.20	0.11	1	10/07/14	10/07/14	KWG1413599	
o-Xylene	ND	U	0.50	0.20	0.074	1	10/07/14	10/07/14	KWG1413599	
Styrene	ND	U	0.50	0.20	0.089	1	10/07/14	10/07/14	KWG1413599	
Bromoform	ND	U	0.50	0.50	0.16	1	10/07/14	10/07/14	KWG1413599	*
Isopropylbenzene	ND	U	2.0	0.20	0.051	1	10/07/14	10/07/14	KWG1413599	
1,1,2,2-Tetrachloroethane	ND	U	0.50	0.20	0.16	1	10/07/14	10/07/14	KWG1413599	
Bromobenzene	ND	U	2.0	0.20	0.12	1	10/07/14	10/07/14	KWG1413599	
n-Propylbenzene	ND	U	2.0	0.20	0.054	1	10/07/14	10/07/14	KWG1413599	
1,2,3-Trichloropropane	ND	U	0.50	0.50	0.20	1	10/07/14	10/07/14	KWG1413599	
2-Chlorotoluene	ND	U	2.0	0.20	0.10	1	10/07/14	10/07/14	KWG1413599	
1,3,5-Trimethylbenzene	ND	U	2.0	0.20	0.089	1	10/07/14	10/07/14	KWG1413599	
4-Chlorotoluene	ND	U	2.0	0.20	0.13	1	10/07/14	10/07/14	KWG1413599	
tert-Butylbenzene	ND	U	2.0	0.20	0.059	1	10/07/14	10/07/14	KWG1413599	
1,2,4-Trimethylbenzene	ND	U	2.0	0.20	0.069	1	10/07/14	10/07/14	KWG1413599	
sec-Butylbenzene	ND	U	2.0	0.10	0.062	1	10/07/14	10/07/14	KWG1413599	
4-Isopropyltoluene	ND	U	2.0	0.20	0.060	1	10/07/14	10/07/14	KWG1413599	
1,3-Dichlorobenzene	ND	U	0.50	0.20	0.10	1	10/07/14	10/07/14	KWG1413599	
1,4-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	10/07/14	10/07/14	KWG1413599	
n-Butylbenzene	ND	U	2.0	0.10	0.054	1	10/07/14	10/07/14	KWG1413599	
1,2-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	10/07/14	10/07/14	KWG1413599	
1,2-Dibromo-3-chloropropane	ND	U	2.0	0.80	0.20	1	10/07/14	10/07/14	KWG1413599	
1,2,4-Trichlorobenzene	ND	U	2.0	0.30	0.096	1	10/07/14	10/07/14	KWG1413599	
Hexachlorobutadiene	ND	U	2.0	0.30	0.11	1	10/07/14	10/07/14	KWG1413599	
Naphthalene	ND	U	2.0	0.30	0.088	1	10/07/14	10/07/14	KWG1413599	
1,2,3-Trichlorobenzene	ND	U	2.0	0.40	0.11	1	10/07/14	10/07/14	KWG1413599	

* See Case Narrative

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1410537
Project:	TO 01 JBLM	**Date Collected:**	09/25/2014
Sample Matrix:	Water	**Date Received:**	09/26/2014

Volatile Organic Compounds

Sample Name:	LGC140925DUP7-1	**Units:**	ug/L
Lab Code:	K1410537-020	**Basis:**	NA

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Dibromofluoromethane	100	85-115	10/07/14	Acceptable
1,2-Dichloroethane-d4	118	70-120	10/07/14	Acceptable
Toluene-d8	99	85-120	10/07/14	Acceptable
4-Bromofluorobenzene	88	75-120	10/07/14	Acceptable

Comments:

Analytical Results

Client: Sealaska Environmental Services, LLC
Project: TO 01 JBLM
Sample Matrix: Water

Service Request: K1410537
Date Collected: 09/25/2014
Date Received: 09/26/2014

Volatile Organic Compounds

Sample Name: LGC140925LC99D-1
Lab Code: K1410537-021

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
Dichlorodifluoromethane	ND	U	0.50	0.20	0.13	1	10/07/14	10/07/14	KWG1413599	
Chloromethane	**0.22**	J	0.50	0.20	0.068	1	10/07/14	10/07/14	KWG1413599	
Vinyl Chloride	ND	U	0.50	0.10	0.075	1	10/07/14	10/07/14	KWG1413599	
Bromomethane	ND	U	0.50	0.30	0.10	1	10/07/14	10/07/14	KWG1413599	*
Chloroethane	ND	U	0.50	0.20	0.16	1	10/07/14	10/07/14	KWG1413599	
Trichlorofluoromethane	ND	U	0.50	0.20	0.12	1	10/07/14	10/07/14	KWG1413599	
1,1-Dichloroethene	ND	U	0.50	0.20	0.080	1	10/07/14	10/07/14	KWG1413599	
Acetone	**3.4**	J	20	10	3.3	1	10/07/14	10/07/14	KWG1413599	*
Carbon Disulfide	ND	U	0.50	0.20	0.069	1	10/07/14	10/07/14	KWG1413599	*
Methylene Chloride	ND	U	2.0	0.20	0.10	1	10/07/14	10/07/14	KWG1413599	
Methyl tert-Butyl Ether	ND	U	0.50	0.30	0.11	1	10/07/14	10/07/14	KWG1413599	
trans-1,2-Dichloroethene	ND	U	0.50	0.20	0.072	1	10/07/14	10/07/14	KWG1413599	
1,1-Dichloroethane	**0.090**	J	0.50	0.20	0.077	1	10/07/14	10/07/14	KWG1413599	
2,2-Dichloropropane	ND	U	0.50	0.20	0.060	1	10/07/14	10/07/14	KWG1413599	*
cis-1,2-Dichloroethene	**1.5**		0.50	0.20	0.067	1	10/07/14	10/07/14	KWG1413599	
2-Butanone (MEK)	ND	U	20	4.0	1.9	1	10/07/14	10/07/14	KWG1413599	
Bromochloromethane	ND	U	0.50	0.20	0.16	1	10/07/14	10/07/14	KWG1413599	
Chloroform	**0.20**	J	0.50	0.20	0.072	1	10/07/14	10/07/14	KWG1413599	
1,1,1-Trichloroethane (TCA)	**0.14**	J	0.50	0.20	0.075	1	10/07/14	10/07/14	KWG1413599	
Carbon Tetrachloride	**0.17**	J	0.50	0.20	0.096	1	10/07/14	10/07/14	KWG1413599	
1,1-Dichloropropene	ND	U	0.50	0.20	0.089	1	10/07/14	10/07/14	KWG1413599	
Benzene	ND	U	0.50	0.10	0.062	1	10/07/14	10/07/14	KWG1413599	
1,2-Dichloroethane (EDC)	ND	U	0.50	0.15	0.080	1	10/07/14	10/07/14	KWG1413599	
Trichloroethene (TCE)	**68**		0.50	0.10	0.10	1	10/07/14	10/07/14	KWG1413599	
1,2-Dichloropropane	ND	U	0.50	0.20	0.095	1	10/07/14	10/07/14	KWG1413599	
Dibromomethane	ND	U	0.50	0.50	0.15	1	10/07/14	10/07/14	KWG1413599	
Bromodichloromethane	ND	U	0.50	0.30	0.091	1	10/07/14	10/07/14	KWG1413599	
cis-1,3-Dichloropropene	ND	U	0.50	0.20	0.18	1	10/07/14	10/07/14	KWG1413599	
4-Methyl-2-pentanone (MIBK)	ND	U	20	10	2.6	1	10/07/14	10/07/14	KWG1413599	
Toluene	ND	U	0.50	0.10	0.054	1	10/07/14	10/07/14	KWG1413599	
trans-1,3-Dichloropropene	ND	U	0.50	0.20	0.068	1	10/07/14	10/07/14	KWG1413599	*
1,1,2-Trichloroethane	ND	U	0.50	0.40	0.14	1	10/07/14	10/07/14	KWG1413599	
Tetrachloroethene (PCE)	ND	U	0.50	0.20	0.099	1	10/07/14	10/07/14	KWG1413599	

Comments:

Analytical Results

Client: Sealaska Environmental Services, LLC
Project: TO 01 JBLM
Sample Matrix: Water

Service Request: K1410537
Date Collected: 09/25/2014
Date Received: 09/26/2014

Volatile Organic Compounds

Sample Name: LGC140925LC99D-1
Lab Code: K1410537-021

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
2-Hexanone	ND	U	20	10	2.7	1	10/07/14	10/07/14	KWG1413599	
1,3-Dichloropropane	ND	U	0.50	0.30	0.14	1	10/07/14	10/07/14	KWG1413599	
Dibromochloromethane	ND	U	0.50	0.50	0.14	1	10/07/14	10/07/14	KWG1413599	
1,2-Dibromoethane (EDB)	ND	U	2.0	0.20	0.10	1	10/07/14	10/07/14	KWG1413599	
Chlorobenzene	ND	U	0.50	0.20	0.11	1	10/07/14	10/07/14	KWG1413599	
Ethylbenzene	ND	U	0.50	0.10	0.050	1	10/07/14	10/07/14	KWG1413599	
1,1,1,2-Tetrachloroethane	ND	U	0.50	0.20	0.11	1	10/07/14	10/07/14	KWG1413599	
m,p-Xylenes	ND	U	0.50	0.20	0.11	1	10/07/14	10/07/14	KWG1413599	
o-Xylene	ND	U	0.50	0.20	0.074	1	10/07/14	10/07/14	KWG1413599	
Styrene	ND	U	0.50	0.20	0.089	1	10/07/14	10/07/14	KWG1413599	
Bromoform	ND	U	0.50	0.50	0.16	1	10/07/14	10/07/14	KWG1413599	*
Isopropylbenzene	ND	U	2.0	0.20	0.051	1	10/07/14	10/07/14	KWG1413599	
1,1,2,2-Tetrachloroethane	ND	U	0.50	0.20	0.16	1	10/07/14	10/07/14	KWG1413599	
Bromobenzene	ND	U	2.0	0.20	0.12	1	10/07/14	10/07/14	KWG1413599	
n-Propylbenzene	ND	U	2.0	0.20	0.054	1	10/07/14	10/07/14	KWG1413599	
1,2,3-Trichloropropane	ND	U	0.50	0.50	0.20	1	10/07/14	10/07/14	KWG1413599	
2-Chlorotoluene	ND	U	2.0	0.20	0.10	1	10/07/14	10/07/14	KWG1413599	
1,3,5-Trimethylbenzene	ND	U	2.0	0.20	0.089	1	10/07/14	10/07/14	KWG1413599	
4-Chlorotoluene	ND	U	2.0	0.20	0.13	1	10/07/14	10/07/14	KWG1413599	
tert-Butylbenzene	ND	U	2.0	0.20	0.059	1	10/07/14	10/07/14	KWG1413599	
1,2,4-Trimethylbenzene	ND	U	2.0	0.20	0.069	1	10/07/14	10/07/14	KWG1413599	
sec-Butylbenzene	ND	U	2.0	0.10	0.062	1	10/07/14	10/07/14	KWG1413599	
4-Isopropyltoluene	ND	U	2.0	0.20	0.060	1	10/07/14	10/07/14	KWG1413599	
1,3-Dichlorobenzene	ND	U	0.50	0.20	0.10	1	10/07/14	10/07/14	KWG1413599	
1,4-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	10/07/14	10/07/14	KWG1413599	
n-Butylbenzene	ND	U	2.0	0.10	0.054	1	10/07/14	10/07/14	KWG1413599	
1,2-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	10/07/14	10/07/14	KWG1413599	
1,2-Dibromo-3-chloropropane	ND	U	2.0	0.80	0.20	1	10/07/14	10/07/14	KWG1413599	
1,2,4-Trichlorobenzene	ND	U	2.0	0.30	0.096	1	10/07/14	10/07/14	KWG1413599	
Hexachlorobutadiene	ND	U	2.0	0.30	0.11	1	10/07/14	10/07/14	KWG1413599	
Naphthalene	ND	U	2.0	0.30	0.088	1	10/07/14	10/07/14	KWG1413599	
1,2,3-Trichlorobenzene	ND	U	2.0	0.40	0.11	1	10/07/14	10/07/14	KWG1413599	

* See Case Narrative

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1410537
Project:	TO 01 JBLM	**Date Collected:**	09/25/2014
Sample Matrix:	Water	**Date Received:**	09/26/2014

Volatile Organic Compounds

Sample Name:	LGC140925LC99D-1	**Units:**	ug/L
Lab Code:	K1410537-021	**Basis:**	NA

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Dibromofluoromethane	98	85-115	10/07/14	Acceptable
1,2-Dichloroethane-d4	114	70-120	10/07/14	Acceptable
Toluene-d8	95	85-120	10/07/14	Acceptable
4-Bromofluorobenzene	90	75-120	10/07/14	Acceptable

Comments:

Analytical Results

Client: Sealaska Environmental Services, LLC
Project: TO 01 JBLM
Sample Matrix: Water

Service Request: K1410537
Date Collected: 09/25/2014
Date Received: 09/26/2014

Volatile Organic Compounds

Sample Name: LGC140925LC74D-1
Lab Code: K1410537-022

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
Dichlorodifluoromethane	ND	U	0.50	0.20	0.13	1	10/07/14	10/07/14	KWG1413599	
Chloromethane	**0.16**	J	0.50	0.20	0.068	1	10/07/14	10/07/14	KWG1413599	
Vinyl Chloride	ND	U	0.50	0.10	0.075	1	10/07/14	10/07/14	KWG1413599	
Bromomethane	ND	U	0.50	0.30	0.10	1	10/07/14	10/07/14	KWG1413599	*
Chloroethane	ND	U	0.50	0.20	0.16	1	10/07/14	10/07/14	KWG1413599	
Trichlorofluoromethane	ND	U	0.50	0.20	0.12	1	10/07/14	10/07/14	KWG1413599	
1,1-Dichloroethene	ND	U	0.50	0.20	0.080	1	10/07/14	10/07/14	KWG1413599	
Acetone	ND	U	20	10	3.3	1	10/07/14	10/07/14	KWG1413599	
Carbon Disulfide	ND	U	0.50	0.20	0.069	1	10/07/14	10/07/14	KWG1413599	*
Methylene Chloride	ND	U	2.0	0.20	0.10	1	10/07/14	10/07/14	KWG1413599	
Methyl tert-Butyl Ether	ND	U	0.50	0.30	0.11	1	10/07/14	10/07/14	KWG1413599	
trans-1,2-Dichloroethene	ND	U	0.50	0.20	0.072	1	10/07/14	10/07/14	KWG1413599	
1,1-Dichloroethane	ND	U	0.50	0.20	0.077	1	10/07/14	10/07/14	KWG1413599	
2,2-Dichloropropane	ND	U	0.50	0.20	0.060	1	10/07/14	10/07/14	KWG1413599	*
cis-1,2-Dichloroethene	**0.17**	J	0.50	0.20	0.067	1	10/07/14	10/07/14	KWG1413599	
2-Butanone (MEK)	ND	U	20	4.0	1.9	1	10/07/14	10/07/14	KWG1413599	
Bromochloromethane	ND	U	0.50	0.20	0.16	1	10/07/14	10/07/14	KWG1413599	
Chloroform	ND	U	0.50	0.20	0.072	1	10/07/14	10/07/14	KWG1413599	
1,1,1-Trichloroethane (TCA)	ND	U	0.50	0.20	0.075	1	10/07/14	10/07/14	KWG1413599	
Carbon Tetrachloride	ND	U	0.50	0.20	0.096	1	10/07/14	10/07/14	KWG1413599	
1,1-Dichloropropene	ND	U	0.50	0.20	0.089	1	10/07/14	10/07/14	KWG1413599	
Benzene	ND	U	0.50	0.10	0.062	1	10/07/14	10/07/14	KWG1413599	
1,2-Dichloroethane (EDC)	ND	U	0.50	0.15	0.080	1	10/07/14	10/07/14	KWG1413599	
Trichloroethene (TCE)	**5.7**		0.50	0.10	0.10	1	10/07/14	10/07/14	KWG1413599	
1,2-Dichloropropane	ND	U	0.50	0.20	0.095	1	10/07/14	10/07/14	KWG1413599	
Dibromomethane	ND	U	0.50	0.50	0.15	1	10/07/14	10/07/14	KWG1413599	
Bromodichloromethane	ND	U	0.50	0.30	0.091	1	10/07/14	10/07/14	KWG1413599	
cis-1,3-Dichloropropene	ND	U	0.50	0.20	0.18	1	10/07/14	10/07/14	KWG1413599	
4-Methyl-2-pentanone (MIBK)	ND	U	20	10	2.6	1	10/07/14	10/07/14	KWG1413599	
Toluene	ND	U	0.50	0.10	0.054	1	10/07/14	10/07/14	KWG1413599	
trans-1,3-Dichloropropene	ND	U	0.50	0.20	0.068	1	10/07/14	10/07/14	KWG1413599	*
1,1,2-Trichloroethane	ND	U	0.50	0.40	0.14	1	10/07/14	10/07/14	KWG1413599	
Tetrachloroethene (PCE)	ND	U	0.50	0.20	0.099	1	10/07/14	10/07/14	KWG1413599	

Comments:

Analytical Results

Client: Sealaska Environmental Services, LLC
Project: TO 01 JBLM
Sample Matrix: Water

Service Request: K1410537
Date Collected: 09/25/2014
Date Received: 09/26/2014

Volatile Organic Compounds

Sample Name: LGC140925LC74D-1
Lab Code: K1410537-022

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
2-Hexanone	ND	U	20	10	2.7	1	10/07/14	10/07/14	KWG1413599	
1,3-Dichloropropane	ND	U	0.50	0.30	0.14	1	10/07/14	10/07/14	KWG1413599	
Dibromochloromethane	ND	U	0.50	0.50	0.14	1	10/07/14	10/07/14	KWG1413599	
1,2-Dibromoethane (EDB)	ND	U	2.0	0.20	0.10	1	10/07/14	10/07/14	KWG1413599	
Chlorobenzene	ND	U	0.50	0.20	0.11	1	10/07/14	10/07/14	KWG1413599	
Ethylbenzene	ND	U	0.50	0.10	0.050	1	10/07/14	10/07/14	KWG1413599	
1,1,1,2-Tetrachloroethane	ND	U	0.50	0.20	0.11	1	10/07/14	10/07/14	KWG1413599	
m,p-Xylenes	ND	U	0.50	0.20	0.11	1	10/07/14	10/07/14	KWG1413599	
o-Xylene	ND	U	0.50	0.20	0.074	1	10/07/14	10/07/14	KWG1413599	
Styrene	ND	U	0.50	0.20	0.089	1	10/07/14	10/07/14	KWG1413599	
Bromoform	ND	U	0.50	0.50	0.16	1	10/07/14	10/07/14	KWG1413599	*
Isopropylbenzene	ND	U	2.0	0.20	0.051	1	10/07/14	10/07/14	KWG1413599	
1,1,2,2-Tetrachloroethane	ND	U	0.50	0.20	0.16	1	10/07/14	10/07/14	KWG1413599	
Bromobenzene	ND	U	2.0	0.20	0.12	1	10/07/14	10/07/14	KWG1413599	
n-Propylbenzene	ND	U	2.0	0.20	0.054	1	10/07/14	10/07/14	KWG1413599	
1,2,3-Trichloropropane	ND	U	0.50	0.50	0.20	1	10/07/14	10/07/14	KWG1413599	
2-Chlorotoluene	ND	U	2.0	0.20	0.10	1	10/07/14	10/07/14	KWG1413599	
1,3,5-Trimethylbenzene	ND	U	2.0	0.20	0.089	1	10/07/14	10/07/14	KWG1413599	
4-Chlorotoluene	ND	U	2.0	0.20	0.13	1	10/07/14	10/07/14	KWG1413599	
tert-Butylbenzene	ND	U	2.0	0.20	0.059	1	10/07/14	10/07/14	KWG1413599	
1,2,4-Trimethylbenzene	ND	U	2.0	0.20	0.069	1	10/07/14	10/07/14	KWG1413599	
sec-Butylbenzene	ND	U	2.0	0.10	0.062	1	10/07/14	10/07/14	KWG1413599	
4-Isopropyltoluene	ND	U	2.0	0.20	0.060	1	10/07/14	10/07/14	KWG1413599	
1,3-Dichlorobenzene	ND	U	0.50	0.20	0.10	1	10/07/14	10/07/14	KWG1413599	
1,4-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	10/07/14	10/07/14	KWG1413599	
n-Butylbenzene	ND	U	2.0	0.10	0.054	1	10/07/14	10/07/14	KWG1413599	
1,2-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	10/07/14	10/07/14	KWG1413599	
1,2-Dibromo-3-chloropropane	ND	U	2.0	0.80	0.20	1	10/07/14	10/07/14	KWG1413599	
1,2,4-Trichlorobenzene	ND	U	2.0	0.30	0.096	1	10/07/14	10/07/14	KWG1413599	
Hexachlorobutadiene	ND	U	2.0	0.30	0.11	1	10/07/14	10/07/14	KWG1413599	
Naphthalene	ND	U	2.0	0.30	0.088	1	10/07/14	10/07/14	KWG1413599	
1,2,3-Trichlorobenzene	ND	U	2.0	0.40	0.11	1	10/07/14	10/07/14	KWG1413599	

* See Case Narrative

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1410537
Project:	TO 01 JBLM	**Date Collected:**	09/25/2014
Sample Matrix:	Water	**Date Received:**	09/26/2014

Volatile Organic Compounds

Sample Name:	LGC140925LC74D-1	**Units:**	ug/L
Lab Code:	K1410537-022	**Basis:**	NA

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Dibromofluoromethane	95	85-115	10/07/14	Acceptable
1,2-Dichloroethane-d4	110	70-120	10/07/14	Acceptable
Toluene-d8	95	85-120	10/07/14	Acceptable
4-Bromofluorobenzene	87	75-120	10/07/14	Acceptable

Comments:

Analytical Results

Client: Sealaska Environmental Services, LLC
Project: TO 01 JBLM
Sample Matrix: Water

Service Request: K1410537
Date Collected: 09/25/2014
Date Received: 09/26/2014

Volatile Organic Compounds

Sample Name: LGC140925LC96D-1
Lab Code: K1410537-023

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
Dichlorodifluoromethane	ND	U	0.50	0.20	0.13	1	10/07/14	10/07/14	KWG1413599	
Chloromethane	**0.16**	J	0.50	0.20	0.068	1	10/07/14	10/07/14	KWG1413599	
Vinyl Chloride	ND	U	0.50	0.10	0.075	1	10/07/14	10/07/14	KWG1413599	
Bromomethane	ND	U	0.50	0.30	0.10	1	10/07/14	10/07/14	KWG1413599	*
Chloroethane	ND	U	0.50	0.20	0.16	1	10/07/14	10/07/14	KWG1413599	
Trichlorofluoromethane	ND	U	0.50	0.20	0.12	1	10/07/14	10/07/14	KWG1413599	
1,1-Dichloroethene	ND	U	0.50	0.20	0.080	1	10/07/14	10/07/14	KWG1413599	
Acetone	**3.8**	J	20	10	3.3	1	10/07/14	10/07/14	KWG1413599	*
Carbon Disulfide	ND	U	0.50	0.20	0.069	1	10/07/14	10/07/14	KWG1413599	*
Methylene Chloride	ND	U	2.0	0.20	0.10	1	10/07/14	10/07/14	KWG1413599	
Methyl tert-Butyl Ether	ND	U	0.50	0.30	0.11	1	10/07/14	10/07/14	KWG1413599	
trans-1,2-Dichloroethene	ND	U	0.50	0.20	0.072	1	10/07/14	10/07/14	KWG1413599	
1,1-Dichloroethane	ND	U	0.50	0.20	0.077	1	10/07/14	10/07/14	KWG1413599	
2,2-Dichloropropane	ND	U	0.50	0.20	0.060	1	10/07/14	10/07/14	KWG1413599	*
cis-1,2-Dichloroethene	**0.20**	J	0.50	0.20	0.067	1	10/07/14	10/07/14	KWG1413599	
2-Butanone (MEK)	ND	U	20	4.0	1.9	1	10/07/14	10/07/14	KWG1413599	
Bromochloromethane	ND	U	0.50	0.20	0.16	1	10/07/14	10/07/14	KWG1413599	
Chloroform	ND	U	0.50	0.20	0.072	1	10/07/14	10/07/14	KWG1413599	
1,1,1-Trichloroethane (TCA)	ND	U	0.50	0.20	0.075	1	10/07/14	10/07/14	KWG1413599	
Carbon Tetrachloride	ND	U	0.50	0.20	0.096	1	10/07/14	10/07/14	KWG1413599	
1,1-Dichloropropene	ND	U	0.50	0.20	0.089	1	10/07/14	10/07/14	KWG1413599	
Benzene	ND	U	0.50	0.10	0.062	1	10/07/14	10/07/14	KWG1413599	
1,2-Dichloroethane (EDC)	ND	U	0.50	0.15	0.080	1	10/07/14	10/07/14	KWG1413599	
Trichloroethene (TCE)	**8.3**		0.50	0.10	0.10	1	10/07/14	10/07/14	KWG1413599	
1,2-Dichloropropane	ND	U	0.50	0.20	0.095	1	10/07/14	10/07/14	KWG1413599	
Dibromomethane	ND	U	0.50	0.50	0.15	1	10/07/14	10/07/14	KWG1413599	
Bromodichloromethane	ND	U	0.50	0.30	0.091	1	10/07/14	10/07/14	KWG1413599	
cis-1,3-Dichloropropene	ND	U	0.50	0.20	0.18	1	10/07/14	10/07/14	KWG1413599	
4-Methyl-2-pentanone (MIBK)	ND	U	20	10	2.6	1	10/07/14	10/07/14	KWG1413599	
Toluene	ND	U	0.50	0.10	0.054	1	10/07/14	10/07/14	KWG1413599	
trans-1,3-Dichloropropene	ND	U	0.50	0.20	0.068	1	10/07/14	10/07/14	KWG1413599	*
1,1,2-Trichloroethane	ND	U	0.50	0.40	0.14	1	10/07/14	10/07/14	KWG1413599	
Tetrachloroethene (PCE)	ND	U	0.50	0.20	0.099	1	10/07/14	10/07/14	KWG1413599	

Comments:

Analytical Results

Client: Sealaska Environmental Services, LLC
Project: TO 01 JBLM
Sample Matrix: Water

Service Request: K1410537
Date Collected: 09/25/2014
Date Received: 09/26/2014

Volatile Organic Compounds

Sample Name: LGC140925LC96D-1
Lab Code: K1410537-023

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
2-Hexanone	ND	U	20	10	2.7	1	10/07/14	10/07/14	KWG1413599	
1,3-Dichloropropane	ND	U	0.50	0.30	0.14	1	10/07/14	10/07/14	KWG1413599	
Dibromochloromethane	ND	U	0.50	0.50	0.14	1	10/07/14	10/07/14	KWG1413599	
1,2-Dibromoethane (EDB)	ND	U	2.0	0.20	0.10	1	10/07/14	10/07/14	KWG1413599	
Chlorobenzene	ND	U	0.50	0.20	0.11	1	10/07/14	10/07/14	KWG1413599	
Ethylbenzene	ND	U	0.50	0.10	0.050	1	10/07/14	10/07/14	KWG1413599	
1,1,1,2-Tetrachloroethane	ND	U	0.50	0.20	0.11	1	10/07/14	10/07/14	KWG1413599	
m,p-Xylenes	ND	U	0.50	0.20	0.11	1	10/07/14	10/07/14	KWG1413599	
o-Xylene	ND	U	0.50	0.20	0.074	1	10/07/14	10/07/14	KWG1413599	
Styrene	ND	U	0.50	0.20	0.089	1	10/07/14	10/07/14	KWG1413599	
Bromoform	ND	U	0.50	0.50	0.16	1	10/07/14	10/07/14	KWG1413599	*
Isopropylbenzene	ND	U	2.0	0.20	0.051	1	10/07/14	10/07/14	KWG1413599	
1,1,2,2-Tetrachloroethane	ND	U	0.50	0.20	0.16	1	10/07/14	10/07/14	KWG1413599	
Bromobenzene	ND	U	2.0	0.20	0.12	1	10/07/14	10/07/14	KWG1413599	
n-Propylbenzene	ND	U	2.0	0.20	0.054	1	10/07/14	10/07/14	KWG1413599	
1,2,3-Trichloropropane	ND	U	0.50	0.50	0.20	1	10/07/14	10/07/14	KWG1413599	
2-Chlorotoluene	ND	U	2.0	0.20	0.10	1	10/07/14	10/07/14	KWG1413599	
1,3,5-Trimethylbenzene	ND	U	2.0	0.20	0.089	1	10/07/14	10/07/14	KWG1413599	
4-Chlorotoluene	ND	U	2.0	0.20	0.13	1	10/07/14	10/07/14	KWG1413599	
tert-Butylbenzene	ND	U	2.0	0.20	0.059	1	10/07/14	10/07/14	KWG1413599	
1,2,4-Trimethylbenzene	ND	U	2.0	0.20	0.069	1	10/07/14	10/07/14	KWG1413599	
sec-Butylbenzene	ND	U	2.0	0.10	0.062	1	10/07/14	10/07/14	KWG1413599	
4-Isopropyltoluene	ND	U	2.0	0.20	0.060	1	10/07/14	10/07/14	KWG1413599	
1,3-Dichlorobenzene	ND	U	0.50	0.20	0.10	1	10/07/14	10/07/14	KWG1413599	
1,4-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	10/07/14	10/07/14	KWG1413599	
n-Butylbenzene	ND	U	2.0	0.10	0.054	1	10/07/14	10/07/14	KWG1413599	
1,2-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	10/07/14	10/07/14	KWG1413599	
1,2-Dibromo-3-chloropropane	ND	U	2.0	0.80	0.20	1	10/07/14	10/07/14	KWG1413599	
1,2,4-Trichlorobenzene	ND	U	2.0	0.30	0.096	1	10/07/14	10/07/14	KWG1413599	
Hexachlorobutadiene	ND	U	2.0	0.30	0.11	1	10/07/14	10/07/14	KWG1413599	
Naphthalene	ND	U	2.0	0.30	0.088	1	10/07/14	10/07/14	KWG1413599	
1,2,3-Trichlorobenzene	ND	U	2.0	0.40	0.11	1	10/07/14	10/07/14	KWG1413599	

* See Case Narrative

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1410537
Project:	TO 01 JBLM	**Date Collected:**	09/25/2014
Sample Matrix:	Water	**Date Received:**	09/26/2014

Volatile Organic Compounds

Sample Name:	LGC140925LC96D-1	**Units:**	ug/L
Lab Code:	K1410537-023	**Basis:**	NA

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Dibromofluoromethane	98	85-115	10/07/14	Acceptable
1,2-Dichloroethane-d4	113	70-120	10/07/14	Acceptable
Toluene-d8	94	85-120	10/07/14	Acceptable
4-Bromofluorobenzene	88	75-120	10/07/14	Acceptable

Comments:

Analytical Results

Client: Sealaska Environmental Services, LLC
Project: TO 01 JBLM
Sample Matrix: Water

Service Request: K1410537
Date Collected: 09/25/2014
Date Received: 09/26/2014

Volatile Organic Compounds

Sample Name: LGC140925SLAP6-1
Lab Code: K1410537-024

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
Dichlorodifluoromethane	ND	U	0.50	0.20	0.13	1	10/07/14	10/07/14	KWG1413599	
Chloromethane	**0.14**	J	0.50	0.20	0.068	1	10/07/14	10/07/14	KWG1413599	
Vinyl Chloride	ND	U	0.50	0.10	0.075	1	10/07/14	10/07/14	KWG1413599	
Bromomethane	ND	U	0.50	0.30	0.10	1	10/07/14	10/07/14	KWG1413599	*
Chloroethane	ND	U	0.50	0.20	0.16	1	10/07/14	10/07/14	KWG1413599	
Trichlorofluoromethane	ND	U	0.50	0.20	0.12	1	10/07/14	10/07/14	KWG1413599	
1,1-Dichloroethene	ND	U	0.50	0.20	0.080	1	10/07/14	10/07/14	KWG1413599	
Acetone	ND	U	20	10	3.3	1	10/07/14	10/07/14	KWG1413599	
Carbon Disulfide	ND	U	0.50	0.20	0.069	1	10/07/14	10/07/14	KWG1413599	*
Methylene Chloride	ND	U	2.0	0.20	0.10	1	10/07/14	10/07/14	KWG1413599	
Methyl tert-Butyl Ether	ND	U	0.50	0.30	0.11	1	10/07/14	10/07/14	KWG1413599	
trans-1,2-Dichloroethene	ND	U	0.50	0.20	0.072	1	10/07/14	10/07/14	KWG1413599	
1,1-Dichloroethane	ND	U	0.50	0.20	0.077	1	10/07/14	10/07/14	KWG1413599	
2,2-Dichloropropane	ND	U	0.50	0.20	0.060	1	10/07/14	10/07/14	KWG1413599	*
cis-1,2-Dichloroethene	**0.19**	J	0.50	0.20	0.067	1	10/07/14	10/07/14	KWG1413599	
2-Butanone (MEK)	ND	U	20	4.0	1.9	1	10/07/14	10/07/14	KWG1413599	
Bromochloromethane	ND	U	0.50	0.20	0.16	1	10/07/14	10/07/14	KWG1413599	
Chloroform	ND	U	0.50	0.20	0.072	1	10/07/14	10/07/14	KWG1413599	
1,1,1-Trichloroethane (TCA)	ND	U	0.50	0.20	0.075	1	10/07/14	10/07/14	KWG1413599	
Carbon Tetrachloride	ND	U	0.50	0.20	0.096	1	10/07/14	10/07/14	KWG1413599	
1,1-Dichloropropene	ND	U	0.50	0.20	0.089	1	10/07/14	10/07/14	KWG1413599	
Benzene	ND	U	0.50	0.10	0.062	1	10/07/14	10/07/14	KWG1413599	
1,2-Dichloroethane (EDC)	ND	U	0.50	0.15	0.080	1	10/07/14	10/07/14	KWG1413599	
Trichloroethene (TCE)	**8.0**		0.50	0.10	0.10	1	10/07/14	10/07/14	KWG1413599	
1,2-Dichloropropane	ND	U	0.50	0.20	0.095	1	10/07/14	10/07/14	KWG1413599	
Dibromomethane	ND	U	0.50	0.50	0.15	1	10/07/14	10/07/14	KWG1413599	
Bromodichloromethane	ND	U	0.50	0.30	0.091	1	10/07/14	10/07/14	KWG1413599	
cis-1,3-Dichloropropene	ND	U	0.50	0.20	0.18	1	10/07/14	10/07/14	KWG1413599	
4-Methyl-2-pentanone (MIBK)	ND	U	20	10	2.6	1	10/07/14	10/07/14	KWG1413599	
Toluene	ND	U	0.50	0.10	0.054	1	10/07/14	10/07/14	KWG1413599	
trans-1,3-Dichloropropene	ND	U	0.50	0.20	0.068	1	10/07/14	10/07/14	KWG1413599	*
1,1,2-Trichloroethane	ND	U	0.50	0.40	0.14	1	10/07/14	10/07/14	KWG1413599	
Tetrachloroethene (PCE)	ND	U	0.50	0.20	0.099	1	10/07/14	10/07/14	KWG1413599	

Comments:

Analytical Results

Client: Sealaska Environmental Services, LLC
Project: TO 01 JBLM
Sample Matrix: Water

Service Request: K1410537
Date Collected: 09/25/2014
Date Received: 09/26/2014

Volatile Organic Compounds

Sample Name: LGC140925SLAP6-1
Lab Code: K1410537-024

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
2-Hexanone	ND	U	20	10	2.7	1	10/07/14	10/07/14	KWG1413599	
1,3-Dichloropropane	ND	U	0.50	0.30	0.14	1	10/07/14	10/07/14	KWG1413599	
Dibromochloromethane	ND	U	0.50	0.50	0.14	1	10/07/14	10/07/14	KWG1413599	
1,2-Dibromoethane (EDB)	ND	U	2.0	0.20	0.10	1	10/07/14	10/07/14	KWG1413599	
Chlorobenzene	ND	U	0.50	0.20	0.11	1	10/07/14	10/07/14	KWG1413599	
Ethylbenzene	ND	U	0.50	0.10	0.050	1	10/07/14	10/07/14	KWG1413599	
1,1,1,2-Tetrachloroethane	ND	U	0.50	0.20	0.11	1	10/07/14	10/07/14	KWG1413599	
m,p-Xylenes	ND	U	0.50	0.20	0.11	1	10/07/14	10/07/14	KWG1413599	
o-Xylene	ND	U	0.50	0.20	0.074	1	10/07/14	10/07/14	KWG1413599	
Styrene	ND	U	0.50	0.20	0.089	1	10/07/14	10/07/14	KWG1413599	
Bromoform	ND	U	0.50	0.50	0.16	1	10/07/14	10/07/14	KWG1413599	*
Isopropylbenzene	ND	U	2.0	0.20	0.051	1	10/07/14	10/07/14	KWG1413599	
1,1,2,2-Tetrachloroethane	ND	U	0.50	0.20	0.16	1	10/07/14	10/07/14	KWG1413599	
Bromobenzene	ND	U	2.0	0.20	0.12	1	10/07/14	10/07/14	KWG1413599	
n-Propylbenzene	ND	U	2.0	0.20	0.054	1	10/07/14	10/07/14	KWG1413599	
1,2,3-Trichloropropane	ND	U	0.50	0.50	0.20	1	10/07/14	10/07/14	KWG1413599	
2-Chlorotoluene	ND	U	2.0	0.20	0.10	1	10/07/14	10/07/14	KWG1413599	
1,3,5-Trimethylbenzene	ND	U	2.0	0.20	0.089	1	10/07/14	10/07/14	KWG1413599	
4-Chlorotoluene	ND	U	2.0	0.20	0.13	1	10/07/14	10/07/14	KWG1413599	
tert-Butylbenzene	ND	U	2.0	0.20	0.059	1	10/07/14	10/07/14	KWG1413599	
1,2,4-Trimethylbenzene	ND	U	2.0	0.20	0.069	1	10/07/14	10/07/14	KWG1413599	
sec-Butylbenzene	ND	U	2.0	0.10	0.062	1	10/07/14	10/07/14	KWG1413599	
4-Isopropyltoluene	ND	U	2.0	0.20	0.060	1	10/07/14	10/07/14	KWG1413599	
1,3-Dichlorobenzene	ND	U	0.50	0.20	0.10	1	10/07/14	10/07/14	KWG1413599	
1,4-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	10/07/14	10/07/14	KWG1413599	
n-Butylbenzene	ND	U	2.0	0.10	0.054	1	10/07/14	10/07/14	KWG1413599	
1,2-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	10/07/14	10/07/14	KWG1413599	
1,2-Dibromo-3-chloropropane	ND	U	2.0	0.80	0.20	1	10/07/14	10/07/14	KWG1413599	
1,2,4-Trichlorobenzene	ND	U	2.0	0.30	0.096	1	10/07/14	10/07/14	KWG1413599	
Hexachlorobutadiene	ND	U	2.0	0.30	0.11	1	10/07/14	10/07/14	KWG1413599	
Naphthalene	ND	U	2.0	0.30	0.088	1	10/07/14	10/07/14	KWG1413599	
1,2,3-Trichlorobenzene	ND	U	2.0	0.40	0.11	1	10/07/14	10/07/14	KWG1413599	

* See Case Narrative

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1410537
Project:	TO 01 JBLM	**Date Collected:**	09/25/2014
Sample Matrix:	Water	**Date Received:**	09/26/2014

Volatile Organic Compounds

Sample Name:	LGC140925SLAP6-1	**Units:**	ug/L
Lab Code:	K1410537-024	**Basis:**	NA

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Dibromofluoromethane	96	85-115	10/07/14	Acceptable
1,2-Dichloroethane-d4	111	70-120	10/07/14	Acceptable
Toluene-d8	95	85-120	10/07/14	Acceptable
4-Bromofluorobenzene	90	75-120	10/07/14	Acceptable

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1410537
Project:	TO 01 JBLM	**Date Collected:**	09/25/2014
Sample Matrix:	Water	**Date Received:**	09/26/2014

Volatile Organic Compounds

Sample Name:	TB092514	**Units:**	ug/L
Lab Code:	K1410537-025	**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
Dichlorodifluoromethane	ND	U	0.50	0.20	0.13	1	10/07/14	10/07/14	KWG1413599	
Chloromethane	ND	U	0.50	0.20	0.068	1	10/07/14	10/07/14	KWG1413599	
Vinyl Chloride	ND	U	0.50	0.10	0.075	1	10/07/14	10/07/14	KWG1413599	
Bromomethane	ND	U	0.50	0.30	0.10	1	10/07/14	10/07/14	KWG1413599	*
Chloroethane	ND	U	0.50	0.20	0.16	1	10/07/14	10/07/14	KWG1413599	
Trichlorofluoromethane	ND	U	0.50	0.20	0.12	1	10/07/14	10/07/14	KWG1413599	
1,1-Dichloroethene	ND	U	0.50	0.20	0.080	1	10/07/14	10/07/14	KWG1413599	
Acetone	ND	U	20	10	3.3	1	10/07/14	10/07/14	KWG1413599	
Carbon Disulfide	ND	U	0.50	0.20	0.069	1	10/07/14	10/07/14	KWG1413599	*
Methylene Chloride	**0.25**	J	2.0	0.20	0.10	1	10/07/14	10/07/14	KWG1413599	
Methyl tert-Butyl Ether	ND	U	0.50	0.30	0.11	1	10/07/14	10/07/14	KWG1413599	
trans-1,2-Dichloroethene	ND	U	0.50	0.20	0.072	1	10/07/14	10/07/14	KWG1413599	
1,1-Dichloroethane	ND	U	0.50	0.20	0.077	1	10/07/14	10/07/14	KWG1413599	
2,2-Dichloropropane	ND	U	0.50	0.20	0.060	1	10/07/14	10/07/14	KWG1413599	*
cis-1,2-Dichloroethene	ND	U	0.50	0.20	0.067	1	10/07/14	10/07/14	KWG1413599	
2-Butanone (MEK)	ND	U	20	4.0	1.9	1	10/07/14	10/07/14	KWG1413599	
Bromochloromethane	ND	U	0.50	0.20	0.16	1	10/07/14	10/07/14	KWG1413599	
Chloroform	ND	U	0.50	0.20	0.072	1	10/07/14	10/07/14	KWG1413599	
1,1,1-Trichloroethane (TCA)	ND	U	0.50	0.20	0.075	1	10/07/14	10/07/14	KWG1413599	
Carbon Tetrachloride	ND	U	0.50	0.20	0.096	1	10/07/14	10/07/14	KWG1413599	
1,1-Dichloropropene	ND	U	0.50	0.20	0.089	1	10/07/14	10/07/14	KWG1413599	
Benzene	ND	U	0.50	0.10	0.062	1	10/07/14	10/07/14	KWG1413599	
1,2-Dichloroethane (EDC)	ND	U	0.50	0.15	0.080	1	10/07/14	10/07/14	KWG1413599	
Trichloroethene (TCE)	ND	U	0.50	0.10	0.10	1	10/07/14	10/07/14	KWG1413599	
1,2-Dichloropropane	ND	U	0.50	0.20	0.095	1	10/07/14	10/07/14	KWG1413599	
Dibromomethane	ND	U	0.50	0.50	0.15	1	10/07/14	10/07/14	KWG1413599	
Bromodichloromethane	ND	U	0.50	0.30	0.091	1	10/07/14	10/07/14	KWG1413599	
cis-1,3-Dichloropropene	ND	U	0.50	0.20	0.18	1	10/07/14	10/07/14	KWG1413599	
4-Methyl-2-pentanone (MIBK)	ND	U	20	10	2.6	1	10/07/14	10/07/14	KWG1413599	
Toluene	**0.060**	J	0.50	0.10	0.054	1	10/07/14	10/07/14	KWG1413599	
trans-1,3-Dichloropropene	ND	U	0.50	0.20	0.068	1	10/07/14	10/07/14	KWG1413599	*
1,1,2-Trichloroethane	ND	U	0.50	0.40	0.14	1	10/07/14	10/07/14	KWG1413599	
Tetrachloroethene (PCE)	ND	U	0.50	0.20	0.099	1	10/07/14	10/07/14	KWG1413599	

Comments:

Analytical Results

Client: Sealaska Environmental Services, LLC
Project: TO 01 JBLM
Sample Matrix: Water

Service Request: K1410537
Date Collected: 09/25/2014
Date Received: 09/26/2014

Volatile Organic Compounds

Sample Name: TB092514
Lab Code: K1410537-025

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
2-Hexanone	ND	U	20	10	2.7	1	10/07/14	10/07/14	KWG1413599	
1,3-Dichloropropane	ND	U	0.50	0.30	0.14	1	10/07/14	10/07/14	KWG1413599	
Dibromochloromethane	ND	U	0.50	0.50	0.14	1	10/07/14	10/07/14	KWG1413599	
1,2-Dibromoethane (EDB)	ND	U	2.0	0.20	0.10	1	10/07/14	10/07/14	KWG1413599	
Chlorobenzene	ND	U	0.50	0.20	0.11	1	10/07/14	10/07/14	KWG1413599	
Ethylbenzene	ND	U	0.50	0.10	0.050	1	10/07/14	10/07/14	KWG1413599	
1,1,1,2-Tetrachloroethane	ND	U	0.50	0.20	0.11	1	10/07/14	10/07/14	KWG1413599	
m,p-Xylenes	ND	U	0.50	0.20	0.11	1	10/07/14	10/07/14	KWG1413599	
o-Xylene	ND	U	0.50	0.20	0.074	1	10/07/14	10/07/14	KWG1413599	
Styrene	ND	U	0.50	0.20	0.089	1	10/07/14	10/07/14	KWG1413599	
Bromoform	ND	U	0.50	0.50	0.16	1	10/07/14	10/07/14	KWG1413599	*
Isopropylbenzene	ND	U	2.0	0.20	0.051	1	10/07/14	10/07/14	KWG1413599	
1,1,2,2-Tetrachloroethane	ND	U	0.50	0.20	0.16	1	10/07/14	10/07/14	KWG1413599	
Bromobenzene	ND	U	2.0	0.20	0.12	1	10/07/14	10/07/14	KWG1413599	
n-Propylbenzene	ND	U	2.0	0.20	0.054	1	10/07/14	10/07/14	KWG1413599	
1,2,3-Trichloropropane	ND	U	0.50	0.50	0.20	1	10/07/14	10/07/14	KWG1413599	
2-Chlorotoluene	ND	U	2.0	0.20	0.10	1	10/07/14	10/07/14	KWG1413599	
1,3,5-Trimethylbenzene	ND	U	2.0	0.20	0.089	1	10/07/14	10/07/14	KWG1413599	
4-Chlorotoluene	ND	U	2.0	0.20	0.13	1	10/07/14	10/07/14	KWG1413599	
tert-Butylbenzene	ND	U	2.0	0.20	0.059	1	10/07/14	10/07/14	KWG1413599	
1,2,4-Trimethylbenzene	ND	U	2.0	0.20	0.069	1	10/07/14	10/07/14	KWG1413599	
sec-Butylbenzene	ND	U	2.0	0.10	0.062	1	10/07/14	10/07/14	KWG1413599	
4-Isopropyltoluene	ND	U	2.0	0.20	0.060	1	10/07/14	10/07/14	KWG1413599	
1,3-Dichlorobenzene	ND	U	0.50	0.20	0.10	1	10/07/14	10/07/14	KWG1413599	
1,4-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	10/07/14	10/07/14	KWG1413599	
n-Butylbenzene	ND	U	2.0	0.10	0.054	1	10/07/14	10/07/14	KWG1413599	
1,2-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	10/07/14	10/07/14	KWG1413599	
1,2-Dibromo-3-chloropropane	ND	U	2.0	0.80	0.20	1	10/07/14	10/07/14	KWG1413599	
1,2,4-Trichlorobenzene	ND	U	2.0	0.30	0.096	1	10/07/14	10/07/14	KWG1413599	
Hexachlorobutadiene	ND	U	2.0	0.30	0.11	1	10/07/14	10/07/14	KWG1413599	
Naphthalene	ND	U	2.0	0.30	0.088	1	10/07/14	10/07/14	KWG1413599	
1,2,3-Trichlorobenzene	ND	U	2.0	0.40	0.11	1	10/07/14	10/07/14	KWG1413599	

* See Case Narrative

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1410537
Project:	TO 01 JBLM	**Date Collected:**	09/25/2014
Sample Matrix:	Water	**Date Received:**	09/26/2014

Volatile Organic Compounds

Sample Name:	TB092514	**Units:**	ug/L
Lab Code:	K1410537-025	**Basis:**	NA

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Dibromofluoromethane	93	85-115	10/07/14	Acceptable
1,2-Dichloroethane-d4	110	70-120	10/07/14	Acceptable
Toluene-d8	94	85-120	10/07/14	Acceptable
4-Bromofluorobenzene	90	75-120	10/07/14	Acceptable

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1410537
Project:	TO 01 JBLM	**Date Collected:**	09/25/2014
Sample Matrix:	Water	**Date Received:**	09/26/2014

Volatile Organic Compounds

Sample Name:	LGC140925EGDYPW1-1	**Units:**	ug/L
Lab Code:	K1410537-026	**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
Dichlorodifluoromethane	ND	U	0.50	0.20	0.13	1	10/07/14	10/07/14	KWG1413599	
Chloromethane	**0.16**	J	0.50	0.20	0.068	1	10/07/14	10/07/14	KWG1413599	
Vinyl Chloride	**0.23**	J	0.50	0.10	0.075	1	10/07/14	10/07/14	KWG1413599	
Bromomethane	ND	U	0.50	0.30	0.10	1	10/07/14	10/07/14	KWG1413599	*
Chloroethane	ND	U	0.50	0.20	0.16	1	10/07/14	10/07/14	KWG1413599	
Trichlorofluoromethane	ND	U	0.50	0.20	0.12	1	10/07/14	10/07/14	KWG1413599	
1,1-Dichloroethene	ND	U	0.50	0.20	0.080	1	10/07/14	10/07/14	KWG1413599	
Acetone	ND	U	20	10	3.3	1	10/07/14	10/07/14	KWG1413599	
Carbon Disulfide	ND	U	0.50	0.20	0.069	1	10/07/14	10/07/14	KWG1413599	*
Methylene Chloride	ND	U	2.0	0.20	0.10	1	10/07/14	10/07/14	KWG1413599	
Methyl tert-Butyl Ether	ND	U	0.50	0.30	0.11	1	10/07/14	10/07/14	KWG1413599	
trans-1,2-Dichloroethene	**0.73**		0.50	0.20	0.072	1	10/07/14	10/07/14	KWG1413599	
1,1-Dichloroethane	ND	U	0.50	0.20	0.077	1	10/07/14	10/07/14	KWG1413599	
2,2-Dichloropropane	ND	U	0.50	0.20	0.060	1	10/07/14	10/07/14	KWG1413599	*
cis-1,2-Dichloroethene	**24**		0.50	0.20	0.067	1	10/07/14	10/07/14	KWG1413599	
2-Butanone (MEK)	ND	U	20	4.0	1.9	1	10/07/14	10/07/14	KWG1413599	
Bromochloromethane	ND	U	0.50	0.20	0.16	1	10/07/14	10/07/14	KWG1413599	
Chloroform	ND	U	0.50	0.20	0.072	1	10/07/14	10/07/14	KWG1413599	
1,1,1-Trichloroethane (TCA)	ND	U	0.50	0.20	0.075	1	10/07/14	10/07/14	KWG1413599	
Carbon Tetrachloride	ND	U	0.50	0.20	0.096	1	10/07/14	10/07/14	KWG1413599	
1,1-Dichloropropene	ND	U	0.50	0.20	0.089	1	10/07/14	10/07/14	KWG1413599	
Benzene	ND	U	0.50	0.10	0.062	1	10/07/14	10/07/14	KWG1413599	
1,2-Dichloroethane (EDC)	ND	U	0.50	0.15	0.080	1	10/07/14	10/07/14	KWG1413599	
Trichloroethene (TCE)	**150**	D	5.0	1.0	1.0	10	10/07/14	10/07/14	KWG1413599	
1,2-Dichloropropane	ND	U	0.50	0.20	0.095	1	10/07/14	10/07/14	KWG1413599	
Dibromomethane	ND	U	0.50	0.50	0.15	1	10/07/14	10/07/14	KWG1413599	
Bromodichloromethane	ND	U	0.50	0.30	0.091	1	10/07/14	10/07/14	KWG1413599	
cis-1,3-Dichloropropene	ND	U	0.50	0.20	0.18	1	10/07/14	10/07/14	KWG1413599	
4-Methyl-2-pentanone (MIBK)	ND	U	20	10	2.6	1	10/07/14	10/07/14	KWG1413599	
Toluene	ND	U	0.50	0.10	0.054	1	10/07/14	10/07/14	KWG1413599	
trans-1,3-Dichloropropene	ND	U	0.50	0.20	0.068	1	10/07/14	10/07/14	KWG1413599	*
1,1,2-Trichloroethane	ND	U	0.50	0.40	0.14	1	10/07/14	10/07/14	KWG1413599	
Tetrachloroethene (PCE)	**0.21**	J	0.50	0.20	0.099	1	10/07/14	10/07/14	KWG1413599	

Comments:

Analytical Results

Client: Sealaska Environmental Services, LLC
Project: TO 01 JBLM
Sample Matrix: Water

Service Request: K1410537
Date Collected: 09/25/2014
Date Received: 09/26/2014

Volatile Organic Compounds

Sample Name: LGC140925EGDYPW1-1
Lab Code: K1410537-026

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
2-Hexanone	ND	U	20	10	2.7	1	10/07/14	10/07/14	KWG1413599	
1,3-Dichloropropane	ND	U	0.50	0.30	0.14	1	10/07/14	10/07/14	KWG1413599	
Dibromochloromethane	ND	U	0.50	0.50	0.14	1	10/07/14	10/07/14	KWG1413599	
1,2-Dibromoethane (EDB)	ND	U	2.0	0.20	0.10	1	10/07/14	10/07/14	KWG1413599	
Chlorobenzene	ND	U	0.50	0.20	0.11	1	10/07/14	10/07/14	KWG1413599	
Ethylbenzene	ND	U	0.50	0.10	0.050	1	10/07/14	10/07/14	KWG1413599	
1,1,1,2-Tetrachloroethane	ND	U	0.50	0.20	0.11	1	10/07/14	10/07/14	KWG1413599	
m,p-Xylenes	ND	U	0.50	0.20	0.11	1	10/07/14	10/07/14	KWG1413599	
o-Xylene	ND	U	0.50	0.20	0.074	1	10/07/14	10/07/14	KWG1413599	
Styrene	ND	U	0.50	0.20	0.089	1	10/07/14	10/07/14	KWG1413599	
Bromoform	ND	U	0.50	0.50	0.16	1	10/07/14	10/07/14	KWG1413599	*
Isopropylbenzene	ND	U	2.0	0.20	0.051	1	10/07/14	10/07/14	KWG1413599	
1,1,2,2-Tetrachloroethane	ND	U	0.50	0.20	0.16	1	10/07/14	10/07/14	KWG1413599	
Bromobenzene	ND	U	2.0	0.20	0.12	1	10/07/14	10/07/14	KWG1413599	
n-Propylbenzene	ND	U	2.0	0.20	0.054	1	10/07/14	10/07/14	KWG1413599	
1,2,3-Trichloropropane	ND	U	0.50	0.50	0.20	1	10/07/14	10/07/14	KWG1413599	
2-Chlorotoluene	ND	U	2.0	0.20	0.10	1	10/07/14	10/07/14	KWG1413599	
1,3,5-Trimethylbenzene	ND	U	2.0	0.20	0.089	1	10/07/14	10/07/14	KWG1413599	
4-Chlorotoluene	ND	U	2.0	0.20	0.13	1	10/07/14	10/07/14	KWG1413599	
tert-Butylbenzene	ND	U	2.0	0.20	0.059	1	10/07/14	10/07/14	KWG1413599	
1,2,4-Trimethylbenzene	ND	U	2.0	0.20	0.069	1	10/07/14	10/07/14	KWG1413599	
sec-Butylbenzene	ND	U	2.0	0.10	0.062	1	10/07/14	10/07/14	KWG1413599	
4-Isopropyltoluene	ND	U	2.0	0.20	0.060	1	10/07/14	10/07/14	KWG1413599	
1,3-Dichlorobenzene	ND	U	0.50	0.20	0.10	1	10/07/14	10/07/14	KWG1413599	
1,4-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	10/07/14	10/07/14	KWG1413599	
n-Butylbenzene	ND	U	2.0	0.10	0.054	1	10/07/14	10/07/14	KWG1413599	
1,2-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	10/07/14	10/07/14	KWG1413599	
1,2-Dibromo-3-chloropropane	ND	U	2.0	0.80	0.20	1	10/07/14	10/07/14	KWG1413599	
1,2,4-Trichlorobenzene	ND	U	2.0	0.30	0.096	1	10/07/14	10/07/14	KWG1413599	
Hexachlorobutadiene	ND	U	2.0	0.30	0.11	1	10/07/14	10/07/14	KWG1413599	
Naphthalene	ND	U	2.0	0.30	0.088	1	10/07/14	10/07/14	KWG1413599	
1,2,3-Trichlorobenzene	ND	U	2.0	0.40	0.11	1	10/07/14	10/07/14	KWG1413599	

* See Case Narrative

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1410537
Project:	TO 01 JBLM	**Date Collected:**	09/25/2014
Sample Matrix:	Water	**Date Received:**	09/26/2014

Volatile Organic Compounds

Sample Name:	LGC140925EGDYPW1-1	**Units:**	ug/L
Lab Code:	K1410537-026	**Basis:**	NA

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Dibromofluoromethane	100	85-115	10/07/14	Acceptable
1,2-Dichloroethane-d4	116	70-120	10/07/14	Acceptable
Toluene-d8	97	85-120	10/07/14	Acceptable
4-Bromofluorobenzene	90	75-120	10/07/14	Acceptable

Comments:

Analytical Results

Client: Sealaska Environmental Services, LLC
Project: TO 01 JBLM
Sample Matrix: Water

Service Request: K1410537
Date Collected: 09/25/2014
Date Received: 09/26/2014

Volatile Organic Compounds

Sample Name: LGC140925EGDYPW2-1
Lab Code: K1410537-027

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
Dichlorodifluoromethane	ND	U	0.50	0.20	0.13	1	10/07/14	10/07/14	KWG1413599	
Chloromethane	**0.18**	J	0.50	0.20	0.068	1	10/07/14	10/07/14	KWG1413599	
Vinyl Chloride	ND	U	0.50	0.10	0.075	1	10/07/14	10/07/14	KWG1413599	
Bromomethane	ND	U	0.50	0.30	0.10	1	10/07/14	10/07/14	KWG1413599	*
Chloroethane	ND	U	0.50	0.20	0.16	1	10/07/14	10/07/14	KWG1413599	
Trichlorofluoromethane	ND	U	0.50	0.20	0.12	1	10/07/14	10/07/14	KWG1413599	
1,1-Dichloroethene	ND	U	0.50	0.20	0.080	1	10/07/14	10/07/14	KWG1413599	
Acetone	ND	U	20	10	3.3	1	10/07/14	10/07/14	KWG1413599	
Carbon Disulfide	ND	U	0.50	0.20	0.069	1	10/07/14	10/07/14	KWG1413599	*
Methylene Chloride	ND	U	2.0	0.20	0.10	1	10/07/14	10/07/14	KWG1413599	
Methyl tert-Butyl Ether	ND	U	0.50	0.30	0.11	1	10/07/14	10/07/14	KWG1413599	
trans-1,2-Dichloroethene	**0.17**	J	0.50	0.20	0.072	1	10/07/14	10/07/14	KWG1413599	
1,1-Dichloroethane	ND	U	0.50	0.20	0.077	1	10/07/14	10/07/14	KWG1413599	
2,2-Dichloropropane	ND	U	0.50	0.20	0.060	1	10/07/14	10/07/14	KWG1413599	*
cis-1,2-Dichloroethene	**2.1**		0.50	0.20	0.067	1	10/07/14	10/07/14	KWG1413599	
2-Butanone (MEK)	ND	U	20	4.0	1.9	1	10/07/14	10/07/14	KWG1413599	
Bromochloromethane	ND	U	0.50	0.20	0.16	1	10/07/14	10/07/14	KWG1413599	
Chloroform	ND	U	0.50	0.20	0.072	1	10/07/14	10/07/14	KWG1413599	
1,1,1-Trichloroethane (TCA)	**0.32**	J	0.50	0.20	0.075	1	10/07/14	10/07/14	KWG1413599	
Carbon Tetrachloride	ND	U	0.50	0.20	0.096	1	10/07/14	10/07/14	KWG1413599	
1,1-Dichloropropene	ND	U	0.50	0.20	0.089	1	10/07/14	10/07/14	KWG1413599	
Benzene	ND	U	0.50	0.10	0.062	1	10/07/14	10/07/14	KWG1413599	
1,2-Dichloroethane (EDC)	ND	U	0.50	0.15	0.080	1	10/07/14	10/07/14	KWG1413599	
Trichloroethene (TCE)	**53**		0.50	0.10	0.10	1	10/07/14	10/07/14	KWG1413599	
1,2-Dichloropropane	ND	U	0.50	0.20	0.095	1	10/07/14	10/07/14	KWG1413599	
Dibromomethane	ND	U	0.50	0.50	0.15	1	10/07/14	10/07/14	KWG1413599	
Bromodichloromethane	ND	U	0.50	0.30	0.091	1	10/07/14	10/07/14	KWG1413599	
cis-1,3-Dichloropropene	ND	U	0.50	0.20	0.18	1	10/07/14	10/07/14	KWG1413599	
4-Methyl-2-pentanone (MIBK)	ND	U	20	10	2.6	1	10/07/14	10/07/14	KWG1413599	
Toluene	ND	U	0.50	0.10	0.054	1	10/07/14	10/07/14	KWG1413599	
trans-1,3-Dichloropropene	ND	U	0.50	0.20	0.068	1	10/07/14	10/07/14	KWG1413599	*
1,1,2-Trichloroethane	ND	U	0.50	0.40	0.14	1	10/07/14	10/07/14	KWG1413599	
Tetrachloroethene (PCE)	ND	U	0.50	0.20	0.099	1	10/07/14	10/07/14	KWG1413599	

Comments:

Analytical Results

Client: Sealaska Environmental Services, LLC
Project: TO 01 JBLM
Sample Matrix: Water

Service Request: K1410537
Date Collected: 09/25/2014
Date Received: 09/26/2014

Volatile Organic Compounds

Sample Name: LGC140925EGDYPW2-1
Lab Code: K1410537-027

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
2-Hexanone	ND	U	20	10	2.7	1	10/07/14	10/07/14	KWG1413599	
1,3-Dichloropropane	ND	U	0.50	0.30	0.14	1	10/07/14	10/07/14	KWG1413599	
Dibromochloromethane	ND	U	0.50	0.50	0.14	1	10/07/14	10/07/14	KWG1413599	
1,2-Dibromoethane (EDB)	ND	U	2.0	0.20	0.10	1	10/07/14	10/07/14	KWG1413599	
Chlorobenzene	ND	U	0.50	0.20	0.11	1	10/07/14	10/07/14	KWG1413599	
Ethylbenzene	ND	U	0.50	0.10	0.050	1	10/07/14	10/07/14	KWG1413599	
1,1,1,2-Tetrachloroethane	ND	U	0.50	0.20	0.11	1	10/07/14	10/07/14	KWG1413599	
m,p-Xylenes	ND	U	0.50	0.20	0.11	1	10/07/14	10/07/14	KWG1413599	
o-Xylene	ND	U	0.50	0.20	0.074	1	10/07/14	10/07/14	KWG1413599	
Styrene	ND	U	0.50	0.20	0.089	1	10/07/14	10/07/14	KWG1413599	
Bromoform	ND	U	0.50	0.50	0.16	1	10/07/14	10/07/14	KWG1413599	*
Isopropylbenzene	ND	U	2.0	0.20	0.051	1	10/07/14	10/07/14	KWG1413599	
1,1,2,2-Tetrachloroethane	ND	U	0.50	0.20	0.16	1	10/07/14	10/07/14	KWG1413599	
Bromobenzene	ND	U	2.0	0.20	0.12	1	10/07/14	10/07/14	KWG1413599	
n-Propylbenzene	ND	U	2.0	0.20	0.054	1	10/07/14	10/07/14	KWG1413599	
1,2,3-Trichloropropane	ND	U	0.50	0.50	0.20	1	10/07/14	10/07/14	KWG1413599	
2-Chlorotoluene	ND	U	2.0	0.20	0.10	1	10/07/14	10/07/14	KWG1413599	
1,3,5-Trimethylbenzene	ND	U	2.0	0.20	0.089	1	10/07/14	10/07/14	KWG1413599	
4-Chlorotoluene	ND	U	2.0	0.20	0.13	1	10/07/14	10/07/14	KWG1413599	
tert-Butylbenzene	ND	U	2.0	0.20	0.059	1	10/07/14	10/07/14	KWG1413599	
1,2,4-Trimethylbenzene	ND	U	2.0	0.20	0.069	1	10/07/14	10/07/14	KWG1413599	
sec-Butylbenzene	ND	U	2.0	0.10	0.062	1	10/07/14	10/07/14	KWG1413599	
4-Isopropyltoluene	ND	U	2.0	0.20	0.060	1	10/07/14	10/07/14	KWG1413599	
1,3-Dichlorobenzene	ND	U	0.50	0.20	0.10	1	10/07/14	10/07/14	KWG1413599	
1,4-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	10/07/14	10/07/14	KWG1413599	
n-Butylbenzene	ND	U	2.0	0.10	0.054	1	10/07/14	10/07/14	KWG1413599	
1,2-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	10/07/14	10/07/14	KWG1413599	
1,2-Dibromo-3-chloropropane	ND	U	2.0	0.80	0.20	1	10/07/14	10/07/14	KWG1413599	
1,2,4-Trichlorobenzene	ND	U	2.0	0.30	0.096	1	10/07/14	10/07/14	KWG1413599	
Hexachlorobutadiene	ND	U	2.0	0.30	0.11	1	10/07/14	10/07/14	KWG1413599	
Naphthalene	ND	U	2.0	0.30	0.088	1	10/07/14	10/07/14	KWG1413599	
1,2,3-Trichlorobenzene	ND	U	2.0	0.40	0.11	1	10/07/14	10/07/14	KWG1413599	

* See Case Narrative

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1410537
Project:	TO 01 JBLM	**Date Collected:**	09/25/2014
Sample Matrix:	Water	**Date Received:**	09/26/2014

Volatile Organic Compounds

Sample Name:	LGC140925EGDYPW2-1	**Units:**	ug/L
Lab Code:	K1410537-027	**Basis:**	NA

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Dibromofluoromethane	95	85-115	10/07/14	Acceptable
1,2-Dichloroethane-d4	114	70-120	10/07/14	Acceptable
Toluene-d8	94	85-120	10/07/14	Acceptable
4-Bromofluorobenzene	87	75-120	10/07/14	Acceptable

Comments:

Analytical Results

Client: Sealaska Environmental Services, LLC
Project: TO 01 JBLM
Sample Matrix: Water

Service Request: K1410537
Date Collected: 09/25/2014
Date Received: 09/26/2014

Volatile Organic Compounds

Sample Name: LGC140925EGDYPW3-1
Lab Code: K1410537-028

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
Dichlorodifluoromethane	ND	U	0.50	0.20	0.13	1	10/07/14	10/07/14	KWG1413599	
Chloromethane	**0.18**	J	0.50	0.20	0.068	1	10/07/14	10/07/14	KWG1413599	
Vinyl Chloride	ND	U	0.50	0.10	0.075	1	10/07/14	10/07/14	KWG1413599	
Bromomethane	ND	U	0.50	0.30	0.10	1	10/07/14	10/07/14	KWG1413599	*
Chloroethane	ND	U	0.50	0.20	0.16	1	10/07/14	10/07/14	KWG1413599	
Trichlorofluoromethane	ND	U	0.50	0.20	0.12	1	10/07/14	10/07/14	KWG1413599	
1,1-Dichloroethene	ND	U	0.50	0.20	0.080	1	10/07/14	10/07/14	KWG1413599	
Acetone	ND	U	20	10	3.3	1	10/07/14	10/07/14	KWG1413599	
Carbon Disulfide	ND	U	0.50	0.20	0.069	1	10/07/14	10/07/14	KWG1413599	*
Methylene Chloride	**0.10**	J	2.0	0.20	0.10	1	10/07/14	10/07/14	KWG1413599	
Methyl tert-Butyl Ether	ND	U	0.50	0.30	0.11	1	10/07/14	10/07/14	KWG1413599	
trans-1,2-Dichloroethene	**0.44**	J	0.50	0.20	0.072	1	10/07/14	10/07/14	KWG1413599	
1,1-Dichloroethane	ND	U	0.50	0.20	0.077	1	10/07/14	10/07/14	KWG1413599	
2,2-Dichloropropane	ND	U	0.50	0.20	0.060	1	10/07/14	10/07/14	KWG1413599	*
cis-1,2-Dichloroethene	**1.7**		0.50	0.20	0.067	1	10/07/14	10/07/14	KWG1413599	
2-Butanone (MEK)	ND	U	20	4.0	1.9	1	10/07/14	10/07/14	KWG1413599	
Bromochloromethane	ND	U	0.50	0.20	0.16	1	10/07/14	10/07/14	KWG1413599	
Chloroform	ND	U	0.50	0.20	0.072	1	10/07/14	10/07/14	KWG1413599	
1,1,1-Trichloroethane (TCA)	**0.080**	J	0.50	0.20	0.075	1	10/07/14	10/07/14	KWG1413599	
Carbon Tetrachloride	ND	U	0.50	0.20	0.096	1	10/07/14	10/07/14	KWG1413599	
1,1-Dichloropropene	ND	U	0.50	0.20	0.089	1	10/07/14	10/07/14	KWG1413599	
Benzene	ND	U	0.50	0.10	0.062	1	10/07/14	10/07/14	KWG1413599	
1,2-Dichloroethane (EDC)	ND	U	0.50	0.15	0.080	1	10/07/14	10/07/14	KWG1413599	
Trichloroethene (TCE)	**110**	D	5.0	1.0	1.0	10	10/07/14	10/07/14	KWG1413599	
1,2-Dichloropropane	ND	U	0.50	0.20	0.095	1	10/07/14	10/07/14	KWG1413599	
Dibromomethane	ND	U	0.50	0.50	0.15	1	10/07/14	10/07/14	KWG1413599	
Bromodichloromethane	ND	U	0.50	0.30	0.091	1	10/07/14	10/07/14	KWG1413599	
cis-1,3-Dichloropropene	ND	U	0.50	0.20	0.18	1	10/07/14	10/07/14	KWG1413599	
4-Methyl-2-pentanone (MIBK)	ND	U	20	10	2.6	1	10/07/14	10/07/14	KWG1413599	
Toluene	ND	U	0.50	0.10	0.054	1	10/07/14	10/07/14	KWG1413599	
trans-1,3-Dichloropropene	ND	U	0.50	0.20	0.068	1	10/07/14	10/07/14	KWG1413599	*
1,1,2-Trichloroethane	ND	U	0.50	0.40	0.14	1	10/07/14	10/07/14	KWG1413599	
Tetrachloroethene (PCE)	ND	U	0.50	0.20	0.099	1	10/07/14	10/07/14	KWG1413599	

Comments:

Analytical Results

Client: Sealaska Environmental Services, LLC
Project: TO 01 JBLM
Sample Matrix: Water

Service Request: K1410537
Date Collected: 09/25/2014
Date Received: 09/26/2014

Volatile Organic Compounds

Sample Name: LGC140925EGDYPW3-1
Lab Code: K1410537-028

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
2-Hexanone	ND	U	20	10	2.7	1	10/07/14	10/07/14	KWG1413599	
1,3-Dichloropropane	ND	U	0.50	0.30	0.14	1	10/07/14	10/07/14	KWG1413599	
Dibromochloromethane	ND	U	0.50	0.50	0.14	1	10/07/14	10/07/14	KWG1413599	
1,2-Dibromoethane (EDB)	ND	U	2.0	0.20	0.10	1	10/07/14	10/07/14	KWG1413599	
Chlorobenzene	ND	U	0.50	0.20	0.11	1	10/07/14	10/07/14	KWG1413599	
Ethylbenzene	ND	U	0.50	0.10	0.050	1	10/07/14	10/07/14	KWG1413599	
1,1,1,2-Tetrachloroethane	ND	U	0.50	0.20	0.11	1	10/07/14	10/07/14	KWG1413599	
m,p-Xylenes	ND	U	0.50	0.20	0.11	1	10/07/14	10/07/14	KWG1413599	
o-Xylene	ND	U	0.50	0.20	0.074	1	10/07/14	10/07/14	KWG1413599	
Styrene	ND	U	0.50	0.20	0.089	1	10/07/14	10/07/14	KWG1413599	
Bromoform	ND	U	0.50	0.50	0.16	1	10/07/14	10/07/14	KWG1413599	*
Isopropylbenzene	ND	U	2.0	0.20	0.051	1	10/07/14	10/07/14	KWG1413599	
1,1,2,2-Tetrachloroethane	ND	U	0.50	0.20	0.16	1	10/07/14	10/07/14	KWG1413599	
Bromobenzene	ND	U	2.0	0.20	0.12	1	10/07/14	10/07/14	KWG1413599	
n-Propylbenzene	ND	U	2.0	0.20	0.054	1	10/07/14	10/07/14	KWG1413599	
1,2,3-Trichloropropane	ND	U	0.50	0.50	0.20	1	10/07/14	10/07/14	KWG1413599	
2-Chlorotoluene	ND	U	2.0	0.20	0.10	1	10/07/14	10/07/14	KWG1413599	
1,3,5-Trimethylbenzene	ND	U	2.0	0.20	0.089	1	10/07/14	10/07/14	KWG1413599	
4-Chlorotoluene	ND	U	2.0	0.20	0.13	1	10/07/14	10/07/14	KWG1413599	
tert-Butylbenzene	ND	U	2.0	0.20	0.059	1	10/07/14	10/07/14	KWG1413599	
1,2,4-Trimethylbenzene	ND	U	2.0	0.20	0.069	1	10/07/14	10/07/14	KWG1413599	
sec-Butylbenzene	ND	U	2.0	0.10	0.062	1	10/07/14	10/07/14	KWG1413599	
4-Isopropyltoluene	ND	U	2.0	0.20	0.060	1	10/07/14	10/07/14	KWG1413599	
1,3-Dichlorobenzene	ND	U	0.50	0.20	0.10	1	10/07/14	10/07/14	KWG1413599	
1,4-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	10/07/14	10/07/14	KWG1413599	
n-Butylbenzene	ND	U	2.0	0.10	0.054	1	10/07/14	10/07/14	KWG1413599	
1,2-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	10/07/14	10/07/14	KWG1413599	
1,2-Dibromo-3-chloropropane	ND	U	2.0	0.80	0.20	1	10/07/14	10/07/14	KWG1413599	
1,2,4-Trichlorobenzene	ND	U	2.0	0.30	0.096	1	10/07/14	10/07/14	KWG1413599	
Hexachlorobutadiene	ND	U	2.0	0.30	0.11	1	10/07/14	10/07/14	KWG1413599	
Naphthalene	ND	U	2.0	0.30	0.088	1	10/07/14	10/07/14	KWG1413599	
1,2,3-Trichlorobenzene	ND	U	2.0	0.40	0.11	1	10/07/14	10/07/14	KWG1413599	

* See Case Narrative

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1410537
Project:	TO 01 JBLM	**Date Collected:**	09/25/2014
Sample Matrix:	Water	**Date Received:**	09/26/2014

Volatile Organic Compounds

Sample Name:	LGC140925EGDYPW3-1	**Units:**	ug/L
Lab Code:	K1410537-028	**Basis:**	NA

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Dibromofluoromethane	97	85-115	10/07/14	Acceptable
1,2-Dichloroethane-d4	115	70-120	10/07/14	Acceptable
Toluene-d8	96	85-120	10/07/14	Acceptable
4-Bromofluorobenzene	89	75-120	10/07/14	Acceptable

Comments:

Analytical Results

Client: Sealaska Environmental Services, LLC
Project: TO 01 JBLM
Sample Matrix: Water

Service Request: K1410537
Date Collected: 09/25/2014
Date Received: 09/26/2014

Volatile Organic Compounds

Sample Name: LGC140925EGDYPW4-1
Lab Code: K1410537-029

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
Dichlorodifluoromethane	ND	U	0.50	0.20	0.13	1	10/08/14	10/08/14	KWG1413665	
Chloromethane	**0.17**	J	0.50	0.20	0.068	1	10/08/14	10/08/14	KWG1413665	*
Vinyl Chloride	ND	U	0.50	0.10	0.075	1	10/08/14	10/08/14	KWG1413665	
Bromomethane	ND	U	0.50	0.30	0.10	1	10/08/14	10/08/14	KWG1413665	
Chloroethane	ND	U	0.50	0.20	0.16	1	10/08/14	10/08/14	KWG1413665	
Trichlorofluoromethane	ND	U	0.50	0.20	0.12	1	10/08/14	10/08/14	KWG1413665	
1,1-Dichloroethene	ND	U	0.50	0.20	0.080	1	10/08/14	10/08/14	KWG1413665	
Acetone	ND	U	20	10	3.3	1	10/08/14	10/08/14	KWG1413665	
Carbon Disulfide	ND	U	0.50	0.20	0.069	1	10/08/14	10/08/14	KWG1413665	
Methylene Chloride	ND	U	2.0	0.20	0.10	1	10/08/14	10/08/14	KWG1413665	
Methyl tert-Butyl Ether	ND	U	0.50	0.30	0.11	1	10/08/14	10/08/14	KWG1413665	*
trans-1,2-Dichloroethene	**0.15**	J	0.50	0.20	0.072	1	10/08/14	10/08/14	KWG1413665	
1,1-Dichloroethane	ND	U	0.50	0.20	0.077	1	10/08/14	10/08/14	KWG1413665	
2,2-Dichloropropane	ND	U	0.50	0.20	0.060	1	10/08/14	10/08/14	KWG1413665	*
cis-1,2-Dichloroethene	**5.7**		0.50	0.20	0.067	1	10/08/14	10/08/14	KWG1413665	
2-Butanone (MEK)	ND	U	20	4.0	1.9	1	10/08/14	10/08/14	KWG1413665	
Bromochloromethane	ND	U	0.50	0.20	0.16	1	10/08/14	10/08/14	KWG1413665	
Chloroform	ND	U	0.50	0.20	0.072	1	10/08/14	10/08/14	KWG1413665	
1,1,1-Trichloroethane (TCA)	**0.41**	J	0.50	0.20	0.075	1	10/08/14	10/08/14	KWG1413665	
Carbon Tetrachloride	ND	U	0.50	0.20	0.096	1	10/08/14	10/08/14	KWG1413665	
1,1-Dichloropropene	ND	U	0.50	0.20	0.089	1	10/08/14	10/08/14	KWG1413665	
Benzene	ND	U	0.50	0.10	0.062	1	10/08/14	10/08/14	KWG1413665	
1,2-Dichloroethane (EDC)	ND	U	0.50	0.15	0.080	1	10/08/14	10/08/14	KWG1413665	
Trichloroethene (TCE)	**37**		0.50	0.10	0.10	1	10/08/14	10/08/14	KWG1413665	
1,2-Dichloropropane	ND	U	0.50	0.20	0.095	1	10/08/14	10/08/14	KWG1413665	
Dibromomethane	ND	U	0.50	0.50	0.15	1	10/08/14	10/08/14	KWG1413665	
Bromodichloromethane	ND	U	0.50	0.30	0.091	1	10/08/14	10/08/14	KWG1413665	
cis-1,3-Dichloropropene	ND	U	0.50	0.20	0.18	1	10/08/14	10/08/14	KWG1413665	
4-Methyl-2-pentanone (MIBK)	ND	U	20	10	2.6	1	10/08/14	10/08/14	KWG1413665	
Toluene	ND	U	0.50	0.10	0.054	1	10/08/14	10/08/14	KWG1413665	
trans-1,3-Dichloropropene	ND	U	0.50	0.20	0.068	1	10/08/14	10/08/14	KWG1413665	*
1,1,2-Trichloroethane	ND	U	0.50	0.40	0.14	1	10/08/14	10/08/14	KWG1413665	
Tetrachloroethene (PCE)	ND	U	0.50	0.20	0.099	1	10/08/14	10/08/14	KWG1413665	

Comments:

Analytical Results

Client: Sealaska Environmental Services, LLC
Project: TO 01 JBLM
Sample Matrix: Water

Service Request: K1410537
Date Collected: 09/25/2014
Date Received: 09/26/2014

Volatile Organic Compounds

Sample Name: LGC140925EGDYPW4-1
Lab Code: K1410537-029

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
2-Hexanone	ND	U	20	10	2.7	1	10/08/14	10/08/14	KWG1413665	
1,3-Dichloropropane	ND	U	0.50	0.30	0.14	1	10/08/14	10/08/14	KWG1413665	
Dibromochloromethane	ND	U	0.50	0.50	0.14	1	10/08/14	10/08/14	KWG1413665	
1,2-Dibromoethane (EDB)	ND	U	2.0	0.20	0.10	1	10/08/14	10/08/14	KWG1413665	
Chlorobenzene	ND	U	0.50	0.20	0.11	1	10/08/14	10/08/14	KWG1413665	
Ethylbenzene	ND	U	0.50	0.10	0.050	1	10/08/14	10/08/14	KWG1413665	
1,1,1,2-Tetrachloroethane	ND	U	0.50	0.20	0.11	1	10/08/14	10/08/14	KWG1413665	
m,p-Xylenes	ND	U	0.50	0.20	0.11	1	10/08/14	10/08/14	KWG1413665	
o-Xylene	ND	U	0.50	0.20	0.074	1	10/08/14	10/08/14	KWG1413665	
Styrene	ND	U	0.50	0.20	0.089	1	10/08/14	10/08/14	KWG1413665	
Bromoform	ND	U	0.50	0.50	0.16	1	10/08/14	10/08/14	KWG1413665	
Isopropylbenzene	ND	U	2.0	0.20	0.051	1	10/08/14	10/08/14	KWG1413665	
1,1,2,2-Tetrachloroethane	ND	U	0.50	0.20	0.16	1	10/08/14	10/08/14	KWG1413665	
Bromobenzene	ND	U	2.0	0.20	0.12	1	10/08/14	10/08/14	KWG1413665	
n-Propylbenzene	ND	U	2.0	0.20	0.054	1	10/08/14	10/08/14	KWG1413665	
1,2,3-Trichloropropane	ND	U	0.50	0.50	0.20	1	10/08/14	10/08/14	KWG1413665	
2-Chlorotoluene	ND	U	2.0	0.20	0.10	1	10/08/14	10/08/14	KWG1413665	
1,3,5-Trimethylbenzene	ND	U	2.0	0.20	0.089	1	10/08/14	10/08/14	KWG1413665	
4-Chlorotoluene	ND	U	2.0	0.20	0.13	1	10/08/14	10/08/14	KWG1413665	
tert-Butylbenzene	ND	U	2.0	0.20	0.059	1	10/08/14	10/08/14	KWG1413665	
1,2,4-Trimethylbenzene	ND	U	2.0	0.20	0.069	1	10/08/14	10/08/14	KWG1413665	
sec-Butylbenzene	ND	U	2.0	0.10	0.062	1	10/08/14	10/08/14	KWG1413665	
4-Isopropyltoluene	ND	U	2.0	0.20	0.060	1	10/08/14	10/08/14	KWG1413665	
1,3-Dichlorobenzene	ND	U	0.50	0.20	0.10	1	10/08/14	10/08/14	KWG1413665	
1,4-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	10/08/14	10/08/14	KWG1413665	
n-Butylbenzene	ND	U	2.0	0.10	0.054	1	10/08/14	10/08/14	KWG1413665	
1,2-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	10/08/14	10/08/14	KWG1413665	
1,2-Dibromo-3-chloropropane	ND	U	2.0	0.80	0.20	1	10/08/14	10/08/14	KWG1413665	
1,2,4-Trichlorobenzene	ND	U	2.0	0.30	0.096	1	10/08/14	10/08/14	KWG1413665	
Hexachlorobutadiene	ND	U	2.0	0.30	0.11	1	10/08/14	10/08/14	KWG1413665	
Naphthalene	ND	U	2.0	0.30	0.088	1	10/08/14	10/08/14	KWG1413665	
1,2,3-Trichlorobenzene	ND	U	2.0	0.40	0.11	1	10/08/14	10/08/14	KWG1413665	

* See Case Narrative

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1410537
Project:	TO 01 JBLM	**Date Collected:**	09/25/2014
Sample Matrix:	Water	**Date Received:**	09/26/2014

Volatile Organic Compounds

Sample Name:	LGC140925EGDYPW4-1	**Units:**	ug/L
Lab Code:	K1410537-029	**Basis:**	NA

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Dibromofluoromethane	92	85-115	10/08/14	Acceptable
1,2-Dichloroethane-d4	114	70-120	10/08/14	Acceptable
Toluene-d8	97	85-120	10/08/14	Acceptable
4-Bromofluorobenzene	87	75-120	10/08/14	Acceptable

Comments:

Analytical Results

Client: Sealaska Environmental Services, LLC
Project: TO 01 JBLM
Sample Matrix: Water

Service Request: K1410537
Date Collected: 09/25/2014
Date Received: 09/26/2014

Volatile Organic Compounds

Sample Name: LGC140925EGDYPW5-1
Lab Code: K1410537-030

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
Dichlorodifluoromethane	ND	U	0.50	0.20	0.13	1	10/08/14	10/08/14	KWG1413665	
Chloromethane	**0.14**	J	0.50	0.20	0.068	1	10/08/14	10/08/14	KWG1413665	*
Vinyl Chloride	ND	U	0.50	0.10	0.075	1	10/08/14	10/08/14	KWG1413665	
Bromomethane	ND	U	0.50	0.30	0.10	1	10/08/14	10/08/14	KWG1413665	
Chloroethane	ND	U	0.50	0.20	0.16	1	10/08/14	10/08/14	KWG1413665	
Trichlorofluoromethane	ND	U	0.50	0.20	0.12	1	10/08/14	10/08/14	KWG1413665	
1,1-Dichloroethene	**0.080**	J	0.50	0.20	0.080	1	10/08/14	10/08/14	KWG1413665	
Acetone	ND	U	20	10	3.3	1	10/08/14	10/08/14	KWG1413665	
Carbon Disulfide	ND	U	0.50	0.20	0.069	1	10/08/14	10/08/14	KWG1413665	
Methylene Chloride	ND	U	2.0	0.20	0.10	1	10/08/14	10/08/14	KWG1413665	
Methyl tert-Butyl Ether	ND	U	0.50	0.30	0.11	1	10/08/14	10/08/14	KWG1413665	*
trans-1,2-Dichloroethene	**0.12**	J	0.50	0.20	0.072	1	10/08/14	10/08/14	KWG1413665	
1,1-Dichloroethane	ND	U	0.50	0.20	0.077	1	10/08/14	10/08/14	KWG1413665	
2,2-Dichloropropane	ND	U	0.50	0.20	0.060	1	10/08/14	10/08/14	KWG1413665	*
cis-1,2-Dichloroethene	**3.3**		0.50	0.20	0.067	1	10/08/14	10/08/14	KWG1413665	
2-Butanone (MEK)	ND	U	20	4.0	1.9	1	10/08/14	10/08/14	KWG1413665	
Bromochloromethane	ND	U	0.50	0.20	0.16	1	10/08/14	10/08/14	KWG1413665	
Chloroform	ND	U	0.50	0.20	0.072	1	10/08/14	10/08/14	KWG1413665	
1,1,1-Trichloroethane (TCA)	**0.38**	J	0.50	0.20	0.075	1	10/08/14	10/08/14	KWG1413665	
Carbon Tetrachloride	ND	U	0.50	0.20	0.096	1	10/08/14	10/08/14	KWG1413665	
1,1-Dichloropropene	ND	U	0.50	0.20	0.089	1	10/08/14	10/08/14	KWG1413665	
Benzene	ND	U	0.50	0.10	0.062	1	10/08/14	10/08/14	KWG1413665	
1,2-Dichloroethane (EDC)	ND	U	0.50	0.15	0.080	1	10/08/14	10/08/14	KWG1413665	
Trichloroethene (TCE)	**39**		0.50	0.10	0.10	1	10/08/14	10/08/14	KWG1413665	
1,2-Dichloropropane	ND	U	0.50	0.20	0.095	1	10/08/14	10/08/14	KWG1413665	
Dibromomethane	ND	U	0.50	0.50	0.15	1	10/08/14	10/08/14	KWG1413665	
Bromodichloromethane	ND	U	0.50	0.30	0.091	1	10/08/14	10/08/14	KWG1413665	
cis-1,3-Dichloropropene	ND	U	0.50	0.20	0.18	1	10/08/14	10/08/14	KWG1413665	
4-Methyl-2-pentanone (MIBK)	ND	U	20	10	2.6	1	10/08/14	10/08/14	KWG1413665	
Toluene	ND	U	0.50	0.10	0.054	1	10/08/14	10/08/14	KWG1413665	
trans-1,3-Dichloropropene	ND	U	0.50	0.20	0.068	1	10/08/14	10/08/14	KWG1413665	*
1,1,2-Trichloroethane	ND	U	0.50	0.40	0.14	1	10/08/14	10/08/14	KWG1413665	
Tetrachloroethene (PCE)	ND	U	0.50	0.20	0.099	1	10/08/14	10/08/14	KWG1413665	

Comments:

Analytical Results

Client: Sealaska Environmental Services, LLC
Project: TO 01 JBLM
Sample Matrix: Water

Service Request: K1410537
Date Collected: 09/25/2014
Date Received: 09/26/2014

Volatile Organic Compounds

Sample Name: LGC140925EGDYPW5-1
Lab Code: K1410537-030

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
2-Hexanone	ND	U	20	10	2.7	1	10/08/14	10/08/14	KWG1413665	
1,3-Dichloropropane	ND	U	0.50	0.30	0.14	1	10/08/14	10/08/14	KWG1413665	
Dibromochloromethane	ND	U	0.50	0.50	0.14	1	10/08/14	10/08/14	KWG1413665	
1,2-Dibromoethane (EDB)	ND	U	2.0	0.20	0.10	1	10/08/14	10/08/14	KWG1413665	
Chlorobenzene	ND	U	0.50	0.20	0.11	1	10/08/14	10/08/14	KWG1413665	
Ethylbenzene	ND	U	0.50	0.10	0.050	1	10/08/14	10/08/14	KWG1413665	
1,1,1,2-Tetrachloroethane	ND	U	0.50	0.20	0.11	1	10/08/14	10/08/14	KWG1413665	
m,p-Xylenes	ND	U	0.50	0.20	0.11	1	10/08/14	10/08/14	KWG1413665	
o-Xylene	ND	U	0.50	0.20	0.074	1	10/08/14	10/08/14	KWG1413665	
Styrene	ND	U	0.50	0.20	0.089	1	10/08/14	10/08/14	KWG1413665	
Bromoform	ND	U	0.50	0.50	0.16	1	10/08/14	10/08/14	KWG1413665	
Isopropylbenzene	ND	U	2.0	0.20	0.051	1	10/08/14	10/08/14	KWG1413665	
1,1,2,2-Tetrachloroethane	ND	U	0.50	0.20	0.16	1	10/08/14	10/08/14	KWG1413665	
Bromobenzene	ND	U	2.0	0.20	0.12	1	10/08/14	10/08/14	KWG1413665	
n-Propylbenzene	ND	U	2.0	0.20	0.054	1	10/08/14	10/08/14	KWG1413665	
1,2,3-Trichloropropane	ND	U	0.50	0.50	0.20	1	10/08/14	10/08/14	KWG1413665	
2-Chlorotoluene	ND	U	2.0	0.20	0.10	1	10/08/14	10/08/14	KWG1413665	
1,3,5-Trimethylbenzene	ND	U	2.0	0.20	0.089	1	10/08/14	10/08/14	KWG1413665	
4-Chlorotoluene	ND	U	2.0	0.20	0.13	1	10/08/14	10/08/14	KWG1413665	
tert-Butylbenzene	ND	U	2.0	0.20	0.059	1	10/08/14	10/08/14	KWG1413665	
1,2,4-Trimethylbenzene	ND	U	2.0	0.20	0.069	1	10/08/14	10/08/14	KWG1413665	
sec-Butylbenzene	ND	U	2.0	0.10	0.062	1	10/08/14	10/08/14	KWG1413665	
4-Isopropyltoluene	ND	U	2.0	0.20	0.060	1	10/08/14	10/08/14	KWG1413665	
1,3-Dichlorobenzene	ND	U	0.50	0.20	0.10	1	10/08/14	10/08/14	KWG1413665	
1,4-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	10/08/14	10/08/14	KWG1413665	
n-Butylbenzene	ND	U	2.0	0.10	0.054	1	10/08/14	10/08/14	KWG1413665	
1,2-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	10/08/14	10/08/14	KWG1413665	
1,2-Dibromo-3-chloropropane	ND	U	2.0	0.80	0.20	1	10/08/14	10/08/14	KWG1413665	
1,2,4-Trichlorobenzene	ND	U	2.0	0.30	0.096	1	10/08/14	10/08/14	KWG1413665	
Hexachlorobutadiene	ND	U	2.0	0.30	0.11	1	10/08/14	10/08/14	KWG1413665	
Naphthalene	ND	U	2.0	0.30	0.088	1	10/08/14	10/08/14	KWG1413665	
1,2,3-Trichlorobenzene	ND	U	2.0	0.40	0.11	1	10/08/14	10/08/14	KWG1413665	

* See Case Narrative

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1410537
Project:	TO 01 JBLM	**Date Collected:**	09/25/2014
Sample Matrix:	Water	**Date Received:**	09/26/2014

Volatile Organic Compounds

Sample Name:	LGC140925EGDYPW5-1	**Units:**	ug/L
Lab Code:	K1410537-030	**Basis:**	NA

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Dibromofluoromethane	93	85-115	10/08/14	Acceptable
1,2-Dichloroethane-d4	114	70-120	10/08/14	Acceptable
Toluene-d8	95	85-120	10/08/14	Acceptable
4-Bromofluorobenzene	88	75-120	10/08/14	Acceptable

Comments:

Analytical Results

Client: Sealaska Environmental Services, LLC
Project: TO 01 JBLM
Sample Matrix: Water

Service Request: K1410537
Date Collected: 09/25/2014
Date Received: 09/26/2014

Volatile Organic Compounds

Sample Name: LGC140925EGDYPW6-1
Lab Code: K1410537-031

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
Dichlorodifluoromethane	ND	U	0.50	0.20	0.13	1	10/08/14	10/08/14	KWG1413665	
Chloromethane	**0.22**	J	0.50	0.20	0.068	1	10/08/14	10/08/14	KWG1413665	*
Vinyl Chloride	ND	U	0.50	0.10	0.075	1	10/08/14	10/08/14	KWG1413665	
Bromomethane	ND	U	0.50	0.30	0.10	1	10/08/14	10/08/14	KWG1413665	
Chloroethane	ND	U	0.50	0.20	0.16	1	10/08/14	10/08/14	KWG1413665	
Trichlorofluoromethane	ND	U	0.50	0.20	0.12	1	10/08/14	10/08/14	KWG1413665	
1,1-Dichloroethene	ND	U	0.50	0.20	0.080	1	10/08/14	10/08/14	KWG1413665	
Acetone	ND	U	20	10	3.3	1	10/08/14	10/08/14	KWG1413665	
Carbon Disulfide	ND	U	0.50	0.20	0.069	1	10/08/14	10/08/14	KWG1413665	
Methylene Chloride	ND	U	2.0	0.20	0.10	1	10/08/14	10/08/14	KWG1413665	
Methyl tert-Butyl Ether	ND	U	0.50	0.30	0.11	1	10/08/14	10/08/14	KWG1413665	*
trans-1,2-Dichloroethene	ND	U	0.50	0.20	0.072	1	10/08/14	10/08/14	KWG1413665	
1,1-Dichloroethane	ND	U	0.50	0.20	0.077	1	10/08/14	10/08/14	KWG1413665	
2,2-Dichloropropane	ND	U	0.50	0.20	0.060	1	10/08/14	10/08/14	KWG1413665	*
cis-1,2-Dichloroethene	**0.57**		0.50	0.20	0.067	1	10/08/14	10/08/14	KWG1413665	
2-Butanone (MEK)	ND	U	20	4.0	1.9	1	10/08/14	10/08/14	KWG1413665	
Bromochloromethane	ND	U	0.50	0.20	0.16	1	10/08/14	10/08/14	KWG1413665	
Chloroform	ND	U	0.50	0.20	0.072	1	10/08/14	10/08/14	KWG1413665	
1,1,1-Trichloroethane (TCA)	ND	U	0.50	0.20	0.075	1	10/08/14	10/08/14	KWG1413665	
Carbon Tetrachloride	ND	U	0.50	0.20	0.096	1	10/08/14	10/08/14	KWG1413665	
1,1-Dichloropropene	ND	U	0.50	0.20	0.089	1	10/08/14	10/08/14	KWG1413665	
Benzene	ND	U	0.50	0.10	0.062	1	10/08/14	10/08/14	KWG1413665	
1,2-Dichloroethane (EDC)	ND	U	0.50	0.15	0.080	1	10/08/14	10/08/14	KWG1413665	
Trichloroethene (TCE)	**19**		0.50	0.10	0.10	1	10/08/14	10/08/14	KWG1413665	
1,2-Dichloropropane	ND	U	0.50	0.20	0.095	1	10/08/14	10/08/14	KWG1413665	
Dibromomethane	ND	U	0.50	0.50	0.15	1	10/08/14	10/08/14	KWG1413665	
Bromodichloromethane	ND	U	0.50	0.30	0.091	1	10/08/14	10/08/14	KWG1413665	
cis-1,3-Dichloropropene	ND	U	0.50	0.20	0.18	1	10/08/14	10/08/14	KWG1413665	
4-Methyl-2-pentanone (MIBK)	ND	U	20	10	2.6	1	10/08/14	10/08/14	KWG1413665	
Toluene	ND	U	0.50	0.10	0.054	1	10/08/14	10/08/14	KWG1413665	
trans-1,3-Dichloropropene	ND	U	0.50	0.20	0.068	1	10/08/14	10/08/14	KWG1413665	*
1,1,2-Trichloroethane	ND	U	0.50	0.40	0.14	1	10/08/14	10/08/14	KWG1413665	
Tetrachloroethene (PCE)	ND	U	0.50	0.20	0.099	1	10/08/14	10/08/14	KWG1413665	

Comments:

Analytical Results

Client: Sealaska Environmental Services, LLC
Project: TO 01 JBLM
Sample Matrix: Water

Service Request: K1410537
Date Collected: 09/25/2014
Date Received: 09/26/2014

Volatile Organic Compounds

Sample Name: LGC140925EGDYPW6-1
Lab Code: K1410537-031

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
2-Hexanone	ND	U	20	10	2.7	1	10/08/14	10/08/14	KWG1413665	
1,3-Dichloropropane	ND	U	0.50	0.30	0.14	1	10/08/14	10/08/14	KWG1413665	
Dibromochloromethane	ND	U	0.50	0.50	0.14	1	10/08/14	10/08/14	KWG1413665	
1,2-Dibromoethane (EDB)	ND	U	2.0	0.20	0.10	1	10/08/14	10/08/14	KWG1413665	
Chlorobenzene	ND	U	0.50	0.20	0.11	1	10/08/14	10/08/14	KWG1413665	
Ethylbenzene	ND	U	0.50	0.10	0.050	1	10/08/14	10/08/14	KWG1413665	
1,1,1,2-Tetrachloroethane	ND	U	0.50	0.20	0.11	1	10/08/14	10/08/14	KWG1413665	
m,p-Xylenes	ND	U	0.50	0.20	0.11	1	10/08/14	10/08/14	KWG1413665	
o-Xylene	ND	U	0.50	0.20	0.074	1	10/08/14	10/08/14	KWG1413665	
Styrene	ND	U	0.50	0.20	0.089	1	10/08/14	10/08/14	KWG1413665	
Bromoform	ND	U	0.50	0.50	0.16	1	10/08/14	10/08/14	KWG1413665	
Isopropylbenzene	ND	U	2.0	0.20	0.051	1	10/08/14	10/08/14	KWG1413665	
1,1,2,2-Tetrachloroethane	ND	U	0.50	0.20	0.16	1	10/08/14	10/08/14	KWG1413665	
Bromobenzene	ND	U	2.0	0.20	0.12	1	10/08/14	10/08/14	KWG1413665	
n-Propylbenzene	ND	U	2.0	0.20	0.054	1	10/08/14	10/08/14	KWG1413665	
1,2,3-Trichloropropane	ND	U	0.50	0.50	0.20	1	10/08/14	10/08/14	KWG1413665	
2-Chlorotoluene	ND	U	2.0	0.20	0.10	1	10/08/14	10/08/14	KWG1413665	
1,3,5-Trimethylbenzene	ND	U	2.0	0.20	0.089	1	10/08/14	10/08/14	KWG1413665	
4-Chlorotoluene	ND	U	2.0	0.20	0.13	1	10/08/14	10/08/14	KWG1413665	
tert-Butylbenzene	ND	U	2.0	0.20	0.059	1	10/08/14	10/08/14	KWG1413665	
1,2,4-Trimethylbenzene	ND	U	2.0	0.20	0.069	1	10/08/14	10/08/14	KWG1413665	
sec-Butylbenzene	ND	U	2.0	0.10	0.062	1	10/08/14	10/08/14	KWG1413665	
4-Isopropyltoluene	ND	U	2.0	0.20	0.060	1	10/08/14	10/08/14	KWG1413665	
1,3-Dichlorobenzene	ND	U	0.50	0.20	0.10	1	10/08/14	10/08/14	KWG1413665	
1,4-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	10/08/14	10/08/14	KWG1413665	
n-Butylbenzene	ND	U	2.0	0.10	0.054	1	10/08/14	10/08/14	KWG1413665	
1,2-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	10/08/14	10/08/14	KWG1413665	
1,2-Dibromo-3-chloropropane	ND	U	2.0	0.80	0.20	1	10/08/14	10/08/14	KWG1413665	
1,2,4-Trichlorobenzene	ND	U	2.0	0.30	0.096	1	10/08/14	10/08/14	KWG1413665	
Hexachlorobutadiene	ND	U	2.0	0.30	0.11	1	10/08/14	10/08/14	KWG1413665	
Naphthalene	ND	U	2.0	0.30	0.088	1	10/08/14	10/08/14	KWG1413665	
1,2,3-Trichlorobenzene	ND	U	2.0	0.40	0.11	1	10/08/14	10/08/14	KWG1413665	

* See Case Narrative

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1410537
Project:	TO 01 JBLM	**Date Collected:**	09/25/2014
Sample Matrix:	Water	**Date Received:**	09/26/2014

Volatile Organic Compounds

Sample Name:	LGC140925EGDYPW6-1	**Units:**	ug/L
Lab Code:	K1410537-031	**Basis:**	NA

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Dibromofluoromethane	95	85-115	10/08/14	Acceptable
1,2-Dichloroethane-d4	114	70-120	10/08/14	Acceptable
Toluene-d8	95	85-120	10/08/14	Acceptable
4-Bromofluorobenzene	88	75-120	10/08/14	Acceptable

Comments:

Analytical Results

Client: Sealaska Environmental Services, LLC
Project: TO 01 JBLM
Sample Matrix: Water

Service Request: K1410537
Date Collected: 09/25/2014
Date Received: 09/26/2014

Volatile Organic Compounds

Sample Name: LGC140925EGDYPW7-1
Lab Code: K1410537-032

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
Dichlorodifluoromethane	ND	U	0.50	0.20	0.13	1	10/08/14	10/08/14	KWG1413665	
Chloromethane	**0.14**	J	0.50	0.20	0.068	1	10/08/14	10/08/14	KWG1413665	*
Vinyl Chloride	ND	U	0.50	0.10	0.075	1	10/08/14	10/08/14	KWG1413665	
Bromomethane	ND	U	0.50	0.30	0.10	1	10/08/14	10/08/14	KWG1413665	
Chloroethane	ND	U	0.50	0.20	0.16	1	10/08/14	10/08/14	KWG1413665	
Trichlorofluoromethane	ND	U	0.50	0.20	0.12	1	10/08/14	10/08/14	KWG1413665	
1,1-Dichloroethene	ND	U	0.50	0.20	0.080	1	10/08/14	10/08/14	KWG1413665	
Acetone	ND	U	20	10	3.3	1	10/08/14	10/08/14	KWG1413665	
Carbon Disulfide	ND	U	0.50	0.20	0.069	1	10/08/14	10/08/14	KWG1413665	
Methylene Chloride	ND	U	2.0	0.20	0.10	1	10/08/14	10/08/14	KWG1413665	
Methyl tert-Butyl Ether	ND	U	0.50	0.30	0.11	1	10/08/14	10/08/14	KWG1413665	*
trans-1,2-Dichloroethene	ND	U	0.50	0.20	0.072	1	10/08/14	10/08/14	KWG1413665	
1,1-Dichloroethane	ND	U	0.50	0.20	0.077	1	10/08/14	10/08/14	KWG1413665	
2,2-Dichloropropane	ND	U	0.50	0.20	0.060	1	10/08/14	10/08/14	KWG1413665	*
cis-1,2-Dichloroethene	**0.72**		0.50	0.20	0.067	1	10/08/14	10/08/14	KWG1413665	
2-Butanone (MEK)	ND	U	20	4.0	1.9	1	10/08/14	10/08/14	KWG1413665	
Bromochloromethane	ND	U	0.50	0.20	0.16	1	10/08/14	10/08/14	KWG1413665	
Chloroform	ND	U	0.50	0.20	0.072	1	10/08/14	10/08/14	KWG1413665	
1,1,1-Trichloroethane (TCA)	ND	U	0.50	0.20	0.075	1	10/08/14	10/08/14	KWG1413665	
Carbon Tetrachloride	ND	U	0.50	0.20	0.096	1	10/08/14	10/08/14	KWG1413665	
1,1-Dichloropropene	ND	U	0.50	0.20	0.089	1	10/08/14	10/08/14	KWG1413665	
Benzene	ND	U	0.50	0.10	0.062	1	10/08/14	10/08/14	KWG1413665	
1,2-Dichloroethane (EDC)	ND	U	0.50	0.15	0.080	1	10/08/14	10/08/14	KWG1413665	
Trichloroethene (TCE)	**21**		0.50	0.10	0.10	1	10/08/14	10/08/14	KWG1413665	
1,2-Dichloropropane	ND	U	0.50	0.20	0.095	1	10/08/14	10/08/14	KWG1413665	
Dibromomethane	ND	U	0.50	0.50	0.15	1	10/08/14	10/08/14	KWG1413665	
Bromodichloromethane	ND	U	0.50	0.30	0.091	1	10/08/14	10/08/14	KWG1413665	
cis-1,3-Dichloropropene	ND	U	0.50	0.20	0.18	1	10/08/14	10/08/14	KWG1413665	
4-Methyl-2-pentanone (MIBK)	ND	U	20	10	2.6	1	10/08/14	10/08/14	KWG1413665	
Toluene	ND	U	0.50	0.10	0.054	1	10/08/14	10/08/14	KWG1413665	
trans-1,3-Dichloropropene	ND	U	0.50	0.20	0.068	1	10/08/14	10/08/14	KWG1413665	*
1,1,2-Trichloroethane	ND	U	0.50	0.40	0.14	1	10/08/14	10/08/14	KWG1413665	
Tetrachloroethene (PCE)	ND	U	0.50	0.20	0.099	1	10/08/14	10/08/14	KWG1413665	

Comments:

Analytical Results

Client: Sealaska Environmental Services, LLC
Project: TO 01 JBLM
Sample Matrix: Water

Service Request: K1410537
Date Collected: 09/25/2014
Date Received: 09/26/2014

Volatile Organic Compounds

Sample Name: LGC140925EGDYPW7-1
Lab Code: K1410537-032

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
2-Hexanone	ND	U	20	10	2.7	1	10/08/14	10/08/14	KWG1413665	
1,3-Dichloropropane	ND	U	0.50	0.30	0.14	1	10/08/14	10/08/14	KWG1413665	
Dibromochloromethane	ND	U	0.50	0.50	0.14	1	10/08/14	10/08/14	KWG1413665	
1,2-Dibromoethane (EDB)	ND	U	2.0	0.20	0.10	1	10/08/14	10/08/14	KWG1413665	
Chlorobenzene	ND	U	0.50	0.20	0.11	1	10/08/14	10/08/14	KWG1413665	
Ethylbenzene	ND	U	0.50	0.10	0.050	1	10/08/14	10/08/14	KWG1413665	
1,1,1,2-Tetrachloroethane	ND	U	0.50	0.20	0.11	1	10/08/14	10/08/14	KWG1413665	
m,p-Xylenes	ND	U	0.50	0.20	0.11	1	10/08/14	10/08/14	KWG1413665	
o-Xylene	ND	U	0.50	0.20	0.074	1	10/08/14	10/08/14	KWG1413665	
Styrene	ND	U	0.50	0.20	0.089	1	10/08/14	10/08/14	KWG1413665	
Bromoform	ND	U	0.50	0.50	0.16	1	10/08/14	10/08/14	KWG1413665	
Isopropylbenzene	ND	U	2.0	0.20	0.051	1	10/08/14	10/08/14	KWG1413665	
1,1,2,2-Tetrachloroethane	ND	U	0.50	0.20	0.16	1	10/08/14	10/08/14	KWG1413665	
Bromobenzene	ND	U	2.0	0.20	0.12	1	10/08/14	10/08/14	KWG1413665	
n-Propylbenzene	ND	U	2.0	0.20	0.054	1	10/08/14	10/08/14	KWG1413665	
1,2,3-Trichloropropane	ND	U	0.50	0.50	0.20	1	10/08/14	10/08/14	KWG1413665	
2-Chlorotoluene	ND	U	2.0	0.20	0.10	1	10/08/14	10/08/14	KWG1413665	
1,3,5-Trimethylbenzene	ND	U	2.0	0.20	0.089	1	10/08/14	10/08/14	KWG1413665	
4-Chlorotoluene	ND	U	2.0	0.20	0.13	1	10/08/14	10/08/14	KWG1413665	
tert-Butylbenzene	ND	U	2.0	0.20	0.059	1	10/08/14	10/08/14	KWG1413665	
1,2,4-Trimethylbenzene	ND	U	2.0	0.20	0.069	1	10/08/14	10/08/14	KWG1413665	
sec-Butylbenzene	ND	U	2.0	0.10	0.062	1	10/08/14	10/08/14	KWG1413665	
4-Isopropyltoluene	ND	U	2.0	0.20	0.060	1	10/08/14	10/08/14	KWG1413665	
1,3-Dichlorobenzene	ND	U	0.50	0.20	0.10	1	10/08/14	10/08/14	KWG1413665	
1,4-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	10/08/14	10/08/14	KWG1413665	
n-Butylbenzene	ND	U	2.0	0.10	0.054	1	10/08/14	10/08/14	KWG1413665	
1,2-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	10/08/14	10/08/14	KWG1413665	
1,2-Dibromo-3-chloropropane	ND	U	2.0	0.80	0.20	1	10/08/14	10/08/14	KWG1413665	
1,2,4-Trichlorobenzene	ND	U	2.0	0.30	0.096	1	10/08/14	10/08/14	KWG1413665	
Hexachlorobutadiene	ND	U	2.0	0.30	0.11	1	10/08/14	10/08/14	KWG1413665	
Naphthalene	ND	U	2.0	0.30	0.088	1	10/08/14	10/08/14	KWG1413665	
1,2,3-Trichlorobenzene	ND	U	2.0	0.40	0.11	1	10/08/14	10/08/14	KWG1413665	

* See Case Narrative

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1410537
Project:	TO 01 JBLM	**Date Collected:**	09/25/2014
Sample Matrix:	Water	**Date Received:**	09/26/2014

Volatile Organic Compounds

Sample Name:	LGC140925EGDYPW7-1	**Units:**	ug/L
Lab Code:	K1410537-032	**Basis:**	NA

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Dibromofluoromethane	92	85-115	10/08/14	Acceptable
1,2-Dichloroethane-d4	113	70-120	10/08/14	Acceptable
Toluene-d8	93	85-120	10/08/14	Acceptable
4-Bromofluorobenzene	87	75-120	10/08/14	Acceptable

Comments:

Analytical Results

Client: Sealaska Environmental Services, LLC
Project: TO 01 JBLM
Sample Matrix: Water

Service Request: K1410537
Date Collected: 09/25/2014
Date Received: 09/26/2014

Volatile Organic Compounds

Sample Name: LGC140925EGDYPW8-1
Lab Code: K1410537-033

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
Dichlorodifluoromethane	ND	U	0.50	0.20	0.13	1	10/08/14	10/08/14	KWG1413665	
Chloromethane	ND	U	0.50	0.20	0.068	1	10/08/14	10/08/14	KWG1413665	
Vinyl Chloride	ND	U	0.50	0.10	0.075	1	10/08/14	10/08/14	KWG1413665	
Bromomethane	ND	U	0.50	0.30	0.10	1	10/08/14	10/08/14	KWG1413665	
Chloroethane	ND	U	0.50	0.20	0.16	1	10/08/14	10/08/14	KWG1413665	
Trichlorofluoromethane	ND	U	0.50	0.20	0.12	1	10/08/14	10/08/14	KWG1413665	
1,1-Dichloroethene	ND	U	0.50	0.20	0.080	1	10/08/14	10/08/14	KWG1413665	
Acetone	ND	U	20	10	3.3	1	10/08/14	10/08/14	KWG1413665	
Carbon Disulfide	ND	U	0.50	0.20	0.069	1	10/08/14	10/08/14	KWG1413665	
Methylene Chloride	ND	U	2.0	0.20	0.10	1	10/08/14	10/08/14	KWG1413665	
Methyl tert-Butyl Ether	ND	U	0.50	0.30	0.11	1	10/08/14	10/08/14	KWG1413665	*
trans-1,2-Dichloroethene	ND	U	0.50	0.20	0.072	1	10/08/14	10/08/14	KWG1413665	
1,1-Dichloroethane	ND	U	0.50	0.20	0.077	1	10/08/14	10/08/14	KWG1413665	
2,2-Dichloropropane	ND	U	0.50	0.20	0.060	1	10/08/14	10/08/14	KWG1413665	*
cis-1,2-Dichloroethene	**2.1**		0.50	0.20	0.067	1	10/08/14	10/08/14	KWG1413665	
2-Butanone (MEK)	ND	U	20	4.0	1.9	1	10/08/14	10/08/14	KWG1413665	
Bromochloromethane	ND	U	0.50	0.20	0.16	1	10/08/14	10/08/14	KWG1413665	
Chloroform	ND	U	0.50	0.20	0.072	1	10/08/14	10/08/14	KWG1413665	
1,1,1-Trichloroethane (TCA)	ND	U	0.50	0.20	0.075	1	10/08/14	10/08/14	KWG1413665	
Carbon Tetrachloride	ND	U	0.50	0.20	0.096	1	10/08/14	10/08/14	KWG1413665	
1,1-Dichloropropene	ND	U	0.50	0.20	0.089	1	10/08/14	10/08/14	KWG1413665	
Benzene	ND	U	0.50	0.10	0.062	1	10/08/14	10/08/14	KWG1413665	
1,2-Dichloroethane (EDC)	ND	U	0.50	0.15	0.080	1	10/08/14	10/08/14	KWG1413665	
Trichloroethene (TCE)	**18**		0.50	0.10	0.10	1	10/08/14	10/08/14	KWG1413665	
1,2-Dichloropropane	ND	U	0.50	0.20	0.095	1	10/08/14	10/08/14	KWG1413665	
Dibromomethane	ND	U	0.50	0.50	0.15	1	10/08/14	10/08/14	KWG1413665	
Bromodichloromethane	ND	U	0.50	0.30	0.091	1	10/08/14	10/08/14	KWG1413665	
cis-1,3-Dichloropropene	ND	U	0.50	0.20	0.18	1	10/08/14	10/08/14	KWG1413665	
4-Methyl-2-pentanone (MIBK)	ND	U	20	10	2.6	1	10/08/14	10/08/14	KWG1413665	
Toluene	ND	U	0.50	0.10	0.054	1	10/08/14	10/08/14	KWG1413665	
trans-1,3-Dichloropropene	ND	U	0.50	0.20	0.068	1	10/08/14	10/08/14	KWG1413665	*
1,1,2-Trichloroethane	ND	U	0.50	0.40	0.14	1	10/08/14	10/08/14	KWG1413665	
Tetrachloroethene (PCE)	ND	U	0.50	0.20	0.099	1	10/08/14	10/08/14	KWG1413665	

Comments:

Analytical Results

Client: Sealaska Environmental Services, LLC
Project: TO 01 JBLM
Sample Matrix: Water

Service Request: K1410537
Date Collected: 09/25/2014
Date Received: 09/26/2014

Volatile Organic Compounds

Sample Name: LGC140925EGDYPW8-1
Lab Code: K1410537-033

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
2-Hexanone	ND	U	20	10	2.7	1	10/08/14	10/08/14	KWG1413665	
1,3-Dichloropropane	ND	U	0.50	0.30	0.14	1	10/08/14	10/08/14	KWG1413665	
Dibromochloromethane	ND	U	0.50	0.50	0.14	1	10/08/14	10/08/14	KWG1413665	
1,2-Dibromoethane (EDB)	ND	U	2.0	0.20	0.10	1	10/08/14	10/08/14	KWG1413665	
Chlorobenzene	ND	U	0.50	0.20	0.11	1	10/08/14	10/08/14	KWG1413665	
Ethylbenzene	ND	U	0.50	0.10	0.050	1	10/08/14	10/08/14	KWG1413665	
1,1,1,2-Tetrachloroethane	ND	U	0.50	0.20	0.11	1	10/08/14	10/08/14	KWG1413665	
m,p-Xylenes	ND	U	0.50	0.20	0.11	1	10/08/14	10/08/14	KWG1413665	
o-Xylene	ND	U	0.50	0.20	0.074	1	10/08/14	10/08/14	KWG1413665	
Styrene	ND	U	0.50	0.20	0.089	1	10/08/14	10/08/14	KWG1413665	
Bromoform	ND	U	0.50	0.50	0.16	1	10/08/14	10/08/14	KWG1413665	
Isopropylbenzene	ND	U	2.0	0.20	0.051	1	10/08/14	10/08/14	KWG1413665	
1,1,2,2-Tetrachloroethane	ND	U	0.50	0.20	0.16	1	10/08/14	10/08/14	KWG1413665	
Bromobenzene	ND	U	2.0	0.20	0.12	1	10/08/14	10/08/14	KWG1413665	
n-Propylbenzene	ND	U	2.0	0.20	0.054	1	10/08/14	10/08/14	KWG1413665	
1,2,3-Trichloropropane	ND	U	0.50	0.50	0.20	1	10/08/14	10/08/14	KWG1413665	
2-Chlorotoluene	ND	U	2.0	0.20	0.10	1	10/08/14	10/08/14	KWG1413665	
1,3,5-Trimethylbenzene	ND	U	2.0	0.20	0.089	1	10/08/14	10/08/14	KWG1413665	
4-Chlorotoluene	ND	U	2.0	0.20	0.13	1	10/08/14	10/08/14	KWG1413665	
tert-Butylbenzene	ND	U	2.0	0.20	0.059	1	10/08/14	10/08/14	KWG1413665	
1,2,4-Trimethylbenzene	ND	U	2.0	0.20	0.069	1	10/08/14	10/08/14	KWG1413665	
sec-Butylbenzene	ND	U	2.0	0.10	0.062	1	10/08/14	10/08/14	KWG1413665	
4-Isopropyltoluene	ND	U	2.0	0.20	0.060	1	10/08/14	10/08/14	KWG1413665	
1,3-Dichlorobenzene	ND	U	0.50	0.20	0.10	1	10/08/14	10/08/14	KWG1413665	
1,4-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	10/08/14	10/08/14	KWG1413665	
n-Butylbenzene	ND	U	2.0	0.10	0.054	1	10/08/14	10/08/14	KWG1413665	
1,2-Dichlorobenzene	**0.12**	J	0.50	0.20	0.12	1	10/08/14	10/08/14	KWG1413665	
1,2-Dibromo-3-chloropropane	ND	U	2.0	0.80	0.20	1	10/08/14	10/08/14	KWG1413665	
1,2,4-Trichlorobenzene	ND	U	2.0	0.30	0.096	1	10/08/14	10/08/14	KWG1413665	
Hexachlorobutadiene	ND	U	2.0	0.30	0.11	1	10/08/14	10/08/14	KWG1413665	
Naphthalene	ND	U	2.0	0.30	0.088	1	10/08/14	10/08/14	KWG1413665	
1,2,3-Trichlorobenzene	ND	U	2.0	0.40	0.11	1	10/08/14	10/08/14	KWG1413665	

* See Case Narrative

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1410537
Project:	TO 01 JBLM	**Date Collected:**	09/25/2014
Sample Matrix:	Water	**Date Received:**	09/26/2014

Volatile Organic Compounds

Sample Name:	LGC140925EGDYPW8-1	**Units:**	ug/L
Lab Code:	K1410537-033	**Basis:**	NA

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Dibromofluoromethane	96	85-115	10/08/14	Acceptable
1,2-Dichloroethane-d4	113	70-120	10/08/14	Acceptable
Toluene-d8	94	85-120	10/08/14	Acceptable
4-Bromofluorobenzene	87	75-120	10/08/14	Acceptable

Comments:

Analytical Results

Client: Sealaska Environmental Services, LLC
Project: TO 01 JBLM
Sample Matrix: Water

Service Request: K1410537
Date Collected: 09/25/2014
Date Received: 09/26/2014

Volatile Organic Compounds

Sample Name: LGC140925EGDYE-1
Lab Code: K1410537-034

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
Dichlorodifluoromethane	ND	U	0.50	0.20	0.13	1	10/08/14	10/08/14	KWG1413665	
Chloromethane	**0.29**	J	0.50	0.20	0.068	1	10/08/14	10/08/14	KWG1413665	*
Vinyl Chloride	ND	U	0.50	0.10	0.075	1	10/08/14	10/08/14	KWG1413665	
Bromomethane	ND	U	0.50	0.30	0.10	1	10/08/14	10/08/14	KWG1413665	
Chloroethane	ND	U	0.50	0.20	0.16	1	10/08/14	10/08/14	KWG1413665	
Trichlorofluoromethane	ND	U	0.50	0.20	0.12	1	10/08/14	10/08/14	KWG1413665	
1,1-Dichloroethene	ND	U	0.50	0.20	0.080	1	10/08/14	10/08/14	KWG1413665	
Acetone	ND	U	20	10	3.3	1	10/08/14	10/08/14	KWG1413665	
Carbon Disulfide	ND	U	0.50	0.20	0.069	1	10/08/14	10/08/14	KWG1413665	
Methylene Chloride	ND	U	2.0	0.20	0.10	1	10/08/14	10/08/14	KWG1413665	
Methyl tert-Butyl Ether	ND	U	0.50	0.30	0.11	1	10/08/14	10/08/14	KWG1413665	*
trans-1,2-Dichloroethene	ND	U	0.50	0.20	0.072	1	10/08/14	10/08/14	KWG1413665	
1,1-Dichloroethane	ND	U	0.50	0.20	0.077	1	10/08/14	10/08/14	KWG1413665	
2,2-Dichloropropane	ND	U	0.50	0.20	0.060	1	10/08/14	10/08/14	KWG1413665	*
cis-1,2-Dichloroethene	**0.80**		0.50	0.20	0.067	1	10/08/14	10/08/14	KWG1413665	
2-Butanone (MEK)	ND	U	20	4.0	1.9	1	10/08/14	10/08/14	KWG1413665	
Bromochloromethane	ND	U	0.50	0.20	0.16	1	10/08/14	10/08/14	KWG1413665	
Chloroform	ND	U	0.50	0.20	0.072	1	10/08/14	10/08/14	KWG1413665	
1,1,1-Trichloroethane (TCA)	ND	U	0.50	0.20	0.075	1	10/08/14	10/08/14	KWG1413665	
Carbon Tetrachloride	ND	U	0.50	0.20	0.096	1	10/08/14	10/08/14	KWG1413665	
1,1-Dichloropropene	ND	U	0.50	0.20	0.089	1	10/08/14	10/08/14	KWG1413665	
Benzene	ND	U	0.50	0.10	0.062	1	10/08/14	10/08/14	KWG1413665	
1,2-Dichloroethane (EDC)	ND	U	0.50	0.15	0.080	1	10/08/14	10/08/14	KWG1413665	
Trichloroethene (TCE)	**1.4**		0.50	0.10	0.10	1	10/08/14	10/08/14	KWG1413665	
1,2-Dichloropropane	ND	U	0.50	0.20	0.095	1	10/08/14	10/08/14	KWG1413665	
Dibromomethane	ND	U	0.50	0.50	0.15	1	10/08/14	10/08/14	KWG1413665	
Bromodichloromethane	ND	U	0.50	0.30	0.091	1	10/08/14	10/08/14	KWG1413665	
cis-1,3-Dichloropropene	ND	U	0.50	0.20	0.18	1	10/08/14	10/08/14	KWG1413665	
4-Methyl-2-pentanone (MIBK)	ND	U	20	10	2.6	1	10/08/14	10/08/14	KWG1413665	
Toluene	ND	U	0.50	0.10	0.054	1	10/08/14	10/08/14	KWG1413665	
trans-1,3-Dichloropropene	ND	U	0.50	0.20	0.068	1	10/08/14	10/08/14	KWG1413665	*
1,1,2-Trichloroethane	ND	U	0.50	0.40	0.14	1	10/08/14	10/08/14	KWG1413665	
Tetrachloroethene (PCE)	ND	U	0.50	0.20	0.099	1	10/08/14	10/08/14	KWG1413665	

Comments:

Analytical Results

Client: Sealaska Environmental Services, LLC
Project: TO 01 JBLM
Sample Matrix: Water

Service Request: K1410537
Date Collected: 09/25/2014
Date Received: 09/26/2014

Volatile Organic Compounds

Sample Name: LGC140925EGDYE-1
Lab Code: K1410537-034

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
2-Hexanone	ND	U	20	10	2.7	1	10/08/14	10/08/14	KWG1413665	
1,3-Dichloropropane	ND	U	0.50	0.30	0.14	1	10/08/14	10/08/14	KWG1413665	
Dibromochloromethane	ND	U	0.50	0.50	0.14	1	10/08/14	10/08/14	KWG1413665	
1,2-Dibromoethane (EDB)	ND	U	2.0	0.20	0.10	1	10/08/14	10/08/14	KWG1413665	
Chlorobenzene	ND	U	0.50	0.20	0.11	1	10/08/14	10/08/14	KWG1413665	
Ethylbenzene	ND	U	0.50	0.10	0.050	1	10/08/14	10/08/14	KWG1413665	
1,1,1,2-Tetrachloroethane	ND	U	0.50	0.20	0.11	1	10/08/14	10/08/14	KWG1413665	
m,p-Xylenes	ND	U	0.50	0.20	0.11	1	10/08/14	10/08/14	KWG1413665	
o-Xylene	ND	U	0.50	0.20	0.074	1	10/08/14	10/08/14	KWG1413665	
Styrene	ND	U	0.50	0.20	0.089	1	10/08/14	10/08/14	KWG1413665	
Bromoform	ND	U	0.50	0.50	0.16	1	10/08/14	10/08/14	KWG1413665	
Isopropylbenzene	ND	U	2.0	0.20	0.051	1	10/08/14	10/08/14	KWG1413665	
1,1,2,2-Tetrachloroethane	ND	U	0.50	0.20	0.16	1	10/08/14	10/08/14	KWG1413665	
Bromobenzene	ND	U	2.0	0.20	0.12	1	10/08/14	10/08/14	KWG1413665	
n-Propylbenzene	ND	U	2.0	0.20	0.054	1	10/08/14	10/08/14	KWG1413665	
1,2,3-Trichloropropane	ND	U	0.50	0.50	0.20	1	10/08/14	10/08/14	KWG1413665	
2-Chlorotoluene	ND	U	2.0	0.20	0.10	1	10/08/14	10/08/14	KWG1413665	
1,3,5-Trimethylbenzene	ND	U	2.0	0.20	0.089	1	10/08/14	10/08/14	KWG1413665	
4-Chlorotoluene	ND	U	2.0	0.20	0.13	1	10/08/14	10/08/14	KWG1413665	
tert-Butylbenzene	ND	U	2.0	0.20	0.059	1	10/08/14	10/08/14	KWG1413665	
1,2,4-Trimethylbenzene	ND	U	2.0	0.20	0.069	1	10/08/14	10/08/14	KWG1413665	
sec-Butylbenzene	ND	U	2.0	0.10	0.062	1	10/08/14	10/08/14	KWG1413665	
4-Isopropyltoluene	ND	U	2.0	0.20	0.060	1	10/08/14	10/08/14	KWG1413665	
1,3-Dichlorobenzene	ND	U	0.50	0.20	0.10	1	10/08/14	10/08/14	KWG1413665	
1,4-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	10/08/14	10/08/14	KWG1413665	
n-Butylbenzene	ND	U	2.0	0.10	0.054	1	10/08/14	10/08/14	KWG1413665	
1,2-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	10/08/14	10/08/14	KWG1413665	
1,2-Dibromo-3-chloropropane	ND	U	2.0	0.80	0.20	1	10/08/14	10/08/14	KWG1413665	
1,2,4-Trichlorobenzene	ND	U	2.0	0.30	0.096	1	10/08/14	10/08/14	KWG1413665	
Hexachlorobutadiene	ND	U	2.0	0.30	0.11	1	10/08/14	10/08/14	KWG1413665	
Naphthalene	ND	U	2.0	0.30	0.088	1	10/08/14	10/08/14	KWG1413665	
1,2,3-Trichlorobenzene	ND	U	2.0	0.40	0.11	1	10/08/14	10/08/14	KWG1413665	

* See Case Narrative

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1410537
Project:	TO 01 JBLM	**Date Collected:**	09/25/2014
Sample Matrix:	Water	**Date Received:**	09/26/2014

Volatile Organic Compounds

Sample Name:	LGC140925EGDYE-1	**Units:**	ug/L
Lab Code:	K1410537-034	**Basis:**	NA

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Dibromofluoromethane	95	85-115	10/08/14	Acceptable
1,2-Dichloroethane-d4	113	70-120	10/08/14	Acceptable
Toluene-d8	94	85-120	10/08/14	Acceptable
4-Bromofluorobenzene	87	75-120	10/08/14	Acceptable

Comments:

Analytical Results

Client: Sealaska Environmental Services, LLC
Project: TO 01 JBLM
Sample Matrix: Water

Service Request: K1410537
Date Collected: 09/25/2014
Date Received: 09/26/2014

Volatile Organic Compounds

Sample Name: LGC140925EGDYI-1
Lab Code: K1410537-035

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
Dichlorodifluoromethane	ND	U	0.50	0.20	0.13	1	10/08/14	10/08/14	KWG1413665	
Chloromethane	**0.090**	J	0.50	0.20	0.068	1	10/08/14	10/08/14	KWG1413665	*
Vinyl Chloride	ND	U	0.50	0.10	0.075	1	10/08/14	10/08/14	KWG1413665	
Bromomethane	ND	U	0.50	0.30	0.10	1	10/08/14	10/08/14	KWG1413665	
Chloroethane	ND	U	0.50	0.20	0.16	1	10/08/14	10/08/14	KWG1413665	
Trichlorofluoromethane	ND	U	0.50	0.20	0.12	1	10/08/14	10/08/14	KWG1413665	
1,1-Dichloroethene	ND	U	0.50	0.20	0.080	1	10/08/14	10/08/14	KWG1413665	
Acetone	ND	U	20	10	3.3	1	10/08/14	10/08/14	KWG1413665	
Carbon Disulfide	ND	U	0.50	0.20	0.069	1	10/08/14	10/08/14	KWG1413665	
Methylene Chloride	ND	U	2.0	0.20	0.10	1	10/08/14	10/08/14	KWG1413665	
Methyl tert-Butyl Ether	ND	U	0.50	0.30	0.11	1	10/08/14	10/08/14	KWG1413665	*
trans-1,2-Dichloroethene	**0.11**	J	0.50	0.20	0.072	1	10/08/14	10/08/14	KWG1413665	
1,1-Dichloroethane	ND	U	0.50	0.20	0.077	1	10/08/14	10/08/14	KWG1413665	
2,2-Dichloropropane	ND	U	0.50	0.20	0.060	1	10/08/14	10/08/14	KWG1413665	*
cis-1,2-Dichloroethene	**3.3**		0.50	0.20	0.067	1	10/08/14	10/08/14	KWG1413665	
2-Butanone (MEK)	ND	U	20	4.0	1.9	1	10/08/14	10/08/14	KWG1413665	
Bromochloromethane	ND	U	0.50	0.20	0.16	1	10/08/14	10/08/14	KWG1413665	
Chloroform	ND	U	0.50	0.20	0.072	1	10/08/14	10/08/14	KWG1413665	
1,1,1-Trichloroethane (TCA)	**0.25**	J	0.50	0.20	0.075	1	10/08/14	10/08/14	KWG1413665	
Carbon Tetrachloride	ND	U	0.50	0.20	0.096	1	10/08/14	10/08/14	KWG1413665	
1,1-Dichloropropene	ND	U	0.50	0.20	0.089	1	10/08/14	10/08/14	KWG1413665	
Benzene	ND	U	0.50	0.10	0.062	1	10/08/14	10/08/14	KWG1413665	
1,2-Dichloroethane (EDC)	ND	U	0.50	0.15	0.080	1	10/08/14	10/08/14	KWG1413665	
Trichloroethene (TCE)	**39**		0.50	0.10	0.10	1	10/08/14	10/08/14	KWG1413665	
1,2-Dichloropropane	ND	U	0.50	0.20	0.095	1	10/08/14	10/08/14	KWG1413665	
Dibromomethane	ND	U	0.50	0.50	0.15	1	10/08/14	10/08/14	KWG1413665	
Bromodichloromethane	ND	U	0.50	0.30	0.091	1	10/08/14	10/08/14	KWG1413665	
cis-1,3-Dichloropropene	ND	U	0.50	0.20	0.18	1	10/08/14	10/08/14	KWG1413665	
4-Methyl-2-pentanone (MIBK)	ND	U	20	10	2.6	1	10/08/14	10/08/14	KWG1413665	
Toluene	ND	U	0.50	0.10	0.054	1	10/08/14	10/08/14	KWG1413665	
trans-1,3-Dichloropropene	ND	U	0.50	0.20	0.068	1	10/08/14	10/08/14	KWG1413665	*
1,1,2-Trichloroethane	ND	U	0.50	0.40	0.14	1	10/08/14	10/08/14	KWG1413665	
Tetrachloroethene (PCE)	ND	U	0.50	0.20	0.099	1	10/08/14	10/08/14	KWG1413665	

Comments:

Analytical Results

Client: Sealaska Environmental Services, LLC
Project: TO 01 JBLM
Sample Matrix: Water

Service Request: K1410537
Date Collected: 09/25/2014
Date Received: 09/26/2014

Volatile Organic Compounds

Sample Name: LGC140925EGDYI-1
Lab Code: K1410537-035

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
2-Hexanone	ND	U	20	10	2.7	1	10/08/14	10/08/14	KWG1413665	
1,3-Dichloropropane	ND	U	0.50	0.30	0.14	1	10/08/14	10/08/14	KWG1413665	
Dibromochloromethane	ND	U	0.50	0.50	0.14	1	10/08/14	10/08/14	KWG1413665	
1,2-Dibromoethane (EDB)	ND	U	2.0	0.20	0.10	1	10/08/14	10/08/14	KWG1413665	
Chlorobenzene	ND	U	0.50	0.20	0.11	1	10/08/14	10/08/14	KWG1413665	
Ethylbenzene	ND	U	0.50	0.10	0.050	1	10/08/14	10/08/14	KWG1413665	
1,1,1,2-Tetrachloroethane	ND	U	0.50	0.20	0.11	1	10/08/14	10/08/14	KWG1413665	
m,p-Xylenes	ND	U	0.50	0.20	0.11	1	10/08/14	10/08/14	KWG1413665	
o-Xylene	ND	U	0.50	0.20	0.074	1	10/08/14	10/08/14	KWG1413665	
Styrene	ND	U	0.50	0.20	0.089	1	10/08/14	10/08/14	KWG1413665	
Bromoform	ND	U	0.50	0.50	0.16	1	10/08/14	10/08/14	KWG1413665	
Isopropylbenzene	ND	U	2.0	0.20	0.051	1	10/08/14	10/08/14	KWG1413665	
1,1,2,2-Tetrachloroethane	ND	U	0.50	0.20	0.16	1	10/08/14	10/08/14	KWG1413665	
Bromobenzene	ND	U	2.0	0.20	0.12	1	10/08/14	10/08/14	KWG1413665	
n-Propylbenzene	ND	U	2.0	0.20	0.054	1	10/08/14	10/08/14	KWG1413665	
1,2,3-Trichloropropane	ND	U	0.50	0.50	0.20	1	10/08/14	10/08/14	KWG1413665	
2-Chlorotoluene	ND	U	2.0	0.20	0.10	1	10/08/14	10/08/14	KWG1413665	
1,3,5-Trimethylbenzene	ND	U	2.0	0.20	0.089	1	10/08/14	10/08/14	KWG1413665	
4-Chlorotoluene	ND	U	2.0	0.20	0.13	1	10/08/14	10/08/14	KWG1413665	
tert-Butylbenzene	ND	U	2.0	0.20	0.059	1	10/08/14	10/08/14	KWG1413665	
1,2,4-Trimethylbenzene	ND	U	2.0	0.20	0.069	1	10/08/14	10/08/14	KWG1413665	
sec-Butylbenzene	ND	U	2.0	0.10	0.062	1	10/08/14	10/08/14	KWG1413665	
4-Isopropyltoluene	ND	U	2.0	0.20	0.060	1	10/08/14	10/08/14	KWG1413665	
1,3-Dichlorobenzene	ND	U	0.50	0.20	0.10	1	10/08/14	10/08/14	KWG1413665	
1,4-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	10/08/14	10/08/14	KWG1413665	
n-Butylbenzene	ND	U	2.0	0.10	0.054	1	10/08/14	10/08/14	KWG1413665	
1,2-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	10/08/14	10/08/14	KWG1413665	
1,2-Dibromo-3-chloropropane	ND	U	2.0	0.80	0.20	1	10/08/14	10/08/14	KWG1413665	
1,2,4-Trichlorobenzene	ND	U	2.0	0.30	0.096	1	10/08/14	10/08/14	KWG1413665	
Hexachlorobutadiene	ND	U	2.0	0.30	0.11	1	10/08/14	10/08/14	KWG1413665	
Naphthalene	ND	U	2.0	0.30	0.088	1	10/08/14	10/08/14	KWG1413665	
1,2,3-Trichlorobenzene	ND	U	2.0	0.40	0.11	1	10/08/14	10/08/14	KWG1413665	

* See Case Narrative

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1410537
Project:	TO 01 JBLM	**Date Collected:**	09/25/2014
Sample Matrix:	Water	**Date Received:**	09/26/2014

Volatile Organic Compounds

Sample Name:	LGC140925EGDYI-1	**Units:**	ug/L
Lab Code:	K1410537-035	**Basis:**	NA

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Dibromofluoromethane	99	85-115	10/08/14	Acceptable
1,2-Dichloroethane-d4	115	70-120	10/08/14	Acceptable
Toluene-d8	96	85-120	10/08/14	Acceptable
4-Bromofluorobenzene	86	75-120	10/08/14	Acceptable

Comments:

Analytical Results

Client: Sealaska Environmental Services, LLC
Project: TO 01 JBLM
Sample Matrix: Water

Service Request: K1410537
Date Collected: NA
Date Received: NA

Volatile Organic Compounds

Sample Name: Method Blank
Lab Code: KWG1413535-5

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
Dichlorodifluoromethane	ND	U	0.50	0.20	0.13	1	10/06/14	10/06/14	KWG1413535	
Chloromethane	ND	U	0.50	0.20	0.068	1	10/06/14	10/06/14	KWG1413535	
Vinyl Chloride	ND	U	0.50	0.10	0.075	1	10/06/14	10/06/14	KWG1413535	
Bromomethane	ND	U	0.50	0.30	0.10	1	10/06/14	10/06/14	KWG1413535	
Chloroethane	ND	U	0.50	0.20	0.16	1	10/06/14	10/06/14	KWG1413535	
Trichlorofluoromethane	ND	U	0.50	0.20	0.12	1	10/06/14	10/06/14	KWG1413535	
1,1-Dichloroethene	ND	U	0.50	0.20	0.080	1	10/06/14	10/06/14	KWG1413535	
Acetone	ND	U	20	10	3.3	1	10/06/14	10/06/14	KWG1413535	*
Carbon Disulfide	ND	U	0.50	0.20	0.069	1	10/06/14	10/06/14	KWG1413535	*
Methylene Chloride	**0.22**	J	2.0	0.20	0.10	1	10/06/14	10/06/14	KWG1413535	
Methyl tert-Butyl Ether	ND	U	0.50	0.30	0.11	1	10/06/14	10/06/14	KWG1413535	
trans-1,2-Dichloroethene	ND	U	0.50	0.20	0.072	1	10/06/14	10/06/14	KWG1413535	
1,1-Dichloroethane	ND	U	0.50	0.20	0.077	1	10/06/14	10/06/14	KWG1413535	
2,2-Dichloropropane	ND	U	0.50	0.20	0.060	1	10/06/14	10/06/14	KWG1413535	*
cis-1,2-Dichloroethene	ND	U	0.50	0.20	0.067	1	10/06/14	10/06/14	KWG1413535	
2-Butanone (MEK)	ND	U	20	4.0	1.9	1	10/06/14	10/06/14	KWG1413535	
Bromochloromethane	ND	U	0.50	0.20	0.16	1	10/06/14	10/06/14	KWG1413535	
Chloroform	ND	U	0.50	0.20	0.072	1	10/06/14	10/06/14	KWG1413535	
1,1,1-Trichloroethane (TCA)	ND	U	0.50	0.20	0.075	1	10/06/14	10/06/14	KWG1413535	
Carbon Tetrachloride	ND	U	0.50	0.20	0.096	1	10/06/14	10/06/14	KWG1413535	
1,1-Dichloropropene	ND	U	0.50	0.20	0.089	1	10/06/14	10/06/14	KWG1413535	
Benzene	ND	U	0.50	0.10	0.062	1	10/06/14	10/06/14	KWG1413535	
1,2-Dichloroethane (EDC)	ND	U	0.50	0.15	0.080	1	10/06/14	10/06/14	KWG1413535	
Trichloroethene (TCE)	ND	U	0.50	0.10	0.10	1	10/06/14	10/06/14	KWG1413535	
1,2-Dichloropropane	ND	U	0.50	0.20	0.095	1	10/06/14	10/06/14	KWG1413535	
Dibromomethane	ND	U	0.50	0.50	0.15	1	10/06/14	10/06/14	KWG1413535	
Bromodichloromethane	ND	U	0.50	0.30	0.091	1	10/06/14	10/06/14	KWG1413535	
cis-1,3-Dichloropropene	ND	U	0.50	0.20	0.18	1	10/06/14	10/06/14	KWG1413535	
4-Methyl-2-pentanone (MIBK)	ND	U	20	10	2.6	1	10/06/14	10/06/14	KWG1413535	
Toluene	ND	U	0.50	0.10	0.054	1	10/06/14	10/06/14	KWG1413535	
trans-1,3-Dichloropropene	ND	U	0.50	0.20	0.068	1	10/06/14	10/06/14	KWG1413535	*
1,1,2-Trichloroethane	ND	U	0.50	0.40	0.14	1	10/06/14	10/06/14	KWG1413535	
Tetrachloroethene (PCE)	ND	U	0.50	0.20	0.099	1	10/06/14	10/06/14	KWG1413535	

Comments:

Analytical Results

Client: Sealaska Environmental Services, LLC
Project: TO 01 JBLM
Sample Matrix: Water

Service Request: K1410537
Date Collected: NA
Date Received: NA

Volatile Organic Compounds

Sample Name: Method Blank
Lab Code: KWG1413535-5

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
2-Hexanone	ND	U	20	10	2.7	1	10/06/14	10/06/14	KWG1413535	
1,3-Dichloropropane	ND	U	0.50	0.30	0.14	1	10/06/14	10/06/14	KWG1413535	
Dibromochloromethane	ND	U	0.50	0.50	0.14	1	10/06/14	10/06/14	KWG1413535	
1,2-Dibromoethane (EDB)	ND	U	2.0	0.20	0.10	1	10/06/14	10/06/14	KWG1413535	
Chlorobenzene	ND	U	0.50	0.20	0.11	1	10/06/14	10/06/14	KWG1413535	
Ethylbenzene	ND	U	0.50	0.10	0.050	1	10/06/14	10/06/14	KWG1413535	
1,1,1,2-Tetrachloroethane	ND	U	0.50	0.20	0.11	1	10/06/14	10/06/14	KWG1413535	
m,p-Xylenes	ND	U	0.50	0.20	0.11	1	10/06/14	10/06/14	KWG1413535	
o-Xylene	ND	U	0.50	0.20	0.074	1	10/06/14	10/06/14	KWG1413535	
Styrene	ND	U	0.50	0.20	0.089	1	10/06/14	10/06/14	KWG1413535	
Bromoform	ND	U	0.50	0.50	0.16	1	10/06/14	10/06/14	KWG1413535	
Isopropylbenzene	ND	U	2.0	0.20	0.051	1	10/06/14	10/06/14	KWG1413535	
1,1,2,2-Tetrachloroethane	ND	U	0.50	0.20	0.16	1	10/06/14	10/06/14	KWG1413535	
Bromobenzene	ND	U	2.0	0.20	0.12	1	10/06/14	10/06/14	KWG1413535	
n-Propylbenzene	ND	U	2.0	0.20	0.054	1	10/06/14	10/06/14	KWG1413535	
1,2,3-Trichloropropane	ND	U	0.50	0.50	0.20	1	10/06/14	10/06/14	KWG1413535	
2-Chlorotoluene	ND	U	2.0	0.20	0.10	1	10/06/14	10/06/14	KWG1413535	
1,3,5-Trimethylbenzene	ND	U	2.0	0.20	0.089	1	10/06/14	10/06/14	KWG1413535	
4-Chlorotoluene	ND	U	2.0	0.20	0.13	1	10/06/14	10/06/14	KWG1413535	
tert-Butylbenzene	ND	U	2.0	0.20	0.059	1	10/06/14	10/06/14	KWG1413535	
1,2,4-Trimethylbenzene	ND	U	2.0	0.20	0.069	1	10/06/14	10/06/14	KWG1413535	
sec-Butylbenzene	ND	U	2.0	0.10	0.062	1	10/06/14	10/06/14	KWG1413535	
4-Isopropyltoluene	ND	U	2.0	0.20	0.060	1	10/06/14	10/06/14	KWG1413535	
1,3-Dichlorobenzene	ND	U	0.50	0.20	0.10	1	10/06/14	10/06/14	KWG1413535	
1,4-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	10/06/14	10/06/14	KWG1413535	
n-Butylbenzene	ND	U	2.0	0.10	0.054	1	10/06/14	10/06/14	KWG1413535	
1,2-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	10/06/14	10/06/14	KWG1413535	
1,2-Dibromo-3-chloropropane	ND	U	2.0	0.80	0.20	1	10/06/14	10/06/14	KWG1413535	
1,2,4-Trichlorobenzene	**0.11**	J	2.0	0.30	0.096	1	10/06/14	10/06/14	KWG1413535	
Hexachlorobutadiene	ND	U	2.0	0.30	0.11	1	10/06/14	10/06/14	KWG1413535	
Naphthalene	ND	U	2.0	0.30	0.088	1	10/06/14	10/06/14	KWG1413535	
1,2,3-Trichlorobenzene	ND	U	2.0	0.40	0.11	1	10/06/14	10/06/14	KWG1413535	

* See Case Narrative

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1410537
Project:	TO 01 JBLM	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA

Volatile Organic Compounds

Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	KWG1413535-5	**Basis:**	NA

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Dibromofluoromethane	95	85-115	10/06/14	Acceptable
1,2-Dichloroethane-d4	106	70-120	10/06/14	Acceptable
Toluene-d8	96	85-120	10/06/14	Acceptable
4-Bromofluorobenzene	93	75-120	10/06/14	Acceptable

Comments:

Analytical Results

Client: Sealaska Environmental Services, LLC
Project: TO 01 JBLM
Sample Matrix: Water

Service Request: K1410537
Date Collected: NA
Date Received: NA

Volatile Organic Compounds

Sample Name: Method Blank
Lab Code: KWG1413599-3

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
Dichlorodifluoromethane	ND	U	0.50	0.20	0.13	1	10/07/14	10/07/14	KWG1413599	
Chloromethane	ND	U	0.50	0.20	0.068	1	10/07/14	10/07/14	KWG1413599	
Vinyl Chloride	ND	U	0.50	0.10	0.075	1	10/07/14	10/07/14	KWG1413599	
Bromomethane	ND	U	0.50	0.30	0.10	1	10/07/14	10/07/14	KWG1413599	*
Chloroethane	ND	U	0.50	0.20	0.16	1	10/07/14	10/07/14	KWG1413599	
Trichlorofluoromethane	ND	U	0.50	0.20	0.12	1	10/07/14	10/07/14	KWG1413599	
1,1-Dichloroethene	ND	U	0.50	0.20	0.080	1	10/07/14	10/07/14	KWG1413599	
Acetone	ND	U	20	10	3.3	1	10/07/14	10/07/14	KWG1413599	
Carbon Disulfide	ND	U	0.50	0.20	0.069	1	10/07/14	10/07/14	KWG1413599	*
Methylene Chloride	**0.23**	J	2.0	0.20	0.10	1	10/07/14	10/07/14	KWG1413599	
Methyl tert-Butyl Ether	ND	U	0.50	0.30	0.11	1	10/07/14	10/07/14	KWG1413599	
trans-1,2-Dichloroethene	ND	U	0.50	0.20	0.072	1	10/07/14	10/07/14	KWG1413599	
1,1-Dichloroethane	ND	U	0.50	0.20	0.077	1	10/07/14	10/07/14	KWG1413599	
2,2-Dichloropropane	ND	U	0.50	0.20	0.060	1	10/07/14	10/07/14	KWG1413599	*
cis-1,2-Dichloroethene	ND	U	0.50	0.20	0.067	1	10/07/14	10/07/14	KWG1413599	
2-Butanone (MEK)	ND	U	20	4.0	1.9	1	10/07/14	10/07/14	KWG1413599	
Bromochloromethane	ND	U	0.50	0.20	0.16	1	10/07/14	10/07/14	KWG1413599	
Chloroform	ND	U	0.50	0.20	0.072	1	10/07/14	10/07/14	KWG1413599	
1,1,1-Trichloroethane (TCA)	ND	U	0.50	0.20	0.075	1	10/07/14	10/07/14	KWG1413599	
Carbon Tetrachloride	ND	U	0.50	0.20	0.096	1	10/07/14	10/07/14	KWG1413599	
1,1-Dichloropropene	ND	U	0.50	0.20	0.089	1	10/07/14	10/07/14	KWG1413599	
Benzene	ND	U	0.50	0.10	0.062	1	10/07/14	10/07/14	KWG1413599	
1,2-Dichloroethane (EDC)	ND	U	0.50	0.15	0.080	1	10/07/14	10/07/14	KWG1413599	
Trichloroethene (TCE)	ND	U	0.50	0.10	0.10	1	10/07/14	10/07/14	KWG1413599	
1,2-Dichloropropane	ND	U	0.50	0.20	0.095	1	10/07/14	10/07/14	KWG1413599	
Dibromomethane	ND	U	0.50	0.50	0.15	1	10/07/14	10/07/14	KWG1413599	
Bromodichloromethane	ND	U	0.50	0.30	0.091	1	10/07/14	10/07/14	KWG1413599	
cis-1,3-Dichloropropene	ND	U	0.50	0.20	0.18	1	10/07/14	10/07/14	KWG1413599	
4-Methyl-2-pentanone (MIBK)	ND	U	20	10	2.6	1	10/07/14	10/07/14	KWG1413599	
Toluene	ND	U	0.50	0.10	0.054	1	10/07/14	10/07/14	KWG1413599	
trans-1,3-Dichloropropene	ND	U	0.50	0.20	0.068	1	10/07/14	10/07/14	KWG1413599	*
1,1,2-Trichloroethane	ND	U	0.50	0.40	0.14	1	10/07/14	10/07/14	KWG1413599	
Tetrachloroethene (PCE)	ND	U	0.50	0.20	0.099	1	10/07/14	10/07/14	KWG1413599	

Comments:

Analytical Results

Client: Sealaska Environmental Services, LLC
Project: TO 01 JBLM
Sample Matrix: Water

Service Request: K1410537
Date Collected: NA
Date Received: NA

Volatile Organic Compounds

Sample Name: Method Blank
Lab Code: KWG1413599-3

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
2-Hexanone	ND	U	20	10	2.7	1	10/07/14	10/07/14	KWG1413599	
1,3-Dichloropropane	ND	U	0.50	0.30	0.14	1	10/07/14	10/07/14	KWG1413599	
Dibromochloromethane	ND	U	0.50	0.50	0.14	1	10/07/14	10/07/14	KWG1413599	
1,2-Dibromoethane (EDB)	ND	U	2.0	0.20	0.10	1	10/07/14	10/07/14	KWG1413599	
Chlorobenzene	ND	U	0.50	0.20	0.11	1	10/07/14	10/07/14	KWG1413599	
Ethylbenzene	ND	U	0.50	0.10	0.050	1	10/07/14	10/07/14	KWG1413599	
1,1,1,2-Tetrachloroethane	ND	U	0.50	0.20	0.11	1	10/07/14	10/07/14	KWG1413599	
m,p-Xylenes	ND	U	0.50	0.20	0.11	1	10/07/14	10/07/14	KWG1413599	
o-Xylene	ND	U	0.50	0.20	0.074	1	10/07/14	10/07/14	KWG1413599	
Styrene	ND	U	0.50	0.20	0.089	1	10/07/14	10/07/14	KWG1413599	
Bromoform	ND	U	0.50	0.50	0.16	1	10/07/14	10/07/14	KWG1413599	*
Isopropylbenzene	ND	U	2.0	0.20	0.051	1	10/07/14	10/07/14	KWG1413599	
1,1,2,2-Tetrachloroethane	ND	U	0.50	0.20	0.16	1	10/07/14	10/07/14	KWG1413599	
Bromobenzene	ND	U	2.0	0.20	0.12	1	10/07/14	10/07/14	KWG1413599	
n-Propylbenzene	ND	U	2.0	0.20	0.054	1	10/07/14	10/07/14	KWG1413599	
1,2,3-Trichloropropane	ND	U	0.50	0.50	0.20	1	10/07/14	10/07/14	KWG1413599	
2-Chlorotoluene	ND	U	2.0	0.20	0.10	1	10/07/14	10/07/14	KWG1413599	
1,3,5-Trimethylbenzene	ND	U	2.0	0.20	0.089	1	10/07/14	10/07/14	KWG1413599	
4-Chlorotoluene	ND	U	2.0	0.20	0.13	1	10/07/14	10/07/14	KWG1413599	
tert-Butylbenzene	ND	U	2.0	0.20	0.059	1	10/07/14	10/07/14	KWG1413599	
1,2,4-Trimethylbenzene	ND	U	2.0	0.20	0.069	1	10/07/14	10/07/14	KWG1413599	
sec-Butylbenzene	ND	U	2.0	0.10	0.062	1	10/07/14	10/07/14	KWG1413599	
4-Isopropyltoluene	ND	U	2.0	0.20	0.060	1	10/07/14	10/07/14	KWG1413599	
1,3-Dichlorobenzene	ND	U	0.50	0.20	0.10	1	10/07/14	10/07/14	KWG1413599	
1,4-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	10/07/14	10/07/14	KWG1413599	
n-Butylbenzene	ND	U	2.0	0.10	0.054	1	10/07/14	10/07/14	KWG1413599	
1,2-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	10/07/14	10/07/14	KWG1413599	
1,2-Dibromo-3-chloropropane	ND	U	2.0	0.80	0.20	1	10/07/14	10/07/14	KWG1413599	
1,2,4-Trichlorobenzene	**0.10**	J	2.0	0.30	0.096	1	10/07/14	10/07/14	KWG1413599	
Hexachlorobutadiene	ND	U	2.0	0.30	0.11	1	10/07/14	10/07/14	KWG1413599	
Naphthalene	**0.090**	J	2.0	0.30	0.088	1	10/07/14	10/07/14	KWG1413599	
1,2,3-Trichlorobenzene	**0.14**	J	2.0	0.40	0.11	1	10/07/14	10/07/14	KWG1413599	

* See Case Narrative

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1410537
Project:	TO 01 JBLM	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA

Volatile Organic Compounds

Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	KWG1413599-3	**Basis:**	NA

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Dibromofluoromethane	93	85-115	10/07/14	Acceptable
1,2-Dichloroethane-d4	106	70-120	10/07/14	Acceptable
Toluene-d8	93	85-120	10/07/14	Acceptable
4-Bromofluorobenzene	87	75-120	10/07/14	Acceptable

Comments:

Analytical Results

Client: Sealaska Environmental Services, LLC
Project: TO 01 JBLM
Sample Matrix: Water

Service Request: K1410537
Date Collected: NA
Date Received: NA

Volatile Organic Compounds

Sample Name: Method Blank
Lab Code: KWG1413665-3

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
Dichlorodifluoromethane	ND	U	0.50	0.20	0.13	1	10/08/14	10/08/14	KWG1413665	
Chloromethane	ND	U	0.50	0.20	0.068	1	10/08/14	10/08/14	KWG1413665	
Vinyl Chloride	ND	U	0.50	0.10	0.075	1	10/08/14	10/08/14	KWG1413665	
Bromomethane	ND	U	0.50	0.30	0.10	1	10/08/14	10/08/14	KWG1413665	
Chloroethane	ND	U	0.50	0.20	0.16	1	10/08/14	10/08/14	KWG1413665	
Trichlorofluoromethane	ND	U	0.50	0.20	0.12	1	10/08/14	10/08/14	KWG1413665	
1,1-Dichloroethene	ND	U	0.50	0.20	0.080	1	10/08/14	10/08/14	KWG1413665	
Acetone	ND	U	20	10	3.3	1	10/08/14	10/08/14	KWG1413665	
Carbon Disulfide	ND	U	0.50	0.20	0.069	1	10/08/14	10/08/14	KWG1413665	
Methylene Chloride	**0.33**	J	2.0	0.20	0.10	1	10/08/14	10/08/14	KWG1413665	
Methyl tert-Butyl Ether	ND	U	0.50	0.30	0.11	1	10/08/14	10/08/14	KWG1413665	*
trans-1,2-Dichloroethene	ND	U	0.50	0.20	0.072	1	10/08/14	10/08/14	KWG1413665	
1,1-Dichloroethane	ND	U	0.50	0.20	0.077	1	10/08/14	10/08/14	KWG1413665	
2,2-Dichloropropane	ND	U	0.50	0.20	0.060	1	10/08/14	10/08/14	KWG1413665	*
cis-1,2-Dichloroethene	ND	U	0.50	0.20	0.067	1	10/08/14	10/08/14	KWG1413665	
2-Butanone (MEK)	ND	U	20	4.0	1.9	1	10/08/14	10/08/14	KWG1413665	
Bromochloromethane	ND	U	0.50	0.20	0.16	1	10/08/14	10/08/14	KWG1413665	
Chloroform	ND	U	0.50	0.20	0.072	1	10/08/14	10/08/14	KWG1413665	
1,1,1-Trichloroethane (TCA)	ND	U	0.50	0.20	0.075	1	10/08/14	10/08/14	KWG1413665	
Carbon Tetrachloride	ND	U	0.50	0.20	0.096	1	10/08/14	10/08/14	KWG1413665	
1,1-Dichloropropene	ND	U	0.50	0.20	0.089	1	10/08/14	10/08/14	KWG1413665	
Benzene	ND	U	0.50	0.10	0.062	1	10/08/14	10/08/14	KWG1413665	
1,2-Dichloroethane (EDC)	ND	U	0.50	0.15	0.080	1	10/08/14	10/08/14	KWG1413665	
Trichloroethene (TCE)	ND	U	0.50	0.10	0.10	1	10/08/14	10/08/14	KWG1413665	
1,2-Dichloropropane	ND	U	0.50	0.20	0.095	1	10/08/14	10/08/14	KWG1413665	
Dibromomethane	ND	U	0.50	0.50	0.15	1	10/08/14	10/08/14	KWG1413665	
Bromodichloromethane	ND	U	0.50	0.30	0.091	1	10/08/14	10/08/14	KWG1413665	
cis-1,3-Dichloropropene	ND	U	0.50	0.20	0.18	1	10/08/14	10/08/14	KWG1413665	
4-Methyl-2-pentanone (MIBK)	ND	U	20	10	2.6	1	10/08/14	10/08/14	KWG1413665	
Toluene	ND	U	0.50	0.10	0.054	1	10/08/14	10/08/14	KWG1413665	
trans-1,3-Dichloropropene	ND	U	0.50	0.20	0.068	1	10/08/14	10/08/14	KWG1413665	*
1,1,2-Trichloroethane	ND	U	0.50	0.40	0.14	1	10/08/14	10/08/14	KWG1413665	
Tetrachloroethene (PCE)	ND	U	0.50	0.20	0.099	1	10/08/14	10/08/14	KWG1413665	

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1410537
Project:	TO 01 JBLM	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA

Volatile Organic Compounds

Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	KWG1413665-3	**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
2-Hexanone	ND	U	20	10	2.7	1	10/08/14	10/08/14	KWG1413665	
1,3-Dichloropropane	ND	U	0.50	0.30	0.14	1	10/08/14	10/08/14	KWG1413665	
Dibromochloromethane	ND	U	0.50	0.50	0.14	1	10/08/14	10/08/14	KWG1413665	
1,2-Dibromoethane (EDB)	ND	U	2.0	0.20	0.10	1	10/08/14	10/08/14	KWG1413665	
Chlorobenzene	ND	U	0.50	0.20	0.11	1	10/08/14	10/08/14	KWG1413665	
Ethylbenzene	ND	U	0.50	0.10	0.050	1	10/08/14	10/08/14	KWG1413665	
1,1,1,2-Tetrachloroethane	ND	U	0.50	0.20	0.11	1	10/08/14	10/08/14	KWG1413665	
m,p-Xylenes	ND	U	0.50	0.20	0.11	1	10/08/14	10/08/14	KWG1413665	
o-Xylene	ND	U	0.50	0.20	0.074	1	10/08/14	10/08/14	KWG1413665	
Styrene	ND	U	0.50	0.20	0.089	1	10/08/14	10/08/14	KWG1413665	
Bromoform	ND	U	0.50	0.50	0.16	1	10/08/14	10/08/14	KWG1413665	
Isopropylbenzene	ND	U	2.0	0.20	0.051	1	10/08/14	10/08/14	KWG1413665	
1,1,2,2-Tetrachloroethane	ND	U	0.50	0.20	0.16	1	10/08/14	10/08/14	KWG1413665	
Bromobenzene	ND	U	2.0	0.20	0.12	1	10/08/14	10/08/14	KWG1413665	
n-Propylbenzene	ND	U	2.0	0.20	0.054	1	10/08/14	10/08/14	KWG1413665	
1,2,3-Trichloropropane	ND	U	0.50	0.50	0.20	1	10/08/14	10/08/14	KWG1413665	
2-Chlorotoluene	ND	U	2.0	0.20	0.10	1	10/08/14	10/08/14	KWG1413665	
1,3,5-Trimethylbenzene	ND	U	2.0	0.20	0.089	1	10/08/14	10/08/14	KWG1413665	
4-Chlorotoluene	ND	U	2.0	0.20	0.13	1	10/08/14	10/08/14	KWG1413665	
tert-Butylbenzene	ND	U	2.0	0.20	0.059	1	10/08/14	10/08/14	KWG1413665	
1,2,4-Trimethylbenzene	ND	U	2.0	0.20	0.069	1	10/08/14	10/08/14	KWG1413665	
sec-Butylbenzene	ND	U	2.0	0.10	0.062	1	10/08/14	10/08/14	KWG1413665	
4-Isopropyltoluene	ND	U	2.0	0.20	0.060	1	10/08/14	10/08/14	KWG1413665	
1,3-Dichlorobenzene	ND	U	0.50	0.20	0.10	1	10/08/14	10/08/14	KWG1413665	
1,4-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	10/08/14	10/08/14	KWG1413665	
n-Butylbenzene	ND	U	2.0	0.10	0.054	1	10/08/14	10/08/14	KWG1413665	
1,2-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	10/08/14	10/08/14	KWG1413665	
1,2-Dibromo-3-chloropropane	ND	U	2.0	0.80	0.20	1	10/08/14	10/08/14	KWG1413665	
1,2,4-Trichlorobenzene	ND	U	2.0	0.30	0.096	1	10/08/14	10/08/14	KWG1413665	
Hexachlorobutadiene	ND	U	2.0	0.30	0.11	1	10/08/14	10/08/14	KWG1413665	
Naphthalene	ND	U	2.0	0.30	0.088	1	10/08/14	10/08/14	KWG1413665	
1,2,3-Trichlorobenzene	**0.11**	J	2.0	0.40	0.11	1	10/08/14	10/08/14	KWG1413665	

* See Case Narrative

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1410537
Project:	TO 01 JBLM	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA

Volatile Organic Compounds

Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	KWG1413665-3	**Basis:**	NA

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Dibromofluoromethane	88	85-115	10/08/14	Acceptable
1,2-Dichloroethane-d4	115	70-120	10/08/14	Acceptable
Toluene-d8	93	85-120	10/08/14	Acceptable
4-Bromofluorobenzene	86	75-120	10/08/14	Acceptable

Comments:

QA/QC Report

Client: Sealaska Environmental Services, LLC **Service Request:** K1410537
Project: TO 01 JBLM
Sample Matrix: Water

Surrogate Recovery Summary
Volatile Organic Compounds

Extraction Method: EPA 5030B **Units:** Percent
Analysis Method: 8260C **Level:** Low

Sample Name	Lab Code	Sur1	Sur2	Sur3	Sur4
LGC140925ISLX2-1	K1410537-001	95	112	95	92
LGC140925ISLX3-1	K1410537-002	98	110	97	90
LGC140925ISLX4-1	K1410537-003	95	111	94	91
LGC140925ISLX5-1	K1410537-004	94	110	97	92
LGC140925ISLX6-1	K1410537-005	95	109	96	92
LGC140925ISLX7-1	K1410537-006	96	110	97	90
LGC140925ISLX9-1	K1410537-007	95	111	95	87
LGC140925ISLX11-1	K1410537-008	96	113	97	92
LGC140925ISLX12-1	K1410537-009	96	112	97	92
LGC140925ISLX13-1	K1410537-010	99	113	96	90
LGC140925ISLX14-1	K1410537-011	96	111	96	90
LGC140925ISLX15-1	K1410537-012	94	112	96	93
LGC140925DUP6-1	K1410537-013	96	112	98	91
LGC140925ISI-1	K1410537-014	96	113	96	91
LGC140925ISE-1	K1410537-015	97	112	95	92
LGC140925SLAPE-1	K1410537-016	95	113	96	91
LGC140925SLAPI-1	K1410537-017	94	112	97	89
LGC140925MAMC3-1	K1410537-018	98	113	95	91
LGC140925MAMC4-1	K1410537-019	94	113	95	88
LGC140925DUP7-1	K1410537-020	100	118	99	88
LGC140925LC99D-1	K1410537-021	98	114	95	90
LGC140925LC74D-1	K1410537-022	95	110	95	87
LGC140925LC96D-1	K1410537-023	98	113	94	88
LGC140925SLAP6-1	K1410537-024	96	111	95	90
TB092514	K1410537-025	93	110	94	90
LGC140925EGDYPW1-1	K1410537-026	100	116	97	90
LGC140925EGDYPW2-1	K1410537-027	95	114	94	87
LGC140925EGDYPW3-1	K1410537-028	97	115	96	89
LGC140925EGDYPW4-1	K1410537-029	92	114	97	87
LGC140925EGDYPW5-1	K1410537-030	93	114	95	88
LGC140925EGDYPW6-1	K1410537-031	95	114	95	88
LGC140925EGDYPW7-1	K1410537-032	92	113	93	87
LGC140925EGDYPW8-1	K1410537-033	96	113	94	87
LGC140925EGDYE-1	K1410537-034	95	113	94	87

Surrogate Recovery Control Limits (%)

Sur1	= Dibromofluoromethane	85-115
Sur2	= 1,2-Dichloroethane-d4	70-120
Sur3	= Toluene-d8	85-120
Sur4	= 4-Bromofluorobenzene	75-120

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Client: Sealaska Environmental Services, LLC **Service Request:** K1410537
Project: TO 01 JBLM
Sample Matrix: Water

Surrogate Recovery Summary
Volatile Organic Compounds

Extraction Method: EPA 5030B **Units:** Percent
Analysis Method: 8260C **Level:** Low

Sample Name	Lab Code	Sur1	Sur2	Sur3	Sur4
LGC140925EGDYI-1	K1410537-035	99	115	96	86
Method Blank	KWG1413535-5	95	106	96	93
Method Blank	KWG1413599-3	93	106	93	87
Method Blank	KWG1413665-3	88	115	93	86
LGC140925SLAPI-1MS	KWG1413535-1	101	110	99	97
LGC140925SLAPI-1DMS	KWG1413535-2	99	106	99	96
LGC140925MAMC4-1MS	KWG1413599-4	96	108	96	95
LGC140925MAMC4-1DMS	KWG1413599-5	99	111	98	93
Lab Control Sample	KWG1413535-3	96	104	98	97
Lab Control Sample	KWG1413599-1	101	110	98	93
Lab Control Sample	KWG1413665-1	102	108	97	93
Duplicate Lab Control Sample	KWG1413665-2	102	111	98	94

Surrogate Recovery Control Limits (%)

Sur1	= Dibromofluoromethane	85-115
Sur2	= 1,2-Dichloroethane-d4	70-120
Sur3	= Toluene-d8	85-120
Sur4	= 4-Bromofluorobenzene	75-120

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1410537
Project:	TO 01 JBLM	**Date Analyzed:**	10/06/2014
		Time Analyzed:	21:27

Internal Standard Area and RT Summary
Volatile Organic Compounds

File ID:	J:\MS18\DATA\100614\1006F035.D	**Lab Code:**	KWG1413536-2
Instrument ID:	GC-MS 18	**Analysis Lot:**	KWG1413536
Analysis Method:	8260C		

		Fluorobenzene		Chlorobenzene-d5		1,4-Dichlorobenzene-d4	
		Area	**RT**	**Area**	**RT**	**Area**	**RT**
	Results ==>	301,811	6.32	130,439	9.64	122,453	12.05
	Upper Limit ==>	603,622	6.82	260,878	10.14	244,906	12.55
	Lower Limit ==>	150,906	5.82	65,220	9.14	61,227	11.55
	ICAL Result ==>	325,249	6.32	135,589	9.64	130,777	12.05
Associated Analyses							
Lab Control Sample	KWG1413535-3	308,648	6.32	128,402	9.64	124,107	12.05
LGC140925SLAPI-1MS	KWG1413535-1	306,614	6.32	130,250	9.64	125,937	12.05
LGC140925SLAPI-1DMS	KWG1413535-2	308,209	6.32	131,143	9.64	125,229	12.05
Method Blank	KWG1413535-5	294,367	6.32	122,184	9.64	111,974	12.05
LGC140925ISLX2-1	K1410537-001	289,010	6.32	121,588	9.64	108,395	12.05
LGC140925ISLX3-1	K1410537-002	284,051	6.32	121,105	9.64	107,507	12.05
LGC140925ISLX4-1	K1410537-003	286,897	6.32	119,532	9.64	106,768	12.05
LGC140925ISLX5-1	K1410537-004	281,716	6.32	117,843	9.64	107,695	12.05
LGC140925ISLX6-1	K1410537-005	281,262	6.32	119,548	9.64	108,374	12.05
LGC140925ISLX7-1	K1410537-006	280,151	6.32	121,479	9.64	102,902	12.05
LGC140925ISLX9-1	K1410537-007	283,873	6.32	121,840	9.64	105,647	12.05
LGC140925ISLX11-1	K1410537-008	276,780	6.32	117,313	9.64	102,359	12.05
LGC140925ISLX12-1	K1410537-009	276,901	6.32	118,217	9.64	107,088	12.05
LGC140925ISLX13-1	K1410537-010	276,022	6.32	118,572	9.64	105,464	12.05
LGC140925ISLX14-1	K1410537-011	274,509	6.32	118,346	9.64	102,746	12.05
LGC140925ISLX15-1	K1410537-012	278,505	6.32	114,793	9.64	102,489	12.05
LGC140925DUP6-1	K1410537-013	272,294	6.32	117,969	9.64	104,538	12.05
LGC140925ISI-1	K1410537-014	276,620	6.32	118,428	9.64	103,909	12.05
LGC140925ISE-1	K1410537-015	276,528	6.32	116,094	9.64	108,889	12.05
LGC140925SLAPE-1	K1410537-016	275,351	6.32	114,673	9.64	102,036	12.05
LGC140925SLAPI-1	K1410537-017	277,142	6.32	120,642	9.64	104,124	12.05

Results flagged with an asterisk (*) indicate values outside control criteria.

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1410537
Project:	TO 01 JBLM	**Date Analyzed:**	10/07/2014
		Time Analyzed:	12:11

Internal Standard Area and RT Summary
Volatile Organic Compounds

File ID:	J:\MS18\DATA\100714\1007F007.D	**Lab Code:**	KWG1413593-2
Instrument ID:	GC-MS 18	**Analysis Lot:**	KWG1413593
Analysis Method:	8260C		

		Fluorobenzene		Chlorobenzene-d5		1,4-Dichlorobenzene-d4	
		Area	**RT**	**Area**	**RT**	**Area**	**RT**
	Results ==>	306,544	6.32	123,536	9.64	118,925	12.05
	Upper Limit ==>	613,088	6.82	247,072	10.14	237,850	12.55
	Lower Limit ==>	153,272	5.82	61,768	9.14	59,463	11.55
	ICAL Result ==>	325,249	6.32	135,589	9.64	130,777	12.05
Associated Analyses							
LGC140925MAMC4-1MS	KWG1413599-4	319,808	6.32	128,797	9.64	121,399	12.05
LGC140925MAMC4-1DMS	KWG1413599-5	317,652	6.32	130,550	9.64	122,204	12.05
Method Blank	KWG1413599-3	301,220	6.32	121,497	9.64	105,331	12.05
LGC140925MAMC4-1	K1410537-019	298,039	6.32	123,245	9.64	105,521	12.05
LGC140925MAMC3-1	K1410537-018	277,231	6.32	116,349	9.64	102,569	12.05
LGC140925LC74D-1	K1410537-022	284,217	6.32	119,874	9.64	102,988	12.05
LGC140925LC96D-1	K1410537-023	283,246	6.32	116,132	9.64	101,628	12.05
LGC140925SLAP6-1	K1410537-024	279,284	6.32	114,477	9.64	98,097	12.05
TB092514	K1410537-025	283,121	6.32	114,204	9.64	100,954	12.05
LGC140925LC99D-1	K1410537-021	283,004	6.32	116,844	9.64	99,815	12.05
LGC140925EGDYPW2-1	K1410537-027	286,103	6.32	117,944	9.64	102,847	12.05
LGC140925DUP7-1DL	K1410537-020	285,743	6.32	116,183	9.64	100,056	12.05
LGC140925DUP7-1	K1410537-020	276,898	6.32	118,373	9.64	100,849	12.05
LGC140925EGDYPW3-1DL	K1410537-028	280,779	6.32	116,622	9.64	101,512	12.05
LGC140925EGDYPW3-1	K1410537-028	287,619	6.32	116,684	9.64	101,448	12.05
LGC140925EGDYPW1-1DL	K1410537-026	284,884	6.32	114,854	9.64	101,951	12.05
LGC140925EGDYPW1-1	K1410537-026	276,884	6.32	114,292	9.64	99,264	12.05
Lab Control Sample	KWG1413599-1	292,154	6.32	120,253	9.64	113,776	12.05

Results flagged with an asterisk (*) indicate values outside control criteria.

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1410537
Project:	TO 01 JBLM	**Date Analyzed:**	10/08/2014
		Time Analyzed:	14:02

Internal Standard Area and RT Summary
Volatile Organic Compounds

File ID:	J:\MS18\DATA\100814\1008F002.D	**Lab Code:**	KWG1413664-2
Instrument ID:	GC-MS 18	**Analysis Lot:**	KWG1413664
Analysis Method:	8260C		

		Fluorobenzene		Chlorobenzene-d5		1,4-Dichlorobenzene-d4	
		Area	**RT**	**Area**	**RT**	**Area**	**RT**
	Results ==>	293,886	6.31	122,224	9.64	113,449	12.05
	Upper Limit ==>	587,772	6.81	244,448	10.14	226,898	12.55
	Lower Limit ==>	146,943	5.81	61,112	9.14	56,725	11.55
	ICAL Result ==>	325,249	6.32	135,589	9.64	130,777	12.05
Associated Analyses							
Lab Control Sample	KWG1413665-1	296,591	6.31	121,896	9.64	113,053	12.05
Duplicate Lab Control Sample	KWG1413665-2	298,717	6.32	123,794	9.64	111,407	12.05
Method Blank	KWG1413665-3	291,454	6.32	119,685	9.64	103,477	12.05
LGC140925EGDYPW4-1	K1410537-029	285,694	6.32	119,144	9.64	101,480	12.05
LGC140925EGDYPW5-1	K1410537-030	289,170	6.32	117,715	9.64	102,988	12.05
LGC140925EGDYPW6-1	K1410537-031	283,899	6.32	115,722	9.64	101,600	12.05
LGC140925EGDYPW7-1	K1410537-032	287,307	6.32	116,286	9.64	99,800	12.05
LGC140925EGDYPW8-1	K1410537-033	278,501	6.32	115,669	9.64	99,189	12.05
LGC140925EGDYE-1	K1410537-034	282,440	6.32	115,728	9.64	100,896	12.05
LGC140925EGDYI-1	K1410537-035	275,654	6.32	114,800	9.64	97,684	12.05

Results flagged with an asterisk (*) indicate values outside control criteria.

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1410537
Project:	TO 01 JBLM	**Date Extracted:**	10/06/2014
Sample Matrix:	Water	**Date Analyzed:**	10/06/2014

Matrix Spike/Duplicate Matrix Spike Summary
Volatile Organic Compounds

Sample Name:	LGC140925SLAPI-1	**Units:**	ug/L
Lab Code:	K1410537-017	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8260C	**Extraction Lot:**	KWG1413535

		LGC140925SLAPI-1MS KWG1413535-1 Matrix Spike				LGC140925SLAPI-1DMS KWG1413535-2 Duplicate Matrix Spike					
Analyte Name	**Sample Result**	**Result**	**Spike Amount**	**%Rec**		**Result**	**Spike Amount**	**%Rec**		**%Rec Limits**	**RPD**	**RPD Limit**
Dichlorodifluoromethane	ND	11.0	10.0	110		10.4	10.0	104		30-155	5	30
Chloromethane	0.18	12.8	10.0	126	*	11.8	10.0	116		40-125	8	30
Vinyl Chloride	ND	14.3	10.0	143		13.5	10.0	135		50-145	6	30
Bromomethane	ND	7.96	10.0	80		7.56	10.0	76		30-145	5	30
Chloroethane	ND	16.6	10.0	166	*	15.8	10.0	158	*	60-135	5	30
Trichlorofluoromethane	ND	11.7	10.0	117		11.1	10.0	111		60-145	5	30
1,1-Dichloroethene	ND	14.9	10.0	149	*	14.4	10.0	144	*	70-130	3	30
Acetone	ND	68.5	50.0	137		70.7	50.0	141	*	40-140	3	30
Carbon Disulfide	ND	28.4	20.0	142		26.5	20.0	133		35-160	7	30
Methylene Chloride	ND	10.9	10.0	109		10.6	10.0	106		55-140	3	30
Methyl tert-Butyl Ether	ND	10.4	10.0	104		9.78	10.0	98		65-125	6	30
trans-1,2-Dichloroethene	ND	13.8	10.0	138		12.7	10.0	127		60-140	8	30
1,1-Dichloroethane	ND	14.5	10.0	145	*	14.4	10.0	144	*	70-135	1	30
2,2-Dichloropropane	ND	7.59	10.0	76		7.26	10.0	73		70-135	4	30
cis-1,2-Dichloroethene	0.47	13.2	10.0	127	*	12.7	10.0	122		70-125	4	30
2-Butanone (MEK)	ND	68.2	50.0	136		69.2	50.0	138		30-150	1	30
Bromochloromethane	ND	12.7	10.0	127		12.6	10.0	126		65-130	1	30
Chloroform	0.11	13.0	10.0	129		12.5	10.0	124		65-135	4	30
1,1,1-Trichloroethane (TCA)	0.090	12.0	10.0	119		11.6	10.0	115		65-130	3	30
Carbon Tetrachloride	ND	12.3	10.0	123		11.7	10.0	117		65-140	5	30
1,1-Dichloropropene	ND	14.3	10.0	143	*	14.1	10.0	141	*	75-130	1	30
Benzene	ND	13.3	10.0	133	*	12.7	10.0	127	*	80-120	4	30
1,2-Dichloroethane (EDC)	ND	13.5	10.0	135	*	12.9	10.0	129		70-130	4	30
Trichloroethene (TCE)	20	33.0	10.0	134	*	31.1	10.0	114		70-125	6	30
1,2-Dichloropropane	ND	12.9	10.0	129	*	12.6	10.0	126	*	75-125	2	30
Dibromomethane	ND	12.9	10.0	129	*	12.1	10.0	121		75-125	7	30
Bromodichloromethane	ND	11.8	10.0	118		11.6	10.0	116		75-120	2	30
cis-1,3-Dichloropropene	ND	10.2	10.0	102		9.90	10.0	99		70-130	3	30
4-Methyl-2-pentanone (MIBK)	ND	70.9	50.0	142	*	67.6	50.0	135		60-135	5	30
Toluene	ND	12.8	10.0	128	*	12.4	10.0	124	*	75-120	3	30
trans-1,3-Dichloropropene	ND	8.63	10.0	86		8.21	10.0	82		55-140	5	30
1,1,2-Trichloroethane	ND	12.6	10.0	126	*	12.1	10.0	121		75-125	4	30
Tetrachloroethene (PCE)	ND	12.7	10.0	127		11.8	10.0	118		45-150	7	30

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1410537
Project:	TO 01 JBLM	**Date Extracted:**	10/06/2014
Sample Matrix:	Water	**Date Analyzed:**	10/06/2014

Matrix Spike/Duplicate Matrix Spike Summary
Volatile Organic Compounds

Sample Name:	LGC140925SLAPI-1	**Units:**	ug/L
Lab Code:	K1410537-017	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8260C	**Extraction Lot:**	KWG1413535

		LGC140925SLAPI-1MS KWG1413535-1 Matrix Spike			LGC140925SLAPI-1DMS KWG1413535-2 Duplicate Matrix Spike					
Analyte Name	**Sample Result**	**Result**	**Spike Amount**	**%Rec**	**Result**	**Spike Amount**	**%Rec**	**%Rec Limits**	**RPD**	**RPD Limit**
2-Hexanone	ND	69.2	50.0	138 *	65.0	50.0	130	55-130	6	30
1,3-Dichloropropane	ND	12.9	10.0	129 *	12.7	10.0	127 *	75-125	2	30
Dibromochloromethane	ND	11.7	10.0	117	11.2	10.0	112	60-135	4	30
1,2-Dibromoethane (EDB)	ND	12.1	10.0	121 *	11.9	10.0	119	80-120	1	30
Chlorobenzene	ND	12.2	10.0	122 *	12.0	10.0	120	80-120	2	30
Ethylbenzene	ND	12.4	10.0	124	11.9	10.0	119	75-125	4	30
1,1,1,2-Tetrachloroethane	ND	11.0	10.0	110	10.6	10.0	106	80-130	4	30
m,p-Xylenes	ND	25.4	20.0	127	24.5	20.0	122	75-130	4	30
o-Xylene	ND	12.4	10.0	124 *	11.9	10.0	119	80-120	4	30
Styrene	ND	12.8	10.0	128	12.4	10.0	124	65-135	3	30
Bromoform	ND	10.3	10.0	103	9.84	10.0	98	70-130	5	30
Isopropylbenzene	ND	12.7	10.0	127 *	12.2	10.0	122	75-125	4	30
1,1,2,2-Tetrachloroethane	ND	13.3	10.0	133 *	12.9	10.0	129	65-130	3	30
Bromobenzene	ND	12.0	10.0	120	11.6	10.0	116	75-125	3	30
n-Propylbenzene	ND	12.9	10.0	129	12.4	10.0	124	70-130	4	30
1,2,3-Trichloropropane	ND	12.7	10.0	127 *	12.6	10.0	126 *	75-125	1	30
2-Chlorotoluene	ND	12.7	10.0	127 *	12.2	10.0	122	75-125	4	30
1,3,5-Trimethylbenzene	ND	13.3	10.0	133 *	12.7	10.0	127	75-130	5	30
4-Chlorotoluene	ND	12.7	10.0	127	12.2	10.0	122	75-130	4	30
tert-Butylbenzene	ND	12.9	10.0	129	12.6	10.0	126	70-130	3	30
1,2,4-Trimethylbenzene	ND	12.9	10.0	129	12.4	10.0	124	75-130	4	30
sec-Butylbenzene	ND	13.1	10.0	131 *	12.4	10.0	124	70-125	5	30
4-Isopropyltoluene	ND	13.2	10.0	132 *	12.7	10.0	127	75-130	4	30
1,3-Dichlorobenzene	ND	12.3	10.0	123	11.8	10.0	118	75-125	4	30
1,4-Dichlorobenzene	ND	12.4	10.0	124	11.9	10.0	119	75-125	4	30
n-Butylbenzene	ND	13.1	10.0	131	12.6	10.0	126	70-135	4	30
1,2-Dichlorobenzene	ND	12.4	10.0	124 *	12.0	10.0	120	70-120	3	30
1,2-Dibromo-3-chloropropane	ND	10.7	10.0	107	9.69	10.0	97	50-130	10	30
1,2,4-Trichlorobenzene	ND	12.2	10.0	122	11.7	10.0	117	65-135	4	30
Hexachlorobutadiene	ND	12.6	10.0	126	12.2	10.0	122	50-140	3	30
Naphthalene	ND	14.0	10.0	140	13.6	10.0	136	55-140	3	30
1,2,3-Trichlorobenzene	ND	13.3	10.0	133	12.5	10.0	125	55-140	6	30

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QA/QC Report

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1410537
Project:	TO 01 JBLM	**Date Extracted:**	10/07/2014
Sample Matrix:	Water	**Date Analyzed:**	10/07/2014

Matrix Spike/Duplicate Matrix Spike Summary
Volatile Organic Compounds

Sample Name:	LGC140925MAMC4-1	**Units:**	ug/L
Lab Code:	K1410537-019	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8260C	**Extraction Lot:**	KWG1413599

		LGC140925MAMC4-1MS KWG1413599-4 Matrix Spike				LGC140925MAMC4-1DMS KWG1413599-5 Duplicate Matrix Spike					
Analyte Name	**Sample Result**	**Result**	**Spike Amount**	**%Rec**		**Result**	**Spike Amount**	**%Rec**		**%Rec Limits**	**RPD**	**RPD Limit**
Dichlorodifluoromethane	ND	9.66	10.0	97		9.79	10.0	98		30-155	1	30
Chloromethane	0.20	11.5	10.0	113		12.0	10.0	118		40-125	4	30
Vinyl Chloride	ND	12.6	10.0	126		12.5	10.0	125		50-145	1	30
Bromomethane	ND	6.17	10.0	62		6.34	10.0	63		30-145	3	30
Chloroethane	ND	14.2	10.0	142	*	14.8	10.0	148	*	60-135	4	30
Trichlorofluoromethane	ND	11.4	10.0	114		11.2	10.0	112		60-145	2	30
1,1-Dichloroethene	ND	14.2	10.0	142	*	14.2	10.0	142	*	70-130	0	30
Acetone	ND	60.0	50.0	120		58.7	50.0	117		40-140	2	30
Carbon Disulfide	ND	26.3	20.0	131		26.1	20.0	131		35-160	1	30
Methylene Chloride	ND	10.0	10.0	100		10.1	10.0	101		55-140	1	30
Methyl tert-Butyl Ether	ND	9.26	10.0	93		9.21	10.0	92		65-125	1	30
trans-1,2-Dichloroethene	ND	12.6	10.0	126		13.1	10.0	131		60-140	4	30
1,1-Dichloroethane	ND	14.2	10.0	142	*	14.3	10.0	143	*	70-135	1	30
2,2-Dichloropropane	ND	8.56	10.0	86		8.89	10.0	89		70-135	4	30
cis-1,2-Dichloroethene	ND	11.9	10.0	119		11.7	10.0	117		70-125	2	30
2-Butanone (MEK)	ND	54.0	50.0	108		57.9	50.0	116		30-150	7	30
Bromochloromethane	ND	12.1	10.0	121		12.2	10.0	122		65-130	1	30
Chloroform	ND	12.4	10.0	124		12.7	10.0	127		65-135	2	30
1,1,1-Trichloroethane (TCA)	ND	11.3	10.0	113		11.8	10.0	118		65-130	4	30
Carbon Tetrachloride	ND	11.8	10.0	118		11.6	10.0	116		65-140	2	30
1,1-Dichloropropene	ND	13.8	10.0	138	*	13.9	10.0	139	*	75-130	1	30
Benzene	ND	12.7	10.0	127	*	12.8	10.0	128	*	80-120	1	30
1,2-Dichloroethane (EDC)	ND	12.4	10.0	124		12.9	10.0	129		70-130	4	30
Trichloroethene (TCE)	ND	12.0	10.0	120		12.4	10.0	124		70-125	3	30
1,2-Dichloropropane	ND	12.2	10.0	122		12.4	10.0	124		75-125	1	30
Dibromomethane	ND	11.2	10.0	112		11.7	10.0	117		75-125	4	30
Bromodichloromethane	ND	11.2	10.0	112		11.2	10.0	112		75-120	1	30
cis-1,3-Dichloropropene	ND	9.86	10.0	99		9.99	10.0	100		70-130	1	30
4-Methyl-2-pentanone (MIBK)	ND	58.1	50.0	116		58.8	50.0	118		60-135	1	30
Toluene	ND	11.7	10.0	117		11.9	10.0	119		75-120	1	30
trans-1,3-Dichloropropene	ND	8.20	10.0	82		8.48	10.0	85		55-140	3	30
1,1,2-Trichloroethane	ND	11.5	10.0	115		11.6	10.0	116		75-125	0	30
Tetrachloroethene (PCE)	ND	12.6	10.0	126		12.0	10.0	120		45-150	5	30

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Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1410537
Project:	TO 01 JBLM	**Date Extracted:**	10/07/2014
Sample Matrix:	Water	**Date Analyzed:**	10/07/2014

Matrix Spike/Duplicate Matrix Spike Summary
Volatile Organic Compounds

Sample Name:	LGC140925MAMC4-1	**Units:**	ug/L
Lab Code:	K1410537-019	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8260C	**Extraction Lot:**	KWG1413599

		LGC140925MAMC4-1MS KWG1413599-4 Matrix Spike			LGC140925MAMC4-1DMS KWG1413599-5 Duplicate Matrix Spike					
Analyte Name	**Sample Result**	**Result**	**Spike Amount**	**%Rec**	**Result**	**Spike Amount**	**%Rec**	**%Rec Limits**	**RPD**	**RPD Limit**
2-Hexanone	ND	57.2	50.0	114	57.2	50.0	114	55-130	0	30
1,3-Dichloropropane	ND	12.0	10.0	120	12.0	10.0	120	75-125	0	30
Dibromochloromethane	ND	10.4	10.0	104	10.8	10.0	108	60-135	4	30
1,2-Dibromoethane (EDB)	ND	10.8	10.0	108	10.9	10.0	109	80-120	1	30
Chlorobenzene	ND	11.7	10.0	117	11.7	10.0	117	80-120	0	30
Ethylbenzene	ND	11.7	10.0	117	11.6	10.0	116	75-125	1	30
1,1,1,2-Tetrachloroethane	ND	10.4	10.0	104	10.3	10.0	103	80-130	1	30
m,p-Xylenes	ND	24.3	20.0	121	23.8	20.0	119	75-130	2	30
o-Xylene	ND	11.6	10.0	116	11.5	10.0	115	80-120	1	30
Styrene	ND	11.9	10.0	119	11.7	10.0	117	65-135	2	30
Bromoform	ND	8.86	10.0	89	9.00	10.0	90	70-130	2	30
Isopropylbenzene	ND	11.8	10.0	118	11.8	10.0	118	75-125	0	30
1,1,2,2-Tetrachloroethane	ND	11.1	10.0	111	11.5	10.0	115	65-130	4	30
Bromobenzene	ND	11.5	10.0	115	11.5	10.0	115	75-125	0	30
n-Propylbenzene	ND	12.7	10.0	127	12.6	10.0	126	70-130	0	30
1,2,3-Trichloropropane	ND	10.6	10.0	106	10.8	10.0	108	75-125	2	30
2-Chlorotoluene	ND	11.9	10.0	119	11.9	10.0	119	75-125	0	30
1,3,5-Trimethylbenzene	ND	12.7	10.0	127	12.7	10.0	127	75-130	0	30
4-Chlorotoluene	ND	12.2	10.0	122	12.1	10.0	121	75-130	0	30
tert-Butylbenzene	ND	12.4	10.0	124	12.3	10.0	123	70-130	1	30
1,2,4-Trimethylbenzene	ND	12.5	10.0	125	12.5	10.0	125	75-130	0	30
sec-Butylbenzene	ND	12.4	10.0	124	12.2	10.0	122	70-125	1	30
4-Isopropyltoluene	ND	12.7	10.0	127	12.8	10.0	128	75-130	0	30
1,3-Dichlorobenzene	ND	11.6	10.0	116	11.6	10.0	116	75-125	0	30
1,4-Dichlorobenzene	ND	11.7	10.0	117	11.6	10.0	116	75-125	0	30
n-Butylbenzene	ND	13.3	10.0	133	13.0	10.0	130	70-135	2	30
1,2-Dichlorobenzene	ND	11.6	10.0	116	11.6	10.0	116	70-120	0	30
1,2-Dibromo-3-chloropropane	ND	9.18	10.0	92	9.67	10.0	97	50-130	5	30
1,2,4-Trichlorobenzene	ND	12.0	10.0	120	12.0	10.0	120	65-135	0	30
Hexachlorobutadiene	ND	12.8	10.0	128	12.7	10.0	127	50-140	1	30
Naphthalene	ND	11.8	10.0	118	12.3	10.0	123	55-140	4	30
1,2,3-Trichlorobenzene	ND	12.7	10.0	127	12.6	10.0	126	55-140	0	30

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QA/QC Report

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1410537
Project:	TO 01 JBLM	**Date Extracted:**	10/06/2014
Sample Matrix:	Water	**Date Analyzed:**	10/06/2014

Lab Control Spike Summary
Volatile Organic Compounds

Extraction Method:	EPA 5030B	**Units:**	ug/L
Analysis Method:	8260C	**Basis:**	NA
		Level:	Low
		Extraction Lot:	KWG1413535

Lab Control Sample
KWG1413535-3
Lab Control Spike

Analyte Name	Result	Spike Amount	%Rec		%Rec Limits
Dichlorodifluoromethane	8.56	10.0	86		30-155
Chloromethane	10.4	10.0	104		40-125
Vinyl Chloride	11.3	10.0	113		50-145
Bromomethane	6.36	10.0	64		30-145
Chloroethane	13.0	10.0	130		60-135
Trichlorofluoromethane	9.59	10.0	96		60-145
1,1-Dichloroethene	12.3	10.0	123		70-130
Acetone	72.7	50.0	145	*	40-140
Carbon Disulfide	22.3	20.0	111		35-160
Methylene Chloride	9.90	10.0	99		55-140
Methyl tert-Butyl Ether	8.54	10.0	85		65-125
trans-1,2-Dichloroethene	11.1	10.0	111		60-140
1,1-Dichloroethane	12.4	10.0	124		70-135
2,2-Dichloropropane	6.17	10.0	62	*	70-135
cis-1,2-Dichloroethene	10.8	10.0	108		70-125
2-Butanone (MEK)	62.0	50.0	124		30-150
Bromochloromethane	11.5	10.0	115		65-130
Chloroform	11.0	10.0	110		65-135
1,1,1-Trichloroethane (TCA)	9.72	10.0	97		65-130
Carbon Tetrachloride	9.86	10.0	99		65-140
1,1-Dichloropropene	12.0	10.0	120		75-130
Benzene	11.3	10.0	113		80-120
1,2-Dichloroethane (EDC)	11.4	10.0	114		70-130
Trichloroethene (TCE)	11.1	10.0	111		70-125
1,2-Dichloropropane	10.9	10.0	109		75-125
Dibromomethane	11.0	10.0	110		75-125
Bromodichloromethane	10.2	10.0	102		75-120
cis-1,3-Dichloropropene	8.87	10.0	89		70-130
4-Methyl-2-pentanone (MIBK)	59.8	50.0	120		60-135
Toluene	10.7	10.0	107		75-120
trans-1,3-Dichloropropene	7.39	10.0	74		55-140
1,1,2-Trichloroethane	11.4	10.0	114		75-125
Tetrachloroethene (PCE)	10.3	10.0	103		45-150
2-Hexanone	58.8	50.0	118		55-130
1,3-Dichloropropane	11.8	10.0	118		75-125

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QA/QC Report

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1410537
Project:	TO 01 JBLM	**Date Extracted:**	10/06/2014
Sample Matrix:	Water	**Date Analyzed:**	10/06/2014

Lab Control Spike Summary
Volatile Organic Compounds

Extraction Method:	EPA 5030B	**Units:**	ug/L
Analysis Method:	8260C	**Basis:**	NA
		Level:	Low
		Extraction Lot:	KWG1413535

Lab Control Sample
KWG1413535-3
Lab Control Spike

Analyte Name	Result	Spike Amount	%Rec	%Rec Limits
Dibromochloromethane	9.94	10.0	99	60-135
1,2-Dibromoethane (EDB)	10.7	10.0	107	80-120
Chlorobenzene	10.8	10.0	108	80-120
Ethylbenzene	10.8	10.0	108	75-125
1,1,1,2-Tetrachloroethane	9.45	10.0	95	80-130
m,p-Xylenes	21.7	20.0	109	75-130
o-Xylene	10.8	10.0	108	80-120
Styrene	11.1	10.0	111	65-135
Bromoform	8.80	10.0	88	70-130
Isopropylbenzene	10.8	10.0	108	75-125
1,1,2,2-Tetrachloroethane	11.6	10.0	116	65-130
Bromobenzene	10.3	10.0	103	75-125
n-Propylbenzene	10.9	10.0	109	70-130
1,2,3-Trichloropropane	10.6	10.0	106	75-125
2-Chlorotoluene	10.8	10.0	108	75-125
1,3,5-Trimethylbenzene	11.2	10.0	112	75-130
4-Chlorotoluene	10.8	10.0	108	75-130
tert-Butylbenzene	11.1	10.0	111	70-130
1,2,4-Trimethylbenzene	11.2	10.0	112	75-130
sec-Butylbenzene	10.9	10.0	109	70-125
4-Isopropyltoluene	11.0	10.0	110	75-130
1,3-Dichlorobenzene	10.6	10.0	106	75-125
1,4-Dichlorobenzene	10.7	10.0	107	75-125
n-Butylbenzene	11.2	10.0	112	70-135
1,2-Dichlorobenzene	11.0	10.0	110	70-120
1,2-Dibromo-3-chloropropane	9.06	10.0	91	50-130
1,2,4-Trichlorobenzene	10.5	10.0	105	65-135
Hexachlorobutadiene	10.2	10.0	102	50-140
Naphthalene	12.1	10.0	121	55-140
1,2,3-Trichlorobenzene	11.0	10.0	110	55-140

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QA/QC Report

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1410537
Project:	TO 01 JBLM	**Date Extracted:**	10/07/2014
Sample Matrix:	Water	**Date Analyzed:**	10/07/2014

Lab Control Spike Summary
Volatile Organic Compounds

Extraction Method:	EPA 5030B	**Units:**	ug/L
Analysis Method:	8260C	**Basis:**	NA
		Level:	Low
		Extraction Lot:	KWG1413599

Lab Control Sample
KWG1413599-1
Lab Control Spike

Analyte Name	Result	Spike Amount	%Rec		%Rec Limits
Dichlorodifluoromethane	8.76	10.0	88		30-155
Chloromethane	10.3	10.0	103		40-125
Vinyl Chloride	11.6	10.0	116		50-145
Bromomethane	4.67	10.0	47		30-145
Chloroethane	13.3	10.0	133		60-135
Trichlorofluoromethane	9.93	10.0	99		60-145
1,1-Dichloroethene	12.4	10.0	124		70-130
Acetone	68.3	50.0	137		40-140
Carbon Disulfide	23.4	20.0	117		35-160
Methylene Chloride	9.80	10.0	98		55-140
Methyl tert-Butyl Ether	8.32	10.0	83		65-125
trans-1,2-Dichloroethene	11.5	10.0	115		60-140
1,1-Dichloroethane	12.8	10.0	128		70-135
2,2-Dichloropropane	6.13	10.0	61	*	70-135
cis-1,2-Dichloroethene	10.7	10.0	107		70-125
2-Butanone (MEK)	56.6	50.0	113		30-150
Bromochloromethane	11.4	10.0	114		65-130
Chloroform	11.5	10.0	115		65-135
1,1,1-Trichloroethane (TCA)	10.0	10.0	100		65-130
Carbon Tetrachloride	10.3	10.0	103		65-140
1,1-Dichloropropene	12.3	10.0	123		75-130
Benzene	11.5	10.0	115		80-120
1,2-Dichloroethane (EDC)	12.1	10.0	121		70-130
Trichloroethene (TCE)	11.8	10.0	118		70-125
1,2-Dichloropropane	11.1	10.0	111		75-125
Dibromomethane	11.0	10.0	110		75-125
Bromodichloromethane	10.8	10.0	108		75-120
cis-1,3-Dichloropropene	8.53	10.0	85		70-130
4-Methyl-2-pentanone (MIBK)	53.0	50.0	106		60-135
Toluene	10.7	10.0	107		75-120
trans-1,3-Dichloropropene	6.92	10.0	69		55-140
1,1,2-Trichloroethane	10.6	10.0	106		75-125
Tetrachloroethene (PCE)	10.8	10.0	108		45-150
2-Hexanone	54.0	50.0	108		55-130
1,3-Dichloropropane	11.1	10.0	111		75-125

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Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1410537
Project:	TO 01 JBLM	**Date Extracted:**	10/07/2014
Sample Matrix:	Water	**Date Analyzed:**	10/07/2014

Lab Control Spike Summary
Volatile Organic Compounds

Extraction Method:	EPA 5030B	**Units:**	ug/L
Analysis Method:	8260C	**Basis:**	NA
		Level:	Low
		Extraction Lot:	KWG1413599

Lab Control Sample
KWG1413599-1
Lab Control Spike

Analyte Name	Result	Spike Amount	%Rec	%Rec Limits
Dibromochloromethane	10.1	10.0	101	60-135
1,2-Dibromoethane (EDB)	10.1	10.0	101	80-120
Chlorobenzene	10.8	10.0	108	80-120
Ethylbenzene	10.5	10.0	105	75-125
1,1,1,2-Tetrachloroethane	9.81	10.0	98	80-130
m,p-Xylenes	21.6	20.0	108	75-130
o-Xylene	10.4	10.0	104	80-120
Styrene	10.8	10.0	108	65-135
Bromoform	8.34	10.0	83	70-130
Isopropylbenzene	10.8	10.0	108	75-125
1,1,2,2-Tetrachloroethane	10.5	10.0	105	65-130
Bromobenzene	10.3	10.0	103	75-125
n-Propylbenzene	11.0	10.0	110	70-130
1,2,3-Trichloropropane	10.4	10.0	104	75-125
2-Chlorotoluene	11.0	10.0	110	75-125
1,3,5-Trimethylbenzene	11.3	10.0	113	75-130
4-Chlorotoluene	10.9	10.0	109	75-130
tert-Butylbenzene	11.1	10.0	111	70-130
1,2,4-Trimethylbenzene	11.1	10.0	111	75-130
sec-Butylbenzene	10.9	10.0	109	70-125
4-Isopropyltoluene	11.2	10.0	112	75-130
1,3-Dichlorobenzene	10.5	10.0	105	75-125
1,4-Dichlorobenzene	10.6	10.0	106	75-125
n-Butylbenzene	11.4	10.0	114	70-135
1,2-Dichlorobenzene	10.6	10.0	106	70-120
1,2-Dibromo-3-chloropropane	8.45	10.0	85	50-130
1,2,4-Trichlorobenzene	10.6	10.0	106	65-135
Hexachlorobutadiene	10.2	10.0	102	50-140
Naphthalene	11.1	10.0	111	55-140
1,2,3-Trichlorobenzene	11.3	10.0	113	55-140

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Client: Sealaska Environmental Services, LLC
Project: TO 01 JBLM
Sample Matrix: Water

Service Request: K1410537
Date Extracted: 10/08/2014
Date Analyzed: 10/08/2014

Lab Control Spike/Duplicate Lab Control Spike Summary
Volatile Organic Compounds

Extraction Method: EPA 5030B
Analysis Method: 8260C

Units: ug/L
Basis: NA
Level: Low
Extraction Lot: KWG1413665

	Lab Control Sample KWG1413665-1 Lab Control Spike			Duplicate Lab Control Sample KWG1413665-2 Duplicate Lab Control Spike					
Analyte Name	**Result**	**Spike Amount**	**%Rec**	**Result**	**Spike Amount**	**%Rec**	**%Rec Limits**	**RPD**	**RPD Limit**
Dichlorodifluoromethane	8.68	10.0	87	8.45	10.0	85	30-155	3	30
Chloromethane	10.9	10.0	109	10.5	10.0	105	40-125	4	30
Vinyl Chloride	11.2	10.0	112	11.1	10.0	111	50-145	1	30
Bromomethane	7.84	10.0	78	7.31	10.0	73	30-145	7	30
Chloroethane	13.0	10.0	130	12.9	10.0	129	60-135	1	30
Trichlorofluoromethane	10.2	10.0	102	10.1	10.0	101	60-145	1	30
1,1-Dichloroethene	12.7	10.0	127	12.1	10.0	121	70-130	5	30
Acetone	64.1	50.0	128	66.4	50.0	133	40-140	4	30
Carbon Disulfide	23.9	20.0	120	23.3	20.0	117	35-160	2	30
Methylene Chloride	9.58	10.0	96	9.56	10.0	96	55-140	0	30
Methyl tert-Butyl Ether	7.96	10.0	80	8.73	10.0	87	65-125	9	30
trans-1,2-Dichloroethene	11.6	10.0	116	11.5	10.0	115	60-140	1	30
1,1-Dichloroethane	12.5	10.0	125	12.6	10.0	126	70-135	1	30
2,2-Dichloropropane	7.42	10.0	74	7.29	10.0	73	70-135	2	30
cis-1,2-Dichloroethene	11.0	10.0	110	11.0	10.0	110	70-125	1	30
2-Butanone (MEK)	53.2	50.0	106	58.1	50.0	116	30-150	9	30
Bromochloromethane	11.3	10.0	113	11.0	10.0	110	65-130	3	30
Chloroform	11.3	10.0	113	11.4	10.0	114	65-135	1	30
1,1,1-Trichloroethane (TCA)	10.2	10.0	102	10.2	10.0	102	65-130	0	30
Carbon Tetrachloride	10.7	10.0	107	10.7	10.0	107	65-140	0	30
1,1-Dichloropropene	12.2	10.0	122	12.3	10.0	123	75-130	1	30
Benzene	11.3	10.0	113	11.3	10.0	113	80-120	0	30
1,2-Dichloroethane (EDC)	11.7	10.0	117	11.9	10.0	119	70-130	2	30
Trichloroethene (TCE)	11.9	10.0	119	11.0	10.0	110	70-125	7	30
1,2-Dichloropropane	11.0	10.0	110	11.0	10.0	110	75-125	1	30
Dibromomethane	10.3	10.0	103	10.5	10.0	105	75-125	2	30
Bromodichloromethane	10.7	10.0	107	10.4	10.0	104	75-120	3	30
cis-1,3-Dichloropropene	9.40	10.0	94	9.71	10.0	97	70-130	3	30
4-Methyl-2-pentanone (MIBK)	50.5	50.0	101	55.9	50.0	112	60-135	10	30
Toluene	10.7	10.0	107	10.5	10.0	105	75-120	2	30
trans-1,3-Dichloropropene	7.62	10.0	76	7.64	10.0	76	55-140	0	30
1,1,2-Trichloroethane	10.3	10.0	103	10.7	10.0	107	75-125	4	30
Tetrachloroethene (PCE)	11.1	10.0	111	10.7	10.0	107	45-150	4	30
2-Hexanone	50.8	50.0	102	53.0	50.0	106	55-130	4	30
1,3-Dichloropropane	10.9	10.0	109	11.1	10.0	111	75-125	2	30

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

QA/QC Report

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1410537
Project:	TO 01 JBLM	**Date Extracted:**	10/08/2014
Sample Matrix:	Water	**Date Analyzed:**	10/08/2014

Lab Control Spike/Duplicate Lab Control Spike Summary
Volatile Organic Compounds

Extraction Method:	EPA 5030B	**Units:**	ug/L
Analysis Method:	8260C	**Basis:**	NA
		Level:	Low
		Extraction Lot:	KWG1413665

	Lab Control Sample KWG1413665-1 Lab Control Spike			Duplicate Lab Control Sample KWG1413665-2 Duplicate Lab Control Spike					
Analyte Name	**Result**	**Spike Amount**	**%Rec**	**Result**	**Spike Amount**	**%Rec**	**%Rec Limits**	**RPD**	**RPD Limit**
Dibromochloromethane	10.2	10.0	102	10.5	10.0	105	60-135	4	30
1,2-Dibromoethane (EDB)	9.70	10.0	97	10.1	10.0	101	80-120	4	30
Chlorobenzene	10.8	10.0	108	10.6	10.0	106	80-120	1	30
Ethylbenzene	10.6	10.0	106	10.3	10.0	103	75-125	3	30
1,1,1,2-Tetrachloroethane	9.42	10.0	94	9.55	10.0	96	80-130	1	30
m,p-Xylenes	21.3	20.0	107	21.3	20.0	106	75-130	0	30
o-Xylene	10.3	10.0	103	10.3	10.0	103	80-120	0	30
Styrene	10.4	10.0	104	10.6	10.0	106	65-135	2	30
Bromoform	8.43	10.0	84	8.51	10.0	85	70-130	1	30
Isopropylbenzene	10.6	10.0	106	10.4	10.0	104	75-125	2	30
1,1,2,2-Tetrachloroethane	10.1	10.0	101	11.5	10.0	115	65-130	13	30
Bromobenzene	10.7	10.0	107	10.8	10.0	108	75-125	0	30
n-Propylbenzene	11.5	10.0	115	11.7	10.0	117	70-130	2	30
1,2,3-Trichloropropane	9.99	10.0	100	10.6	10.0	106	75-125	6	30
2-Chlorotoluene	10.9	10.0	109	11.2	10.0	112	75-125	3	30
1,3,5-Trimethylbenzene	11.4	10.0	114	11.7	10.0	117	75-130	2	30
4-Chlorotoluene	11.2	10.0	112	11.4	10.0	114	75-130	1	30
tert-Butylbenzene	11.2	10.0	112	11.4	10.0	114	70-130	2	30
1,2,4-Trimethylbenzene	11.3	10.0	113	11.6	10.0	116	75-130	3	30
sec-Butylbenzene	11.1	10.0	111	11.3	10.0	113	70-125	2	30
4-Isopropyltoluene	11.5	10.0	115	11.6	10.0	116	75-130	1	30
1,3-Dichlorobenzene	10.7	10.0	107	11.0	10.0	110	75-125	2	30
1,4-Dichlorobenzene	10.5	10.0	105	10.9	10.0	109	75-125	4	30
n-Butylbenzene	11.7	10.0	117	11.9	10.0	119	70-135	2	30
1,2-Dichlorobenzene	10.7	10.0	107	11.0	10.0	110	70-120	3	30
1,2-Dibromo-3-chloropropane	8.51	10.0	85	9.83	10.0	98	50-130	14	30
1,2,4-Trichlorobenzene	10.6	10.0	106	11.2	10.0	112	65-135	6	30
Hexachlorobutadiene	10.8	10.0	108	11.1	10.0	111	50-140	3	30
Naphthalene	10.8	10.0	108	11.8	10.0	118	55-140	8	30
1,2,3-Trichlorobenzene	11.0	10.0	110	12.1	10.0	121	55-140	10	30

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

QA/QC Report

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1410537
Project:	TO 01 JBLM	**Date Extracted:**	10/06/2014
Sample Matrix:	Water	**Date Analyzed:**	10/06/2014
		Time Analyzed:	23:57

Method Blank Summary
Volatile Organic Compounds

Sample Name:	Method Blank	**Instrument ID:**	GC-MS 18
Lab Code:	KWG1413535-5	**File ID:**	J:\MS18\DATA\100614\1006F042.D
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8260C	**Extraction Lot:**	KWG1413535

This Method Blank applies to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
Lab Control Sample	KWG1413535-3	J:\MS18\DATA\100614\1006F037.D	10/06/14	22:10
LGC140925SLAPI-1MS	KWG1413535-1	J:\MS18\DATA\100614\1006F038.D	10/06/14	22:32
LGC140925SLAPI-1DMS	KWG1413535-2	J:\MS18\DATA\100614\1006F039.D	10/06/14	22:53
LGC140925ISLX2-1	K1410537-001	J:\MS18\DATA\100614\1006F046.D	10/07/14	01:23
LGC140925ISLX3-1	K1410537-002	J:\MS18\DATA\100614\1006F047.D	10/07/14	01:44
LGC140925ISLX4-1	K1410537-003	J:\MS18\DATA\100614\1006F048.D	10/07/14	02:06
LGC140925ISLX5-1	K1410537-004	J:\MS18\DATA\100614\1006F049.D	10/07/14	02:27
LGC140925ISLX6-1	K1410537-005	J:\MS18\DATA\100614\1006F050.D	10/07/14	02:48
LGC140925ISLX7-1	K1410537-006	J:\MS18\DATA\100614\1006F051.D	10/07/14	03:10
LGC140925ISLX9-1	K1410537-007	J:\MS18\DATA\100614\1006F052.D	10/07/14	03:31
LGC140925ISLX11-1	K1410537-008	J:\MS18\DATA\100614\1006F053.D	10/07/14	03:52
LGC140925ISLX12-1	K1410537-009	J:\MS18\DATA\100614\1006F054.D	10/07/14	04:14
LGC140925ISLX13-1	K1410537-010	J:\MS18\DATA\100614\1006F055.D	10/07/14	04:35
LGC140925ISLX14-1	K1410537-011	J:\MS18\DATA\100614\1006F056.D	10/07/14	04:56
LGC140925ISLX15-1	K1410537-012	J:\MS18\DATA\100614\1006F057.D	10/07/14	05:18
LGC140925DUP6-1	K1410537-013	J:\MS18\DATA\100614\1006F058.D	10/07/14	05:39
LGC140925ISI-1	K1410537-014	J:\MS18\DATA\100614\1006F059.D	10/07/14	06:01
LGC140925ISE-1	K1410537-015	J:\MS18\DATA\100614\1006F060.D	10/07/14	06:22
LGC140925SLAPE-1	K1410537-016	J:\MS18\DATA\100614\1006F061.D	10/07/14	06:43
LGC140925SLAPI-1	K1410537-017	J:\MS18\DATA\100614\1006F062.D	10/07/14	07:05

QA/QC Report

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1410537
Project:	TO 01 JBLM	**Date Extracted:**	10/07/2014
Sample Matrix:	Water	**Date Analyzed:**	10/07/2014
		Time Analyzed:	14:57

Method Blank Summary
Volatile Organic Compounds

Sample Name:	Method Blank	**Instrument ID:**	GC-MS 18
Lab Code:	KWG1413599-3	**File ID:**	J:\MS18\DATA\100714\1007F014.D
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8260C	**Extraction Lot:**	KWG1413599

This Method Blank applies to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
LGC140925MAMC4-1MS	KWG1413599-4	J:\MS18\DATA\100714\1007F010.D	10/07/14	13:31
LGC140925MAMC4-1DMS	KWG1413599-5	J:\MS18\DATA\100714\1007F011.D	10/07/14	13:53
LGC140925MAMC4-1	K1410537-019	J:\MS18\DATA\100714\1007F015.D	10/07/14	15:18
LGC140925MAMC3-1	K1410537-018	J:\MS18\DATA\100714\1007F024.D	10/07/14	18:33
LGC140925LC74D-1	K1410537-022	J:\MS18\DATA\100714\1007F025.D	10/07/14	18:54
LGC140925LC96D-1	K1410537-023	J:\MS18\DATA\100714\1007F026.D	10/07/14	19:16
LGC140925SLAP6-1	K1410537-024	J:\MS18\DATA\100714\1007F027.D	10/07/14	19:37
TB092514	K1410537-025	J:\MS18\DATA\100714\1007F028.D	10/07/14	19:58
LGC140925LC99D-1	K1410537-021	J:\MS18\DATA\100714\1007F029.D	10/07/14	20:20
LGC140925EGDYPW2-1	K1410537-027	J:\MS18\DATA\100714\1007F030.D	10/07/14	20:41
LGC140925DUP7-1	K1410537-020	J:\MS18\DATA\100714\1007F031.D	10/07/14	21:03
LGC140925DUP7-1	K1410537-020	J:\MS18\DATA\100714\1007F032.D	10/07/14	21:24
LGC140925EGDYPW3-1	K1410537-028	J:\MS18\DATA\100714\1007F033.D	10/07/14	21:46
LGC140925EGDYPW3-1	K1410537-028	J:\MS18\DATA\100714\1007F034.D	10/07/14	22:07
LGC140925EGDYPW1-1	K1410537-026	J:\MS18\DATA\100714\1007F035.D	10/07/14	22:28
LGC140925EGDYPW1-1	K1410537-026	J:\MS18\DATA\100714\1007F036.D	10/07/14	22:50
Lab Control Sample	KWG1413599-1	J:\MS18\DATA\100714\1007F038.D	10/07/14	23:32

QA/QC Report

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1410537
Project:	TO 01 JBLM	**Date Extracted:**	10/08/2014
Sample Matrix:	Water	**Date Analyzed:**	10/08/2014
		Time Analyzed:	16:54

Method Blank Summary
Volatile Organic Compounds

Sample Name:	Method Blank	**Instrument ID:**	GC-MS 18
Lab Code:	KWG1413665-3	**File ID:**	J:\MS18\DATA\100814\1008F009.D
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8260C	**Extraction Lot:**	KWG1413665

This Method Blank applies to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
Lab Control Sample	KWG1413665-1	J:\MS18\DATA\100814\1008F003.D	10/08/14	14:40
Duplicate Lab Control Sample	KWG1413665-2	J:\MS18\DATA\100814\1008F004.D	10/08/14	15:01
LGC140925EGDYPW4-1	K1410537-029	J:\MS18\DATA\100814\1008F021.D	10/08/14	21:10
LGC140925EGDYPW5-1	K1410537-030	J:\MS18\DATA\100814\1008F022.D	10/08/14	21:31
LGC140925EGDYPW6-1	K1410537-031	J:\MS18\DATA\100814\1008F023.D	10/08/14	21:52
LGC140925EGDYPW7-1	K1410537-032	J:\MS18\DATA\100814\1008F024.D	10/08/14	22:14
LGC140925EGDYPW8-1	K1410537-033	J:\MS18\DATA\100814\1008F025.D	10/08/14	22:35
LGC140925EGDYE-1	K1410537-034	J:\MS18\DATA\100814\1008F026.D	10/08/14	22:56
LGC140925EGDYI-1	K1410537-035	J:\MS18\DATA\100814\1008F027.D	10/08/14	23:18

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QA/QC Report

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1410537
Project:	TO 01 JBLM	**Date Extracted:**	10/06/2014
Sample Matrix:	Water	**Date Analyzed:**	10/06/2014
		Time Analyzed:	22:10

Lab Control Sample Summary
Volatile Organic Compounds

Sample Name:	Lab Control Sample	**Instrument ID:**	GC-MS 18
Lab Code:	KWG1413535-3	**File ID:**	J:\MS18\DATA\100614\1006F037.D
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8260C	**Extraction Lot:**	KWG1413535

This Lab Control Sample applies to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
LGC140925SLAPI-1MS	KWG1413535-1	J:\MS18\DATA\100614\1006F038.D	10/06/14	22:32
LGC140925SLAPI-1DMS	KWG1413535-2	J:\MS18\DATA\100614\1006F039.D	10/06/14	22:53
Method Blank	KWG1413535-5	J:\MS18\DATA\100614\1006F042.D	10/06/14	23:57
LGC140925ISLX2-1	K1410537-001	J:\MS18\DATA\100614\1006F046.D	10/07/14	01:23
LGC140925ISLX3-1	K1410537-002	J:\MS18\DATA\100614\1006F047.D	10/07/14	01:44
LGC140925ISLX4-1	K1410537-003	J:\MS18\DATA\100614\1006F048.D	10/07/14	02:06
LGC140925ISLX5-1	K1410537-004	J:\MS18\DATA\100614\1006F049.D	10/07/14	02:27
LGC140925ISLX6-1	K1410537-005	J:\MS18\DATA\100614\1006F050.D	10/07/14	02:48
LGC140925ISLX7-1	K1410537-006	J:\MS18\DATA\100614\1006F051.D	10/07/14	03:10
LGC140925ISLX9-1	K1410537-007	J:\MS18\DATA\100614\1006F052.D	10/07/14	03:31
LGC140925ISLX11-1	K1410537-008	J:\MS18\DATA\100614\1006F053.D	10/07/14	03:52
LGC140925ISLX12-1	K1410537-009	J:\MS18\DATA\100614\1006F054.D	10/07/14	04:14
LGC140925ISLX13-1	K1410537-010	J:\MS18\DATA\100614\1006F055.D	10/07/14	04:35
LGC140925ISLX14-1	K1410537-011	J:\MS18\DATA\100614\1006F056.D	10/07/14	04:56
LGC140925ISLX15-1	K1410537-012	J:\MS18\DATA\100614\1006F057.D	10/07/14	05:18
LGC140925DUP6-1	K1410537-013	J:\MS18\DATA\100614\1006F058.D	10/07/14	05:39
LGC140925ISI-1	K1410537-014	J:\MS18\DATA\100614\1006F059.D	10/07/14	06:01
LGC140925ISE-1	K1410537-015	J:\MS18\DATA\100614\1006F060.D	10/07/14	06:22
LGC140925SLAPE-1	K1410537-016	J:\MS18\DATA\100614\1006F061.D	10/07/14	06:43
LGC140925SLAPI-1	K1410537-017	J:\MS18\DATA\100614\1006F062.D	10/07/14	07:05

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QA/QC Report

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1410537
Project:	TO 01 JBLM	**Date Extracted:**	10/07/2014
Sample Matrix:	Water	**Date Analyzed:**	10/07/2014
		Time Analyzed:	23:32

Lab Control Sample Summary
Volatile Organic Compounds

Sample Name:	Lab Control Sample	**Instrument ID:**	GC-MS 18
Lab Code:	KWG1413599-1	**File ID:**	J:\MS18\DATA\100714\1007F038.D
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8260C	**Extraction Lot:**	KWG1413599

This Lab Control Sample applies to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
LGC140925MAMC4-1MS	KWG1413599-4	J:\MS18\DATA\100714\1007F010.D	10/07/14	13:31
LGC140925MAMC4-1DMS	KWG1413599-5	J:\MS18\DATA\100714\1007F011.D	10/07/14	13:53
Method Blank	KWG1413599-3	J:\MS18\DATA\100714\1007F014.D	10/07/14	14:57
LGC140925MAMC4-1	K1410537-019	J:\MS18\DATA\100714\1007F015.D	10/07/14	15:18
LGC140925MAMC3-1	K1410537-018	J:\MS18\DATA\100714\1007F024.D	10/07/14	18:33
LGC140925LC74D-1	K1410537-022	J:\MS18\DATA\100714\1007F025.D	10/07/14	18:54
LGC140925LC96D-1	K1410537-023	J:\MS18\DATA\100714\1007F026.D	10/07/14	19:16
LGC140925SLAP6-1	K1410537-024	J:\MS18\DATA\100714\1007F027.D	10/07/14	19:37
TB092514	K1410537-025	J:\MS18\DATA\100714\1007F028.D	10/07/14	19:58
LGC140925LC99D-1	K1410537-021	J:\MS18\DATA\100714\1007F029.D	10/07/14	20:20
LGC140925EGDYPW2-1	K1410537-027	J:\MS18\DATA\100714\1007F030.D	10/07/14	20:41
LGC140925DUP7-1	K1410537-020	J:\MS18\DATA\100714\1007F031.D	10/07/14	21:03
LGC140925DUP7-1	K1410537-020	J:\MS18\DATA\100714\1007F032.D	10/07/14	21:24
LGC140925EGDYPW3-1	K1410537-028	J:\MS18\DATA\100714\1007F033.D	10/07/14	21:46
LGC140925EGDYPW3-1	K1410537-028	J:\MS18\DATA\100714\1007F034.D	10/07/14	22:07
LGC140925EGDYPW1-1	K1410537-026	J:\MS18\DATA\100714\1007F035.D	10/07/14	22:28
LGC140925EGDYPW1-1	K1410537-026	J:\MS18\DATA\100714\1007F036.D	10/07/14	22:50

QA/QC Report

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1410537
Project:	TO 01 JBLM	**Date Extracted:**	10/08/2014
Sample Matrix:	Water	**Date Analyzed:**	10/08/2014
		Time Analyzed:	14:40

Lab Control Sample Summary
Volatile Organic Compounds

Sample Name:	Lab Control Sample	**Instrument ID:**	GC-MS 18
Lab Code:	KWG1413665-1	**File ID:**	J:\MS18\DATA\100814\1008F003.D
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8260C	**Extraction Lot:**	KWG1413665

This Lab Control Sample applies to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
Method Blank	KWG1413665-3	J:\MS18\DATA\100814\1008F009.D	10/08/14	16:54
LGC140925EGDYPW4-1	K1410537-029	J:\MS18\DATA\100814\1008F021.D	10/08/14	21:10
LGC140925EGDYPW5-1	K1410537-030	J:\MS18\DATA\100814\1008F022.D	10/08/14	21:31
LGC140925EGDYPW6-1	K1410537-031	J:\MS18\DATA\100814\1008F023.D	10/08/14	21:52
LGC140925EGDYPW7-1	K1410537-032	J:\MS18\DATA\100814\1008F024.D	10/08/14	22:14
LGC140925EGDYPW8-1	K1410537-033	J:\MS18\DATA\100814\1008F025.D	10/08/14	22:35
LGC140925EGDYE-1	K1410537-034	J:\MS18\DATA\100814\1008F026.D	10/08/14	22:56
LGC140925EGDYI-1	K1410537-035	J:\MS18\DATA\100814\1008F027.D	10/08/14	23:18

QA/QC Results

Client: Sealaska Environmental Services, LLC
Project: TO 01 JBLM

Service Request: K1410537
Date Analyzed: 10/06/2014
Time Analyzed: 21:06

Tune Summary
Volatile Organic Compounds

File ID: J:\MS18\DATA\100614\1006F034.D
Instrument ID: GC-MS 18
Column:

Analysis Method: 8260C
Analysis Lot: KWG1413536

Target Mass	Relative to Mass	Lower Limit%	Upper Limit%	Relative Abundance %	Raw Abundance	Result Pass/Fail
50	95	15	40	22.0	11264	PASS
75	95	30	60	55.6	28501	PASS
95	95	100	100	100.0	51306	PASS
96	95	5	9	7.6	3879	PASS
173	174	0	2	0.3	127	PASS
174	95	50	120	78.5	40261	PASS
175	174	5	9	7.7	3086	PASS
176	174	95	101	96.1	38709	PASS
177	176	5	9	7.0	2727	PASS

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed	Q
Continuing Calibration Verification	KWG1413536-2	J:\MS18\DATA\100614\1006F035.D	10/06/2014	21:27	
Lab Control Sample	KWG1413535-3	J:\MS18\DATA\100614\1006F037.D	10/06/2014	22:10	
LGC140925SLAPI-1MS	KWG1413535-1	J:\MS18\DATA\100614\1006F038.D	10/06/2014	22:32	
LGC140925SLAPI-1DMS	KWG1413535-2	J:\MS18\DATA\100614\1006F039.D	10/06/2014	22:53	
Method Blank	KWG1413535-5	J:\MS18\DATA\100614\1006F042.D	10/06/2014	23:57	
LGC140925ISLX2-1	K1410537-001	J:\MS18\DATA\100614\1006F046.D	10/07/2014	01:23	
LGC140925ISLX3-1	K1410537-002	J:\MS18\DATA\100614\1006F047.D	10/07/2014	01:44	
LGC140925ISLX4-1	K1410537-003	J:\MS18\DATA\100614\1006F048.D	10/07/2014	02:06	
LGC140925ISLX5-1	K1410537-004	J:\MS18\DATA\100614\1006F049.D	10/07/2014	02:27	
LGC140925ISLX6-1	K1410537-005	J:\MS18\DATA\100614\1006F050.D	10/07/2014	02:48	
LGC140925ISLX7-1	K1410537-006	J:\MS18\DATA\100614\1006F051.D	10/07/2014	03:10	
LGC140925ISLX9-1	K1410537-007	J:\MS18\DATA\100614\1006F052.D	10/07/2014	03:31	
LGC140925ISLX11-1	K1410537-008	J:\MS18\DATA\100614\1006F053.D	10/07/2014	03:52	
LGC140925ISLX12-1	K1410537-009	J:\MS18\DATA\100614\1006F054.D	10/07/2014	04:14	
LGC140925ISLX13-1	K1410537-010	J:\MS18\DATA\100614\1006F055.D	10/07/2014	04:35	
LGC140925ISLX14-1	K1410537-011	J:\MS18\DATA\100614\1006F056.D	10/07/2014	04:56	
LGC140925ISLX15-1	K1410537-012	J:\MS18\DATA\100614\1006F057.D	10/07/2014	05:18	
LGC140925DUP6-1	K1410537-013	J:\MS18\DATA\100614\1006F058.D	10/07/2014	05:39	
LGC140925ISI-1	K1410537-014	J:\MS18\DATA\100614\1006F059.D	10/07/2014	06:01	
LGC140925ISE-1	K1410537-015	J:\MS18\DATA\100614\1006F060.D	10/07/2014	06:22	
LGC140925SLAPE-1	K1410537-016	J:\MS18\DATA\100614\1006F061.D	10/07/2014	06:43	
LGC140925SLAPI-1	K1410537-017	J:\MS18\DATA\100614\1006F062.D	10/07/2014	07:05	

Results flagged with an asterisk (*) indicate the analysis performed outside specified tune window

ALS Group USA, Corp. dba ALS Environmental

QA/QC Results

Client: Sealaska Environmental Services, LLC
Project: TO 01 JBLM

Service Request: K1410537
Date Analyzed: 10/07/2014
Time Analyzed: 11:50

Tune Summary
Volatile Organic Compounds

File ID: J:\MS18\DATA\100714\1007F006.D
Instrument ID: GC-MS 18
Column:

Analysis Method: 8260C
Analysis Lot: KWG1413593

Target Mass	Relative to Mass	Lower Limit%	Upper Limit%	Relative Abundance %	Raw Abundance	Result Pass/Fail
50	95	15	40	21.6	10647	PASS
75	95	30	60	49.9	24557	PASS
95	95	100	100	100.0	49200	PASS
96	95	5	9	7.2	3559	PASS
173	174	0	2	0.3	124	PASS
174	95	50	120	72.4	35632	PASS
175	174	5	9	7.7	2728	PASS
176	174	95	101	98.4	35053	PASS
177	176	5	9	6.5	2290	PASS

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed	Q
Continuing Calibration Verification	KWG1413593-2	J:\MS18\DATA\100714\1007F007.D	10/07/2014	12:11	
LGC140925MAMC4-1MS	KWG1413599-4	J:\MS18\DATA\100714\1007F010.D	10/07/2014	13:31	
LGC140925MAMC4-1DMS	KWG1413599-5	J:\MS18\DATA\100714\1007F011.D	10/07/2014	13:53	
Method Blank	KWG1413599-3	J:\MS18\DATA\100714\1007F014.D	10/07/2014	14:57	
LGC140925MAMC4-1	K1410537-019	J:\MS18\DATA\100714\1007F015.D	10/07/2014	15:18	
LGC140925MAMC3-1	K1410537-018	J:\MS18\DATA\100714\1007F024.D	10/07/2014	18:33	
LGC140925LC74D-1	K1410537-022	J:\MS18\DATA\100714\1007F025.D	10/07/2014	18:54	
LGC140925LC96D-1	K1410537-023	J:\MS18\DATA\100714\1007F026.D	10/07/2014	19:16	
LGC140925SLAP6-1	K1410537-024	J:\MS18\DATA\100714\1007F027.D	10/07/2014	19:37	
TB092514	K1410537-025	J:\MS18\DATA\100714\1007F028.D	10/07/2014	19:58	
LGC140925LC99D-1	K1410537-021	J:\MS18\DATA\100714\1007F029.D	10/07/2014	20:20	
LGC140925EGDYPW2-1	K1410537-027	J:\MS18\DATA\100714\1007F030.D	10/07/2014	20:41	
LGC140925DUP7-1	K1410537-020	J:\MS18\DATA\100714\1007F031.D	10/07/2014	21:03	
LGC140925DUP7-1	K1410537-020	J:\MS18\DATA\100714\1007F032.D	10/07/2014	21:24	
LGC140925EGDYPW3-1	K1410537-028	J:\MS18\DATA\100714\1007F033.D	10/07/2014	21:46	
LGC140925EGDYPW3-1	K1410537-028	J:\MS18\DATA\100714\1007F034.D	10/07/2014	22:07	
LGC140925EGDYPW1-1	K1410537-026	J:\MS18\DATA\100714\1007F035.D	10/07/2014	22:28	
LGC140925EGDYPW1-1	K1410537-026	J:\MS18\DATA\100714\1007F036.D	10/07/2014	22:50	
Lab Control Sample	KWG1413599-1	J:\MS18\DATA\100714\1007F038.D	10/07/2014	23:32	

Results flagged with an asterisk (*) indicate the analysis performed outside specified tune window

QA/QC Results

Client: Sealaska Environmental Services, LLC
Project: TO 01 JBLM

Service Request: K1410537
Date Analyzed: 10/08/2014
Time Analyzed: 13:31

Tune Summary
Volatile Organic Compounds

File ID: J:\MS18\DATA\100814\1008F001.D
Instrument ID: GC-MS 18
Column:

Analysis Method: 8260C
Analysis Lot: KWG1413664

Target Mass	Relative to Mass	Lower Limit%	Upper Limit%	Relative Abundance %	Raw Abundance	Result Pass/Fail
50	95	15	40	23.7	9918	PASS
75	95	30	60	56.9	23778	PASS
95	95	100	100	100.0	41808	PASS
96	95	5	9	7.2	3028	PASS
173	174	0	2	0.6	215	PASS
174	95	50	120	82.2	34370	PASS
175	174	5	9	6.7	2294	PASS
176	174	95	101	98.1	33704	PASS
177	176	5	9	7.8	2623	PASS

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed	Q
Continuing Calibration Verification	KWG1413664-2	J:\MS18\DATA\100814\1008F002.D	10/08/2014	14:02	
Lab Control Sample	KWG1413665-1	J:\MS18\DATA\100814\1008F003.D	10/08/2014	14:40	
Duplicate Lab Control Sample	KWG1413665-2	J:\MS18\DATA\100814\1008F004.D	10/08/2014	15:01	
Method Blank	KWG1413665-3	J:\MS18\DATA\100814\1008F009.D	10/08/2014	16:54	
LGC140925EGDYPW4-1	K1410537-029	J:\MS18\DATA\100814\1008F021.D	10/08/2014	21:10	
LGC140925EGDYPW5-1	K1410537-030	J:\MS18\DATA\100814\1008F022.D	10/08/2014	21:31	
LGC140925EGDYPW6-1	K1410537-031	J:\MS18\DATA\100814\1008F023.D	10/08/2014	21:52	
LGC140925EGDYPW7-1	K1410537-032	J:\MS18\DATA\100814\1008F024.D	10/08/2014	22:14	
LGC140925EGDYPW8-1	K1410537-033	J:\MS18\DATA\100814\1008F025.D	10/08/2014	22:35	
LGC140925EGDYE-1	K1410537-034	J:\MS18\DATA\100814\1008F026.D	10/08/2014	22:56	
LGC140925EGDYI-1	K1410537-035	J:\MS18\DATA\100814\1008F027.D	10/08/2014	23:18	

Results flagged with an asterisk (*) indicate the analysis performed outside specified tune window

QA/QC Results

Client: Sealaska Environmental Services, LLC **Service Request:** K1410537
Project: TO 01 JBLM **Calibration Date:** 09/17/2014

Initial Calibration Summary
Volatile Organic Compounds

Calibration ID: CAL13556 **Column:** MS
Instrument ID: GC-MS 18

Level ID	File ID	Level ID	File ID
A	J:\MS18\DATA\091714\0917F008.D	G	J:\MS18\DATA\091714\0917F014.D
B	J:\MS18\DATA\091714\0917F009.D	H	J:\MS18\DATA\091714\0917F015.D
C	J:\MS18\DATA\091714\0917F010.D	I	J:\MS18\DATA\091714\0917F016.D
D	J:\MS18\DATA\091714\0917F011.D	J	J:\MS18\DATA\091714\0917F017.D
E	J:\MS18\DATA\091714\0917F012.D	K	J:\MS18\DATA\091714\0917F018.D
F	J:\MS18\DATA\091714\0917F013.D		

Analyte Name	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF
Dichlorodifluoromethane				B	0.20	0.247	C	0.50	0.320	D	1.0	0.335	E	2.0	0.303
	F	5.0	0.416	G	10	0.365	H	20	0.349	I	40	0.347	J	60	0.360
	K	80	0.365												
Chloromethane	A	0.10	0.453	B	0.20	0.416	C	0.50	0.373	D	1.0	0.394	E	2.0	0.343
	F	5.0	0.426	G	10	0.366	H	20	0.356	I	40	0.380	J	60	0.391
	K	80	0.395												
Vinyl Chloride	A	0.10	0.268	B	0.20	0.358	C	0.50	0.363	D	1.0	0.368	E	2.0	0.343
	F	5.0	0.462	G	10	0.397	H	20	0.388	I	40	0.384	J	60	0.397
	K	80	0.395												
Bromomethane							C	0.50	0.373	D	1.0	0.355	E	2.0	0.288
	F	5.0	0.336	G	10	0.250	H	20	0.214	I	40	0.232	J	60	0.254
	K	80	0.272												
Chloroethane							C	0.50	0.222	D	1.0	0.216	E	2.0	0.186
	F	5.0	0.251	G	10	0.210	H	20	0.203	I	40	0.208	J	60	0.210
	K	80	0.212												
Trichlorofluoromethane	A	0.10	0.386	B	0.20	0.443	C	0.50	0.471	D	1.0	0.528	E	2.0	0.459
	F	5.0	0.634	G	10	0.540	H	20	0.526	I	40	0.520	J	60	0.543
	K	80	0.562												
1,1-Dichloroethene	A	0.10	0.164	B	0.20	0.204	C	0.50	0.213	D	1.0	0.225	E	2.0	0.197
	F	5.0	0.264	G	10	0.224	H	20	0.218	I	40	0.223	J	60	0.236
	K	80	0.236												
Acetone				B	8.0	0.0487	C	20	0.0484	D	40	0.0477	E	80	0.0448
	F	100	0.0419	G	200	0.0490	H	400	0.0491	I	800	0.0462	J	1600	0.0496
	K	2000	0.0501												
Carbon Disulfide	A	0.10	0.541	B	0.20	0.611	C	0.50	0.695	D	1.0	0.695	E	2.0	0.624
	F	5.0	0.877	G	10	0.769	H	20	0.790	I	40	0.831	J	60	0.878
	K	80	0.884												
Methylene Chloride							C	0.50	0.411	D	1.0	0.356	E	2.0	0.289
	F	5.0	0.351	G	10	0.284	H	20	0.276	I	40	0.286	J	60	0.291
	K	80	0.293												

Results flagged with an asterisk (*) indicate values outside control criteria.

† SPCC Compound **‡ CCC Compound**

Client: Sealaska Environmental Services, LLC **Service Request:** K1410537
Project: TO 01 JBLM **Calibration Date:** 09/17/2014

Initial Calibration Summary
Volatile Organic Compounds

Calibration ID: CAL13556 **Column:** MS
Instrument ID: GC-MS 18

Analyte Name	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF
Methyl tert-Butyl Ether	A	0.20	0.630	B	0.40	0.655	C	1.0	0.594	D	2.0	0.670	E	4.0	0.611
	F	10	0.796	G	20	0.669	H	40	0.696	I	80	0.692	J	120	0.738
	K	160	0.733												
trans-1,2-Dichloroethene	A	0.10	0.271	B	0.20	0.264	C	0.50	0.250	D	1.0	0.269	E	2.0	0.237
	F	5.0	0.317	G	10	0.270	H	20	0.266	I	40	0.280	J	60	0.285
	K	80	0.290												
1,1-Dichloroethane	A	0.10	0.421	B	0.20	0.438	C	0.50	0.478	D	1.0	0.468	E	2.0	0.416
	F	5.0	0.567	G	10	0.484	H	20	0.485	I	40	0.493	J	60	0.506
	K	80	0.506												
2,2-Dichloropropane				B	0.20	0.360	C	0.50	0.370	D	1.0	0.353	E	2.0	0.338
	F	5.0	0.445	G	10	0.385	H	20	0.384	I	40	0.406	J	60	0.425
	K	80	0.430												
cis-1,2-Dichloroethene				B	0.20	0.285	C	0.50	0.303	D	1.0	0.331	E	2.0	0.293
	F	5.0	0.361	G	10	0.311	H	20	0.323	I	40	0.334	J	60	0.335
	K	80	0.336												
2-Butanone (MEK)	A	4.0	0.0150	B	8.0	0.0185	C	20	0.0186	D	40	0.0196	E	80	0.0180
	F	100	0.0176	G	200	0.0203	H	400	0.0208	I	800	0.0199	J	1600	0.0222
	K	2000	0.0221												
Bromochloromethane				B	0.20	0.114	C	0.50	0.135	D	1.0	0.137	E	2.0	0.120
	F	5.0	0.167	G	10	0.143	H	20	0.144	I	40	0.141	J	60	0.136
	K	80	0.129												
Chloroform				B	0.20	0.444	C	0.50	0.485	D	1.0	0.488	E	2.0	0.439
	F	5.0	0.592	G	10	0.505	H	20	0.508	I	40	0.531	J	60	0.534
	K	80	0.535												
1,1,1-Trichloroethane (TCA)	A	0.10	0.316	B	0.20	0.347	C	0.50	0.398	D	1.0	0.402	E	2.0	0.354
	F	5.0	0.512	G	10	0.431	H	20	0.439	I	40	0.460	J	60	0.481
	K	80	0.483												
Carbon Tetrachloride	A	0.10	0.242	B	0.20	0.284	C	0.50	0.327	D	1.0	0.334	E	2.0	0.304
	F	5.0	0.434	G	10	0.372	H	20	0.375	I	40	0.398	J	60	0.412
	K	80	0.428												
1,1-Dichloropropene	A	0.10	0.288	B	0.20	0.342	C	0.50	0.367	D	1.0	0.372	E	2.0	0.346
	F	5.0	0.462	G	10	0.395	H	20	0.392	I	40	0.400	J	60	0.417
	K	80	0.412												
Benzene	A	0.10	1.11	B	0.20	1.22	C	0.50	1.21	D	1.0	1.20	E	2.0	1.11
	F	5.0	1.46	G	10	1.23	H	20	1.22	I	40	1.27	J	60	1.30
	K	80	1.30												

Results flagged with an asterisk (*) indicate values outside control criteria.

† SPCC Compound **‡ CCC Compound**

Client: Sealaska Environmental Services, LLC **Service Request:** K1410537
Project: TO 01 JBLM **Calibration Date:** 09/17/2014

Initial Calibration Summary
Volatile Organic Compounds

Calibration ID: CAL13556 **Column:** MS
Instrument ID: GC-MS 18

Analyte Name	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF
1,2-Dichloroethane (EDC)				B	0.20	0.373	C	0.50	0.367	D	1.0	0.378	E	2.0	0.355
	F	5.0	0.461	G	10	0.393	H	20	0.386	I	40	0.395	J	60	0.402
	K	80	0.400												
Trichloroethene (TCE)	A	0.10	0.220	B	0.20	0.275	C	0.50	0.247	D	1.0	0.294	E	2.0	0.254
	F	5.0	0.356	G	10	0.290	H	20	0.302	I	40	0.311	J	60	0.319
	K	80	0.312												
1,2-Dichloropropane				B	0.20	0.293	C	0.50	0.270	D	1.0	0.285	E	2.0	0.257
	F	5.0	0.344	G	10	0.303	H	20	0.301	I	40	0.318	J	60	0.320
	K	80	0.321												
Dibromomethane				B	0.20	0.143	C	0.50	0.139	D	1.0	0.155	E	2.0	0.152
	F	5.0	0.188	G	10	0.155	H	20	0.158	I	40	0.164	J	60	0.171
	K	80	0.171												
Bromodichloromethane	A	0.10	0.351	B	0.20	0.269	C	0.50	0.310	D	1.0	0.290	E	2.0	0.292
	F	5.0	0.404	G	10	0.349	H	20	0.368	I	40	0.394	J	60	0.402
	K	80	0.409												
cis-1,3-Dichloropropene	A	0.10	0.312	B	0.20	0.322	C	0.50	0.377	D	1.0	0.369	E	2.0	0.357
	F	5.0	0.494	G	10	0.442	H	20	0.463	I	40	0.494	J	60	0.506
	K	80	0.517												
4-Methyl-2-pentanone (MIBK)	A	4.0	0.0523	B	8.0	0.0585	C	20	0.0641	D	40	0.0650	E	80	0.0612
	F	100	0.0602	G	200	0.0712	H	400	0.0752	I	800	0.0714			
Toluene	A	0.10	0.798	B	0.20	0.776	C	0.50	0.743	D	1.0	0.784	E	2.0	0.714
	F	5.0	0.986	G	10	0.832	H	20	0.839	I	40	0.868	J	60	0.898
	K	80	0.898												
trans-1,3-Dichloropropene	A	0.10	0.675	B	0.20	0.627	C	0.50	0.745	D	1.0	0.742	E	2.0	0.670
	F	5.0	0.976	G	10	0.843	H	20	0.910	I	40	0.985	J	60	1.03
	K	80	1.06												
1,1,2-Trichloroethane	A	0.10	0.442	B	0.20	0.497	C	0.50	0.473	D	1.0	0.468	E	2.0	0.406
	F	5.0	0.552	G	10	0.467	H	20	0.482	I	40	0.491	J	60	0.503
	K	80	0.507												
Tetrachloroethene (PCE)	A	0.10	0.558	B	0.20	0.566	C	0.50	0.542	D	1.0	0.597	E	2.0	0.533
	F	5.0	0.709	G	10	0.615	H	20	0.620	I	40	0.664	J	60	0.665
	K	80	0.668												
2-Hexanone				B	8.0	0.0448	C	20	0.0496	D	40	0.0521	E	80	0.0494
	F	100	0.0488	G	200	0.0578	H	400	0.0598	I	800	0.0575			

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† SPCC Compound **‡ CCC Compound**

Client: Sealaska Environmental Services, LLC **Service Request:** K1410537
Project: TO 01 JBLM **Calibration Date:** 09/17/2014

Initial Calibration Summary
Volatile Organic Compounds

Calibration ID: CAL13556 **Column:** MS
Instrument ID: GC-MS 18

Analyte Name	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF
1,3-Dichloropropane	A	0.10	0.849	B	0.20	1.02	C	0.50	0.977	D	1.0	1.07	E	2.0	0.914
	F	5.0	1.23	G	10	1.07	H	20	1.07	I	40	1.10	J	60	1.11
	K	80	1.11												
Dibromochloromethane				B	0.20	0.400	C	0.50	0.476	D	1.0	0.483	E	2.0	0.435
	F	5.0	0.634	G	10	0.560	H	20	0.611	I	40	0.679			
1,2-Dibromoethane (EDB)	A	0.10	0.456	B	0.20	0.477	C	0.50	0.527	D	1.0	0.498	E	2.0	0.456
	F	5.0	0.625	G	10	0.538	H	20	0.558	I	40	0.579	J	60	0.595
	K	80	0.598												
Chlorobenzene	A	0.10	1.90	B	0.20	1.90	C	0.50	2.10	D	1.0	2.18	E	2.0	1.92
	F	5.0	2.66	G	10	2.25	H	20	2.27	I	40	2.39	J	60	2.39
	K	80	2.40												
Ethylbenzene	A	0.10	0.858	B	0.20	1.01	C	0.50	1.16	D	1.0	1.19	E	2.0	1.05
	F	5.0	1.48	G	10	1.25	H	20	1.26	I	40	1.32	J	60	1.34
	K	80	1.36												
1,1,1,2-Tetrachloroethane	A	0.10	0.577	B	0.20	0.626	C	0.50	0.545	D	1.0	0.615	E	2.0	0.555
	F	5.0	0.796	G	10	0.715	H	20	0.735	I	40	0.805	J	60	0.822
	K	80	0.839												
m,p-Xylenes	A	0.20	1.19	B	0.40	1.29	C	1.0	1.37	D	2.0	1.41	E	4.0	1.24
	F	10	1.79	G	20	1.55	H	40	1.55	I	80	1.64	J	120	1.67
	K	160	1.68												
o-Xylene	A	0.10	1.31	B	0.20	1.26	C	0.50	1.33	D	1.0	1.39	E	2.0	1.21
	F	5.0	1.77	G	10	1.48	H	20	1.52	I	40	1.60	J	60	1.61
	K	80	1.62												
Styrene				B	0.20	0.804	C	0.50	0.950	D	1.0	0.928	E	2.0	0.864
	F	5.0	1.29	G	10	1.14	H	20	1.17	I	40	1.26	J	60	1.28
	K	80	1.29												
Bromoform							C	0.50	0.247	D	1.0	0.224	E	2.0	0.221
	F	5.0	0.316	G	10	0.285	H	20	0.323	I	40	0.361	J	60	0.399
Isopropylbenzene	A	0.10	2.85	B	0.20	3.09	C	0.50	3.29	D	1.0	3.56	E	2.0	3.17
	F	5.0	4.53	G	10	3.87	H	20	3.88	I	40	4.09	J	60	4.15
	K	80	4.20												
1,1,2,2-Tetrachloroethane				B	0.20	0.558	C	0.50	0.552	D	1.0	0.601	E	2.0	0.543
	F	5.0	0.735	G	10	0.632	H	20	0.613	I	40	0.623	J	60	0.642
	K	80	0.633												

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† SPCC Compound **‡ CCC Compound**

Client: Sealaska Environmental Services, LLC **Service Request:** K1410537
Project: TO 01 JBLM **Calibration Date:** 09/17/2014

Initial Calibration Summary
Volatile Organic Compounds

Calibration ID: CAL13556 **Column:** MS
Instrument ID: GC-MS 18

Analyte Name	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF
Bromobenzene	A	0.10	0.812	B	0.20	0.899	C	0.50	0.960	D	1.0	0.903	E	2.0	0.868
	F	5.0	1.13	G	10	0.976	H	20	0.971	I	40	1.01	J	60	1.01
	K	80	0.989												
n-Propylbenzene				B	0.20	3.88	C	0.50	4.11	D	1.0	4.22	E	2.0	3.86
	F	5.0	5.45	G	10	4.65	H	20	4.53	I	40	4.71	J	60	4.73
	K	80	4.69												
1,2,3-Trichloropropane							C	0.50	0.224	D	1.0	0.223	E	2.0	0.183
	F	5.0	0.240	G	10	0.215	H	20	0.199	I	40	0.206	J	60	0.213
	K	80	0.209												
2-Chlorotoluene							C	0.50	2.65	D	1.0	2.73	E	2.0	2.46
	F	5.0	3.25	G	10	2.75	H	20	2.67	I	40	2.79	J	60	2.76
	K	80	2.72												
1,3,5-Trimethylbenzene	A	0.10	2.35	B	0.20	2.51	C	0.50	2.72	D	1.0	2.98	E	2.0	2.67
	F	5.0	3.85	G	10	3.32	H	20	3.24	I	40	3.42	J	60	3.42
	K	80	3.41												
4-Chlorotoluene	A	0.10	2.81	B	0.20	2.78	C	0.50	3.07	D	1.0	3.13	E	2.0	2.84
	F	5.0	3.83	G	10	3.25	H	20	3.19	I	40	3.32	J	60	3.31
	K	80	3.28												
tert-Butylbenzene	A	0.10	2.08	B	0.20	2.36	C	0.50	2.69	D	1.0	2.67	E	2.0	2.55
	F	5.0	3.48	G	10	3.00	H	20	2.89	I	40	3.01	J	60	3.01
	K	80	2.99												
1,2,4-Trimethylbenzene	A	0.10	2.49	B	0.20	2.52	C	0.50	2.78	D	1.0	2.96	E	2.0	2.69
	F	5.0	3.94	G	10	3.35	H	20	3.29	I	40	3.47	J	60	3.49
	K	80	3.47												
sec-Butylbenzene	A	0.10	3.19	B	0.20	3.27	C	0.50	3.52	D	1.0	3.80	E	2.0	3.39
	F	5.0	4.91	G	10	4.23	H	20	4.10	I	40	4.26	J	60	4.31
	K	80	4.31												
4-Isopropyltoluene				B	0.20	2.23	C	0.50	2.63	D	1.0	2.92	E	2.0	2.74
	F	5.0	4.05	G	10	3.50	H	20	3.42	I	40	3.61	J	60	3.64
	K	80	3.64												
1,3-Dichlorobenzene	A	0.10	1.82	B	0.20	1.65	C	0.50	1.76	D	1.0	1.80	E	2.0	1.58
	F	5.0	2.17	G	10	1.85	H	20	1.81	I	40	1.92	J	60	1.90
	K	80	1.90												
1,4-Dichlorobenzene				B	0.20	1.80	C	0.50	1.80	D	1.0	1.78	E	2.0	1.65
	F	5.0	2.22	G	10	1.91	H	20	1.87	I	40	1.95	J	60	1.96
	K	80	1.92												

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† SPCC Compound **‡ CCC Compound**

Client: Sealaska Environmental Services, LLC **Service Request:** K1410537
Project: TO 01 JBLM **Calibration Date:** 09/17/2014

Initial Calibration Summary
Volatile Organic Compounds

Calibration ID: CAL13556 **Column:** MS
Instrument ID: GC-MS 18

Analyte Name	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF
n-Butylbenzene	A	0.10	2.53	B	0.20	2.24	C	0.50	2.42	D	1.0	2.50	E	2.0	2.27
	F	5.0	3.40	G	10	2.95	H	20	2.90	I	40	3.06	J	60	3.13
	K	80	3.16												
1,2-Dichlorobenzene	A	0.10	1.49	B	0.20	1.51	C	0.50	1.65	D	1.0	1.70	E	2.0	1.53
	F	5.0	2.04	G	10	1.75	H	20	1.71	I	40	1.79	J	60	1.80
	K	80	1.79												
1,2-Dibromo-3-chloropropane							C	0.50	0.0510	D	1.0	0.0643	E	2.0	0.0551
	F	5.0	0.0747	G	10	0.0690	H	20	0.0697	I	40	0.0787	J	60	0.0849
	K	80	0.0868												
1,2,4-Trichlorobenzene				B	0.20	1.10	C	0.50	0.881	D	1.0	0.869	E	2.0	0.782
	F	5.0	1.06	G	10	0.928	H	20	0.907	I	40	0.968	J	60	0.987
	K	80	0.991												
Hexachlorobutadiene				B	0.20	0.449	C	0.50	0.400	D	1.0	0.411	E	2.0	0.356
	F	5.0	0.470	G	10	0.403	H	20	0.393	I	40	0.427	J	60	0.435
	K	80	0.445												
Naphthalene				B	0.20	1.31	C	0.50	1.28	D	1.0	1.36	E	2.0	1.21
	F	5.0	1.75	G	10	1.53	H	20	1.54	I	40	1.64	J	60	1.72
	K	80	1.75												
1,2,3-Trichlorobenzene				B	0.20	0.637	C	0.50	0.651	D	1.0	0.685	E	2.0	0.558
	F	5.0	0.766	G	10	0.671	H	20	0.669	I	40	0.691	J	60	0.739
	K	80	0.741												
Dibromofluoromethane	A	10	0.213	B	10	0.215	C	10	0.205	D	10	0.212	E	10	0.221
	F	10	0.219	G	10	0.217	H	10	0.227	I	10	0.226	J	10	0.226
	K	10	0.233												
1,2-Dichloroethane-d4	A	10	0.263	B	10	0.265	C	10	0.252	D	10	0.260	E	10	0.262
	F	10	0.262	G	10	0.263	H	10	0.258	I	10	0.243	J	10	0.254
	K	10	0.261												
Toluene-d8	A	10	1.00	B	10	1.00	C	10	0.972	D	10	1.01	E	10	1.01
	F	10	0.988	G	10	1.02	H	10	1.02	I	10	1.02	J	10	1.03
	K	10	1.03												
4-Bromofluorobenzene	A	10	0.886	B	10	0.891	C	10	0.885	D	10	0.876	E	10	0.877
	F	10	0.897	G	10	0.907	H	10	0.910	I	10	0.925	J	10	0.935
	K	10	0.931												

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† SPCC Compound **‡ CCC Compound**

Client: Sealaska Environmental Services, LLC **Service Request:** K1410537
Project: TO 01 JBLM **Calibration Date:** 09/17/2014

Initial Calibration Summary
Volatile Organic Compounds

Calibration ID: CAL13556 **Column:** MS
Instrument ID: GC-MS 18

		Calibration Evaluation					RRF Evaluation		
Analyte Name	**Compound Type**	**Fit Type**	**Eval.**	**Eval. Result**	**Q**	**Control Criteria**	**Average RRF**	**Q**	**Minimum RRF**
Dichlorodifluoromethane	MS	AverageRF	% RSD	13.1		≤ 20	0.341		0.100
Chloromethane	MS	AverageRF	% RSD	8.2		≤ 20	0.390		0.100
Vinyl Chloride	MS	AverageRF	% RSD	12.6		≤ 20	0.375		0.100
Bromomethane	MS	AverageRF	% RSD	19.7		≤ 20	0.286		0.100
Chloroethane	MS	AverageRF	% RSD	8.1		≤ 20	0.213		0.100
Trichlorofluoromethane	MS	AverageRF	% RSD	13.1		≤ 20	0.510		0.100
1,1-Dichloroethene	MS	AverageRF	% RSD	11.6		≤ 20	0.219		.100
Acetone	MS	AverageRF	% RSD	5.3		≤ 20	0.0476		0.01
Carbon Disulfide	MS	AverageRF	% RSD	16.1		≤ 20	0.745		0.100
Methylene Chloride	MS	AverageRF	% RSD	14.7		≤ 20	0.315		0.100
Methyl tert-Butyl Ether	MS	AverageRF	% RSD	8.8		≤ 20	0.680		0.100
trans-1,2-Dichloroethene	MS	AverageRF	% RSD	7.6		≤ 20	0.273		0.100
1,1-Dichloroethane	MS	AverageRF	% RSD	9.0		≤ 20	0.478		.200
2,2-Dichloropropane	MS	AverageRF	% RSD	9.2		≤ 20	0.390		0.01
cis-1,2-Dichloroethene	MS	AverageRF	% RSD	7.2		≤ 20	0.321		0.100
2-Butanone (MEK)	MS	AverageRF	% RSD	10.9		≤ 20	0.0193		0.01
Bromochloromethane	MS	AverageRF	% RSD	10.7		≤ 20	0.137		0.01
Chloroform	MS	AverageRF	% RSD	9.0		≤ 20	0.506		0.200
1,1,1-Trichloroethane (TCA)	MS	AverageRF	% RSD	14.9		≤ 20	0.420		.100
Carbon Tetrachloride	MS	AverageRF	% RSD	17.6		≤ 20	0.355		0.100
1,1-Dichloropropene	MS	AverageRF	% RSD	12.1		≤ 20	0.381		0.01
Benzene	MS	AverageRF	% RSD	7.7		≤ 20	1.24		0.500
1,2-Dichloroethane (EDC)	MS	AverageRF	% RSD	7.4		≤ 20	0.391		0.100
Trichloroethene (TCE)	MS	AverageRF	% RSD	13.2		≤ 20	0.289		0.200
1,2-Dichloropropane	MS	AverageRF	% RSD	8.7		≤ 20	0.301		0.100
Dibromomethane	MS	AverageRF	% RSD	9.0		≤ 20	0.160		0.01
Bromodichloromethane	MS	AverageRF	% RSD	14.8		≤ 20	0.349		0.200
cis-1,3-Dichloropropene	MS	AverageRF	% RSD	18.2		≤ 20	0.423		0.200
4-Methyl-2-pentanone (MIBK)	MS	AverageRF	% RSD	11.3		≤ 20	0.0643		0.01
Toluene	MS	AverageRF	% RSD	9.5		≤ 20	0.831		0.400
trans-1,3-Dichloropropene	MS	AverageRF	% RSD	18.6		≤ 20	0.841		0.100
1,1,2-Trichloroethane	MS	AverageRF	% RSD	7.9		≤ 20	0.481		.100
Tetrachloroethene (PCE)	MS	AverageRF	% RSD	9.6		≤ 20	0.613		0.200
2-Hexanone	MS	AverageRF	% RSD	10.1		≤ 20	0.0525		0.015
1,3-Dichloropropane	MS	AverageRF	% RSD	9.9		≤ 20	1.05		0.01
Dibromochloromethane	MS	AverageRF	% RSD	18.9		≤ 20	0.535		0.100
1,2-Dibromoethane (EDB)	MS	AverageRF	% RSD	11.1		≤ 20	0.537		0.100
Chlorobenzene	MS	AverageRF	% RSD	11.0		≤ 20	2.21		0.500
Ethylbenzene	MS	AverageRF	% RSD	14.8		≤ 20	1.21		0.100
1,1,1,2-Tetrachloroethane	MS	AverageRF	% RSD	16.4		≤ 20	0.694		.01
m,p-Xylenes	MS	AverageRF	% RSD	13.4		≤ 20	1.49		0.100
o-Xylene	MS	AverageRF	% RSD	12.0		≤ 20	1.46		0.300

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† SPCC Compound **‡ CCC Compound**

Client: Sealaska Environmental Services, LLC **Service Request:** K1410537
Project: TO 01 JBLM **Calibration Date:** 09/17/2014

Initial Calibration Summary
Volatile Organic Compounds

Calibration ID: CAL13556 **Column:** MS
Instrument ID: GC-MS 18

		Calibration Evaluation					RRF Evaluation		
Analyte Name	**Compound Type**	**Fit Type**	**Eval.**	**Eval. Result**	**Q**	**Control Criteria**	**Average RRF**	**Q**	**Minimum RRF**
Styrene	MS	AverageRF	% RSD	17.5		≤ 20	1.10		0.300
Bromoform	MS	Quadratic(0,0)	COD	1.000		≥ 0.990	0.297		0.100
Isopropylbenzene	MS	AverageRF	% RSD	14.6		≤ 20	3.70		0.100
1,1,2,2-Tetrachloroethane	MS	AverageRF	% RSD	9.1		≤ 20	0.613		.300
Bromobenzene	MS	AverageRF	% RSD	8.8		≤ 20	0.956		0.01
n-Propylbenzene	MS	AverageRF	% RSD	10.7		≤ 20	4.48		0.01
1,2,3-Trichloropropane	MS	AverageRF	% RSD	7.6		≤ 20	0.212		0.01
2-Chlorotoluene	MS	AverageRF	% RSD	7.6		≤ 20	2.75		0.01
1,3,5-Trimethylbenzene	MS	AverageRF	% RSD	15.1		≤ 20	3.08		0.01
4-Chlorotoluene	MS	AverageRF	% RSD	9.5		≤ 20	3.16		0.01
tert-Butylbenzene	MS	AverageRF	% RSD	13.5		≤ 20	2.79		0.01
1,2,4-Trimethylbenzene	MS	AverageRF	% RSD	15.0		≤ 20	3.13		0.01
sec-Butylbenzene	MS	AverageRF	% RSD	13.8		≤ 20	3.94		0.01
4-Isopropyltoluene	MS	AverageRF	% RSD	17.7		≤ 20	3.24		0.01
1,3-Dichlorobenzene	MS	AverageRF	% RSD	8.3		≤ 20	1.83		0.600
1,4-Dichlorobenzene	MS	AverageRF	% RSD	8.0		≤ 20	1.88		0.500
n-Butylbenzene	MS	AverageRF	% RSD	14.4		≤ 20	2.78		0.01
1,2-Dichlorobenzene	MS	AverageRF	% RSD	9.4		≤ 20	1.71		0.400
1,2-Dibromo-3-chloropropane	MS	AverageRF	% RSD	17.5		≤ 20	0.0705		0.025
1,2,4-Trichlorobenzene	MS	AverageRF	% RSD	9.9		≤ 20	0.947		0.200
Hexachlorobutadiene	MS	AverageRF	% RSD	7.9		≤ 20	0.419		0.01
Naphthalene	MS	AverageRF	% RSD	13.7		≤ 20	1.51		0.01
1,2,3-Trichlorobenzene	MS	AverageRF	% RSD	8.8		≤ 20	0.681		0.01
Dibromofluoromethane	SURR	AverageRF	% RSD	3.6		≤ 20	0.219		0.01
1,2-Dichloroethane-d4	SURR	AverageRF	% RSD	2.5		≤ 20	0.258		0.01
Toluene-d8	SURR	AverageRF	% RSD	1.8		≤ 20	1.01		0.01
4-Bromofluorobenzene	SURR	AverageRF	% RSD	2.4		≤ 20	0.902		0.01

Results flagged with an asterisk (*) indicate values outside control criteria.

† SPCC Compound **‡ CCC Compound**

QA/QC Results

Client: Sealaska Environmental Services, LLC
Project: TO 01 JBLM

Service Request: K1410537
Calibration Date: 09/17/2014
Date Analyzed: 09/17/2014 - 09/18/2014

Second Source Calibration Verification
Volatile Organic Compounds

Calibration Type: Internal Standard
Analysis Method: 8260C

Calibration ID: CAL13556
Units: PPB

File ID: J:\MS18\DATA\091714\0917F021.D
J:\MS18\DATA\091814\0918F003.D

Analyte Name	Expected	Result	Average RF	SSV RF	%D	%Drift	Criteria	Curve Fit
Dichlorodifluoromethane	10	9.7	0.341	0.331	-3	NA	± 30 %	AverageRF
Chloromethane	10	9.4	0.390	0.368	-6	NA	± 30 %	AverageRF
Vinyl Chloride	10	11	0.375	0.399	6	NA	± 30 %	AverageRF
Bromomethane	10	10	0.286	0.296	4	NA	± 30 %	AverageRF
Chloroethane	10	12	0.213	0.254	19	NA	± 30 %	AverageRF
Trichlorofluoromethane	10	9.4	0.510	0.477	-6	NA	± 30 %	AverageRF
1,1-Dichloroethene	10	12	0.219	0.257	17	NA	± 30 %	AverageRF
Acetone	50	51	0.0476	0.0487	2	NA	± 30 %	AverageRF
Carbon Disulfide	20	22	0.745	0.806	8	NA	± 30 %	AverageRF
Methylene Chloride	10	8.8	0.315	0.278	-12	NA	± 30 %	AverageRF
Methyl tert-Butyl Ether	10	9.9	0.680	0.671	-1	NA	± 30 %	AverageRF
trans-1,2-Dichloroethene	10	11	0.273	0.308	13	NA	± 30 %	AverageRF
1,1-Dichloroethane	10	11	0.478	0.549	15	NA	± 30 %	AverageRF
2,2-Dichloropropane	10	10	0.390	0.391	0	NA	± 30 %	AverageRF
cis-1,2-Dichloroethene	10	11	0.321	0.341	6	NA	± 30 %	AverageRF
2-Butanone (MEK)	50	55	0.0193	0.0211	9	NA	± 30 %	AverageRF
Bromochloromethane	10	10	0.137	0.136	0	NA	± 30 %	AverageRF
Chloroform	10	11	0.506	0.544	7	NA	± 30 %	AverageRF
1,1,1-Trichloroethane (TCA)	10	11	0.420	0.464	11	NA	± 30 %	AverageRF
Carbon Tetrachloride	10	11	0.355	0.396	11	NA	± 30 %	AverageRF
1,1-Dichloropropene	10	11	0.381	0.423	11	NA	± 30 %	AverageRF
Benzene	10	11	1.24	1.32	7	NA	± 30 %	AverageRF
1,2-Dichloroethane (EDC)	10	10	0.391	0.406	4	NA	± 30 %	AverageRF
Trichloroethene (TCE)	10	11	0.289	0.312	8	NA	± 30 %	AverageRF
1,2-Dichloropropane	10	10	0.301	0.309	3	NA	± 30 %	AverageRF
Dibromomethane	10	10	0.160	0.166	4	NA	± 30 %	AverageRF
Bromodichloromethane	10	11	0.349	0.371	6	NA	± 30 %	AverageRF
cis-1,3-Dichloropropene	10	11	0.423	0.456	8	NA	± 30 %	AverageRF
4-Methyl-2-pentanone (MIBK)	50	57	0.0643	0.0728	13	NA	± 30 %	AverageRF
Toluene	10	11	0.831	0.886	7	NA	± 30 %	AverageRF
trans-1,3-Dichloropropene	10	9.8	0.841	0.821	-2	NA	± 30 %	AverageRF
1,1,2-Trichloroethane	10	10	0.481	0.496	3	NA	± 30 %	AverageRF
Tetrachloroethene (PCE)	10	11	0.613	0.658	7	NA	± 30 %	AverageRF
2-Hexanone	50	54	0.0525	0.0571	9	NA	± 30 %	AverageRF
1,3-Dichloropropane	10	10	1.05	1.10	5	NA	± 30 %	AverageRF
Dibromochloromethane	10	11	0.535	0.601	12	NA	± 30 %	AverageRF
1,2-Dibromoethane (EDB)	10	11	0.537	0.565	5	NA	± 30 %	AverageRF
Chlorobenzene	10	11	2.21	2.39	8	NA	± 30 %	AverageRF
Ethylbenzene	10	11	1.21	1.31	9	NA	± 30 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† SPCC Compound **‡ CCC Compound**

QA/QC Results

Client: Sealaska Environmental Services, LLC
Project: TO 01 JBLM

Service Request: K1410537
Calibration Date: 09/17/2014
Date Analyzed: 09/17/2014 - 09/18/2014

Second Source Calibration Verification
Volatile Organic Compounds

Calibration Type: Internal Standard
Analysis Method: 8260C

Calibration ID: CAL13556
Units: PPB

Analyte Name	Expected	Result	Average RF	SSV RF	%D	%Drift	Criteria	Curve Fit
1,1,1,2-Tetrachloroethane	10	11	0.694	0.735	6	NA	± 30 %	AverageRF
m,p-Xylenes	20	22	1.49	1.63	10	NA	± 30 %	AverageRF
o-Xylene	10	11	1.46	1.58	8	NA	± 30 %	AverageRF
Styrene	10	11	1.10	1.20	9	NA	± 30 %	AverageRF
Bromoform	10	10	0.297	0.312	NA	3	± 30 %	Quadratic(0,0
Isopropylbenzene	10	11	3.70	4.03	9	NA	± 30 %	AverageRF
1,1,2,2-Tetrachloroethane	10	10	0.613	0.633	3	NA	± 30 %	AverageRF
Bromobenzene	10	11	0.956	1.03	8	NA	± 30 %	AverageRF
n-Propylbenzene	10	11	4.48	4.84	8	NA	± 30 %	AverageRF
1,2,3-Trichloropropane	10	10	0.212	0.214	1	NA	± 30 %	AverageRF
2-Chlorotoluene	10	11	2.75	2.92	6	NA	± 30 %	AverageRF
1,3,5-Trimethylbenzene	10	11	3.08	3.46	12	NA	± 30 %	AverageRF
4-Chlorotoluene	10	11	3.16	3.39	7	NA	± 30 %	AverageRF
tert-Butylbenzene	10	11	2.79	3.07	10	NA	± 30 %	AverageRF
1,2,4-Trimethylbenzene	10	11	3.13	3.47	11	NA	± 30 %	AverageRF
sec-Butylbenzene	10	11	3.94	4.22	7	NA	± 30 %	AverageRF
4-Isopropyltoluene	10	11	3.24	3.62	12	NA	± 30 %	AverageRF
1,3-Dichlorobenzene	10	11	1.83	1.99	8	NA	± 30 %	AverageRF
1,4-Dichlorobenzene	10	11	1.88	2.01	7	NA	± 30 %	AverageRF
n-Butylbenzene	10	11	2.78	3.04	9	NA	± 30 %	AverageRF
1,2-Dichlorobenzene	10	11	1.71	1.83	7	NA	± 30 %	AverageRF
1,2-Dibromo-3-chloropropane	10	10	0.0705	0.0706	0	NA	± 30 %	AverageRF
1,2,4-Trichlorobenzene	10	10	0.947	0.978	3	NA	± 30 %	AverageRF
Hexachlorobutadiene	10	10	0.419	0.437	4	NA	± 30 %	AverageRF
Naphthalene	10	10	1.51	1.55	3	NA	± 30 %	AverageRF
1,2,3-Trichlorobenzene	10	10	0.681	0.700	3	NA	± 30 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† SPCC Compound **‡ CCC Compound**

ALS Group USA, Corp. dba ALS Environmental

QA/QC Results

Client: Sealaska Environmental Services, LLC
Project: TO 01 JBLM

Service Request: K1410537
Date Analyzed: 10/06/2014

Continuing Calibration Verification Summary
Volatile Organic Compounds

Calibration Type: Internal Standard
Analysis Method: 8260C

Calibration Date: 09/17/2014
Calibration ID: CAL13556
Analysis Lot: KWG1413536
Units: PPB

File ID: J:\MS18\DATA\100614\1006F035.D

Analyte Name	Expected	Result	Min RF	Average RF	CCV RF	%D		%Drift	Criteria	Curve Fit
Dichlorodifluoromethane	10	8.5	0.100	0.341	0.289	-15		NA	± 20	AverageRF
Chloromethane	10	10	0.100	0.390	0.405	4		NA	± 20	AverageRF
Vinyl Chloride	10	11	0.100	0.375	0.403	7		NA	± 20	AverageRF
Bromomethane	10	9.2	0.100	0.286	0.262	-8		NA	± 20	AverageRF
Chloroethane	10	11	0.100	0.213	0.230	8		NA	± 20	AverageRF
Trichlorofluoromethane	10	9.9	0.100	0.510	0.503	-1		NA	± 20	AverageRF
1,1-Dichloroethene	10	9.6	.100	0.219	0.210	-4		NA	± 20	AverageRF
Acetone	200	270	0.01	0.0476	0.0646	36	*	NA	± 20	AverageRF
Carbon Disulfide	10	6.0	0.100	0.745	0.449	-40	*	NA	± 20	AverageRF
Methylene Chloride	10	9.4	0.100	0.315	0.295	-6		NA	± 20	AverageRF
Methyl tert-Butyl Ether	20	17	0.100	0.680	0.583	-14		NA	± 20	AverageRF
trans-1,2-Dichloroethene	10	9.8	0.100	0.273	0.268	-2		NA	± 20	AverageRF
1,1-Dichloroethane	10	10	.200	0.478	0.490	2		NA	± 20	AverageRF
2,2-Dichloropropane	10	5.6	0.01	0.390	0.216	-45	*	NA	± 20	AverageRF
cis-1,2-Dichloroethene	10	9.5	0.100	0.321	0.305	-5		NA	± 20	AverageRF
2-Butanone (MEK)	200	260	0.01	0.0193	0.0247	28	*	NA	± 20	AverageRF
Bromochloromethane	10	10	0.01	0.137	0.137	0		NA	± 20	AverageRF
Chloroform	10	10	0.200	0.506	0.505	0		NA	± 20	AverageRF
1,1,1-Trichloroethane (TCA)	10	8.6	.100	0.420	0.360	-14		NA	± 20	AverageRF
Carbon Tetrachloride	10	8.7	0.100	0.355	0.308	-13		NA	± 20	AverageRF
1,1-Dichloropropene	10	10	0.01	0.381	0.399	5		NA	± 20	AverageRF
Benzene	10	10	0.500	1.24	1.24	0		NA	± 20	AverageRF
1,2-Dichloroethane (EDC)	10	11	0.100	0.391	0.419	7		NA	± 20	AverageRF
Trichloroethene (TCE)	10	10	0.200	0.289	0.301	4		NA	± 20	AverageRF
1,2-Dichloropropane	10	10	0.100	0.301	0.304	1		NA	± 20	AverageRF
Dibromomethane	10	10	0.01	0.160	0.165	3		NA	± 20	AverageRF
Bromodichloromethane	10	9.5	0.200	0.349	0.331	-5		NA	± 20	AverageRF
cis-1,3-Dichloropropene	10	8.7	0.200	0.423	0.366	-13		NA	± 20	AverageRF
4-Methyl-2-pentanone (MIBK)	200	280	0.01	0.0643	0.0913	42	*	NA	± 20	AverageRF
Toluene	10	10	0.400	0.831	0.838	1		NA	± 20	AverageRF
trans-1,3-Dichloropropene	10	7.2	0.100	0.841	0.603	-28	*	NA	± 20	AverageRF
1,1,2-Trichloroethane	10	10	.100	0.481	0.488	1		NA	± 20	AverageRF
Tetrachloroethene (PCE)	10	9.2	0.200	0.613	0.563	-8		NA	± 20	AverageRF
2-Hexanone	200	260	0.015	0.0525	0.0693	32	*	NA	± 20	AverageRF
1,3-Dichloropropane	10	11	0.01	1.05	1.14	9		NA	± 20	AverageRF
Dibromochloromethane	10	9.2	0.100	0.535	0.490	-8		NA	± 20	AverageRF
1,2-Dibromoethane (EDB)	10	9.7	0.100	0.537	0.521	-3		NA	± 20	AverageRF
Chlorobenzene	10	9.8	0.500	2.21	2.17	-2		NA	± 20	AverageRF
Ethylbenzene	10	9.9	0.100	1.21	1.20	-1		NA	± 20	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† SPCC Compound **‡ CCC Compound**

Client: Sealaska Environmental Services, LLC
Project: TO 01 JBLM

Service Request: K1410537
Date Analyzed: 10/06/2014

Continuing Calibration Verification Summary
Volatile Organic Compounds

Calibration Type: Internal Standard
Analysis Method: 8260C

Calibration Date: 09/17/2014
Calibration ID: CAL13556
Analysis Lot: KWG1413536
Units: PPB

Analyte Name	Expected	Result	Min RF	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
1,1,1,2-Tetrachloroethane	10	8.8	.01	0.694	0.608	-12	NA	± 20	AverageRF
m,p-Xylenes	20	20	0.100	1.49	1.47	-2	NA	± 20	AverageRF
o-Xylene	10	9.7	0.300	1.46	1.42	-3	NA	± 20	AverageRF
Styrene	10	9.6	0.300	1.10	1.05	-4	NA	± 20	AverageRF
Bromoform	10	8.3	0.100	0.297	0.247	NA	-17	± 20	Quadratic(0,0)
Isopropylbenzene	10	9.9	0.100	3.70	3.67	-1	NA	± 20	AverageRF
1,1,2,2-Tetrachloroethane	10	12	.300	0.613	0.724	18	NA	± 20	AverageRF
Bromobenzene	10	9.8	0.01	0.956	0.940	-2	NA	± 20	AverageRF
n-Propylbenzene	10	10	0.01	4.48	4.67	4	NA	± 20	AverageRF
1,2,3-Trichloropropane	10	11	0.01	0.212	0.228	8	NA	± 20	AverageRF
2-Chlorotoluene	10	10	0.01	2.75	2.78	1	NA	± 20	AverageRF
1,3,5-Trimethylbenzene	10	11	0.01	3.08	3.25	5	NA	± 20	AverageRF
4-Chlorotoluene	10	10	0.01	3.16	3.24	2	NA	± 20	AverageRF
tert-Butylbenzene	10	10	0.01	2.79	2.89	3	NA	± 20	AverageRF
1,2,4-Trimethylbenzene	10	11	0.01	3.13	3.30	5	NA	± 20	AverageRF
sec-Butylbenzene	10	11	0.01	3.94	4.14	5	NA	± 20	AverageRF
4-Isopropyltoluene	10	10	0.01	3.24	3.34	3	NA	± 20	AverageRF
1,3-Dichlorobenzene	10	9.9	0.600	1.83	1.82	-1	NA	± 20	AverageRF
1,4-Dichlorobenzene	10	10	0.500	1.88	1.89	0	NA	± 20	AverageRF
n-Butylbenzene	10	10	0.01	2.78	2.85	2	NA	± 20	AverageRF
1,2-Dichlorobenzene	10	10	0.400	1.71	1.72	1	NA	± 20	AverageRF
1,2-Dibromo-3-chloropropane	10	8.8	0.025	0.0705	0.0622	-12	NA	± 20	AverageRF
1,2,4-Trichlorobenzene	10	9.9	0.200	0.947	0.939	-1	NA	± 20	AverageRF
Hexachlorobutadiene	10	9.3	0.01	0.419	0.389	-7	NA	± 20	AverageRF
Naphthalene	10	11	0.01	1.51	1.72	14	NA	± 20	AverageRF
1,2,3-Trichlorobenzene	10	10	0.01	0.681	0.712	5	NA	± 20	AverageRF
Dibromofluoromethane	10	10	0.01	0.219	0.222	1	NA	± 20	AverageRF
1,2-Dichloroethane-d4	10	11	0.01	0.258	0.276	7	NA	± 20	AverageRF
Toluene-d8	10	10	0.01	1.01	1.03	2	NA	± 20	AverageRF
4-Bromofluorobenzene	10	9.8	0.01	0.902	0.883	-2	NA	± 20	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† SPCC Compound **‡ CCC Compound**

QA/QC Results

Client: Sealaska Environmental Services, LLC
Project: TO 01 JBLM

Service Request: K1410537
Date Analyzed: 10/07/2014

Continuing Calibration Verification Summary
Volatile Organic Compounds

Calibration Type: Internal Standard
Analysis Method: 8260C

Calibration Date: 09/17/2014
Calibration ID: CAL13556
Analysis Lot: KWG1413593
Units: PPB

File ID: J:\MS18\DATA\100714\1007F007.D

Analyte Name	Expected	Result	Min RF	Average RF	CCV RF	%D		%Drift	Criteria	Curve Fit
Dichlorodifluoromethane	10	8.5	0.100	0.341	0.289	-15		NA	± 20	AverageRF
Chloromethane	10	11	0.100	0.390	0.432	11		NA	± 20	AverageRF
Vinyl Chloride	10	10	0.100	0.375	0.389	4		NA	± 20	AverageRF
Bromomethane	10	5.6	0.100	0.286	0.159	-45	*	NA	± 20	AverageRF
Chloroethane	10	10	0.100	0.213	0.214	0		NA	± 20	AverageRF
Trichlorofluoromethane	10	9.5	0.100	0.510	0.485	-5		NA	± 20	AverageRF
1,1-Dichloroethene	10	9.5	.100	0.219	0.208	-5		NA	± 20	AverageRF
Acetone	200	250	0.01	0.0476	0.0592	24	*	NA	± 20	AverageRF
Carbon Disulfide	10	6.2	0.100	0.745	0.458	-38	*	NA	± 20	AverageRF
Methylene Chloride	10	8.9	0.100	0.315	0.281	-11		NA	± 20	AverageRF
Methyl tert-Butyl Ether	20	17	0.100	0.680	0.564	-17		NA	± 20	AverageRF
trans-1,2-Dichloroethene	10	9.2	0.100	0.273	0.251	-8		NA	± 20	AverageRF
1,1-Dichloroethane	10	9.9	.200	0.478	0.471	-1		NA	± 20	AverageRF
2,2-Dichloropropane	10	6.0	0.01	0.390	0.232	-41	*	NA	± 20	AverageRF
cis-1,2-Dichloroethene	10	9.4	0.100	0.321	0.301	-6		NA	± 20	AverageRF
2-Butanone (MEK)	200	230	0.01	0.0193	0.0225	17		NA	± 20	AverageRF
Bromochloromethane	10	10	0.01	0.137	0.139	2		NA	± 20	AverageRF
Chloroform	10	9.7	0.200	0.506	0.493	-3		NA	± 20	AverageRF
1,1,1-Trichloroethane (TCA)	10	8.7	.100	0.420	0.365	-13		NA	± 20	AverageRF
Carbon Tetrachloride	10	8.7	0.100	0.355	0.308	-13		NA	± 20	AverageRF
1,1-Dichloropropene	10	9.6	0.01	0.381	0.365	-4		NA	± 20	AverageRF
Benzene	10	9.7	0.500	1.24	1.20	-3		NA	± 20	AverageRF
1,2-Dichloroethane (EDC)	10	10	0.100	0.391	0.406	4		NA	± 20	AverageRF
Trichloroethene (TCE)	10	9.7	0.200	0.289	0.279	-3		NA	± 20	AverageRF
1,2-Dichloropropane	10	10	0.100	0.301	0.300	0		NA	± 20	AverageRF
Dibromomethane	10	10	0.01	0.160	0.162	1		NA	± 20	AverageRF
Bromodichloromethane	10	9.2	0.200	0.349	0.319	-8		NA	± 20	AverageRF
cis-1,3-Dichloropropene	10	8.6	0.200	0.423	0.362	-14		NA	± 20	AverageRF
4-Methyl-2-pentanone (MIBK)	200	250	0.01	0.0643	0.0797	24	*	NA	± 20	AverageRF
Toluene	10	9.5	0.400	0.831	0.790	-5		NA	± 20	AverageRF
trans-1,3-Dichloropropene	10	7.7	0.100	0.841	0.649	-23	*	NA	± 20	AverageRF
1,1,2-Trichloroethane	10	10	.100	0.481	0.487	1		NA	± 20	AverageRF
Tetrachloroethene (PCE)	10	9.5	0.200	0.613	0.579	-6		NA	± 20	AverageRF
2-Hexanone	200	240	0.015	0.0525	0.0642	22	*	NA	± 20	AverageRF
1,3-Dichloropropane	10	10	0.01	1.05	1.08	3		NA	± 20	AverageRF
Dibromochloromethane	10	9.4	0.100	0.535	0.503	-6		NA	± 20	AverageRF
1,2-Dibromoethane (EDB)	10	9.5	0.100	0.537	0.512	-5		NA	± 20	AverageRF
Chlorobenzene	10	9.7	0.500	2.21	2.14	-3		NA	± 20	AverageRF
Ethylbenzene	10	9.6	0.100	1.21	1.16	-4		NA	± 20	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† SPCC Compound **‡ CCC Compound**

Client: Sealaska Environmental Services, LLC
Project: TO 01 JBLM

Service Request: K1410537
Date Analyzed: 10/07/2014

Continuing Calibration Verification Summary
Volatile Organic Compounds

Calibration Type: Internal Standard
Analysis Method: 8260C

Calibration Date: 09/17/2014
Calibration ID: CAL13556
Analysis Lot: KWG1413593
Units: PPB

Analyte Name	Expected	Result	Min RF	Average RF	CCV RF	%D	%Drift		Criteria	Curve Fit
1,1,1,2-Tetrachloroethane	10	8.7	.01	0.694	0.605	-13	NA		± 20	AverageRF
m,p-Xylenes	20	19	0.100	1.49	1.42	-5	NA		± 20	AverageRF
o-Xylene	10	9.2	0.300	1.46	1.35	-8	NA		± 20	AverageRF
Styrene	10	9.6	0.300	1.10	1.05	-4	NA		± 20	AverageRF
Bromoform	10	7.9	0.100	0.297	0.235	NA	-21	*	± 20	Quadratic(0,0)
Isopropylbenzene	10	9.6	0.100	3.70	3.53	-4	NA		± 20	AverageRF
1,1,2,2-Tetrachloroethane	10	10	.300	0.613	0.635	4	NA		± 20	AverageRF
Bromobenzene	10	9.3	0.01	0.956	0.890	-7	NA		± 20	AverageRF
n-Propylbenzene	10	9.9	0.01	4.48	4.44	-1	NA		± 20	AverageRF
1,2,3-Trichloropropane	10	9.8	0.01	0.212	0.207	-2	NA		± 20	AverageRF
2-Chlorotoluene	10	9.4	0.01	2.75	2.59	-6	NA		± 20	AverageRF
1,3,5-Trimethylbenzene	10	9.9	0.01	3.08	3.05	-1	NA		± 20	AverageRF
4-Chlorotoluene	10	10	0.01	3.16	3.15	0	NA		± 20	AverageRF
tert-Butylbenzene	10	9.5	0.01	2.79	2.66	-5	NA		± 20	AverageRF
1,2,4-Trimethylbenzene	10	9.9	0.01	3.13	3.10	-1	NA		± 20	AverageRF
sec-Butylbenzene	10	9.8	0.01	3.94	3.86	-2	NA		± 20	AverageRF
4-Isopropyltoluene	10	9.8	0.01	3.24	3.18	-2	NA		± 20	AverageRF
1,3-Dichlorobenzene	10	9.4	0.600	1.83	1.72	-6	NA		± 20	AverageRF
1,4-Dichlorobenzene	10	9.3	0.500	1.88	1.76	-7	NA		± 20	AverageRF
n-Butylbenzene	10	10	0.01	2.78	2.77	0	NA		± 20	AverageRF
1,2-Dichlorobenzene	10	9.5	0.400	1.71	1.63	-5	NA		± 20	AverageRF
1,2-Dibromo-3-chloropropane	10	8.9	0.025	0.0705	0.0625	-11	NA		± 20	AverageRF
1,2,4-Trichlorobenzene	10	9.8	0.200	0.947	0.925	-2	NA		± 20	AverageRF
Hexachlorobutadiene	10	9.4	0.01	0.419	0.395	-6	NA		± 20	AverageRF
Naphthalene	10	11	0.01	1.51	1.60	6	NA		± 20	AverageRF
1,2,3-Trichlorobenzene	10	10	0.01	0.681	0.698	3	NA		± 20	AverageRF
Dibromofluoromethane	10	9.8	0.01	0.219	0.215	-2	NA		± 20	AverageRF
1,2-Dichloroethane-d4	10	11	0.01	0.258	0.276	7	NA		± 20	AverageRF
Toluene-d8	10	9.9	0.01	1.01	0.995	-1	NA		± 20	AverageRF
4-Bromofluorobenzene	10	9.9	0.01	0.902	0.889	-1	NA		± 20	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† SPCC Compound **‡ CCC Compound**

Client: Sealaska Environmental Services, LLC
Project: TO 01 JBLM

Service Request: K1410537
Date Analyzed: 10/08/2014

Continuing Calibration Verification Summary
Volatile Organic Compounds

Calibration Type: Internal Standard
Analysis Method: 8260C

Calibration Date: 09/17/2014
Calibration ID: CAL13556
Analysis Lot: KWG1413664
Units: PPB

File ID: J:\MS18\DATA\100814\1008F002.D

Analyte Name	Expected	Result	Min RF	Average RF	CCV RF	%D		%Drift	Criteria	Curve Fit
Dichlorodifluoromethane	10	13	0.100	0.341	0.437	28	*	NA	± 20	AverageRF
Chloromethane	10	13	0.100	0.390	0.490	26	*	NA	± 20	AverageRF
Vinyl Chloride	10	13	0.100	0.375	0.473	26	*	NA	± 20	AverageRF
Bromomethane	10	9.9	0.100	0.286	0.284	-1		NA	± 20	AverageRF
Chloroethane	10	12	0.100	0.213	0.246	16		NA	± 20	AverageRF
Trichlorofluoromethane	10	12	0.100	0.510	0.602	18		NA	± 20	AverageRF
1,1-Dichloroethene	10	12	.100	0.219	0.259	18		NA	± 20	AverageRF
Acetone	200	230	0.01	0.0476	0.0556	17		NA	± 20	AverageRF
Carbon Disulfide	10	11	0.100	0.745	0.853	15		NA	± 20	AverageRF
Methylene Chloride	10	10	0.100	0.315	0.321	2		NA	± 20	AverageRF
Methyl tert-Butyl Ether	20	16	0.100	0.680	0.536	-21	*	NA	± 20	AverageRF
trans-1,2-Dichloroethene	10	11	0.100	0.273	0.298	9		NA	± 20	AverageRF
1,1-Dichloroethane	10	11	.200	0.478	0.539	13		NA	± 20	AverageRF
2,2-Dichloropropane	10	7.1	0.01	0.390	0.275	-29	*	NA	± 20	AverageRF
cis-1,2-Dichloroethene	10	11	0.100	0.321	0.339	6		NA	± 20	AverageRF
2-Butanone (MEK)	200	210	0.01	0.0193	0.0200	3		NA	± 20	AverageRF
Bromochloromethane	10	10	0.01	0.137	0.140	3		NA	± 20	AverageRF
Chloroform	10	11	0.200	0.506	0.560	11		NA	± 20	AverageRF
1,1,1-Trichloroethane (TCA)	10	10	.100	0.420	0.419	0		NA	± 20	AverageRF
Carbon Tetrachloride	10	10	0.100	0.355	0.366	3		NA	± 20	AverageRF
1,1-Dichloropropene	10	12	0.01	0.381	0.451	18		NA	± 20	AverageRF
Benzene	10	11	0.500	1.24	1.34	8		NA	± 20	AverageRF
1,2-Dichloroethane (EDC)	10	11	0.100	0.391	0.441	13		NA	± 20	AverageRF
Trichloroethene (TCE)	10	11	0.200	0.289	0.331	15		NA	± 20	AverageRF
1,2-Dichloropropane	10	11	0.100	0.301	0.327	8		NA	± 20	AverageRF
Dibromomethane	10	10	0.01	0.160	0.164	3		NA	± 20	AverageRF
Bromodichloromethane	10	10	0.200	0.349	0.360	3		NA	± 20	AverageRF
cis-1,3-Dichloropropene	10	9.1	0.200	0.423	0.385	-9		NA	± 20	AverageRF
4-Methyl-2-pentanone (MIBK)	200	220	0.01	0.0643	0.0718	12		NA	± 20	AverageRF
Toluene	10	10	0.400	0.831	0.870	5		NA	± 20	AverageRF
trans-1,3-Dichloropropene	10	7.9	0.100	0.841	0.661	-21	*	NA	± 20	AverageRF
1,1,2-Trichloroethane	10	9.9	.100	0.481	0.477	-1		NA	± 20	AverageRF
Tetrachloroethene (PCE)	10	11	0.200	0.613	0.654	7		NA	± 20	AverageRF
2-Hexanone	200	210	0.015	0.0525	0.0561	7		NA	± 20	AverageRF
1,3-Dichloropropane	10	11	0.01	1.05	1.11	6		NA	± 20	AverageRF
Dibromochloromethane	10	9.8	0.100	0.535	0.523	-2		NA	± 20	AverageRF
1,2-Dibromoethane (EDB)	10	9.5	0.100	0.537	0.508	-5		NA	± 20	AverageRF
Chlorobenzene	10	10	0.500	2.21	2.27	3		NA	± 20	AverageRF
Ethylbenzene	10	10	0.100	1.21	1.25	4		NA	± 20	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† SPCC Compound **‡ CCC Compound**

Client: Sealaska Environmental Services, LLC
Project: TO 01 JBLM

Service Request: K1410537
Date Analyzed: 10/08/2014

Continuing Calibration Verification Summary
Volatile Organic Compounds

Calibration Type: Internal Standard
Analysis Method: 8260C

Calibration Date: 09/17/2014
Calibration ID: CAL13556
Analysis Lot: KWG1413664
Units: PPB

Analyte Name	Expected	Result	Min RF	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
1,1,1,2-Tetrachloroethane	10	9.2	.01	0.694	0.638	-8	NA	± 20	AverageRF
m,p-Xylenes	20	21	0.100	1.49	1.55	4	NA	± 20	AverageRF
o-Xylene	10	9.9	0.300	1.46	1.45	-1	NA	± 20	AverageRF
Styrene	10	10	0.300	1.10	1.12	2	NA	± 20	AverageRF
Bromoform	10	8.2	0.100	0.297	0.242	NA	-19	± 20	Quadratic(0,0)
Isopropylbenzene	10	10	0.100	3.70	3.85	4	NA	± 20	AverageRF
1,1,2,2-Tetrachloroethane	10	10	.300	0.613	0.630	3	NA	± 20	AverageRF
Bromobenzene	10	10	0.01	0.956	0.976	2	NA	± 20	AverageRF
n-Propylbenzene	10	11	0.01	4.48	5.01	12	NA	± 20	AverageRF
1,2,3-Trichloropropane	10	9.5	0.01	0.212	0.202	-5	NA	± 20	AverageRF
2-Chlorotoluene	10	11	0.01	2.75	2.90	5	NA	± 20	AverageRF
1,3,5-Trimethylbenzene	10	11	0.01	3.08	3.41	11	NA	± 20	AverageRF
4-Chlorotoluene	10	11	0.01	3.16	3.45	9	NA	± 20	AverageRF
tert-Butylbenzene	10	11	0.01	2.79	3.05	9	NA	± 20	AverageRF
1,2,4-Trimethylbenzene	10	11	0.01	3.13	3.47	11	NA	± 20	AverageRF
sec-Butylbenzene	10	11	0.01	3.94	4.37	11	NA	± 20	AverageRF
4-Isopropyltoluene	10	11	0.01	3.24	3.57	10	NA	± 20	AverageRF
1,3-Dichlorobenzene	10	10	0.600	1.83	1.87	2	NA	± 20	AverageRF
1,4-Dichlorobenzene	10	10	0.500	1.88	1.91	1	NA	± 20	AverageRF
n-Butylbenzene	10	11	0.01	2.78	3.19	15	NA	± 20	AverageRF
1,2-Dichlorobenzene	10	10	0.400	1.71	1.76	3	NA	± 20	AverageRF
1,2-Dibromo-3-chloropropane	10	8.0	0.025	0.0705	0.0561	-20	NA	± 20	AverageRF
1,2,4-Trichlorobenzene	10	10	0.200	0.947	0.949	0	NA	± 20	AverageRF
Hexachlorobutadiene	10	10	0.01	0.419	0.417	-1	NA	± 20	AverageRF
Naphthalene	10	9.7	0.01	1.51	1.46	-3	NA	± 20	AverageRF
1,2,3-Trichlorobenzene	10	10	0.01	0.681	0.705	4	NA	± 20	AverageRF
Dibromofluoromethane	10	10	0.01	0.219	0.220	0	NA	± 20	AverageRF
1,2-Dichloroethane-d4	10	11	0.01	0.258	0.285	10	NA	± 20	AverageRF
Toluene-d8	10	9.9	0.01	1.01	1.00	-1	NA	± 20	AverageRF
4-Bromofluorobenzene	10	9.7	0.01	0.902	0.872	-3	NA	± 20	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† SPCC Compound **‡ CCC Compound**

ALS Group USA, Corp. dba ALS Environmental

QA/QC Results

Client: Sealaska Environmental Services, LLC **Service Request:** K1410537
Project: TO 01 JBLM

Analysis Run Log
Volatile Organic Compounds

Analysis Method: 8260C **Analysis Lot:** KWG1413536
Instrument ID: GC-MS 18

File ID	Sample Name	Lab Code	Date Analysis Started	Start Time	Q	Date Analysis Finished	Finish Time
1006F034.D	GC/MS Tuning - Bromofluorobenzene	KWG1413536-1	10/6/2014	21:06		10/6/2014	21:22
1006F035.D	Continuing Calibration Verification	KWG1413536-2	10/6/2014	21:27		10/6/2014	21:43
1006F037.D	Lab Control Sample	KWG1413535-3	10/6/2014	22:10		10/6/2014	22:26
1006F038.D	LGC140925SLAPI-1MS	KWG1413535-1	10/6/2014	22:32		10/6/2014	22:48
1006F039.D	LGC140925SLAPI-1DMS	KWG1413535-2	10/6/2014	22:53		10/6/2014	23:09
1006F042.D	Method Blank	KWG1413535-5	10/6/2014	23:57		10/7/2014	00:13
1006F043.D	ZZZZZZ	ZZZZZZ	10/7/2014	00:19		10/7/2014	00:35
1006F044.D	ZZZZZZ	ZZZZZZ	10/7/2014	00:40		10/7/2014	00:56
1006F045.D	ZZZZZZ	ZZZZZZ	10/7/2014	01:02		10/7/2014	01:18
1006F046.D	LGC140925ISLX2-1	K1410537-001	10/7/2014	01:23		10/7/2014	01:39
1006F047.D	LGC140925ISLX3-1	K1410537-002	10/7/2014	01:44		10/7/2014	02:00
1006F048.D	LGC140925ISLX4-1	K1410537-003	10/7/2014	02:06		10/7/2014	02:22
1006F049.D	LGC140925ISLX5-1	K1410537-004	10/7/2014	02:27		10/7/2014	02:43
1006F050.D	LGC140925ISLX6-1	K1410537-005	10/7/2014	02:48		10/7/2014	03:04
1006F051.D	LGC140925ISLX7-1	K1410537-006	10/7/2014	03:10		10/7/2014	03:26
1006F052.D	LGC140925ISLX9-1	K1410537-007	10/7/2014	03:31		10/7/2014	03:47
1006F053.D	LGC140925ISLX11-1	K1410537-008	10/7/2014	03:52		10/7/2014	04:08
1006F054.D	LGC140925ISLX12-1	K1410537-009	10/7/2014	04:14		10/7/2014	04:30
1006F055.D	LGC140925ISLX13-1	K1410537-010	10/7/2014	04:35		10/7/2014	04:51
1006F056.D	LGC140925ISLX14-1	K1410537-011	10/7/2014	04:56		10/7/2014	05:12
1006F057.D	LGC140925ISLX15-1	K1410537-012	10/7/2014	05:18		10/7/2014	05:34
1006F058.D	LGC140925DUP6-1	K1410537-013	10/7/2014	05:39		10/7/2014	05:55
1006F059.D	LGC140925ISI-1	K1410537-014	10/7/2014	06:01		10/7/2014	06:17
1006F060.D	LGC140925ISE-1	K1410537-015	10/7/2014	06:22		10/7/2014	06:38
1006F061.D	LGC140925SLAPE-1	K1410537-016	10/7/2014	06:43		10/7/2014	06:59
1006F062.D	LGC140925SLAPI-1	K1410537-017	10/7/2014	07:05		10/7/2014	07:21

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

Client: Sealaska Environmental Services, LLC **Service Request:** K1410537
Project: TO 01 JBLM

Analysis Run Log
Volatile Organic Compounds

Analysis Method: 8260C **Analysis Lot:** KWG1413593
Instrument ID: GC-MS 18

File ID	Sample Name	Lab Code	Date Analysis Started	Start Time	Q	Date Analysis Finished	Finish Time
1007F006.D	GC/MS Tuning - Bromofluorobenzene	KWG1413593-1	10/7/2014	11:50		10/7/2014	12:06
1007F007.D	Continuing Calibration Verification	KWG1413593-2	10/7/2014	12:11		10/7/2014	12:27
1007F008.D	ZZZZZZ	ZZZZZZ	10/7/2014	12:49		10/7/2014	13:05
1007F010.D	LGC140925MAMC4-1MS	KWG1413599-4	10/7/2014	13:31		10/7/2014	13:47
1007F011.D	LGC140925MAMC4-1DMS	KWG1413599-5	10/7/2014	13:53		10/7/2014	14:09
1007F014.D	Method Blank	KWG1413599-3	10/7/2014	14:57		10/7/2014	15:13
1007F015.D	LGC140925MAMC4-1	K1410537-019	10/7/2014	15:18		10/7/2014	15:34
1007F016.D	ZZZZZZ	ZZZZZZ	10/7/2014	15:40		10/7/2014	15:56
1007F017.D	ZZZZZZ	ZZZZZZ	10/7/2014	16:01		10/7/2014	16:17
1007F018.D	ZZZZZZ	ZZZZZZ	10/7/2014	16:22		10/7/2014	16:38
1007F019.D	ZZZZZZ	ZZZZZZ	10/7/2014	16:44		10/7/2014	17:00
1007F020.D	ZZZZZZ	ZZZZZZ	10/7/2014	17:05		10/7/2014	17:21
1007F021.D	ZZZZZZ	ZZZZZZ	10/7/2014	17:26		10/7/2014	17:42
1007F022.D	ZZZZZZ	ZZZZZZ	10/7/2014	17:50		10/7/2014	18:06
1007F024.D	LGC140925MAMC3-1	K1410537-018	10/7/2014	18:33		10/7/2014	18:49
1007F025.D	LGC140925LC74D-1	K1410537-022	10/7/2014	18:54		10/7/2014	19:10
1007F026.D	LGC140925LC96D-1	K1410537-023	10/7/2014	19:16		10/7/2014	19:32
1007F027.D	LGC140925SLAP6-1	K1410537-024	10/7/2014	19:37		10/7/2014	19:53
1007F028.D	TB092514	K1410537-025	10/7/2014	19:58		10/7/2014	20:14
1007F029.D	LGC140925LC99D-1	K1410537-021	10/7/2014	20:20		10/7/2014	20:36
1007F030.D	LGC140925EGDYPW2-1	K1410537-027	10/7/2014	20:41		10/7/2014	20:57
1007F031.D	LGC140925DUP7-1	K1410537-020	10/7/2014	21:03		10/7/2014	21:19
1007F032.D	LGC140925DUP7-1	K1410537-020	10/7/2014	21:24		10/7/2014	21:40
1007F033.D	LGC140925EGDYPW3-1	K1410537-028	10/7/2014	21:46		10/7/2014	22:02
1007F034.D	LGC140925EGDYPW3-1	K1410537-028	10/7/2014	22:07		10/7/2014	22:23
1007F035.D	LGC140925EGDYPW1-1	K1410537-026	10/7/2014	22:28		10/7/2014	22:44
1007F036.D	LGC140925EGDYPW1-1	K1410537-026	10/7/2014	22:50		10/7/2014	23:06
1007F038.D	Lab Control Sample	KWG1413599-1	10/7/2014	23:32		10/7/2014	23:48

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

Client: Sealaska Environmental Services, LLC **Service Request:** K1410537
Project: TO 01 JBLM

Analysis Run Log
Volatile Organic Compounds

Analysis Method: 8260C **Analysis Lot:** KWG1413664
Instrument ID: GC-MS 18

File ID	Sample Name	Lab Code	Date Analysis Started	Start Time	Q	Date Analysis Finished	Finish Time
1008F001.D	GC/MS Tuning - Bromofluorobenzene	KWG1413664-1	10/8/2014	13:31		10/8/2014	13:47
1008F002.D	Continuing Calibration Verification	KWG1413664-2	10/8/2014	14:02		10/8/2014	14:18
1008F003.D	Lab Control Sample	KWG1413665-1	10/8/2014	14:40		10/8/2014	14:56
1008F004.D	Duplicate Lab Control Sample	KWG1413665-2	10/8/2014	15:01		10/8/2014	15:17
1008F009.D	Method Blank	KWG1413665-3	10/8/2014	16:54		10/8/2014	17:10
1008F018.D	ZZZZZZ	ZZZZZZ	10/8/2014	20:06		10/8/2014	20:22
1008F019.D	ZZZZZZ	ZZZZZZ	10/8/2014	20:27		10/8/2014	20:43
1008F020.D	ZZZZZZ	ZZZZZZ	10/8/2014	20:48		10/8/2014	21:04
1008F021.D	LGC140925EGDYPW4-1	K1410537-029	10/8/2014	21:10		10/8/2014	21:26
1008F022.D	LGC140925EGDYPW5-1	K1410537-030	10/8/2014	21:31		10/8/2014	21:47
1008F023.D	LGC140925EGDYPW6-1	K1410537-031	10/8/2014	21:52		10/8/2014	22:08
1008F024.D	LGC140925EGDYPW7-1	K1410537-032	10/8/2014	22:14		10/8/2014	22:30
1008F025.D	LGC140925EGDYPW8-1	K1410537-033	10/8/2014	22:35		10/8/2014	22:51
1008F026.D	LGC140925EGDYE-1	K1410537-034	10/8/2014	22:56		10/8/2014	23:12
1008F027.D	LGC140925EGDYI-1	K1410537-035	10/8/2014	23:18		10/8/2014	23:34
1008F028.D	ZZZZZZ	ZZZZZZ	10/8/2014	23:39		10/8/2014	23:55
1008F029.D	ZZZZZZ	ZZZZZZ	10/9/2014	00:00		10/9/2014	00:16
1008F030.D	ZZZZZZ	ZZZZZZ	10/9/2014	00:22		10/9/2014	00:38
1008F031.D	ZZZZZZ	ZZZZZZ	10/9/2014	00:43		10/9/2014	00:59

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

QA/QC Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1410537
Project:	TO 01 JBLM	**Date Extracted:**	10/07/2014
Sample Matrix:	Water		

Extraction Prep Log
Volatile Organic Compounds

Extraction Method:	EPA 5030B	**Extraction Lot:**	KWG1413535
Analysis Method:	8260C	**Level:**	Low

Sample Name	Lab Code	Date Collected	Date Received	Sample Amount	Final Volume	% Solids	Note
LGC140925ISLX2-1	K1410537-001	09/25/14	09/26/14	10ml	10ml	NA	
LGC140925ISLX3-1	K1410537-002	09/25/14	09/26/14	10ml	10ml	NA	
LGC140925ISLX4-1	K1410537-003	09/25/14	09/26/14	10ml	10ml	NA	
LGC140925ISLX5-1	K1410537-004	09/25/14	09/26/14	10ml	10ml	NA	
LGC140925ISLX6-1	K1410537-005	09/25/14	09/26/14	10ml	10ml	NA	
LGC140925ISLX7-1	K1410537-006	09/25/14	09/26/14	10ml	10ml	NA	
LGC140925ISLX9-1	K1410537-007	09/25/14	09/26/14	10ml	10ml	NA	
LGC140925ISLX11-1	K1410537-008	09/25/14	09/26/14	10ml	10ml	NA	
LGC140925ISLX12-1	K1410537-009	09/25/14	09/26/14	10ml	10ml	NA	
LGC140925ISLX13-1	K1410537-010	09/25/14	09/26/14	10ml	10ml	NA	
LGC140925ISLX14-1	K1410537-011	09/25/14	09/26/14	10ml	10ml	NA	
LGC140925ISLX15-1	K1410537-012	09/25/14	09/26/14	10ml	10ml	NA	
LGC140925DUP6-1	K1410537-013	09/25/14	09/26/14	10ml	10ml	NA	
LGC140925ISI-1	K1410537-014	09/25/14	09/26/14	10ml	10ml	NA	
LGC140925ISE-1	K1410537-015	09/25/14	09/26/14	10ml	10ml	NA	
LGC140925SLAPE-1	K1410537-016	09/25/14	09/26/14	10ml	10ml	NA	
LGC140925SLAPI-1	K1410537-017	09/25/14	09/26/14	10ml	10ml	NA	
Method Blank	KWG1413535-5	NA	NA	10ml	10ml	NA	
LGC140925SLAPI-1MS	KWG1413535-1	09/25/14	09/26/14	10ml	10ml	NA	
LGC140925SLAPI-1DMS	KWG1413535-2	09/25/14	09/26/14	10ml	10ml	NA	
Lab Control Sample	KWG1413535-3	NA	NA	10ml	10ml	NA	

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

QA/QC Results

Client: Sealaska Environmental Services, LLC
Project: TO 01 JBLM
Sample Matrix: Water

Service Request: K1410537
Date Extracted: 10/07/2014

Extraction Prep Log
Volatile Organic Compounds

Extraction Method: EPA 5030B
Analysis Method: 8260C

Extraction Lot: KWG1413599
Level: Low

Sample Name	Lab Code	Date Collected	Date Received	Sample Amount	Final Volume	% Solids	Note
LGC140925MAMC3-1	K1410537-018	09/25/14	09/26/14	10ml	10ml	NA	
LGC140925MAMC4-1	K1410537-019	09/25/14	09/26/14	10ml	10ml	NA	
LGC140925DUP7-1DL	K1410537-020	09/25/14	09/26/14	10ml	10ml	NA	
LGC140925DUP7-1	K1410537-020	09/25/14	09/26/14	10ml	10ml	NA	
LGC140925LC99D-1	K1410537-021	09/25/14	09/26/14	10ml	10ml	NA	
LGC140925LC74D-1	K1410537-022	09/25/14	09/26/14	10ml	10ml	NA	
LGC140925LC96D-1	K1410537-023	09/25/14	09/26/14	10ml	10ml	NA	
LGC140925SLAP6-1	K1410537-024	09/25/14	09/26/14	10ml	10ml	NA	
TB092514	K1410537-025	09/25/14	09/26/14	10ml	10ml	NA	
LGC140925EGDYPW1-1	K1410537-026	09/25/14	09/26/14	10ml	10ml	NA	
LGC140925EGDYPW1-1DL	K1410537-026	09/25/14	09/26/14	10ml	10ml	NA	
LGC140925EGDYPW2-1	K1410537-027	09/25/14	09/26/14	10ml	10ml	NA	
LGC140925EGDYPW3-1DL	K1410537-028	09/25/14	09/26/14	10ml	10ml	NA	
LGC140925EGDYPW3-1	K1410537-028	09/25/14	09/26/14	10ml	10ml	NA	
Method Blank	KWG1413599-3	NA	NA	10ml	10ml	NA	
LGC140925MAMC4-1MS	KWG1413599-4	09/25/14	09/26/14	10ml	10ml	NA	
LGC140925MAMC4-1DMS	KWG1413599-5	09/25/14	09/26/14	10ml	10ml	NA	
Lab Control Sample	KWG1413599-1	NA	NA	10ml	10ml	NA	

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

QA/QC Results

Client: Sealaska Environmental Services, LLC
Project: TO 01 JBLM
Sample Matrix: Water

Service Request: K1410537
Date Extracted: 10/08/2014

Extraction Prep Log
Volatile Organic Compounds

Extraction Method: EPA 5030B
Analysis Method: 8260C

Extraction Lot: KWG1413665
Level: Low

Sample Name	Lab Code	Date Collected	Date Received	Sample Amount	Final Volume	% Solids	Note
LGC140925EGDYPW4-1	K1410537-029	09/25/14	09/26/14	10ml	10ml	NA	
LGC140925EGDYPW5-1	K1410537-030	09/25/14	09/26/14	10ml	10ml	NA	
LGC140925EGDYPW6-1	K1410537-031	09/25/14	09/26/14	10ml	10ml	NA	
LGC140925EGDYPW7-1	K1410537-032	09/25/14	09/26/14	10ml	10ml	NA	
LGC140925EGDYPW8-1	K1410537-033	09/25/14	09/26/14	10ml	10ml	NA	
LGC140925EGDYE-1	K1410537-034	09/25/14	09/26/14	10ml	10ml	NA	
LGC140925EGDYI-1	K1410537-035	09/25/14	09/26/14	10ml	10ml	NA	
Method Blank	KWG1413665-3	NA	NA	10ml	10ml	NA	
Lab Control Sample	KWG1413665-1	NA	NA	10ml	10ml	NA	
Duplicate Lab Control Sample	KWG1413665-2	NA	NA	10ml	10ml	NA	

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

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November 3, 2014 Analytical Report for Service Request No: K1410790

Scott Elkind
Sealaska Environmental Services, LLC
18743 Front Street NE
P.O. Box 869
Poulsbo, WA 98370

RE: JBLM LTM Log Center/TO-01

Dear Scott:

Enclosed are the results of the samples submitted to our laboratory on October 02, 2014. For your reference, these analyses have been assigned our service request number K1410790.

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. The test results meet requirements of the current NELAP standards, where applicable, and except as noted in the laboratory case narrative provided. For a specific list of NELAP-accredited analytes, refer to the certifications section at www.alsglobal.com. All results are intended to be considered in their entirety, and ALS Group USA Corp. dba ALS Environmental (ALS) is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report.

Please call if you have any questions. My extension is 3376. You may also contact me via Email at Gregory.Salata@alsglobal.com.

Respectfully submitted,

ALS Group USA Corp. dba ALS Environmental

Gregory Salata

Gregory Salata, Ph.D.
Client Services Manager

GS/kd

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Acronyms

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Volatile Organic Compounds By EPA Method 8260

Raw Data

Acronyms

ASTM	American Society for Testing and Materials
A2LA	American Association for Laboratory Accreditation
CARB	California Air Resources Board
CAS Number	Chemical Abstract Service registry Number
CFC	Chlorofluorocarbon
CFU	Colony-Forming Unit
DEC	Department of Environmental Conservation
DEQ	Department of Environmental Quality
DHS	Department of Health Services
DOE	Department of Ecology
DOH	Department of Health
EPA	U. S. Environmental Protection Agency
ELAP	Environmental Laboratory Accreditation Program
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
LOD	Limit of Detection
LOQ	Limit of Quantitation
LUFT	Leaking Underground Fuel Tank
M	Modified
MCL	Maximum Contaminant Level is the highest permissible concentration of a substance allowed in drinking water as established by the USEPA.
MDL	Method Detection Limit
MPN	Most Probable Number
MRL	Method Reporting Limit
NA	Not Applicable
NC	Not Calculated
NCASI	National Council of the Paper Industry for Air and Stream Improvement
ND	Not Detected
NIOSH	National Institute for Occupational Safety and Health
PQL	Practical Quantitation Limit
RCRA	Resource Conservation and Recovery Act
SIM	Selected Ion Monitoring
TPH	Total Petroleum Hydrocarbons
tr	Trace level is the concentration of an analyte that is less than the PQL but greater than or equal to the MDL.

Inorganic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable. See case narrative.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
E	The result is an estimate amount because the value exceeded the instrument calibration range.
J	The result is an estimated value.
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
i	The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
X	See case narrative.
Q	See case narrative. One or more quality control criteria was outside the limits.
H	The holding time for this test is immediately following sample collection. The samples were analyzed as soon as possible after receipt by the laboratory.

Metals Data Qualifiers

#	The control limit criteria is not applicable. See case narrative.
J	The result is an estimated value.
E	The percent difference for the serial dilution was greater than 10%, indicating a possible matrix interference in the sample.
M	The duplicate injection precision was not met.
N	The Matrix Spike sample recovery is not within control limits. See case narrative.
S	The reported value was determined by the Method of Standard Additions (MSA).
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
W	The post-digestion spike for furnace AA analysis is out of control limits, while sample absorbance is less than 50% of spike absorbance.
i	The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
X	See case narrative.
+	The correlation coefficient for the MSA is less than 0.995.
Q	See case narrative. One or more quality control criteria was outside the limits.

Organic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable. See case narrative.
A	A tentatively identified compound, a suspected aldol-condensation product.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
C	The analyte was qualitatively confirmed using GC/MS techniques, pattern recognition, or by comparing to historical data.
D	The reported result is from a dilution.
E	The result is an estimated value.
J	The result is an estimated value.
N	The result is presumptive. The analyte was tentatively identified, but a confirmation analysis was not performed.
P	The GC or HPLC confirmation criteria was exceeded. The relative percent difference is greater than 40% between the two analytical results.
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
i	The MRL/MDL or LOQ/LOD is elevated due to a chromatographic interference.
X	See case narrative.
Q	See case narrative. One or more quality control criteria was outside the limits.

Additional Petroleum Hydrocarbon Specific Qualifiers

F	The chromatographic fingerprint of the sample matches the elution pattern of the calibration standard.
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.
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.
O	The chromatographic fingerprint of the sample resembles an oil, but does not match the calibration standard.
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.

ALS Group USA Corp. dba ALS Environmental (ALS) - Kelso
State Certifications, Accreditations, and Licenses

Agency	Web Site	Number
Alaska DEC UST	http://dec.alaska.gov/applications/eh/ehllabreports/USTLabs.aspx	UST-040
Arizona DHS	http://www.azdhs.gov/lab/license/env.htm	AZ0339
Arkansas - DEQ	http://www.adeq.state.ar.us/techsvs/labcert.htm	88-0637
California DHS (ELAP)	http://www.cdph.ca.gov/certlic/labs/Pages/ELAP.aspx	2795
DOD ELAP	http://www.denix.osd.mil/edqw/Accreditation/AccreditedLabs.cfm	L14-51
Florida DOH	http://www.doh.state.fl.us/lab/EnvLabCert/WaterCert.htm	E87412
Hawaii DOH	Not available	-
Idaho DHW	http://www.healthandwelfare.idaho.gov/Health/Labs/CertificationDrinkingWaterLabs/tabid/1833/Default.aspx	-
ISO 17025	http://www.pjlabs.com/	L14-50
Louisiana DEQ	http://www.deq.louisiana.gov/portal/DIVISIONS/PublicParticipationandPermitSupport/LouisianaLaboratoryAccreditationProgram.aspx	03016
Maine DHS	Not available	WA01276
Michigan DEQ	http://www.michigan.gov/deq/0,1607,7-135-3307_4131_4156---,00.html	9949
Minnesota DOH	http://www.health.state.mn.us/accreditation	053-999-457
Montana DPHHS	http://www.dphhs.mt.gov/publichealth/	CERT0047
Nevada DEP	http://ndep.nv.gov/bsdw/labservice.htm	WA01276
New Jersey DEP	http://www.nj.gov/dep/oqa/	WA005
North Carolina DWQ	http://www.dwqlab.org/	605
Oklahoma DEQ	http://www.deq.state.ok.us/CSDnew/labcert.htm	9801
Oregon – DEQ (NELAP)	http://public.health.oregon.gov/LaboratoryServices/EnvironmentalLaboratoryAccreditation/Pages/index.aspx	WA100010
South Carolina DHEC	http://www.scdhec.gov/environment/envserv/	61002
Texas CEQ	http://www.tceq.texas.gov/field/qa/env_lab_accreditation.html	T104704427
Washington DOE	http://www.ecy.wa.gov/programs/eap/labs/lab-accreditation.html	C544
Wisconsin DNR	http://dnr.wi.gov/	998386840
Wyoming (EPA Region 8)	http://www.epa.gov/region8/water/dwhome/wyomingdi.html	-
Kelso Laboratory Website	www.alsglobal.com	NA

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. A complete listing of specific NELAP-certified analytes, can be found in the certification section at www.ALSGlobal.com or at the accreditation bodies web site.
Please refer to the certification and/or accreditation body's web site if samples are submitted for compliance purposes. The states highlighted above, require the analysis be listed on the state certification if used for compliance purposes and if the method/anlayte is offered by that state.

Case Narrative

ALS Environmental—Kelso Laboratory
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ALS ENVIRONMENTAL

Client:	Sealaska Environmental Services, LLC	**Service Request No.:**	K1410790
Project:	JBLM LTM Log Center/ TO-01	**Date Received:**	10/02/14
Sample Matrix:	Water		

Case Narrative

All analyses were performed consistent with the quality assurance program of ALS Environmental. This report contains analytical results for samples designated for Tier IV validation deliverables including summary forms and all of the associated raw data for each of the analyses. When appropriate to the method, method blank results have been reported with each analytical test.

Sample Receipt

Forty water samples were received for analysis at ALS Environmental on 10/02/14. T The samples were received in good condition and consistent with the accompanying chain of custody form. The samples were stored in a refrigerator at 4ºC upon receipt at the laboratory.

Volatile Organic Compounds by EPA Method 8260

Calibration Verification Exceptions:
The following analytes were flagged as outside the control criterion for Continuing Calibration Verification (CCV) MS13\1010F005.D: Carbon Disulfide, 4-Methyl-2-pentanone, Tetrachloroethene and Isopropylbenzene. In accordance with the EPA Method, 80% or more of the CCV analytes must pass within 20% of the true value. The ALS SOP allows for 40% difference for the remaining analytes. The CCV met these criteria. The quality of the sample data was not significantly affected. No further corrective action was required.

The following analytes were flagged as outside the control criterion for Continuing Calibration Verification (CCV) MS13\1013F003.D: Chloromethane, Bromomethane, Acetone, 4-Methyl-2-pentanone, Tetrachloroethene, Ethylbenzene, m,p-Xylenes, o-Xylene, Styrene, Bromoform, Isopropylbenzene, 1,2,4-Trichlorobenzene and 1,2,3-Trichlorobenzene. In accordance with the EPA Method, 80% or more of the CCV analytes must pass within 20% of the true value. The ALS SOP allows for 40% difference for the remaining analytes. The CCV met these criteria. The quality of the sample data was not significantly affected. No further corrective action was required.

Matrix Spike Recovery Exceptions:
The duplicate matrix spike recovery of 2,2-Dichloropropane for sample LGC141001Well13-1 was outside control criteria. Recovery in the Laboratory Control Sample (LCS) was acceptable, which indicated the analytical batch was in control. The matrix spike outlier suggested a potential low bias in this matrix. No further corrective action was appropriate.

Lab Control Sample Exceptions:
The advisory criterion was exceeded for Benzene in Duplicate Laboratory Control Sample (DLCS) KWG1413833-4. As per the ALS/Kelso Standard Operating Procedure (SOP) for this method, these compounds are not included in the subset of analytes used to control the analysis. The recovery information reported for these analytes is for advisory purposes only (i.e. to provide additional detail related to the performance of each individual compound). No further corrective action was required.

Approved by____Gregory Salata_____

Sample Notes and Discussion:
Manual integration of one or more chromatographic peaks was required to correct the integration performed by the automated data processing program. The manual integration was performed in accordance with ALS policy, which is consistent with the National Environmental Laboratory Accreditation Program (NELAP), Department of Defense (DOD), and other certifying agencies. Refer to the raw data for the compounds impacted by the manual integration.

No other anomalies associated with the analysis of these samples were observed.

Approved by_____

Chain of Custody

ALS Environmental—Kelso Laboratory
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Phone (360)577-7222 Fax (360)636-1068
www.alsglobal.com

Columbia Analytical Services

CHAIN OF CUSTODY

SR#: K1410790

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PAGE 1 OF 4 COC #

PROJECT NAME: JBLM LIM LOG CENTER
PROJECT NUMBER: TO 01
PROJECT MANAGER: SCOTT ELKIND
COMPANY/ADDRESS: SEALASKA ENVIRONMENTAL
18743 FRONT ST NE STE 201
CITY/STATE/ZIP: POULSBO, WA 98370
E-MAIL ADDRESS: scott.elkind@sealaska.com
PHONE #: 3606263991 FAX #:
SAMPLER'S SIGNATURE:

SAMPLE I.D.	DATE	TIME	LAB I.D.	MATRIX	NUMBER OF CONTAINERS	Semivolatile Organics by GC/MS 625 ☐ 8270 ☐ 8270LL ☐	Volatile Organics 624 ☐ 8260 ☒ 8021 ☐ BTEX ☐	Hydrocarbons (*see below) Gas ☐ Diesel ☐ Oil ☐	☐ Fuel Fingerprint (FIQ) ☐ NW-HCID Screen	Oil & Grease/TRPH 1664 HEM ☐ 1664 SGT ☐	PCB's Aroclors ☐ Congeners ☐	Pesticides/Herbicides 608 ☐ 8081A ☐ 8141A ☐ 8151A ☐	Chlorophenolics - 8151M Tri ☐ Tetra ☐ PCP ☐	PAHS 8310 ☐ SIM ☐	Metals, Total or Dissolved (See list below)	Cyanide ☐ Hex-Chrom ☐	pH, Cond., Cl, SO4, PO4, F, NO2, NO3, BOD, TSS, TDS (circle)	NH3-N, COD, Total-P, TKN, TOC, DOC (circle) NO2+NO3	TOX 9020 ☐ AOX 1650 ☐ 506 ☐					REMARKS
TB-140929	092914	0800		W	2		2																		
LGC140929LC93D1-1	092914	0835		GW	3		3																		
LGC140929LC93D2-1	092914	0845		GW	3		3																		
LGC140929T13B-1	092914	1020		GW	3		3																		
LGC140929LC225-1	092914	1030		GW	3		3																		
LGC140929T05-1	092914	1045		GW	3		3																		
LGC140929T06-1	092914	1100		GW	3		3																		
LGC140929T11B-1	092914	1110		GW	3		3																		
LGC140929BC1-1	092914	1135		GW	9		9																		MS/MSD
LGC140929T10-1	092914	1155		GW	6		6																		MS/MSD

REPORT REQUIREMENTS

___ I. Routine Report: Method Blank, Surrogate, as required
___ II. Report Dup., MS, MSD as required
___ III. Data Validation Report (includes all raw data)
___ IV. CLP Deliverable Report
___ V. EDD

INVOICE INFORMATION

P.O. #
Bill To:

TURNAROUND REQUIREMENTS

___ 24 hr. ___ 48 hr.
___ 5 Day
X Standard (10-15 working days)
___ Provide FAX Results

Requested Report Date

Circle which metals are to be analyzed:

Total Metals: Al As Sb Ba Be B Ca Cd Co Cr Cu Fe Pb Mg Mn Mo Ni K Ag Na Se Sr Tl Sn V Zn Hg

Dissolved Metals: Al As Sb Ba Be B Ca Cd Co Cr Cu Fe Pb Mg Mn Mo Ni K Ag Na Se Sr Tl Sn V Zn Hg

*INDICATE STATE HYDROCARBON PROCEDURE: AK CA WI NORTHWEST OTHER:_____ (CIRCLE ONE)

SPECIAL INSTRUCTIONS/COMMENTS:
* AS PER CONTRACT

☐ Sample Shipment contains USDA regulated soil samples (check box if applicable)

RELINQUISHED BY:	RECEIVED BY:	RELINQUISHED BY:	RECEIVED BY:
Signature: [signature] Date/Time: 10/2/14 0800	Signature: Date/Time:	Signature: Date/Time:	Signature: [signature] Date/Time: 10/2/14 1150
Printed Name: V. SUNRISE PATTERSON Firm: SEALASKA	Printed Name: Firm: MC Delivery	Printed Name: Firm: MC Delivery	Printed Name: SWOLF Firm: ALS

RCOC #1 03/10

Columbia Analytical Services

CHAIN OF CUSTODY

SR#: K1410790

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PAGE 2 OF 4 COC #

PROJECT NAME: JBLM LTM LOG CENTER
PROJECT NUMBER: TO 01
PROJECT MANAGER: SCOTT ELKIND
COMPANY/ADDRESS: SEALASKA ENVIRONMENTAL
13743 FRONT ST NE STE. 201
CITY/STATE/ZIP: POULSBO, WA 98370
E-MAIL ADDRESS: scott.elkind@sealaska.com
PHONE #: 3606726 3991 FAX #:
SAMPLER'S SIGNATURE:

SAMPLE I.D.	DATE	TIME	LAB I.D.	MATRIX	NUMBER OF CONTAINERS	Semivolatile Organics by GC/MS 625 ☐ 8270 ☐	Volatile Organics 624 ☐ 8270LL ☐	Hydrocarbons (*see below) Gas ☐ Diesel ☐ Oil ☐	Fuel Fingerprint (FIQ) ☐ NW-HCID Screen ☐	Oil & Grease/TRPH 1664 HEM ☐ 1664 SGT ☐	PCB's Aroclors ☐ Congeners ☐	Pesticides/Herbicides 608 ☐ 8081A ☐ 8141A ☐ 8151A ☐	Chlorophenolics - 8151M Tri ☐ Tetra ☐ PCP ☐	PAHS 8310 ☐ SIM ☐	Metals: Total or Dissolved (See list below)	Cyanide ☐ Hex-Chrom ☐	pH, Cond, Cl, SO_4, P, F, NO_2, NO_3, BOD, TSS, TDS (circle)	NH_3-N, COD, Total-P, TKN, TOC, DOC (circle) NO_2+NO_3	TOX 9020 ☐ AOX 1650 ☐ 506 ☐	REMARKS
LGC140929TI5-1	092914	1225		GW	3		3													
LGC140929DUP4-1	092914	1230		GW	3		3													
LGC140929LC86D1-1	092914	1240		GW	3		3													
LGC140929LC8602-1	092914	1245		GW	3		3													
LGC140929LC102D1-1	092914	1305		GW	3		3													
LGC140929LC102D2-1	092914	1315		GW	3		3													
LGC140929LC88D1-1	092914	1330		GW	3		3													
LGC140929LC88D2-1	092914	1340		GW	3		3													
LGC140929LC95D1-1	092914	1400		GW	3		3													
LGC140929LC95D2-1	092914	1410		GW	6		6													MS/MSD

REPORT REQUIREMENTS

___ I. Routine Report: Method Blank, Surrogate, as required
___ II. Report Dup., MS, MSD as required
___ III. Data Validation Report (includes all raw data)
___ IV. CLP Deliverable Report
___ V. EDD

INVOICE INFORMATION

P.O. #
Bill To:

TURNAROUND REQUIREMENTS

___ 24 hr. ___ 48 hr.
___ 5 Day
X Standard (10-15 working days)
___ Provide FAX Results

Requested Report Date

Circle which metals are to be analyzed:

Total Metals: Al As Sb Ba Be B Ca Cd Co Cr Cu Fe Pb Mg Mn Mo Ni K Ag Na Se Sr Tl Sn V Zn Hg

Dissolved Metals: Al As Sb Ba Be B Ca Cd Co Cr Cu Fe Pb Mg Mn Mo Ni K Ag Na Se Sr Tl Sn V Zn Hg

*INDICATE STATE HYDROCARBON PROCEDURE: AK CA WI NORTHWEST OTHER: (CIRCLE ONE)

SPECIAL INSTRUCTIONS/COMMENTS:
AS PER CONTRACT

☐ Sample Shipment contains USDA regulated soil samples (check box if applicable)

RELINQUISHED BY:	RECEIVED BY:	RELINQUISHED BY:	RECEIVED BY:
Signature:	Signature:	Signature:	Signature:
Date/Time: 10/02/14 0800	Date/Time:	Date/Time:	Date/Time: 10/2/14 1150
Printed Name: V. SUNRISE MATTESON	Printed Name:	Printed Name:	Printed Name:
Firm: SEALASKA	Firm: MT Delivery	Firm: MT Delivery	Firm: A2S

Columbia Analytical Services

CHAIN OF CUSTODY

SR#: K1410790

1317 South 13th Ave, Kelso, WA 98626 | 360.577.7222 | 800.695.7222 | 360.636.1068 (fax)

PAGE 3 OF 4 COC #

PROJECT NAME: JBLM LTM LOG CENTER
PROJECT NUMBER: TO 01
PROJECT MANAGER: SCOTT ELKIND
COMPANY/ADDRESS: SEALASKA ENVIRONMENTAL
18743 FRONT ST NE FL 2
CITY/STATE/ZIP: POULSBO, WA 98370
E-MAIL ADDRESS: scott.elkind@sealaska.com
PHONE #: 3606262991 FAX #:
SAMPLER'S SIGNATURE:

SAMPLE I.D.	DATE	TIME	LAB I.D.	MATRIX	NUMBER OF CONTAINERS	Semivolatile Organics by GC/MS 625 ☐ 8270 ☐ 8270LL ☐	Volatile Organics 624 ☐ 8260 ☐ 8021 ☐ BTEX ☐	Hydrocarbons (*see below) Gas ☐ Diesel ☐ Oil ☐	Fuel Fingerprint (FIQ) ☐ NW-HCID Screen ☐	Oil & Grease/TRPH 1664 HEM ☐ 1664 SGT ☐	PCB's Aroclors ☐ Congeners ☐	Pesticides/Herbicides 608 ☐ 8081A ☐ 8141A ☐ 8151A ☐	Chlorophenolics - 8151M Tri ☐ Tetra ☐ PCP ☐	PAHS 8310 ☐ SIM ☐	Metals, Total or Dissolved (See list below)	Cyanide ☐ Hex-Chrom ☐	pH, Cond., Cl, SO_4, PO_4, F, NO_2, NO_3, BOD, TSS, TDS (circle)	NH_3-N, COD, Total-P, TKN, TOC, DOC (circle) NO_2+NO_3	TOX 9020 ☐ AOX 1650 ☐ 506 ☐	REMARKS
LGC14D930-TO4-1	093014	0745		GW	3		3														
LGC14D930-DUP5-1	093014	0750		GW	3		3														
LGC14D930-LC103D-1	093014	0810		GW	3		3														
LGC14D930-LC101D2-1	093014	0835		GW	3		3														
LGC14D930-LC101D1-1	093014	0840		GW	3		3														
LGC14D930-MANLOF2-1	093014	1020		GW	3		3														
LGC14D930-LC109-1	093014	1045		GW	3		3														
LGC14D930-LC03-1	093014	1125		GW	3		3														
LGC14D930-DUP9-1	093014	1135		GW	3		3														
LGC14D930-LC182-1	093014	1215		GW	3		3														

REPORT REQUIREMENTS

___ I. Routine Report: Method Blank, Surrogate, as required
___ II. Report Dup., MS, MSD as required
___ III. Data Validation Report (includes all raw data)
___ IV. CLP Deliverable Report
___ V. EDD

INVOICE INFORMATION

P.O. #
Bill To:

TURNAROUND REQUIREMENTS

___ 24 hr. ___ 48 hr.
___ 5 Day
X Standard (10-15 working days)
___ Provide FAX Results

Requested Report Date

Circle which metals are to be analyzed:

Total Metals: Al As Sb Ba Be B Ca Cd Co Cr Cu Fe Pb Mg Mn Mo Ni K Ag Na Se Sr Tl Sn V Zn Hg

Dissolved Metals: Al As Sb Ba Be B Ca Cd Co Cr Cu Fe Pb Mg Mn Mo Ni K Ag Na Se Sr Tl Sn V Zn Hg

*INDICATE STATE HYDROCARBON PROCEDURE: AK CA WI NORTHWEST OTHER:_____ (CIRCLE ONE)

SPECIAL INSTRUCTIONS/COMMENTS:
* AS PER CONTRACT

☐ Sample Shipment contains USDA regulated soil samples (check box if applicable)

RELINQUISHED BY:	RECEIVED BY:	RELINQUISHED BY:	RECEIVED BY:
Signature	Signature	Signature	Signature
Date/Time 100214 0800	Date/Time	Date/Time	Date/Time 10/2/14 1150
Printed Name S. MARIE PATTERSON	Printed Name	Printed Name	Printed Name
Firm SEALASKA	Firm ~~FedEx~~ Hand Delivery	Firm Hand Delivery	Firm STL

Columbia Analytical Services™

CHAIN OF CUSTODY

1317 South 13th Ave, Kelso, WA 98626 | 360.577.7222 | 800.695.7222 | 360.636.1068 (fax)

SR#: K1410790

PAGE 4 OF 4 COC #

PROJECT NAME: JBLM LTM LOG CENTER
PROJECT NUMBER: TO 01
PROJECT MANAGER: SCOTT ELKIND
COMPANY/ADDRESS: SEALASKA ENVIRONMENTAL
18743 FRONT ST NE STE 201
CITY/STATE/ZIP: POULSBO, WA 98370
E-MAIL ADDRESS: scott.elkind@sealaska.com
PHONE #: 3606263991 FAX #:
SAMPLER'S SIGNATURE:

SAMPLE I.D.	DATE	TIME	LAB I.D.	MATRIX	NUMBER OF CONTAINERS	Semivolatile Organics by GC/MS 625 ☐ 8270 ☐ 8270LL ☐	Volatile Organics 624 ☐ 8260 ☐ 8021 ☐ BTEX ☐	Hydrocarbons (*see below) Gas ☐ Diesel ☐ Oil ☐	☐ Fuel Fingerprint (FIQ) ☐ NW-HCID Screen	Oil & Grease/TRPH 1664 HEM ☐ 1664 SGT ☐	PCB's Aroclors ☐ Congeners ☐	Pesticides/Herbicides 608 ☐ 8081A ☐ 8141A ☐ 8151A ☐	Chlorophenolics - 8151M Tri ☐ Tetra ☐ PCP ☐	PAHS 8310 ☐ SIM ☐	Metals, Total or Dissolved (See list below)	Cyanide ☐ Hex-Chrom ☐	pH, Cond., Cl, SO4, PO4, F, NO2, NO3, BOD, TSS, TDS (circle)	NH3-N, COD, Total-P, TKN, TOC, DOC (circle) NO2+NO3	TOX 9020 ☐ AOX 1650 ☐ 506 ☐					REMARKS
LGC140930LC16-1	093014	1310		GW	3		3																		
LGC140930DUP1-1	093014	1315		GW	3		3																		
LGC140930LC180-1	093014	1410		GW	3		3																		
LGC141001LC223-1	100114 ~~0930~~	0830		GW	3		3																		
LGC141001DUP3-1	100114	0835		GW	3		3																		
LGC141001LC178-1	100114	0920		GW	3		3																		
LGC141001WELL13-1	100114	0925		GW	9		9																		MS/MSD
LGC141001LC98D1-1	100114	1100		GW	3		3																		
LGC141001DUP8-1	100114	1105		GW	3		3																		
LGC141001LC98D2-1	100114	1140		GW	3		3																		

REPORT REQUIREMENTS

___ I. Routine Report: Method Blank, Surrogate, as required
___ II. Report Dup., MS, MSD as required
___ III. Data Validation Report (includes all raw data)
___ IV. CLP Deliverable Report
___ V. EDD

INVOICE INFORMATION

P.O. #
Bill To:

TURNAROUND REQUIREMENTS

___ 24 hr. ___ 48 hr.
___ 5 Day
X Standard (10-15 working days)
___ Provide FAX Results

Requested Report Date

Circle which metals are to be analyzed:

Total Metals: Al As Sb Ba Be B Ca Cd Co Cr Cu Fe Pb Mg Mn Mo Ni K Ag Na Se Sr Tl Sn V Zn Hg

Dissolved Metals: Al As Sb Ba Be B Ca Cd Co Cr Cu Fe Pb Mg Mn Mo Ni K Ag Na Se Sr Tl Sn V Zn Hg

*INDICATE STATE HYDROCARBON PROCEDURE: AK CA WI NORTHWEST OTHER:_____ (CIRCLE ONE)

SPECIAL INSTRUCTIONS/COMMENTS:
* AS PER CONTRACT

☐ Sample Shipment contains USDA regulated soil samples (check box if applicable)

RELINQUISHED BY:	RECEIVED BY:	RELINQUISHED BY:	RECEIVED BY:
Signature: [signature] Date/Time: 100214 0800	Signature: Date/Time:	Signature: Date/Time:	Signature: [signature] Date/Time: 10/2/14 1150
Printed Name: V. SUNRISE PATTERSON Firm: SEALASKA	Printed Name: MC Delivery Firm:	Printed Name: MC Delivery Firm:	Printed Name: SWORF Firm: ALS

RCOC #1 03/10

PC Greg

Cooler Receipt and Preservation Form

Client / Project: Sealaska Service Request K14 10790

Received: 10/2/14 Opened: 10/2/14 By: [signature] Unloaded: 10/2/14 By: [signature]

1. Samples were received via? *Mail* *Fed Ex* *UPS* *DHL* *PDX* (*Courier*) *Hand Delivered*
2. Samples were received in: (circle) (*Cooler*) *Box* *Envelope* *Other* _____ *NA*
3. Were custody seals on coolers? NA (Y) N If yes, how many and where? 2 front + back
   If present, were custody seals intact? (Y) N If present, were they signed and dated? (Y) N

Raw Cooler Temp	Corrected Cooler Temp	Raw Temp Blank	Corrected Temp Blank	Corr. Factor	Thermometer ID	Cooler/COC ID (NA)	Tracking Number NA	Filed
-0.2	-0.3	4.1	4.0	-0.1	339			✓

4. Packing material: *Inserts* (*Baggies*) (*Bubble Wrap*) *Gel Packs* (*Wet Ice*) *Dry Ice* *Sleeves* _____
5. Were custody papers properly filled out (ink, signed, etc.)? NA (Y) N
6. Did all bottles arrive in good condition (unbroken)? *Indicate in the table below.* NA (Y) N
7. Were all sample labels complete (i.e analysis, preservation, etc.)? NA (Y) N
8. Did all sample labels and tags agree with custody papers? *Indicate major discrepancies in the table on page 2.* NA (Y) N
9. Were appropriate bottles/containers and volumes received for the tests indicated? NA (Y) N
10. Were the pH-preserved bottles (*see SMO GEN SOP*) received at the appropriate pH? *Indicate in the table below* (NA) Y N
11. Were VOA vials received without headspace? *Indicate in the table below.* NA (Y) N
12. Was C12/Res negative? (NA) Y N

Sample ID on Bottle	Sample ID on COC	Identified by:

Sample ID	Bottle Count Bottle Type	Out of Temp	Head-space	Broke	pH	Reagent	Volume added	Reagent Lot Number	Initials	Time

Notes, Discrepancies, & Resolutions: _____

Page _____ *of* _____

Volatile Organic Compounds

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360)577-7222 Fax (360)636-1068
www.alsglobal.com

Client: Sealaska Environmental Services, LLC **Service Request:** K1410790
Project: JBLM LTM Log Center/TO-01

Cover Page - Organic Analysis Data Package
Volatile Organic Compounds

Sample Name	Lab Code	Date Collected	Date Received
TB-140929	K1410790-001	09/29/2014	10/02/2014
LGC140929LC93D1-1	K1410790-002	09/29/2014	10/02/2014
LGC140929LC93D2-1	K1410790-003	09/29/2014	10/02/2014
LGC140929T13B-1	K1410790-004	09/29/2014	10/02/2014
LGC140929LC225-1	K1410790-005	09/29/2014	10/02/2014
LGC140929T05-1	K1410790-006	09/29/2014	10/02/2014
LGC140929T06-1	K1410790-007	09/29/2014	10/02/2014
LGC140929T11B-1	K1410790-008	09/29/2014	10/02/2014
LGC140929BC1-1	K1410790-009	09/29/2014	10/02/2014
LGC140929T10-1	K1410790-010	09/29/2014	10/02/2014
LGC140929T15-1	K1410790-011	09/29/2014	10/02/2014
LGC140929DUP4-1	K1410790-012	09/29/2014	10/02/2014
LGC140929LC86D1-1	K1410790-013	09/29/2014	10/02/2014
LGC140929LC86D2-1	K1410790-014	09/29/2014	10/02/2014
LGC140929LC102D1-1	K1410790-015	09/29/2014	10/02/2014
LGC140929LC102D2-1	K1410790-016	09/29/2014	10/02/2014
LGC140929LC88D1-1	K1410790-017	09/29/2014	10/02/2014
LGC140929LC88D2-1	K1410790-018	09/29/2014	10/02/2014
LGC140929LC95D1-1	K1410790-019	09/29/2014	10/02/2014
LGC140929LC95D2-1	K1410790-020	09/29/2014	10/02/2014
LGC140930T04-1	K1410790-021	09/30/2014	10/02/2014
LGC140930DUP5-1	K1410790-022	09/30/2014	10/02/2014
LGC140930LC103D-1	K1410790-023	09/30/2014	10/02/2014
LGC140930LC101D2-1	K1410790-024	09/30/2014	10/02/2014
LGC140930LC101D1-1	K1410790-025	09/30/2014	10/02/2014
LGC140930MAMCOF2-1	K1410790-026	09/30/2014	10/02/2014
LGC140930LC109-1	K1410790-027	09/30/2014	10/02/2014
LGC140930LC03-1	K1410790-028	09/30/2014	10/02/2014
LGC140930DUP9-1	K1410790-029	09/30/2014	10/02/2014
LGC140930LC182-1	K1410790-030	09/30/2014	10/02/2014
LGC140930LC16-1	K1410790-031	09/30/2014	10/02/2014
LGC140930DUP1-1	K1410790-032	09/30/2014	10/02/2014
LGC140930LC180-1	K1410790-033	09/30/2014	10/02/2014
LGC141001LC223-1	K1410790-034	10/01/2014	10/02/2014
LGC141001DUP3-1	K1410790-035	10/01/2014	10/02/2014
LGC141001LC178-1	K1410790-036	10/01/2014	10/02/2014
LGC141001Well13-1	K1410790-037	10/01/2014	10/02/2014
LGC141001LC98D1-1	K1410790-038	10/01/2014	10/02/2014
LGC141001DUP8-1	K1410790-039	10/01/2014	10/02/2014
LGC141001LC98D2-1	K1410790-040	10/01/2014	10/02/2014
LGC140929BC1-1MS	KWG1413774-1	09/29/2014	10/02/2014
LGC140929BC1-1DMS	KWG1413774-2	09/29/2014	10/02/2014

Client: Sealaska Environmental Services, LLC **Service Request:** K1410790
Project: JBLM LTM Log Center/TO-01

Cover Page - Organic Analysis Data Package
Volatile Organic Compounds

Sample Name	Lab Code	Date Collected	Date Received
LGC140929T10-1MS	KWG1413817-1	09/29/2014	10/02/2014
LGC140929T10-1DMS	KWG1413817-2	09/29/2014	10/02/2014
LGC140929LC95D2-1MS	KWG1413817-3	09/29/2014	10/02/2014
LGC140929LC95D2-1DMS	KWG1413817-4	09/29/2014	10/02/2014
LGC141001Well13-1MS	KWG1413840-1	10/01/2014	10/02/2014
LGC141001Well13-1DMS	KWG1413840-2	10/01/2014	10/02/2014

Analytical Results

Client: Sealaska Environmental Services, LLC
Project: JBLM LTM Log Center/TO-01
Sample Matrix: Water

Service Request: K1410790
Date Collected: 09/29/2014
Date Received: 10/02/2014

Volatile Organic Compounds

Sample Name: TB-140929
Lab Code: K1410790-001

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
Dichlorodifluoromethane	ND	U	0.50	0.20	0.13	1	10/10/14	10/10/14	KWG1413774	
Chloromethane	ND	U	0.50	0.20	0.068	1	10/10/14	10/10/14	KWG1413774	
Vinyl Chloride	ND	U	0.50	0.10	0.075	1	10/10/14	10/10/14	KWG1413774	
Bromomethane	ND	U	0.50	0.30	0.10	1	10/10/14	10/10/14	KWG1413774	
Chloroethane	ND	U	0.50	0.20	0.16	1	10/10/14	10/10/14	KWG1413774	
Trichlorofluoromethane	ND	U	0.50	0.20	0.12	1	10/10/14	10/10/14	KWG1413774	
1,1-Dichloroethene	ND	U	0.50	0.20	0.080	1	10/10/14	10/10/14	KWG1413774	
Acetone	ND	U	20	10	3.3	1	10/10/14	10/10/14	KWG1413774	*
Carbon Disulfide	**0.090**	J	0.50	0.20	0.069	1	10/10/14	10/10/14	KWG1413774	
Methylene Chloride	**0.15**	J	2.0	0.20	0.10	1	10/10/14	10/10/14	KWG1413774	
Methyl tert-Butyl Ether	ND	U	0.50	0.30	0.11	1	10/10/14	10/10/14	KWG1413774	
trans-1,2-Dichloroethene	ND	U	0.50	0.20	0.072	1	10/10/14	10/10/14	KWG1413774	
1,1-Dichloroethane	ND	U	0.50	0.20	0.077	1	10/10/14	10/10/14	KWG1413774	
2,2-Dichloropropane	ND	U	0.50	0.20	0.060	1	10/10/14	10/10/14	KWG1413774	
cis-1,2-Dichloroethene	ND	U	0.50	0.20	0.067	1	10/10/14	10/10/14	KWG1413774	
2-Butanone (MEK)	ND	U	20	4.0	1.9	1	10/10/14	10/10/14	KWG1413774	
Bromochloromethane	ND	U	0.50	0.20	0.16	1	10/10/14	10/10/14	KWG1413774	
Chloroform	ND	U	0.50	0.20	0.072	1	10/10/14	10/10/14	KWG1413774	
1,1,1-Trichloroethane (TCA)	ND	U	0.50	0.20	0.075	1	10/10/14	10/10/14	KWG1413774	
Carbon Tetrachloride	ND	U	0.50	0.20	0.096	1	10/10/14	10/10/14	KWG1413774	
1,1-Dichloropropene	ND	U	0.50	0.20	0.089	1	10/10/14	10/10/14	KWG1413774	
Benzene	ND	U	0.50	0.10	0.062	1	10/10/14	10/10/14	KWG1413774	
1,2-Dichloroethane (EDC)	ND	U	0.50	0.15	0.080	1	10/10/14	10/10/14	KWG1413774	
Trichloroethene (TCE)	ND	U	0.50	0.10	0.10	1	10/10/14	10/10/14	KWG1413774	
1,2-Dichloropropane	ND	U	0.50	0.20	0.095	1	10/10/14	10/10/14	KWG1413774	
Dibromomethane	ND	U	0.50	0.50	0.15	1	10/10/14	10/10/14	KWG1413774	
Bromodichloromethane	ND	U	0.50	0.30	0.091	1	10/10/14	10/10/14	KWG1413774	
cis-1,3-Dichloropropene	ND	U	0.50	0.20	0.18	1	10/10/14	10/10/14	KWG1413774	
4-Methyl-2-pentanone (MIBK)	ND	U	20	10	2.6	1	10/10/14	10/10/14	KWG1413774	*
Toluene	ND	U	0.50	0.10	0.054	1	10/10/14	10/10/14	KWG1413774	
trans-1,3-Dichloropropene	ND	U	0.50	0.20	0.068	1	10/10/14	10/10/14	KWG1413774	
1,1,2-Trichloroethane	ND	U	0.50	0.40	0.14	1	10/10/14	10/10/14	KWG1413774	
Tetrachloroethene (PCE)	ND	U	0.50	0.20	0.099	1	10/10/14	10/10/14	KWG1413774	

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1410790
Project:	JBLM LTM Log Center/TO-01	**Date Collected:**	09/29/2014
Sample Matrix:	Water	**Date Received:**	10/02/2014

Volatile Organic Compounds

Sample Name:	TB-140929	**Units:**	ug/L
Lab Code:	K1410790-001	**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
2-Hexanone	ND	U	20	10	2.7	1	10/10/14	10/10/14	KWG1413774	
1,3-Dichloropropane	ND	U	0.50	0.30	0.14	1	10/10/14	10/10/14	KWG1413774	
Dibromochloromethane	ND	U	0.50	0.50	0.14	1	10/10/14	10/10/14	KWG1413774	
1,2-Dibromoethane (EDB)	ND	U	2.0	0.20	0.10	1	10/10/14	10/10/14	KWG1413774	
Chlorobenzene	ND	U	0.50	0.20	0.11	1	10/10/14	10/10/14	KWG1413774	
Ethylbenzene	ND	U	0.50	0.10	0.050	1	10/10/14	10/10/14	KWG1413774	
1,1,1,2-Tetrachloroethane	ND	U	0.50	0.20	0.11	1	10/10/14	10/10/14	KWG1413774	
m,p-Xylenes	ND	U	0.50	0.20	0.11	1	10/10/14	10/10/14	KWG1413774	
o-Xylene	ND	U	0.50	0.20	0.074	1	10/10/14	10/10/14	KWG1413774	
Styrene	ND	U	0.50	0.20	0.089	1	10/10/14	10/10/14	KWG1413774	
Bromoform	ND	U	0.50	0.50	0.16	1	10/10/14	10/10/14	KWG1413774	
Isopropylbenzene	ND	U	2.0	0.20	0.051	1	10/10/14	10/10/14	KWG1413774	
1,1,2,2-Tetrachloroethane	ND	U	0.50	0.20	0.16	1	10/10/14	10/10/14	KWG1413774	
Bromobenzene	ND	U	2.0	0.20	0.12	1	10/10/14	10/10/14	KWG1413774	
n-Propylbenzene	ND	U	2.0	0.20	0.054	1	10/10/14	10/10/14	KWG1413774	
1,2,3-Trichloropropane	ND	U	0.50	0.50	0.20	1	10/10/14	10/10/14	KWG1413774	
2-Chlorotoluene	ND	U	2.0	0.20	0.10	1	10/10/14	10/10/14	KWG1413774	
1,3,5-Trimethylbenzene	ND	U	2.0	0.20	0.089	1	10/10/14	10/10/14	KWG1413774	
4-Chlorotoluene	ND	U	2.0	0.20	0.13	1	10/10/14	10/10/14	KWG1413774	
tert-Butylbenzene	ND	U	2.0	0.20	0.059	1	10/10/14	10/10/14	KWG1413774	
1,2,4-Trimethylbenzene	ND	U	2.0	0.20	0.069	1	10/10/14	10/10/14	KWG1413774	
sec-Butylbenzene	ND	U	2.0	0.10	0.062	1	10/10/14	10/10/14	KWG1413774	
4-Isopropyltoluene	ND	U	2.0	0.20	0.060	1	10/10/14	10/10/14	KWG1413774	
1,3-Dichlorobenzene	ND	U	0.50	0.20	0.10	1	10/10/14	10/10/14	KWG1413774	
1,4-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	10/10/14	10/10/14	KWG1413774	
n-Butylbenzene	ND	U	2.0	0.10	0.054	1	10/10/14	10/10/14	KWG1413774	
1,2-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	10/10/14	10/10/14	KWG1413774	
1,2-Dibromo-3-chloropropane	ND	U	2.0	0.80	0.20	1	10/10/14	10/10/14	KWG1413774	
1,2,4-Trichlorobenzene	ND	U	2.0	0.30	0.096	1	10/10/14	10/10/14	KWG1413774	
Hexachlorobutadiene	ND	U	2.0	0.30	0.11	1	10/10/14	10/10/14	KWG1413774	
Naphthalene	ND	U	2.0	0.30	0.088	1	10/10/14	10/10/14	KWG1413774	
1,2,3-Trichlorobenzene	ND	U	2.0	0.40	0.11	1	10/10/14	10/10/14	KWG1413774	

* See Case Narrative

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1410790
Project:	JBLM LTM Log Center/TO-01	**Date Collected:**	09/29/2014
Sample Matrix:	Water	**Date Received:**	10/02/2014

Volatile Organic Compounds

Sample Name:	TB-140929	**Units:**	ug/L
Lab Code:	K1410790-001	**Basis:**	NA

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Dibromofluoromethane	101	85-115	10/10/14	Acceptable
1,2-Dichloroethane-d4	90	70-120	10/10/14	Acceptable
Toluene-d8	98	85-120	10/10/14	Acceptable
4-Bromofluorobenzene	96	75-120	10/10/14	Acceptable

Comments:

Analytical Results

Client: Sealaska Environmental Services, LLC
Project: JBLM LTM Log Center/TO-01
Sample Matrix: Water

Service Request: K1410790
Date Collected: 09/29/2014
Date Received: 10/02/2014

Volatile Organic Compounds

Sample Name: LGC140929LC93D1-1
Lab Code: K1410790-002

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
Dichlorodifluoromethane	ND	U	0.50	0.20	0.13	1	10/10/14	10/10/14	KWG1413774	
Chloromethane	ND	U	0.50	0.20	0.068	1	10/10/14	10/10/14	KWG1413774	
Vinyl Chloride	ND	U	0.50	0.10	0.075	1	10/10/14	10/10/14	KWG1413774	
Bromomethane	ND	U	0.50	0.30	0.10	1	10/10/14	10/10/14	KWG1413774	
Chloroethane	ND	U	0.50	0.20	0.16	1	10/10/14	10/10/14	KWG1413774	
Trichlorofluoromethane	ND	U	0.50	0.20	0.12	1	10/10/14	10/10/14	KWG1413774	
1,1-Dichloroethene	ND	U	0.50	0.20	0.080	1	10/10/14	10/10/14	KWG1413774	
Acetone	**3.8**	J	20	10	3.3	1	10/10/14	10/10/14	KWG1413774	*
Carbon Disulfide	ND	U	0.50	0.20	0.069	1	10/10/14	10/10/14	KWG1413774	
Methylene Chloride	ND	U	2.0	0.20	0.10	1	10/10/14	10/10/14	KWG1413774	
Methyl tert-Butyl Ether	ND	U	0.50	0.30	0.11	1	10/10/14	10/10/14	KWG1413774	
trans-1,2-Dichloroethene	ND	U	0.50	0.20	0.072	1	10/10/14	10/10/14	KWG1413774	
1,1-Dichloroethane	ND	U	0.50	0.20	0.077	1	10/10/14	10/10/14	KWG1413774	
2,2-Dichloropropane	ND	U	0.50	0.20	0.060	1	10/10/14	10/10/14	KWG1413774	
cis-1,2-Dichloroethene	ND	U	0.50	0.20	0.067	1	10/10/14	10/10/14	KWG1413774	
2-Butanone (MEK)	ND	U	20	4.0	1.9	1	10/10/14	10/10/14	KWG1413774	
Bromochloromethane	ND	U	0.50	0.20	0.16	1	10/10/14	10/10/14	KWG1413774	
Chloroform	ND	U	0.50	0.20	0.072	1	10/10/14	10/10/14	KWG1413774	
1,1,1-Trichloroethane (TCA)	ND	U	0.50	0.20	0.075	1	10/10/14	10/10/14	KWG1413774	
Carbon Tetrachloride	ND	U	0.50	0.20	0.096	1	10/10/14	10/10/14	KWG1413774	
1,1-Dichloropropene	ND	U	0.50	0.20	0.089	1	10/10/14	10/10/14	KWG1413774	
Benzene	ND	U	0.50	0.10	0.062	1	10/10/14	10/10/14	KWG1413774	
1,2-Dichloroethane (EDC)	ND	U	0.50	0.15	0.080	1	10/10/14	10/10/14	KWG1413774	
Trichloroethene (TCE)	ND	U	0.50	0.10	0.10	1	10/10/14	10/10/14	KWG1413774	
1,2-Dichloropropane	ND	U	0.50	0.20	0.095	1	10/10/14	10/10/14	KWG1413774	
Dibromomethane	ND	U	0.50	0.50	0.15	1	10/10/14	10/10/14	KWG1413774	
Bromodichloromethane	ND	U	0.50	0.30	0.091	1	10/10/14	10/10/14	KWG1413774	
cis-1,3-Dichloropropene	ND	U	0.50	0.20	0.18	1	10/10/14	10/10/14	KWG1413774	
4-Methyl-2-pentanone (MIBK)	ND	U	20	10	2.6	1	10/10/14	10/10/14	KWG1413774	*
Toluene	ND	U	0.50	0.10	0.054	1	10/10/14	10/10/14	KWG1413774	
trans-1,3-Dichloropropene	ND	U	0.50	0.20	0.068	1	10/10/14	10/10/14	KWG1413774	
1,1,2-Trichloroethane	ND	U	0.50	0.40	0.14	1	10/10/14	10/10/14	KWG1413774	
Tetrachloroethene (PCE)	ND	U	0.50	0.20	0.099	1	10/10/14	10/10/14	KWG1413774	

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1410790
Project:	JBLM LTM Log Center/TO-01	**Date Collected:**	09/29/2014
Sample Matrix:	Water	**Date Received:**	10/02/2014

Volatile Organic Compounds

Sample Name:	LGC140929LC93D1-1	**Units:**	ug/L
Lab Code:	K1410790-002	**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
2-Hexanone	ND	U	20	10	2.7	1	10/10/14	10/10/14	KWG1413774	
1,3-Dichloropropane	ND	U	0.50	0.30	0.14	1	10/10/14	10/10/14	KWG1413774	
Dibromochloromethane	ND	U	0.50	0.50	0.14	1	10/10/14	10/10/14	KWG1413774	
1,2-Dibromoethane (EDB)	ND	U	2.0	0.20	0.10	1	10/10/14	10/10/14	KWG1413774	
Chlorobenzene	ND	U	0.50	0.20	0.11	1	10/10/14	10/10/14	KWG1413774	
Ethylbenzene	ND	U	0.50	0.10	0.050	1	10/10/14	10/10/14	KWG1413774	
1,1,1,2-Tetrachloroethane	ND	U	0.50	0.20	0.11	1	10/10/14	10/10/14	KWG1413774	
m,p-Xylenes	ND	U	0.50	0.20	0.11	1	10/10/14	10/10/14	KWG1413774	
o-Xylene	ND	U	0.50	0.20	0.074	1	10/10/14	10/10/14	KWG1413774	
Styrene	ND	U	0.50	0.20	0.089	1	10/10/14	10/10/14	KWG1413774	
Bromoform	ND	U	0.50	0.50	0.16	1	10/10/14	10/10/14	KWG1413774	
Isopropylbenzene	ND	U	2.0	0.20	0.051	1	10/10/14	10/10/14	KWG1413774	
1,1,2,2-Tetrachloroethane	ND	U	0.50	0.20	0.16	1	10/10/14	10/10/14	KWG1413774	
Bromobenzene	ND	U	2.0	0.20	0.12	1	10/10/14	10/10/14	KWG1413774	
n-Propylbenzene	ND	U	2.0	0.20	0.054	1	10/10/14	10/10/14	KWG1413774	
1,2,3-Trichloropropane	ND	U	0.50	0.50	0.20	1	10/10/14	10/10/14	KWG1413774	
2-Chlorotoluene	ND	U	2.0	0.20	0.10	1	10/10/14	10/10/14	KWG1413774	
1,3,5-Trimethylbenzene	ND	U	2.0	0.20	0.089	1	10/10/14	10/10/14	KWG1413774	
4-Chlorotoluene	ND	U	2.0	0.20	0.13	1	10/10/14	10/10/14	KWG1413774	
tert-Butylbenzene	ND	U	2.0	0.20	0.059	1	10/10/14	10/10/14	KWG1413774	
1,2,4-Trimethylbenzene	ND	U	2.0	0.20	0.069	1	10/10/14	10/10/14	KWG1413774	
sec-Butylbenzene	ND	U	2.0	0.10	0.062	1	10/10/14	10/10/14	KWG1413774	
4-Isopropyltoluene	ND	U	2.0	0.20	0.060	1	10/10/14	10/10/14	KWG1413774	
1,3-Dichlorobenzene	ND	U	0.50	0.20	0.10	1	10/10/14	10/10/14	KWG1413774	
1,4-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	10/10/14	10/10/14	KWG1413774	
n-Butylbenzene	ND	U	2.0	0.10	0.054	1	10/10/14	10/10/14	KWG1413774	
1,2-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	10/10/14	10/10/14	KWG1413774	
1,2-Dibromo-3-chloropropane	ND	U	2.0	0.80	0.20	1	10/10/14	10/10/14	KWG1413774	
1,2,4-Trichlorobenzene	ND	U	2.0	0.30	0.096	1	10/10/14	10/10/14	KWG1413774	
Hexachlorobutadiene	ND	U	2.0	0.30	0.11	1	10/10/14	10/10/14	KWG1413774	
Naphthalene	ND	U	2.0	0.30	0.088	1	10/10/14	10/10/14	KWG1413774	
1,2,3-Trichlorobenzene	ND	U	2.0	0.40	0.11	1	10/10/14	10/10/14	KWG1413774	

* See Case Narrative

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1410790
Project:	JBLM LTM Log Center/TO-01	**Date Collected:**	09/29/2014
Sample Matrix:	Water	**Date Received:**	10/02/2014

Volatile Organic Compounds

Sample Name:	LGC140929LC93D1-1	**Units:**	ug/L
Lab Code:	K1410790-002	**Basis:**	NA

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Dibromofluoromethane	101	85-115	10/10/14	Acceptable
1,2-Dichloroethane-d4	92	70-120	10/10/14	Acceptable
Toluene-d8	96	85-120	10/10/14	Acceptable
4-Bromofluorobenzene	96	75-120	10/10/14	Acceptable

Comments:

Analytical Results

Client: Sealaska Environmental Services, LLC
Project: JBLM LTM Log Center/TO-01
Sample Matrix: Water

Service Request: K1410790
Date Collected: 09/29/2014
Date Received: 10/02/2014

Volatile Organic Compounds

Sample Name: LGC140929LC93D2-1
Lab Code: K1410790-003

Units: ug/L
Basis: NA

Extraction Method: EPA 5030B
Analysis Method: 8260C

Level: Low

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Dichlorodifluoromethane	ND	U	0.50	0.20	0.13	1	10/10/14	10/10/14	KWG1413774	
Chloromethane	ND	U	0.50	0.20	0.068	1	10/10/14	10/10/14	KWG1413774	
Vinyl Chloride	ND	U	0.50	0.10	0.075	1	10/10/14	10/10/14	KWG1413774	
Bromomethane	ND	U	0.50	0.30	0.10	1	10/10/14	10/10/14	KWG1413774	
Chloroethane	ND	U	0.50	0.20	0.16	1	10/10/14	10/10/14	KWG1413774	
Trichlorofluoromethane	ND	U	0.50	0.20	0.12	1	10/10/14	10/10/14	KWG1413774	
1,1-Dichloroethene	ND	U	0.50	0.20	0.080	1	10/10/14	10/10/14	KWG1413774	
Acetone	**4.0**	J	20	10	3.3	1	10/10/14	10/10/14	KWG1413774	*
Carbon Disulfide	ND	U	0.50	0.20	0.069	1	10/10/14	10/10/14	KWG1413774	
Methylene Chloride	ND	U	2.0	0.20	0.10	1	10/10/14	10/10/14	KWG1413774	
Methyl tert-Butyl Ether	ND	U	0.50	0.30	0.11	1	10/10/14	10/10/14	KWG1413774	
trans-1,2-Dichloroethene	ND	U	0.50	0.20	0.072	1	10/10/14	10/10/14	KWG1413774	
1,1-Dichloroethane	ND	U	0.50	0.20	0.077	1	10/10/14	10/10/14	KWG1413774	
2,2-Dichloropropane	ND	U	0.50	0.20	0.060	1	10/10/14	10/10/14	KWG1413774	
cis-1,2-Dichloroethene	ND	U	0.50	0.20	0.067	1	10/10/14	10/10/14	KWG1413774	
2-Butanone (MEK)	ND	U	20	4.0	1.9	1	10/10/14	10/10/14	KWG1413774	
Bromochloromethane	ND	U	0.50	0.20	0.16	1	10/10/14	10/10/14	KWG1413774	
Chloroform	ND	U	0.50	0.20	0.072	1	10/10/14	10/10/14	KWG1413774	
1,1,1-Trichloroethane (TCA)	ND	U	0.50	0.20	0.075	1	10/10/14	10/10/14	KWG1413774	
Carbon Tetrachloride	ND	U	0.50	0.20	0.096	1	10/10/14	10/10/14	KWG1413774	
1,1-Dichloropropene	ND	U	0.50	0.20	0.089	1	10/10/14	10/10/14	KWG1413774	
Benzene	ND	U	0.50	0.10	0.062	1	10/10/14	10/10/14	KWG1413774	
1,2-Dichloroethane (EDC)	ND	U	0.50	0.15	0.080	1	10/10/14	10/10/14	KWG1413774	
Trichloroethene (TCE)	**0.29**	J	0.50	0.10	0.10	1	10/10/14	10/10/14	KWG1413774	
1,2-Dichloropropane	ND	U	0.50	0.20	0.095	1	10/10/14	10/10/14	KWG1413774	
Dibromomethane	ND	U	0.50	0.50	0.15	1	10/10/14	10/10/14	KWG1413774	
Bromodichloromethane	ND	U	0.50	0.30	0.091	1	10/10/14	10/10/14	KWG1413774	
cis-1,3-Dichloropropene	ND	U	0.50	0.20	0.18	1	10/10/14	10/10/14	KWG1413774	
4-Methyl-2-pentanone (MIBK)	ND	U	20	10	2.6	1	10/10/14	10/10/14	KWG1413774	*
Toluene	ND	U	0.50	0.10	0.054	1	10/10/14	10/10/14	KWG1413774	
trans-1,3-Dichloropropene	ND	U	0.50	0.20	0.068	1	10/10/14	10/10/14	KWG1413774	
1,1,2-Trichloroethane	ND	U	0.50	0.40	0.14	1	10/10/14	10/10/14	KWG1413774	
Tetrachloroethene (PCE)	ND	U	0.50	0.20	0.099	1	10/10/14	10/10/14	KWG1413774	

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1410790
Project:	JBLM LTM Log Center/TO-01	**Date Collected:**	09/29/2014
Sample Matrix:	Water	**Date Received:**	10/02/2014

Volatile Organic Compounds

Sample Name:	LGC140929LC93D2-1	**Units:**	ug/L
Lab Code:	K1410790-003	**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
2-Hexanone	ND	U	20	10	2.7	1	10/10/14	10/10/14	KWG1413774	
1,3-Dichloropropane	ND	U	0.50	0.30	0.14	1	10/10/14	10/10/14	KWG1413774	
Dibromochloromethane	ND	U	0.50	0.50	0.14	1	10/10/14	10/10/14	KWG1413774	
1,2-Dibromoethane (EDB)	ND	U	2.0	0.20	0.10	1	10/10/14	10/10/14	KWG1413774	
Chlorobenzene	ND	U	0.50	0.20	0.11	1	10/10/14	10/10/14	KWG1413774	
Ethylbenzene	ND	U	0.50	0.10	0.050	1	10/10/14	10/10/14	KWG1413774	
1,1,1,2-Tetrachloroethane	ND	U	0.50	0.20	0.11	1	10/10/14	10/10/14	KWG1413774	
m,p-Xylenes	ND	U	0.50	0.20	0.11	1	10/10/14	10/10/14	KWG1413774	
o-Xylene	ND	U	0.50	0.20	0.074	1	10/10/14	10/10/14	KWG1413774	
Styrene	ND	U	0.50	0.20	0.089	1	10/10/14	10/10/14	KWG1413774	
Bromoform	ND	U	0.50	0.50	0.16	1	10/10/14	10/10/14	KWG1413774	
Isopropylbenzene	ND	U	2.0	0.20	0.051	1	10/10/14	10/10/14	KWG1413774	
1,1,2,2-Tetrachloroethane	ND	U	0.50	0.20	0.16	1	10/10/14	10/10/14	KWG1413774	
Bromobenzene	ND	U	2.0	0.20	0.12	1	10/10/14	10/10/14	KWG1413774	
n-Propylbenzene	ND	U	2.0	0.20	0.054	1	10/10/14	10/10/14	KWG1413774	
1,2,3-Trichloropropane	ND	U	0.50	0.50	0.20	1	10/10/14	10/10/14	KWG1413774	
2-Chlorotoluene	ND	U	2.0	0.20	0.10	1	10/10/14	10/10/14	KWG1413774	
1,3,5-Trimethylbenzene	ND	U	2.0	0.20	0.089	1	10/10/14	10/10/14	KWG1413774	
4-Chlorotoluene	ND	U	2.0	0.20	0.13	1	10/10/14	10/10/14	KWG1413774	
tert-Butylbenzene	ND	U	2.0	0.20	0.059	1	10/10/14	10/10/14	KWG1413774	
1,2,4-Trimethylbenzene	ND	U	2.0	0.20	0.069	1	10/10/14	10/10/14	KWG1413774	
sec-Butylbenzene	ND	U	2.0	0.10	0.062	1	10/10/14	10/10/14	KWG1413774	
4-Isopropyltoluene	ND	U	2.0	0.20	0.060	1	10/10/14	10/10/14	KWG1413774	
1,3-Dichlorobenzene	ND	U	0.50	0.20	0.10	1	10/10/14	10/10/14	KWG1413774	
1,4-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	10/10/14	10/10/14	KWG1413774	
n-Butylbenzene	ND	U	2.0	0.10	0.054	1	10/10/14	10/10/14	KWG1413774	
1,2-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	10/10/14	10/10/14	KWG1413774	
1,2-Dibromo-3-chloropropane	ND	U	2.0	0.80	0.20	1	10/10/14	10/10/14	KWG1413774	
1,2,4-Trichlorobenzene	ND	U	2.0	0.30	0.096	1	10/10/14	10/10/14	KWG1413774	
Hexachlorobutadiene	ND	U	2.0	0.30	0.11	1	10/10/14	10/10/14	KWG1413774	
Naphthalene	ND	U	2.0	0.30	0.088	1	10/10/14	10/10/14	KWG1413774	
1,2,3-Trichlorobenzene	ND	U	2.0	0.40	0.11	1	10/10/14	10/10/14	KWG1413774	

* See Case Narrative

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1410790
Project:	JBLM LTM Log Center/TO-01	**Date Collected:**	09/29/2014
Sample Matrix:	Water	**Date Received:**	10/02/2014

Volatile Organic Compounds

Sample Name:	LGC140929LC93D2-1	**Units:**	ug/L
Lab Code:	K1410790-003	**Basis:**	NA

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Dibromofluoromethane	101	85-115	10/10/14	Acceptable
1,2-Dichloroethane-d4	91	70-120	10/10/14	Acceptable
Toluene-d8	98	85-120	10/10/14	Acceptable
4-Bromofluorobenzene	94	75-120	10/10/14	Acceptable

Comments:

Analytical Results

Client: Sealaska Environmental Services, LLC
Project: JBLM LTM Log Center/TO-01
Sample Matrix: Water

Service Request: K1410790
Date Collected: 09/29/2014
Date Received: 10/02/2014

Volatile Organic Compounds

Sample Name: LGC140929T13B-1
Lab Code: K1410790-004

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
Dichlorodifluoromethane	ND	U	0.50	0.20	0.13	1	10/10/14	10/10/14	KWG1413774	
Chloromethane	ND	U	0.50	0.20	0.068	1	10/10/14	10/10/14	KWG1413774	
Vinyl Chloride	ND	U	0.50	0.10	0.075	1	10/10/14	10/10/14	KWG1413774	
Bromomethane	ND	U	0.50	0.30	0.10	1	10/10/14	10/10/14	KWG1413774	
Chloroethane	ND	U	0.50	0.20	0.16	1	10/10/14	10/10/14	KWG1413774	
Trichlorofluoromethane	ND	U	0.50	0.20	0.12	1	10/10/14	10/10/14	KWG1413774	
1,1-Dichloroethene	ND	U	0.50	0.20	0.080	1	10/10/14	10/10/14	KWG1413774	
Acetone	ND	U	20	10	3.3	1	10/10/14	10/10/14	KWG1413774	*
Carbon Disulfide	ND	U	0.50	0.20	0.069	1	10/10/14	10/10/14	KWG1413774	
Methylene Chloride	ND	U	2.0	0.20	0.10	1	10/10/14	10/10/14	KWG1413774	
Methyl tert-Butyl Ether	ND	U	0.50	0.30	0.11	1	10/10/14	10/10/14	KWG1413774	
trans-1,2-Dichloroethene	ND	U	0.50	0.20	0.072	1	10/10/14	10/10/14	KWG1413774	
1,1-Dichloroethane	ND	U	0.50	0.20	0.077	1	10/10/14	10/10/14	KWG1413774	
2,2-Dichloropropane	ND	U	0.50	0.20	0.060	1	10/10/14	10/10/14	KWG1413774	
cis-1,2-Dichloroethene	**0.98**		0.50	0.20	0.067	1	10/10/14	10/10/14	KWG1413774	
2-Butanone (MEK)	ND	U	20	4.0	1.9	1	10/10/14	10/10/14	KWG1413774	
Bromochloromethane	ND	U	0.50	0.20	0.16	1	10/10/14	10/10/14	KWG1413774	
Chloroform	**0.12**	J	0.50	0.20	0.072	1	10/10/14	10/10/14	KWG1413774	
1,1,1-Trichloroethane (TCA)	**0.41**	J	0.50	0.20	0.075	1	10/10/14	10/10/14	KWG1413774	
Carbon Tetrachloride	ND	U	0.50	0.20	0.096	1	10/10/14	10/10/14	KWG1413774	
1,1-Dichloropropene	ND	U	0.50	0.20	0.089	1	10/10/14	10/10/14	KWG1413774	
Benzene	ND	U	0.50	0.10	0.062	1	10/10/14	10/10/14	KWG1413774	
1,2-Dichloroethane (EDC)	ND	U	0.50	0.15	0.080	1	10/10/14	10/10/14	KWG1413774	
Trichloroethene (TCE)	**4.7**		0.50	0.10	0.10	1	10/10/14	10/10/14	KWG1413774	
1,2-Dichloropropane	ND	U	0.50	0.20	0.095	1	10/10/14	10/10/14	KWG1413774	
Dibromomethane	ND	U	0.50	0.50	0.15	1	10/10/14	10/10/14	KWG1413774	
Bromodichloromethane	ND	U	0.50	0.30	0.091	1	10/10/14	10/10/14	KWG1413774	
cis-1,3-Dichloropropene	ND	U	0.50	0.20	0.18	1	10/10/14	10/10/14	KWG1413774	
4-Methyl-2-pentanone (MIBK)	ND	U	20	10	2.6	1	10/10/14	10/10/14	KWG1413774	*
Toluene	ND	U	0.50	0.10	0.054	1	10/10/14	10/10/14	KWG1413774	
trans-1,3-Dichloropropene	ND	U	0.50	0.20	0.068	1	10/10/14	10/10/14	KWG1413774	
1,1,2-Trichloroethane	ND	U	0.50	0.40	0.14	1	10/10/14	10/10/14	KWG1413774	
Tetrachloroethene (PCE)	**0.10**	J	0.50	0.20	0.099	1	10/10/14	10/10/14	KWG1413774	*

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1410790
Project:	JBLM LTM Log Center/TO-01	**Date Collected:**	09/29/2014
Sample Matrix:	Water	**Date Received:**	10/02/2014

Volatile Organic Compounds

Sample Name:	LGC140929T13B-1	**Units:**	ug/L
Lab Code:	K1410790-004	**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
2-Hexanone	ND	U	20	10	2.7	1	10/10/14	10/10/14	KWG1413774	
1,3-Dichloropropane	ND	U	0.50	0.30	0.14	1	10/10/14	10/10/14	KWG1413774	
Dibromochloromethane	ND	U	0.50	0.50	0.14	1	10/10/14	10/10/14	KWG1413774	
1,2-Dibromoethane (EDB)	ND	U	2.0	0.20	0.10	1	10/10/14	10/10/14	KWG1413774	
Chlorobenzene	ND	U	0.50	0.20	0.11	1	10/10/14	10/10/14	KWG1413774	
Ethylbenzene	ND	U	0.50	0.10	0.050	1	10/10/14	10/10/14	KWG1413774	
1,1,1,2-Tetrachloroethane	ND	U	0.50	0.20	0.11	1	10/10/14	10/10/14	KWG1413774	
m,p-Xylenes	ND	U	0.50	0.20	0.11	1	10/10/14	10/10/14	KWG1413774	
o-Xylene	ND	U	0.50	0.20	0.074	1	10/10/14	10/10/14	KWG1413774	
Styrene	ND	U	0.50	0.20	0.089	1	10/10/14	10/10/14	KWG1413774	
Bromoform	ND	U	0.50	0.50	0.16	1	10/10/14	10/10/14	KWG1413774	
Isopropylbenzene	ND	U	2.0	0.20	0.051	1	10/10/14	10/10/14	KWG1413774	
1,1,2,2-Tetrachloroethane	ND	U	0.50	0.20	0.16	1	10/10/14	10/10/14	KWG1413774	
Bromobenzene	ND	U	2.0	0.20	0.12	1	10/10/14	10/10/14	KWG1413774	
n-Propylbenzene	ND	U	2.0	0.20	0.054	1	10/10/14	10/10/14	KWG1413774	
1,2,3-Trichloropropane	ND	U	0.50	0.50	0.20	1	10/10/14	10/10/14	KWG1413774	
2-Chlorotoluene	ND	U	2.0	0.20	0.10	1	10/10/14	10/10/14	KWG1413774	
1,3,5-Trimethylbenzene	ND	U	2.0	0.20	0.089	1	10/10/14	10/10/14	KWG1413774	
4-Chlorotoluene	ND	U	2.0	0.20	0.13	1	10/10/14	10/10/14	KWG1413774	
tert-Butylbenzene	ND	U	2.0	0.20	0.059	1	10/10/14	10/10/14	KWG1413774	
1,2,4-Trimethylbenzene	ND	U	2.0	0.20	0.069	1	10/10/14	10/10/14	KWG1413774	
sec-Butylbenzene	ND	U	2.0	0.10	0.062	1	10/10/14	10/10/14	KWG1413774	
4-Isopropyltoluene	ND	U	2.0	0.20	0.060	1	10/10/14	10/10/14	KWG1413774	
1,3-Dichlorobenzene	ND	U	0.50	0.20	0.10	1	10/10/14	10/10/14	KWG1413774	
1,4-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	10/10/14	10/10/14	KWG1413774	
n-Butylbenzene	ND	U	2.0	0.10	0.054	1	10/10/14	10/10/14	KWG1413774	
1,2-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	10/10/14	10/10/14	KWG1413774	
1,2-Dibromo-3-chloropropane	ND	U	2.0	0.80	0.20	1	10/10/14	10/10/14	KWG1413774	
1,2,4-Trichlorobenzene	ND	U	2.0	0.30	0.096	1	10/10/14	10/10/14	KWG1413774	
Hexachlorobutadiene	ND	U	2.0	0.30	0.11	1	10/10/14	10/10/14	KWG1413774	
Naphthalene	ND	U	2.0	0.30	0.088	1	10/10/14	10/10/14	KWG1413774	
1,2,3-Trichlorobenzene	ND	U	2.0	0.40	0.11	1	10/10/14	10/10/14	KWG1413774	

* See Case Narrative

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1410790
Project:	JBLM LTM Log Center/TO-01	**Date Collected:**	09/29/2014
Sample Matrix:	Water	**Date Received:**	10/02/2014

Volatile Organic Compounds

Sample Name:	LGC140929T13B-1	**Units:**	ug/L
Lab Code:	K1410790-004	**Basis:**	NA

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Dibromofluoromethane	100	85-115	10/10/14	Acceptable
1,2-Dichloroethane-d4	90	70-120	10/10/14	Acceptable
Toluene-d8	97	85-120	10/10/14	Acceptable
4-Bromofluorobenzene	95	75-120	10/10/14	Acceptable

Comments:

Analytical Results

Client: Sealaska Environmental Services, LLC
Project: JBLM LTM Log Center/TO-01
Sample Matrix: Water

Service Request: K1410790
Date Collected: 09/29/2014
Date Received: 10/02/2014

Volatile Organic Compounds

Sample Name: LGC140929LC225-1
Lab Code: K1410790-005

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
Dichlorodifluoromethane	ND	U	0.50	0.20	0.13	1	10/10/14	10/10/14	KWG1413774	
Chloromethane	ND	U	0.50	0.20	0.068	1	10/10/14	10/10/14	KWG1413774	
Vinyl Chloride	ND	U	0.50	0.10	0.075	1	10/10/14	10/10/14	KWG1413774	
Bromomethane	ND	U	0.50	0.30	0.10	1	10/10/14	10/10/14	KWG1413774	
Chloroethane	ND	U	0.50	0.20	0.16	1	10/10/14	10/10/14	KWG1413774	
Trichlorofluoromethane	ND	U	0.50	0.20	0.12	1	10/10/14	10/10/14	KWG1413774	
1,1-Dichloroethene	ND	U	0.50	0.20	0.080	1	10/10/14	10/10/14	KWG1413774	
Acetone	ND	U	20	10	3.3	1	10/10/14	10/10/14	KWG1413774	*
Carbon Disulfide	ND	U	0.50	0.20	0.069	1	10/10/14	10/10/14	KWG1413774	
Methylene Chloride	ND	U	2.0	0.20	0.10	1	10/10/14	10/10/14	KWG1413774	
Methyl tert-Butyl Ether	ND	U	0.50	0.30	0.11	1	10/10/14	10/10/14	KWG1413774	
trans-1,2-Dichloroethene	ND	U	0.50	0.20	0.072	1	10/10/14	10/10/14	KWG1413774	
1,1-Dichloroethane	ND	U	0.50	0.20	0.077	1	10/10/14	10/10/14	KWG1413774	
2,2-Dichloropropane	ND	U	0.50	0.20	0.060	1	10/10/14	10/10/14	KWG1413774	
cis-1,2-Dichloroethene	**0.75**		0.50	0.20	0.067	1	10/10/14	10/10/14	KWG1413774	
2-Butanone (MEK)	ND	U	20	4.0	1.9	1	10/10/14	10/10/14	KWG1413774	
Bromochloromethane	ND	U	0.50	0.20	0.16	1	10/10/14	10/10/14	KWG1413774	
Chloroform	ND	U	0.50	0.20	0.072	1	10/10/14	10/10/14	KWG1413774	
1,1,1-Trichloroethane (TCA)	**0.28**	J	0.50	0.20	0.075	1	10/10/14	10/10/14	KWG1413774	
Carbon Tetrachloride	ND	U	0.50	0.20	0.096	1	10/10/14	10/10/14	KWG1413774	
1,1-Dichloropropene	ND	U	0.50	0.20	0.089	1	10/10/14	10/10/14	KWG1413774	
Benzene	ND	U	0.50	0.10	0.062	1	10/10/14	10/10/14	KWG1413774	
1,2-Dichloroethane (EDC)	ND	U	0.50	0.15	0.080	1	10/10/14	10/10/14	KWG1413774	
Trichloroethene (TCE)	**11**		0.50	0.10	0.10	1	10/10/14	10/10/14	KWG1413774	
1,2-Dichloropropane	ND	U	0.50	0.20	0.095	1	10/10/14	10/10/14	KWG1413774	
Dibromomethane	ND	U	0.50	0.50	0.15	1	10/10/14	10/10/14	KWG1413774	
Bromodichloromethane	ND	U	0.50	0.30	0.091	1	10/10/14	10/10/14	KWG1413774	
cis-1,3-Dichloropropene	ND	U	0.50	0.20	0.18	1	10/10/14	10/10/14	KWG1413774	
4-Methyl-2-pentanone (MIBK)	ND	U	20	10	2.6	1	10/10/14	10/10/14	KWG1413774	*
Toluene	ND	U	0.50	0.10	0.054	1	10/10/14	10/10/14	KWG1413774	
trans-1,3-Dichloropropene	ND	U	0.50	0.20	0.068	1	10/10/14	10/10/14	KWG1413774	
1,1,2-Trichloroethane	ND	U	0.50	0.40	0.14	1	10/10/14	10/10/14	KWG1413774	
Tetrachloroethene (PCE)	**0.20**	J	0.50	0.20	0.099	1	10/10/14	10/10/14	KWG1413774	*

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1410790
Project:	JBLM LTM Log Center/TO-01	**Date Collected:**	09/29/2014
Sample Matrix:	Water	**Date Received:**	10/02/2014

Volatile Organic Compounds

Sample Name:	LGC140929LC225-1	**Units:**	ug/L
Lab Code:	K1410790-005	**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
2-Hexanone	ND	U	20	10	2.7	1	10/10/14	10/10/14	KWG1413774	
1,3-Dichloropropane	ND	U	0.50	0.30	0.14	1	10/10/14	10/10/14	KWG1413774	
Dibromochloromethane	ND	U	0.50	0.50	0.14	1	10/10/14	10/10/14	KWG1413774	
1,2-Dibromoethane (EDB)	ND	U	2.0	0.20	0.10	1	10/10/14	10/10/14	KWG1413774	
Chlorobenzene	ND	U	0.50	0.20	0.11	1	10/10/14	10/10/14	KWG1413774	
Ethylbenzene	ND	U	0.50	0.10	0.050	1	10/10/14	10/10/14	KWG1413774	
1,1,1,2-Tetrachloroethane	ND	U	0.50	0.20	0.11	1	10/10/14	10/10/14	KWG1413774	
m,p-Xylenes	ND	U	0.50	0.20	0.11	1	10/10/14	10/10/14	KWG1413774	
o-Xylene	ND	U	0.50	0.20	0.074	1	10/10/14	10/10/14	KWG1413774	
Styrene	ND	U	0.50	0.20	0.089	1	10/10/14	10/10/14	KWG1413774	
Bromoform	ND	U	0.50	0.50	0.16	1	10/10/14	10/10/14	KWG1413774	
Isopropylbenzene	ND	U	2.0	0.20	0.051	1	10/10/14	10/10/14	KWG1413774	
1,1,2,2-Tetrachloroethane	ND	U	0.50	0.20	0.16	1	10/10/14	10/10/14	KWG1413774	
Bromobenzene	ND	U	2.0	0.20	0.12	1	10/10/14	10/10/14	KWG1413774	
n-Propylbenzene	ND	U	2.0	0.20	0.054	1	10/10/14	10/10/14	KWG1413774	
1,2,3-Trichloropropane	ND	U	0.50	0.50	0.20	1	10/10/14	10/10/14	KWG1413774	
2-Chlorotoluene	ND	U	2.0	0.20	0.10	1	10/10/14	10/10/14	KWG1413774	
1,3,5-Trimethylbenzene	ND	U	2.0	0.20	0.089	1	10/10/14	10/10/14	KWG1413774	
4-Chlorotoluene	ND	U	2.0	0.20	0.13	1	10/10/14	10/10/14	KWG1413774	
tert-Butylbenzene	ND	U	2.0	0.20	0.059	1	10/10/14	10/10/14	KWG1413774	
1,2,4-Trimethylbenzene	ND	U	2.0	0.20	0.069	1	10/10/14	10/10/14	KWG1413774	
sec-Butylbenzene	ND	U	2.0	0.10	0.062	1	10/10/14	10/10/14	KWG1413774	
4-Isopropyltoluene	ND	U	2.0	0.20	0.060	1	10/10/14	10/10/14	KWG1413774	
1,3-Dichlorobenzene	ND	U	0.50	0.20	0.10	1	10/10/14	10/10/14	KWG1413774	
1,4-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	10/10/14	10/10/14	KWG1413774	
n-Butylbenzene	ND	U	2.0	0.10	0.054	1	10/10/14	10/10/14	KWG1413774	
1,2-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	10/10/14	10/10/14	KWG1413774	
1,2-Dibromo-3-chloropropane	ND	U	2.0	0.80	0.20	1	10/10/14	10/10/14	KWG1413774	
1,2,4-Trichlorobenzene	ND	U	2.0	0.30	0.096	1	10/10/14	10/10/14	KWG1413774	
Hexachlorobutadiene	ND	U	2.0	0.30	0.11	1	10/10/14	10/10/14	KWG1413774	
Naphthalene	ND	U	2.0	0.30	0.088	1	10/10/14	10/10/14	KWG1413774	
1,2,3-Trichlorobenzene	ND	U	2.0	0.40	0.11	1	10/10/14	10/10/14	KWG1413774	

* See Case Narrative

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1410790
Project:	JBLM LTM Log Center/TO-01	**Date Collected:**	09/29/2014
Sample Matrix:	Water	**Date Received:**	10/02/2014

Volatile Organic Compounds

Sample Name:	LGC140929LC225-1	**Units:**	ug/L
Lab Code:	K1410790-005	**Basis:**	NA

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Dibromofluoromethane	100	85-115	10/10/14	Acceptable
1,2-Dichloroethane-d4	92	70-120	10/10/14	Acceptable
Toluene-d8	98	85-120	10/10/14	Acceptable
4-Bromofluorobenzene	93	75-120	10/10/14	Acceptable

Comments:

Analytical Results

Client: Sealaska Environmental Services, LLC
Project: JBLM LTM Log Center/TO-01
Sample Matrix: Water

Service Request: K1410790
Date Collected: 09/29/2014
Date Received: 10/02/2014

Volatile Organic Compounds

Sample Name: LGC140929T05-1
Lab Code: K1410790-006

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
Dichlorodifluoromethane	ND	U	0.50	0.20	0.13	1	10/10/14	10/10/14	KWG1413774	
Chloromethane	ND	U	0.50	0.20	0.068	1	10/10/14	10/10/14	KWG1413774	
Vinyl Chloride	ND	U	0.50	0.10	0.075	1	10/10/14	10/10/14	KWG1413774	
Bromomethane	ND	U	0.50	0.30	0.10	1	10/10/14	10/10/14	KWG1413774	
Chloroethane	ND	U	0.50	0.20	0.16	1	10/10/14	10/10/14	KWG1413774	
Trichlorofluoromethane	ND	U	0.50	0.20	0.12	1	10/10/14	10/10/14	KWG1413774	
1,1-Dichloroethene	ND	U	0.50	0.20	0.080	1	10/10/14	10/10/14	KWG1413774	
Acetone	ND	U	20	10	3.3	1	10/10/14	10/10/14	KWG1413774	*
Carbon Disulfide	ND	U	0.50	0.20	0.069	1	10/10/14	10/10/14	KWG1413774	
Methylene Chloride	ND	U	2.0	0.20	0.10	1	10/10/14	10/10/14	KWG1413774	
Methyl tert-Butyl Ether	ND	U	0.50	0.30	0.11	1	10/10/14	10/10/14	KWG1413774	
trans-1,2-Dichloroethene	ND	U	0.50	0.20	0.072	1	10/10/14	10/10/14	KWG1413774	
1,1-Dichloroethane	ND	U	0.50	0.20	0.077	1	10/10/14	10/10/14	KWG1413774	
2,2-Dichloropropane	ND	U	0.50	0.20	0.060	1	10/10/14	10/10/14	KWG1413774	
cis-1,2-Dichloroethene	ND	U	0.50	0.20	0.067	1	10/10/14	10/10/14	KWG1413774	
2-Butanone (MEK)	ND	U	20	4.0	1.9	1	10/10/14	10/10/14	KWG1413774	
Bromochloromethane	ND	U	0.50	0.20	0.16	1	10/10/14	10/10/14	KWG1413774	
Chloroform	ND	U	0.50	0.20	0.072	1	10/10/14	10/10/14	KWG1413774	
1,1,1-Trichloroethane (TCA)	ND	U	0.50	0.20	0.075	1	10/10/14	10/10/14	KWG1413774	
Carbon Tetrachloride	ND	U	0.50	0.20	0.096	1	10/10/14	10/10/14	KWG1413774	
1,1-Dichloropropene	ND	U	0.50	0.20	0.089	1	10/10/14	10/10/14	KWG1413774	
Benzene	ND	U	0.50	0.10	0.062	1	10/10/14	10/10/14	KWG1413774	
1,2-Dichloroethane (EDC)	ND	U	0.50	0.15	0.080	1	10/10/14	10/10/14	KWG1413774	
Trichloroethene (TCE)	**1.3**		0.50	0.10	0.10	1	10/10/14	10/10/14	KWG1413774	
1,2-Dichloropropane	ND	U	0.50	0.20	0.095	1	10/10/14	10/10/14	KWG1413774	
Dibromomethane	ND	U	0.50	0.50	0.15	1	10/10/14	10/10/14	KWG1413774	
Bromodichloromethane	ND	U	0.50	0.30	0.091	1	10/10/14	10/10/14	KWG1413774	
cis-1,3-Dichloropropene	ND	U	0.50	0.20	0.18	1	10/10/14	10/10/14	KWG1413774	
4-Methyl-2-pentanone (MIBK)	ND	U	20	10	2.6	1	10/10/14	10/10/14	KWG1413774	*
Toluene	ND	U	0.50	0.10	0.054	1	10/10/14	10/10/14	KWG1413774	
trans-1,3-Dichloropropene	ND	U	0.50	0.20	0.068	1	10/10/14	10/10/14	KWG1413774	
1,1,2-Trichloroethane	ND	U	0.50	0.40	0.14	1	10/10/14	10/10/14	KWG1413774	
Tetrachloroethene (PCE)	**0.10**	J	0.50	0.20	0.099	1	10/10/14	10/10/14	KWG1413774	*

Comments:

Analytical Results

Client: Sealaska Environmental Services, LLC
Project: JBLM LTM Log Center/TO-01
Sample Matrix: Water

Service Request: K1410790
Date Collected: 09/29/2014
Date Received: 10/02/2014

Volatile Organic Compounds

Sample Name: LGC140929T05-1
Lab Code: K1410790-006

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
2-Hexanone	ND	U	20	10	2.7	1	10/10/14	10/10/14	KWG1413774	
1,3-Dichloropropane	ND	U	0.50	0.30	0.14	1	10/10/14	10/10/14	KWG1413774	
Dibromochloromethane	ND	U	0.50	0.50	0.14	1	10/10/14	10/10/14	KWG1413774	
1,2-Dibromoethane (EDB)	ND	U	2.0	0.20	0.10	1	10/10/14	10/10/14	KWG1413774	
Chlorobenzene	ND	U	0.50	0.20	0.11	1	10/10/14	10/10/14	KWG1413774	
Ethylbenzene	ND	U	0.50	0.10	0.050	1	10/10/14	10/10/14	KWG1413774	
1,1,1,2-Tetrachloroethane	ND	U	0.50	0.20	0.11	1	10/10/14	10/10/14	KWG1413774	
m,p-Xylenes	ND	U	0.50	0.20	0.11	1	10/10/14	10/10/14	KWG1413774	
o-Xylene	ND	U	0.50	0.20	0.074	1	10/10/14	10/10/14	KWG1413774	
Styrene	ND	U	0.50	0.20	0.089	1	10/10/14	10/10/14	KWG1413774	
Bromoform	ND	U	0.50	0.50	0.16	1	10/10/14	10/10/14	KWG1413774	
Isopropylbenzene	ND	U	2.0	0.20	0.051	1	10/10/14	10/10/14	KWG1413774	
1,1,2,2-Tetrachloroethane	ND	U	0.50	0.20	0.16	1	10/10/14	10/10/14	KWG1413774	
Bromobenzene	ND	U	2.0	0.20	0.12	1	10/10/14	10/10/14	KWG1413774	
n-Propylbenzene	ND	U	2.0	0.20	0.054	1	10/10/14	10/10/14	KWG1413774	
1,2,3-Trichloropropane	ND	U	0.50	0.50	0.20	1	10/10/14	10/10/14	KWG1413774	
2-Chlorotoluene	ND	U	2.0	0.20	0.10	1	10/10/14	10/10/14	KWG1413774	
1,3,5-Trimethylbenzene	ND	U	2.0	0.20	0.089	1	10/10/14	10/10/14	KWG1413774	
4-Chlorotoluene	ND	U	2.0	0.20	0.13	1	10/10/14	10/10/14	KWG1413774	
tert-Butylbenzene	ND	U	2.0	0.20	0.059	1	10/10/14	10/10/14	KWG1413774	
1,2,4-Trimethylbenzene	ND	U	2.0	0.20	0.069	1	10/10/14	10/10/14	KWG1413774	
sec-Butylbenzene	ND	U	2.0	0.10	0.062	1	10/10/14	10/10/14	KWG1413774	
4-Isopropyltoluene	ND	U	2.0	0.20	0.060	1	10/10/14	10/10/14	KWG1413774	
1,3-Dichlorobenzene	ND	U	0.50	0.20	0.10	1	10/10/14	10/10/14	KWG1413774	
1,4-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	10/10/14	10/10/14	KWG1413774	
n-Butylbenzene	ND	U	2.0	0.10	0.054	1	10/10/14	10/10/14	KWG1413774	
1,2-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	10/10/14	10/10/14	KWG1413774	
1,2-Dibromo-3-chloropropane	ND	U	2.0	0.80	0.20	1	10/10/14	10/10/14	KWG1413774	
1,2,4-Trichlorobenzene	ND	U	2.0	0.30	0.096	1	10/10/14	10/10/14	KWG1413774	
Hexachlorobutadiene	ND	U	2.0	0.30	0.11	1	10/10/14	10/10/14	KWG1413774	
Naphthalene	ND	U	2.0	0.30	0.088	1	10/10/14	10/10/14	KWG1413774	
1,2,3-Trichlorobenzene	ND	U	2.0	0.40	0.11	1	10/10/14	10/10/14	KWG1413774	

* See Case Narrative

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1410790
Project:	JBLM LTM Log Center/TO-01	**Date Collected:**	09/29/2014
Sample Matrix:	Water	**Date Received:**	10/02/2014

Volatile Organic Compounds

Sample Name:	LGC140929T05-1	**Units:**	ug/L
Lab Code:	K1410790-006	**Basis:**	NA

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Dibromofluoromethane	103	85-115	10/10/14	Acceptable
1,2-Dichloroethane-d4	93	70-120	10/10/14	Acceptable
Toluene-d8	98	85-120	10/10/14	Acceptable
4-Bromofluorobenzene	94	75-120	10/10/14	Acceptable

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1410790
Project:	JBLM LTM Log Center/TO-01	**Date Collected:**	09/29/2014
Sample Matrix:	Water	**Date Received:**	10/02/2014

Volatile Organic Compounds

Sample Name:	LGC140929T06-1	**Units:**	ug/L
Lab Code:	K1410790-007	**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
Dichlorodifluoromethane	ND	U	0.50	0.20	0.13	1	10/10/14	10/10/14	KWG1413774	
Chloromethane	ND	U	0.50	0.20	0.068	1	10/10/14	10/10/14	KWG1413774	
Vinyl Chloride	ND	U	0.50	0.10	0.075	1	10/10/14	10/10/14	KWG1413774	
Bromomethane	ND	U	0.50	0.30	0.10	1	10/10/14	10/10/14	KWG1413774	
Chloroethane	ND	U	0.50	0.20	0.16	1	10/10/14	10/10/14	KWG1413774	
Trichlorofluoromethane	ND	U	0.50	0.20	0.12	1	10/10/14	10/10/14	KWG1413774	
1,1-Dichloroethene	ND	U	0.50	0.20	0.080	1	10/10/14	10/10/14	KWG1413774	
Acetone	ND	U	20	10	3.3	1	10/10/14	10/10/14	KWG1413774	*
Carbon Disulfide	ND	U	0.50	0.20	0.069	1	10/10/14	10/10/14	KWG1413774	
Methylene Chloride	ND	U	2.0	0.20	0.10	1	10/10/14	10/10/14	KWG1413774	
Methyl tert-Butyl Ether	ND	U	0.50	0.30	0.11	1	10/10/14	10/10/14	KWG1413774	
trans-1,2-Dichloroethene	ND	U	0.50	0.20	0.072	1	10/10/14	10/10/14	KWG1413774	
1,1-Dichloroethane	ND	U	0.50	0.20	0.077	1	10/10/14	10/10/14	KWG1413774	
2,2-Dichloropropane	ND	U	0.50	0.20	0.060	1	10/10/14	10/10/14	KWG1413774	
cis-1,2-Dichloroethene	ND	U	0.50	0.20	0.067	1	10/10/14	10/10/14	KWG1413774	
2-Butanone (MEK)	ND	U	20	4.0	1.9	1	10/10/14	10/10/14	KWG1413774	
Bromochloromethane	ND	U	0.50	0.20	0.16	1	10/10/14	10/10/14	KWG1413774	
Chloroform	ND	U	0.50	0.20	0.072	1	10/10/14	10/10/14	KWG1413774	
1,1,1-Trichloroethane (TCA)	ND	U	0.50	0.20	0.075	1	10/10/14	10/10/14	KWG1413774	
Carbon Tetrachloride	ND	U	0.50	0.20	0.096	1	10/10/14	10/10/14	KWG1413774	
1,1-Dichloropropene	ND	U	0.50	0.20	0.089	1	10/10/14	10/10/14	KWG1413774	
Benzene	ND	U	0.50	0.10	0.062	1	10/10/14	10/10/14	KWG1413774	
1,2-Dichloroethane (EDC)	ND	U	0.50	0.15	0.080	1	10/10/14	10/10/14	KWG1413774	
Trichloroethene (TCE)	**3.8**		0.50	0.10	0.10	1	10/10/14	10/10/14	KWG1413774	
1,2-Dichloropropane	ND	U	0.50	0.20	0.095	1	10/10/14	10/10/14	KWG1413774	
Dibromomethane	ND	U	0.50	0.50	0.15	1	10/10/14	10/10/14	KWG1413774	
Bromodichloromethane	ND	U	0.50	0.30	0.091	1	10/10/14	10/10/14	KWG1413774	
cis-1,3-Dichloropropene	ND	U	0.50	0.20	0.18	1	10/10/14	10/10/14	KWG1413774	
4-Methyl-2-pentanone (MIBK)	ND	U	20	10	2.6	1	10/10/14	10/10/14	KWG1413774	*
Toluene	ND	U	0.50	0.10	0.054	1	10/10/14	10/10/14	KWG1413774	
trans-1,3-Dichloropropene	ND	U	0.50	0.20	0.068	1	10/10/14	10/10/14	KWG1413774	
1,1,2-Trichloroethane	ND	U	0.50	0.40	0.14	1	10/10/14	10/10/14	KWG1413774	
Tetrachloroethene (PCE)	ND	U	0.50	0.20	0.099	1	10/10/14	10/10/14	KWG1413774	

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1410790
Project:	JBLM LTM Log Center/TO-01	**Date Collected:**	09/29/2014
Sample Matrix:	Water	**Date Received:**	10/02/2014

Volatile Organic Compounds

Sample Name:	LGC140929T06-1	**Units:**	ug/L
Lab Code:	K1410790-007	**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
2-Hexanone	ND	U	20	10	2.7	1	10/10/14	10/10/14	KWG1413774	
1,3-Dichloropropane	ND	U	0.50	0.30	0.14	1	10/10/14	10/10/14	KWG1413774	
Dibromochloromethane	ND	U	0.50	0.50	0.14	1	10/10/14	10/10/14	KWG1413774	
1,2-Dibromoethane (EDB)	ND	U	2.0	0.20	0.10	1	10/10/14	10/10/14	KWG1413774	
Chlorobenzene	ND	U	0.50	0.20	0.11	1	10/10/14	10/10/14	KWG1413774	
Ethylbenzene	ND	U	0.50	0.10	0.050	1	10/10/14	10/10/14	KWG1413774	
1,1,1,2-Tetrachloroethane	ND	U	0.50	0.20	0.11	1	10/10/14	10/10/14	KWG1413774	
m,p-Xylenes	ND	U	0.50	0.20	0.11	1	10/10/14	10/10/14	KWG1413774	
o-Xylene	ND	U	0.50	0.20	0.074	1	10/10/14	10/10/14	KWG1413774	
Styrene	ND	U	0.50	0.20	0.089	1	10/10/14	10/10/14	KWG1413774	
Bromoform	ND	U	0.50	0.50	0.16	1	10/10/14	10/10/14	KWG1413774	
Isopropylbenzene	ND	U	2.0	0.20	0.051	1	10/10/14	10/10/14	KWG1413774	
1,1,2,2-Tetrachloroethane	ND	U	0.50	0.20	0.16	1	10/10/14	10/10/14	KWG1413774	
Bromobenzene	ND	U	2.0	0.20	0.12	1	10/10/14	10/10/14	KWG1413774	
n-Propylbenzene	ND	U	2.0	0.20	0.054	1	10/10/14	10/10/14	KWG1413774	
1,2,3-Trichloropropane	ND	U	0.50	0.50	0.20	1	10/10/14	10/10/14	KWG1413774	
2-Chlorotoluene	ND	U	2.0	0.20	0.10	1	10/10/14	10/10/14	KWG1413774	
1,3,5-Trimethylbenzene	ND	U	2.0	0.20	0.089	1	10/10/14	10/10/14	KWG1413774	
4-Chlorotoluene	ND	U	2.0	0.20	0.13	1	10/10/14	10/10/14	KWG1413774	
tert-Butylbenzene	ND	U	2.0	0.20	0.059	1	10/10/14	10/10/14	KWG1413774	
1,2,4-Trimethylbenzene	ND	U	2.0	0.20	0.069	1	10/10/14	10/10/14	KWG1413774	
sec-Butylbenzene	ND	U	2.0	0.10	0.062	1	10/10/14	10/10/14	KWG1413774	
4-Isopropyltoluene	ND	U	2.0	0.20	0.060	1	10/10/14	10/10/14	KWG1413774	
1,3-Dichlorobenzene	ND	U	0.50	0.20	0.10	1	10/10/14	10/10/14	KWG1413774	
1,4-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	10/10/14	10/10/14	KWG1413774	
n-Butylbenzene	ND	U	2.0	0.10	0.054	1	10/10/14	10/10/14	KWG1413774	
1,2-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	10/10/14	10/10/14	KWG1413774	
1,2-Dibromo-3-chloropropane	ND	U	2.0	0.80	0.20	1	10/10/14	10/10/14	KWG1413774	
1,2,4-Trichlorobenzene	ND	U	2.0	0.30	0.096	1	10/10/14	10/10/14	KWG1413774	
Hexachlorobutadiene	ND	U	2.0	0.30	0.11	1	10/10/14	10/10/14	KWG1413774	
Naphthalene	ND	U	2.0	0.30	0.088	1	10/10/14	10/10/14	KWG1413774	
1,2,3-Trichlorobenzene	ND	U	2.0	0.40	0.11	1	10/10/14	10/10/14	KWG1413774	

* See Case Narrative

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1410790
Project:	JBLM LTM Log Center/TO-01	**Date Collected:**	09/29/2014
Sample Matrix:	Water	**Date Received:**	10/02/2014

Volatile Organic Compounds

Sample Name:	LGC140929T06-1	**Units:**	ug/L
Lab Code:	K1410790-007	**Basis:**	NA

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Dibromofluoromethane	102	85-115	10/10/14	Acceptable
1,2-Dichloroethane-d4	91	70-120	10/10/14	Acceptable
Toluene-d8	98	85-120	10/10/14	Acceptable
4-Bromofluorobenzene	95	75-120	10/10/14	Acceptable

Comments:

Analytical Results

Client: Sealaska Environmental Services, LLC
Project: JBLM LTM Log Center/TO-01
Sample Matrix: Water

Service Request: K1410790
Date Collected: 09/29/2014
Date Received: 10/02/2014

Volatile Organic Compounds

Sample Name: LGC140929T11B-1
Lab Code: K1410790-008

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
Dichlorodifluoromethane	ND	U	0.50	0.20	0.13	1	10/10/14	10/10/14	KWG1413774	
Chloromethane	ND	U	0.50	0.20	0.068	1	10/10/14	10/10/14	KWG1413774	
Vinyl Chloride	ND	U	0.50	0.10	0.075	1	10/10/14	10/10/14	KWG1413774	
Bromomethane	ND	U	0.50	0.30	0.10	1	10/10/14	10/10/14	KWG1413774	
Chloroethane	ND	U	0.50	0.20	0.16	1	10/10/14	10/10/14	KWG1413774	
Trichlorofluoromethane	ND	U	0.50	0.20	0.12	1	10/10/14	10/10/14	KWG1413774	
1,1-Dichloroethene	ND	U	0.50	0.20	0.080	1	10/10/14	10/10/14	KWG1413774	
Acetone	ND	U	20	10	3.3	1	10/10/14	10/10/14	KWG1413774	*
Carbon Disulfide	ND	U	0.50	0.20	0.069	1	10/10/14	10/10/14	KWG1413774	
Methylene Chloride	ND	U	2.0	0.20	0.10	1	10/10/14	10/10/14	KWG1413774	
Methyl tert-Butyl Ether	ND	U	0.50	0.30	0.11	1	10/10/14	10/10/14	KWG1413774	
trans-1,2-Dichloroethene	ND	U	0.50	0.20	0.072	1	10/10/14	10/10/14	KWG1413774	
1,1-Dichloroethane	ND	U	0.50	0.20	0.077	1	10/10/14	10/10/14	KWG1413774	
2,2-Dichloropropane	ND	U	0.50	0.20	0.060	1	10/10/14	10/10/14	KWG1413774	
cis-1,2-Dichloroethene	ND	U	0.50	0.20	0.067	1	10/10/14	10/10/14	KWG1413774	
2-Butanone (MEK)	ND	U	20	4.0	1.9	1	10/10/14	10/10/14	KWG1413774	
Bromochloromethane	ND	U	0.50	0.20	0.16	1	10/10/14	10/10/14	KWG1413774	
Chloroform	**0.090**	J	0.50	0.20	0.072	1	10/10/14	10/10/14	KWG1413774	
1,1,1-Trichloroethane (TCA)	ND	U	0.50	0.20	0.075	1	10/10/14	10/10/14	KWG1413774	
Carbon Tetrachloride	ND	U	0.50	0.20	0.096	1	10/10/14	10/10/14	KWG1413774	
1,1-Dichloropropene	ND	U	0.50	0.20	0.089	1	10/10/14	10/10/14	KWG1413774	
Benzene	ND	U	0.50	0.10	0.062	1	10/10/14	10/10/14	KWG1413774	
1,2-Dichloroethane (EDC)	ND	U	0.50	0.15	0.080	1	10/10/14	10/10/14	KWG1413774	
Trichloroethene (TCE)	**4.1**		0.50	0.10	0.10	1	10/10/14	10/10/14	KWG1413774	
1,2-Dichloropropane	ND	U	0.50	0.20	0.095	1	10/10/14	10/10/14	KWG1413774	
Dibromomethane	ND	U	0.50	0.50	0.15	1	10/10/14	10/10/14	KWG1413774	
Bromodichloromethane	ND	U	0.50	0.30	0.091	1	10/10/14	10/10/14	KWG1413774	
cis-1,3-Dichloropropene	ND	U	0.50	0.20	0.18	1	10/10/14	10/10/14	KWG1413774	
4-Methyl-2-pentanone (MIBK)	ND	U	20	10	2.6	1	10/10/14	10/10/14	KWG1413774	*
Toluene	ND	U	0.50	0.10	0.054	1	10/10/14	10/10/14	KWG1413774	
trans-1,3-Dichloropropene	ND	U	0.50	0.20	0.068	1	10/10/14	10/10/14	KWG1413774	
1,1,2-Trichloroethane	ND	U	0.50	0.40	0.14	1	10/10/14	10/10/14	KWG1413774	
Tetrachloroethene (PCE)	ND	U	0.50	0.20	0.099	1	10/10/14	10/10/14	KWG1413774	

Comments:

Analytical Results

Client: Sealaska Environmental Services, LLC
Project: JBLM LTM Log Center/TO-01
Sample Matrix: Water

Service Request: K1410790
Date Collected: 09/29/2014
Date Received: 10/02/2014

Volatile Organic Compounds

Sample Name: LGC140929T11B-1
Lab Code: K1410790-008

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
2-Hexanone	ND	U	20	10	2.7	1	10/10/14	10/10/14	KWG1413774	
1,3-Dichloropropane	ND	U	0.50	0.30	0.14	1	10/10/14	10/10/14	KWG1413774	
Dibromochloromethane	ND	U	0.50	0.50	0.14	1	10/10/14	10/10/14	KWG1413774	
1,2-Dibromoethane (EDB)	ND	U	2.0	0.20	0.10	1	10/10/14	10/10/14	KWG1413774	
Chlorobenzene	ND	U	0.50	0.20	0.11	1	10/10/14	10/10/14	KWG1413774	
Ethylbenzene	ND	U	0.50	0.10	0.050	1	10/10/14	10/10/14	KWG1413774	
1,1,1,2-Tetrachloroethane	ND	U	0.50	0.20	0.11	1	10/10/14	10/10/14	KWG1413774	
m,p-Xylenes	ND	U	0.50	0.20	0.11	1	10/10/14	10/10/14	KWG1413774	
o-Xylene	ND	U	0.50	0.20	0.074	1	10/10/14	10/10/14	KWG1413774	
Styrene	ND	U	0.50	0.20	0.089	1	10/10/14	10/10/14	KWG1413774	
Bromoform	ND	U	0.50	0.50	0.16	1	10/10/14	10/10/14	KWG1413774	
Isopropylbenzene	ND	U	2.0	0.20	0.051	1	10/10/14	10/10/14	KWG1413774	
1,1,2,2-Tetrachloroethane	ND	U	0.50	0.20	0.16	1	10/10/14	10/10/14	KWG1413774	
Bromobenzene	ND	U	2.0	0.20	0.12	1	10/10/14	10/10/14	KWG1413774	
n-Propylbenzene	ND	U	2.0	0.20	0.054	1	10/10/14	10/10/14	KWG1413774	
1,2,3-Trichloropropane	ND	U	0.50	0.50	0.20	1	10/10/14	10/10/14	KWG1413774	
2-Chlorotoluene	ND	U	2.0	0.20	0.10	1	10/10/14	10/10/14	KWG1413774	
1,3,5-Trimethylbenzene	ND	U	2.0	0.20	0.089	1	10/10/14	10/10/14	KWG1413774	
4-Chlorotoluene	ND	U	2.0	0.20	0.13	1	10/10/14	10/10/14	KWG1413774	
tert-Butylbenzene	ND	U	2.0	0.20	0.059	1	10/10/14	10/10/14	KWG1413774	
1,2,4-Trimethylbenzene	ND	U	2.0	0.20	0.069	1	10/10/14	10/10/14	KWG1413774	
sec-Butylbenzene	ND	U	2.0	0.10	0.062	1	10/10/14	10/10/14	KWG1413774	
4-Isopropyltoluene	ND	U	2.0	0.20	0.060	1	10/10/14	10/10/14	KWG1413774	
1,3-Dichlorobenzene	ND	U	0.50	0.20	0.10	1	10/10/14	10/10/14	KWG1413774	
1,4-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	10/10/14	10/10/14	KWG1413774	
n-Butylbenzene	ND	U	2.0	0.10	0.054	1	10/10/14	10/10/14	KWG1413774	
1,2-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	10/10/14	10/10/14	KWG1413774	
1,2-Dibromo-3-chloropropane	ND	U	2.0	0.80	0.20	1	10/10/14	10/10/14	KWG1413774	
1,2,4-Trichlorobenzene	ND	U	2.0	0.30	0.096	1	10/10/14	10/10/14	KWG1413774	
Hexachlorobutadiene	ND	U	2.0	0.30	0.11	1	10/10/14	10/10/14	KWG1413774	
Naphthalene	ND	U	2.0	0.30	0.088	1	10/10/14	10/10/14	KWG1413774	
1,2,3-Trichlorobenzene	ND	U	2.0	0.40	0.11	1	10/10/14	10/10/14	KWG1413774	

* See Case Narrative

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1410790
Project:	JBLM LTM Log Center/TO-01	**Date Collected:**	09/29/2014
Sample Matrix:	Water	**Date Received:**	10/02/2014

Volatile Organic Compounds

Sample Name:	LGC140929T11B-1	**Units:**	ug/L
Lab Code:	K1410790-008	**Basis:**	NA

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Dibromofluoromethane	101	85-115	10/10/14	Acceptable
1,2-Dichloroethane-d4	90	70-120	10/10/14	Acceptable
Toluene-d8	98	85-120	10/10/14	Acceptable
4-Bromofluorobenzene	94	75-120	10/10/14	Acceptable

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1410790
Project:	JBLM LTM Log Center/TO-01	**Date Collected:**	09/29/2014
Sample Matrix:	Water	**Date Received:**	10/02/2014

Volatile Organic Compounds

Sample Name:	LGC140929BC1-1	**Units:**	ug/L
Lab Code:	K1410790-009	**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
Dichlorodifluoromethane	ND	U	0.50	0.20	0.13	1	10/10/14	10/10/14	KWG1413774	
Chloromethane	ND	U	0.50	0.20	0.068	1	10/10/14	10/10/14	KWG1413774	
Vinyl Chloride	ND	U	0.50	0.10	0.075	1	10/10/14	10/10/14	KWG1413774	
Bromomethane	ND	U	0.50	0.30	0.10	1	10/10/14	10/10/14	KWG1413774	
Chloroethane	ND	U	0.50	0.20	0.16	1	10/10/14	10/10/14	KWG1413774	
Trichlorofluoromethane	ND	U	0.50	0.20	0.12	1	10/10/14	10/10/14	KWG1413774	
1,1-Dichloroethene	ND	U	0.50	0.20	0.080	1	10/10/14	10/10/14	KWG1413774	
Acetone	ND	U	20	10	3.3	1	10/10/14	10/10/14	KWG1413774	*
Carbon Disulfide	ND	U	0.50	0.20	0.069	1	10/10/14	10/10/14	KWG1413774	
Methylene Chloride	ND	U	2.0	0.20	0.10	1	10/10/14	10/10/14	KWG1413774	
Methyl tert-Butyl Ether	ND	U	0.50	0.30	0.11	1	10/10/14	10/10/14	KWG1413774	
trans-1,2-Dichloroethene	ND	U	0.50	0.20	0.072	1	10/10/14	10/10/14	KWG1413774	
1,1-Dichloroethane	ND	U	0.50	0.20	0.077	1	10/10/14	10/10/14	KWG1413774	
2,2-Dichloropropane	ND	U	0.50	0.20	0.060	1	10/10/14	10/10/14	KWG1413774	
cis-1,2-Dichloroethene	ND	U	0.50	0.20	0.067	1	10/10/14	10/10/14	KWG1413774	
2-Butanone (MEK)	ND	U	20	4.0	1.9	1	10/10/14	10/10/14	KWG1413774	
Bromochloromethane	ND	U	0.50	0.20	0.16	1	10/10/14	10/10/14	KWG1413774	
Chloroform	ND	U	0.50	0.20	0.072	1	10/10/14	10/10/14	KWG1413774	
1,1,1-Trichloroethane (TCA)	**0.32**	J	0.50	0.20	0.075	1	10/10/14	10/10/14	KWG1413774	
Carbon Tetrachloride	ND	U	0.50	0.20	0.096	1	10/10/14	10/10/14	KWG1413774	
1,1-Dichloropropene	ND	U	0.50	0.20	0.089	1	10/10/14	10/10/14	KWG1413774	
Benzene	ND	U	0.50	0.10	0.062	1	10/10/14	10/10/14	KWG1413774	
1,2-Dichloroethane (EDC)	ND	U	0.50	0.15	0.080	1	10/10/14	10/10/14	KWG1413774	
Trichloroethene (TCE)	ND	U	0.50	0.10	0.10	1	10/10/14	10/10/14	KWG1413774	
1,2-Dichloropropane	ND	U	0.50	0.20	0.095	1	10/10/14	10/10/14	KWG1413774	
Dibromomethane	ND	U	0.50	0.50	0.15	1	10/10/14	10/10/14	KWG1413774	
Bromodichloromethane	ND	U	0.50	0.30	0.091	1	10/10/14	10/10/14	KWG1413774	
cis-1,3-Dichloropropene	ND	U	0.50	0.20	0.18	1	10/10/14	10/10/14	KWG1413774	
4-Methyl-2-pentanone (MIBK)	ND	U	20	10	2.6	1	10/10/14	10/10/14	KWG1413774	*
Toluene	ND	U	0.50	0.10	0.054	1	10/10/14	10/10/14	KWG1413774	
trans-1,3-Dichloropropene	ND	U	0.50	0.20	0.068	1	10/10/14	10/10/14	KWG1413774	
1,1,2-Trichloroethane	ND	U	0.50	0.40	0.14	1	10/10/14	10/10/14	KWG1413774	
Tetrachloroethene (PCE)	ND	U	0.50	0.20	0.099	1	10/10/14	10/10/14	KWG1413774	

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1410790
Project:	JBLM LTM Log Center/TO-01	**Date Collected:**	09/29/2014
Sample Matrix:	Water	**Date Received:**	10/02/2014

Volatile Organic Compounds

Sample Name:	LGC140929BC1-1	**Units:**	ug/L
Lab Code:	K1410790-009	**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
2-Hexanone	ND	U	20	10	2.7	1	10/10/14	10/10/14	KWG1413774	
1,3-Dichloropropane	ND	U	0.50	0.30	0.14	1	10/10/14	10/10/14	KWG1413774	
Dibromochloromethane	ND	U	0.50	0.50	0.14	1	10/10/14	10/10/14	KWG1413774	
1,2-Dibromoethane (EDB)	ND	U	2.0	0.20	0.10	1	10/10/14	10/10/14	KWG1413774	
Chlorobenzene	ND	U	0.50	0.20	0.11	1	10/10/14	10/10/14	KWG1413774	
Ethylbenzene	ND	U	0.50	0.10	0.050	1	10/10/14	10/10/14	KWG1413774	
1,1,1,2-Tetrachloroethane	ND	U	0.50	0.20	0.11	1	10/10/14	10/10/14	KWG1413774	
m,p-Xylenes	ND	U	0.50	0.20	0.11	1	10/10/14	10/10/14	KWG1413774	
o-Xylene	ND	U	0.50	0.20	0.074	1	10/10/14	10/10/14	KWG1413774	
Styrene	ND	U	0.50	0.20	0.089	1	10/10/14	10/10/14	KWG1413774	
Bromoform	ND	U	0.50	0.50	0.16	1	10/10/14	10/10/14	KWG1413774	
Isopropylbenzene	ND	U	2.0	0.20	0.051	1	10/10/14	10/10/14	KWG1413774	
1,1,2,2-Tetrachloroethane	ND	U	0.50	0.20	0.16	1	10/10/14	10/10/14	KWG1413774	
Bromobenzene	ND	U	2.0	0.20	0.12	1	10/10/14	10/10/14	KWG1413774	
n-Propylbenzene	ND	U	2.0	0.20	0.054	1	10/10/14	10/10/14	KWG1413774	
1,2,3-Trichloropropane	ND	U	0.50	0.50	0.20	1	10/10/14	10/10/14	KWG1413774	
2-Chlorotoluene	ND	U	2.0	0.20	0.10	1	10/10/14	10/10/14	KWG1413774	
1,3,5-Trimethylbenzene	ND	U	2.0	0.20	0.089	1	10/10/14	10/10/14	KWG1413774	
4-Chlorotoluene	ND	U	2.0	0.20	0.13	1	10/10/14	10/10/14	KWG1413774	
tert-Butylbenzene	ND	U	2.0	0.20	0.059	1	10/10/14	10/10/14	KWG1413774	
1,2,4-Trimethylbenzene	ND	U	2.0	0.20	0.069	1	10/10/14	10/10/14	KWG1413774	
sec-Butylbenzene	ND	U	2.0	0.10	0.062	1	10/10/14	10/10/14	KWG1413774	
4-Isopropyltoluene	ND	U	2.0	0.20	0.060	1	10/10/14	10/10/14	KWG1413774	
1,3-Dichlorobenzene	ND	U	0.50	0.20	0.10	1	10/10/14	10/10/14	KWG1413774	
1,4-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	10/10/14	10/10/14	KWG1413774	
n-Butylbenzene	ND	U	2.0	0.10	0.054	1	10/10/14	10/10/14	KWG1413774	
1,2-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	10/10/14	10/10/14	KWG1413774	
1,2-Dibromo-3-chloropropane	ND	U	2.0	0.80	0.20	1	10/10/14	10/10/14	KWG1413774	
1,2,4-Trichlorobenzene	ND	U	2.0	0.30	0.096	1	10/10/14	10/10/14	KWG1413774	
Hexachlorobutadiene	ND	U	2.0	0.30	0.11	1	10/10/14	10/10/14	KWG1413774	
Naphthalene	ND	U	2.0	0.30	0.088	1	10/10/14	10/10/14	KWG1413774	
1,2,3-Trichlorobenzene	ND	U	2.0	0.40	0.11	1	10/10/14	10/10/14	KWG1413774	

* See Case Narrative

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1410790
Project:	JBLM LTM Log Center/TO-01	**Date Collected:**	09/29/2014
Sample Matrix:	Water	**Date Received:**	10/02/2014

Volatile Organic Compounds

Sample Name:	LGC140929BC1-1	**Units:**	ug/L
Lab Code:	K1410790-009	**Basis:**	NA

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Dibromofluoromethane	98	85-115	10/10/14	Acceptable
1,2-Dichloroethane-d4	90	70-120	10/10/14	Acceptable
Toluene-d8	97	85-120	10/10/14	Acceptable
4-Bromofluorobenzene	95	75-120	10/10/14	Acceptable

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1410790
Project:	JBLM LTM Log Center/TO-01	**Date Collected:**	09/29/2014
Sample Matrix:	Water	**Date Received:**	10/02/2014

Volatile Organic Compounds

Sample Name:	LGC140929T10-1	**Units:**	ug/L
Lab Code:	K1410790-010	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8260C		

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Dichlorodifluoromethane	ND	U	0.50	0.20	0.13	1	10/12/14	10/12/14	KWG1413817	
Chloromethane	ND	U	0.50	0.20	0.068	1	10/12/14	10/12/14	KWG1413817	
Vinyl Chloride	ND	U	0.50	0.10	0.075	1	10/12/14	10/12/14	KWG1413817	
Bromomethane	ND	U	0.50	0.30	0.10	1	10/12/14	10/12/14	KWG1413817	
Chloroethane	ND	U	0.50	0.20	0.16	1	10/12/14	10/12/14	KWG1413817	
Trichlorofluoromethane	ND	U	0.50	0.20	0.12	1	10/12/14	10/12/14	KWG1413817	
1,1-Dichloroethene	ND	U	0.50	0.20	0.080	1	10/12/14	10/12/14	KWG1413817	
Acetone	ND	U	20	10	3.3	1	10/12/14	10/12/14	KWG1413817	
Carbon Disulfide	ND	U	0.50	0.20	0.069	1	10/12/14	10/12/14	KWG1413817	
Methylene Chloride	ND	U	2.0	0.20	0.10	1	10/12/14	10/12/14	KWG1413817	
Methyl tert-Butyl Ether	ND	U	0.50	0.30	0.11	1	10/12/14	10/12/14	KWG1413817	
trans-1,2-Dichloroethene	ND	U	0.50	0.20	0.072	1	10/12/14	10/12/14	KWG1413817	
1,1-Dichloroethane	ND	U	0.50	0.20	0.077	1	10/12/14	10/12/14	KWG1413817	
2,2-Dichloropropane	ND	U	0.50	0.20	0.060	1	10/12/14	10/12/14	KWG1413817	
cis-1,2-Dichloroethene	ND	U	0.50	0.20	0.067	1	10/12/14	10/12/14	KWG1413817	
2-Butanone (MEK)	ND	U	20	4.0	1.9	1	10/12/14	10/12/14	KWG1413817	
Bromochloromethane	ND	U	0.50	0.20	0.16	1	10/12/14	10/12/14	KWG1413817	
Chloroform	ND	U	0.50	0.20	0.072	1	10/12/14	10/12/14	KWG1413817	
1,1,1-Trichloroethane (TCA)	ND	U	0.50	0.20	0.075	1	10/12/14	10/12/14	KWG1413817	
Carbon Tetrachloride	ND	U	0.50	0.20	0.096	1	10/12/14	10/12/14	KWG1413817	
1,1-Dichloropropene	ND	U	0.50	0.20	0.089	1	10/12/14	10/12/14	KWG1413817	
Benzene	ND	U	0.50	0.10	0.062	1	10/12/14	10/12/14	KWG1413817	
1,2-Dichloroethane (EDC)	ND	U	0.50	0.15	0.080	1	10/12/14	10/12/14	KWG1413817	
Trichloroethene (TCE)	ND	U	0.50	0.10	0.10	1	10/12/14	10/12/14	KWG1413817	
1,2-Dichloropropane	ND	U	0.50	0.20	0.095	1	10/12/14	10/12/14	KWG1413817	
Dibromomethane	ND	U	0.50	0.50	0.15	1	10/12/14	10/12/14	KWG1413817	
Bromodichloromethane	ND	U	0.50	0.30	0.091	1	10/12/14	10/12/14	KWG1413817	
cis-1,3-Dichloropropene	ND	U	0.50	0.20	0.18	1	10/12/14	10/12/14	KWG1413817	
4-Methyl-2-pentanone (MIBK)	ND	U	20	10	2.6	1	10/12/14	10/12/14	KWG1413817	
Toluene	ND	U	0.50	0.10	0.054	1	10/12/14	10/12/14	KWG1413817	
trans-1,3-Dichloropropene	ND	U	0.50	0.20	0.068	1	10/12/14	10/12/14	KWG1413817	
1,1,2-Trichloroethane	ND	U	0.50	0.40	0.14	1	10/12/14	10/12/14	KWG1413817	
Tetrachloroethene (PCE)	ND	U	0.50	0.20	0.099	1	10/12/14	10/12/14	KWG1413817	

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1410790
Project:	JBLM LTM Log Center/TO-01	**Date Collected:**	09/29/2014
Sample Matrix:	Water	**Date Received:**	10/02/2014

Volatile Organic Compounds

Sample Name:	LGC140929T10-1	**Units:**	ug/L
Lab Code:	K1410790-010	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8260C		

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
2-Hexanone	ND	U	20	10	2.7	1	10/12/14	10/12/14	KWG1413817	
1,3-Dichloropropane	ND	U	0.50	0.30	0.14	1	10/12/14	10/12/14	KWG1413817	
Dibromochloromethane	ND	U	0.50	0.50	0.14	1	10/12/14	10/12/14	KWG1413817	
1,2-Dibromoethane (EDB)	ND	U	2.0	0.20	0.10	1	10/12/14	10/12/14	KWG1413817	
Chlorobenzene	ND	U	0.50	0.20	0.11	1	10/12/14	10/12/14	KWG1413817	
Ethylbenzene	ND	U	0.50	0.10	0.050	1	10/12/14	10/12/14	KWG1413817	
1,1,1,2-Tetrachloroethane	ND	U	0.50	0.20	0.11	1	10/12/14	10/12/14	KWG1413817	
m,p-Xylenes	ND	U	0.50	0.20	0.11	1	10/12/14	10/12/14	KWG1413817	
o-Xylene	ND	U	0.50	0.20	0.074	1	10/12/14	10/12/14	KWG1413817	
Styrene	ND	U	0.50	0.20	0.089	1	10/12/14	10/12/14	KWG1413817	
Bromoform	ND	U	0.50	0.50	0.16	1	10/12/14	10/12/14	KWG1413817	
Isopropylbenzene	ND	U	2.0	0.20	0.051	1	10/12/14	10/12/14	KWG1413817	
1,1,2,2-Tetrachloroethane	ND	U	0.50	0.20	0.16	1	10/12/14	10/12/14	KWG1413817	
Bromobenzene	ND	U	2.0	0.20	0.12	1	10/12/14	10/12/14	KWG1413817	
n-Propylbenzene	ND	U	2.0	0.20	0.054	1	10/12/14	10/12/14	KWG1413817	
1,2,3-Trichloropropane	ND	U	0.50	0.50	0.20	1	10/12/14	10/12/14	KWG1413817	
2-Chlorotoluene	ND	U	2.0	0.20	0.10	1	10/12/14	10/12/14	KWG1413817	
1,3,5-Trimethylbenzene	ND	U	2.0	0.20	0.089	1	10/12/14	10/12/14	KWG1413817	
4-Chlorotoluene	ND	U	2.0	0.20	0.13	1	10/12/14	10/12/14	KWG1413817	
tert-Butylbenzene	ND	U	2.0	0.20	0.059	1	10/12/14	10/12/14	KWG1413817	
1,2,4-Trimethylbenzene	ND	U	2.0	0.20	0.069	1	10/12/14	10/12/14	KWG1413817	
sec-Butylbenzene	ND	U	2.0	0.10	0.062	1	10/12/14	10/12/14	KWG1413817	
4-Isopropyltoluene	ND	U	2.0	0.20	0.060	1	10/12/14	10/12/14	KWG1413817	
1,3-Dichlorobenzene	ND	U	0.50	0.20	0.10	1	10/12/14	10/12/14	KWG1413817	
1,4-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	10/12/14	10/12/14	KWG1413817	
n-Butylbenzene	ND	U	2.0	0.10	0.054	1	10/12/14	10/12/14	KWG1413817	
1,2-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	10/12/14	10/12/14	KWG1413817	
1,2-Dibromo-3-chloropropane	ND	U	2.0	0.80	0.20	1	10/12/14	10/12/14	KWG1413817	
1,2,4-Trichlorobenzene	ND	U	2.0	0.30	0.096	1	10/12/14	10/12/14	KWG1413817	
Hexachlorobutadiene	ND	U	2.0	0.30	0.11	1	10/12/14	10/12/14	KWG1413817	
Naphthalene	ND	U	2.0	0.30	0.088	1	10/12/14	10/12/14	KWG1413817	
1,2,3-Trichlorobenzene	ND	U	2.0	0.40	0.11	1	10/12/14	10/12/14	KWG1413817	

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1410790
Project:	JBLM LTM Log Center/TO-01	**Date Collected:**	09/29/2014
Sample Matrix:	Water	**Date Received:**	10/02/2014

Volatile Organic Compounds

Sample Name:	LGC140929T10-1	**Units:**	ug/L
Lab Code:	K1410790-010	**Basis:**	NA

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Dibromofluoromethane	94	85-115	10/12/14	Acceptable
1,2-Dichloroethane-d4	99	70-120	10/12/14	Acceptable
Toluene-d8	96	85-120	10/12/14	Acceptable
4-Bromofluorobenzene	97	75-120	10/12/14	Acceptable

Comments:

Analytical Results

Client: Sealaska Environmental Services, LLC
Project: JBLM LTM Log Center/TO-01
Sample Matrix: Water

Service Request: K1410790
Date Collected: 09/29/2014
Date Received: 10/02/2014

Volatile Organic Compounds

Sample Name: LGC140929T15-1
Lab Code: K1410790-011

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
Dichlorodifluoromethane	ND	U	0.50	0.20	0.13	1	10/10/14	10/10/14	KWG1413774	
Chloromethane	ND	U	0.50	0.20	0.068	1	10/10/14	10/10/14	KWG1413774	
Vinyl Chloride	ND	U	0.50	0.10	0.075	1	10/10/14	10/10/14	KWG1413774	
Bromomethane	ND	U	0.50	0.30	0.10	1	10/10/14	10/10/14	KWG1413774	
Chloroethane	ND	U	0.50	0.20	0.16	1	10/10/14	10/10/14	KWG1413774	
Trichlorofluoromethane	ND	U	0.50	0.20	0.12	1	10/10/14	10/10/14	KWG1413774	
1,1-Dichloroethene	ND	U	0.50	0.20	0.080	1	10/10/14	10/10/14	KWG1413774	
Acetone	ND	U	20	10	3.3	1	10/10/14	10/10/14	KWG1413774	*
Carbon Disulfide	ND	U	0.50	0.20	0.069	1	10/10/14	10/10/14	KWG1413774	
Methylene Chloride	ND	U	2.0	0.20	0.10	1	10/10/14	10/10/14	KWG1413774	
Methyl tert-Butyl Ether	ND	U	0.50	0.30	0.11	1	10/10/14	10/10/14	KWG1413774	
trans-1,2-Dichloroethene	ND	U	0.50	0.20	0.072	1	10/10/14	10/10/14	KWG1413774	
1,1-Dichloroethane	ND	U	0.50	0.20	0.077	1	10/10/14	10/10/14	KWG1413774	
2,2-Dichloropropane	ND	U	0.50	0.20	0.060	1	10/10/14	10/10/14	KWG1413774	
cis-1,2-Dichloroethene	ND	U	0.50	0.20	0.067	1	10/10/14	10/10/14	KWG1413774	
2-Butanone (MEK)	ND	U	20	4.0	1.9	1	10/10/14	10/10/14	KWG1413774	
Bromochloromethane	ND	U	0.50	0.20	0.16	1	10/10/14	10/10/14	KWG1413774	
Chloroform	ND	U	0.50	0.20	0.072	1	10/10/14	10/10/14	KWG1413774	
1,1,1-Trichloroethane (TCA)	**0.16**	J	0.50	0.20	0.075	1	10/10/14	10/10/14	KWG1413774	
Carbon Tetrachloride	**0.44**	J	0.50	0.20	0.096	1	10/10/14	10/10/14	KWG1413774	
1,1-Dichloropropene	ND	U	0.50	0.20	0.089	1	10/10/14	10/10/14	KWG1413774	
Benzene	ND	U	0.50	0.10	0.062	1	10/10/14	10/10/14	KWG1413774	
1,2-Dichloroethane (EDC)	ND	U	0.50	0.15	0.080	1	10/10/14	10/10/14	KWG1413774	
Trichloroethene (TCE)	ND	U	0.50	0.10	0.10	1	10/10/14	10/10/14	KWG1413774	
1,2-Dichloropropane	ND	U	0.50	0.20	0.095	1	10/10/14	10/10/14	KWG1413774	
Dibromomethane	ND	U	0.50	0.50	0.15	1	10/10/14	10/10/14	KWG1413774	
Bromodichloromethane	ND	U	0.50	0.30	0.091	1	10/10/14	10/10/14	KWG1413774	
cis-1,3-Dichloropropene	ND	U	0.50	0.20	0.18	1	10/10/14	10/10/14	KWG1413774	
4-Methyl-2-pentanone (MIBK)	ND	U	20	10	2.6	1	10/10/14	10/10/14	KWG1413774	*
Toluene	ND	U	0.50	0.10	0.054	1	10/10/14	10/10/14	KWG1413774	
trans-1,3-Dichloropropene	ND	U	0.50	0.20	0.068	1	10/10/14	10/10/14	KWG1413774	
1,1,2-Trichloroethane	ND	U	0.50	0.40	0.14	1	10/10/14	10/10/14	KWG1413774	
Tetrachloroethene (PCE)	ND	U	0.50	0.20	0.099	1	10/10/14	10/10/14	KWG1413774	

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1410790
Project:	JBLM LTM Log Center/TO-01	**Date Collected:**	09/29/2014
Sample Matrix:	Water	**Date Received:**	10/02/2014

Volatile Organic Compounds

Sample Name:	LGC140929T15-1	**Units:**	ug/L
Lab Code:	K1410790-011	**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
2-Hexanone	ND	U	20	10	2.7	1	10/10/14	10/10/14	KWG1413774	
1,3-Dichloropropane	ND	U	0.50	0.30	0.14	1	10/10/14	10/10/14	KWG1413774	
Dibromochloromethane	ND	U	0.50	0.50	0.14	1	10/10/14	10/10/14	KWG1413774	
1,2-Dibromoethane (EDB)	ND	U	2.0	0.20	0.10	1	10/10/14	10/10/14	KWG1413774	
Chlorobenzene	ND	U	0.50	0.20	0.11	1	10/10/14	10/10/14	KWG1413774	
Ethylbenzene	ND	U	0.50	0.10	0.050	1	10/10/14	10/10/14	KWG1413774	
1,1,1,2-Tetrachloroethane	ND	U	0.50	0.20	0.11	1	10/10/14	10/10/14	KWG1413774	
m,p-Xylenes	ND	U	0.50	0.20	0.11	1	10/10/14	10/10/14	KWG1413774	
o-Xylene	ND	U	0.50	0.20	0.074	1	10/10/14	10/10/14	KWG1413774	
Styrene	ND	U	0.50	0.20	0.089	1	10/10/14	10/10/14	KWG1413774	
Bromoform	ND	U	0.50	0.50	0.16	1	10/10/14	10/10/14	KWG1413774	
Isopropylbenzene	ND	U	2.0	0.20	0.051	1	10/10/14	10/10/14	KWG1413774	
1,1,2,2-Tetrachloroethane	ND	U	0.50	0.20	0.16	1	10/10/14	10/10/14	KWG1413774	
Bromobenzene	ND	U	2.0	0.20	0.12	1	10/10/14	10/10/14	KWG1413774	
n-Propylbenzene	ND	U	2.0	0.20	0.054	1	10/10/14	10/10/14	KWG1413774	
1,2,3-Trichloropropane	ND	U	0.50	0.50	0.20	1	10/10/14	10/10/14	KWG1413774	
2-Chlorotoluene	ND	U	2.0	0.20	0.10	1	10/10/14	10/10/14	KWG1413774	
1,3,5-Trimethylbenzene	ND	U	2.0	0.20	0.089	1	10/10/14	10/10/14	KWG1413774	
4-Chlorotoluene	ND	U	2.0	0.20	0.13	1	10/10/14	10/10/14	KWG1413774	
tert-Butylbenzene	ND	U	2.0	0.20	0.059	1	10/10/14	10/10/14	KWG1413774	
1,2,4-Trimethylbenzene	ND	U	2.0	0.20	0.069	1	10/10/14	10/10/14	KWG1413774	
sec-Butylbenzene	ND	U	2.0	0.10	0.062	1	10/10/14	10/10/14	KWG1413774	
4-Isopropyltoluene	ND	U	2.0	0.20	0.060	1	10/10/14	10/10/14	KWG1413774	
1,3-Dichlorobenzene	ND	U	0.50	0.20	0.10	1	10/10/14	10/10/14	KWG1413774	
1,4-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	10/10/14	10/10/14	KWG1413774	
n-Butylbenzene	ND	U	2.0	0.10	0.054	1	10/10/14	10/10/14	KWG1413774	
1,2-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	10/10/14	10/10/14	KWG1413774	
1,2-Dibromo-3-chloropropane	ND	U	2.0	0.80	0.20	1	10/10/14	10/10/14	KWG1413774	
1,2,4-Trichlorobenzene	ND	U	2.0	0.30	0.096	1	10/10/14	10/10/14	KWG1413774	
Hexachlorobutadiene	ND	U	2.0	0.30	0.11	1	10/10/14	10/10/14	KWG1413774	
Naphthalene	ND	U	2.0	0.30	0.088	1	10/10/14	10/10/14	KWG1413774	
1,2,3-Trichlorobenzene	ND	U	2.0	0.40	0.11	1	10/10/14	10/10/14	KWG1413774	

* See Case Narrative

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1410790
Project:	JBLM LTM Log Center/TO-01	**Date Collected:**	09/29/2014
Sample Matrix:	Water	**Date Received:**	10/02/2014

Volatile Organic Compounds

Sample Name:	LGC140929T15-1	**Units:**	ug/L
Lab Code:	K1410790-011	**Basis:**	NA

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Dibromofluoromethane	101	85-115	10/10/14	Acceptable
1,2-Dichloroethane-d4	93	70-120	10/10/14	Acceptable
Toluene-d8	97	85-120	10/10/14	Acceptable
4-Bromofluorobenzene	96	75-120	10/10/14	Acceptable

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1410790
Project:	JBLM LTM Log Center/TO-01	**Date Collected:**	09/29/2014
Sample Matrix:	Water	**Date Received:**	10/02/2014

Volatile Organic Compounds

Sample Name:	LGC140929DUP4-1	**Units:**	ug/L
Lab Code:	K1410790-012	**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
Dichlorodifluoromethane	ND	U	0.50	0.20	0.13	1	10/10/14	10/10/14	KWG1413774	
Chloromethane	ND	U	0.50	0.20	0.068	1	10/10/14	10/10/14	KWG1413774	
Vinyl Chloride	ND	U	0.50	0.10	0.075	1	10/10/14	10/10/14	KWG1413774	
Bromomethane	ND	U	0.50	0.30	0.10	1	10/10/14	10/10/14	KWG1413774	
Chloroethane	ND	U	0.50	0.20	0.16	1	10/10/14	10/10/14	KWG1413774	
Trichlorofluoromethane	ND	U	0.50	0.20	0.12	1	10/10/14	10/10/14	KWG1413774	
1,1-Dichloroethene	ND	U	0.50	0.20	0.080	1	10/10/14	10/10/14	KWG1413774	
Acetone	ND	U	20	10	3.3	1	10/10/14	10/10/14	KWG1413774	*
Carbon Disulfide	ND	U	0.50	0.20	0.069	1	10/10/14	10/10/14	KWG1413774	
Methylene Chloride	ND	U	2.0	0.20	0.10	1	10/10/14	10/10/14	KWG1413774	
Methyl tert-Butyl Ether	ND	U	0.50	0.30	0.11	1	10/10/14	10/10/14	KWG1413774	
trans-1,2-Dichloroethene	ND	U	0.50	0.20	0.072	1	10/10/14	10/10/14	KWG1413774	
1,1-Dichloroethane	ND	U	0.50	0.20	0.077	1	10/10/14	10/10/14	KWG1413774	
2,2-Dichloropropane	ND	U	0.50	0.20	0.060	1	10/10/14	10/10/14	KWG1413774	
cis-1,2-Dichloroethene	ND	U	0.50	0.20	0.067	1	10/10/14	10/10/14	KWG1413774	
2-Butanone (MEK)	ND	U	20	4.0	1.9	1	10/10/14	10/10/14	KWG1413774	
Bromochloromethane	ND	U	0.50	0.20	0.16	1	10/10/14	10/10/14	KWG1413774	
Chloroform	ND	U	0.50	0.20	0.072	1	10/10/14	10/10/14	KWG1413774	
1,1,1-Trichloroethane (TCA)	**0.16**	J	0.50	0.20	0.075	1	10/10/14	10/10/14	KWG1413774	
Carbon Tetrachloride	**0.44**	J	0.50	0.20	0.096	1	10/10/14	10/10/14	KWG1413774	
1,1-Dichloropropene	ND	U	0.50	0.20	0.089	1	10/10/14	10/10/14	KWG1413774	
Benzene	ND	U	0.50	0.10	0.062	1	10/10/14	10/10/14	KWG1413774	
1,2-Dichloroethane (EDC)	ND	U	0.50	0.15	0.080	1	10/10/14	10/10/14	KWG1413774	
Trichloroethene (TCE)	ND	U	0.50	0.10	0.10	1	10/10/14	10/10/14	KWG1413774	
1,2-Dichloropropane	ND	U	0.50	0.20	0.095	1	10/10/14	10/10/14	KWG1413774	
Dibromomethane	ND	U	0.50	0.50	0.15	1	10/10/14	10/10/14	KWG1413774	
Bromodichloromethane	ND	U	0.50	0.30	0.091	1	10/10/14	10/10/14	KWG1413774	
cis-1,3-Dichloropropene	ND	U	0.50	0.20	0.18	1	10/10/14	10/10/14	KWG1413774	
4-Methyl-2-pentanone (MIBK)	ND	U	20	10	2.6	1	10/10/14	10/10/14	KWG1413774	*
Toluene	ND	U	0.50	0.10	0.054	1	10/10/14	10/10/14	KWG1413774	
trans-1,3-Dichloropropene	ND	U	0.50	0.20	0.068	1	10/10/14	10/10/14	KWG1413774	
1,1,2-Trichloroethane	ND	U	0.50	0.40	0.14	1	10/10/14	10/10/14	KWG1413774	
Tetrachloroethene (PCE)	ND	U	0.50	0.20	0.099	1	10/10/14	10/10/14	KWG1413774	

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1410790
Project:	JBLM LTM Log Center/TO-01	**Date Collected:**	09/29/2014
Sample Matrix:	Water	**Date Received:**	10/02/2014

Volatile Organic Compounds

Sample Name:	LGC140929DUP4-1	**Units:**	ug/L
Lab Code:	K1410790-012	**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
2-Hexanone	ND	U	20	10	2.7	1	10/10/14	10/10/14	KWG1413774	
1,3-Dichloropropane	ND	U	0.50	0.30	0.14	1	10/10/14	10/10/14	KWG1413774	
Dibromochloromethane	ND	U	0.50	0.50	0.14	1	10/10/14	10/10/14	KWG1413774	
1,2-Dibromoethane (EDB)	ND	U	2.0	0.20	0.10	1	10/10/14	10/10/14	KWG1413774	
Chlorobenzene	ND	U	0.50	0.20	0.11	1	10/10/14	10/10/14	KWG1413774	
Ethylbenzene	ND	U	0.50	0.10	0.050	1	10/10/14	10/10/14	KWG1413774	
1,1,1,2-Tetrachloroethane	ND	U	0.50	0.20	0.11	1	10/10/14	10/10/14	KWG1413774	
m,p-Xylenes	ND	U	0.50	0.20	0.11	1	10/10/14	10/10/14	KWG1413774	
o-Xylene	ND	U	0.50	0.20	0.074	1	10/10/14	10/10/14	KWG1413774	
Styrene	ND	U	0.50	0.20	0.089	1	10/10/14	10/10/14	KWG1413774	
Bromoform	ND	U	0.50	0.50	0.16	1	10/10/14	10/10/14	KWG1413774	
Isopropylbenzene	ND	U	2.0	0.20	0.051	1	10/10/14	10/10/14	KWG1413774	
1,1,2,2-Tetrachloroethane	ND	U	0.50	0.20	0.16	1	10/10/14	10/10/14	KWG1413774	
Bromobenzene	ND	U	2.0	0.20	0.12	1	10/10/14	10/10/14	KWG1413774	
n-Propylbenzene	ND	U	2.0	0.20	0.054	1	10/10/14	10/10/14	KWG1413774	
1,2,3-Trichloropropane	ND	U	0.50	0.50	0.20	1	10/10/14	10/10/14	KWG1413774	
2-Chlorotoluene	ND	U	2.0	0.20	0.10	1	10/10/14	10/10/14	KWG1413774	
1,3,5-Trimethylbenzene	ND	U	2.0	0.20	0.089	1	10/10/14	10/10/14	KWG1413774	
4-Chlorotoluene	ND	U	2.0	0.20	0.13	1	10/10/14	10/10/14	KWG1413774	
tert-Butylbenzene	ND	U	2.0	0.20	0.059	1	10/10/14	10/10/14	KWG1413774	
1,2,4-Trimethylbenzene	ND	U	2.0	0.20	0.069	1	10/10/14	10/10/14	KWG1413774	
sec-Butylbenzene	ND	U	2.0	0.10	0.062	1	10/10/14	10/10/14	KWG1413774	
4-Isopropyltoluene	ND	U	2.0	0.20	0.060	1	10/10/14	10/10/14	KWG1413774	
1,3-Dichlorobenzene	ND	U	0.50	0.20	0.10	1	10/10/14	10/10/14	KWG1413774	
1,4-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	10/10/14	10/10/14	KWG1413774	
n-Butylbenzene	ND	U	2.0	0.10	0.054	1	10/10/14	10/10/14	KWG1413774	
1,2-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	10/10/14	10/10/14	KWG1413774	
1,2-Dibromo-3-chloropropane	ND	U	2.0	0.80	0.20	1	10/10/14	10/10/14	KWG1413774	
1,2,4-Trichlorobenzene	ND	U	2.0	0.30	0.096	1	10/10/14	10/10/14	KWG1413774	
Hexachlorobutadiene	ND	U	2.0	0.30	0.11	1	10/10/14	10/10/14	KWG1413774	
Naphthalene	ND	U	2.0	0.30	0.088	1	10/10/14	10/10/14	KWG1413774	
1,2,3-Trichlorobenzene	ND	U	2.0	0.40	0.11	1	10/10/14	10/10/14	KWG1413774	

* See Case Narrative

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1410790
Project:	JBLM LTM Log Center/TO-01	**Date Collected:**	09/29/2014
Sample Matrix:	Water	**Date Received:**	10/02/2014

Volatile Organic Compounds

Sample Name:	LGC140929DUP4-1	**Units:**	ug/L
Lab Code:	K1410790-012	**Basis:**	NA

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Dibromofluoromethane	100	85-115	10/10/14	Acceptable
1,2-Dichloroethane-d4	94	70-120	10/10/14	Acceptable
Toluene-d8	97	85-120	10/10/14	Acceptable
4-Bromofluorobenzene	94	75-120	10/10/14	Acceptable

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1410790
Project:	JBLM LTM Log Center/TO-01	**Date Collected:**	09/29/2014
Sample Matrix:	Water	**Date Received:**	10/02/2014

Volatile Organic Compounds

Sample Name:	LGC140929LC86D1-1	**Units:**	ug/L
Lab Code:	K1410790-013	**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
Dichlorodifluoromethane	ND	U	0.50	0.20	0.13	1	10/10/14	10/10/14	KWG1413774	
Chloromethane	ND	U	0.50	0.20	0.068	1	10/10/14	10/10/14	KWG1413774	
Vinyl Chloride	ND	U	0.50	0.10	0.075	1	10/10/14	10/10/14	KWG1413774	
Bromomethane	ND	U	0.50	0.30	0.10	1	10/10/14	10/10/14	KWG1413774	
Chloroethane	ND	U	0.50	0.20	0.16	1	10/10/14	10/10/14	KWG1413774	
Trichlorofluoromethane	ND	U	0.50	0.20	0.12	1	10/10/14	10/10/14	KWG1413774	
1,1-Dichloroethene	ND	U	0.50	0.20	0.080	1	10/10/14	10/10/14	KWG1413774	
Acetone	**4.1**	J	20	10	3.3	1	10/10/14	10/10/14	KWG1413774	*
Carbon Disulfide	ND	U	0.50	0.20	0.069	1	10/10/14	10/10/14	KWG1413774	
Methylene Chloride	ND	U	2.0	0.20	0.10	1	10/10/14	10/10/14	KWG1413774	
Methyl tert-Butyl Ether	ND	U	0.50	0.30	0.11	1	10/10/14	10/10/14	KWG1413774	
trans-1,2-Dichloroethene	ND	U	0.50	0.20	0.072	1	10/10/14	10/10/14	KWG1413774	
1,1-Dichloroethane	ND	U	0.50	0.20	0.077	1	10/10/14	10/10/14	KWG1413774	
2,2-Dichloropropane	ND	U	0.50	0.20	0.060	1	10/10/14	10/10/14	KWG1413774	
cis-1,2-Dichloroethene	**0.48**	J	0.50	0.20	0.067	1	10/10/14	10/10/14	KWG1413774	
2-Butanone (MEK)	ND	U	20	4.0	1.9	1	10/10/14	10/10/14	KWG1413774	
Bromochloromethane	ND	U	0.50	0.20	0.16	1	10/10/14	10/10/14	KWG1413774	
Chloroform	**0.10**	J	0.50	0.20	0.072	1	10/10/14	10/10/14	KWG1413774	
1,1,1-Trichloroethane (TCA)	ND	U	0.50	0.20	0.075	1	10/10/14	10/10/14	KWG1413774	
Carbon Tetrachloride	**0.12**	J	0.50	0.20	0.096	1	10/10/14	10/10/14	KWG1413774	
1,1-Dichloropropene	ND	U	0.50	0.20	0.089	1	10/10/14	10/10/14	KWG1413774	
Benzene	ND	U	0.50	0.10	0.062	1	10/10/14	10/10/14	KWG1413774	
1,2-Dichloroethane (EDC)	ND	U	0.50	0.15	0.080	1	10/10/14	10/10/14	KWG1413774	
Trichloroethene (TCE)	**7.5**		0.50	0.10	0.10	1	10/10/14	10/10/14	KWG1413774	
1,2-Dichloropropane	ND	U	0.50	0.20	0.095	1	10/10/14	10/10/14	KWG1413774	
Dibromomethane	ND	U	0.50	0.50	0.15	1	10/10/14	10/10/14	KWG1413774	
Bromodichloromethane	ND	U	0.50	0.30	0.091	1	10/10/14	10/10/14	KWG1413774	
cis-1,3-Dichloropropene	ND	U	0.50	0.20	0.18	1	10/10/14	10/10/14	KWG1413774	
4-Methyl-2-pentanone (MIBK)	ND	U	20	10	2.6	1	10/10/14	10/10/14	KWG1413774	*
Toluene	ND	U	0.50	0.10	0.054	1	10/10/14	10/10/14	KWG1413774	
trans-1,3-Dichloropropene	ND	U	0.50	0.20	0.068	1	10/10/14	10/10/14	KWG1413774	
1,1,2-Trichloroethane	ND	U	0.50	0.40	0.14	1	10/10/14	10/10/14	KWG1413774	
Tetrachloroethene (PCE)	ND	U	0.50	0.20	0.099	1	10/10/14	10/10/14	KWG1413774	

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1410790
Project:	JBLM LTM Log Center/TO-01	**Date Collected:**	09/29/2014
Sample Matrix:	Water	**Date Received:**	10/02/2014

Volatile Organic Compounds

Sample Name:	LGC140929LC86D1-1	**Units:**	ug/L
Lab Code:	K1410790-013	**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
2-Hexanone	ND	U	20	10	2.7	1	10/10/14	10/10/14	KWG1413774	
1,3-Dichloropropane	ND	U	0.50	0.30	0.14	1	10/10/14	10/10/14	KWG1413774	
Dibromochloromethane	ND	U	0.50	0.50	0.14	1	10/10/14	10/10/14	KWG1413774	
1,2-Dibromoethane (EDB)	ND	U	2.0	0.20	0.10	1	10/10/14	10/10/14	KWG1413774	
Chlorobenzene	ND	U	0.50	0.20	0.11	1	10/10/14	10/10/14	KWG1413774	
Ethylbenzene	ND	U	0.50	0.10	0.050	1	10/10/14	10/10/14	KWG1413774	
1,1,1,2-Tetrachloroethane	ND	U	0.50	0.20	0.11	1	10/10/14	10/10/14	KWG1413774	
m,p-Xylenes	ND	U	0.50	0.20	0.11	1	10/10/14	10/10/14	KWG1413774	
o-Xylene	ND	U	0.50	0.20	0.074	1	10/10/14	10/10/14	KWG1413774	
Styrene	ND	U	0.50	0.20	0.089	1	10/10/14	10/10/14	KWG1413774	
Bromoform	ND	U	0.50	0.50	0.16	1	10/10/14	10/10/14	KWG1413774	
Isopropylbenzene	ND	U	2.0	0.20	0.051	1	10/10/14	10/10/14	KWG1413774	
1,1,2,2-Tetrachloroethane	ND	U	0.50	0.20	0.16	1	10/10/14	10/10/14	KWG1413774	
Bromobenzene	ND	U	2.0	0.20	0.12	1	10/10/14	10/10/14	KWG1413774	
n-Propylbenzene	ND	U	2.0	0.20	0.054	1	10/10/14	10/10/14	KWG1413774	
1,2,3-Trichloropropane	ND	U	0.50	0.50	0.20	1	10/10/14	10/10/14	KWG1413774	
2-Chlorotoluene	ND	U	2.0	0.20	0.10	1	10/10/14	10/10/14	KWG1413774	
1,3,5-Trimethylbenzene	ND	U	2.0	0.20	0.089	1	10/10/14	10/10/14	KWG1413774	
4-Chlorotoluene	ND	U	2.0	0.20	0.13	1	10/10/14	10/10/14	KWG1413774	
tert-Butylbenzene	ND	U	2.0	0.20	0.059	1	10/10/14	10/10/14	KWG1413774	
1,2,4-Trimethylbenzene	ND	U	2.0	0.20	0.069	1	10/10/14	10/10/14	KWG1413774	
sec-Butylbenzene	ND	U	2.0	0.10	0.062	1	10/10/14	10/10/14	KWG1413774	
4-Isopropyltoluene	ND	U	2.0	0.20	0.060	1	10/10/14	10/10/14	KWG1413774	
1,3-Dichlorobenzene	ND	U	0.50	0.20	0.10	1	10/10/14	10/10/14	KWG1413774	
1,4-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	10/10/14	10/10/14	KWG1413774	
n-Butylbenzene	ND	U	2.0	0.10	0.054	1	10/10/14	10/10/14	KWG1413774	
1,2-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	10/10/14	10/10/14	KWG1413774	
1,2-Dibromo-3-chloropropane	ND	U	2.0	0.80	0.20	1	10/10/14	10/10/14	KWG1413774	
1,2,4-Trichlorobenzene	ND	U	2.0	0.30	0.096	1	10/10/14	10/10/14	KWG1413774	
Hexachlorobutadiene	ND	U	2.0	0.30	0.11	1	10/10/14	10/10/14	KWG1413774	
Naphthalene	ND	U	2.0	0.30	0.088	1	10/10/14	10/10/14	KWG1413774	
1,2,3-Trichlorobenzene	ND	U	2.0	0.40	0.11	1	10/10/14	10/10/14	KWG1413774	

* See Case Narrative

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1410790
Project:	JBLM LTM Log Center/TO-01	**Date Collected:**	09/29/2014
Sample Matrix:	Water	**Date Received:**	10/02/2014

Volatile Organic Compounds

Sample Name:	LGC140929LC86D1-1	**Units:**	ug/L
Lab Code:	K1410790-013	**Basis:**	NA

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Dibromofluoromethane	102	85-115	10/10/14	Acceptable
1,2-Dichloroethane-d4	92	70-120	10/10/14	Acceptable
Toluene-d8	97	85-120	10/10/14	Acceptable
4-Bromofluorobenzene	95	75-120	10/10/14	Acceptable

Comments:

Analytical Results

Client: Sealaska Environmental Services, LLC
Project: JBLM LTM Log Center/TO-01
Sample Matrix: Water

Service Request: K1410790
Date Collected: 09/29/2014
Date Received: 10/02/2014

Volatile Organic Compounds

Sample Name: LGC140929LC86D2-1
Lab Code: K1410790-014

Units: ug/L
Basis: NA

Extraction Method: EPA 5030B
Analysis Method: 8260C

Level: Low

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Dichlorodifluoromethane	ND	U	0.50	0.20	0.13	1	10/10/14	10/10/14	KWG1413774	
Chloromethane	ND	U	0.50	0.20	0.068	1	10/10/14	10/10/14	KWG1413774	
Vinyl Chloride	ND	U	0.50	0.10	0.075	1	10/10/14	10/10/14	KWG1413774	
Bromomethane	ND	U	0.50	0.30	0.10	1	10/10/14	10/10/14	KWG1413774	
Chloroethane	ND	U	0.50	0.20	0.16	1	10/10/14	10/10/14	KWG1413774	
Trichlorofluoromethane	ND	U	0.50	0.20	0.12	1	10/10/14	10/10/14	KWG1413774	
1,1-Dichloroethene	ND	U	0.50	0.20	0.080	1	10/10/14	10/10/14	KWG1413774	
Acetone	**4.2**	J	20	10	3.3	1	10/10/14	10/10/14	KWG1413774	*
Carbon Disulfide	ND	U	0.50	0.20	0.069	1	10/10/14	10/10/14	KWG1413774	
Methylene Chloride	ND	U	2.0	0.20	0.10	1	10/10/14	10/10/14	KWG1413774	
Methyl tert-Butyl Ether	ND	U	0.50	0.30	0.11	1	10/10/14	10/10/14	KWG1413774	
trans-1,2-Dichloroethene	ND	U	0.50	0.20	0.072	1	10/10/14	10/10/14	KWG1413774	
1,1-Dichloroethane	ND	U	0.50	0.20	0.077	1	10/10/14	10/10/14	KWG1413774	
2,2-Dichloropropane	ND	U	0.50	0.20	0.060	1	10/10/14	10/10/14	KWG1413774	
cis-1,2-Dichloroethene	**0.48**	J	0.50	0.20	0.067	1	10/10/14	10/10/14	KWG1413774	
2-Butanone (MEK)	ND	U	20	4.0	1.9	1	10/10/14	10/10/14	KWG1413774	
Bromochloromethane	ND	U	0.50	0.20	0.16	1	10/10/14	10/10/14	KWG1413774	
Chloroform	**0.090**	J	0.50	0.20	0.072	1	10/10/14	10/10/14	KWG1413774	
1,1,1-Trichloroethane (TCA)	**0.10**	J	0.50	0.20	0.075	1	10/10/14	10/10/14	KWG1413774	
Carbon Tetrachloride	**0.10**	J	0.50	0.20	0.096	1	10/10/14	10/10/14	KWG1413774	
1,1-Dichloropropene	ND	U	0.50	0.20	0.089	1	10/10/14	10/10/14	KWG1413774	
Benzene	ND	U	0.50	0.10	0.062	1	10/10/14	10/10/14	KWG1413774	
1,2-Dichloroethane (EDC)	ND	U	0.50	0.15	0.080	1	10/10/14	10/10/14	KWG1413774	
Trichloroethene (TCE)	**7.7**		0.50	0.10	0.10	1	10/10/14	10/10/14	KWG1413774	
1,2-Dichloropropane	ND	U	0.50	0.20	0.095	1	10/10/14	10/10/14	KWG1413774	
Dibromomethane	ND	U	0.50	0.50	0.15	1	10/10/14	10/10/14	KWG1413774	
Bromodichloromethane	ND	U	0.50	0.30	0.091	1	10/10/14	10/10/14	KWG1413774	
cis-1,3-Dichloropropene	ND	U	0.50	0.20	0.18	1	10/10/14	10/10/14	KWG1413774	
4-Methyl-2-pentanone (MIBK)	ND	U	20	10	2.6	1	10/10/14	10/10/14	KWG1413774	*
Toluene	ND	U	0.50	0.10	0.054	1	10/10/14	10/10/14	KWG1413774	
trans-1,3-Dichloropropene	ND	U	0.50	0.20	0.068	1	10/10/14	10/10/14	KWG1413774	
1,1,2-Trichloroethane	ND	U	0.50	0.40	0.14	1	10/10/14	10/10/14	KWG1413774	
Tetrachloroethene (PCE)	ND	U	0.50	0.20	0.099	1	10/10/14	10/10/14	KWG1413774	

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1410790
Project:	JBLM LTM Log Center/TO-01	**Date Collected:**	09/29/2014
Sample Matrix:	Water	**Date Received:**	10/02/2014

Volatile Organic Compounds

Sample Name:	LGC140929LC86D2-1	**Units:**	ug/L
Lab Code:	K1410790-014	**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
2-Hexanone	ND	U	20	10	2.7	1	10/10/14	10/10/14	KWG1413774	
1,3-Dichloropropane	ND	U	0.50	0.30	0.14	1	10/10/14	10/10/14	KWG1413774	
Dibromochloromethane	ND	U	0.50	0.50	0.14	1	10/10/14	10/10/14	KWG1413774	
1,2-Dibromoethane (EDB)	ND	U	2.0	0.20	0.10	1	10/10/14	10/10/14	KWG1413774	
Chlorobenzene	ND	U	0.50	0.20	0.11	1	10/10/14	10/10/14	KWG1413774	
Ethylbenzene	ND	U	0.50	0.10	0.050	1	10/10/14	10/10/14	KWG1413774	
1,1,1,2-Tetrachloroethane	ND	U	0.50	0.20	0.11	1	10/10/14	10/10/14	KWG1413774	
m,p-Xylenes	ND	U	0.50	0.20	0.11	1	10/10/14	10/10/14	KWG1413774	
o-Xylene	ND	U	0.50	0.20	0.074	1	10/10/14	10/10/14	KWG1413774	
Styrene	ND	U	0.50	0.20	0.089	1	10/10/14	10/10/14	KWG1413774	
Bromoform	ND	U	0.50	0.50	0.16	1	10/10/14	10/10/14	KWG1413774	
Isopropylbenzene	ND	U	2.0	0.20	0.051	1	10/10/14	10/10/14	KWG1413774	
1,1,2,2-Tetrachloroethane	ND	U	0.50	0.20	0.16	1	10/10/14	10/10/14	KWG1413774	
Bromobenzene	ND	U	2.0	0.20	0.12	1	10/10/14	10/10/14	KWG1413774	
n-Propylbenzene	ND	U	2.0	0.20	0.054	1	10/10/14	10/10/14	KWG1413774	
1,2,3-Trichloropropane	ND	U	0.50	0.50	0.20	1	10/10/14	10/10/14	KWG1413774	
2-Chlorotoluene	ND	U	2.0	0.20	0.10	1	10/10/14	10/10/14	KWG1413774	
1,3,5-Trimethylbenzene	ND	U	2.0	0.20	0.089	1	10/10/14	10/10/14	KWG1413774	
4-Chlorotoluene	ND	U	2.0	0.20	0.13	1	10/10/14	10/10/14	KWG1413774	
tert-Butylbenzene	ND	U	2.0	0.20	0.059	1	10/10/14	10/10/14	KWG1413774	
1,2,4-Trimethylbenzene	ND	U	2.0	0.20	0.069	1	10/10/14	10/10/14	KWG1413774	
sec-Butylbenzene	ND	U	2.0	0.10	0.062	1	10/10/14	10/10/14	KWG1413774	
4-Isopropyltoluene	ND	U	2.0	0.20	0.060	1	10/10/14	10/10/14	KWG1413774	
1,3-Dichlorobenzene	ND	U	0.50	0.20	0.10	1	10/10/14	10/10/14	KWG1413774	
1,4-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	10/10/14	10/10/14	KWG1413774	
n-Butylbenzene	ND	U	2.0	0.10	0.054	1	10/10/14	10/10/14	KWG1413774	
1,2-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	10/10/14	10/10/14	KWG1413774	
1,2-Dibromo-3-chloropropane	ND	U	2.0	0.80	0.20	1	10/10/14	10/10/14	KWG1413774	
1,2,4-Trichlorobenzene	ND	U	2.0	0.30	0.096	1	10/10/14	10/10/14	KWG1413774	
Hexachlorobutadiene	ND	U	2.0	0.30	0.11	1	10/10/14	10/10/14	KWG1413774	
Naphthalene	ND	U	2.0	0.30	0.088	1	10/10/14	10/10/14	KWG1413774	
1,2,3-Trichlorobenzene	ND	U	2.0	0.40	0.11	1	10/10/14	10/10/14	KWG1413774	

* See Case Narrative

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1410790
Project:	JBLM LTM Log Center/TO-01	**Date Collected:**	09/29/2014
Sample Matrix:	Water	**Date Received:**	10/02/2014

Volatile Organic Compounds

Sample Name:	LGC140929LC86D2-1	**Units:**	ug/L
Lab Code:	K1410790-014	**Basis:**	NA

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Dibromofluoromethane	100	85-115	10/10/14	Acceptable
1,2-Dichloroethane-d4	91	70-120	10/10/14	Acceptable
Toluene-d8	96	85-120	10/10/14	Acceptable
4-Bromofluorobenzene	95	75-120	10/10/14	Acceptable

Comments:

Analytical Results

Client: Sealaska Environmental Services, LLC
Project: JBLM LTM Log Center/TO-01
Sample Matrix: Water

Service Request: K1410790
Date Collected: 09/29/2014
Date Received: 10/02/2014

Volatile Organic Compounds

Sample Name: LGC140929LC102D1-1
Lab Code: K1410790-015

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
Dichlorodifluoromethane	ND	U	0.50	0.20	0.13	1	10/10/14	10/10/14	KWG1413774	
Chloromethane	ND	U	0.50	0.20	0.068	1	10/10/14	10/10/14	KWG1413774	
Vinyl Chloride	ND	U	0.50	0.10	0.075	1	10/10/14	10/10/14	KWG1413774	
Bromomethane	ND	U	0.50	0.30	0.10	1	10/10/14	10/10/14	KWG1413774	
Chloroethane	ND	U	0.50	0.20	0.16	1	10/10/14	10/10/14	KWG1413774	
Trichlorofluoromethane	ND	U	0.50	0.20	0.12	1	10/10/14	10/10/14	KWG1413774	
1,1-Dichloroethene	ND	U	0.50	0.20	0.080	1	10/10/14	10/10/14	KWG1413774	
Acetone	**4.1**	J	20	10	3.3	1	10/10/14	10/10/14	KWG1413774	*
Carbon Disulfide	ND	U	0.50	0.20	0.069	1	10/10/14	10/10/14	KWG1413774	
Methylene Chloride	ND	U	2.0	0.20	0.10	1	10/10/14	10/10/14	KWG1413774	
Methyl tert-Butyl Ether	ND	U	0.50	0.30	0.11	1	10/10/14	10/10/14	KWG1413774	
trans-1,2-Dichloroethene	ND	U	0.50	0.20	0.072	1	10/10/14	10/10/14	KWG1413774	
1,1-Dichloroethane	ND	U	0.50	0.20	0.077	1	10/10/14	10/10/14	KWG1413774	
2,2-Dichloropropane	ND	U	0.50	0.20	0.060	1	10/10/14	10/10/14	KWG1413774	
cis-1,2-Dichloroethene	**0.34**	J	0.50	0.20	0.067	1	10/10/14	10/10/14	KWG1413774	
2-Butanone (MEK)	ND	U	20	4.0	1.9	1	10/10/14	10/10/14	KWG1413774	
Bromochloromethane	ND	U	0.50	0.20	0.16	1	10/10/14	10/10/14	KWG1413774	
Chloroform	ND	U	0.50	0.20	0.072	1	10/10/14	10/10/14	KWG1413774	
1,1,1-Trichloroethane (TCA)	ND	U	0.50	0.20	0.075	1	10/10/14	10/10/14	KWG1413774	
Carbon Tetrachloride	**0.13**	J	0.50	0.20	0.096	1	10/10/14	10/10/14	KWG1413774	
1,1-Dichloropropene	ND	U	0.50	0.20	0.089	1	10/10/14	10/10/14	KWG1413774	
Benzene	ND	U	0.50	0.10	0.062	1	10/10/14	10/10/14	KWG1413774	
1,2-Dichloroethane (EDC)	ND	U	0.50	0.15	0.080	1	10/10/14	10/10/14	KWG1413774	
Trichloroethene (TCE)	**5.8**		0.50	0.10	0.10	1	10/10/14	10/10/14	KWG1413774	
1,2-Dichloropropane	ND	U	0.50	0.20	0.095	1	10/10/14	10/10/14	KWG1413774	
Dibromomethane	ND	U	0.50	0.50	0.15	1	10/10/14	10/10/14	KWG1413774	
Bromodichloromethane	ND	U	0.50	0.30	0.091	1	10/10/14	10/10/14	KWG1413774	
cis-1,3-Dichloropropene	ND	U	0.50	0.20	0.18	1	10/10/14	10/10/14	KWG1413774	
4-Methyl-2-pentanone (MIBK)	ND	U	20	10	2.6	1	10/10/14	10/10/14	KWG1413774	*
Toluene	ND	U	0.50	0.10	0.054	1	10/10/14	10/10/14	KWG1413774	
trans-1,3-Dichloropropene	ND	U	0.50	0.20	0.068	1	10/10/14	10/10/14	KWG1413774	
1,1,2-Trichloroethane	ND	U	0.50	0.40	0.14	1	10/10/14	10/10/14	KWG1413774	
Tetrachloroethene (PCE)	ND	U	0.50	0.20	0.099	1	10/10/14	10/10/14	KWG1413774	

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1410790
Project:	JBLM LTM Log Center/TO-01	**Date Collected:**	09/29/2014
Sample Matrix:	Water	**Date Received:**	10/02/2014

Volatile Organic Compounds

Sample Name:	LGC140929LC102D1-1	**Units:**	ug/L
Lab Code:	K1410790-015	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8260C		

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
2-Hexanone	ND	U	20	10	2.7	1	10/10/14	10/10/14	KWG1413774	
1,3-Dichloropropane	ND	U	0.50	0.30	0.14	1	10/10/14	10/10/14	KWG1413774	
Dibromochloromethane	ND	U	0.50	0.50	0.14	1	10/10/14	10/10/14	KWG1413774	
1,2-Dibromoethane (EDB)	ND	U	2.0	0.20	0.10	1	10/10/14	10/10/14	KWG1413774	
Chlorobenzene	ND	U	0.50	0.20	0.11	1	10/10/14	10/10/14	KWG1413774	
Ethylbenzene	ND	U	0.50	0.10	0.050	1	10/10/14	10/10/14	KWG1413774	
1,1,1,2-Tetrachloroethane	ND	U	0.50	0.20	0.11	1	10/10/14	10/10/14	KWG1413774	
m,p-Xylenes	ND	U	0.50	0.20	0.11	1	10/10/14	10/10/14	KWG1413774	
o-Xylene	ND	U	0.50	0.20	0.074	1	10/10/14	10/10/14	KWG1413774	
Styrene	ND	U	0.50	0.20	0.089	1	10/10/14	10/10/14	KWG1413774	
Bromoform	ND	U	0.50	0.50	0.16	1	10/10/14	10/10/14	KWG1413774	
Isopropylbenzene	ND	U	2.0	0.20	0.051	1	10/10/14	10/10/14	KWG1413774	
1,1,2,2-Tetrachloroethane	ND	U	0.50	0.20	0.16	1	10/10/14	10/10/14	KWG1413774	
Bromobenzene	ND	U	2.0	0.20	0.12	1	10/10/14	10/10/14	KWG1413774	
n-Propylbenzene	ND	U	2.0	0.20	0.054	1	10/10/14	10/10/14	KWG1413774	
1,2,3-Trichloropropane	ND	U	0.50	0.50	0.20	1	10/10/14	10/10/14	KWG1413774	
2-Chlorotoluene	ND	U	2.0	0.20	0.10	1	10/10/14	10/10/14	KWG1413774	
1,3,5-Trimethylbenzene	ND	U	2.0	0.20	0.089	1	10/10/14	10/10/14	KWG1413774	
4-Chlorotoluene	ND	U	2.0	0.20	0.13	1	10/10/14	10/10/14	KWG1413774	
tert-Butylbenzene	ND	U	2.0	0.20	0.059	1	10/10/14	10/10/14	KWG1413774	
1,2,4-Trimethylbenzene	ND	U	2.0	0.20	0.069	1	10/10/14	10/10/14	KWG1413774	
sec-Butylbenzene	ND	U	2.0	0.10	0.062	1	10/10/14	10/10/14	KWG1413774	
4-Isopropyltoluene	ND	U	2.0	0.20	0.060	1	10/10/14	10/10/14	KWG1413774	
1,3-Dichlorobenzene	ND	U	0.50	0.20	0.10	1	10/10/14	10/10/14	KWG1413774	
1,4-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	10/10/14	10/10/14	KWG1413774	
n-Butylbenzene	ND	U	2.0	0.10	0.054	1	10/10/14	10/10/14	KWG1413774	
1,2-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	10/10/14	10/10/14	KWG1413774	
1,2-Dibromo-3-chloropropane	ND	U	2.0	0.80	0.20	1	10/10/14	10/10/14	KWG1413774	
1,2,4-Trichlorobenzene	ND	U	2.0	0.30	0.096	1	10/10/14	10/10/14	KWG1413774	
Hexachlorobutadiene	ND	U	2.0	0.30	0.11	1	10/10/14	10/10/14	KWG1413774	
Naphthalene	ND	U	2.0	0.30	0.088	1	10/10/14	10/10/14	KWG1413774	
1,2,3-Trichlorobenzene	ND	U	2.0	0.40	0.11	1	10/10/14	10/10/14	KWG1413774	

* See Case Narrative

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1410790
Project:	JBLM LTM Log Center/TO-01	**Date Collected:**	09/29/2014
Sample Matrix:	Water	**Date Received:**	10/02/2014

Volatile Organic Compounds

Sample Name:	LGC140929LC102D1-1	**Units:**	ug/L
Lab Code:	K1410790-015	**Basis:**	NA

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Dibromofluoromethane	99	85-115	10/10/14	Acceptable
1,2-Dichloroethane-d4	91	70-120	10/10/14	Acceptable
Toluene-d8	96	85-120	10/10/14	Acceptable
4-Bromofluorobenzene	95	75-120	10/10/14	Acceptable

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1410790
Project:	JBLM LTM Log Center/TO-01	**Date Collected:**	09/29/2014
Sample Matrix:	Water	**Date Received:**	10/02/2014

Volatile Organic Compounds

Sample Name:	LGC140929LC102D2-1	**Units:**	ug/L
Lab Code:	K1410790-016	**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
Dichlorodifluoromethane	ND	U	0.50	0.20	0.13	1	10/10/14	10/10/14	KWG1413774	
Chloromethane	ND	U	0.50	0.20	0.068	1	10/10/14	10/10/14	KWG1413774	
Vinyl Chloride	ND	U	0.50	0.10	0.075	1	10/10/14	10/10/14	KWG1413774	
Bromomethane	ND	U	0.50	0.30	0.10	1	10/10/14	10/10/14	KWG1413774	
Chloroethane	ND	U	0.50	0.20	0.16	1	10/10/14	10/10/14	KWG1413774	
Trichlorofluoromethane	ND	U	0.50	0.20	0.12	1	10/10/14	10/10/14	KWG1413774	
1,1-Dichloroethene	ND	U	0.50	0.20	0.080	1	10/10/14	10/10/14	KWG1413774	
Acetone	**4.2**	J	20	10	3.3	1	10/10/14	10/10/14	KWG1413774	*
Carbon Disulfide	ND	U	0.50	0.20	0.069	1	10/10/14	10/10/14	KWG1413774	
Methylene Chloride	ND	U	2.0	0.20	0.10	1	10/10/14	10/10/14	KWG1413774	
Methyl tert-Butyl Ether	ND	U	0.50	0.30	0.11	1	10/10/14	10/10/14	KWG1413774	
trans-1,2-Dichloroethene	ND	U	0.50	0.20	0.072	1	10/10/14	10/10/14	KWG1413774	
1,1-Dichloroethane	ND	U	0.50	0.20	0.077	1	10/10/14	10/10/14	KWG1413774	
2,2-Dichloropropane	ND	U	0.50	0.20	0.060	1	10/10/14	10/10/14	KWG1413774	
cis-1,2-Dichloroethene	**0.34**	J	0.50	0.20	0.067	1	10/10/14	10/10/14	KWG1413774	
2-Butanone (MEK)	ND	U	20	4.0	1.9	1	10/10/14	10/10/14	KWG1413774	
Bromochloromethane	ND	U	0.50	0.20	0.16	1	10/10/14	10/10/14	KWG1413774	
Chloroform	ND	U	0.50	0.20	0.072	1	10/10/14	10/10/14	KWG1413774	
1,1,1-Trichloroethane (TCA)	ND	U	0.50	0.20	0.075	1	10/10/14	10/10/14	KWG1413774	
Carbon Tetrachloride	**0.12**	J	0.50	0.20	0.096	1	10/10/14	10/10/14	KWG1413774	
1,1-Dichloropropene	ND	U	0.50	0.20	0.089	1	10/10/14	10/10/14	KWG1413774	
Benzene	ND	U	0.50	0.10	0.062	1	10/10/14	10/10/14	KWG1413774	
1,2-Dichloroethane (EDC)	ND	U	0.50	0.15	0.080	1	10/10/14	10/10/14	KWG1413774	
Trichloroethene (TCE)	**5.8**		0.50	0.10	0.10	1	10/10/14	10/10/14	KWG1413774	
1,2-Dichloropropane	ND	U	0.50	0.20	0.095	1	10/10/14	10/10/14	KWG1413774	
Dibromomethane	ND	U	0.50	0.50	0.15	1	10/10/14	10/10/14	KWG1413774	
Bromodichloromethane	ND	U	0.50	0.30	0.091	1	10/10/14	10/10/14	KWG1413774	
cis-1,3-Dichloropropene	ND	U	0.50	0.20	0.18	1	10/10/14	10/10/14	KWG1413774	
4-Methyl-2-pentanone (MIBK)	ND	U	20	10	2.6	1	10/10/14	10/10/14	KWG1413774	*
Toluene	ND	U	0.50	0.10	0.054	1	10/10/14	10/10/14	KWG1413774	
trans-1,3-Dichloropropene	ND	U	0.50	0.20	0.068	1	10/10/14	10/10/14	KWG1413774	
1,1,2-Trichloroethane	ND	U	0.50	0.40	0.14	1	10/10/14	10/10/14	KWG1413774	
Tetrachloroethene (PCE)	ND	U	0.50	0.20	0.099	1	10/10/14	10/10/14	KWG1413774	

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1410790
Project:	JBLM LTM Log Center/TO-01	**Date Collected:**	09/29/2014
Sample Matrix:	Water	**Date Received:**	10/02/2014

Volatile Organic Compounds

Sample Name:	LGC140929LC102D2-1	**Units:**	ug/L
Lab Code:	K1410790-016	**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
2-Hexanone	ND	U	20	10	2.7	1	10/10/14	10/10/14	KWG1413774	
1,3-Dichloropropane	ND	U	0.50	0.30	0.14	1	10/10/14	10/10/14	KWG1413774	
Dibromochloromethane	ND	U	0.50	0.50	0.14	1	10/10/14	10/10/14	KWG1413774	
1,2-Dibromoethane (EDB)	ND	U	2.0	0.20	0.10	1	10/10/14	10/10/14	KWG1413774	
Chlorobenzene	ND	U	0.50	0.20	0.11	1	10/10/14	10/10/14	KWG1413774	
Ethylbenzene	ND	U	0.50	0.10	0.050	1	10/10/14	10/10/14	KWG1413774	
1,1,1,2-Tetrachloroethane	ND	U	0.50	0.20	0.11	1	10/10/14	10/10/14	KWG1413774	
m,p-Xylenes	ND	U	0.50	0.20	0.11	1	10/10/14	10/10/14	KWG1413774	
o-Xylene	ND	U	0.50	0.20	0.074	1	10/10/14	10/10/14	KWG1413774	
Styrene	ND	U	0.50	0.20	0.089	1	10/10/14	10/10/14	KWG1413774	
Bromoform	ND	U	0.50	0.50	0.16	1	10/10/14	10/10/14	KWG1413774	
Isopropylbenzene	ND	U	2.0	0.20	0.051	1	10/10/14	10/10/14	KWG1413774	
1,1,2,2-Tetrachloroethane	ND	U	0.50	0.20	0.16	1	10/10/14	10/10/14	KWG1413774	
Bromobenzene	ND	U	2.0	0.20	0.12	1	10/10/14	10/10/14	KWG1413774	
n-Propylbenzene	ND	U	2.0	0.20	0.054	1	10/10/14	10/10/14	KWG1413774	
1,2,3-Trichloropropane	ND	U	0.50	0.50	0.20	1	10/10/14	10/10/14	KWG1413774	
2-Chlorotoluene	ND	U	2.0	0.20	0.10	1	10/10/14	10/10/14	KWG1413774	
1,3,5-Trimethylbenzene	ND	U	2.0	0.20	0.089	1	10/10/14	10/10/14	KWG1413774	
4-Chlorotoluene	ND	U	2.0	0.20	0.13	1	10/10/14	10/10/14	KWG1413774	
tert-Butylbenzene	ND	U	2.0	0.20	0.059	1	10/10/14	10/10/14	KWG1413774	
1,2,4-Trimethylbenzene	ND	U	2.0	0.20	0.069	1	10/10/14	10/10/14	KWG1413774	
sec-Butylbenzene	ND	U	2.0	0.10	0.062	1	10/10/14	10/10/14	KWG1413774	
4-Isopropyltoluene	ND	U	2.0	0.20	0.060	1	10/10/14	10/10/14	KWG1413774	
1,3-Dichlorobenzene	ND	U	0.50	0.20	0.10	1	10/10/14	10/10/14	KWG1413774	
1,4-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	10/10/14	10/10/14	KWG1413774	
n-Butylbenzene	ND	U	2.0	0.10	0.054	1	10/10/14	10/10/14	KWG1413774	
1,2-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	10/10/14	10/10/14	KWG1413774	
1,2-Dibromo-3-chloropropane	ND	U	2.0	0.80	0.20	1	10/10/14	10/10/14	KWG1413774	
1,2,4-Trichlorobenzene	ND	U	2.0	0.30	0.096	1	10/10/14	10/10/14	KWG1413774	
Hexachlorobutadiene	ND	U	2.0	0.30	0.11	1	10/10/14	10/10/14	KWG1413774	
Naphthalene	ND	U	2.0	0.30	0.088	1	10/10/14	10/10/14	KWG1413774	
1,2,3-Trichlorobenzene	ND	U	2.0	0.40	0.11	1	10/10/14	10/10/14	KWG1413774	

* See Case Narrative

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1410790
Project:	JBLM LTM Log Center/TO-01	**Date Collected:**	09/29/2014
Sample Matrix:	Water	**Date Received:**	10/02/2014

Volatile Organic Compounds

Sample Name:	LGC140929LC102D2-1	**Units:**	ug/L
Lab Code:	K1410790-016	**Basis:**	NA

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Dibromofluoromethane	101	85-115	10/10/14	Acceptable
1,2-Dichloroethane-d4	91	70-120	10/10/14	Acceptable
Toluene-d8	97	85-120	10/10/14	Acceptable
4-Bromofluorobenzene	96	75-120	10/10/14	Acceptable

Comments:

Analytical Results

Client: Sealaska Environmental Services, LLC
Project: JBLM LTM Log Center/TO-01
Sample Matrix: Water

Service Request: K1410790
Date Collected: 09/29/2014
Date Received: 10/02/2014

Volatile Organic Compounds

Sample Name: LGC140929LC88D1-1
Lab Code: K1410790-017

Units: ug/L
Basis: NA

Extraction Method: EPA 5030B
Analysis Method: 8260C

Level: Low

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Dichlorodifluoromethane	ND	U	0.50	0.20	0.13	1	10/10/14	10/10/14	KWG1413774	
Chloromethane	**0.080**	J	0.50	0.20	0.068	1	10/10/14	10/10/14	KWG1413774	
Vinyl Chloride	ND	U	0.50	0.10	0.075	1	10/10/14	10/10/14	KWG1413774	
Bromomethane	ND	U	0.50	0.30	0.10	1	10/10/14	10/10/14	KWG1413774	
Chloroethane	ND	U	0.50	0.20	0.16	1	10/10/14	10/10/14	KWG1413774	
Trichlorofluoromethane	ND	U	0.50	0.20	0.12	1	10/10/14	10/10/14	KWG1413774	
1,1-Dichloroethene	ND	U	0.50	0.20	0.080	1	10/10/14	10/10/14	KWG1413774	
Acetone	**4.5**	J	20	10	3.3	1	10/10/14	10/10/14	KWG1413774	*
Carbon Disulfide	ND	U	0.50	0.20	0.069	1	10/10/14	10/10/14	KWG1413774	
Methylene Chloride	ND	U	2.0	0.20	0.10	1	10/10/14	10/10/14	KWG1413774	
Methyl tert-Butyl Ether	ND	U	0.50	0.30	0.11	1	10/10/14	10/10/14	KWG1413774	
trans-1,2-Dichloroethene	ND	U	0.50	0.20	0.072	1	10/10/14	10/10/14	KWG1413774	
1,1-Dichloroethane	ND	U	0.50	0.20	0.077	1	10/10/14	10/10/14	KWG1413774	
2,2-Dichloropropane	ND	U	0.50	0.20	0.060	1	10/10/14	10/10/14	KWG1413774	
cis-1,2-Dichloroethene	**0.21**	J	0.50	0.20	0.067	1	10/10/14	10/10/14	KWG1413774	
2-Butanone (MEK)	ND	U	20	4.0	1.9	1	10/10/14	10/10/14	KWG1413774	
Bromochloromethane	ND	U	0.50	0.20	0.16	1	10/10/14	10/10/14	KWG1413774	
Chloroform	ND	U	0.50	0.20	0.072	1	10/10/14	10/10/14	KWG1413774	
1,1,1-Trichloroethane (TCA)	ND	U	0.50	0.20	0.075	1	10/10/14	10/10/14	KWG1413774	
Carbon Tetrachloride	ND	U	0.50	0.20	0.096	1	10/10/14	10/10/14	KWG1413774	
1,1-Dichloropropene	ND	U	0.50	0.20	0.089	1	10/10/14	10/10/14	KWG1413774	
Benzene	ND	U	0.50	0.10	0.062	1	10/10/14	10/10/14	KWG1413774	
1,2-Dichloroethane (EDC)	ND	U	0.50	0.15	0.080	1	10/10/14	10/10/14	KWG1413774	
Trichloroethene (TCE)	**2.6**		0.50	0.10	0.10	1	10/10/14	10/10/14	KWG1413774	
1,2-Dichloropropane	ND	U	0.50	0.20	0.095	1	10/10/14	10/10/14	KWG1413774	
Dibromomethane	ND	U	0.50	0.50	0.15	1	10/10/14	10/10/14	KWG1413774	
Bromodichloromethane	ND	U	0.50	0.30	0.091	1	10/10/14	10/10/14	KWG1413774	
cis-1,3-Dichloropropene	ND	U	0.50	0.20	0.18	1	10/10/14	10/10/14	KWG1413774	
4-Methyl-2-pentanone (MIBK)	ND	U	20	10	2.6	1	10/10/14	10/10/14	KWG1413774	*
Toluene	ND	U	0.50	0.10	0.054	1	10/10/14	10/10/14	KWG1413774	
trans-1,3-Dichloropropene	ND	U	0.50	0.20	0.068	1	10/10/14	10/10/14	KWG1413774	
1,1,2-Trichloroethane	ND	U	0.50	0.40	0.14	1	10/10/14	10/10/14	KWG1413774	
Tetrachloroethene (PCE)	ND	U	0.50	0.20	0.099	1	10/10/14	10/10/14	KWG1413774	

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1410790
Project:	JBLM LTM Log Center/TO-01	**Date Collected:**	09/29/2014
Sample Matrix:	Water	**Date Received:**	10/02/2014

Volatile Organic Compounds

Sample Name:	LGC140929LC88D1-1	**Units:**	ug/L
Lab Code:	K1410790-017	**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
2-Hexanone	ND	U	20	10	2.7	1	10/10/14	10/10/14	KWG1413774	
1,3-Dichloropropane	ND	U	0.50	0.30	0.14	1	10/10/14	10/10/14	KWG1413774	
Dibromochloromethane	ND	U	0.50	0.50	0.14	1	10/10/14	10/10/14	KWG1413774	
1,2-Dibromoethane (EDB)	ND	U	2.0	0.20	0.10	1	10/10/14	10/10/14	KWG1413774	
Chlorobenzene	ND	U	0.50	0.20	0.11	1	10/10/14	10/10/14	KWG1413774	
Ethylbenzene	ND	U	0.50	0.10	0.050	1	10/10/14	10/10/14	KWG1413774	
1,1,1,2-Tetrachloroethane	ND	U	0.50	0.20	0.11	1	10/10/14	10/10/14	KWG1413774	
m,p-Xylenes	ND	U	0.50	0.20	0.11	1	10/10/14	10/10/14	KWG1413774	
o-Xylene	ND	U	0.50	0.20	0.074	1	10/10/14	10/10/14	KWG1413774	
Styrene	ND	U	0.50	0.20	0.089	1	10/10/14	10/10/14	KWG1413774	
Bromoform	ND	U	0.50	0.50	0.16	1	10/10/14	10/10/14	KWG1413774	
Isopropylbenzene	ND	U	2.0	0.20	0.051	1	10/10/14	10/10/14	KWG1413774	
1,1,2,2-Tetrachloroethane	ND	U	0.50	0.20	0.16	1	10/10/14	10/10/14	KWG1413774	
Bromobenzene	ND	U	2.0	0.20	0.12	1	10/10/14	10/10/14	KWG1413774	
n-Propylbenzene	ND	U	2.0	0.20	0.054	1	10/10/14	10/10/14	KWG1413774	
1,2,3-Trichloropropane	ND	U	0.50	0.50	0.20	1	10/10/14	10/10/14	KWG1413774	
2-Chlorotoluene	ND	U	2.0	0.20	0.10	1	10/10/14	10/10/14	KWG1413774	
1,3,5-Trimethylbenzene	ND	U	2.0	0.20	0.089	1	10/10/14	10/10/14	KWG1413774	
4-Chlorotoluene	ND	U	2.0	0.20	0.13	1	10/10/14	10/10/14	KWG1413774	
tert-Butylbenzene	ND	U	2.0	0.20	0.059	1	10/10/14	10/10/14	KWG1413774	
1,2,4-Trimethylbenzene	ND	U	2.0	0.20	0.069	1	10/10/14	10/10/14	KWG1413774	
sec-Butylbenzene	ND	U	2.0	0.10	0.062	1	10/10/14	10/10/14	KWG1413774	
4-Isopropyltoluene	ND	U	2.0	0.20	0.060	1	10/10/14	10/10/14	KWG1413774	
1,3-Dichlorobenzene	ND	U	0.50	0.20	0.10	1	10/10/14	10/10/14	KWG1413774	
1,4-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	10/10/14	10/10/14	KWG1413774	
n-Butylbenzene	ND	U	2.0	0.10	0.054	1	10/10/14	10/10/14	KWG1413774	
1,2-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	10/10/14	10/10/14	KWG1413774	
1,2-Dibromo-3-chloropropane	ND	U	2.0	0.80	0.20	1	10/10/14	10/10/14	KWG1413774	
1,2,4-Trichlorobenzene	ND	U	2.0	0.30	0.096	1	10/10/14	10/10/14	KWG1413774	
Hexachlorobutadiene	ND	U	2.0	0.30	0.11	1	10/10/14	10/10/14	KWG1413774	
Naphthalene	ND	U	2.0	0.30	0.088	1	10/10/14	10/10/14	KWG1413774	
1,2,3-Trichlorobenzene	ND	U	2.0	0.40	0.11	1	10/10/14	10/10/14	KWG1413774	

* See Case Narrative

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1410790
Project:	JBLM LTM Log Center/TO-01	**Date Collected:**	09/29/2014
Sample Matrix:	Water	**Date Received:**	10/02/2014

Volatile Organic Compounds

Sample Name:	LGC140929LC88D1-1	**Units:**	ug/L
Lab Code:	K1410790-017	**Basis:**	NA

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Dibromofluoromethane	103	85-115	10/10/14	Acceptable
1,2-Dichloroethane-d4	94	70-120	10/10/14	Acceptable
Toluene-d8	97	85-120	10/10/14	Acceptable
4-Bromofluorobenzene	97	75-120	10/10/14	Acceptable

Comments:

Analytical Results

Client: Sealaska Environmental Services, LLC
Project: JBLM LTM Log Center/TO-01
Sample Matrix: Water

Service Request: K1410790
Date Collected: 09/29/2014
Date Received: 10/02/2014

Volatile Organic Compounds

Sample Name: LGC140929LC88D2-1
Lab Code: K1410790-018

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
Dichlorodifluoromethane	ND	U	0.50	0.20	0.13	1	10/12/14	10/12/14	KWG1413817	
Chloromethane	**0.11**	J	0.50	0.20	0.068	1	10/12/14	10/12/14	KWG1413817	
Vinyl Chloride	ND	U	0.50	0.10	0.075	1	10/12/14	10/12/14	KWG1413817	
Bromomethane	ND	U	0.50	0.30	0.10	1	10/12/14	10/12/14	KWG1413817	
Chloroethane	ND	U	0.50	0.20	0.16	1	10/12/14	10/12/14	KWG1413817	
Trichlorofluoromethane	ND	U	0.50	0.20	0.12	1	10/12/14	10/12/14	KWG1413817	
1,1-Dichloroethene	ND	U	0.50	0.20	0.080	1	10/12/14	10/12/14	KWG1413817	
Acetone	**4.3**	J	20	10	3.3	1	10/12/14	10/12/14	KWG1413817	
Carbon Disulfide	ND	U	0.50	0.20	0.069	1	10/12/14	10/12/14	KWG1413817	
Methylene Chloride	ND	U	2.0	0.20	0.10	1	10/12/14	10/12/14	KWG1413817	
Methyl tert-Butyl Ether	ND	U	0.50	0.30	0.11	1	10/12/14	10/12/14	KWG1413817	
trans-1,2-Dichloroethene	ND	U	0.50	0.20	0.072	1	10/12/14	10/12/14	KWG1413817	
1,1-Dichloroethane	ND	U	0.50	0.20	0.077	1	10/12/14	10/12/14	KWG1413817	
2,2-Dichloropropane	ND	U	0.50	0.20	0.060	1	10/12/14	10/12/14	KWG1413817	
cis-1,2-Dichloroethene	ND	U	0.50	0.20	0.067	1	10/12/14	10/12/14	KWG1413817	
2-Butanone (MEK)	ND	U	20	4.0	1.9	1	10/12/14	10/12/14	KWG1413817	
Bromochloromethane	ND	U	0.50	0.20	0.16	1	10/12/14	10/12/14	KWG1413817	
Chloroform	ND	U	0.50	0.20	0.072	1	10/12/14	10/12/14	KWG1413817	
1,1,1-Trichloroethane (TCA)	ND	U	0.50	0.20	0.075	1	10/12/14	10/12/14	KWG1413817	
Carbon Tetrachloride	ND	U	0.50	0.20	0.096	1	10/12/14	10/12/14	KWG1413817	
1,1-Dichloropropene	ND	U	0.50	0.20	0.089	1	10/12/14	10/12/14	KWG1413817	
Benzene	ND	U	0.50	0.10	0.062	1	10/12/14	10/12/14	KWG1413817	
1,2-Dichloroethane (EDC)	ND	U	0.50	0.15	0.080	1	10/12/14	10/12/14	KWG1413817	
Trichloroethene (TCE)	**0.48**	J	0.50	0.10	0.10	1	10/12/14	10/12/14	KWG1413817	
1,2-Dichloropropane	ND	U	0.50	0.20	0.095	1	10/12/14	10/12/14	KWG1413817	
Dibromomethane	ND	U	0.50	0.50	0.15	1	10/12/14	10/12/14	KWG1413817	
Bromodichloromethane	ND	U	0.50	0.30	0.091	1	10/12/14	10/12/14	KWG1413817	
cis-1,3-Dichloropropene	ND	U	0.50	0.20	0.18	1	10/12/14	10/12/14	KWG1413817	
4-Methyl-2-pentanone (MIBK)	ND	U	20	10	2.6	1	10/12/14	10/12/14	KWG1413817	
Toluene	ND	U	0.50	0.10	0.054	1	10/12/14	10/12/14	KWG1413817	
trans-1,3-Dichloropropene	ND	U	0.50	0.20	0.068	1	10/12/14	10/12/14	KWG1413817	
1,1,2-Trichloroethane	ND	U	0.50	0.40	0.14	1	10/12/14	10/12/14	KWG1413817	
Tetrachloroethene (PCE)	ND	U	0.50	0.20	0.099	1	10/12/14	10/12/14	KWG1413817	

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1410790
Project:	JBLM LTM Log Center/TO-01	**Date Collected:**	09/29/2014
Sample Matrix:	Water	**Date Received:**	10/02/2014

Volatile Organic Compounds

Sample Name:	LGC140929LC88D2-1	**Units:**	ug/L
Lab Code:	K1410790-018	**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
2-Hexanone	ND	U	20	10	2.7	1	10/12/14	10/12/14	KWG1413817	
1,3-Dichloropropane	ND	U	0.50	0.30	0.14	1	10/12/14	10/12/14	KWG1413817	
Dibromochloromethane	ND	U	0.50	0.50	0.14	1	10/12/14	10/12/14	KWG1413817	
1,2-Dibromoethane (EDB)	ND	U	2.0	0.20	0.10	1	10/12/14	10/12/14	KWG1413817	
Chlorobenzene	ND	U	0.50	0.20	0.11	1	10/12/14	10/12/14	KWG1413817	
Ethylbenzene	ND	U	0.50	0.10	0.050	1	10/12/14	10/12/14	KWG1413817	
1,1,1,2-Tetrachloroethane	ND	U	0.50	0.20	0.11	1	10/12/14	10/12/14	KWG1413817	
m,p-Xylenes	ND	U	0.50	0.20	0.11	1	10/12/14	10/12/14	KWG1413817	
o-Xylene	ND	U	0.50	0.20	0.074	1	10/12/14	10/12/14	KWG1413817	
Styrene	ND	U	0.50	0.20	0.089	1	10/12/14	10/12/14	KWG1413817	
Bromoform	ND	U	0.50	0.50	0.16	1	10/12/14	10/12/14	KWG1413817	
Isopropylbenzene	ND	U	2.0	0.20	0.051	1	10/12/14	10/12/14	KWG1413817	
1,1,2,2-Tetrachloroethane	ND	U	0.50	0.20	0.16	1	10/12/14	10/12/14	KWG1413817	
Bromobenzene	ND	U	2.0	0.20	0.12	1	10/12/14	10/12/14	KWG1413817	
n-Propylbenzene	ND	U	2.0	0.20	0.054	1	10/12/14	10/12/14	KWG1413817	
1,2,3-Trichloropropane	ND	U	0.50	0.50	0.20	1	10/12/14	10/12/14	KWG1413817	
2-Chlorotoluene	ND	U	2.0	0.20	0.10	1	10/12/14	10/12/14	KWG1413817	
1,3,5-Trimethylbenzene	ND	U	2.0	0.20	0.089	1	10/12/14	10/12/14	KWG1413817	
4-Chlorotoluene	ND	U	2.0	0.20	0.13	1	10/12/14	10/12/14	KWG1413817	
tert-Butylbenzene	ND	U	2.0	0.20	0.059	1	10/12/14	10/12/14	KWG1413817	
1,2,4-Trimethylbenzene	ND	U	2.0	0.20	0.069	1	10/12/14	10/12/14	KWG1413817	
sec-Butylbenzene	ND	U	2.0	0.10	0.062	1	10/12/14	10/12/14	KWG1413817	
4-Isopropyltoluene	ND	U	2.0	0.20	0.060	1	10/12/14	10/12/14	KWG1413817	
1,3-Dichlorobenzene	ND	U	0.50	0.20	0.10	1	10/12/14	10/12/14	KWG1413817	
1,4-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	10/12/14	10/12/14	KWG1413817	
n-Butylbenzene	ND	U	2.0	0.10	0.054	1	10/12/14	10/12/14	KWG1413817	
1,2-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	10/12/14	10/12/14	KWG1413817	
1,2-Dibromo-3-chloropropane	ND	U	2.0	0.80	0.20	1	10/12/14	10/12/14	KWG1413817	
1,2,4-Trichlorobenzene	ND	U	2.0	0.30	0.096	1	10/12/14	10/12/14	KWG1413817	
Hexachlorobutadiene	ND	U	2.0	0.30	0.11	1	10/12/14	10/12/14	KWG1413817	
Naphthalene	ND	U	2.0	0.30	0.088	1	10/12/14	10/12/14	KWG1413817	
1,2,3-Trichlorobenzene	ND	U	2.0	0.40	0.11	1	10/12/14	10/12/14	KWG1413817	

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1410790
Project:	JBLM LTM Log Center/TO-01	**Date Collected:**	09/29/2014
Sample Matrix:	Water	**Date Received:**	10/02/2014

Volatile Organic Compounds

Sample Name:	LGC140929LC88D2-1	**Units:**	ug/L
Lab Code:	K1410790-018	**Basis:**	NA

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Dibromofluoromethane	93	85-115	10/12/14	Acceptable
1,2-Dichloroethane-d4	98	70-120	10/12/14	Acceptable
Toluene-d8	96	85-120	10/12/14	Acceptable
4-Bromofluorobenzene	99	75-120	10/12/14	Acceptable

Comments:

Analytical Results

Client: Sealaska Environmental Services, LLC
Project: JBLM LTM Log Center/TO-01
Sample Matrix: Water

Service Request: K1410790
Date Collected: 09/29/2014
Date Received: 10/02/2014

Volatile Organic Compounds

Sample Name: LGC140929LC95D1-1
Lab Code: K1410790-019

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
Dichlorodifluoromethane	ND	U	0.50	0.20	0.13	1	10/12/14	10/12/14	KWG1413817	
Chloromethane	**0.070**	J	0.50	0.20	0.068	1	10/12/14	10/12/14	KWG1413817	
Vinyl Chloride	ND	U	0.50	0.10	0.075	1	10/12/14	10/12/14	KWG1413817	
Bromomethane	ND	U	0.50	0.30	0.10	1	10/12/14	10/12/14	KWG1413817	
Chloroethane	ND	U	0.50	0.20	0.16	1	10/12/14	10/12/14	KWG1413817	
Trichlorofluoromethane	ND	U	0.50	0.20	0.12	1	10/12/14	10/12/14	KWG1413817	
1,1-Dichloroethene	ND	U	0.50	0.20	0.080	1	10/12/14	10/12/14	KWG1413817	
Acetone	**7.3**	J	20	10	3.3	1	10/12/14	10/12/14	KWG1413817	
Carbon Disulfide	ND	U	0.50	0.20	0.069	1	10/12/14	10/12/14	KWG1413817	
Methylene Chloride	ND	U	2.0	0.20	0.10	1	10/12/14	10/12/14	KWG1413817	
Methyl tert-Butyl Ether	ND	U	0.50	0.30	0.11	1	10/12/14	10/12/14	KWG1413817	
trans-1,2-Dichloroethene	ND	U	0.50	0.20	0.072	1	10/12/14	10/12/14	KWG1413817	
1,1-Dichloroethane	ND	U	0.50	0.20	0.077	1	10/12/14	10/12/14	KWG1413817	
2,2-Dichloropropane	ND	U	0.50	0.20	0.060	1	10/12/14	10/12/14	KWG1413817	
cis-1,2-Dichloroethene	ND	U	0.50	0.20	0.067	1	10/12/14	10/12/14	KWG1413817	
2-Butanone (MEK)	ND	U	20	4.0	1.9	1	10/12/14	10/12/14	KWG1413817	
Bromochloromethane	ND	U	0.50	0.20	0.16	1	10/12/14	10/12/14	KWG1413817	
Chloroform	ND	U	0.50	0.20	0.072	1	10/12/14	10/12/14	KWG1413817	
1,1,1-Trichloroethane (TCA)	ND	U	0.50	0.20	0.075	1	10/12/14	10/12/14	KWG1413817	
Carbon Tetrachloride	ND	U	0.50	0.20	0.096	1	10/12/14	10/12/14	KWG1413817	
1,1-Dichloropropene	ND	U	0.50	0.20	0.089	1	10/12/14	10/12/14	KWG1413817	
Benzene	ND	U	0.50	0.10	0.062	1	10/12/14	10/12/14	KWG1413817	
1,2-Dichloroethane (EDC)	ND	U	0.50	0.15	0.080	1	10/12/14	10/12/14	KWG1413817	
Trichloroethene (TCE)	**0.50**		0.50	0.10	0.10	1	10/12/14	10/12/14	KWG1413817	
1,2-Dichloropropane	ND	U	0.50	0.20	0.095	1	10/12/14	10/12/14	KWG1413817	
Dibromomethane	ND	U	0.50	0.50	0.15	1	10/12/14	10/12/14	KWG1413817	
Bromodichloromethane	ND	U	0.50	0.30	0.091	1	10/12/14	10/12/14	KWG1413817	
cis-1,3-Dichloropropene	ND	U	0.50	0.20	0.18	1	10/12/14	10/12/14	KWG1413817	
4-Methyl-2-pentanone (MIBK)	ND	U	20	10	2.6	1	10/12/14	10/12/14	KWG1413817	
Toluene	ND	U	0.50	0.10	0.054	1	10/12/14	10/12/14	KWG1413817	
trans-1,3-Dichloropropene	ND	U	0.50	0.20	0.068	1	10/12/14	10/12/14	KWG1413817	
1,1,2-Trichloroethane	ND	U	0.50	0.40	0.14	1	10/12/14	10/12/14	KWG1413817	
Tetrachloroethene (PCE)	ND	U	0.50	0.20	0.099	1	10/12/14	10/12/14	KWG1413817	

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1410790
Project:	JBLM LTM Log Center/TO-01	**Date Collected:**	09/29/2014
Sample Matrix:	Water	**Date Received:**	10/02/2014

Volatile Organic Compounds

Sample Name:	LGC140929LC95D1-1	**Units:**	ug/L
Lab Code:	K1410790-019	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8260C		

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
2-Hexanone	ND	U	20	10	2.7	1	10/12/14	10/12/14	KWG1413817	
1,3-Dichloropropane	ND	U	0.50	0.30	0.14	1	10/12/14	10/12/14	KWG1413817	
Dibromochloromethane	ND	U	0.50	0.50	0.14	1	10/12/14	10/12/14	KWG1413817	
1,2-Dibromoethane (EDB)	ND	U	2.0	0.20	0.10	1	10/12/14	10/12/14	KWG1413817	
Chlorobenzene	ND	U	0.50	0.20	0.11	1	10/12/14	10/12/14	KWG1413817	
Ethylbenzene	ND	U	0.50	0.10	0.050	1	10/12/14	10/12/14	KWG1413817	
1,1,1,2-Tetrachloroethane	ND	U	0.50	0.20	0.11	1	10/12/14	10/12/14	KWG1413817	
m,p-Xylenes	ND	U	0.50	0.20	0.11	1	10/12/14	10/12/14	KWG1413817	
o-Xylene	ND	U	0.50	0.20	0.074	1	10/12/14	10/12/14	KWG1413817	
Styrene	ND	U	0.50	0.20	0.089	1	10/12/14	10/12/14	KWG1413817	
Bromoform	ND	U	0.50	0.50	0.16	1	10/12/14	10/12/14	KWG1413817	
Isopropylbenzene	ND	U	2.0	0.20	0.051	1	10/12/14	10/12/14	KWG1413817	
1,1,2,2-Tetrachloroethane	ND	U	0.50	0.20	0.16	1	10/12/14	10/12/14	KWG1413817	
Bromobenzene	ND	U	2.0	0.20	0.12	1	10/12/14	10/12/14	KWG1413817	
n-Propylbenzene	ND	U	2.0	0.20	0.054	1	10/12/14	10/12/14	KWG1413817	
1,2,3-Trichloropropane	ND	U	0.50	0.50	0.20	1	10/12/14	10/12/14	KWG1413817	
2-Chlorotoluene	ND	U	2.0	0.20	0.10	1	10/12/14	10/12/14	KWG1413817	
1,3,5-Trimethylbenzene	ND	U	2.0	0.20	0.089	1	10/12/14	10/12/14	KWG1413817	
4-Chlorotoluene	ND	U	2.0	0.20	0.13	1	10/12/14	10/12/14	KWG1413817	
tert-Butylbenzene	ND	U	2.0	0.20	0.059	1	10/12/14	10/12/14	KWG1413817	
1,2,4-Trimethylbenzene	ND	U	2.0	0.20	0.069	1	10/12/14	10/12/14	KWG1413817	
sec-Butylbenzene	ND	U	2.0	0.10	0.062	1	10/12/14	10/12/14	KWG1413817	
4-Isopropyltoluene	ND	U	2.0	0.20	0.060	1	10/12/14	10/12/14	KWG1413817	
1,3-Dichlorobenzene	ND	U	0.50	0.20	0.10	1	10/12/14	10/12/14	KWG1413817	
1,4-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	10/12/14	10/12/14	KWG1413817	
n-Butylbenzene	ND	U	2.0	0.10	0.054	1	10/12/14	10/12/14	KWG1413817	
1,2-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	10/12/14	10/12/14	KWG1413817	
1,2-Dibromo-3-chloropropane	ND	U	2.0	0.80	0.20	1	10/12/14	10/12/14	KWG1413817	
1,2,4-Trichlorobenzene	ND	U	2.0	0.30	0.096	1	10/12/14	10/12/14	KWG1413817	
Hexachlorobutadiene	ND	U	2.0	0.30	0.11	1	10/12/14	10/12/14	KWG1413817	
Naphthalene	ND	U	2.0	0.30	0.088	1	10/12/14	10/12/14	KWG1413817	
1,2,3-Trichlorobenzene	ND	U	2.0	0.40	0.11	1	10/12/14	10/12/14	KWG1413817	

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1410790
Project:	JBLM LTM Log Center/TO-01	**Date Collected:**	09/29/2014
Sample Matrix:	Water	**Date Received:**	10/02/2014

Volatile Organic Compounds

Sample Name:	LGC140929LC95D1-1	**Units:**	ug/L
Lab Code:	K1410790-019	**Basis:**	NA

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Dibromofluoromethane	95	85-115	10/12/14	Acceptable
1,2-Dichloroethane-d4	98	70-120	10/12/14	Acceptable
Toluene-d8	97	85-120	10/12/14	Acceptable
4-Bromofluorobenzene	96	75-120	10/12/14	Acceptable

Comments:

Analytical Results

Client: Sealaska Environmental Services, LLC
Project: JBLM LTM Log Center/TO-01
Sample Matrix: Water

Service Request: K1410790
Date Collected: 09/29/2014
Date Received: 10/02/2014

Volatile Organic Compounds

Sample Name: LGC140929LC95D2-1
Lab Code: K1410790-020

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
Dichlorodifluoromethane	ND	U	0.50	0.20	0.13	1	10/12/14	10/12/14	KWG1413817	
Chloromethane	ND	U	0.50	0.20	0.068	1	10/12/14	10/12/14	KWG1413817	
Vinyl Chloride	ND	U	0.50	0.10	0.075	1	10/12/14	10/12/14	KWG1413817	
Bromomethane	ND	U	0.50	0.30	0.10	1	10/12/14	10/12/14	KWG1413817	
Chloroethane	ND	U	0.50	0.20	0.16	1	10/12/14	10/12/14	KWG1413817	
Trichlorofluoromethane	ND	U	0.50	0.20	0.12	1	10/12/14	10/12/14	KWG1413817	
1,1-Dichloroethene	ND	U	0.50	0.20	0.080	1	10/12/14	10/12/14	KWG1413817	
Acetone	**4.2**	J	20	10	3.3	1	10/12/14	10/12/14	KWG1413817	
Carbon Disulfide	ND	U	0.50	0.20	0.069	1	10/12/14	10/12/14	KWG1413817	
Methylene Chloride	ND	U	2.0	0.20	0.10	1	10/12/14	10/12/14	KWG1413817	
Methyl tert-Butyl Ether	ND	U	0.50	0.30	0.11	1	10/12/14	10/12/14	KWG1413817	
trans-1,2-Dichloroethene	ND	U	0.50	0.20	0.072	1	10/12/14	10/12/14	KWG1413817	
1,1-Dichloroethane	ND	U	0.50	0.20	0.077	1	10/12/14	10/12/14	KWG1413817	
2,2-Dichloropropane	ND	U	0.50	0.20	0.060	1	10/12/14	10/12/14	KWG1413817	
cis-1,2-Dichloroethene	**0.18**	J	0.50	0.20	0.067	1	10/12/14	10/12/14	KWG1413817	
2-Butanone (MEK)	ND	U	20	4.0	1.9	1	10/12/14	10/12/14	KWG1413817	
Bromochloromethane	ND	U	0.50	0.20	0.16	1	10/12/14	10/12/14	KWG1413817	
Chloroform	ND	U	0.50	0.20	0.072	1	10/12/14	10/12/14	KWG1413817	
1,1,1-Trichloroethane (TCA)	ND	U	0.50	0.20	0.075	1	10/12/14	10/12/14	KWG1413817	
Carbon Tetrachloride	**0.12**	J	0.50	0.20	0.096	1	10/12/14	10/12/14	KWG1413817	
1,1-Dichloropropene	ND	U	0.50	0.20	0.089	1	10/12/14	10/12/14	KWG1413817	
Benzene	ND	U	0.50	0.10	0.062	1	10/12/14	10/12/14	KWG1413817	
1,2-Dichloroethane (EDC)	ND	U	0.50	0.15	0.080	1	10/12/14	10/12/14	KWG1413817	
Trichloroethene (TCE)	**1.6**		0.50	0.10	0.10	1	10/12/14	10/12/14	KWG1413817	
1,2-Dichloropropane	ND	U	0.50	0.20	0.095	1	10/12/14	10/12/14	KWG1413817	
Dibromomethane	ND	U	0.50	0.50	0.15	1	10/12/14	10/12/14	KWG1413817	
Bromodichloromethane	ND	U	0.50	0.30	0.091	1	10/12/14	10/12/14	KWG1413817	
cis-1,3-Dichloropropene	ND	U	0.50	0.20	0.18	1	10/12/14	10/12/14	KWG1413817	
4-Methyl-2-pentanone (MIBK)	ND	U	20	10	2.6	1	10/12/14	10/12/14	KWG1413817	
Toluene	ND	U	0.50	0.10	0.054	1	10/12/14	10/12/14	KWG1413817	
trans-1,3-Dichloropropene	ND	U	0.50	0.20	0.068	1	10/12/14	10/12/14	KWG1413817	
1,1,2-Trichloroethane	ND	U	0.50	0.40	0.14	1	10/12/14	10/12/14	KWG1413817	
Tetrachloroethene (PCE)	ND	U	0.50	0.20	0.099	1	10/12/14	10/12/14	KWG1413817	

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1410790
Project:	JBLM LTM Log Center/TO-01	**Date Collected:**	09/29/2014
Sample Matrix:	Water	**Date Received:**	10/02/2014

Volatile Organic Compounds

Sample Name:	LGC140929LC95D2-1	**Units:**	ug/L
Lab Code:	K1410790-020	**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
2-Hexanone	ND	U	20	10	2.7	1	10/12/14	10/12/14	KWG1413817	
1,3-Dichloropropane	ND	U	0.50	0.30	0.14	1	10/12/14	10/12/14	KWG1413817	
Dibromochloromethane	ND	U	0.50	0.50	0.14	1	10/12/14	10/12/14	KWG1413817	
1,2-Dibromoethane (EDB)	ND	U	2.0	0.20	0.10	1	10/12/14	10/12/14	KWG1413817	
Chlorobenzene	ND	U	0.50	0.20	0.11	1	10/12/14	10/12/14	KWG1413817	
Ethylbenzene	ND	U	0.50	0.10	0.050	1	10/12/14	10/12/14	KWG1413817	
1,1,1,2-Tetrachloroethane	ND	U	0.50	0.20	0.11	1	10/12/14	10/12/14	KWG1413817	
m,p-Xylenes	ND	U	0.50	0.20	0.11	1	10/12/14	10/12/14	KWG1413817	
o-Xylene	ND	U	0.50	0.20	0.074	1	10/12/14	10/12/14	KWG1413817	
Styrene	ND	U	0.50	0.20	0.089	1	10/12/14	10/12/14	KWG1413817	
Bromoform	ND	U	0.50	0.50	0.16	1	10/12/14	10/12/14	KWG1413817	
Isopropylbenzene	ND	U	2.0	0.20	0.051	1	10/12/14	10/12/14	KWG1413817	
1,1,2,2-Tetrachloroethane	ND	U	0.50	0.20	0.16	1	10/12/14	10/12/14	KWG1413817	
Bromobenzene	ND	U	2.0	0.20	0.12	1	10/12/14	10/12/14	KWG1413817	
n-Propylbenzene	ND	U	2.0	0.20	0.054	1	10/12/14	10/12/14	KWG1413817	
1,2,3-Trichloropropane	ND	U	0.50	0.50	0.20	1	10/12/14	10/12/14	KWG1413817	
2-Chlorotoluene	ND	U	2.0	0.20	0.10	1	10/12/14	10/12/14	KWG1413817	
1,3,5-Trimethylbenzene	ND	U	2.0	0.20	0.089	1	10/12/14	10/12/14	KWG1413817	
4-Chlorotoluene	ND	U	2.0	0.20	0.13	1	10/12/14	10/12/14	KWG1413817	
tert-Butylbenzene	ND	U	2.0	0.20	0.059	1	10/12/14	10/12/14	KWG1413817	
1,2,4-Trimethylbenzene	ND	U	2.0	0.20	0.069	1	10/12/14	10/12/14	KWG1413817	
sec-Butylbenzene	ND	U	2.0	0.10	0.062	1	10/12/14	10/12/14	KWG1413817	
4-Isopropyltoluene	ND	U	2.0	0.20	0.060	1	10/12/14	10/12/14	KWG1413817	
1,3-Dichlorobenzene	ND	U	0.50	0.20	0.10	1	10/12/14	10/12/14	KWG1413817	
1,4-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	10/12/14	10/12/14	KWG1413817	
n-Butylbenzene	ND	U	2.0	0.10	0.054	1	10/12/14	10/12/14	KWG1413817	
1,2-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	10/12/14	10/12/14	KWG1413817	
1,2-Dibromo-3-chloropropane	ND	U	2.0	0.80	0.20	1	10/12/14	10/12/14	KWG1413817	
1,2,4-Trichlorobenzene	ND	U	2.0	0.30	0.096	1	10/12/14	10/12/14	KWG1413817	
Hexachlorobutadiene	ND	U	2.0	0.30	0.11	1	10/12/14	10/12/14	KWG1413817	
Naphthalene	ND	U	2.0	0.30	0.088	1	10/12/14	10/12/14	KWG1413817	
1,2,3-Trichlorobenzene	ND	U	2.0	0.40	0.11	1	10/12/14	10/12/14	KWG1413817	

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1410790
Project:	JBLM LTM Log Center/TO-01	**Date Collected:**	09/29/2014
Sample Matrix:	Water	**Date Received:**	10/02/2014

Volatile Organic Compounds

Sample Name:	LGC140929LC95D2-1	**Units:**	ug/L
Lab Code:	K1410790-020	**Basis:**	NA

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Dibromofluoromethane	94	85-115	10/12/14	Acceptable
1,2-Dichloroethane-d4	98	70-120	10/12/14	Acceptable
Toluene-d8	96	85-120	10/12/14	Acceptable
4-Bromofluorobenzene	98	75-120	10/12/14	Acceptable

Comments:

Analytical Results

Client: Sealaska Environmental Services, LLC
Project: JBLM LTM Log Center/TO-01
Sample Matrix: Water

Service Request: K1410790
Date Collected: 09/30/2014
Date Received: 10/02/2014

Volatile Organic Compounds

Sample Name: LGC140930T04-1
Lab Code: K1410790-021

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
Dichlorodifluoromethane	ND	U	0.50	0.20	0.13	1	10/12/14	10/12/14	KWG1413817	
Chloromethane	**0.12**	J	0.50	0.20	0.068	1	10/12/14	10/12/14	KWG1413817	
Vinyl Chloride	ND	U	0.50	0.10	0.075	1	10/12/14	10/12/14	KWG1413817	
Bromomethane	ND	U	0.50	0.30	0.10	1	10/12/14	10/12/14	KWG1413817	
Chloroethane	ND	U	0.50	0.20	0.16	1	10/12/14	10/12/14	KWG1413817	
Trichlorofluoromethane	ND	U	0.50	0.20	0.12	1	10/12/14	10/12/14	KWG1413817	
1,1-Dichloroethene	ND	U	0.50	0.20	0.080	1	10/12/14	10/12/14	KWG1413817	
Acetone	ND	U	20	10	3.3	1	10/12/14	10/12/14	KWG1413817	
Carbon Disulfide	ND	U	0.50	0.20	0.069	1	10/12/14	10/12/14	KWG1413817	
Methylene Chloride	ND	U	2.0	0.20	0.10	1	10/12/14	10/12/14	KWG1413817	
Methyl tert-Butyl Ether	ND	U	0.50	0.30	0.11	1	10/12/14	10/12/14	KWG1413817	
trans-1,2-Dichloroethene	ND	U	0.50	0.20	0.072	1	10/12/14	10/12/14	KWG1413817	
1,1-Dichloroethane	ND	U	0.50	0.20	0.077	1	10/12/14	10/12/14	KWG1413817	
2,2-Dichloropropane	ND	U	0.50	0.20	0.060	1	10/12/14	10/12/14	KWG1413817	
cis-1,2-Dichloroethene	**0.31**	J	0.50	0.20	0.067	1	10/12/14	10/12/14	KWG1413817	
2-Butanone (MEK)	ND	U	20	4.0	1.9	1	10/12/14	10/12/14	KWG1413817	
Bromochloromethane	ND	U	0.50	0.20	0.16	1	10/12/14	10/12/14	KWG1413817	
Chloroform	**0.090**	J	0.50	0.20	0.072	1	10/12/14	10/12/14	KWG1413817	
1,1,1-Trichloroethane (TCA)	**0.19**	J	0.50	0.20	0.075	1	10/12/14	10/12/14	KWG1413817	
Carbon Tetrachloride	ND	U	0.50	0.20	0.096	1	10/12/14	10/12/14	KWG1413817	
1,1-Dichloropropene	ND	U	0.50	0.20	0.089	1	10/12/14	10/12/14	KWG1413817	
Benzene	ND	U	0.50	0.10	0.062	1	10/12/14	10/12/14	KWG1413817	
1,2-Dichloroethane (EDC)	ND	U	0.50	0.15	0.080	1	10/12/14	10/12/14	KWG1413817	
Trichloroethene (TCE)	**8.6**		0.50	0.10	0.10	1	10/12/14	10/12/14	KWG1413817	
1,2-Dichloropropane	ND	U	0.50	0.20	0.095	1	10/12/14	10/12/14	KWG1413817	
Dibromomethane	ND	U	0.50	0.50	0.15	1	10/12/14	10/12/14	KWG1413817	
Bromodichloromethane	ND	U	0.50	0.30	0.091	1	10/12/14	10/12/14	KWG1413817	
cis-1,3-Dichloropropene	ND	U	0.50	0.20	0.18	1	10/12/14	10/12/14	KWG1413817	
4-Methyl-2-pentanone (MIBK)	ND	U	20	10	2.6	1	10/12/14	10/12/14	KWG1413817	
Toluene	ND	U	0.50	0.10	0.054	1	10/12/14	10/12/14	KWG1413817	
trans-1,3-Dichloropropene	ND	U	0.50	0.20	0.068	1	10/12/14	10/12/14	KWG1413817	
1,1,2-Trichloroethane	ND	U	0.50	0.40	0.14	1	10/12/14	10/12/14	KWG1413817	
Tetrachloroethene (PCE)	ND	U	0.50	0.20	0.099	1	10/12/14	10/12/14	KWG1413817	

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1410790
Project:	JBLM LTM Log Center/TO-01	**Date Collected:**	09/30/2014
Sample Matrix:	Water	**Date Received:**	10/02/2014

Volatile Organic Compounds

Sample Name:	LGC140930T04-1	**Units:**	ug/L
Lab Code:	K1410790-021	**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
2-Hexanone	ND	U	20	10	2.7	1	10/12/14	10/12/14	KWG1413817	
1,3-Dichloropropane	ND	U	0.50	0.30	0.14	1	10/12/14	10/12/14	KWG1413817	
Dibromochloromethane	ND	U	0.50	0.50	0.14	1	10/12/14	10/12/14	KWG1413817	
1,2-Dibromoethane (EDB)	ND	U	2.0	0.20	0.10	1	10/12/14	10/12/14	KWG1413817	
Chlorobenzene	ND	U	0.50	0.20	0.11	1	10/12/14	10/12/14	KWG1413817	
Ethylbenzene	ND	U	0.50	0.10	0.050	1	10/12/14	10/12/14	KWG1413817	
1,1,1,2-Tetrachloroethane	ND	U	0.50	0.20	0.11	1	10/12/14	10/12/14	KWG1413817	
m,p-Xylenes	ND	U	0.50	0.20	0.11	1	10/12/14	10/12/14	KWG1413817	
o-Xylene	ND	U	0.50	0.20	0.074	1	10/12/14	10/12/14	KWG1413817	
Styrene	ND	U	0.50	0.20	0.089	1	10/12/14	10/12/14	KWG1413817	
Bromoform	ND	U	0.50	0.50	0.16	1	10/12/14	10/12/14	KWG1413817	
Isopropylbenzene	ND	U	2.0	0.20	0.051	1	10/12/14	10/12/14	KWG1413817	
1,1,2,2-Tetrachloroethane	ND	U	0.50	0.20	0.16	1	10/12/14	10/12/14	KWG1413817	
Bromobenzene	ND	U	2.0	0.20	0.12	1	10/12/14	10/12/14	KWG1413817	
n-Propylbenzene	ND	U	2.0	0.20	0.054	1	10/12/14	10/12/14	KWG1413817	
1,2,3-Trichloropropane	ND	U	0.50	0.50	0.20	1	10/12/14	10/12/14	KWG1413817	
2-Chlorotoluene	ND	U	2.0	0.20	0.10	1	10/12/14	10/12/14	KWG1413817	
1,3,5-Trimethylbenzene	ND	U	2.0	0.20	0.089	1	10/12/14	10/12/14	KWG1413817	
4-Chlorotoluene	ND	U	2.0	0.20	0.13	1	10/12/14	10/12/14	KWG1413817	
tert-Butylbenzene	ND	U	2.0	0.20	0.059	1	10/12/14	10/12/14	KWG1413817	
1,2,4-Trimethylbenzene	ND	U	2.0	0.20	0.069	1	10/12/14	10/12/14	KWG1413817	
sec-Butylbenzene	ND	U	2.0	0.10	0.062	1	10/12/14	10/12/14	KWG1413817	
4-Isopropyltoluene	ND	U	2.0	0.20	0.060	1	10/12/14	10/12/14	KWG1413817	
1,3-Dichlorobenzene	ND	U	0.50	0.20	0.10	1	10/12/14	10/12/14	KWG1413817	
1,4-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	10/12/14	10/12/14	KWG1413817	
n-Butylbenzene	ND	U	2.0	0.10	0.054	1	10/12/14	10/12/14	KWG1413817	
1,2-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	10/12/14	10/12/14	KWG1413817	
1,2-Dibromo-3-chloropropane	ND	U	2.0	0.80	0.20	1	10/12/14	10/12/14	KWG1413817	
1,2,4-Trichlorobenzene	ND	U	2.0	0.30	0.096	1	10/12/14	10/12/14	KWG1413817	
Hexachlorobutadiene	ND	U	2.0	0.30	0.11	1	10/12/14	10/12/14	KWG1413817	
Naphthalene	ND	U	2.0	0.30	0.088	1	10/12/14	10/12/14	KWG1413817	
1,2,3-Trichlorobenzene	ND	U	2.0	0.40	0.11	1	10/12/14	10/12/14	KWG1413817	

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1410790
Project:	JBLM LTM Log Center/TO-01	**Date Collected:**	09/30/2014
Sample Matrix:	Water	**Date Received:**	10/02/2014

Volatile Organic Compounds

Sample Name:	LGC140930T04-1	**Units:**	ug/L
Lab Code:	K1410790-021	**Basis:**	NA

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Dibromofluoromethane	94	85-115	10/12/14	Acceptable
1,2-Dichloroethane-d4	99	70-120	10/12/14	Acceptable
Toluene-d8	96	85-120	10/12/14	Acceptable
4-Bromofluorobenzene	98	75-120	10/12/14	Acceptable

Comments:

Analytical Results

Client: Sealaska Environmental Services, LLC
Project: JBLM LTM Log Center/TO-01
Sample Matrix: Water

Service Request: K1410790
Date Collected: 09/30/2014
Date Received: 10/02/2014

Volatile Organic Compounds

Sample Name: LGC140930DUP5-1
Lab Code: K1410790-022

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
Dichlorodifluoromethane	ND	U	0.50	0.20	0.13	1	10/12/14	10/12/14	KWG1413817	
Chloromethane	**0.090**	J	0.50	0.20	0.068	1	10/12/14	10/12/14	KWG1413817	
Vinyl Chloride	ND	U	0.50	0.10	0.075	1	10/12/14	10/12/14	KWG1413817	
Bromomethane	ND	U	0.50	0.30	0.10	1	10/12/14	10/12/14	KWG1413817	
Chloroethane	ND	U	0.50	0.20	0.16	1	10/12/14	10/12/14	KWG1413817	
Trichlorofluoromethane	ND	U	0.50	0.20	0.12	1	10/12/14	10/12/14	KWG1413817	
1,1-Dichloroethene	ND	U	0.50	0.20	0.080	1	10/12/14	10/12/14	KWG1413817	
Acetone	ND	U	20	10	3.3	1	10/12/14	10/12/14	KWG1413817	
Carbon Disulfide	ND	U	0.50	0.20	0.069	1	10/12/14	10/12/14	KWG1413817	
Methylene Chloride	ND	U	2.0	0.20	0.10	1	10/12/14	10/12/14	KWG1413817	
Methyl tert-Butyl Ether	ND	U	0.50	0.30	0.11	1	10/12/14	10/12/14	KWG1413817	
trans-1,2-Dichloroethene	ND	U	0.50	0.20	0.072	1	10/12/14	10/12/14	KWG1413817	
1,1-Dichloroethane	ND	U	0.50	0.20	0.077	1	10/12/14	10/12/14	KWG1413817	
2,2-Dichloropropane	ND	U	0.50	0.20	0.060	1	10/12/14	10/12/14	KWG1413817	
cis-1,2-Dichloroethene	**0.27**	J	0.50	0.20	0.067	1	10/12/14	10/12/14	KWG1413817	
2-Butanone (MEK)	ND	U	20	4.0	1.9	1	10/12/14	10/12/14	KWG1413817	
Bromochloromethane	ND	U	0.50	0.20	0.16	1	10/12/14	10/12/14	KWG1413817	
Chloroform	ND	U	0.50	0.20	0.072	1	10/12/14	10/12/14	KWG1413817	
1,1,1-Trichloroethane (TCA)	**0.20**	J	0.50	0.20	0.075	1	10/12/14	10/12/14	KWG1413817	
Carbon Tetrachloride	ND	U	0.50	0.20	0.096	1	10/12/14	10/12/14	KWG1413817	
1,1-Dichloropropene	ND	U	0.50	0.20	0.089	1	10/12/14	10/12/14	KWG1413817	
Benzene	ND	U	0.50	0.10	0.062	1	10/12/14	10/12/14	KWG1413817	
1,2-Dichloroethane (EDC)	ND	U	0.50	0.15	0.080	1	10/12/14	10/12/14	KWG1413817	
Trichloroethene (TCE)	**8.9**		0.50	0.10	0.10	1	10/12/14	10/12/14	KWG1413817	
1,2-Dichloropropane	ND	U	0.50	0.20	0.095	1	10/12/14	10/12/14	KWG1413817	
Dibromomethane	ND	U	0.50	0.50	0.15	1	10/12/14	10/12/14	KWG1413817	
Bromodichloromethane	ND	U	0.50	0.30	0.091	1	10/12/14	10/12/14	KWG1413817	
cis-1,3-Dichloropropene	ND	U	0.50	0.20	0.18	1	10/12/14	10/12/14	KWG1413817	
4-Methyl-2-pentanone (MIBK)	ND	U	20	10	2.6	1	10/12/14	10/12/14	KWG1413817	
Toluene	ND	U	0.50	0.10	0.054	1	10/12/14	10/12/14	KWG1413817	
trans-1,3-Dichloropropene	ND	U	0.50	0.20	0.068	1	10/12/14	10/12/14	KWG1413817	
1,1,2-Trichloroethane	ND	U	0.50	0.40	0.14	1	10/12/14	10/12/14	KWG1413817	
Tetrachloroethene (PCE)	ND	U	0.50	0.20	0.099	1	10/12/14	10/12/14	KWG1413817	

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1410790
Project:	JBLM LTM Log Center/TO-01	**Date Collected:**	09/30/2014
Sample Matrix:	Water	**Date Received:**	10/02/2014

Volatile Organic Compounds

Sample Name:	LGC140930DUP5-1	**Units:**	ug/L
Lab Code:	K1410790-022	**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
2-Hexanone	ND	U	20	10	2.7	1	10/12/14	10/12/14	KWG1413817	
1,3-Dichloropropane	ND	U	0.50	0.30	0.14	1	10/12/14	10/12/14	KWG1413817	
Dibromochloromethane	ND	U	0.50	0.50	0.14	1	10/12/14	10/12/14	KWG1413817	
1,2-Dibromoethane (EDB)	ND	U	2.0	0.20	0.10	1	10/12/14	10/12/14	KWG1413817	
Chlorobenzene	ND	U	0.50	0.20	0.11	1	10/12/14	10/12/14	KWG1413817	
Ethylbenzene	ND	U	0.50	0.10	0.050	1	10/12/14	10/12/14	KWG1413817	
1,1,1,2-Tetrachloroethane	ND	U	0.50	0.20	0.11	1	10/12/14	10/12/14	KWG1413817	
m,p-Xylenes	ND	U	0.50	0.20	0.11	1	10/12/14	10/12/14	KWG1413817	
o-Xylene	ND	U	0.50	0.20	0.074	1	10/12/14	10/12/14	KWG1413817	
Styrene	ND	U	0.50	0.20	0.089	1	10/12/14	10/12/14	KWG1413817	
Bromoform	ND	U	0.50	0.50	0.16	1	10/12/14	10/12/14	KWG1413817	
Isopropylbenzene	ND	U	2.0	0.20	0.051	1	10/12/14	10/12/14	KWG1413817	
1,1,2,2-Tetrachloroethane	ND	U	0.50	0.20	0.16	1	10/12/14	10/12/14	KWG1413817	
Bromobenzene	ND	U	2.0	0.20	0.12	1	10/12/14	10/12/14	KWG1413817	
n-Propylbenzene	ND	U	2.0	0.20	0.054	1	10/12/14	10/12/14	KWG1413817	
1,2,3-Trichloropropane	ND	U	0.50	0.50	0.20	1	10/12/14	10/12/14	KWG1413817	
2-Chlorotoluene	ND	U	2.0	0.20	0.10	1	10/12/14	10/12/14	KWG1413817	
1,3,5-Trimethylbenzene	ND	U	2.0	0.20	0.089	1	10/12/14	10/12/14	KWG1413817	
4-Chlorotoluene	ND	U	2.0	0.20	0.13	1	10/12/14	10/12/14	KWG1413817	
tert-Butylbenzene	ND	U	2.0	0.20	0.059	1	10/12/14	10/12/14	KWG1413817	
1,2,4-Trimethylbenzene	ND	U	2.0	0.20	0.069	1	10/12/14	10/12/14	KWG1413817	
sec-Butylbenzene	ND	U	2.0	0.10	0.062	1	10/12/14	10/12/14	KWG1413817	
4-Isopropyltoluene	ND	U	2.0	0.20	0.060	1	10/12/14	10/12/14	KWG1413817	
1,3-Dichlorobenzene	ND	U	0.50	0.20	0.10	1	10/12/14	10/12/14	KWG1413817	
1,4-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	10/12/14	10/12/14	KWG1413817	
n-Butylbenzene	ND	U	2.0	0.10	0.054	1	10/12/14	10/12/14	KWG1413817	
1,2-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	10/12/14	10/12/14	KWG1413817	
1,2-Dibromo-3-chloropropane	ND	U	2.0	0.80	0.20	1	10/12/14	10/12/14	KWG1413817	
1,2,4-Trichlorobenzene	ND	U	2.0	0.30	0.096	1	10/12/14	10/12/14	KWG1413817	
Hexachlorobutadiene	ND	U	2.0	0.30	0.11	1	10/12/14	10/12/14	KWG1413817	
Naphthalene	ND	U	2.0	0.30	0.088	1	10/12/14	10/12/14	KWG1413817	
1,2,3-Trichlorobenzene	ND	U	2.0	0.40	0.11	1	10/12/14	10/12/14	KWG1413817	

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1410790
Project:	JBLM LTM Log Center/TO-01	**Date Collected:**	09/30/2014
Sample Matrix:	Water	**Date Received:**	10/02/2014

Volatile Organic Compounds

Sample Name:	LGC140930DUP5-1	**Units:**	ug/L
Lab Code:	K1410790-022	**Basis:**	NA

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Dibromofluoromethane	95	85-115	10/12/14	Acceptable
1,2-Dichloroethane-d4	99	70-120	10/12/14	Acceptable
Toluene-d8	97	85-120	10/12/14	Acceptable
4-Bromofluorobenzene	97	75-120	10/12/14	Acceptable

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1410790
Project:	JBLM LTM Log Center/TO-01	**Date Collected:**	09/30/2014
Sample Matrix:	Water	**Date Received:**	10/02/2014

Volatile Organic Compounds

Sample Name:	LGC140930LC103D-1	**Units:**	ug/L
Lab Code:	K1410790-023	**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
Dichlorodifluoromethane	ND	U	0.50	0.20	0.13	1	10/12/14	10/12/14	KWG1413817	
Chloromethane	**0.12**	J	0.50	0.20	0.068	1	10/12/14	10/12/14	KWG1413817	
Vinyl Chloride	ND	U	0.50	0.10	0.075	1	10/12/14	10/12/14	KWG1413817	
Bromomethane	ND	U	0.50	0.30	0.10	1	10/12/14	10/12/14	KWG1413817	
Chloroethane	ND	U	0.50	0.20	0.16	1	10/12/14	10/12/14	KWG1413817	
Trichlorofluoromethane	ND	U	0.50	0.20	0.12	1	10/12/14	10/12/14	KWG1413817	
1,1-Dichloroethene	ND	U	0.50	0.20	0.080	1	10/12/14	10/12/14	KWG1413817	
Acetone	**3.3**	J	20	10	3.3	1	10/12/14	10/12/14	KWG1413817	
Carbon Disulfide	ND	U	0.50	0.20	0.069	1	10/12/14	10/12/14	KWG1413817	
Methylene Chloride	ND	U	2.0	0.20	0.10	1	10/12/14	10/12/14	KWG1413817	
Methyl tert-Butyl Ether	ND	U	0.50	0.30	0.11	1	10/12/14	10/12/14	KWG1413817	
trans-1,2-Dichloroethene	ND	U	0.50	0.20	0.072	1	10/12/14	10/12/14	KWG1413817	
1,1-Dichloroethane	ND	U	0.50	0.20	0.077	1	10/12/14	10/12/14	KWG1413817	
2,2-Dichloropropane	ND	U	0.50	0.20	0.060	1	10/12/14	10/12/14	KWG1413817	
cis-1,2-Dichloroethene	**1.2**		0.50	0.20	0.067	1	10/12/14	10/12/14	KWG1413817	
2-Butanone (MEK)	ND	U	20	4.0	1.9	1	10/12/14	10/12/14	KWG1413817	
Bromochloromethane	ND	U	0.50	0.20	0.16	1	10/12/14	10/12/14	KWG1413817	
Chloroform	**0.13**	J	0.50	0.20	0.072	1	10/12/14	10/12/14	KWG1413817	
1,1,1-Trichloroethane (TCA)	**0.090**	J	0.50	0.20	0.075	1	10/12/14	10/12/14	KWG1413817	
Carbon Tetrachloride	**0.13**	J	0.50	0.20	0.096	1	10/12/14	10/12/14	KWG1413817	
1,1-Dichloropropene	ND	U	0.50	0.20	0.089	1	10/12/14	10/12/14	KWG1413817	
Benzene	ND	U	0.50	0.10	0.062	1	10/12/14	10/12/14	KWG1413817	
1,2-Dichloroethane (EDC)	ND	U	0.50	0.15	0.080	1	10/12/14	10/12/14	KWG1413817	
Trichloroethene (TCE)	**44**		0.50	0.10	0.10	1	10/12/14	10/12/14	KWG1413817	
1,2-Dichloropropane	ND	U	0.50	0.20	0.095	1	10/12/14	10/12/14	KWG1413817	
Dibromomethane	ND	U	0.50	0.50	0.15	1	10/12/14	10/12/14	KWG1413817	
Bromodichloromethane	ND	U	0.50	0.30	0.091	1	10/12/14	10/12/14	KWG1413817	
cis-1,3-Dichloropropene	ND	U	0.50	0.20	0.18	1	10/12/14	10/12/14	KWG1413817	
4-Methyl-2-pentanone (MIBK)	ND	U	20	10	2.6	1	10/12/14	10/12/14	KWG1413817	
Toluene	ND	U	0.50	0.10	0.054	1	10/12/14	10/12/14	KWG1413817	
trans-1,3-Dichloropropene	ND	U	0.50	0.20	0.068	1	10/12/14	10/12/14	KWG1413817	
1,1,2-Trichloroethane	ND	U	0.50	0.40	0.14	1	10/12/14	10/12/14	KWG1413817	
Tetrachloroethene (PCE)	ND	U	0.50	0.20	0.099	1	10/12/14	10/12/14	KWG1413817	

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1410790
Project:	JBLM LTM Log Center/TO-01	**Date Collected:**	09/30/2014
Sample Matrix:	Water	**Date Received:**	10/02/2014

Volatile Organic Compounds

Sample Name:	LGC140930LC103D-1	**Units:**	ug/L
Lab Code:	K1410790-023	**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
2-Hexanone	ND	U	20	10	2.7	1	10/12/14	10/12/14	KWG1413817	
1,3-Dichloropropane	ND	U	0.50	0.30	0.14	1	10/12/14	10/12/14	KWG1413817	
Dibromochloromethane	ND	U	0.50	0.50	0.14	1	10/12/14	10/12/14	KWG1413817	
1,2-Dibromoethane (EDB)	ND	U	2.0	0.20	0.10	1	10/12/14	10/12/14	KWG1413817	
Chlorobenzene	ND	U	0.50	0.20	0.11	1	10/12/14	10/12/14	KWG1413817	
Ethylbenzene	ND	U	0.50	0.10	0.050	1	10/12/14	10/12/14	KWG1413817	
1,1,1,2-Tetrachloroethane	ND	U	0.50	0.20	0.11	1	10/12/14	10/12/14	KWG1413817	
m,p-Xylenes	ND	U	0.50	0.20	0.11	1	10/12/14	10/12/14	KWG1413817	
o-Xylene	ND	U	0.50	0.20	0.074	1	10/12/14	10/12/14	KWG1413817	
Styrene	ND	U	0.50	0.20	0.089	1	10/12/14	10/12/14	KWG1413817	
Bromoform	ND	U	0.50	0.50	0.16	1	10/12/14	10/12/14	KWG1413817	
Isopropylbenzene	ND	U	2.0	0.20	0.051	1	10/12/14	10/12/14	KWG1413817	
1,1,2,2-Tetrachloroethane	ND	U	0.50	0.20	0.16	1	10/12/14	10/12/14	KWG1413817	
Bromobenzene	ND	U	2.0	0.20	0.12	1	10/12/14	10/12/14	KWG1413817	
n-Propylbenzene	ND	U	2.0	0.20	0.054	1	10/12/14	10/12/14	KWG1413817	
1,2,3-Trichloropropane	ND	U	0.50	0.50	0.20	1	10/12/14	10/12/14	KWG1413817	
2-Chlorotoluene	ND	U	2.0	0.20	0.10	1	10/12/14	10/12/14	KWG1413817	
1,3,5-Trimethylbenzene	ND	U	2.0	0.20	0.089	1	10/12/14	10/12/14	KWG1413817	
4-Chlorotoluene	ND	U	2.0	0.20	0.13	1	10/12/14	10/12/14	KWG1413817	
tert-Butylbenzene	ND	U	2.0	0.20	0.059	1	10/12/14	10/12/14	KWG1413817	
1,2,4-Trimethylbenzene	ND	U	2.0	0.20	0.069	1	10/12/14	10/12/14	KWG1413817	
sec-Butylbenzene	ND	U	2.0	0.10	0.062	1	10/12/14	10/12/14	KWG1413817	
4-Isopropyltoluene	ND	U	2.0	0.20	0.060	1	10/12/14	10/12/14	KWG1413817	
1,3-Dichlorobenzene	ND	U	0.50	0.20	0.10	1	10/12/14	10/12/14	KWG1413817	
1,4-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	10/12/14	10/12/14	KWG1413817	
n-Butylbenzene	ND	U	2.0	0.10	0.054	1	10/12/14	10/12/14	KWG1413817	
1,2-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	10/12/14	10/12/14	KWG1413817	
1,2-Dibromo-3-chloropropane	ND	U	2.0	0.80	0.20	1	10/12/14	10/12/14	KWG1413817	
1,2,4-Trichlorobenzene	ND	U	2.0	0.30	0.096	1	10/12/14	10/12/14	KWG1413817	
Hexachlorobutadiene	ND	U	2.0	0.30	0.11	1	10/12/14	10/12/14	KWG1413817	
Naphthalene	ND	U	2.0	0.30	0.088	1	10/12/14	10/12/14	KWG1413817	
1,2,3-Trichlorobenzene	ND	U	2.0	0.40	0.11	1	10/12/14	10/12/14	KWG1413817	

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1410790
Project:	JBLM LTM Log Center/TO-01	**Date Collected:**	09/30/2014
Sample Matrix:	Water	**Date Received:**	10/02/2014

Volatile Organic Compounds

Sample Name:	LGC140930LC103D-1	**Units:**	ug/L
Lab Code:	K1410790-023	**Basis:**	NA

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Dibromofluoromethane	93	85-115	10/12/14	Acceptable
1,2-Dichloroethane-d4	101	70-120	10/12/14	Acceptable
Toluene-d8	97	85-120	10/12/14	Acceptable
4-Bromofluorobenzene	98	75-120	10/12/14	Acceptable

Comments:

Analytical Results

Client: Sealaska Environmental Services, LLC
Project: JBLM LTM Log Center/TO-01
Sample Matrix: Water

Service Request: K1410790
Date Collected: 09/30/2014
Date Received: 10/02/2014

Volatile Organic Compounds

Sample Name: LGC140930LC101D2-1
Lab Code: K1410790-024

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
Dichlorodifluoromethane	ND	U	0.50	0.20	0.13	1	10/12/14	10/12/14	KWG1413817	
Chloromethane	**0.12**	J	0.50	0.20	0.068	1	10/12/14	10/12/14	KWG1413817	
Vinyl Chloride	ND	U	0.50	0.10	0.075	1	10/12/14	10/12/14	KWG1413817	
Bromomethane	ND	U	0.50	0.30	0.10	1	10/12/14	10/12/14	KWG1413817	
Chloroethane	ND	U	0.50	0.20	0.16	1	10/12/14	10/12/14	KWG1413817	
Trichlorofluoromethane	ND	U	0.50	0.20	0.12	1	10/12/14	10/12/14	KWG1413817	
1,1-Dichloroethene	ND	U	0.50	0.20	0.080	1	10/12/14	10/12/14	KWG1413817	
Acetone	ND	U	20	10	3.3	1	10/12/14	10/12/14	KWG1413817	
Carbon Disulfide	ND	U	0.50	0.20	0.069	1	10/12/14	10/12/14	KWG1413817	
Methylene Chloride	ND	U	2.0	0.20	0.10	1	10/12/14	10/12/14	KWG1413817	
Methyl tert-Butyl Ether	ND	U	0.50	0.30	0.11	1	10/12/14	10/12/14	KWG1413817	
trans-1,2-Dichloroethene	ND	U	0.50	0.20	0.072	1	10/12/14	10/12/14	KWG1413817	
1,1-Dichloroethane	ND	U	0.50	0.20	0.077	1	10/12/14	10/12/14	KWG1413817	
2,2-Dichloropropane	ND	U	0.50	0.20	0.060	1	10/12/14	10/12/14	KWG1413817	
cis-1,2-Dichloroethene	**0.68**		0.50	0.20	0.067	1	10/12/14	10/12/14	KWG1413817	
2-Butanone (MEK)	ND	U	20	4.0	1.9	1	10/12/14	10/12/14	KWG1413817	
Bromochloromethane	ND	U	0.50	0.20	0.16	1	10/12/14	10/12/14	KWG1413817	
Chloroform	**0.14**	J	0.50	0.20	0.072	1	10/12/14	10/12/14	KWG1413817	
1,1,1-Trichloroethane (TCA)	**0.10**	J	0.50	0.20	0.075	1	10/12/14	10/12/14	KWG1413817	
Carbon Tetrachloride	ND	U	0.50	0.20	0.096	1	10/12/14	10/12/14	KWG1413817	
1,1-Dichloropropene	ND	U	0.50	0.20	0.089	1	10/12/14	10/12/14	KWG1413817	
Benzene	ND	U	0.50	0.10	0.062	1	10/12/14	10/12/14	KWG1413817	
1,2-Dichloroethane (EDC)	ND	U	0.50	0.15	0.080	1	10/12/14	10/12/14	KWG1413817	
Trichloroethene (TCE)	**13**		0.50	0.10	0.10	1	10/12/14	10/12/14	KWG1413817	
1,2-Dichloropropane	ND	U	0.50	0.20	0.095	1	10/12/14	10/12/14	KWG1413817	
Dibromomethane	ND	U	0.50	0.50	0.15	1	10/12/14	10/12/14	KWG1413817	
Bromodichloromethane	ND	U	0.50	0.30	0.091	1	10/12/14	10/12/14	KWG1413817	
cis-1,3-Dichloropropene	ND	U	0.50	0.20	0.18	1	10/12/14	10/12/14	KWG1413817	
4-Methyl-2-pentanone (MIBK)	ND	U	20	10	2.6	1	10/12/14	10/12/14	KWG1413817	
Toluene	ND	U	0.50	0.10	0.054	1	10/12/14	10/12/14	KWG1413817	
trans-1,3-Dichloropropene	ND	U	0.50	0.20	0.068	1	10/12/14	10/12/14	KWG1413817	
1,1,2-Trichloroethane	ND	U	0.50	0.40	0.14	1	10/12/14	10/12/14	KWG1413817	
Tetrachloroethene (PCE)	ND	U	0.50	0.20	0.099	1	10/12/14	10/12/14	KWG1413817	

Comments:

Analytical Results

Client: Sealaska Environmental Services, LLC
Project: JBLM LTM Log Center/TO-01
Sample Matrix: Water

Service Request: K1410790
Date Collected: 09/30/2014
Date Received: 10/02/2014

Volatile Organic Compounds

Sample Name: LGC140930LC101D2-1
Lab Code: K1410790-024

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
2-Hexanone	ND	U	20	10	2.7	1	10/12/14	10/12/14	KWG1413817	
1,3-Dichloropropane	ND	U	0.50	0.30	0.14	1	10/12/14	10/12/14	KWG1413817	
Dibromochloromethane	ND	U	0.50	0.50	0.14	1	10/12/14	10/12/14	KWG1413817	
1,2-Dibromoethane (EDB)	ND	U	2.0	0.20	0.10	1	10/12/14	10/12/14	KWG1413817	
Chlorobenzene	ND	U	0.50	0.20	0.11	1	10/12/14	10/12/14	KWG1413817	
Ethylbenzene	ND	U	0.50	0.10	0.050	1	10/12/14	10/12/14	KWG1413817	
1,1,1,2-Tetrachloroethane	ND	U	0.50	0.20	0.11	1	10/12/14	10/12/14	KWG1413817	
m,p-Xylenes	ND	U	0.50	0.20	0.11	1	10/12/14	10/12/14	KWG1413817	
o-Xylene	ND	U	0.50	0.20	0.074	1	10/12/14	10/12/14	KWG1413817	
Styrene	ND	U	0.50	0.20	0.089	1	10/12/14	10/12/14	KWG1413817	
Bromoform	ND	U	0.50	0.50	0.16	1	10/12/14	10/12/14	KWG1413817	
Isopropylbenzene	ND	U	2.0	0.20	0.051	1	10/12/14	10/12/14	KWG1413817	
1,1,2,2-Tetrachloroethane	ND	U	0.50	0.20	0.16	1	10/12/14	10/12/14	KWG1413817	
Bromobenzene	ND	U	2.0	0.20	0.12	1	10/12/14	10/12/14	KWG1413817	
n-Propylbenzene	ND	U	2.0	0.20	0.054	1	10/12/14	10/12/14	KWG1413817	
1,2,3-Trichloropropane	ND	U	0.50	0.50	0.20	1	10/12/14	10/12/14	KWG1413817	
2-Chlorotoluene	ND	U	2.0	0.20	0.10	1	10/12/14	10/12/14	KWG1413817	
1,3,5-Trimethylbenzene	ND	U	2.0	0.20	0.089	1	10/12/14	10/12/14	KWG1413817	
4-Chlorotoluene	ND	U	2.0	0.20	0.13	1	10/12/14	10/12/14	KWG1413817	
tert-Butylbenzene	ND	U	2.0	0.20	0.059	1	10/12/14	10/12/14	KWG1413817	
1,2,4-Trimethylbenzene	ND	U	2.0	0.20	0.069	1	10/12/14	10/12/14	KWG1413817	
sec-Butylbenzene	ND	U	2.0	0.10	0.062	1	10/12/14	10/12/14	KWG1413817	
4-Isopropyltoluene	ND	U	2.0	0.20	0.060	1	10/12/14	10/12/14	KWG1413817	
1,3-Dichlorobenzene	ND	U	0.50	0.20	0.10	1	10/12/14	10/12/14	KWG1413817	
1,4-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	10/12/14	10/12/14	KWG1413817	
n-Butylbenzene	ND	U	2.0	0.10	0.054	1	10/12/14	10/12/14	KWG1413817	
1,2-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	10/12/14	10/12/14	KWG1413817	
1,2-Dibromo-3-chloropropane	ND	U	2.0	0.80	0.20	1	10/12/14	10/12/14	KWG1413817	
1,2,4-Trichlorobenzene	ND	U	2.0	0.30	0.096	1	10/12/14	10/12/14	KWG1413817	
Hexachlorobutadiene	ND	U	2.0	0.30	0.11	1	10/12/14	10/12/14	KWG1413817	
Naphthalene	ND	U	2.0	0.30	0.088	1	10/12/14	10/12/14	KWG1413817	
1,2,3-Trichlorobenzene	ND	U	2.0	0.40	0.11	1	10/12/14	10/12/14	KWG1413817	

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1410790
Project:	JBLM LTM Log Center/TO-01	**Date Collected:**	09/30/2014
Sample Matrix:	Water	**Date Received:**	10/02/2014

Volatile Organic Compounds

Sample Name:	LGC140930LC101D2-1	**Units:**	ug/L
Lab Code:	K1410790-024	**Basis:**	NA

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Dibromofluoromethane	94	85-115	10/12/14	Acceptable
1,2-Dichloroethane-d4	100	70-120	10/12/14	Acceptable
Toluene-d8	97	85-120	10/12/14	Acceptable
4-Bromofluorobenzene	95	75-120	10/12/14	Acceptable

Comments:

Analytical Results

Client: Sealaska Environmental Services, LLC
Project: JBLM LTM Log Center/TO-01
Sample Matrix: Water

Service Request: K1410790
Date Collected: 09/30/2014
Date Received: 10/02/2014

Volatile Organic Compounds

Sample Name: LGC140930LC101D1-1
Lab Code: K1410790-025

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
Dichlorodifluoromethane	ND	U	0.50	0.20	0.13	1	10/12/14	10/12/14	KWG1413817	
Chloromethane	**0.080**	J	0.50	0.20	0.068	1	10/12/14	10/12/14	KWG1413817	
Vinyl Chloride	ND	U	0.50	0.10	0.075	1	10/12/14	10/12/14	KWG1413817	
Bromomethane	ND	U	0.50	0.30	0.10	1	10/12/14	10/12/14	KWG1413817	
Chloroethane	ND	U	0.50	0.20	0.16	1	10/12/14	10/12/14	KWG1413817	
Trichlorofluoromethane	ND	U	0.50	0.20	0.12	1	10/12/14	10/12/14	KWG1413817	
1,1-Dichloroethene	ND	U	0.50	0.20	0.080	1	10/12/14	10/12/14	KWG1413817	
Acetone	ND	U	20	10	3.3	1	10/12/14	10/12/14	KWG1413817	
Carbon Disulfide	ND	U	0.50	0.20	0.069	1	10/12/14	10/12/14	KWG1413817	
Methylene Chloride	ND	U	2.0	0.20	0.10	1	10/12/14	10/12/14	KWG1413817	
Methyl tert-Butyl Ether	ND	U	0.50	0.30	0.11	1	10/12/14	10/12/14	KWG1413817	
trans-1,2-Dichloroethene	**0.13**	J	0.50	0.20	0.072	1	10/12/14	10/12/14	KWG1413817	
1,1-Dichloroethane	ND	U	0.50	0.20	0.077	1	10/12/14	10/12/14	KWG1413817	
2,2-Dichloropropane	ND	U	0.50	0.20	0.060	1	10/12/14	10/12/14	KWG1413817	
cis-1,2-Dichloroethene	**0.57**		0.50	0.20	0.067	1	10/12/14	10/12/14	KWG1413817	
2-Butanone (MEK)	ND	U	20	4.0	1.9	1	10/12/14	10/12/14	KWG1413817	
Bromochloromethane	ND	U	0.50	0.20	0.16	1	10/12/14	10/12/14	KWG1413817	
Chloroform	ND	U	0.50	0.20	0.072	1	10/12/14	10/12/14	KWG1413817	
1,1,1-Trichloroethane (TCA)	ND	U	0.50	0.20	0.075	1	10/12/14	10/12/14	KWG1413817	
Carbon Tetrachloride	ND	U	0.50	0.20	0.096	1	10/12/14	10/12/14	KWG1413817	
1,1-Dichloropropene	ND	U	0.50	0.20	0.089	1	10/12/14	10/12/14	KWG1413817	
Benzene	ND	U	0.50	0.10	0.062	1	10/12/14	10/12/14	KWG1413817	
1,2-Dichloroethane (EDC)	ND	U	0.50	0.15	0.080	1	10/12/14	10/12/14	KWG1413817	
Trichloroethene (TCE)	**1.8**		0.50	0.10	0.10	1	10/12/14	10/12/14	KWG1413817	
1,2-Dichloropropane	ND	U	0.50	0.20	0.095	1	10/12/14	10/12/14	KWG1413817	
Dibromomethane	ND	U	0.50	0.50	0.15	1	10/12/14	10/12/14	KWG1413817	
Bromodichloromethane	ND	U	0.50	0.30	0.091	1	10/12/14	10/12/14	KWG1413817	
cis-1,3-Dichloropropene	ND	U	0.50	0.20	0.18	1	10/12/14	10/12/14	KWG1413817	
4-Methyl-2-pentanone (MIBK)	ND	U	20	10	2.6	1	10/12/14	10/12/14	KWG1413817	
Toluene	ND	U	0.50	0.10	0.054	1	10/12/14	10/12/14	KWG1413817	
trans-1,3-Dichloropropene	ND	U	0.50	0.20	0.068	1	10/12/14	10/12/14	KWG1413817	
1,1,2-Trichloroethane	ND	U	0.50	0.40	0.14	1	10/12/14	10/12/14	KWG1413817	
Tetrachloroethene (PCE)	ND	U	0.50	0.20	0.099	1	10/12/14	10/12/14	KWG1413817	

Comments:

Analytical Results

Client: Sealaska Environmental Services, LLC
Project: JBLM LTM Log Center/TO-01
Sample Matrix: Water

Service Request: K1410790
Date Collected: 09/30/2014
Date Received: 10/02/2014

Volatile Organic Compounds

Sample Name: LGC140930LC101D1-1
Lab Code: K1410790-025

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
2-Hexanone	ND	U	20	10	2.7	1	10/12/14	10/12/14	KWG1413817	
1,3-Dichloropropane	ND	U	0.50	0.30	0.14	1	10/12/14	10/12/14	KWG1413817	
Dibromochloromethane	ND	U	0.50	0.50	0.14	1	10/12/14	10/12/14	KWG1413817	
1,2-Dibromoethane (EDB)	ND	U	2.0	0.20	0.10	1	10/12/14	10/12/14	KWG1413817	
Chlorobenzene	ND	U	0.50	0.20	0.11	1	10/12/14	10/12/14	KWG1413817	
Ethylbenzene	ND	U	0.50	0.10	0.050	1	10/12/14	10/12/14	KWG1413817	
1,1,1,2-Tetrachloroethane	ND	U	0.50	0.20	0.11	1	10/12/14	10/12/14	KWG1413817	
m,p-Xylenes	ND	U	0.50	0.20	0.11	1	10/12/14	10/12/14	KWG1413817	
o-Xylene	ND	U	0.50	0.20	0.074	1	10/12/14	10/12/14	KWG1413817	
Styrene	ND	U	0.50	0.20	0.089	1	10/12/14	10/12/14	KWG1413817	
Bromoform	ND	U	0.50	0.50	0.16	1	10/12/14	10/12/14	KWG1413817	
Isopropylbenzene	ND	U	2.0	0.20	0.051	1	10/12/14	10/12/14	KWG1413817	
1,1,2,2-Tetrachloroethane	ND	U	0.50	0.20	0.16	1	10/12/14	10/12/14	KWG1413817	
Bromobenzene	ND	U	2.0	0.20	0.12	1	10/12/14	10/12/14	KWG1413817	
n-Propylbenzene	ND	U	2.0	0.20	0.054	1	10/12/14	10/12/14	KWG1413817	
1,2,3-Trichloropropane	ND	U	0.50	0.50	0.20	1	10/12/14	10/12/14	KWG1413817	
2-Chlorotoluene	ND	U	2.0	0.20	0.10	1	10/12/14	10/12/14	KWG1413817	
1,3,5-Trimethylbenzene	ND	U	2.0	0.20	0.089	1	10/12/14	10/12/14	KWG1413817	
4-Chlorotoluene	ND	U	2.0	0.20	0.13	1	10/12/14	10/12/14	KWG1413817	
tert-Butylbenzene	ND	U	2.0	0.20	0.059	1	10/12/14	10/12/14	KWG1413817	
1,2,4-Trimethylbenzene	ND	U	2.0	0.20	0.069	1	10/12/14	10/12/14	KWG1413817	
sec-Butylbenzene	ND	U	2.0	0.10	0.062	1	10/12/14	10/12/14	KWG1413817	
4-Isopropyltoluene	ND	U	2.0	0.20	0.060	1	10/12/14	10/12/14	KWG1413817	
1,3-Dichlorobenzene	ND	U	0.50	0.20	0.10	1	10/12/14	10/12/14	KWG1413817	
1,4-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	10/12/14	10/12/14	KWG1413817	
n-Butylbenzene	ND	U	2.0	0.10	0.054	1	10/12/14	10/12/14	KWG1413817	
1,2-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	10/12/14	10/12/14	KWG1413817	
1,2-Dibromo-3-chloropropane	ND	U	2.0	0.80	0.20	1	10/12/14	10/12/14	KWG1413817	
1,2,4-Trichlorobenzene	ND	U	2.0	0.30	0.096	1	10/12/14	10/12/14	KWG1413817	
Hexachlorobutadiene	ND	U	2.0	0.30	0.11	1	10/12/14	10/12/14	KWG1413817	
Naphthalene	ND	U	2.0	0.30	0.088	1	10/12/14	10/12/14	KWG1413817	
1,2,3-Trichlorobenzene	ND	U	2.0	0.40	0.11	1	10/12/14	10/12/14	KWG1413817	

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1410790
Project:	JBLM LTM Log Center/TO-01	**Date Collected:**	09/30/2014
Sample Matrix:	Water	**Date Received:**	10/02/2014

Volatile Organic Compounds

Sample Name:	LGC140930LC101D1-1	**Units:**	ug/L
Lab Code:	K1410790-025	**Basis:**	NA

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Dibromofluoromethane	96	85-115	10/12/14	Acceptable
1,2-Dichloroethane-d4	98	70-120	10/12/14	Acceptable
Toluene-d8	96	85-120	10/12/14	Acceptable
4-Bromofluorobenzene	96	75-120	10/12/14	Acceptable

Comments:

Analytical Results

Client: Sealaska Environmental Services, LLC
Project: JBLM LTM Log Center/TO-01
Sample Matrix: Water

Service Request: K1410790
Date Collected: 09/30/2014
Date Received: 10/02/2014

Volatile Organic Compounds

Sample Name: LGC140930MAMCOF2-1
Lab Code: K1410790-026

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
Dichlorodifluoromethane	ND	U	0.50	0.20	0.13	1	10/12/14	10/12/14	KWG1413817	
Chloromethane	**0.070**	J	0.50	0.20	0.068	1	10/12/14	10/12/14	KWG1413817	
Vinyl Chloride	ND	U	0.50	0.10	0.075	1	10/12/14	10/12/14	KWG1413817	
Bromomethane	ND	U	0.50	0.30	0.10	1	10/12/14	10/12/14	KWG1413817	
Chloroethane	ND	U	0.50	0.20	0.16	1	10/12/14	10/12/14	KWG1413817	
Trichlorofluoromethane	ND	U	0.50	0.20	0.12	1	10/12/14	10/12/14	KWG1413817	
1,1-Dichloroethene	ND	U	0.50	0.20	0.080	1	10/12/14	10/12/14	KWG1413817	
Acetone	ND	U	20	10	3.3	1	10/12/14	10/12/14	KWG1413817	
Carbon Disulfide	ND	U	0.50	0.20	0.069	1	10/12/14	10/12/14	KWG1413817	
Methylene Chloride	ND	U	2.0	0.20	0.10	1	10/12/14	10/12/14	KWG1413817	
Methyl tert-Butyl Ether	ND	U	0.50	0.30	0.11	1	10/12/14	10/12/14	KWG1413817	
trans-1,2-Dichloroethene	ND	U	0.50	0.20	0.072	1	10/12/14	10/12/14	KWG1413817	
1,1-Dichloroethane	ND	U	0.50	0.20	0.077	1	10/12/14	10/12/14	KWG1413817	
2,2-Dichloropropane	ND	U	0.50	0.20	0.060	1	10/12/14	10/12/14	KWG1413817	
cis-1,2-Dichloroethene	ND	U	0.50	0.20	0.067	1	10/12/14	10/12/14	KWG1413817	
2-Butanone (MEK)	ND	U	20	4.0	1.9	1	10/12/14	10/12/14	KWG1413817	
Bromochloromethane	ND	U	0.50	0.20	0.16	1	10/12/14	10/12/14	KWG1413817	
Chloroform	ND	U	0.50	0.20	0.072	1	10/12/14	10/12/14	KWG1413817	
1,1,1-Trichloroethane (TCA)	ND	U	0.50	0.20	0.075	1	10/12/14	10/12/14	KWG1413817	
Carbon Tetrachloride	ND	U	0.50	0.20	0.096	1	10/12/14	10/12/14	KWG1413817	
1,1-Dichloropropene	ND	U	0.50	0.20	0.089	1	10/12/14	10/12/14	KWG1413817	
Benzene	ND	U	0.50	0.10	0.062	1	10/12/14	10/12/14	KWG1413817	
1,2-Dichloroethane (EDC)	ND	U	0.50	0.15	0.080	1	10/12/14	10/12/14	KWG1413817	
Trichloroethene (TCE)	**0.37**	J	0.50	0.10	0.10	1	10/12/14	10/12/14	KWG1413817	
1,2-Dichloropropane	ND	U	0.50	0.20	0.095	1	10/12/14	10/12/14	KWG1413817	
Dibromomethane	ND	U	0.50	0.50	0.15	1	10/12/14	10/12/14	KWG1413817	
Bromodichloromethane	ND	U	0.50	0.30	0.091	1	10/12/14	10/12/14	KWG1413817	
cis-1,3-Dichloropropene	ND	U	0.50	0.20	0.18	1	10/12/14	10/12/14	KWG1413817	
4-Methyl-2-pentanone (MIBK)	ND	U	20	10	2.6	1	10/12/14	10/12/14	KWG1413817	
Toluene	ND	U	0.50	0.10	0.054	1	10/12/14	10/12/14	KWG1413817	
trans-1,3-Dichloropropene	ND	U	0.50	0.20	0.068	1	10/12/14	10/12/14	KWG1413817	
1,1,2-Trichloroethane	ND	U	0.50	0.40	0.14	1	10/12/14	10/12/14	KWG1413817	
Tetrachloroethene (PCE)	ND	U	0.50	0.20	0.099	1	10/12/14	10/12/14	KWG1413817	

Comments:

Analytical Results

Client: Sealaska Environmental Services, LLC
Project: JBLM LTM Log Center/TO-01
Sample Matrix: Water

Service Request: K1410790
Date Collected: 09/30/2014
Date Received: 10/02/2014

Volatile Organic Compounds

Sample Name: LGC140930MAMCOF2-1
Lab Code: K1410790-026

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
2-Hexanone	ND	U	20	10	2.7	1	10/12/14	10/12/14	KWG1413817	
1,3-Dichloropropane	ND	U	0.50	0.30	0.14	1	10/12/14	10/12/14	KWG1413817	
Dibromochloromethane	ND	U	0.50	0.50	0.14	1	10/12/14	10/12/14	KWG1413817	
1,2-Dibromoethane (EDB)	ND	U	2.0	0.20	0.10	1	10/12/14	10/12/14	KWG1413817	
Chlorobenzene	ND	U	0.50	0.20	0.11	1	10/12/14	10/12/14	KWG1413817	
Ethylbenzene	ND	U	0.50	0.10	0.050	1	10/12/14	10/12/14	KWG1413817	
1,1,1,2-Tetrachloroethane	ND	U	0.50	0.20	0.11	1	10/12/14	10/12/14	KWG1413817	
m,p-Xylenes	ND	U	0.50	0.20	0.11	1	10/12/14	10/12/14	KWG1413817	
o-Xylene	ND	U	0.50	0.20	0.074	1	10/12/14	10/12/14	KWG1413817	
Styrene	ND	U	0.50	0.20	0.089	1	10/12/14	10/12/14	KWG1413817	
Bromoform	ND	U	0.50	0.50	0.16	1	10/12/14	10/12/14	KWG1413817	
Isopropylbenzene	ND	U	2.0	0.20	0.051	1	10/12/14	10/12/14	KWG1413817	
1,1,2,2-Tetrachloroethane	ND	U	0.50	0.20	0.16	1	10/12/14	10/12/14	KWG1413817	
Bromobenzene	ND	U	2.0	0.20	0.12	1	10/12/14	10/12/14	KWG1413817	
n-Propylbenzene	ND	U	2.0	0.20	0.054	1	10/12/14	10/12/14	KWG1413817	
1,2,3-Trichloropropane	ND	U	0.50	0.50	0.20	1	10/12/14	10/12/14	KWG1413817	
2-Chlorotoluene	ND	U	2.0	0.20	0.10	1	10/12/14	10/12/14	KWG1413817	
1,3,5-Trimethylbenzene	ND	U	2.0	0.20	0.089	1	10/12/14	10/12/14	KWG1413817	
4-Chlorotoluene	ND	U	2.0	0.20	0.13	1	10/12/14	10/12/14	KWG1413817	
tert-Butylbenzene	ND	U	2.0	0.20	0.059	1	10/12/14	10/12/14	KWG1413817	
1,2,4-Trimethylbenzene	ND	U	2.0	0.20	0.069	1	10/12/14	10/12/14	KWG1413817	
sec-Butylbenzene	ND	U	2.0	0.10	0.062	1	10/12/14	10/12/14	KWG1413817	
4-Isopropyltoluene	ND	U	2.0	0.20	0.060	1	10/12/14	10/12/14	KWG1413817	
1,3-Dichlorobenzene	ND	U	0.50	0.20	0.10	1	10/12/14	10/12/14	KWG1413817	
1,4-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	10/12/14	10/12/14	KWG1413817	
n-Butylbenzene	ND	U	2.0	0.10	0.054	1	10/12/14	10/12/14	KWG1413817	
1,2-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	10/12/14	10/12/14	KWG1413817	
1,2-Dibromo-3-chloropropane	ND	U	2.0	0.80	0.20	1	10/12/14	10/12/14	KWG1413817	
1,2,4-Trichlorobenzene	ND	U	2.0	0.30	0.096	1	10/12/14	10/12/14	KWG1413817	
Hexachlorobutadiene	ND	U	2.0	0.30	0.11	1	10/12/14	10/12/14	KWG1413817	
Naphthalene	ND	U	2.0	0.30	0.088	1	10/12/14	10/12/14	KWG1413817	
1,2,3-Trichlorobenzene	ND	U	2.0	0.40	0.11	1	10/12/14	10/12/14	KWG1413817	

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1410790
Project:	JBLM LTM Log Center/TO-01	**Date Collected:**	09/30/2014
Sample Matrix:	Water	**Date Received:**	10/02/2014

Volatile Organic Compounds

Sample Name:	LGC140930MAMCOF2-1	**Units:**	ug/L
Lab Code:	K1410790-026	**Basis:**	NA

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Dibromofluoromethane	94	85-115	10/12/14	Acceptable
1,2-Dichloroethane-d4	99	70-120	10/12/14	Acceptable
Toluene-d8	96	85-120	10/12/14	Acceptable
4-Bromofluorobenzene	97	75-120	10/12/14	Acceptable

Comments:

Analytical Results

Client: Sealaska Environmental Services, LLC
Project: JBLM LTM Log Center/TO-01
Sample Matrix: Water

Service Request: K1410790
Date Collected: 09/30/2014
Date Received: 10/02/2014

Volatile Organic Compounds

Sample Name: LGC140930LC109-1
Lab Code: K1410790-027

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
Dichlorodifluoromethane	ND	U	0.50	0.20	0.13	1	10/13/14	10/13/14	KWG1413833	
Chloromethane	**0.070**	J	0.50	0.20	0.068	1	10/13/14	10/13/14	KWG1413833	
Vinyl Chloride	ND	U	0.50	0.10	0.075	1	10/13/14	10/13/14	KWG1413833	
Bromomethane	ND	U	0.50	0.30	0.10	1	10/13/14	10/13/14	KWG1413833	
Chloroethane	ND	U	0.50	0.20	0.16	1	10/13/14	10/13/14	KWG1413833	
Trichlorofluoromethane	ND	U	0.50	0.20	0.12	1	10/13/14	10/13/14	KWG1413833	
1,1-Dichloroethene	ND	U	0.50	0.20	0.080	1	10/13/14	10/13/14	KWG1413833	
Acetone	**3.5**	J	20	10	3.3	1	10/13/14	10/13/14	KWG1413833	
Carbon Disulfide	ND	U	0.50	0.20	0.069	1	10/13/14	10/13/14	KWG1413833	
Methylene Chloride	ND	U	2.0	0.20	0.10	1	10/13/14	10/13/14	KWG1413833	
Methyl tert-Butyl Ether	ND	U	0.50	0.30	0.11	1	10/13/14	10/13/14	KWG1413833	
trans-1,2-Dichloroethene	ND	U	0.50	0.20	0.072	1	10/13/14	10/13/14	KWG1413833	
1,1-Dichloroethane	ND	U	0.50	0.20	0.077	1	10/13/14	10/13/14	KWG1413833	
2,2-Dichloropropane	ND	U	0.50	0.20	0.060	1	10/13/14	10/13/14	KWG1413833	
cis-1,2-Dichloroethene	**0.17**	J	0.50	0.20	0.067	1	10/13/14	10/13/14	KWG1413833	
2-Butanone (MEK)	ND	U	20	4.0	1.9	1	10/13/14	10/13/14	KWG1413833	
Bromochloromethane	ND	U	0.50	0.20	0.16	1	10/13/14	10/13/14	KWG1413833	
Chloroform	ND	U	0.50	0.20	0.072	1	10/13/14	10/13/14	KWG1413833	
1,1,1-Trichloroethane (TCA)	ND	U	0.50	0.20	0.075	1	10/13/14	10/13/14	KWG1413833	
Carbon Tetrachloride	ND	U	0.50	0.20	0.096	1	10/13/14	10/13/14	KWG1413833	
1,1-Dichloropropene	ND	U	0.50	0.20	0.089	1	10/13/14	10/13/14	KWG1413833	
Benzene	ND	U	0.50	0.10	0.062	1	10/13/14	10/13/14	KWG1413833	*
1,2-Dichloroethane (EDC)	ND	U	0.50	0.15	0.080	1	10/13/14	10/13/14	KWG1413833	
Trichloroethene (TCE)	**1.3**		0.50	0.10	0.10	1	10/13/14	10/13/14	KWG1413833	
1,2-Dichloropropane	ND	U	0.50	0.20	0.095	1	10/13/14	10/13/14	KWG1413833	
Dibromomethane	ND	U	0.50	0.50	0.15	1	10/13/14	10/13/14	KWG1413833	
Bromodichloromethane	ND	U	0.50	0.30	0.091	1	10/13/14	10/13/14	KWG1413833	
cis-1,3-Dichloropropene	ND	U	0.50	0.20	0.18	1	10/13/14	10/13/14	KWG1413833	
4-Methyl-2-pentanone (MIBK)	ND	U	20	10	2.6	1	10/13/14	10/13/14	KWG1413833	
Toluene	ND	U	0.50	0.10	0.054	1	10/13/14	10/13/14	KWG1413833	
trans-1,3-Dichloropropene	ND	U	0.50	0.20	0.068	1	10/13/14	10/13/14	KWG1413833	
1,1,2-Trichloroethane	ND	U	0.50	0.40	0.14	1	10/13/14	10/13/14	KWG1413833	
Tetrachloroethene (PCE)	ND	U	0.50	0.20	0.099	1	10/13/14	10/13/14	KWG1413833	

Comments:

Analytical Results

Client: Sealaska Environmental Services, LLC
Project: JBLM LTM Log Center/TO-01
Sample Matrix: Water

Service Request: K1410790
Date Collected: 09/30/2014
Date Received: 10/02/2014

Volatile Organic Compounds

Sample Name: LGC140930LC109-1
Lab Code: K1410790-027

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
2-Hexanone	ND	U	20	10	2.7	1	10/13/14	10/13/14	KWG1413833	
1,3-Dichloropropane	ND	U	0.50	0.30	0.14	1	10/13/14	10/13/14	KWG1413833	
Dibromochloromethane	ND	U	0.50	0.50	0.14	1	10/13/14	10/13/14	KWG1413833	
1,2-Dibromoethane (EDB)	ND	U	2.0	0.20	0.10	1	10/13/14	10/13/14	KWG1413833	
Chlorobenzene	ND	U	0.50	0.20	0.11	1	10/13/14	10/13/14	KWG1413833	
Ethylbenzene	ND	U	0.50	0.10	0.050	1	10/13/14	10/13/14	KWG1413833	
1,1,1,2-Tetrachloroethane	ND	U	0.50	0.20	0.11	1	10/13/14	10/13/14	KWG1413833	
m,p-Xylenes	ND	U	0.50	0.20	0.11	1	10/13/14	10/13/14	KWG1413833	
o-Xylene	ND	U	0.50	0.20	0.074	1	10/13/14	10/13/14	KWG1413833	
Styrene	ND	U	0.50	0.20	0.089	1	10/13/14	10/13/14	KWG1413833	
Bromoform	ND	U	0.50	0.50	0.16	1	10/13/14	10/13/14	KWG1413833	
Isopropylbenzene	ND	U	2.0	0.20	0.051	1	10/13/14	10/13/14	KWG1413833	
1,1,2,2-Tetrachloroethane	ND	U	0.50	0.20	0.16	1	10/13/14	10/13/14	KWG1413833	
Bromobenzene	ND	U	2.0	0.20	0.12	1	10/13/14	10/13/14	KWG1413833	
n-Propylbenzene	ND	U	2.0	0.20	0.054	1	10/13/14	10/13/14	KWG1413833	
1,2,3-Trichloropropane	ND	U	0.50	0.50	0.20	1	10/13/14	10/13/14	KWG1413833	
2-Chlorotoluene	ND	U	2.0	0.20	0.10	1	10/13/14	10/13/14	KWG1413833	
1,3,5-Trimethylbenzene	ND	U	2.0	0.20	0.089	1	10/13/14	10/13/14	KWG1413833	
4-Chlorotoluene	ND	U	2.0	0.20	0.13	1	10/13/14	10/13/14	KWG1413833	
tert-Butylbenzene	ND	U	2.0	0.20	0.059	1	10/13/14	10/13/14	KWG1413833	
1,2,4-Trimethylbenzene	ND	U	2.0	0.20	0.069	1	10/13/14	10/13/14	KWG1413833	
sec-Butylbenzene	ND	U	2.0	0.10	0.062	1	10/13/14	10/13/14	KWG1413833	
4-Isopropyltoluene	ND	U	2.0	0.20	0.060	1	10/13/14	10/13/14	KWG1413833	
1,3-Dichlorobenzene	ND	U	0.50	0.20	0.10	1	10/13/14	10/13/14	KWG1413833	
1,4-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	10/13/14	10/13/14	KWG1413833	
n-Butylbenzene	ND	U	2.0	0.10	0.054	1	10/13/14	10/13/14	KWG1413833	
1,2-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	10/13/14	10/13/14	KWG1413833	
1,2-Dibromo-3-chloropropane	ND	U	2.0	0.80	0.20	1	10/13/14	10/13/14	KWG1413833	
1,2,4-Trichlorobenzene	ND	U	2.0	0.30	0.096	1	10/13/14	10/13/14	KWG1413833	
Hexachlorobutadiene	ND	U	2.0	0.30	0.11	1	10/13/14	10/13/14	KWG1413833	
Naphthalene	ND	U	2.0	0.30	0.088	1	10/13/14	10/13/14	KWG1413833	
1,2,3-Trichlorobenzene	ND	U	2.0	0.40	0.11	1	10/13/14	10/13/14	KWG1413833	

* See Case Narrative

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1410790
Project:	JBLM LTM Log Center/TO-01	**Date Collected:**	09/30/2014
Sample Matrix:	Water	**Date Received:**	10/02/2014

Volatile Organic Compounds

Sample Name:	LGC140930LC109-1	**Units:**	ug/L
Lab Code:	K1410790-027	**Basis:**	NA

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Dibromofluoromethane	95	85-115	10/13/14	Acceptable
1,2-Dichloroethane-d4	99	70-120	10/13/14	Acceptable
Toluene-d8	97	85-120	10/13/14	Acceptable
4-Bromofluorobenzene	97	75-120	10/13/14	Acceptable

Comments:

Analytical Results

Client: Sealaska Environmental Services, LLC
Project: JBLM LTM Log Center/TO-01
Sample Matrix: Water

Service Request: K1410790
Date Collected: 09/30/2014
Date Received: 10/02/2014

Volatile Organic Compounds

Sample Name: LGC140930LC03-1
Lab Code: K1410790-028

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
Dichlorodifluoromethane	ND	U	0.50	0.20	0.13	1	10/13/14	10/13/14	KWG1413840	
Chloromethane	**0.070**	J	0.50	0.20	0.068	1	10/13/14	10/13/14	KWG1413840	*
Vinyl Chloride	ND	U	0.50	0.10	0.075	1	10/13/14	10/13/14	KWG1413840	
Bromomethane	ND	U	0.50	0.30	0.10	1	10/13/14	10/13/14	KWG1413840	*
Chloroethane	ND	U	0.50	0.20	0.16	1	10/13/14	10/13/14	KWG1413840	
Trichlorofluoromethane	ND	U	0.50	0.20	0.12	1	10/13/14	10/13/14	KWG1413840	
1,1-Dichloroethene	ND	U	0.50	0.20	0.080	1	10/13/14	10/13/14	KWG1413840	
Acetone	ND	U	20	10	3.3	1	10/13/14	10/13/14	KWG1413840	*
Carbon Disulfide	**0.070**	J	0.50	0.20	0.069	1	10/13/14	10/13/14	KWG1413840	
Methylene Chloride	ND	U	2.0	0.20	0.10	1	10/13/14	10/13/14	KWG1413840	
Methyl tert-Butyl Ether	ND	U	0.50	0.30	0.11	1	10/13/14	10/13/14	KWG1413840	
trans-1,2-Dichloroethene	ND	U	0.50	0.20	0.072	1	10/13/14	10/13/14	KWG1413840	
1,1-Dichloroethane	ND	U	0.50	0.20	0.077	1	10/13/14	10/13/14	KWG1413840	
2,2-Dichloropropane	ND	U	0.50	0.20	0.060	1	10/13/14	10/13/14	KWG1413840	
cis-1,2-Dichloroethene	ND	U	0.50	0.20	0.067	1	10/13/14	10/13/14	KWG1413840	
2-Butanone (MEK)	ND	U	20	4.0	1.9	1	10/13/14	10/13/14	KWG1413840	
Bromochloromethane	ND	U	0.50	0.20	0.16	1	10/13/14	10/13/14	KWG1413840	
Chloroform	**0.10**	J	0.50	0.20	0.072	1	10/13/14	10/13/14	KWG1413840	
1,1,1-Trichloroethane (TCA)	ND	U	0.50	0.20	0.075	1	10/13/14	10/13/14	KWG1413840	
Carbon Tetrachloride	ND	U	0.50	0.20	0.096	1	10/13/14	10/13/14	KWG1413840	
1,1-Dichloropropene	ND	U	0.50	0.20	0.089	1	10/13/14	10/13/14	KWG1413840	
Benzene	ND	U	0.50	0.10	0.062	1	10/13/14	10/13/14	KWG1413840	
1,2-Dichloroethane (EDC)	ND	U	0.50	0.15	0.080	1	10/13/14	10/13/14	KWG1413840	
Trichloroethene (TCE)	**1.2**		0.50	0.10	0.10	1	10/13/14	10/13/14	KWG1413840	
1,2-Dichloropropane	ND	U	0.50	0.20	0.095	1	10/13/14	10/13/14	KWG1413840	
Dibromomethane	ND	U	0.50	0.50	0.15	1	10/13/14	10/13/14	KWG1413840	
Bromodichloromethane	ND	U	0.50	0.30	0.091	1	10/13/14	10/13/14	KWG1413840	
cis-1,3-Dichloropropene	ND	U	0.50	0.20	0.18	1	10/13/14	10/13/14	KWG1413840	
4-Methyl-2-pentanone (MIBK)	ND	U	20	10	2.6	1	10/13/14	10/13/14	KWG1413840	*
Toluene	ND	U	0.50	0.10	0.054	1	10/13/14	10/13/14	KWG1413840	
trans-1,3-Dichloropropene	ND	U	0.50	0.20	0.068	1	10/13/14	10/13/14	KWG1413840	
1,1,2-Trichloroethane	ND	U	0.50	0.40	0.14	1	10/13/14	10/13/14	KWG1413840	
Tetrachloroethene (PCE)	ND	U	0.50	0.20	0.099	1	10/13/14	10/13/14	KWG1413840	

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1410790
Project:	JBLM LTM Log Center/TO-01	**Date Collected:**	09/30/2014
Sample Matrix:	Water	**Date Received:**	10/02/2014

Volatile Organic Compounds

Sample Name:	LGC140930LC03-1	**Units:**	ug/L
Lab Code:	K1410790-028	**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
2-Hexanone	ND	U	20	10	2.7	1	10/13/14	10/13/14	KWG1413840	
1,3-Dichloropropane	ND	U	0.50	0.30	0.14	1	10/13/14	10/13/14	KWG1413840	
Dibromochloromethane	ND	U	0.50	0.50	0.14	1	10/13/14	10/13/14	KWG1413840	
1,2-Dibromoethane (EDB)	ND	U	2.0	0.20	0.10	1	10/13/14	10/13/14	KWG1413840	
Chlorobenzene	ND	U	0.50	0.20	0.11	1	10/13/14	10/13/14	KWG1413840	
Ethylbenzene	ND	U	0.50	0.10	0.050	1	10/13/14	10/13/14	KWG1413840	
1,1,1,2-Tetrachloroethane	ND	U	0.50	0.20	0.11	1	10/13/14	10/13/14	KWG1413840	
m,p-Xylenes	ND	U	0.50	0.20	0.11	1	10/13/14	10/13/14	KWG1413840	
o-Xylene	ND	U	0.50	0.20	0.074	1	10/13/14	10/13/14	KWG1413840	
Styrene	ND	U	0.50	0.20	0.089	1	10/13/14	10/13/14	KWG1413840	
Bromoform	ND	U	0.50	0.50	0.16	1	10/13/14	10/13/14	KWG1413840	
Isopropylbenzene	ND	U	2.0	0.20	0.051	1	10/13/14	10/13/14	KWG1413840	
1,1,2,2-Tetrachloroethane	ND	U	0.50	0.20	0.16	1	10/13/14	10/13/14	KWG1413840	
Bromobenzene	ND	U	2.0	0.20	0.12	1	10/13/14	10/13/14	KWG1413840	
n-Propylbenzene	ND	U	2.0	0.20	0.054	1	10/13/14	10/13/14	KWG1413840	
1,2,3-Trichloropropane	ND	U	0.50	0.50	0.20	1	10/13/14	10/13/14	KWG1413840	
2-Chlorotoluene	ND	U	2.0	0.20	0.10	1	10/13/14	10/13/14	KWG1413840	
1,3,5-Trimethylbenzene	ND	U	2.0	0.20	0.089	1	10/13/14	10/13/14	KWG1413840	
4-Chlorotoluene	ND	U	2.0	0.20	0.13	1	10/13/14	10/13/14	KWG1413840	
tert-Butylbenzene	ND	U	2.0	0.20	0.059	1	10/13/14	10/13/14	KWG1413840	
1,2,4-Trimethylbenzene	ND	U	2.0	0.20	0.069	1	10/13/14	10/13/14	KWG1413840	
sec-Butylbenzene	ND	U	2.0	0.10	0.062	1	10/13/14	10/13/14	KWG1413840	
4-Isopropyltoluene	ND	U	2.0	0.20	0.060	1	10/13/14	10/13/14	KWG1413840	
1,3-Dichlorobenzene	ND	U	0.50	0.20	0.10	1	10/13/14	10/13/14	KWG1413840	
1,4-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	10/13/14	10/13/14	KWG1413840	
n-Butylbenzene	ND	U	2.0	0.10	0.054	1	10/13/14	10/13/14	KWG1413840	
1,2-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	10/13/14	10/13/14	KWG1413840	
1,2-Dibromo-3-chloropropane	ND	U	2.0	0.80	0.20	1	10/13/14	10/13/14	KWG1413840	
1,2,4-Trichlorobenzene	ND	U	2.0	0.30	0.096	1	10/13/14	10/13/14	KWG1413840	
Hexachlorobutadiene	ND	U	2.0	0.30	0.11	1	10/13/14	10/13/14	KWG1413840	
Naphthalene	ND	U	2.0	0.30	0.088	1	10/13/14	10/13/14	KWG1413840	
1,2,3-Trichlorobenzene	ND	U	2.0	0.40	0.11	1	10/13/14	10/13/14	KWG1413840	

* See Case Narrative

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1410790
Project:	JBLM LTM Log Center/TO-01	**Date Collected:**	09/30/2014
Sample Matrix:	Water	**Date Received:**	10/02/2014

Volatile Organic Compounds

Sample Name:	LGC140930LC03-1	**Units:**	ug/L
Lab Code:	K1410790-028	**Basis:**	NA

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Dibromofluoromethane	101	85-115	10/13/14	Acceptable
1,2-Dichloroethane-d4	88	70-120	10/13/14	Acceptable
Toluene-d8	97	85-120	10/13/14	Acceptable
4-Bromofluorobenzene	96	75-120	10/13/14	Acceptable

Comments:

Analytical Results

Client: Sealaska Environmental Services, LLC
Project: JBLM LTM Log Center/TO-01
Sample Matrix: Water

Service Request: K1410790
Date Collected: 09/30/2014
Date Received: 10/02/2014

Volatile Organic Compounds

Sample Name: LGC140930DUP9-1
Lab Code: K1410790-029

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
Dichlorodifluoromethane	ND	U	0.50	0.20	0.13	1	10/13/14	10/13/14	KWG1413840	
Chloromethane	ND	U	0.50	0.20	0.068	1	10/13/14	10/13/14	KWG1413840	*
Vinyl Chloride	ND	U	0.50	0.10	0.075	1	10/13/14	10/13/14	KWG1413840	
Bromomethane	ND	U	0.50	0.30	0.10	1	10/13/14	10/13/14	KWG1413840	*
Chloroethane	ND	U	0.50	0.20	0.16	1	10/13/14	10/13/14	KWG1413840	
Trichlorofluoromethane	ND	U	0.50	0.20	0.12	1	10/13/14	10/13/14	KWG1413840	
1,1-Dichloroethene	ND	U	0.50	0.20	0.080	1	10/13/14	10/13/14	KWG1413840	
Acetone	ND	U	20	10	3.3	1	10/13/14	10/13/14	KWG1413840	*
Carbon Disulfide	**0.070**	J	0.50	0.20	0.069	1	10/13/14	10/13/14	KWG1413840	
Methylene Chloride	ND	U	2.0	0.20	0.10	1	10/13/14	10/13/14	KWG1413840	
Methyl tert-Butyl Ether	ND	U	0.50	0.30	0.11	1	10/13/14	10/13/14	KWG1413840	
trans-1,2-Dichloroethene	ND	U	0.50	0.20	0.072	1	10/13/14	10/13/14	KWG1413840	
1,1-Dichloroethane	ND	U	0.50	0.20	0.077	1	10/13/14	10/13/14	KWG1413840	
2,2-Dichloropropane	ND	U	0.50	0.20	0.060	1	10/13/14	10/13/14	KWG1413840	
cis-1,2-Dichloroethene	ND	U	0.50	0.20	0.067	1	10/13/14	10/13/14	KWG1413840	
2-Butanone (MEK)	ND	U	20	4.0	1.9	1	10/13/14	10/13/14	KWG1413840	
Bromochloromethane	ND	U	0.50	0.20	0.16	1	10/13/14	10/13/14	KWG1413840	
Chloroform	**0.10**	J	0.50	0.20	0.072	1	10/13/14	10/13/14	KWG1413840	
1,1,1-Trichloroethane (TCA)	ND	U	0.50	0.20	0.075	1	10/13/14	10/13/14	KWG1413840	
Carbon Tetrachloride	ND	U	0.50	0.20	0.096	1	10/13/14	10/13/14	KWG1413840	
1,1-Dichloropropene	ND	U	0.50	0.20	0.089	1	10/13/14	10/13/14	KWG1413840	
Benzene	ND	U	0.50	0.10	0.062	1	10/13/14	10/13/14	KWG1413840	
1,2-Dichloroethane (EDC)	ND	U	0.50	0.15	0.080	1	10/13/14	10/13/14	KWG1413840	
Trichloroethene (TCE)	**1.1**		0.50	0.10	0.10	1	10/13/14	10/13/14	KWG1413840	
1,2-Dichloropropane	ND	U	0.50	0.20	0.095	1	10/13/14	10/13/14	KWG1413840	
Dibromomethane	ND	U	0.50	0.50	0.15	1	10/13/14	10/13/14	KWG1413840	
Bromodichloromethane	ND	U	0.50	0.30	0.091	1	10/13/14	10/13/14	KWG1413840	
cis-1,3-Dichloropropene	ND	U	0.50	0.20	0.18	1	10/13/14	10/13/14	KWG1413840	
4-Methyl-2-pentanone (MIBK)	ND	U	20	10	2.6	1	10/13/14	10/13/14	KWG1413840	*
Toluene	ND	U	0.50	0.10	0.054	1	10/13/14	10/13/14	KWG1413840	
trans-1,3-Dichloropropene	ND	U	0.50	0.20	0.068	1	10/13/14	10/13/14	KWG1413840	
1,1,2-Trichloroethane	ND	U	0.50	0.40	0.14	1	10/13/14	10/13/14	KWG1413840	
Tetrachloroethene (PCE)	ND	U	0.50	0.20	0.099	1	10/13/14	10/13/14	KWG1413840	

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1410790
Project:	JBLM LTM Log Center/TO-01	**Date Collected:**	09/30/2014
Sample Matrix:	Water	**Date Received:**	10/02/2014

Volatile Organic Compounds

Sample Name:	LGC140930DUP9-1	**Units:**	ug/L
Lab Code:	K1410790-029	**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
2-Hexanone	ND	U	20	10	2.7	1	10/13/14	10/13/14	KWG1413840	
1,3-Dichloropropane	ND	U	0.50	0.30	0.14	1	10/13/14	10/13/14	KWG1413840	
Dibromochloromethane	ND	U	0.50	0.50	0.14	1	10/13/14	10/13/14	KWG1413840	
1,2-Dibromoethane (EDB)	ND	U	2.0	0.20	0.10	1	10/13/14	10/13/14	KWG1413840	
Chlorobenzene	ND	U	0.50	0.20	0.11	1	10/13/14	10/13/14	KWG1413840	
Ethylbenzene	ND	U	0.50	0.10	0.050	1	10/13/14	10/13/14	KWG1413840	
1,1,1,2-Tetrachloroethane	ND	U	0.50	0.20	0.11	1	10/13/14	10/13/14	KWG1413840	
m,p-Xylenes	ND	U	0.50	0.20	0.11	1	10/13/14	10/13/14	KWG1413840	
o-Xylene	ND	U	0.50	0.20	0.074	1	10/13/14	10/13/14	KWG1413840	
Styrene	ND	U	0.50	0.20	0.089	1	10/13/14	10/13/14	KWG1413840	
Bromoform	ND	U	0.50	0.50	0.16	1	10/13/14	10/13/14	KWG1413840	
Isopropylbenzene	ND	U	2.0	0.20	0.051	1	10/13/14	10/13/14	KWG1413840	
1,1,2,2-Tetrachloroethane	ND	U	0.50	0.20	0.16	1	10/13/14	10/13/14	KWG1413840	
Bromobenzene	ND	U	2.0	0.20	0.12	1	10/13/14	10/13/14	KWG1413840	
n-Propylbenzene	ND	U	2.0	0.20	0.054	1	10/13/14	10/13/14	KWG1413840	
1,2,3-Trichloropropane	ND	U	0.50	0.50	0.20	1	10/13/14	10/13/14	KWG1413840	
2-Chlorotoluene	ND	U	2.0	0.20	0.10	1	10/13/14	10/13/14	KWG1413840	
1,3,5-Trimethylbenzene	ND	U	2.0	0.20	0.089	1	10/13/14	10/13/14	KWG1413840	
4-Chlorotoluene	ND	U	2.0	0.20	0.13	1	10/13/14	10/13/14	KWG1413840	
tert-Butylbenzene	ND	U	2.0	0.20	0.059	1	10/13/14	10/13/14	KWG1413840	
1,2,4-Trimethylbenzene	ND	U	2.0	0.20	0.069	1	10/13/14	10/13/14	KWG1413840	
sec-Butylbenzene	ND	U	2.0	0.10	0.062	1	10/13/14	10/13/14	KWG1413840	
4-Isopropyltoluene	ND	U	2.0	0.20	0.060	1	10/13/14	10/13/14	KWG1413840	
1,3-Dichlorobenzene	ND	U	0.50	0.20	0.10	1	10/13/14	10/13/14	KWG1413840	
1,4-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	10/13/14	10/13/14	KWG1413840	
n-Butylbenzene	ND	U	2.0	0.10	0.054	1	10/13/14	10/13/14	KWG1413840	
1,2-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	10/13/14	10/13/14	KWG1413840	
1,2-Dibromo-3-chloropropane	ND	U	2.0	0.80	0.20	1	10/13/14	10/13/14	KWG1413840	
1,2,4-Trichlorobenzene	ND	U	2.0	0.30	0.096	1	10/13/14	10/13/14	KWG1413840	
Hexachlorobutadiene	ND	U	2.0	0.30	0.11	1	10/13/14	10/13/14	KWG1413840	
Naphthalene	ND	U	2.0	0.30	0.088	1	10/13/14	10/13/14	KWG1413840	
1,2,3-Trichlorobenzene	ND	U	2.0	0.40	0.11	1	10/13/14	10/13/14	KWG1413840	

* See Case Narrative

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1410790
Project:	JBLM LTM Log Center/TO-01	**Date Collected:**	09/30/2014
Sample Matrix:	Water	**Date Received:**	10/02/2014

Volatile Organic Compounds

Sample Name:	LGC140930DUP9-1	**Units:**	ug/L
Lab Code:	K1410790-029	**Basis:**	NA

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Dibromofluoromethane	102	85-115	10/13/14	Acceptable
1,2-Dichloroethane-d4	89	70-120	10/13/14	Acceptable
Toluene-d8	97	85-120	10/13/14	Acceptable
4-Bromofluorobenzene	97	75-120	10/13/14	Acceptable

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1410790
Project:	JBLM LTM Log Center/TO-01	**Date Collected:**	09/30/2014
Sample Matrix:	Water	**Date Received:**	10/02/2014

Volatile Organic Compounds

Sample Name:	LGC140930LC182-1	**Units:**	ug/L
Lab Code:	K1410790-030	**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
Dichlorodifluoromethane	ND	U	0.50	0.20	0.13	1	10/13/14	10/13/14	KWG1413840	
Chloromethane	**0.090**	J	0.50	0.20	0.068	1	10/13/14	10/13/14	KWG1413840	*
Vinyl Chloride	ND	U	0.50	0.10	0.075	1	10/13/14	10/13/14	KWG1413840	
Bromomethane	ND	U	0.50	0.30	0.10	1	10/13/14	10/13/14	KWG1413840	*
Chloroethane	ND	U	0.50	0.20	0.16	1	10/13/14	10/13/14	KWG1413840	
Trichlorofluoromethane	ND	U	0.50	0.20	0.12	1	10/13/14	10/13/14	KWG1413840	
1,1-Dichloroethene	ND	U	0.50	0.20	0.080	1	10/13/14	10/13/14	KWG1413840	
Acetone	ND	U	20	10	3.3	1	10/13/14	10/13/14	KWG1413840	*
Carbon Disulfide	ND	U	0.50	0.20	0.069	1	10/13/14	10/13/14	KWG1413840	
Methylene Chloride	ND	U	2.0	0.20	0.10	1	10/13/14	10/13/14	KWG1413840	
Methyl tert-Butyl Ether	ND	U	0.50	0.30	0.11	1	10/13/14	10/13/14	KWG1413840	
trans-1,2-Dichloroethene	ND	U	0.50	0.20	0.072	1	10/13/14	10/13/14	KWG1413840	
1,1-Dichloroethane	ND	U	0.50	0.20	0.077	1	10/13/14	10/13/14	KWG1413840	
2,2-Dichloropropane	ND	U	0.50	0.20	0.060	1	10/13/14	10/13/14	KWG1413840	
cis-1,2-Dichloroethene	ND	U	0.50	0.20	0.067	1	10/13/14	10/13/14	KWG1413840	
2-Butanone (MEK)	ND	U	20	4.0	1.9	1	10/13/14	10/13/14	KWG1413840	
Bromochloromethane	ND	U	0.50	0.20	0.16	1	10/13/14	10/13/14	KWG1413840	
Chloroform	ND	U	0.50	0.20	0.072	1	10/13/14	10/13/14	KWG1413840	
1,1,1-Trichloroethane (TCA)	ND	U	0.50	0.20	0.075	1	10/13/14	10/13/14	KWG1413840	
Carbon Tetrachloride	ND	U	0.50	0.20	0.096	1	10/13/14	10/13/14	KWG1413840	
1,1-Dichloropropene	ND	U	0.50	0.20	0.089	1	10/13/14	10/13/14	KWG1413840	
Benzene	ND	U	0.50	0.10	0.062	1	10/13/14	10/13/14	KWG1413840	
1,2-Dichloroethane (EDC)	ND	U	0.50	0.15	0.080	1	10/13/14	10/13/14	KWG1413840	
Trichloroethene (TCE)	ND	U	0.50	0.10	0.10	1	10/13/14	10/13/14	KWG1413840	
1,2-Dichloropropane	ND	U	0.50	0.20	0.095	1	10/13/14	10/13/14	KWG1413840	
Dibromomethane	ND	U	0.50	0.50	0.15	1	10/13/14	10/13/14	KWG1413840	
Bromodichloromethane	ND	U	0.50	0.30	0.091	1	10/13/14	10/13/14	KWG1413840	
cis-1,3-Dichloropropene	ND	U	0.50	0.20	0.18	1	10/13/14	10/13/14	KWG1413840	
4-Methyl-2-pentanone (MIBK)	ND	U	20	10	2.6	1	10/13/14	10/13/14	KWG1413840	*
Toluene	ND	U	0.50	0.10	0.054	1	10/13/14	10/13/14	KWG1413840	
trans-1,3-Dichloropropene	ND	U	0.50	0.20	0.068	1	10/13/14	10/13/14	KWG1413840	
1,1,2-Trichloroethane	ND	U	0.50	0.40	0.14	1	10/13/14	10/13/14	KWG1413840	
Tetrachloroethene (PCE)	ND	U	0.50	0.20	0.099	1	10/13/14	10/13/14	KWG1413840	

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1410790
Project:	JBLM LTM Log Center/TO-01	**Date Collected:**	09/30/2014
Sample Matrix:	Water	**Date Received:**	10/02/2014

Volatile Organic Compounds

Sample Name:	LGC140930LC182-1	**Units:**	ug/L
Lab Code:	K1410790-030	**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
2-Hexanone	ND	U	20	10	2.7	1	10/13/14	10/13/14	KWG1413840	
1,3-Dichloropropane	ND	U	0.50	0.30	0.14	1	10/13/14	10/13/14	KWG1413840	
Dibromochloromethane	ND	U	0.50	0.50	0.14	1	10/13/14	10/13/14	KWG1413840	
1,2-Dibromoethane (EDB)	ND	U	2.0	0.20	0.10	1	10/13/14	10/13/14	KWG1413840	
Chlorobenzene	ND	U	0.50	0.20	0.11	1	10/13/14	10/13/14	KWG1413840	
Ethylbenzene	ND	U	0.50	0.10	0.050	1	10/13/14	10/13/14	KWG1413840	
1,1,1,2-Tetrachloroethane	ND	U	0.50	0.20	0.11	1	10/13/14	10/13/14	KWG1413840	
m,p-Xylenes	ND	U	0.50	0.20	0.11	1	10/13/14	10/13/14	KWG1413840	
o-Xylene	ND	U	0.50	0.20	0.074	1	10/13/14	10/13/14	KWG1413840	
Styrene	ND	U	0.50	0.20	0.089	1	10/13/14	10/13/14	KWG1413840	
Bromoform	ND	U	0.50	0.50	0.16	1	10/13/14	10/13/14	KWG1413840	
Isopropylbenzene	ND	U	2.0	0.20	0.051	1	10/13/14	10/13/14	KWG1413840	
1,1,2,2-Tetrachloroethane	ND	U	0.50	0.20	0.16	1	10/13/14	10/13/14	KWG1413840	
Bromobenzene	ND	U	2.0	0.20	0.12	1	10/13/14	10/13/14	KWG1413840	
n-Propylbenzene	ND	U	2.0	0.20	0.054	1	10/13/14	10/13/14	KWG1413840	
1,2,3-Trichloropropane	ND	U	0.50	0.50	0.20	1	10/13/14	10/13/14	KWG1413840	
2-Chlorotoluene	ND	U	2.0	0.20	0.10	1	10/13/14	10/13/14	KWG1413840	
1,3,5-Trimethylbenzene	ND	U	2.0	0.20	0.089	1	10/13/14	10/13/14	KWG1413840	
4-Chlorotoluene	ND	U	2.0	0.20	0.13	1	10/13/14	10/13/14	KWG1413840	
tert-Butylbenzene	ND	U	2.0	0.20	0.059	1	10/13/14	10/13/14	KWG1413840	
1,2,4-Trimethylbenzene	ND	U	2.0	0.20	0.069	1	10/13/14	10/13/14	KWG1413840	
sec-Butylbenzene	ND	U	2.0	0.10	0.062	1	10/13/14	10/13/14	KWG1413840	
4-Isopropyltoluene	ND	U	2.0	0.20	0.060	1	10/13/14	10/13/14	KWG1413840	
1,3-Dichlorobenzene	ND	U	0.50	0.20	0.10	1	10/13/14	10/13/14	KWG1413840	
1,4-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	10/13/14	10/13/14	KWG1413840	
n-Butylbenzene	ND	U	2.0	0.10	0.054	1	10/13/14	10/13/14	KWG1413840	
1,2-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	10/13/14	10/13/14	KWG1413840	
1,2-Dibromo-3-chloropropane	ND	U	2.0	0.80	0.20	1	10/13/14	10/13/14	KWG1413840	
1,2,4-Trichlorobenzene	ND	U	2.0	0.30	0.096	1	10/13/14	10/13/14	KWG1413840	
Hexachlorobutadiene	ND	U	2.0	0.30	0.11	1	10/13/14	10/13/14	KWG1413840	
Naphthalene	ND	U	2.0	0.30	0.088	1	10/13/14	10/13/14	KWG1413840	
1,2,3-Trichlorobenzene	ND	U	2.0	0.40	0.11	1	10/13/14	10/13/14	KWG1413840	

* See Case Narrative

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1410790
Project:	JBLM LTM Log Center/TO-01	**Date Collected:**	09/30/2014
Sample Matrix:	Water	**Date Received:**	10/02/2014

Volatile Organic Compounds

Sample Name:	LGC140930LC182-1	**Units:**	ug/L
Lab Code:	K1410790-030	**Basis:**	NA

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Dibromofluoromethane	101	85-115	10/13/14	Acceptable
1,2-Dichloroethane-d4	90	70-120	10/13/14	Acceptable
Toluene-d8	98	85-120	10/13/14	Acceptable
4-Bromofluorobenzene	93	75-120	10/13/14	Acceptable

Comments:

Analytical Results

Client: Sealaska Environmental Services, LLC
Project: JBLM LTM Log Center/TO-01
Sample Matrix: Water

Service Request: K1410790
Date Collected: 09/30/2014
Date Received: 10/02/2014

Volatile Organic Compounds

Sample Name: LGC140930LC16-1
Lab Code: K1410790-031

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
Dichlorodifluoromethane	ND	U	0.50	0.20	0.13	1	10/13/14	10/13/14	KWG1413840	
Chloromethane	**0.070**	J	0.50	0.20	0.068	1	10/13/14	10/13/14	KWG1413840	*
Vinyl Chloride	ND	U	0.50	0.10	0.075	1	10/13/14	10/13/14	KWG1413840	
Bromomethane	ND	U	0.50	0.30	0.10	1	10/13/14	10/13/14	KWG1413840	*
Chloroethane	ND	U	0.50	0.20	0.16	1	10/13/14	10/13/14	KWG1413840	
Trichlorofluoromethane	ND	U	0.50	0.20	0.12	1	10/13/14	10/13/14	KWG1413840	
1,1-Dichloroethene	ND	U	0.50	0.20	0.080	1	10/13/14	10/13/14	KWG1413840	
Acetone	**4.1**	J	20	10	3.3	1	10/13/14	10/13/14	KWG1413840	*
Carbon Disulfide	ND	U	0.50	0.20	0.069	1	10/13/14	10/13/14	KWG1413840	
Methylene Chloride	ND	U	2.0	0.20	0.10	1	10/13/14	10/13/14	KWG1413840	
Methyl tert-Butyl Ether	ND	U	0.50	0.30	0.11	1	10/13/14	10/13/14	KWG1413840	
trans-1,2-Dichloroethene	ND	U	0.50	0.20	0.072	1	10/13/14	10/13/14	KWG1413840	
1,1-Dichloroethane	ND	U	0.50	0.20	0.077	1	10/13/14	10/13/14	KWG1413840	
2,2-Dichloropropane	ND	U	0.50	0.20	0.060	1	10/13/14	10/13/14	KWG1413840	
cis-1,2-Dichloroethene	**0.11**	J	0.50	0.20	0.067	1	10/13/14	10/13/14	KWG1413840	
2-Butanone (MEK)	ND	U	20	4.0	1.9	1	10/13/14	10/13/14	KWG1413840	
Bromochloromethane	ND	U	0.50	0.20	0.16	1	10/13/14	10/13/14	KWG1413840	
Chloroform	ND	U	0.50	0.20	0.072	1	10/13/14	10/13/14	KWG1413840	
1,1,1-Trichloroethane (TCA)	ND	U	0.50	0.20	0.075	1	10/13/14	10/13/14	KWG1413840	
Carbon Tetrachloride	ND	U	0.50	0.20	0.096	1	10/13/14	10/13/14	KWG1413840	
1,1-Dichloropropene	ND	U	0.50	0.20	0.089	1	10/13/14	10/13/14	KWG1413840	
Benzene	ND	U	0.50	0.10	0.062	1	10/13/14	10/13/14	KWG1413840	
1,2-Dichloroethane (EDC)	ND	U	0.50	0.15	0.080	1	10/13/14	10/13/14	KWG1413840	
Trichloroethene (TCE)	**7.5**		0.50	0.10	0.10	1	10/13/14	10/13/14	KWG1413840	
1,2-Dichloropropane	ND	U	0.50	0.20	0.095	1	10/13/14	10/13/14	KWG1413840	
Dibromomethane	ND	U	0.50	0.50	0.15	1	10/13/14	10/13/14	KWG1413840	
Bromodichloromethane	ND	U	0.50	0.30	0.091	1	10/13/14	10/13/14	KWG1413840	
cis-1,3-Dichloropropene	ND	U	0.50	0.20	0.18	1	10/13/14	10/13/14	KWG1413840	
4-Methyl-2-pentanone (MIBK)	ND	U	20	10	2.6	1	10/13/14	10/13/14	KWG1413840	*
Toluene	ND	U	0.50	0.10	0.054	1	10/13/14	10/13/14	KWG1413840	
trans-1,3-Dichloropropene	ND	U	0.50	0.20	0.068	1	10/13/14	10/13/14	KWG1413840	
1,1,2-Trichloroethane	ND	U	0.50	0.40	0.14	1	10/13/14	10/13/14	KWG1413840	
Tetrachloroethene (PCE)	ND	U	0.50	0.20	0.099	1	10/13/14	10/13/14	KWG1413840	

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1410790
Project:	JBLM LTM Log Center/TO-01	**Date Collected:**	09/30/2014
Sample Matrix:	Water	**Date Received:**	10/02/2014

Volatile Organic Compounds

Sample Name:	LGC140930LC16-1	**Units:**	ug/L
Lab Code:	K1410790-031	**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
2-Hexanone	ND	U	20	10	2.7	1	10/13/14	10/13/14	KWG1413840	
1,3-Dichloropropane	ND	U	0.50	0.30	0.14	1	10/13/14	10/13/14	KWG1413840	
Dibromochloromethane	ND	U	0.50	0.50	0.14	1	10/13/14	10/13/14	KWG1413840	
1,2-Dibromoethane (EDB)	ND	U	2.0	0.20	0.10	1	10/13/14	10/13/14	KWG1413840	
Chlorobenzene	ND	U	0.50	0.20	0.11	1	10/13/14	10/13/14	KWG1413840	
Ethylbenzene	ND	U	0.50	0.10	0.050	1	10/13/14	10/13/14	KWG1413840	
1,1,1,2-Tetrachloroethane	ND	U	0.50	0.20	0.11	1	10/13/14	10/13/14	KWG1413840	
m,p-Xylenes	ND	U	0.50	0.20	0.11	1	10/13/14	10/13/14	KWG1413840	
o-Xylene	ND	U	0.50	0.20	0.074	1	10/13/14	10/13/14	KWG1413840	
Styrene	ND	U	0.50	0.20	0.089	1	10/13/14	10/13/14	KWG1413840	
Bromoform	ND	U	0.50	0.50	0.16	1	10/13/14	10/13/14	KWG1413840	
Isopropylbenzene	ND	U	2.0	0.20	0.051	1	10/13/14	10/13/14	KWG1413840	
1,1,2,2-Tetrachloroethane	ND	U	0.50	0.20	0.16	1	10/13/14	10/13/14	KWG1413840	
Bromobenzene	ND	U	2.0	0.20	0.12	1	10/13/14	10/13/14	KWG1413840	
n-Propylbenzene	ND	U	2.0	0.20	0.054	1	10/13/14	10/13/14	KWG1413840	
1,2,3-Trichloropropane	ND	U	0.50	0.50	0.20	1	10/13/14	10/13/14	KWG1413840	
2-Chlorotoluene	ND	U	2.0	0.20	0.10	1	10/13/14	10/13/14	KWG1413840	
1,3,5-Trimethylbenzene	ND	U	2.0	0.20	0.089	1	10/13/14	10/13/14	KWG1413840	
4-Chlorotoluene	ND	U	2.0	0.20	0.13	1	10/13/14	10/13/14	KWG1413840	
tert-Butylbenzene	ND	U	2.0	0.20	0.059	1	10/13/14	10/13/14	KWG1413840	
1,2,4-Trimethylbenzene	ND	U	2.0	0.20	0.069	1	10/13/14	10/13/14	KWG1413840	
sec-Butylbenzene	ND	U	2.0	0.10	0.062	1	10/13/14	10/13/14	KWG1413840	
4-Isopropyltoluene	ND	U	2.0	0.20	0.060	1	10/13/14	10/13/14	KWG1413840	
1,3-Dichlorobenzene	ND	U	0.50	0.20	0.10	1	10/13/14	10/13/14	KWG1413840	
1,4-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	10/13/14	10/13/14	KWG1413840	
n-Butylbenzene	ND	U	2.0	0.10	0.054	1	10/13/14	10/13/14	KWG1413840	
1,2-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	10/13/14	10/13/14	KWG1413840	
1,2-Dibromo-3-chloropropane	ND	U	2.0	0.80	0.20	1	10/13/14	10/13/14	KWG1413840	
1,2,4-Trichlorobenzene	ND	U	2.0	0.30	0.096	1	10/13/14	10/13/14	KWG1413840	
Hexachlorobutadiene	ND	U	2.0	0.30	0.11	1	10/13/14	10/13/14	KWG1413840	
Naphthalene	ND	U	2.0	0.30	0.088	1	10/13/14	10/13/14	KWG1413840	
1,2,3-Trichlorobenzene	ND	U	2.0	0.40	0.11	1	10/13/14	10/13/14	KWG1413840	

* See Case Narrative

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1410790
Project:	JBLM LTM Log Center/TO-01	**Date Collected:**	09/30/2014
Sample Matrix:	Water	**Date Received:**	10/02/2014

Volatile Organic Compounds

Sample Name:	LGC140930LC16-1	**Units:**	ug/L
Lab Code:	K1410790-031	**Basis:**	NA

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Dibromofluoromethane	102	85-115	10/13/14	Acceptable
1,2-Dichloroethane-d4	89	70-120	10/13/14	Acceptable
Toluene-d8	98	85-120	10/13/14	Acceptable
4-Bromofluorobenzene	97	75-120	10/13/14	Acceptable

Comments:

Analytical Results

Client: Sealaska Environmental Services, LLC
Project: JBLM LTM Log Center/TO-01
Sample Matrix: Water

Service Request: K1410790
Date Collected: 09/30/2014
Date Received: 10/02/2014

Volatile Organic Compounds

Sample Name: LGC140930DUP1-1
Lab Code: K1410790-032

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
Dichlorodifluoromethane	ND	U	0.50	0.20	0.13	1	10/13/14	10/13/14	KWG1413840	
Chloromethane	ND	U	0.50	0.20	0.068	1	10/13/14	10/13/14	KWG1413840	*
Vinyl Chloride	ND	U	0.50	0.10	0.075	1	10/13/14	10/13/14	KWG1413840	
Bromomethane	ND	U	0.50	0.30	0.10	1	10/13/14	10/13/14	KWG1413840	*
Chloroethane	ND	U	0.50	0.20	0.16	1	10/13/14	10/13/14	KWG1413840	
Trichlorofluoromethane	ND	U	0.50	0.20	0.12	1	10/13/14	10/13/14	KWG1413840	
1,1-Dichloroethene	ND	U	0.50	0.20	0.080	1	10/13/14	10/13/14	KWG1413840	
Acetone	**4.0**	J	20	10	3.3	1	10/13/14	10/13/14	KWG1413840	*
Carbon Disulfide	ND	U	0.50	0.20	0.069	1	10/13/14	10/13/14	KWG1413840	
Methylene Chloride	ND	U	2.0	0.20	0.10	1	10/13/14	10/13/14	KWG1413840	
Methyl tert-Butyl Ether	ND	U	0.50	0.30	0.11	1	10/13/14	10/13/14	KWG1413840	
trans-1,2-Dichloroethene	ND	U	0.50	0.20	0.072	1	10/13/14	10/13/14	KWG1413840	
1,1-Dichloroethane	ND	U	0.50	0.20	0.077	1	10/13/14	10/13/14	KWG1413840	
2,2-Dichloropropane	ND	U	0.50	0.20	0.060	1	10/13/14	10/13/14	KWG1413840	
cis-1,2-Dichloroethene	**0.13**	J	0.50	0.20	0.067	1	10/13/14	10/13/14	KWG1413840	
2-Butanone (MEK)	ND	U	20	4.0	1.9	1	10/13/14	10/13/14	KWG1413840	
Bromochloromethane	ND	U	0.50	0.20	0.16	1	10/13/14	10/13/14	KWG1413840	
Chloroform	ND	U	0.50	0.20	0.072	1	10/13/14	10/13/14	KWG1413840	
1,1,1-Trichloroethane (TCA)	ND	U	0.50	0.20	0.075	1	10/13/14	10/13/14	KWG1413840	
Carbon Tetrachloride	ND	U	0.50	0.20	0.096	1	10/13/14	10/13/14	KWG1413840	
1,1-Dichloropropene	ND	U	0.50	0.20	0.089	1	10/13/14	10/13/14	KWG1413840	
Benzene	ND	U	0.50	0.10	0.062	1	10/13/14	10/13/14	KWG1413840	
1,2-Dichloroethane (EDC)	ND	U	0.50	0.15	0.080	1	10/13/14	10/13/14	KWG1413840	
Trichloroethene (TCE)	**7.3**		0.50	0.10	0.10	1	10/13/14	10/13/14	KWG1413840	
1,2-Dichloropropane	ND	U	0.50	0.20	0.095	1	10/13/14	10/13/14	KWG1413840	
Dibromomethane	ND	U	0.50	0.50	0.15	1	10/13/14	10/13/14	KWG1413840	
Bromodichloromethane	ND	U	0.50	0.30	0.091	1	10/13/14	10/13/14	KWG1413840	
cis-1,3-Dichloropropene	ND	U	0.50	0.20	0.18	1	10/13/14	10/13/14	KWG1413840	
4-Methyl-2-pentanone (MIBK)	ND	U	20	10	2.6	1	10/13/14	10/13/14	KWG1413840	*
Toluene	ND	U	0.50	0.10	0.054	1	10/13/14	10/13/14	KWG1413840	
trans-1,3-Dichloropropene	ND	U	0.50	0.20	0.068	1	10/13/14	10/13/14	KWG1413840	
1,1,2-Trichloroethane	ND	U	0.50	0.40	0.14	1	10/13/14	10/13/14	KWG1413840	
Tetrachloroethene (PCE)	ND	U	0.50	0.20	0.099	1	10/13/14	10/13/14	KWG1413840	

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1410790
Project:	JBLM LTM Log Center/TO-01	**Date Collected:**	09/30/2014
Sample Matrix:	Water	**Date Received:**	10/02/2014

Volatile Organic Compounds

Sample Name:	LGC140930DUP1-1	**Units:**	ug/L
Lab Code:	K1410790-032	**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
2-Hexanone	ND	U	20	10	2.7	1	10/13/14	10/13/14	KWG1413840	
1,3-Dichloropropane	ND	U	0.50	0.30	0.14	1	10/13/14	10/13/14	KWG1413840	
Dibromochloromethane	ND	U	0.50	0.50	0.14	1	10/13/14	10/13/14	KWG1413840	
1,2-Dibromoethane (EDB)	ND	U	2.0	0.20	0.10	1	10/13/14	10/13/14	KWG1413840	
Chlorobenzene	ND	U	0.50	0.20	0.11	1	10/13/14	10/13/14	KWG1413840	
Ethylbenzene	ND	U	0.50	0.10	0.050	1	10/13/14	10/13/14	KWG1413840	
1,1,1,2-Tetrachloroethane	ND	U	0.50	0.20	0.11	1	10/13/14	10/13/14	KWG1413840	
m,p-Xylenes	ND	U	0.50	0.20	0.11	1	10/13/14	10/13/14	KWG1413840	
o-Xylene	ND	U	0.50	0.20	0.074	1	10/13/14	10/13/14	KWG1413840	
Styrene	ND	U	0.50	0.20	0.089	1	10/13/14	10/13/14	KWG1413840	
Bromoform	ND	U	0.50	0.50	0.16	1	10/13/14	10/13/14	KWG1413840	
Isopropylbenzene	ND	U	2.0	0.20	0.051	1	10/13/14	10/13/14	KWG1413840	
1,1,2,2-Tetrachloroethane	ND	U	0.50	0.20	0.16	1	10/13/14	10/13/14	KWG1413840	
Bromobenzene	ND	U	2.0	0.20	0.12	1	10/13/14	10/13/14	KWG1413840	
n-Propylbenzene	ND	U	2.0	0.20	0.054	1	10/13/14	10/13/14	KWG1413840	
1,2,3-Trichloropropane	ND	U	0.50	0.50	0.20	1	10/13/14	10/13/14	KWG1413840	
2-Chlorotoluene	ND	U	2.0	0.20	0.10	1	10/13/14	10/13/14	KWG1413840	
1,3,5-Trimethylbenzene	ND	U	2.0	0.20	0.089	1	10/13/14	10/13/14	KWG1413840	
4-Chlorotoluene	ND	U	2.0	0.20	0.13	1	10/13/14	10/13/14	KWG1413840	
tert-Butylbenzene	ND	U	2.0	0.20	0.059	1	10/13/14	10/13/14	KWG1413840	
1,2,4-Trimethylbenzene	ND	U	2.0	0.20	0.069	1	10/13/14	10/13/14	KWG1413840	
sec-Butylbenzene	ND	U	2.0	0.10	0.062	1	10/13/14	10/13/14	KWG1413840	
4-Isopropyltoluene	ND	U	2.0	0.20	0.060	1	10/13/14	10/13/14	KWG1413840	
1,3-Dichlorobenzene	ND	U	0.50	0.20	0.10	1	10/13/14	10/13/14	KWG1413840	
1,4-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	10/13/14	10/13/14	KWG1413840	
n-Butylbenzene	ND	U	2.0	0.10	0.054	1	10/13/14	10/13/14	KWG1413840	
1,2-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	10/13/14	10/13/14	KWG1413840	
1,2-Dibromo-3-chloropropane	ND	U	2.0	0.80	0.20	1	10/13/14	10/13/14	KWG1413840	
1,2,4-Trichlorobenzene	ND	U	2.0	0.30	0.096	1	10/13/14	10/13/14	KWG1413840	
Hexachlorobutadiene	ND	U	2.0	0.30	0.11	1	10/13/14	10/13/14	KWG1413840	
Naphthalene	ND	U	2.0	0.30	0.088	1	10/13/14	10/13/14	KWG1413840	
1,2,3-Trichlorobenzene	ND	U	2.0	0.40	0.11	1	10/13/14	10/13/14	KWG1413840	

* See Case Narrative

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1410790
Project:	JBLM LTM Log Center/TO-01	**Date Collected:**	09/30/2014
Sample Matrix:	Water	**Date Received:**	10/02/2014

Volatile Organic Compounds

Sample Name:	LGC140930DUP1-1	**Units:**	ug/L
Lab Code:	K1410790-032	**Basis:**	NA

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Dibromofluoromethane	104	85-115	10/13/14	Acceptable
1,2-Dichloroethane-d4	90	70-120	10/13/14	Acceptable
Toluene-d8	97	85-120	10/13/14	Acceptable
4-Bromofluorobenzene	93	75-120	10/13/14	Acceptable

Comments:

Analytical Results

Client: Sealaska Environmental Services, LLC
Project: JBLM LTM Log Center/TO-01
Sample Matrix: Water

Service Request: K1410790
Date Collected: 09/30/2014
Date Received: 10/02/2014

Volatile Organic Compounds

Sample Name: LGC140930LC180-1
Lab Code: K1410790-033

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
Dichlorodifluoromethane	ND	U	0.50	0.20	0.13	1	10/13/14	10/13/14	KWG1413840	
Chloromethane	**0.080**	J	0.50	0.20	0.068	1	10/13/14	10/13/14	KWG1413840	*
Vinyl Chloride	ND	U	0.50	0.10	0.075	1	10/13/14	10/13/14	KWG1413840	
Bromomethane	ND	U	0.50	0.30	0.10	1	10/13/14	10/13/14	KWG1413840	*
Chloroethane	ND	U	0.50	0.20	0.16	1	10/13/14	10/13/14	KWG1413840	
Trichlorofluoromethane	ND	U	0.50	0.20	0.12	1	10/13/14	10/13/14	KWG1413840	
1,1-Dichloroethene	ND	U	0.50	0.20	0.080	1	10/13/14	10/13/14	KWG1413840	
Acetone	ND	U	20	10	3.3	1	10/13/14	10/13/14	KWG1413840	*
Carbon Disulfide	ND	U	0.50	0.20	0.069	1	10/13/14	10/13/14	KWG1413840	
Methylene Chloride	ND	U	2.0	0.20	0.10	1	10/13/14	10/13/14	KWG1413840	
Methyl tert-Butyl Ether	ND	U	0.50	0.30	0.11	1	10/13/14	10/13/14	KWG1413840	
trans-1,2-Dichloroethene	ND	U	0.50	0.20	0.072	1	10/13/14	10/13/14	KWG1413840	
1,1-Dichloroethane	ND	U	0.50	0.20	0.077	1	10/13/14	10/13/14	KWG1413840	
2,2-Dichloropropane	ND	U	0.50	0.20	0.060	1	10/13/14	10/13/14	KWG1413840	
cis-1,2-Dichloroethene	**0.11**	J	0.50	0.20	0.067	1	10/13/14	10/13/14	KWG1413840	
2-Butanone (MEK)	ND	U	20	4.0	1.9	1	10/13/14	10/13/14	KWG1413840	
Bromochloromethane	ND	U	0.50	0.20	0.16	1	10/13/14	10/13/14	KWG1413840	
Chloroform	ND	U	0.50	0.20	0.072	1	10/13/14	10/13/14	KWG1413840	
1,1,1-Trichloroethane (TCA)	ND	U	0.50	0.20	0.075	1	10/13/14	10/13/14	KWG1413840	
Carbon Tetrachloride	ND	U	0.50	0.20	0.096	1	10/13/14	10/13/14	KWG1413840	
1,1-Dichloropropene	ND	U	0.50	0.20	0.089	1	10/13/14	10/13/14	KWG1413840	
Benzene	ND	U	0.50	0.10	0.062	1	10/13/14	10/13/14	KWG1413840	
1,2-Dichloroethane (EDC)	ND	U	0.50	0.15	0.080	1	10/13/14	10/13/14	KWG1413840	
Trichloroethene (TCE)	**2.9**		0.50	0.10	0.10	1	10/13/14	10/13/14	KWG1413840	
1,2-Dichloropropane	ND	U	0.50	0.20	0.095	1	10/13/14	10/13/14	KWG1413840	
Dibromomethane	ND	U	0.50	0.50	0.15	1	10/13/14	10/13/14	KWG1413840	
Bromodichloromethane	ND	U	0.50	0.30	0.091	1	10/13/14	10/13/14	KWG1413840	
cis-1,3-Dichloropropene	ND	U	0.50	0.20	0.18	1	10/13/14	10/13/14	KWG1413840	
4-Methyl-2-pentanone (MIBK)	ND	U	20	10	2.6	1	10/13/14	10/13/14	KWG1413840	*
Toluene	ND	U	0.50	0.10	0.054	1	10/13/14	10/13/14	KWG1413840	
trans-1,3-Dichloropropene	ND	U	0.50	0.20	0.068	1	10/13/14	10/13/14	KWG1413840	
1,1,2-Trichloroethane	ND	U	0.50	0.40	0.14	1	10/13/14	10/13/14	KWG1413840	
Tetrachloroethene (PCE)	ND	U	0.50	0.20	0.099	1	10/13/14	10/13/14	KWG1413840	

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1410790
Project:	JBLM LTM Log Center/TO-01	**Date Collected:**	09/30/2014
Sample Matrix:	Water	**Date Received:**	10/02/2014

Volatile Organic Compounds

Sample Name:	LGC140930LC180-1	**Units:**	ug/L
Lab Code:	K1410790-033	**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
2-Hexanone	ND	U	20	10	2.7	1	10/13/14	10/13/14	KWG1413840	
1,3-Dichloropropane	ND	U	0.50	0.30	0.14	1	10/13/14	10/13/14	KWG1413840	
Dibromochloromethane	ND	U	0.50	0.50	0.14	1	10/13/14	10/13/14	KWG1413840	
1,2-Dibromoethane (EDB)	ND	U	2.0	0.20	0.10	1	10/13/14	10/13/14	KWG1413840	
Chlorobenzene	ND	U	0.50	0.20	0.11	1	10/13/14	10/13/14	KWG1413840	
Ethylbenzene	ND	U	0.50	0.10	0.050	1	10/13/14	10/13/14	KWG1413840	
1,1,1,2-Tetrachloroethane	ND	U	0.50	0.20	0.11	1	10/13/14	10/13/14	KWG1413840	
m,p-Xylenes	ND	U	0.50	0.20	0.11	1	10/13/14	10/13/14	KWG1413840	
o-Xylene	ND	U	0.50	0.20	0.074	1	10/13/14	10/13/14	KWG1413840	
Styrene	ND	U	0.50	0.20	0.089	1	10/13/14	10/13/14	KWG1413840	
Bromoform	ND	U	0.50	0.50	0.16	1	10/13/14	10/13/14	KWG1413840	
Isopropylbenzene	ND	U	2.0	0.20	0.051	1	10/13/14	10/13/14	KWG1413840	
1,1,2,2-Tetrachloroethane	ND	U	0.50	0.20	0.16	1	10/13/14	10/13/14	KWG1413840	
Bromobenzene	ND	U	2.0	0.20	0.12	1	10/13/14	10/13/14	KWG1413840	
n-Propylbenzene	ND	U	2.0	0.20	0.054	1	10/13/14	10/13/14	KWG1413840	
1,2,3-Trichloropropane	ND	U	0.50	0.50	0.20	1	10/13/14	10/13/14	KWG1413840	
2-Chlorotoluene	ND	U	2.0	0.20	0.10	1	10/13/14	10/13/14	KWG1413840	
1,3,5-Trimethylbenzene	ND	U	2.0	0.20	0.089	1	10/13/14	10/13/14	KWG1413840	
4-Chlorotoluene	ND	U	2.0	0.20	0.13	1	10/13/14	10/13/14	KWG1413840	
tert-Butylbenzene	ND	U	2.0	0.20	0.059	1	10/13/14	10/13/14	KWG1413840	
1,2,4-Trimethylbenzene	ND	U	2.0	0.20	0.069	1	10/13/14	10/13/14	KWG1413840	
sec-Butylbenzene	ND	U	2.0	0.10	0.062	1	10/13/14	10/13/14	KWG1413840	
4-Isopropyltoluene	ND	U	2.0	0.20	0.060	1	10/13/14	10/13/14	KWG1413840	
1,3-Dichlorobenzene	ND	U	0.50	0.20	0.10	1	10/13/14	10/13/14	KWG1413840	
1,4-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	10/13/14	10/13/14	KWG1413840	
n-Butylbenzene	ND	U	2.0	0.10	0.054	1	10/13/14	10/13/14	KWG1413840	
1,2-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	10/13/14	10/13/14	KWG1413840	
1,2-Dibromo-3-chloropropane	ND	U	2.0	0.80	0.20	1	10/13/14	10/13/14	KWG1413840	
1,2,4-Trichlorobenzene	ND	U	2.0	0.30	0.096	1	10/13/14	10/13/14	KWG1413840	
Hexachlorobutadiene	ND	U	2.0	0.30	0.11	1	10/13/14	10/13/14	KWG1413840	
Naphthalene	ND	U	2.0	0.30	0.088	1	10/13/14	10/13/14	KWG1413840	
1,2,3-Trichlorobenzene	ND	U	2.0	0.40	0.11	1	10/13/14	10/13/14	KWG1413840	

* See Case Narrative

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1410790
Project:	JBLM LTM Log Center/TO-01	**Date Collected:**	09/30/2014
Sample Matrix:	Water	**Date Received:**	10/02/2014

Volatile Organic Compounds

Sample Name:	LGC140930LC180-1	**Units:**	ug/L
Lab Code:	K1410790-033	**Basis:**	NA

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Dibromofluoromethane	103	85-115	10/13/14	Acceptable
1,2-Dichloroethane-d4	90	70-120	10/13/14	Acceptable
Toluene-d8	98	85-120	10/13/14	Acceptable
4-Bromofluorobenzene	96	75-120	10/13/14	Acceptable

Comments:

Analytical Results

Client: Sealaska Environmental Services, LLC
Project: JBLM LTM Log Center/TO-01
Sample Matrix: Water

Service Request: K1410790
Date Collected: 10/01/2014
Date Received: 10/02/2014

Volatile Organic Compounds

Sample Name: LGC141001LC223-1
Lab Code: K1410790-034

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
Dichlorodifluoromethane	ND	U	0.50	0.20	0.13	1	10/13/14	10/13/14	KWG1413840	
Chloromethane	**0.13**	J	0.50	0.20	0.068	1	10/13/14	10/13/14	KWG1413840	*
Vinyl Chloride	ND	U	0.50	0.10	0.075	1	10/13/14	10/13/14	KWG1413840	
Bromomethane	ND	U	0.50	0.30	0.10	1	10/13/14	10/13/14	KWG1413840	*
Chloroethane	ND	U	0.50	0.20	0.16	1	10/13/14	10/13/14	KWG1413840	
Trichlorofluoromethane	ND	U	0.50	0.20	0.12	1	10/13/14	10/13/14	KWG1413840	
1,1-Dichloroethene	ND	U	0.50	0.20	0.080	1	10/13/14	10/13/14	KWG1413840	
Acetone	ND	U	20	10	3.3	1	10/13/14	10/13/14	KWG1413840	*
Carbon Disulfide	ND	U	0.50	0.20	0.069	1	10/13/14	10/13/14	KWG1413840	
Methylene Chloride	ND	U	2.0	0.20	0.10	1	10/13/14	10/13/14	KWG1413840	
Methyl tert-Butyl Ether	ND	U	0.50	0.30	0.11	1	10/13/14	10/13/14	KWG1413840	
trans-1,2-Dichloroethene	ND	U	0.50	0.20	0.072	1	10/13/14	10/13/14	KWG1413840	
1,1-Dichloroethane	ND	U	0.50	0.20	0.077	1	10/13/14	10/13/14	KWG1413840	
2,2-Dichloropropane	ND	U	0.50	0.20	0.060	1	10/13/14	10/13/14	KWG1413840	
cis-1,2-Dichloroethene	**0.51**		0.50	0.20	0.067	1	10/13/14	10/13/14	KWG1413840	
2-Butanone (MEK)	ND	U	20	4.0	1.9	1	10/13/14	10/13/14	KWG1413840	
Bromochloromethane	ND	U	0.50	0.20	0.16	1	10/13/14	10/13/14	KWG1413840	
Chloroform	ND	U	0.50	0.20	0.072	1	10/13/14	10/13/14	KWG1413840	
1,1,1-Trichloroethane (TCA)	ND	U	0.50	0.20	0.075	1	10/13/14	10/13/14	KWG1413840	
Carbon Tetrachloride	ND	U	0.50	0.20	0.096	1	10/13/14	10/13/14	KWG1413840	
1,1-Dichloropropene	ND	U	0.50	0.20	0.089	1	10/13/14	10/13/14	KWG1413840	
Benzene	ND	U	0.50	0.10	0.062	1	10/13/14	10/13/14	KWG1413840	
1,2-Dichloroethane (EDC)	ND	U	0.50	0.15	0.080	1	10/13/14	10/13/14	KWG1413840	
Trichloroethene (TCE)	**25**		0.50	0.10	0.10	1	10/13/14	10/13/14	KWG1413840	
1,2-Dichloropropane	ND	U	0.50	0.20	0.095	1	10/13/14	10/13/14	KWG1413840	
Dibromomethane	ND	U	0.50	0.50	0.15	1	10/13/14	10/13/14	KWG1413840	
Bromodichloromethane	ND	U	0.50	0.30	0.091	1	10/13/14	10/13/14	KWG1413840	
cis-1,3-Dichloropropene	ND	U	0.50	0.20	0.18	1	10/13/14	10/13/14	KWG1413840	
4-Methyl-2-pentanone (MIBK)	ND	U	20	10	2.6	1	10/13/14	10/13/14	KWG1413840	*
Toluene	ND	U	0.50	0.10	0.054	1	10/13/14	10/13/14	KWG1413840	
trans-1,3-Dichloropropene	ND	U	0.50	0.20	0.068	1	10/13/14	10/13/14	KWG1413840	
1,1,2-Trichloroethane	ND	U	0.50	0.40	0.14	1	10/13/14	10/13/14	KWG1413840	
Tetrachloroethene (PCE)	ND	U	0.50	0.20	0.099	1	10/13/14	10/13/14	KWG1413840	

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1410790
Project:	JBLM LTM Log Center/TO-01	**Date Collected:**	10/01/2014
Sample Matrix:	Water	**Date Received:**	10/02/2014

Volatile Organic Compounds

Sample Name:	LGC141001LC223-1	**Units:**	ug/L
Lab Code:	K1410790-034	**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
2-Hexanone	ND	U	20	10	2.7	1	10/13/14	10/13/14	KWG1413840	
1,3-Dichloropropane	ND	U	0.50	0.30	0.14	1	10/13/14	10/13/14	KWG1413840	
Dibromochloromethane	ND	U	0.50	0.50	0.14	1	10/13/14	10/13/14	KWG1413840	
1,2-Dibromoethane (EDB)	ND	U	2.0	0.20	0.10	1	10/13/14	10/13/14	KWG1413840	
Chlorobenzene	ND	U	0.50	0.20	0.11	1	10/13/14	10/13/14	KWG1413840	
Ethylbenzene	ND	U	0.50	0.10	0.050	1	10/13/14	10/13/14	KWG1413840	
1,1,1,2-Tetrachloroethane	ND	U	0.50	0.20	0.11	1	10/13/14	10/13/14	KWG1413840	
m,p-Xylenes	ND	U	0.50	0.20	0.11	1	10/13/14	10/13/14	KWG1413840	
o-Xylene	ND	U	0.50	0.20	0.074	1	10/13/14	10/13/14	KWG1413840	
Styrene	ND	U	0.50	0.20	0.089	1	10/13/14	10/13/14	KWG1413840	
Bromoform	ND	U	0.50	0.50	0.16	1	10/13/14	10/13/14	KWG1413840	
Isopropylbenzene	ND	U	2.0	0.20	0.051	1	10/13/14	10/13/14	KWG1413840	
1,1,2,2-Tetrachloroethane	ND	U	0.50	0.20	0.16	1	10/13/14	10/13/14	KWG1413840	
Bromobenzene	ND	U	2.0	0.20	0.12	1	10/13/14	10/13/14	KWG1413840	
n-Propylbenzene	ND	U	2.0	0.20	0.054	1	10/13/14	10/13/14	KWG1413840	
1,2,3-Trichloropropane	ND	U	0.50	0.50	0.20	1	10/13/14	10/13/14	KWG1413840	
2-Chlorotoluene	ND	U	2.0	0.20	0.10	1	10/13/14	10/13/14	KWG1413840	
1,3,5-Trimethylbenzene	ND	U	2.0	0.20	0.089	1	10/13/14	10/13/14	KWG1413840	
4-Chlorotoluene	ND	U	2.0	0.20	0.13	1	10/13/14	10/13/14	KWG1413840	
tert-Butylbenzene	ND	U	2.0	0.20	0.059	1	10/13/14	10/13/14	KWG1413840	
1,2,4-Trimethylbenzene	ND	U	2.0	0.20	0.069	1	10/13/14	10/13/14	KWG1413840	
sec-Butylbenzene	ND	U	2.0	0.10	0.062	1	10/13/14	10/13/14	KWG1413840	
4-Isopropyltoluene	ND	U	2.0	0.20	0.060	1	10/13/14	10/13/14	KWG1413840	
1,3-Dichlorobenzene	ND	U	0.50	0.20	0.10	1	10/13/14	10/13/14	KWG1413840	
1,4-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	10/13/14	10/13/14	KWG1413840	
n-Butylbenzene	ND	U	2.0	0.10	0.054	1	10/13/14	10/13/14	KWG1413840	
1,2-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	10/13/14	10/13/14	KWG1413840	
1,2-Dibromo-3-chloropropane	ND	U	2.0	0.80	0.20	1	10/13/14	10/13/14	KWG1413840	
1,2,4-Trichlorobenzene	ND	U	2.0	0.30	0.096	1	10/13/14	10/13/14	KWG1413840	
Hexachlorobutadiene	ND	U	2.0	0.30	0.11	1	10/13/14	10/13/14	KWG1413840	
Naphthalene	ND	U	2.0	0.30	0.088	1	10/13/14	10/13/14	KWG1413840	
1,2,3-Trichlorobenzene	ND	U	2.0	0.40	0.11	1	10/13/14	10/13/14	KWG1413840	

* See Case Narrative

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1410790
Project:	JBLM LTM Log Center/TO-01	**Date Collected:**	10/01/2014
Sample Matrix:	Water	**Date Received:**	10/02/2014

Volatile Organic Compounds

Sample Name:	LGC141001LC223-1	**Units:**	ug/L
Lab Code:	K1410790-034	**Basis:**	NA

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Dibromofluoromethane	102	85-115	10/13/14	Acceptable
1,2-Dichloroethane-d4	87	70-120	10/13/14	Acceptable
Toluene-d8	98	85-120	10/13/14	Acceptable
4-Bromofluorobenzene	94	75-120	10/13/14	Acceptable

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1410790
Project:	JBLM LTM Log Center/TO-01	**Date Collected:**	10/01/2014
Sample Matrix:	Water	**Date Received:**	10/02/2014

Volatile Organic Compounds

Sample Name:	LGC141001DUP3-1	**Units:**	ug/L
Lab Code:	K1410790-035	**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
Dichlorodifluoromethane	ND	U	0.50	0.20	0.13	1	10/13/14	10/13/14	KWG1413840	
Chloromethane	**0.090**	J	0.50	0.20	0.068	1	10/13/14	10/13/14	KWG1413840	*
Vinyl Chloride	ND	U	0.50	0.10	0.075	1	10/13/14	10/13/14	KWG1413840	
Bromomethane	ND	U	0.50	0.30	0.10	1	10/13/14	10/13/14	KWG1413840	*
Chloroethane	ND	U	0.50	0.20	0.16	1	10/13/14	10/13/14	KWG1413840	
Trichlorofluoromethane	ND	U	0.50	0.20	0.12	1	10/13/14	10/13/14	KWG1413840	
1,1-Dichloroethene	ND	U	0.50	0.20	0.080	1	10/13/14	10/13/14	KWG1413840	
Acetone	ND	U	20	10	3.3	1	10/13/14	10/13/14	KWG1413840	*
Carbon Disulfide	ND	U	0.50	0.20	0.069	1	10/13/14	10/13/14	KWG1413840	
Methylene Chloride	ND	U	2.0	0.20	0.10	1	10/13/14	10/13/14	KWG1413840	
Methyl tert-Butyl Ether	ND	U	0.50	0.30	0.11	1	10/13/14	10/13/14	KWG1413840	
trans-1,2-Dichloroethene	ND	U	0.50	0.20	0.072	1	10/13/14	10/13/14	KWG1413840	
1,1-Dichloroethane	ND	U	0.50	0.20	0.077	1	10/13/14	10/13/14	KWG1413840	
2,2-Dichloropropane	ND	U	0.50	0.20	0.060	1	10/13/14	10/13/14	KWG1413840	
cis-1,2-Dichloroethene	**0.50**		0.50	0.20	0.067	1	10/13/14	10/13/14	KWG1413840	
2-Butanone (MEK)	ND	U	20	4.0	1.9	1	10/13/14	10/13/14	KWG1413840	
Bromochloromethane	ND	U	0.50	0.20	0.16	1	10/13/14	10/13/14	KWG1413840	
Chloroform	ND	U	0.50	0.20	0.072	1	10/13/14	10/13/14	KWG1413840	
1,1,1-Trichloroethane (TCA)	ND	U	0.50	0.20	0.075	1	10/13/14	10/13/14	KWG1413840	
Carbon Tetrachloride	ND	U	0.50	0.20	0.096	1	10/13/14	10/13/14	KWG1413840	
1,1-Dichloropropene	ND	U	0.50	0.20	0.089	1	10/13/14	10/13/14	KWG1413840	
Benzene	ND	U	0.50	0.10	0.062	1	10/13/14	10/13/14	KWG1413840	
1,2-Dichloroethane (EDC)	ND	U	0.50	0.15	0.080	1	10/13/14	10/13/14	KWG1413840	
Trichloroethene (TCE)	**26**		0.50	0.10	0.10	1	10/13/14	10/13/14	KWG1413840	
1,2-Dichloropropane	ND	U	0.50	0.20	0.095	1	10/13/14	10/13/14	KWG1413840	
Dibromomethane	ND	U	0.50	0.50	0.15	1	10/13/14	10/13/14	KWG1413840	
Bromodichloromethane	ND	U	0.50	0.30	0.091	1	10/13/14	10/13/14	KWG1413840	
cis-1,3-Dichloropropene	ND	U	0.50	0.20	0.18	1	10/13/14	10/13/14	KWG1413840	
4-Methyl-2-pentanone (MIBK)	ND	U	20	10	2.6	1	10/13/14	10/13/14	KWG1413840	*
Toluene	ND	U	0.50	0.10	0.054	1	10/13/14	10/13/14	KWG1413840	
trans-1,3-Dichloropropene	ND	U	0.50	0.20	0.068	1	10/13/14	10/13/14	KWG1413840	
1,1,2-Trichloroethane	ND	U	0.50	0.40	0.14	1	10/13/14	10/13/14	KWG1413840	
Tetrachloroethene (PCE)	ND	U	0.50	0.20	0.099	1	10/13/14	10/13/14	KWG1413840	

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1410790
Project:	JBLM LTM Log Center/TO-01	**Date Collected:**	10/01/2014
Sample Matrix:	Water	**Date Received:**	10/02/2014

Volatile Organic Compounds

Sample Name:	LGC141001DUP3-1	**Units:**	ug/L
Lab Code:	K1410790-035	**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
2-Hexanone	ND	U	20	10	2.7	1	10/13/14	10/13/14	KWG1413840	
1,3-Dichloropropane	ND	U	0.50	0.30	0.14	1	10/13/14	10/13/14	KWG1413840	
Dibromochloromethane	ND	U	0.50	0.50	0.14	1	10/13/14	10/13/14	KWG1413840	
1,2-Dibromoethane (EDB)	ND	U	2.0	0.20	0.10	1	10/13/14	10/13/14	KWG1413840	
Chlorobenzene	ND	U	0.50	0.20	0.11	1	10/13/14	10/13/14	KWG1413840	
Ethylbenzene	ND	U	0.50	0.10	0.050	1	10/13/14	10/13/14	KWG1413840	
1,1,1,2-Tetrachloroethane	ND	U	0.50	0.20	0.11	1	10/13/14	10/13/14	KWG1413840	
m,p-Xylenes	ND	U	0.50	0.20	0.11	1	10/13/14	10/13/14	KWG1413840	
o-Xylene	ND	U	0.50	0.20	0.074	1	10/13/14	10/13/14	KWG1413840	
Styrene	ND	U	0.50	0.20	0.089	1	10/13/14	10/13/14	KWG1413840	
Bromoform	ND	U	0.50	0.50	0.16	1	10/13/14	10/13/14	KWG1413840	
Isopropylbenzene	ND	U	2.0	0.20	0.051	1	10/13/14	10/13/14	KWG1413840	
1,1,2,2-Tetrachloroethane	ND	U	0.50	0.20	0.16	1	10/13/14	10/13/14	KWG1413840	
Bromobenzene	ND	U	2.0	0.20	0.12	1	10/13/14	10/13/14	KWG1413840	
n-Propylbenzene	ND	U	2.0	0.20	0.054	1	10/13/14	10/13/14	KWG1413840	
1,2,3-Trichloropropane	ND	U	0.50	0.50	0.20	1	10/13/14	10/13/14	KWG1413840	
2-Chlorotoluene	ND	U	2.0	0.20	0.10	1	10/13/14	10/13/14	KWG1413840	
1,3,5-Trimethylbenzene	ND	U	2.0	0.20	0.089	1	10/13/14	10/13/14	KWG1413840	
4-Chlorotoluene	ND	U	2.0	0.20	0.13	1	10/13/14	10/13/14	KWG1413840	
tert-Butylbenzene	ND	U	2.0	0.20	0.059	1	10/13/14	10/13/14	KWG1413840	
1,2,4-Trimethylbenzene	ND	U	2.0	0.20	0.069	1	10/13/14	10/13/14	KWG1413840	
sec-Butylbenzene	ND	U	2.0	0.10	0.062	1	10/13/14	10/13/14	KWG1413840	
4-Isopropyltoluene	ND	U	2.0	0.20	0.060	1	10/13/14	10/13/14	KWG1413840	
1,3-Dichlorobenzene	ND	U	0.50	0.20	0.10	1	10/13/14	10/13/14	KWG1413840	
1,4-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	10/13/14	10/13/14	KWG1413840	
n-Butylbenzene	ND	U	2.0	0.10	0.054	1	10/13/14	10/13/14	KWG1413840	
1,2-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	10/13/14	10/13/14	KWG1413840	
1,2-Dibromo-3-chloropropane	ND	U	2.0	0.80	0.20	1	10/13/14	10/13/14	KWG1413840	
1,2,4-Trichlorobenzene	ND	U	2.0	0.30	0.096	1	10/13/14	10/13/14	KWG1413840	
Hexachlorobutadiene	ND	U	2.0	0.30	0.11	1	10/13/14	10/13/14	KWG1413840	
Naphthalene	ND	U	2.0	0.30	0.088	1	10/13/14	10/13/14	KWG1413840	
1,2,3-Trichlorobenzene	ND	U	2.0	0.40	0.11	1	10/13/14	10/13/14	KWG1413840	

* See Case Narrative

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1410790
Project:	JBLM LTM Log Center/TO-01	**Date Collected:**	10/01/2014
Sample Matrix:	Water	**Date Received:**	10/02/2014

Volatile Organic Compounds

Sample Name:	LGC141001DUP3-1	**Units:**	ug/L
Lab Code:	K1410790-035	**Basis:**	NA

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Dibromofluoromethane	105	85-115	10/13/14	Acceptable
1,2-Dichloroethane-d4	93	70-120	10/13/14	Acceptable
Toluene-d8	99	85-120	10/13/14	Acceptable
4-Bromofluorobenzene	96	75-120	10/13/14	Acceptable

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1410790
Project:	JBLM LTM Log Center/TO-01	**Date Collected:**	10/01/2014
Sample Matrix:	Water	**Date Received:**	10/02/2014

Volatile Organic Compounds

Sample Name:	LGC141001LC178-1	**Units:**	ug/L
Lab Code:	K1410790-036	**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
Dichlorodifluoromethane	ND	U	0.50	0.20	0.13	1	10/13/14	10/13/14	KWG1413840	
Chloromethane	**0.090**	J	0.50	0.20	0.068	1	10/13/14	10/13/14	KWG1413840	*
Vinyl Chloride	ND	U	0.50	0.10	0.075	1	10/13/14	10/13/14	KWG1413840	
Bromomethane	ND	U	0.50	0.30	0.10	1	10/13/14	10/13/14	KWG1413840	*
Chloroethane	ND	U	0.50	0.20	0.16	1	10/13/14	10/13/14	KWG1413840	
Trichlorofluoromethane	ND	U	0.50	0.20	0.12	1	10/13/14	10/13/14	KWG1413840	
1,1-Dichloroethene	ND	U	0.50	0.20	0.080	1	10/13/14	10/13/14	KWG1413840	
Acetone	ND	U	20	10	3.3	1	10/13/14	10/13/14	KWG1413840	*
Carbon Disulfide	ND	U	0.50	0.20	0.069	1	10/13/14	10/13/14	KWG1413840	
Methylene Chloride	ND	U	2.0	0.20	0.10	1	10/13/14	10/13/14	KWG1413840	
Methyl tert-Butyl Ether	ND	U	0.50	0.30	0.11	1	10/13/14	10/13/14	KWG1413840	
trans-1,2-Dichloroethene	ND	U	0.50	0.20	0.072	1	10/13/14	10/13/14	KWG1413840	
1,1-Dichloroethane	ND	U	0.50	0.20	0.077	1	10/13/14	10/13/14	KWG1413840	
2,2-Dichloropropane	ND	U	0.50	0.20	0.060	1	10/13/14	10/13/14	KWG1413840	
cis-1,2-Dichloroethene	**0.15**	J	0.50	0.20	0.067	1	10/13/14	10/13/14	KWG1413840	
2-Butanone (MEK)	ND	U	20	4.0	1.9	1	10/13/14	10/13/14	KWG1413840	
Bromochloromethane	ND	U	0.50	0.20	0.16	1	10/13/14	10/13/14	KWG1413840	
Chloroform	ND	U	0.50	0.20	0.072	1	10/13/14	10/13/14	KWG1413840	
1,1,1-Trichloroethane (TCA)	ND	U	0.50	0.20	0.075	1	10/13/14	10/13/14	KWG1413840	
Carbon Tetrachloride	ND	U	0.50	0.20	0.096	1	10/13/14	10/13/14	KWG1413840	
1,1-Dichloropropene	ND	U	0.50	0.20	0.089	1	10/13/14	10/13/14	KWG1413840	
Benzene	ND	U	0.50	0.10	0.062	1	10/13/14	10/13/14	KWG1413840	
1,2-Dichloroethane (EDC)	ND	U	0.50	0.15	0.080	1	10/13/14	10/13/14	KWG1413840	
Trichloroethene (TCE)	**5.4**		0.50	0.10	0.10	1	10/13/14	10/13/14	KWG1413840	
1,2-Dichloropropane	ND	U	0.50	0.20	0.095	1	10/13/14	10/13/14	KWG1413840	
Dibromomethane	ND	U	0.50	0.50	0.15	1	10/13/14	10/13/14	KWG1413840	
Bromodichloromethane	ND	U	0.50	0.30	0.091	1	10/13/14	10/13/14	KWG1413840	
cis-1,3-Dichloropropene	ND	U	0.50	0.20	0.18	1	10/13/14	10/13/14	KWG1413840	
4-Methyl-2-pentanone (MIBK)	ND	U	20	10	2.6	1	10/13/14	10/13/14	KWG1413840	*
Toluene	ND	U	0.50	0.10	0.054	1	10/13/14	10/13/14	KWG1413840	
trans-1,3-Dichloropropene	ND	U	0.50	0.20	0.068	1	10/13/14	10/13/14	KWG1413840	
1,1,2-Trichloroethane	ND	U	0.50	0.40	0.14	1	10/13/14	10/13/14	KWG1413840	
Tetrachloroethene (PCE)	ND	U	0.50	0.20	0.099	1	10/13/14	10/13/14	KWG1413840	

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1410790
Project:	JBLM LTM Log Center/TO-01	**Date Collected:**	10/01/2014
Sample Matrix:	Water	**Date Received:**	10/02/2014

Volatile Organic Compounds

Sample Name:	LGC141001LC178-1	**Units:**	ug/L
Lab Code:	K1410790-036	**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
2-Hexanone	ND	U	20	10	2.7	1	10/13/14	10/13/14	KWG1413840	
1,3-Dichloropropane	ND	U	0.50	0.30	0.14	1	10/13/14	10/13/14	KWG1413840	
Dibromochloromethane	ND	U	0.50	0.50	0.14	1	10/13/14	10/13/14	KWG1413840	
1,2-Dibromoethane (EDB)	ND	U	2.0	0.20	0.10	1	10/13/14	10/13/14	KWG1413840	
Chlorobenzene	ND	U	0.50	0.20	0.11	1	10/13/14	10/13/14	KWG1413840	
Ethylbenzene	ND	U	0.50	0.10	0.050	1	10/13/14	10/13/14	KWG1413840	
1,1,1,2-Tetrachloroethane	ND	U	0.50	0.20	0.11	1	10/13/14	10/13/14	KWG1413840	
m,p-Xylenes	ND	U	0.50	0.20	0.11	1	10/13/14	10/13/14	KWG1413840	
o-Xylene	ND	U	0.50	0.20	0.074	1	10/13/14	10/13/14	KWG1413840	
Styrene	ND	U	0.50	0.20	0.089	1	10/13/14	10/13/14	KWG1413840	
Bromoform	ND	U	0.50	0.50	0.16	1	10/13/14	10/13/14	KWG1413840	
Isopropylbenzene	ND	U	2.0	0.20	0.051	1	10/13/14	10/13/14	KWG1413840	
1,1,2,2-Tetrachloroethane	ND	U	0.50	0.20	0.16	1	10/13/14	10/13/14	KWG1413840	
Bromobenzene	ND	U	2.0	0.20	0.12	1	10/13/14	10/13/14	KWG1413840	
n-Propylbenzene	ND	U	2.0	0.20	0.054	1	10/13/14	10/13/14	KWG1413840	
1,2,3-Trichloropropane	ND	U	0.50	0.50	0.20	1	10/13/14	10/13/14	KWG1413840	
2-Chlorotoluene	ND	U	2.0	0.20	0.10	1	10/13/14	10/13/14	KWG1413840	
1,3,5-Trimethylbenzene	ND	U	2.0	0.20	0.089	1	10/13/14	10/13/14	KWG1413840	
4-Chlorotoluene	ND	U	2.0	0.20	0.13	1	10/13/14	10/13/14	KWG1413840	
tert-Butylbenzene	ND	U	2.0	0.20	0.059	1	10/13/14	10/13/14	KWG1413840	
1,2,4-Trimethylbenzene	ND	U	2.0	0.20	0.069	1	10/13/14	10/13/14	KWG1413840	
sec-Butylbenzene	ND	U	2.0	0.10	0.062	1	10/13/14	10/13/14	KWG1413840	
4-Isopropyltoluene	ND	U	2.0	0.20	0.060	1	10/13/14	10/13/14	KWG1413840	
1,3-Dichlorobenzene	ND	U	0.50	0.20	0.10	1	10/13/14	10/13/14	KWG1413840	
1,4-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	10/13/14	10/13/14	KWG1413840	
n-Butylbenzene	ND	U	2.0	0.10	0.054	1	10/13/14	10/13/14	KWG1413840	
1,2-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	10/13/14	10/13/14	KWG1413840	
1,2-Dibromo-3-chloropropane	ND	U	2.0	0.80	0.20	1	10/13/14	10/13/14	KWG1413840	
1,2,4-Trichlorobenzene	ND	U	2.0	0.30	0.096	1	10/13/14	10/13/14	KWG1413840	
Hexachlorobutadiene	ND	U	2.0	0.30	0.11	1	10/13/14	10/13/14	KWG1413840	
Naphthalene	ND	U	2.0	0.30	0.088	1	10/13/14	10/13/14	KWG1413840	
1,2,3-Trichlorobenzene	ND	U	2.0	0.40	0.11	1	10/13/14	10/13/14	KWG1413840	

* See Case Narrative

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1410790
Project:	JBLM LTM Log Center/TO-01	**Date Collected:**	10/01/2014
Sample Matrix:	Water	**Date Received:**	10/02/2014

Volatile Organic Compounds

Sample Name:	LGC141001LC178-1	**Units:**	ug/L
Lab Code:	K1410790-036	**Basis:**	NA

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Dibromofluoromethane	102	85-115	10/13/14	Acceptable
1,2-Dichloroethane-d4	91	70-120	10/13/14	Acceptable
Toluene-d8	98	85-120	10/13/14	Acceptable
4-Bromofluorobenzene	95	75-120	10/13/14	Acceptable

Comments:

Analytical Results

Client: Sealaska Environmental Services, LLC
Project: JBLM LTM Log Center/TO-01
Sample Matrix: Water

Service Request: K1410790
Date Collected: 10/01/2014
Date Received: 10/02/2014

Volatile Organic Compounds

Sample Name: LGC141001Well13-1
Lab Code: K1410790-037

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
Dichlorodifluoromethane	ND	U	0.50	0.20	0.13	1	10/13/14	10/13/14	KWG1413840	
Chloromethane	ND	U	0.50	0.20	0.068	1	10/13/14	10/13/14	KWG1413840	*
Vinyl Chloride	ND	U	0.50	0.10	0.075	1	10/13/14	10/13/14	KWG1413840	
Bromomethane	ND	U	0.50	0.30	0.10	1	10/13/14	10/13/14	KWG1413840	*
Chloroethane	ND	U	0.50	0.20	0.16	1	10/13/14	10/13/14	KWG1413840	
Trichlorofluoromethane	ND	U	0.50	0.20	0.12	1	10/13/14	10/13/14	KWG1413840	
1,1-Dichloroethene	ND	U	0.50	0.20	0.080	1	10/13/14	10/13/14	KWG1413840	
Acetone	ND	U	20	10	3.3	1	10/13/14	10/13/14	KWG1413840	*
Carbon Disulfide	ND	U	0.50	0.20	0.069	1	10/13/14	10/13/14	KWG1413840	
Methylene Chloride	ND	U	2.0	0.20	0.10	1	10/13/14	10/13/14	KWG1413840	
Methyl tert-Butyl Ether	ND	U	0.50	0.30	0.11	1	10/13/14	10/13/14	KWG1413840	
trans-1,2-Dichloroethene	ND	U	0.50	0.20	0.072	1	10/13/14	10/13/14	KWG1413840	
1,1-Dichloroethane	ND	U	0.50	0.20	0.077	1	10/13/14	10/13/14	KWG1413840	
2,2-Dichloropropane	ND	U	0.50	0.20	0.060	1	10/13/14	10/13/14	KWG1413840	
cis-1,2-Dichloroethene	ND	U	0.50	0.20	0.067	1	10/13/14	10/13/14	KWG1413840	
2-Butanone (MEK)	ND	U	20	4.0	1.9	1	10/13/14	10/13/14	KWG1413840	
Bromochloromethane	ND	U	0.50	0.20	0.16	1	10/13/14	10/13/14	KWG1413840	
Chloroform	ND	U	0.50	0.20	0.072	1	10/13/14	10/13/14	KWG1413840	
1,1,1-Trichloroethane (TCA)	ND	U	0.50	0.20	0.075	1	10/13/14	10/13/14	KWG1413840	
Carbon Tetrachloride	ND	U	0.50	0.20	0.096	1	10/13/14	10/13/14	KWG1413840	
1,1-Dichloropropene	ND	U	0.50	0.20	0.089	1	10/13/14	10/13/14	KWG1413840	
Benzene	ND	U	0.50	0.10	0.062	1	10/13/14	10/13/14	KWG1413840	
1,2-Dichloroethane (EDC)	ND	U	0.50	0.15	0.080	1	10/13/14	10/13/14	KWG1413840	
Trichloroethene (TCE)	**0.22**	J	0.50	0.10	0.10	1	10/13/14	10/13/14	KWG1413840	
1,2-Dichloropropane	ND	U	0.50	0.20	0.095	1	10/13/14	10/13/14	KWG1413840	
Dibromomethane	ND	U	0.50	0.50	0.15	1	10/13/14	10/13/14	KWG1413840	
Bromodichloromethane	ND	U	0.50	0.30	0.091	1	10/13/14	10/13/14	KWG1413840	
cis-1,3-Dichloropropene	ND	U	0.50	0.20	0.18	1	10/13/14	10/13/14	KWG1413840	
4-Methyl-2-pentanone (MIBK)	ND	U	20	10	2.6	1	10/13/14	10/13/14	KWG1413840	*
Toluene	ND	U	0.50	0.10	0.054	1	10/13/14	10/13/14	KWG1413840	
trans-1,3-Dichloropropene	ND	U	0.50	0.20	0.068	1	10/13/14	10/13/14	KWG1413840	
1,1,2-Trichloroethane	ND	U	0.50	0.40	0.14	1	10/13/14	10/13/14	KWG1413840	
Tetrachloroethene (PCE)	ND	U	0.50	0.20	0.099	1	10/13/14	10/13/14	KWG1413840	

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1410790
Project:	JBLM LTM Log Center/TO-01	**Date Collected:**	10/01/2014
Sample Matrix:	Water	**Date Received:**	10/02/2014

Volatile Organic Compounds

Sample Name:	LGC141001Well13-1	**Units:**	ug/L
Lab Code:	K1410790-037	**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
2-Hexanone	ND	U	20	10	2.7	1	10/13/14	10/13/14	KWG1413840	
1,3-Dichloropropane	ND	U	0.50	0.30	0.14	1	10/13/14	10/13/14	KWG1413840	
Dibromochloromethane	ND	U	0.50	0.50	0.14	1	10/13/14	10/13/14	KWG1413840	
1,2-Dibromoethane (EDB)	ND	U	2.0	0.20	0.10	1	10/13/14	10/13/14	KWG1413840	
Chlorobenzene	ND	U	0.50	0.20	0.11	1	10/13/14	10/13/14	KWG1413840	
Ethylbenzene	ND	U	0.50	0.10	0.050	1	10/13/14	10/13/14	KWG1413840	
1,1,1,2-Tetrachloroethane	ND	U	0.50	0.20	0.11	1	10/13/14	10/13/14	KWG1413840	
m,p-Xylenes	ND	U	0.50	0.20	0.11	1	10/13/14	10/13/14	KWG1413840	
o-Xylene	ND	U	0.50	0.20	0.074	1	10/13/14	10/13/14	KWG1413840	
Styrene	ND	U	0.50	0.20	0.089	1	10/13/14	10/13/14	KWG1413840	
Bromoform	ND	U	0.50	0.50	0.16	1	10/13/14	10/13/14	KWG1413840	
Isopropylbenzene	ND	U	2.0	0.20	0.051	1	10/13/14	10/13/14	KWG1413840	
1,1,2,2-Tetrachloroethane	ND	U	0.50	0.20	0.16	1	10/13/14	10/13/14	KWG1413840	
Bromobenzene	ND	U	2.0	0.20	0.12	1	10/13/14	10/13/14	KWG1413840	
n-Propylbenzene	ND	U	2.0	0.20	0.054	1	10/13/14	10/13/14	KWG1413840	
1,2,3-Trichloropropane	ND	U	0.50	0.50	0.20	1	10/13/14	10/13/14	KWG1413840	
2-Chlorotoluene	ND	U	2.0	0.20	0.10	1	10/13/14	10/13/14	KWG1413840	
1,3,5-Trimethylbenzene	ND	U	2.0	0.20	0.089	1	10/13/14	10/13/14	KWG1413840	
4-Chlorotoluene	ND	U	2.0	0.20	0.13	1	10/13/14	10/13/14	KWG1413840	
tert-Butylbenzene	ND	U	2.0	0.20	0.059	1	10/13/14	10/13/14	KWG1413840	
1,2,4-Trimethylbenzene	ND	U	2.0	0.20	0.069	1	10/13/14	10/13/14	KWG1413840	
sec-Butylbenzene	ND	U	2.0	0.10	0.062	1	10/13/14	10/13/14	KWG1413840	
4-Isopropyltoluene	ND	U	2.0	0.20	0.060	1	10/13/14	10/13/14	KWG1413840	
1,3-Dichlorobenzene	ND	U	0.50	0.20	0.10	1	10/13/14	10/13/14	KWG1413840	
1,4-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	10/13/14	10/13/14	KWG1413840	
n-Butylbenzene	ND	U	2.0	0.10	0.054	1	10/13/14	10/13/14	KWG1413840	
1,2-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	10/13/14	10/13/14	KWG1413840	
1,2-Dibromo-3-chloropropane	ND	U	2.0	0.80	0.20	1	10/13/14	10/13/14	KWG1413840	
1,2,4-Trichlorobenzene	ND	U	2.0	0.30	0.096	1	10/13/14	10/13/14	KWG1413840	
Hexachlorobutadiene	ND	U	2.0	0.30	0.11	1	10/13/14	10/13/14	KWG1413840	
Naphthalene	ND	U	2.0	0.30	0.088	1	10/13/14	10/13/14	KWG1413840	
1,2,3-Trichlorobenzene	ND	U	2.0	0.40	0.11	1	10/13/14	10/13/14	KWG1413840	

* See Case Narrative

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1410790
Project:	JBLM LTM Log Center/TO-01	**Date Collected:**	10/01/2014
Sample Matrix:	Water	**Date Received:**	10/02/2014

Volatile Organic Compounds

Sample Name:	LGC141001Well13-1	**Units:**	ug/L
Lab Code:	K1410790-037	**Basis:**	NA

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Dibromofluoromethane	101	85-115	10/13/14	Acceptable
1,2-Dichloroethane-d4	89	70-120	10/13/14	Acceptable
Toluene-d8	97	85-120	10/13/14	Acceptable
4-Bromofluorobenzene	96	75-120	10/13/14	Acceptable

Comments:

Analytical Results

Client: Sealaska Environmental Services, LLC
Project: JBLM LTM Log Center/TO-01
Sample Matrix: Water

Service Request: K1410790
Date Collected: 10/01/2014
Date Received: 10/02/2014

Volatile Organic Compounds

Sample Name: LGC141001LC98D1-1
Lab Code: K1410790-038

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
Dichlorodifluoromethane	ND	U	0.50	0.20	0.13	1	10/13/14	10/13/14	KWG1413840	
Chloromethane	**0.090**	J	0.50	0.20	0.068	1	10/13/14	10/13/14	KWG1413840	*
Vinyl Chloride	ND	U	0.50	0.10	0.075	1	10/13/14	10/13/14	KWG1413840	
Bromomethane	ND	U	0.50	0.30	0.10	1	10/13/14	10/13/14	KWG1413840	*
Chloroethane	ND	U	0.50	0.20	0.16	1	10/13/14	10/13/14	KWG1413840	
Trichlorofluoromethane	ND	U	0.50	0.20	0.12	1	10/13/14	10/13/14	KWG1413840	
1,1-Dichloroethene	ND	U	0.50	0.20	0.080	1	10/13/14	10/13/14	KWG1413840	
Acetone	ND	U	20	10	3.3	1	10/13/14	10/13/14	KWG1413840	*
Carbon Disulfide	**0.080**	J	0.50	0.20	0.069	1	10/13/14	10/13/14	KWG1413840	
Methylene Chloride	ND	U	2.0	0.20	0.10	1	10/13/14	10/13/14	KWG1413840	
Methyl tert-Butyl Ether	ND	U	0.50	0.30	0.11	1	10/13/14	10/13/14	KWG1413840	
trans-1,2-Dichloroethene	ND	U	0.50	0.20	0.072	1	10/13/14	10/13/14	KWG1413840	
1,1-Dichloroethane	ND	U	0.50	0.20	0.077	1	10/13/14	10/13/14	KWG1413840	
2,2-Dichloropropane	ND	U	0.50	0.20	0.060	1	10/13/14	10/13/14	KWG1413840	
cis-1,2-Dichloroethene	**0.34**	J	0.50	0.20	0.067	1	10/13/14	10/13/14	KWG1413840	
2-Butanone (MEK)	ND	U	20	4.0	1.9	1	10/13/14	10/13/14	KWG1413840	
Bromochloromethane	ND	U	0.50	0.20	0.16	1	10/13/14	10/13/14	KWG1413840	
Chloroform	**0.11**	J	0.50	0.20	0.072	1	10/13/14	10/13/14	KWG1413840	
1,1,1-Trichloroethane (TCA)	ND	U	0.50	0.20	0.075	1	10/13/14	10/13/14	KWG1413840	
Carbon Tetrachloride	ND	U	0.50	0.20	0.096	1	10/13/14	10/13/14	KWG1413840	
1,1-Dichloropropene	ND	U	0.50	0.20	0.089	1	10/13/14	10/13/14	KWG1413840	
Benzene	**0.070**	J	0.50	0.10	0.062	1	10/13/14	10/13/14	KWG1413840	
1,2-Dichloroethane (EDC)	ND	U	0.50	0.15	0.080	1	10/13/14	10/13/14	KWG1413840	
Trichloroethene (TCE)	**15**		0.50	0.10	0.10	1	10/13/14	10/13/14	KWG1413840	
1,2-Dichloropropane	ND	U	0.50	0.20	0.095	1	10/13/14	10/13/14	KWG1413840	
Dibromomethane	ND	U	0.50	0.50	0.15	1	10/13/14	10/13/14	KWG1413840	
Bromodichloromethane	ND	U	0.50	0.30	0.091	1	10/13/14	10/13/14	KWG1413840	
cis-1,3-Dichloropropene	ND	U	0.50	0.20	0.18	1	10/13/14	10/13/14	KWG1413840	
4-Methyl-2-pentanone (MIBK)	ND	U	20	10	2.6	1	10/13/14	10/13/14	KWG1413840	*
Toluene	**1.2**		0.50	0.10	0.054	1	10/13/14	10/13/14	KWG1413840	
trans-1,3-Dichloropropene	ND	U	0.50	0.20	0.068	1	10/13/14	10/13/14	KWG1413840	
1,1,2-Trichloroethane	ND	U	0.50	0.40	0.14	1	10/13/14	10/13/14	KWG1413840	
Tetrachloroethene (PCE)	ND	U	0.50	0.20	0.099	1	10/13/14	10/13/14	KWG1413840	

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1410790
Project:	JBLM LTM Log Center/TO-01	**Date Collected:**	10/01/2014
Sample Matrix:	Water	**Date Received:**	10/02/2014

Volatile Organic Compounds

Sample Name:	LGC141001LC98D1-1	**Units:**	ug/L
Lab Code:	K1410790-038	**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
2-Hexanone	ND	U	20	10	2.7	1	10/13/14	10/13/14	KWG1413840	
1,3-Dichloropropane	ND	U	0.50	0.30	0.14	1	10/13/14	10/13/14	KWG1413840	
Dibromochloromethane	ND	U	0.50	0.50	0.14	1	10/13/14	10/13/14	KWG1413840	
1,2-Dibromoethane (EDB)	ND	U	2.0	0.20	0.10	1	10/13/14	10/13/14	KWG1413840	
Chlorobenzene	ND	U	0.50	0.20	0.11	1	10/13/14	10/13/14	KWG1413840	
Ethylbenzene	**0.19**	J	0.50	0.10	0.050	1	10/13/14	10/13/14	KWG1413840	*
1,1,1,2-Tetrachloroethane	ND	U	0.50	0.20	0.11	1	10/13/14	10/13/14	KWG1413840	
m,p-Xylenes	**0.86**		0.50	0.20	0.11	1	10/13/14	10/13/14	KWG1413840	*
o-Xylene	**0.29**	J	0.50	0.20	0.074	1	10/13/14	10/13/14	KWG1413840	*
Styrene	ND	U	0.50	0.20	0.089	1	10/13/14	10/13/14	KWG1413840	
Bromoform	ND	U	0.50	0.50	0.16	1	10/13/14	10/13/14	KWG1413840	
Isopropylbenzene	ND	U	2.0	0.20	0.051	1	10/13/14	10/13/14	KWG1413840	
1,1,2,2-Tetrachloroethane	ND	U	0.50	0.20	0.16	1	10/13/14	10/13/14	KWG1413840	
Bromobenzene	ND	U	2.0	0.20	0.12	1	10/13/14	10/13/14	KWG1413840	
n-Propylbenzene	ND	U	2.0	0.20	0.054	1	10/13/14	10/13/14	KWG1413840	
1,2,3-Trichloropropane	ND	U	0.50	0.50	0.20	1	10/13/14	10/13/14	KWG1413840	
2-Chlorotoluene	ND	U	2.0	0.20	0.10	1	10/13/14	10/13/14	KWG1413840	
1,3,5-Trimethylbenzene	ND	U	2.0	0.20	0.089	1	10/13/14	10/13/14	KWG1413840	
4-Chlorotoluene	ND	U	2.0	0.20	0.13	1	10/13/14	10/13/14	KWG1413840	
tert-Butylbenzene	ND	U	2.0	0.20	0.059	1	10/13/14	10/13/14	KWG1413840	
1,2,4-Trimethylbenzene	**0.21**	J	2.0	0.20	0.069	1	10/13/14	10/13/14	KWG1413840	
sec-Butylbenzene	ND	U	2.0	0.10	0.062	1	10/13/14	10/13/14	KWG1413840	
4-Isopropyltoluene	ND	U	2.0	0.20	0.060	1	10/13/14	10/13/14	KWG1413840	
1,3-Dichlorobenzene	ND	U	0.50	0.20	0.10	1	10/13/14	10/13/14	KWG1413840	
1,4-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	10/13/14	10/13/14	KWG1413840	
n-Butylbenzene	ND	U	2.0	0.10	0.054	1	10/13/14	10/13/14	KWG1413840	
1,2-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	10/13/14	10/13/14	KWG1413840	
1,2-Dibromo-3-chloropropane	ND	U	2.0	0.80	0.20	1	10/13/14	10/13/14	KWG1413840	
1,2,4-Trichlorobenzene	ND	U	2.0	0.30	0.096	1	10/13/14	10/13/14	KWG1413840	
Hexachlorobutadiene	ND	U	2.0	0.30	0.11	1	10/13/14	10/13/14	KWG1413840	
Naphthalene	**0.11**	J	2.0	0.30	0.088	1	10/13/14	10/13/14	KWG1413840	
1,2,3-Trichlorobenzene	ND	U	2.0	0.40	0.11	1	10/13/14	10/13/14	KWG1413840	

* See Case Narrative

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1410790
Project:	JBLM LTM Log Center/TO-01	**Date Collected:**	10/01/2014
Sample Matrix:	Water	**Date Received:**	10/02/2014

Volatile Organic Compounds

Sample Name:	LGC141001LC98D1-1	**Units:**	ug/L
Lab Code:	K1410790-038	**Basis:**	NA

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Dibromofluoromethane	103	85-115	10/13/14	Acceptable
1,2-Dichloroethane-d4	91	70-120	10/13/14	Acceptable
Toluene-d8	99	85-120	10/13/14	Acceptable
4-Bromofluorobenzene	95	75-120	10/13/14	Acceptable

Comments:

Analytical Results

Client: Sealaska Environmental Services, LLC
Project: JBLM LTM Log Center/TO-01
Sample Matrix: Water

Service Request: K1410790
Date Collected: 10/01/2014
Date Received: 10/02/2014

Volatile Organic Compounds

Sample Name: LGC141001DUP8-1
Lab Code: K1410790-039

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
Dichlorodifluoromethane	ND	U	0.50	0.20	0.13	1	10/13/14	10/13/14	KWG1413840	
Chloromethane	ND	U	0.50	0.20	0.068	1	10/13/14	10/13/14	KWG1413840	*
Vinyl Chloride	ND	U	0.50	0.10	0.075	1	10/13/14	10/13/14	KWG1413840	
Bromomethane	ND	U	0.50	0.30	0.10	1	10/13/14	10/13/14	KWG1413840	*
Chloroethane	ND	U	0.50	0.20	0.16	1	10/13/14	10/13/14	KWG1413840	
Trichlorofluoromethane	ND	U	0.50	0.20	0.12	1	10/13/14	10/13/14	KWG1413840	
1,1-Dichloroethene	ND	U	0.50	0.20	0.080	1	10/13/14	10/13/14	KWG1413840	
Acetone	ND	U	20	10	3.3	1	10/13/14	10/13/14	KWG1413840	*
Carbon Disulfide	ND	U	0.50	0.20	0.069	1	10/13/14	10/13/14	KWG1413840	
Methylene Chloride	ND	U	2.0	0.20	0.10	1	10/13/14	10/13/14	KWG1413840	
Methyl tert-Butyl Ether	ND	U	0.50	0.30	0.11	1	10/13/14	10/13/14	KWG1413840	
trans-1,2-Dichloroethene	ND	U	0.50	0.20	0.072	1	10/13/14	10/13/14	KWG1413840	
1,1-Dichloroethane	ND	U	0.50	0.20	0.077	1	10/13/14	10/13/14	KWG1413840	
2,2-Dichloropropane	ND	U	0.50	0.20	0.060	1	10/13/14	10/13/14	KWG1413840	
cis-1,2-Dichloroethene	**0.42**	J	0.50	0.20	0.067	1	10/13/14	10/13/14	KWG1413840	
2-Butanone (MEK)	ND	U	20	4.0	1.9	1	10/13/14	10/13/14	KWG1413840	
Bromochloromethane	ND	U	0.50	0.20	0.16	1	10/13/14	10/13/14	KWG1413840	
Chloroform	**0.13**	J	0.50	0.20	0.072	1	10/13/14	10/13/14	KWG1413840	
1,1,1-Trichloroethane (TCA)	ND	U	0.50	0.20	0.075	1	10/13/14	10/13/14	KWG1413840	
Carbon Tetrachloride	ND	U	0.50	0.20	0.096	1	10/13/14	10/13/14	KWG1413840	
1,1-Dichloropropene	ND	U	0.50	0.20	0.089	1	10/13/14	10/13/14	KWG1413840	
Benzene	ND	U	0.50	0.10	0.062	1	10/13/14	10/13/14	KWG1413840	
1,2-Dichloroethane (EDC)	ND	U	0.50	0.15	0.080	1	10/13/14	10/13/14	KWG1413840	
Trichloroethene (TCE)	**19**		0.50	0.10	0.10	1	10/13/14	10/13/14	KWG1413840	
1,2-Dichloropropane	ND	U	0.50	0.20	0.095	1	10/13/14	10/13/14	KWG1413840	
Dibromomethane	ND	U	0.50	0.50	0.15	1	10/13/14	10/13/14	KWG1413840	
Bromodichloromethane	ND	U	0.50	0.30	0.091	1	10/13/14	10/13/14	KWG1413840	
cis-1,3-Dichloropropene	ND	U	0.50	0.20	0.18	1	10/13/14	10/13/14	KWG1413840	
4-Methyl-2-pentanone (MIBK)	ND	U	20	10	2.6	1	10/13/14	10/13/14	KWG1413840	*
Toluene	**0.99**		0.50	0.10	0.054	1	10/13/14	10/13/14	KWG1413840	
trans-1,3-Dichloropropene	ND	U	0.50	0.20	0.068	1	10/13/14	10/13/14	KWG1413840	
1,1,2-Trichloroethane	ND	U	0.50	0.40	0.14	1	10/13/14	10/13/14	KWG1413840	
Tetrachloroethene (PCE)	ND	U	0.50	0.20	0.099	1	10/13/14	10/13/14	KWG1413840	

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1410790
Project:	JBLM LTM Log Center/TO-01	**Date Collected:**	10/01/2014
Sample Matrix:	Water	**Date Received:**	10/02/2014

Volatile Organic Compounds

Sample Name:	LGC141001DUP8-1	**Units:**	ug/L
Lab Code:	K1410790-039	**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
2-Hexanone	ND	U	20	10	2.7	1	10/13/14	10/13/14	KWG1413840	
1,3-Dichloropropane	ND	U	0.50	0.30	0.14	1	10/13/14	10/13/14	KWG1413840	
Dibromochloromethane	ND	U	0.50	0.50	0.14	1	10/13/14	10/13/14	KWG1413840	
1,2-Dibromoethane (EDB)	ND	U	2.0	0.20	0.10	1	10/13/14	10/13/14	KWG1413840	
Chlorobenzene	ND	U	0.50	0.20	0.11	1	10/13/14	10/13/14	KWG1413840	
Ethylbenzene	**0.17**	J	0.50	0.10	0.050	1	10/13/14	10/13/14	KWG1413840	*
1,1,1,2-Tetrachloroethane	ND	U	0.50	0.20	0.11	1	10/13/14	10/13/14	KWG1413840	
m,p-Xylenes	**0.76**		0.50	0.20	0.11	1	10/13/14	10/13/14	KWG1413840	*
o-Xylene	**0.28**	J	0.50	0.20	0.074	1	10/13/14	10/13/14	KWG1413840	*
Styrene	ND	U	0.50	0.20	0.089	1	10/13/14	10/13/14	KWG1413840	
Bromoform	ND	U	0.50	0.50	0.16	1	10/13/14	10/13/14	KWG1413840	
Isopropylbenzene	ND	U	2.0	0.20	0.051	1	10/13/14	10/13/14	KWG1413840	
1,1,2,2-Tetrachloroethane	ND	U	0.50	0.20	0.16	1	10/13/14	10/13/14	KWG1413840	
Bromobenzene	ND	U	2.0	0.20	0.12	1	10/13/14	10/13/14	KWG1413840	
n-Propylbenzene	ND	U	2.0	0.20	0.054	1	10/13/14	10/13/14	KWG1413840	
1,2,3-Trichloropropane	ND	U	0.50	0.50	0.20	1	10/13/14	10/13/14	KWG1413840	
2-Chlorotoluene	ND	U	2.0	0.20	0.10	1	10/13/14	10/13/14	KWG1413840	
1,3,5-Trimethylbenzene	ND	U	2.0	0.20	0.089	1	10/13/14	10/13/14	KWG1413840	
4-Chlorotoluene	ND	U	2.0	0.20	0.13	1	10/13/14	10/13/14	KWG1413840	
tert-Butylbenzene	ND	U	2.0	0.20	0.059	1	10/13/14	10/13/14	KWG1413840	
1,2,4-Trimethylbenzene	**0.17**	J	2.0	0.20	0.069	1	10/13/14	10/13/14	KWG1413840	
sec-Butylbenzene	ND	U	2.0	0.10	0.062	1	10/13/14	10/13/14	KWG1413840	
4-Isopropyltoluene	ND	U	2.0	0.20	0.060	1	10/13/14	10/13/14	KWG1413840	
1,3-Dichlorobenzene	ND	U	0.50	0.20	0.10	1	10/13/14	10/13/14	KWG1413840	
1,4-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	10/13/14	10/13/14	KWG1413840	
n-Butylbenzene	ND	U	2.0	0.10	0.054	1	10/13/14	10/13/14	KWG1413840	
1,2-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	10/13/14	10/13/14	KWG1413840	
1,2-Dibromo-3-chloropropane	ND	U	2.0	0.80	0.20	1	10/13/14	10/13/14	KWG1413840	
1,2,4-Trichlorobenzene	ND	U	2.0	0.30	0.096	1	10/13/14	10/13/14	KWG1413840	
Hexachlorobutadiene	ND	U	2.0	0.30	0.11	1	10/13/14	10/13/14	KWG1413840	
Naphthalene	**0.11**	J	2.0	0.30	0.088	1	10/13/14	10/13/14	KWG1413840	
1,2,3-Trichlorobenzene	ND	U	2.0	0.40	0.11	1	10/13/14	10/13/14	KWG1413840	

* See Case Narrative

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1410790
Project:	JBLM LTM Log Center/TO-01	**Date Collected:**	10/01/2014
Sample Matrix:	Water	**Date Received:**	10/02/2014

Volatile Organic Compounds

Sample Name:	LGC141001DUP8-1	**Units:**	ug/L
Lab Code:	K1410790-039	**Basis:**	NA

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Dibromofluoromethane	103	85-115	10/13/14	Acceptable
1,2-Dichloroethane-d4	89	70-120	10/13/14	Acceptable
Toluene-d8	99	85-120	10/13/14	Acceptable
4-Bromofluorobenzene	95	75-120	10/13/14	Acceptable

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1410790
Project:	JBLM LTM Log Center/TO-01	**Date Collected:**	10/01/2014
Sample Matrix:	Water	**Date Received:**	10/02/2014

Volatile Organic Compounds

Sample Name:	LGC141001LC98D2-1	**Units:**	ug/L
Lab Code:	K1410790-040	**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
Dichlorodifluoromethane	ND	U	0.50	0.20	0.13	1	10/13/14	10/13/14	KWG1413840	
Chloromethane	**0.12**	J	0.50	0.20	0.068	1	10/13/14	10/13/14	KWG1413840	*
Vinyl Chloride	ND	U	0.50	0.10	0.075	1	10/13/14	10/13/14	KWG1413840	
Bromomethane	ND	U	0.50	0.30	0.10	1	10/13/14	10/13/14	KWG1413840	*
Chloroethane	ND	U	0.50	0.20	0.16	1	10/13/14	10/13/14	KWG1413840	
Trichlorofluoromethane	ND	U	0.50	0.20	0.12	1	10/13/14	10/13/14	KWG1413840	
1,1-Dichloroethene	ND	U	0.50	0.20	0.080	1	10/13/14	10/13/14	KWG1413840	
Acetone	ND	U	20	10	3.3	1	10/13/14	10/13/14	KWG1413840	*
Carbon Disulfide	**0.10**	J	0.50	0.20	0.069	1	10/13/14	10/13/14	KWG1413840	
Methylene Chloride	ND	U	2.0	0.20	0.10	1	10/13/14	10/13/14	KWG1413840	
Methyl tert-Butyl Ether	ND	U	0.50	0.30	0.11	1	10/13/14	10/13/14	KWG1413840	
trans-1,2-Dichloroethene	ND	U	0.50	0.20	0.072	1	10/13/14	10/13/14	KWG1413840	
1,1-Dichloroethane	ND	U	0.50	0.20	0.077	1	10/13/14	10/13/14	KWG1413840	
2,2-Dichloropropane	ND	U	0.50	0.20	0.060	1	10/13/14	10/13/14	KWG1413840	
cis-1,2-Dichloroethene	ND	U	0.50	0.20	0.067	1	10/13/14	10/13/14	KWG1413840	
2-Butanone (MEK)	ND	U	20	4.0	1.9	1	10/13/14	10/13/14	KWG1413840	
Bromochloromethane	ND	U	0.50	0.20	0.16	1	10/13/14	10/13/14	KWG1413840	
Chloroform	ND	U	0.50	0.20	0.072	1	10/13/14	10/13/14	KWG1413840	
1,1,1-Trichloroethane (TCA)	ND	U	0.50	0.20	0.075	1	10/13/14	10/13/14	KWG1413840	
Carbon Tetrachloride	ND	U	0.50	0.20	0.096	1	10/13/14	10/13/14	KWG1413840	
1,1-Dichloropropene	ND	U	0.50	0.20	0.089	1	10/13/14	10/13/14	KWG1413840	
Benzene	**0.11**	J	0.50	0.10	0.062	1	10/13/14	10/13/14	KWG1413840	
1,2-Dichloroethane (EDC)	ND	U	0.50	0.15	0.080	1	10/13/14	10/13/14	KWG1413840	
Trichloroethene (TCE)	**12**		0.50	0.10	0.10	1	10/13/14	10/13/14	KWG1413840	
1,2-Dichloropropane	ND	U	0.50	0.20	0.095	1	10/13/14	10/13/14	KWG1413840	
Dibromomethane	ND	U	0.50	0.50	0.15	1	10/13/14	10/13/14	KWG1413840	
Bromodichloromethane	ND	U	0.50	0.30	0.091	1	10/13/14	10/13/14	KWG1413840	
cis-1,3-Dichloropropene	ND	U	0.50	0.20	0.18	1	10/13/14	10/13/14	KWG1413840	
4-Methyl-2-pentanone (MIBK)	ND	U	20	10	2.6	1	10/13/14	10/13/14	KWG1413840	*
Toluene	**1.6**		0.50	0.10	0.054	1	10/13/14	10/13/14	KWG1413840	
trans-1,3-Dichloropropene	ND	U	0.50	0.20	0.068	1	10/13/14	10/13/14	KWG1413840	
1,1,2-Trichloroethane	ND	U	0.50	0.40	0.14	1	10/13/14	10/13/14	KWG1413840	
Tetrachloroethene (PCE)	ND	U	0.50	0.20	0.099	1	10/13/14	10/13/14	KWG1413840	

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1410790
Project:	JBLM LTM Log Center/TO-01	**Date Collected:**	10/01/2014
Sample Matrix:	Water	**Date Received:**	10/02/2014

Volatile Organic Compounds

Sample Name:	LGC141001LC98D2-1	**Units:**	ug/L
Lab Code:	K1410790-040	**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
2-Hexanone	ND	U	20	10	2.7	1	10/13/14	10/13/14	KWG1413840	
1,3-Dichloropropane	ND	U	0.50	0.30	0.14	1	10/13/14	10/13/14	KWG1413840	
Dibromochloromethane	ND	U	0.50	0.50	0.14	1	10/13/14	10/13/14	KWG1413840	
1,2-Dibromoethane (EDB)	ND	U	2.0	0.20	0.10	1	10/13/14	10/13/14	KWG1413840	
Chlorobenzene	ND	U	0.50	0.20	0.11	1	10/13/14	10/13/14	KWG1413840	
Ethylbenzene	**0.25**	J	0.50	0.10	0.050	1	10/13/14	10/13/14	KWG1413840	*
1,1,1,2-Tetrachloroethane	ND	U	0.50	0.20	0.11	1	10/13/14	10/13/14	KWG1413840	
m,p-Xylenes	**1.1**		0.50	0.20	0.11	1	10/13/14	10/13/14	KWG1413840	*
o-Xylene	**0.37**	J	0.50	0.20	0.074	1	10/13/14	10/13/14	KWG1413840	*
Styrene	ND	U	0.50	0.20	0.089	1	10/13/14	10/13/14	KWG1413840	
Bromoform	ND	U	0.50	0.50	0.16	1	10/13/14	10/13/14	KWG1413840	
Isopropylbenzene	ND	U	2.0	0.20	0.051	1	10/13/14	10/13/14	KWG1413840	
1,1,2,2-Tetrachloroethane	ND	U	0.50	0.20	0.16	1	10/13/14	10/13/14	KWG1413840	
Bromobenzene	ND	U	2.0	0.20	0.12	1	10/13/14	10/13/14	KWG1413840	
n-Propylbenzene	ND	U	2.0	0.20	0.054	1	10/13/14	10/13/14	KWG1413840	
1,2,3-Trichloropropane	ND	U	0.50	0.50	0.20	1	10/13/14	10/13/14	KWG1413840	
2-Chlorotoluene	ND	U	2.0	0.20	0.10	1	10/13/14	10/13/14	KWG1413840	
1,3,5-Trimethylbenzene	ND	U	2.0	0.20	0.089	1	10/13/14	10/13/14	KWG1413840	
4-Chlorotoluene	ND	U	2.0	0.20	0.13	1	10/13/14	10/13/14	KWG1413840	
tert-Butylbenzene	ND	U	2.0	0.20	0.059	1	10/13/14	10/13/14	KWG1413840	
1,2,4-Trimethylbenzene	**0.24**	J	2.0	0.20	0.069	1	10/13/14	10/13/14	KWG1413840	
sec-Butylbenzene	ND	U	2.0	0.10	0.062	1	10/13/14	10/13/14	KWG1413840	
4-Isopropyltoluene	ND	U	2.0	0.20	0.060	1	10/13/14	10/13/14	KWG1413840	
1,3-Dichlorobenzene	ND	U	0.50	0.20	0.10	1	10/13/14	10/13/14	KWG1413840	
1,4-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	10/13/14	10/13/14	KWG1413840	
n-Butylbenzene	ND	U	2.0	0.10	0.054	1	10/13/14	10/13/14	KWG1413840	
1,2-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	10/13/14	10/13/14	KWG1413840	
1,2-Dibromo-3-chloropropane	ND	U	2.0	0.80	0.20	1	10/13/14	10/13/14	KWG1413840	
1,2,4-Trichlorobenzene	ND	U	2.0	0.30	0.096	1	10/13/14	10/13/14	KWG1413840	
Hexachlorobutadiene	ND	U	2.0	0.30	0.11	1	10/13/14	10/13/14	KWG1413840	
Naphthalene	**0.12**	J	2.0	0.30	0.088	1	10/13/14	10/13/14	KWG1413840	
1,2,3-Trichlorobenzene	ND	U	2.0	0.40	0.11	1	10/13/14	10/13/14	KWG1413840	

* See Case Narrative

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1410790
Project:	JBLM LTM Log Center/TO-01	**Date Collected:**	10/01/2014
Sample Matrix:	Water	**Date Received:**	10/02/2014

Volatile Organic Compounds

Sample Name:	LGC141001LC98D2-1	**Units:**	ug/L
Lab Code:	K1410790-040	**Basis:**	NA

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Dibromofluoromethane	102	85-115	10/13/14	Acceptable
1,2-Dichloroethane-d4	89	70-120	10/13/14	Acceptable
Toluene-d8	98	85-120	10/13/14	Acceptable
4-Bromofluorobenzene	94	75-120	10/13/14	Acceptable

Comments:

Analytical Results

Client: Sealaska Environmental Services, LLC
Project: JBLM LTM Log Center/TO-01
Sample Matrix: Water

Service Request: K1410790
Date Collected: NA
Date Received: NA

Volatile Organic Compounds

Sample Name: Method Blank
Lab Code: KWG1413774-4

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
Dichlorodifluoromethane	ND	U	0.50	0.20	0.13	1	10/10/14	10/10/14	KWG1413774	
Chloromethane	ND	U	0.50	0.20	0.068	1	10/10/14	10/10/14	KWG1413774	
Vinyl Chloride	ND	U	0.50	0.10	0.075	1	10/10/14	10/10/14	KWG1413774	
Bromomethane	ND	U	0.50	0.30	0.10	1	10/10/14	10/10/14	KWG1413774	
Chloroethane	ND	U	0.50	0.20	0.16	1	10/10/14	10/10/14	KWG1413774	
Trichlorofluoromethane	ND	U	0.50	0.20	0.12	1	10/10/14	10/10/14	KWG1413774	
1,1-Dichloroethene	ND	U	0.50	0.20	0.080	1	10/10/14	10/10/14	KWG1413774	
Acetone	ND	U	20	10	3.3	1	10/10/14	10/10/14	KWG1413774	*
Carbon Disulfide	**0.13**	J	0.50	0.20	0.069	1	10/10/14	10/10/14	KWG1413774	
Methylene Chloride	**0.20**	J	2.0	0.20	0.10	1	10/10/14	10/10/14	KWG1413774	
Methyl tert-Butyl Ether	ND	U	0.50	0.30	0.11	1	10/10/14	10/10/14	KWG1413774	
trans-1,2-Dichloroethene	ND	U	0.50	0.20	0.072	1	10/10/14	10/10/14	KWG1413774	
1,1-Dichloroethane	ND	U	0.50	0.20	0.077	1	10/10/14	10/10/14	KWG1413774	
2,2-Dichloropropane	ND	U	0.50	0.20	0.060	1	10/10/14	10/10/14	KWG1413774	
cis-1,2-Dichloroethene	ND	U	0.50	0.20	0.067	1	10/10/14	10/10/14	KWG1413774	
2-Butanone (MEK)	ND	U	20	4.0	1.9	1	10/10/14	10/10/14	KWG1413774	
Bromochloromethane	ND	U	0.50	0.20	0.16	1	10/10/14	10/10/14	KWG1413774	
Chloroform	ND	U	0.50	0.20	0.072	1	10/10/14	10/10/14	KWG1413774	
1,1,1-Trichloroethane (TCA)	ND	U	0.50	0.20	0.075	1	10/10/14	10/10/14	KWG1413774	
Carbon Tetrachloride	ND	U	0.50	0.20	0.096	1	10/10/14	10/10/14	KWG1413774	
1,1-Dichloropropene	ND	U	0.50	0.20	0.089	1	10/10/14	10/10/14	KWG1413774	
Benzene	ND	U	0.50	0.10	0.062	1	10/10/14	10/10/14	KWG1413774	
1,2-Dichloroethane (EDC)	ND	U	0.50	0.15	0.080	1	10/10/14	10/10/14	KWG1413774	
Trichloroethene (TCE)	ND	U	0.50	0.10	0.10	1	10/10/14	10/10/14	KWG1413774	
1,2-Dichloropropane	ND	U	0.50	0.20	0.095	1	10/10/14	10/10/14	KWG1413774	
Dibromomethane	ND	U	0.50	0.50	0.15	1	10/10/14	10/10/14	KWG1413774	
Bromodichloromethane	ND	U	0.50	0.30	0.091	1	10/10/14	10/10/14	KWG1413774	
cis-1,3-Dichloropropene	ND	U	0.50	0.20	0.18	1	10/10/14	10/10/14	KWG1413774	
4-Methyl-2-pentanone (MIBK)	ND	U	20	10	2.6	1	10/10/14	10/10/14	KWG1413774	*
Toluene	ND	U	0.50	0.10	0.054	1	10/10/14	10/10/14	KWG1413774	
trans-1,3-Dichloropropene	ND	U	0.50	0.20	0.068	1	10/10/14	10/10/14	KWG1413774	
1,1,2-Trichloroethane	ND	U	0.50	0.40	0.14	1	10/10/14	10/10/14	KWG1413774	
Tetrachloroethene (PCE)	ND	U	0.50	0.20	0.099	1	10/10/14	10/10/14	KWG1413774	

Comments:

Analytical Results

Client: Sealaska Environmental Services, LLC
Project: JBLM LTM Log Center/TO-01
Sample Matrix: Water

Service Request: K1410790
Date Collected: NA
Date Received: NA

Volatile Organic Compounds

Sample Name: Method Blank
Lab Code: KWG1413774-4

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
2-Hexanone	ND	U	20	10	2.7	1	10/10/14	10/10/14	KWG1413774	
1,3-Dichloropropane	ND	U	0.50	0.30	0.14	1	10/10/14	10/10/14	KWG1413774	
Dibromochloromethane	ND	U	0.50	0.50	0.14	1	10/10/14	10/10/14	KWG1413774	
1,2-Dibromoethane (EDB)	ND	U	2.0	0.20	0.10	1	10/10/14	10/10/14	KWG1413774	
Chlorobenzene	ND	U	0.50	0.20	0.11	1	10/10/14	10/10/14	KWG1413774	
Ethylbenzene	ND	U	0.50	0.10	0.050	1	10/10/14	10/10/14	KWG1413774	
1,1,1,2-Tetrachloroethane	ND	U	0.50	0.20	0.11	1	10/10/14	10/10/14	KWG1413774	
m,p-Xylenes	ND	U	0.50	0.20	0.11	1	10/10/14	10/10/14	KWG1413774	
o-Xylene	ND	U	0.50	0.20	0.074	1	10/10/14	10/10/14	KWG1413774	
Styrene	ND	U	0.50	0.20	0.089	1	10/10/14	10/10/14	KWG1413774	
Bromoform	ND	U	0.50	0.50	0.16	1	10/10/14	10/10/14	KWG1413774	
Isopropylbenzene	ND	U	2.0	0.20	0.051	1	10/10/14	10/10/14	KWG1413774	
1,1,2,2-Tetrachloroethane	ND	U	0.50	0.20	0.16	1	10/10/14	10/10/14	KWG1413774	
Bromobenzene	ND	U	2.0	0.20	0.12	1	10/10/14	10/10/14	KWG1413774	
n-Propylbenzene	ND	U	2.0	0.20	0.054	1	10/10/14	10/10/14	KWG1413774	
1,2,3-Trichloropropane	ND	U	0.50	0.50	0.20	1	10/10/14	10/10/14	KWG1413774	
2-Chlorotoluene	ND	U	2.0	0.20	0.10	1	10/10/14	10/10/14	KWG1413774	
1,3,5-Trimethylbenzene	ND	U	2.0	0.20	0.089	1	10/10/14	10/10/14	KWG1413774	
4-Chlorotoluene	ND	U	2.0	0.20	0.13	1	10/10/14	10/10/14	KWG1413774	
tert-Butylbenzene	ND	U	2.0	0.20	0.059	1	10/10/14	10/10/14	KWG1413774	
1,2,4-Trimethylbenzene	ND	U	2.0	0.20	0.069	1	10/10/14	10/10/14	KWG1413774	
sec-Butylbenzene	ND	U	2.0	0.10	0.062	1	10/10/14	10/10/14	KWG1413774	
4-Isopropyltoluene	ND	U	2.0	0.20	0.060	1	10/10/14	10/10/14	KWG1413774	
1,3-Dichlorobenzene	ND	U	0.50	0.20	0.10	1	10/10/14	10/10/14	KWG1413774	
1,4-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	10/10/14	10/10/14	KWG1413774	
n-Butylbenzene	ND	U	2.0	0.10	0.054	1	10/10/14	10/10/14	KWG1413774	
1,2-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	10/10/14	10/10/14	KWG1413774	
1,2-Dibromo-3-chloropropane	ND	U	2.0	0.80	0.20	1	10/10/14	10/10/14	KWG1413774	
1,2,4-Trichlorobenzene	ND	U	2.0	0.30	0.096	1	10/10/14	10/10/14	KWG1413774	
Hexachlorobutadiene	ND	U	2.0	0.30	0.11	1	10/10/14	10/10/14	KWG1413774	
Naphthalene	ND	U	2.0	0.30	0.088	1	10/10/14	10/10/14	KWG1413774	
1,2,3-Trichlorobenzene	ND	U	2.0	0.40	0.11	1	10/10/14	10/10/14	KWG1413774	

* See Case Narrative

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1410790
Project:	JBLM LTM Log Center/TO-01	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA

Volatile Organic Compounds

Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	KWG1413774-4	**Basis:**	NA

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Dibromofluoromethane	102	85-115	10/10/14	Acceptable
1,2-Dichloroethane-d4	90	70-120	10/10/14	Acceptable
Toluene-d8	97	85-120	10/10/14	Acceptable
4-Bromofluorobenzene	97	75-120	10/10/14	Acceptable

Comments:

Analytical Results

Client: Sealaska Environmental Services, LLC
Project: JBLM LTM Log Center/TO-01
Sample Matrix: Water

Service Request: K1410790
Date Collected: NA
Date Received: NA

Volatile Organic Compounds

Sample Name: Method Blank
Lab Code: KWG1413817-7

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
Dichlorodifluoromethane	ND	U	0.50	0.20	0.13	1	10/12/14	10/12/14	KWG1413817	
Chloromethane	ND	U	0.50	0.20	0.068	1	10/12/14	10/12/14	KWG1413817	
Vinyl Chloride	ND	U	0.50	0.10	0.075	1	10/12/14	10/12/14	KWG1413817	
Bromomethane	ND	U	0.50	0.30	0.10	1	10/12/14	10/12/14	KWG1413817	
Chloroethane	ND	U	0.50	0.20	0.16	1	10/12/14	10/12/14	KWG1413817	
Trichlorofluoromethane	ND	U	0.50	0.20	0.12	1	10/12/14	10/12/14	KWG1413817	
1,1-Dichloroethene	ND	U	0.50	0.20	0.080	1	10/12/14	10/12/14	KWG1413817	
Acetone	ND	U	20	10	3.3	1	10/12/14	10/12/14	KWG1413817	
Carbon Disulfide	**0.080**	J	0.50	0.20	0.069	1	10/12/14	10/12/14	KWG1413817	
Methylene Chloride	**0.25**	J	2.0	0.20	0.10	1	10/12/14	10/12/14	KWG1413817	
Methyl tert-Butyl Ether	ND	U	0.50	0.30	0.11	1	10/12/14	10/12/14	KWG1413817	
trans-1,2-Dichloroethene	ND	U	0.50	0.20	0.072	1	10/12/14	10/12/14	KWG1413817	
1,1-Dichloroethane	ND	U	0.50	0.20	0.077	1	10/12/14	10/12/14	KWG1413817	
2,2-Dichloropropane	ND	U	0.50	0.20	0.060	1	10/12/14	10/12/14	KWG1413817	
cis-1,2-Dichloroethene	ND	U	0.50	0.20	0.067	1	10/12/14	10/12/14	KWG1413817	
2-Butanone (MEK)	ND	U	20	4.0	1.9	1	10/12/14	10/12/14	KWG1413817	
Bromochloromethane	ND	U	0.50	0.20	0.16	1	10/12/14	10/12/14	KWG1413817	
Chloroform	ND	U	0.50	0.20	0.072	1	10/12/14	10/12/14	KWG1413817	
1,1,1-Trichloroethane (TCA)	ND	U	0.50	0.20	0.075	1	10/12/14	10/12/14	KWG1413817	
Carbon Tetrachloride	ND	U	0.50	0.20	0.096	1	10/12/14	10/12/14	KWG1413817	
1,1-Dichloropropene	ND	U	0.50	0.20	0.089	1	10/12/14	10/12/14	KWG1413817	
Benzene	ND	U	0.50	0.10	0.062	1	10/12/14	10/12/14	KWG1413817	
1,2-Dichloroethane (EDC)	ND	U	0.50	0.15	0.080	1	10/12/14	10/12/14	KWG1413817	
Trichloroethene (TCE)	ND	U	0.50	0.10	0.10	1	10/12/14	10/12/14	KWG1413817	
1,2-Dichloropropane	ND	U	0.50	0.20	0.095	1	10/12/14	10/12/14	KWG1413817	
Dibromomethane	ND	U	0.50	0.50	0.15	1	10/12/14	10/12/14	KWG1413817	
Bromodichloromethane	ND	U	0.50	0.30	0.091	1	10/12/14	10/12/14	KWG1413817	
cis-1,3-Dichloropropene	ND	U	0.50	0.20	0.18	1	10/12/14	10/12/14	KWG1413817	
4-Methyl-2-pentanone (MIBK)	ND	U	20	10	2.6	1	10/12/14	10/12/14	KWG1413817	
Toluene	ND	U	0.50	0.10	0.054	1	10/12/14	10/12/14	KWG1413817	
trans-1,3-Dichloropropene	ND	U	0.50	0.20	0.068	1	10/12/14	10/12/14	KWG1413817	
1,1,2-Trichloroethane	ND	U	0.50	0.40	0.14	1	10/12/14	10/12/14	KWG1413817	
Tetrachloroethene (PCE)	ND	U	0.50	0.20	0.099	1	10/12/14	10/12/14	KWG1413817	

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1410790
Project:	JBLM LTM Log Center/TO-01	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA

Volatile Organic Compounds

Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	KWG1413817-7	**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
2-Hexanone	ND	U	20	10	2.7	1	10/12/14	10/12/14	KWG1413817	
1,3-Dichloropropane	ND	U	0.50	0.30	0.14	1	10/12/14	10/12/14	KWG1413817	
Dibromochloromethane	ND	U	0.50	0.50	0.14	1	10/12/14	10/12/14	KWG1413817	
1,2-Dibromoethane (EDB)	ND	U	2.0	0.20	0.10	1	10/12/14	10/12/14	KWG1413817	
Chlorobenzene	ND	U	0.50	0.20	0.11	1	10/12/14	10/12/14	KWG1413817	
Ethylbenzene	ND	U	0.50	0.10	0.050	1	10/12/14	10/12/14	KWG1413817	
1,1,1,2-Tetrachloroethane	ND	U	0.50	0.20	0.11	1	10/12/14	10/12/14	KWG1413817	
m,p-Xylenes	ND	U	0.50	0.20	0.11	1	10/12/14	10/12/14	KWG1413817	
o-Xylene	ND	U	0.50	0.20	0.074	1	10/12/14	10/12/14	KWG1413817	
Styrene	ND	U	0.50	0.20	0.089	1	10/12/14	10/12/14	KWG1413817	
Bromoform	ND	U	0.50	0.50	0.16	1	10/12/14	10/12/14	KWG1413817	
Isopropylbenzene	ND	U	2.0	0.20	0.051	1	10/12/14	10/12/14	KWG1413817	
1,1,2,2-Tetrachloroethane	ND	U	0.50	0.20	0.16	1	10/12/14	10/12/14	KWG1413817	
Bromobenzene	ND	U	2.0	0.20	0.12	1	10/12/14	10/12/14	KWG1413817	
n-Propylbenzene	ND	U	2.0	0.20	0.054	1	10/12/14	10/12/14	KWG1413817	
1,2,3-Trichloropropane	ND	U	0.50	0.50	0.20	1	10/12/14	10/12/14	KWG1413817	
2-Chlorotoluene	ND	U	2.0	0.20	0.10	1	10/12/14	10/12/14	KWG1413817	
1,3,5-Trimethylbenzene	ND	U	2.0	0.20	0.089	1	10/12/14	10/12/14	KWG1413817	
4-Chlorotoluene	ND	U	2.0	0.20	0.13	1	10/12/14	10/12/14	KWG1413817	
tert-Butylbenzene	ND	U	2.0	0.20	0.059	1	10/12/14	10/12/14	KWG1413817	
1,2,4-Trimethylbenzene	ND	U	2.0	0.20	0.069	1	10/12/14	10/12/14	KWG1413817	
sec-Butylbenzene	ND	U	2.0	0.10	0.062	1	10/12/14	10/12/14	KWG1413817	
4-Isopropyltoluene	ND	U	2.0	0.20	0.060	1	10/12/14	10/12/14	KWG1413817	
1,3-Dichlorobenzene	ND	U	0.50	0.20	0.10	1	10/12/14	10/12/14	KWG1413817	
1,4-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	10/12/14	10/12/14	KWG1413817	
n-Butylbenzene	ND	U	2.0	0.10	0.054	1	10/12/14	10/12/14	KWG1413817	
1,2-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	10/12/14	10/12/14	KWG1413817	
1,2-Dibromo-3-chloropropane	ND	U	2.0	0.80	0.20	1	10/12/14	10/12/14	KWG1413817	
1,2,4-Trichlorobenzene	ND	U	2.0	0.30	0.096	1	10/12/14	10/12/14	KWG1413817	
Hexachlorobutadiene	ND	U	2.0	0.30	0.11	1	10/12/14	10/12/14	KWG1413817	
Naphthalene	ND	U	2.0	0.30	0.088	1	10/12/14	10/12/14	KWG1413817	
1,2,3-Trichlorobenzene	ND	U	2.0	0.40	0.11	1	10/12/14	10/12/14	KWG1413817	

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1410790
Project:	JBLM LTM Log Center/TO-01	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA

Volatile Organic Compounds

Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	KWG1413817-7	**Basis:**	NA

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Dibromofluoromethane	95	85-115	10/12/14	Acceptable
1,2-Dichloroethane-d4	99	70-120	10/12/14	Acceptable
Toluene-d8	97	85-120	10/12/14	Acceptable
4-Bromofluorobenzene	96	75-120	10/12/14	Acceptable

Comments:

Analytical Results

Client: Sealaska Environmental Services, LLC
Project: JBLM LTM Log Center/TO-01
Sample Matrix: Water

Service Request: K1410790
Date Collected: NA
Date Received: NA

Volatile Organic Compounds

Sample Name: Method Blank
Lab Code: KWG1413833-5

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
Dichlorodifluoromethane	ND	U	0.50	0.20	0.13	1	10/13/14	10/13/14	KWG1413833	
Chloromethane	ND	U	0.50	0.20	0.068	1	10/13/14	10/13/14	KWG1413833	
Vinyl Chloride	ND	U	0.50	0.10	0.075	1	10/13/14	10/13/14	KWG1413833	
Bromomethane	ND	U	0.50	0.30	0.10	1	10/13/14	10/13/14	KWG1413833	
Chloroethane	ND	U	0.50	0.20	0.16	1	10/13/14	10/13/14	KWG1413833	
Trichlorofluoromethane	ND	U	0.50	0.20	0.12	1	10/13/14	10/13/14	KWG1413833	
1,1-Dichloroethene	ND	U	0.50	0.20	0.080	1	10/13/14	10/13/14	KWG1413833	
Acetone	ND	U	20	10	3.3	1	10/13/14	10/13/14	KWG1413833	
Carbon Disulfide	**0.070**	J	0.50	0.20	0.069	1	10/13/14	10/13/14	KWG1413833	
Methylene Chloride	**0.27**	J	2.0	0.20	0.10	1	10/13/14	10/13/14	KWG1413833	
Methyl tert-Butyl Ether	ND	U	0.50	0.30	0.11	1	10/13/14	10/13/14	KWG1413833	
trans-1,2-Dichloroethene	ND	U	0.50	0.20	0.072	1	10/13/14	10/13/14	KWG1413833	
1,1-Dichloroethane	ND	U	0.50	0.20	0.077	1	10/13/14	10/13/14	KWG1413833	
2,2-Dichloropropane	ND	U	0.50	0.20	0.060	1	10/13/14	10/13/14	KWG1413833	
cis-1,2-Dichloroethene	ND	U	0.50	0.20	0.067	1	10/13/14	10/13/14	KWG1413833	
2-Butanone (MEK)	ND	U	20	4.0	1.9	1	10/13/14	10/13/14	KWG1413833	
Bromochloromethane	ND	U	0.50	0.20	0.16	1	10/13/14	10/13/14	KWG1413833	
Chloroform	ND	U	0.50	0.20	0.072	1	10/13/14	10/13/14	KWG1413833	
1,1,1-Trichloroethane (TCA)	ND	U	0.50	0.20	0.075	1	10/13/14	10/13/14	KWG1413833	
Carbon Tetrachloride	ND	U	0.50	0.20	0.096	1	10/13/14	10/13/14	KWG1413833	
1,1-Dichloropropene	ND	U	0.50	0.20	0.089	1	10/13/14	10/13/14	KWG1413833	
Benzene	ND	U	0.50	0.10	0.062	1	10/13/14	10/13/14	KWG1413833	*
1,2-Dichloroethane (EDC)	ND	U	0.50	0.15	0.080	1	10/13/14	10/13/14	KWG1413833	
Trichloroethene (TCE)	ND	U	0.50	0.10	0.10	1	10/13/14	10/13/14	KWG1413833	
1,2-Dichloropropane	ND	U	0.50	0.20	0.095	1	10/13/14	10/13/14	KWG1413833	
Dibromomethane	ND	U	0.50	0.50	0.15	1	10/13/14	10/13/14	KWG1413833	
Bromodichloromethane	ND	U	0.50	0.30	0.091	1	10/13/14	10/13/14	KWG1413833	
cis-1,3-Dichloropropene	ND	U	0.50	0.20	0.18	1	10/13/14	10/13/14	KWG1413833	
4-Methyl-2-pentanone (MIBK)	ND	U	20	10	2.6	1	10/13/14	10/13/14	KWG1413833	
Toluene	ND	U	0.50	0.10	0.054	1	10/13/14	10/13/14	KWG1413833	
trans-1,3-Dichloropropene	ND	U	0.50	0.20	0.068	1	10/13/14	10/13/14	KWG1413833	
1,1,2-Trichloroethane	ND	U	0.50	0.40	0.14	1	10/13/14	10/13/14	KWG1413833	
Tetrachloroethene (PCE)	ND	U	0.50	0.20	0.099	1	10/13/14	10/13/14	KWG1413833	

Comments:

Analytical Results

Client: Sealaska Environmental Services, LLC
Project: JBLM LTM Log Center/TO-01
Sample Matrix: Water

Service Request: K1410790
Date Collected: NA
Date Received: NA

Volatile Organic Compounds

Sample Name: Method Blank
Lab Code: KWG1413833-5

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
2-Hexanone	ND	U	20	10	2.7	1	10/13/14	10/13/14	KWG1413833	
1,3-Dichloropropane	ND	U	0.50	0.30	0.14	1	10/13/14	10/13/14	KWG1413833	
Dibromochloromethane	ND	U	0.50	0.50	0.14	1	10/13/14	10/13/14	KWG1413833	
1,2-Dibromoethane (EDB)	ND	U	2.0	0.20	0.10	1	10/13/14	10/13/14	KWG1413833	
Chlorobenzene	ND	U	0.50	0.20	0.11	1	10/13/14	10/13/14	KWG1413833	
Ethylbenzene	ND	U	0.50	0.10	0.050	1	10/13/14	10/13/14	KWG1413833	
1,1,1,2-Tetrachloroethane	ND	U	0.50	0.20	0.11	1	10/13/14	10/13/14	KWG1413833	
m,p-Xylenes	ND	U	0.50	0.20	0.11	1	10/13/14	10/13/14	KWG1413833	
o-Xylene	ND	U	0.50	0.20	0.074	1	10/13/14	10/13/14	KWG1413833	
Styrene	ND	U	0.50	0.20	0.089	1	10/13/14	10/13/14	KWG1413833	
Bromoform	ND	U	0.50	0.50	0.16	1	10/13/14	10/13/14	KWG1413833	
Isopropylbenzene	ND	U	2.0	0.20	0.051	1	10/13/14	10/13/14	KWG1413833	
1,1,2,2-Tetrachloroethane	ND	U	0.50	0.20	0.16	1	10/13/14	10/13/14	KWG1413833	
Bromobenzene	ND	U	2.0	0.20	0.12	1	10/13/14	10/13/14	KWG1413833	
n-Propylbenzene	ND	U	2.0	0.20	0.054	1	10/13/14	10/13/14	KWG1413833	
1,2,3-Trichloropropane	ND	U	0.50	0.50	0.20	1	10/13/14	10/13/14	KWG1413833	
2-Chlorotoluene	ND	U	2.0	0.20	0.10	1	10/13/14	10/13/14	KWG1413833	
1,3,5-Trimethylbenzene	ND	U	2.0	0.20	0.089	1	10/13/14	10/13/14	KWG1413833	
4-Chlorotoluene	ND	U	2.0	0.20	0.13	1	10/13/14	10/13/14	KWG1413833	
tert-Butylbenzene	ND	U	2.0	0.20	0.059	1	10/13/14	10/13/14	KWG1413833	
1,2,4-Trimethylbenzene	ND	U	2.0	0.20	0.069	1	10/13/14	10/13/14	KWG1413833	
sec-Butylbenzene	ND	U	2.0	0.10	0.062	1	10/13/14	10/13/14	KWG1413833	
4-Isopropyltoluene	ND	U	2.0	0.20	0.060	1	10/13/14	10/13/14	KWG1413833	
1,3-Dichlorobenzene	ND	U	0.50	0.20	0.10	1	10/13/14	10/13/14	KWG1413833	
1,4-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	10/13/14	10/13/14	KWG1413833	
n-Butylbenzene	ND	U	2.0	0.10	0.054	1	10/13/14	10/13/14	KWG1413833	
1,2-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	10/13/14	10/13/14	KWG1413833	
1,2-Dibromo-3-chloropropane	ND	U	2.0	0.80	0.20	1	10/13/14	10/13/14	KWG1413833	
1,2,4-Trichlorobenzene	ND	U	2.0	0.30	0.096	1	10/13/14	10/13/14	KWG1413833	
Hexachlorobutadiene	ND	U	2.0	0.30	0.11	1	10/13/14	10/13/14	KWG1413833	
Naphthalene	ND	U	2.0	0.30	0.088	1	10/13/14	10/13/14	KWG1413833	
1,2,3-Trichlorobenzene	ND	U	2.0	0.40	0.11	1	10/13/14	10/13/14	KWG1413833	

* See Case Narrative

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1410790
Project:	JBLM LTM Log Center/TO-01	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA

Volatile Organic Compounds

Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	KWG1413833-5	**Basis:**	NA

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Dibromofluoromethane	93	85-115	10/13/14	Acceptable
1,2-Dichloroethane-d4	97	70-120	10/13/14	Acceptable
Toluene-d8	97	85-120	10/13/14	Acceptable
4-Bromofluorobenzene	96	75-120	10/13/14	Acceptable

Comments:

Analytical Results

Client: Sealaska Environmental Services, LLC
Project: JBLM LTM Log Center/TO-01
Sample Matrix: Water

Service Request: K1410790
Date Collected: NA
Date Received: NA

Volatile Organic Compounds

Sample Name: Method Blank
Lab Code: KWG1413840-4

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
Dichlorodifluoromethane	ND	U	0.50	0.20	0.13	1	10/13/14	10/13/14	KWG1413840	
Chloromethane	ND	U	0.50	0.20	0.068	1	10/13/14	10/13/14	KWG1413840	*
Vinyl Chloride	ND	U	0.50	0.10	0.075	1	10/13/14	10/13/14	KWG1413840	
Bromomethane	ND	U	0.50	0.30	0.10	1	10/13/14	10/13/14	KWG1413840	*
Chloroethane	ND	U	0.50	0.20	0.16	1	10/13/14	10/13/14	KWG1413840	
Trichlorofluoromethane	ND	U	0.50	0.20	0.12	1	10/13/14	10/13/14	KWG1413840	
1,1-Dichloroethene	ND	U	0.50	0.20	0.080	1	10/13/14	10/13/14	KWG1413840	
Acetone	ND	U	20	10	3.3	1	10/13/14	10/13/14	KWG1413840	*
Carbon Disulfide	**0.12**	J	0.50	0.20	0.069	1	10/13/14	10/13/14	KWG1413840	
Methylene Chloride	**0.31**	J	2.0	0.20	0.10	1	10/13/14	10/13/14	KWG1413840	
Methyl tert-Butyl Ether	ND	U	0.50	0.30	0.11	1	10/13/14	10/13/14	KWG1413840	
trans-1,2-Dichloroethene	ND	U	0.50	0.20	0.072	1	10/13/14	10/13/14	KWG1413840	
1,1-Dichloroethane	ND	U	0.50	0.20	0.077	1	10/13/14	10/13/14	KWG1413840	
2,2-Dichloropropane	ND	U	0.50	0.20	0.060	1	10/13/14	10/13/14	KWG1413840	
cis-1,2-Dichloroethene	ND	U	0.50	0.20	0.067	1	10/13/14	10/13/14	KWG1413840	
2-Butanone (MEK)	ND	U	20	4.0	1.9	1	10/13/14	10/13/14	KWG1413840	
Bromochloromethane	ND	U	0.50	0.20	0.16	1	10/13/14	10/13/14	KWG1413840	
Chloroform	ND	U	0.50	0.20	0.072	1	10/13/14	10/13/14	KWG1413840	
1,1,1-Trichloroethane (TCA)	ND	U	0.50	0.20	0.075	1	10/13/14	10/13/14	KWG1413840	
Carbon Tetrachloride	ND	U	0.50	0.20	0.096	1	10/13/14	10/13/14	KWG1413840	
1,1-Dichloropropene	ND	U	0.50	0.20	0.089	1	10/13/14	10/13/14	KWG1413840	
Benzene	ND	U	0.50	0.10	0.062	1	10/13/14	10/13/14	KWG1413840	
1,2-Dichloroethane (EDC)	ND	U	0.50	0.15	0.080	1	10/13/14	10/13/14	KWG1413840	
Trichloroethene (TCE)	ND	U	0.50	0.10	0.10	1	10/13/14	10/13/14	KWG1413840	
1,2-Dichloropropane	ND	U	0.50	0.20	0.095	1	10/13/14	10/13/14	KWG1413840	
Dibromomethane	ND	U	0.50	0.50	0.15	1	10/13/14	10/13/14	KWG1413840	
Bromodichloromethane	ND	U	0.50	0.30	0.091	1	10/13/14	10/13/14	KWG1413840	
cis-1,3-Dichloropropene	ND	U	0.50	0.20	0.18	1	10/13/14	10/13/14	KWG1413840	
4-Methyl-2-pentanone (MIBK)	ND	U	20	10	2.6	1	10/13/14	10/13/14	KWG1413840	*
Toluene	ND	U	0.50	0.10	0.054	1	10/13/14	10/13/14	KWG1413840	
trans-1,3-Dichloropropene	ND	U	0.50	0.20	0.068	1	10/13/14	10/13/14	KWG1413840	
1,1,2-Trichloroethane	ND	U	0.50	0.40	0.14	1	10/13/14	10/13/14	KWG1413840	
Tetrachloroethene (PCE)	ND	U	0.50	0.20	0.099	1	10/13/14	10/13/14	KWG1413840	

Comments:

Analytical Results

Client: Sealaska Environmental Services, LLC
Project: JBLM LTM Log Center/TO-01
Sample Matrix: Water

Service Request: K1410790
Date Collected: NA
Date Received: NA

Volatile Organic Compounds

Sample Name: Method Blank
Lab Code: KWG1413840-4

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
2-Hexanone	ND	U	20	10	2.7	1	10/13/14	10/13/14	KWG1413840	
1,3-Dichloropropane	ND	U	0.50	0.30	0.14	1	10/13/14	10/13/14	KWG1413840	
Dibromochloromethane	ND	U	0.50	0.50	0.14	1	10/13/14	10/13/14	KWG1413840	
1,2-Dibromoethane (EDB)	ND	U	2.0	0.20	0.10	1	10/13/14	10/13/14	KWG1413840	
Chlorobenzene	ND	U	0.50	0.20	0.11	1	10/13/14	10/13/14	KWG1413840	
Ethylbenzene	ND	U	0.50	0.10	0.050	1	10/13/14	10/13/14	KWG1413840	
1,1,1,2-Tetrachloroethane	ND	U	0.50	0.20	0.11	1	10/13/14	10/13/14	KWG1413840	
m,p-Xylenes	ND	U	0.50	0.20	0.11	1	10/13/14	10/13/14	KWG1413840	
o-Xylene	ND	U	0.50	0.20	0.074	1	10/13/14	10/13/14	KWG1413840	
Styrene	ND	U	0.50	0.20	0.089	1	10/13/14	10/13/14	KWG1413840	
Bromoform	ND	U	0.50	0.50	0.16	1	10/13/14	10/13/14	KWG1413840	
Isopropylbenzene	ND	U	2.0	0.20	0.051	1	10/13/14	10/13/14	KWG1413840	
1,1,2,2-Tetrachloroethane	ND	U	0.50	0.20	0.16	1	10/13/14	10/13/14	KWG1413840	
Bromobenzene	ND	U	2.0	0.20	0.12	1	10/13/14	10/13/14	KWG1413840	
n-Propylbenzene	ND	U	2.0	0.20	0.054	1	10/13/14	10/13/14	KWG1413840	
1,2,3-Trichloropropane	ND	U	0.50	0.50	0.20	1	10/13/14	10/13/14	KWG1413840	
2-Chlorotoluene	ND	U	2.0	0.20	0.10	1	10/13/14	10/13/14	KWG1413840	
1,3,5-Trimethylbenzene	ND	U	2.0	0.20	0.089	1	10/13/14	10/13/14	KWG1413840	
4-Chlorotoluene	ND	U	2.0	0.20	0.13	1	10/13/14	10/13/14	KWG1413840	
tert-Butylbenzene	ND	U	2.0	0.20	0.059	1	10/13/14	10/13/14	KWG1413840	
1,2,4-Trimethylbenzene	ND	U	2.0	0.20	0.069	1	10/13/14	10/13/14	KWG1413840	
sec-Butylbenzene	ND	U	2.0	0.10	0.062	1	10/13/14	10/13/14	KWG1413840	
4-Isopropyltoluene	ND	U	2.0	0.20	0.060	1	10/13/14	10/13/14	KWG1413840	
1,3-Dichlorobenzene	ND	U	0.50	0.20	0.10	1	10/13/14	10/13/14	KWG1413840	
1,4-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	10/13/14	10/13/14	KWG1413840	
n-Butylbenzene	ND	U	2.0	0.10	0.054	1	10/13/14	10/13/14	KWG1413840	
1,2-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	10/13/14	10/13/14	KWG1413840	
1,2-Dibromo-3-chloropropane	ND	U	2.0	0.80	0.20	1	10/13/14	10/13/14	KWG1413840	
1,2,4-Trichlorobenzene	ND	U	2.0	0.30	0.096	1	10/13/14	10/13/14	KWG1413840	
Hexachlorobutadiene	ND	U	2.0	0.30	0.11	1	10/13/14	10/13/14	KWG1413840	
Naphthalene	ND	U	2.0	0.30	0.088	1	10/13/14	10/13/14	KWG1413840	
1,2,3-Trichlorobenzene	ND	U	2.0	0.40	0.11	1	10/13/14	10/13/14	KWG1413840	

* See Case Narrative

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1410790
Project:	JBLM LTM Log Center/TO-01	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA

Volatile Organic Compounds

Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	KWG1413840-4	**Basis:**	NA

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Dibromofluoromethane	102	85-115	10/13/14	Acceptable
1,2-Dichloroethane-d4	88	70-120	10/13/14	Acceptable
Toluene-d8	98	85-120	10/13/14	Acceptable
4-Bromofluorobenzene	99	75-120	10/13/14	Acceptable

Comments:

Client: Sealaska Environmental Services, LLC **Service Request:** K1410790
Project: JBLM LTM Log Center/TO-01
Sample Matrix: Water

Surrogate Recovery Summary
Volatile Organic Compounds

Extraction Method: EPA 5030B **Units:** Percent
Analysis Method: 8260C **Level:** Low

Sample Name	Lab Code	Sur1	Sur2	Sur3	Sur4
TB-140929	K1410790-001	101	90	98	96
LGC140929LC93D1-1	K1410790-002	101	92	96	96
LGC140929LC93D2-1	K1410790-003	101	91	98	94
LGC140929T13B-1	K1410790-004	100	90	97	95
LGC140929LC225-1	K1410790-005	100	92	98	93
LGC140929T05-1	K1410790-006	103	93	98	94
LGC140929T06-1	K1410790-007	102	91	98	95
LGC140929T11B-1	K1410790-008	101	90	98	94
LGC140929BC1-1	K1410790-009	98	90	97	95
LGC140929T10-1	K1410790-010	94	99	96	97
LGC140929T15-1	K1410790-011	101	93	97	96
LGC140929DUP4-1	K1410790-012	100	94	97	94
LGC140929LC86D1-1	K1410790-013	102	92	97	95
LGC140929LC86D2-1	K1410790-014	100	91	96	95
LGC140929LC102D1-1	K1410790-015	99	91	96	95
LGC140929LC102D2-1	K1410790-016	101	91	97	96
LGC140929LC88D1-1	K1410790-017	103	94	97	97
LGC140929LC88D2-1	K1410790-018	93	98	96	99
LGC140929LC95D1-1	K1410790-019	95	98	97	96
LGC140929LC95D2-1	K1410790-020	94	98	96	98
LGC140930T04-1	K1410790-021	94	99	96	98
LGC140930DUP5-1	K1410790-022	95	99	97	97
LGC140930LC103D-1	K1410790-023	93	101	97	98
LGC140930LC101D2-1	K1410790-024	94	100	97	95
LGC140930LC101D1-1	K1410790-025	96	98	96	96
LGC140930MAMCOF2-1	K1410790-026	94	99	96	97
LGC140930LC109-1	K1410790-027	95	99	97	97
LGC140930LC03-1	K1410790-028	101	88	97	96
LGC140930DUP9-1	K1410790-029	102	89	97	97
LGC140930LC182-1	K1410790-030	101	90	98	93
LGC140930LC16-1	K1410790-031	102	89	98	97
LGC140930DUP1-1	K1410790-032	104	90	97	93
LGC140930LC180-1	K1410790-033	103	90	98	96
LGC141001LC223-1	K1410790-034	102	87	98	94

Surrogate Recovery Control Limits (%)

Sur1	= Dibromofluoromethane	85-115
Sur2	= 1,2-Dichloroethane-d4	70-120
Sur3	= Toluene-d8	85-120
Sur4	= 4-Bromofluorobenzene	75-120

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Client: Sealaska Environmental Services, LLC **Service Request:** K1410790
Project: JBLM LTM Log Center/TO-01
Sample Matrix: Water

Surrogate Recovery Summary
Volatile Organic Compounds

Extraction Method: EPA 5030B **Units:** Percent
Analysis Method: 8260C **Level:** Low

Sample Name	Lab Code	Sur1	Sur2	Sur3	Sur4
LGC141001DUP3-1	K1410790-035	105	93	99	96
LGC141001LC178-1	K1410790-036	102	91	98	95
LGC141001Well13-1	K1410790-037	101	89	97	96
LGC141001LC98D1-1	K1410790-038	103	91	99	95
LGC141001DUP8-1	K1410790-039	103	89	99	95
LGC141001LC98D2-1	K1410790-040	102	89	98	94
Method Blank	KWG1413774-4	102	90	97	97
Method Blank	KWG1413817-7	95	99	97	96
Method Blank	KWG1413833-5	93	97	97	96
Method Blank	KWG1413840-4	102	88	98	99
LGC140929BC1-1MS	KWG1413774-1	98	86	102	100
LGC140929BC1-1DMS	KWG1413774-2	100	88	101	102
LGC140929T10-1MS	KWG1413817-1	96	99	97	98
LGC140929T10-1DMS	KWG1413817-2	94	98	97	99
LGC140929LC95D2-1MS	KWG1413817-3	96	97	97	98
LGC140929LC95D2-1DMS	KWG1413817-4	95	96	97	98
LGC141001Well13-1MS	KWG1413840-1	101	87	103	103
LGC141001Well13-1DMS	KWG1413840-2	99	87	101	103
Lab Control Sample	KWG1413774-3	98	85	101	99
Duplicate Lab Control Sample	KWG1413774-5	99	88	101	103
Lab Control Sample	KWG1413817-5	94	98	98	99
Duplicate Lab Control Sample	KWG1413817-6	96	100	97	98
Lab Control Sample	KWG1413833-3	96	97	98	98
Duplicate Lab Control Sample	KWG1413833-4	95	98	99	100
Lab Control Sample	KWG1413840-3	100	89	102	100
Duplicate Lab Control Sample	KWG1413840-5	99	87	100	101

Surrogate Recovery Control Limits (%)

Sur1	= Dibromofluoromethane	85-115
Sur2	= 1,2-Dichloroethane-d4	70-120
Sur3	= Toluene-d8	85-120
Sur4	= 4-Bromofluorobenzene	75-120

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

QA/QC Report

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1410790
Project:	JBLM LTM Log Center/TO-01	**Date Analyzed:**	10/10/2014
		Time Analyzed:	11:44

Internal Standard Area and RT Summary
Volatile Organic Compounds

File ID:	J:\MS13\DATA\101014\1010F005.D	**Lab Code:**	KWG1413772-2
Instrument ID:	MS13	**Analysis Lot:**	KWG1413772
Analysis Method:	8260C		

		Fluorobenzene		Chlorobenzene-d5		1,4-Dichlorobenzene-d4	
		Area	**RT**	**Area**	**RT**	**Area**	**RT**
	Results ==>	463,431	6.11	169,507	12.02	162,324	15.05
	Upper Limit ==>	926,862	6.61	339,014	12.52	324,648	15.55
	Lower Limit ==>	231,716	5.61	84,754	11.52	81,162	14.55
	ICAL Result ==>	564,474	6.11	214,895	12.03	184,778	15.05
Associated Analyses							
Lab Control Sample	KWG1413774-3	461,385	6.11	168,074	12.02	156,115	15.05
Duplicate Lab Control Sample	KWG1413774-5	457,914	6.11	166,259	12.02	160,063	15.05
LGC140929BC1-1MS	KWG1413774-1	462,778	6.11	168,725	12.02	155,138	15.05
LGC140929BC1-1DMS	KWG1413774-2	464,210	6.11	167,527	12.02	159,357	15.05
Method Blank	KWG1413774-4	463,606	6.11	166,159	12.02	150,879	15.05
TB-140929	K1410790-001	457,269	6.11	167,842	12.02	152,498	15.05
LGC140929LC93D1-1	K1410790-002	427,334	6.11	156,499	12.02	136,477	15.05
LGC140929LC93D2-1	K1410790-003	431,172	6.11	157,870	12.02	137,724	15.05
LGC140929T13B-1	K1410790-004	426,574	6.11	157,157	12.02	140,895	15.05
LGC140929LC225-1	K1410790-005	431,955	6.11	161,082	12.02	140,166	15.05
LGC140929T05-1	K1410790-006	425,345	6.11	156,503	12.02	139,751	15.05
LGC140929T06-1	K1410790-007	440,607	6.11	161,415	12.02	143,496	15.05
LGC140929T11B-1	K1410790-008	430,658	6.11	155,025	12.02	135,151	15.05
LGC140929BC1-1	K1410790-009	454,045	6.11	164,713	12.03	149,261	15.05
LGC140929T15-1	K1410790-011	417,288	6.11	151,569	12.02	135,735	15.05
LGC140929DUP4-1	K1410790-012	422,507	6.11	154,553	12.02	134,730	15.05
LGC140929LC86D1-1	K1410790-013	421,270	6.11	152,850	12.02	134,635	15.05
LGC140929LC86D2-1	K1410790-014	423,363	6.11	153,084	12.02	133,776	15.05
LGC140929LC102D1-1	K1410790-015	426,732	6.11	154,962	12.03	137,977	15.05
LGC140929LC102D2-1	K1410790-016	426,696	6.11	155,169	12.02	139,010	15.05
LGC140929LC88D1-1	K1410790-017	423,692	6.11	153,503	12.02	140,255	15.05

Results flagged with an asterisk (*) indicate values outside control criteria.

QA/QC Report

Client: Sealaska Environmental Services, LLC
Project: JBLM LTM Log Center/TO-01

Service Request: K1410790
Date Analyzed: 10/12/2014
Time Analyzed: 10:42

Internal Standard Area and RT Summary
Volatile Organic Compounds

File ID: J:\MS27\DATA\101214\1012F004.D
Instrument ID: MS27
Analysis Method: 8260C

Lab Code: KWG1413816-2
Analysis Lot: KWG1413816

		Fluorobenzene		Chlorobenzene-d5		1,4-Dichlorobenzene-d4	
		Area	**RT**	**Area**	**RT**	**Area**	**RT**
	Results ==>	1,083,678	6.47	436,508	9.65	426,647	11.99
	Upper Limit ==>	2,167,356	6.97	873,016	10.15	853,294	12.49
	Lower Limit ==>	541,839	5.97	218,254	9.15	213,324	11.49
	ICAL Result ==>	1,090,039	6.47	465,439	9.65	460,144	11.99
Associated Analyses							
Lab Control Sample	KWG1413817-5	1,138,115	6.47	462,148	9.65	446,043	11.99
Duplicate Lab Control Sample	KWG1413817-6	1,146,964	6.47	464,213	9.65	456,431	11.99
LGC140929T10-1MS	KWG1413817-1	1,149,858	6.47	463,955	9.65	461,111	11.99
LGC140929T10-1DMS	KWG1413817-2	1,155,069	6.47	460,320	9.65	452,085	11.99
LGC140929LC95D2-1MS	KWG1413817-3	1,139,088	6.47	457,923	9.65	448,997	11.99
LGC140929LC95D2-1DMS	KWG1413817-4	1,154,152	6.47	464,188	9.65	459,289	11.99
Method Blank	KWG1413817-7	1,082,801	6.47	442,704	9.65	417,408	11.99
LGC140929T10-1	K1410790-010	1,076,633	6.47	434,646	9.65	410,762	11.99
LGC140929LC88D2-1	K1410790-018	1,089,974	6.47	422,551	9.65	413,583	11.99
LGC140929LC95D1-1	K1410790-019	1,075,587	6.47	438,460	9.65	419,657	11.99
LGC140929LC95D2-1	K1410790-020	1,092,062	6.47	433,898	9.65	420,629	11.99
LGC140930T04-1	K1410790-021	1,077,462	6.47	429,768	9.65	416,611	11.99
LGC140930DUP5-1	K1410790-022	1,066,293	6.47	427,267	9.65	416,804	11.99
LGC140930LC103D-1	K1410790-023	1,080,132	6.47	434,623	9.65	420,441	11.99
LGC140930LC101D2-1	K1410790-024	1,057,651	6.47	432,308	9.65	407,898	11.99
LGC140930LC101D1-1	K1410790-025	1,080,404	6.47	434,972	9.65	419,614	11.99
LGC140930MAMCOF2-1	K1410790-026	1,069,908	6.47	429,519	9.65	412,610	11.99

Results flagged with an asterisk (*) indicate values outside control criteria.

QA/QC Report

Client: Sealaska Environmental Services, LLC
Project: JBLM LTM Log Center/TO-01

Service Request: K1410790
Date Analyzed: 10/13/2014
Time Analyzed: 09:57

Internal Standard Area and RT Summary
Volatile Organic Compounds

File ID: J:\MS13\DATA\101314\1013F003.D
Instrument ID: MS13
Analysis Method: 8260C

Lab Code: KWG1413835-2
Analysis Lot: KWG1413835

		Fluorobenzene		Chlorobenzene-d5		1,4-Dichlorobenzene-d4	
		Area	**RT**	**Area**	**RT**	**Area**	**RT**
	Results ==>	438,534	6.11	159,849	12.02	151,174	15.05
	Upper Limit ==>	877,068	6.61	319,698	12.52	302,348	15.55
	Lower Limit ==>	219,267	5.61	79,925	11.52	75,587	14.55
	ICAL Result ==>	564,474	6.11	214,895	12.03	184,778	15.05
Associated Analyses							
LGC141001Well13-1MS	KWG1413840-1	437,302	6.11	162,225	12.02	160,076	15.05
LGC141001Well13-1DMS	KWG1413840-2	451,456	6.11	164,113	12.02	161,252	15.05
Lab Control Sample	KWG1413840-3	448,038	6.11	165,407	12.02	160,363	15.05
Duplicate Lab Control Sample	KWG1413840-5	452,777	6.11	164,792	12.03	160,767	15.05
Method Blank	KWG1413840-4	444,219	6.11	161,964	12.02	150,098	15.05
LGC140930LC03-1	K1410790-028	420,909	6.11	151,401	12.02	139,078	15.05
LGC140930DUP9-1	K1410790-029	419,731	6.11	150,652	12.03	139,137	15.05
LGC140930LC182-1	K1410790-030	420,513	6.11	152,928	12.03	137,668	15.05
LGC140930LC16-1	K1410790-031	425,755	6.11	156,642	12.03	142,911	15.05
LGC140930DUP1-1	K1410790-032	427,636	6.11	158,122	12.02	143,071	15.05
LGC140930LC180-1	K1410790-033	430,034	6.11	156,829	12.02	143,466	15.05
LGC141001LC223-1	K1410790-034	426,494	6.11	154,215	12.03	143,342	15.05
LGC141001DUP3-1	K1410790-035	425,326	6.11	157,562	12.02	145,048	15.05
LGC141001LC178-1	K1410790-036	441,205	6.11	161,024	12.02	149,448	15.05
LGC141001Well13-1	K1410790-037	412,907	6.11	149,385	12.02	136,409	15.05
LGC141001LC98D1-1	K1410790-038	410,269	6.11	151,818	12.03	139,187	15.05
LGC141001DUP8-1	K1410790-039	408,313	6.11	150,376	12.02	134,704	15.05
LGC141001LC98D2-1	K1410790-040	415,421	6.11	154,276	12.02	141,282	15.05

Results flagged with an asterisk (*) indicate values outside control criteria.

QA/QC Report

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1410790
Project:	JBLM LTM Log Center/TO-01	**Date Analyzed:**	10/13/2014
		Time Analyzed:	10:10

Internal Standard Area and RT Summary
Volatile Organic Compounds

File ID:	J:\MS27\DATA\101314\1013F003.D	**Lab Code:**	KWG1413832-2
Instrument ID:	MS27	**Analysis Lot:**	KWG1413832
Analysis Method:	8260C		

		Fluorobenzene		Chlorobenzene-d5		1,4-Dichlorobenzene-d4	
		Area	**RT**	**Area**	**RT**	**Area**	**RT**
	Results ==>	1,058,246	6.47	426,946	9.65	412,731	11.99
	Upper Limit ==>	2,116,492	6.97	853,892	10.15	825,462	12.49
	Lower Limit ==>	529,123	5.97	213,473	9.15	206,366	11.49
	ICAL Result ==>	1,090,039	6.47	465,439	9.65	460,144	11.99
Associated Analyses							
Lab Control Sample	KWG1413833-3	1,101,254	6.47	448,541	9.65	437,449	11.99
Duplicate Lab Control Sample	KWG1413833-4	1,137,547	6.47	459,801	9.65	452,128	11.99
Method Blank	KWG1413833-5	1,098,033	6.47	439,933	9.65	421,282	11.99
LGC140930LC109-1	K1410790-027	1,073,038	6.47	430,733	9.65	421,572	11.99

Results flagged with an asterisk (*) indicate values outside control criteria.

QA/QC Report

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1410790
Project:	JBLM LTM Log Center/TO-01	**Date Extracted:**	10/10/2014
Sample Matrix:	Water	**Date Analyzed:**	10/10/2014

Matrix Spike/Duplicate Matrix Spike Summary
Volatile Organic Compounds

Sample Name:	LGC140929BC1-1	**Units:**	ug/L
Lab Code:	K1410790-009	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8260C	**Extraction Lot:**	KWG1413774

		LGC140929BC1-1MS KWG1413774-1 Matrix Spike			LGC140929BC1-1DMS KWG1413774-2 Duplicate Matrix Spike					
Analyte Name	**Sample Result**	**Result**	**Spike Amount**	**%Rec**	**Result**	**Spike Amount**	**%Rec**	**%Rec Limits**	**RPD**	**RPD Limit**
Dichlorodifluoromethane	ND	7.04	10.0	70	6.24	10.0	62	30-155	12	30
Chloromethane	ND	6.25	10.0	63	5.72	10.0	57	40-125	9	30
Vinyl Chloride	ND	8.50	10.0	85	7.62	10.0	76	50-145	11	30
Bromomethane	ND	8.11	10.0	81	7.59	10.0	76	30-145	7	30
Chloroethane	ND	9.63	10.0	96	8.91	10.0	89	60-135	8	30
Trichlorofluoromethane	ND	8.55	10.0	86	7.52	10.0	75	60-145	13	30
1,1-Dichloroethene	ND	11.0	10.0	110	9.98	10.0	100	70-130	10	30
Acetone	ND	39.6	50.0	79	38.8	50.0	78	40-140	2	30
Carbon Disulfide	ND	19.1	20.0	95	17.3	20.0	86	35-160	10	30
Methylene Chloride	ND	8.16	10.0	82	7.88	10.0	79	55-140	3	30
Methyl tert-Butyl Ether	ND	8.28	10.0	83	8.07	10.0	81	65-125	3	30
trans-1,2-Dichloroethene	ND	10.5	10.0	105	9.58	10.0	96	60-140	9	30
1,1-Dichloroethane	ND	9.87	10.0	99	9.16	10.0	92	70-135	7	30
2,2-Dichloropropane	ND	9.42	10.0	94	8.64	10.0	86	70-135	9	30
cis-1,2-Dichloroethene	ND	10.3	10.0	103	9.73	10.0	97	70-125	5	30
2-Butanone (MEK)	ND	44.8	50.0	90	45.3	50.0	91	30-150	1	30
Bromochloromethane	ND	10.7	10.0	107	10.4	10.0	104	65-130	3	30
Chloroform	ND	9.55	10.0	96	9.01	10.0	90	65-135	6	30
1,1,1-Trichloroethane (TCA)	0.32	10.0	10.0	97	9.26	10.0	89	65-130	8	30
Carbon Tetrachloride	ND	10.7	10.0	107	9.72	10.0	97	65-140	10	30
1,1-Dichloropropene	ND	10.8	10.0	108	9.75	10.0	98	75-130	10	30
Benzene	ND	9.79	10.0	98	9.15	10.0	92	80-120	7	30
1,2-Dichloroethane (EDC)	ND	9.01	10.0	90	8.56	10.0	86	70-130	5	30
Trichloroethene (TCE)	ND	9.77	10.0	98	9.05	10.0	91	70-125	8	30
1,2-Dichloropropane	ND	8.85	10.0	89	8.31	10.0	83	75-125	6	30
Dibromomethane	ND	9.33	10.0	93	9.00	10.0	90	75-125	4	30
Bromodichloromethane	ND	9.51	10.0	95	8.88	10.0	89	75-120	7	30
cis-1,3-Dichloropropene	ND	9.37	10.0	94	8.76	10.0	88	70-130	7	30
4-Methyl-2-pentanone (MIBK)	ND	42.1	50.0	84	41.8	50.0	84	60-135	1	30
Toluene	ND	10.0	10.0	100	9.35	10.0	94	75-120	7	30
trans-1,3-Dichloropropene	ND	8.62	10.0	86	8.46	10.0	85	55-140	2	30
1,1,2-Trichloroethane	ND	9.82	10.0	98	9.66	10.0	97	75-125	2	30
Tetrachloroethene (PCE)	ND	11.8	10.0	118	10.8	10.0	108	45-150	9	30

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1410790
Project:	JBLM LTM Log Center/TO-01	**Date Extracted:**	10/10/2014
Sample Matrix:	Water	**Date Analyzed:**	10/10/2014

Matrix Spike/Duplicate Matrix Spike Summary
Volatile Organic Compounds

Sample Name:	LGC140929BC1-1	**Units:**	ug/L
Lab Code:	K1410790-009	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8260C	**Extraction Lot:**	KWG1413774

		LGC140929BC1-1MS KWG1413774-1 Matrix Spike			LGC140929BC1-1DMS KWG1413774-2 Duplicate Matrix Spike					
Analyte Name	**Sample Result**	**Result**	**Spike Amount**	**%Rec**	**Result**	**Spike Amount**	**%Rec**	**%Rec Limits**	**RPD**	**RPD Limit**
2-Hexanone	ND	45.6	50.0	91	45.9	50.0	92	55-130	1	30
1,3-Dichloropropane	ND	9.91	10.0	99	9.51	10.0	95	75-125	4	30
Dibromochloromethane	ND	10.9	10.0	109	10.6	10.0	106	60-135	3	30
1,2-Dibromoethane (EDB)	ND	10.1	10.0	101	10.2	10.0	102	80-120	1	30
Chlorobenzene	ND	10.9	10.0	109	10.3	10.0	103	80-120	6	30
Ethylbenzene	ND	11.3	10.0	113	10.4	10.0	104	75-125	8	30
1,1,1,2-Tetrachloroethane	ND	11.1	10.0	111	10.6	10.0	106	80-130	5	30
m,p-Xylenes	ND	22.6	20.0	113	21.4	20.0	107	75-130	5	30
o-Xylene	ND	11.6	10.0	116	11.0	10.0	110	80-120	5	30
Styrene	ND	11.4	10.0	114	10.6	10.0	106	65-135	7	30
Bromoform	ND	11.5	10.0	115	11.1	10.0	111	70-130	4	30
Isopropylbenzene	ND	11.4	10.0	114	10.7	10.0	107	75-125	6	30
1,1,2,2-Tetrachloroethane	ND	8.81	10.0	88	8.53	10.0	85	65-130	3	30
Bromobenzene	ND	10.3	10.0	103	9.41	10.0	94	75-125	9	30
n-Propylbenzene	ND	10.0	10.0	100	8.93	10.0	89	70-130	11	30
1,2,3-Trichloropropane	ND	8.82	10.0	88	8.23	10.0	82	75-125	7	30
2-Chlorotoluene	ND	9.88	10.0	99	9.14	10.0	91	75-125	8	30
1,3,5-Trimethylbenzene	ND	10.4	10.0	104	9.42	10.0	94	75-130	10	30
4-Chlorotoluene	ND	9.55	10.0	96	8.73	10.0	87	75-130	9	30
tert-Butylbenzene	ND	10.9	10.0	109	9.89	10.0	99	70-130	10	30
1,2,4-Trimethylbenzene	ND	10.4	10.0	104	9.50	10.0	95	75-130	9	30
sec-Butylbenzene	ND	10.2	10.0	102	9.26	10.0	93	70-125	10	30
4-Isopropyltoluene	ND	11.0	10.0	110	9.87	10.0	99	75-130	11	30
1,3-Dichlorobenzene	ND	10.4	10.0	104	9.51	10.0	95	75-125	8	30
1,4-Dichlorobenzene	ND	9.96	10.0	100	9.17	10.0	92	75-125	8	30
n-Butylbenzene	ND	10.5	10.0	105	9.28	10.0	93	70-135	12	30
1,2-Dichlorobenzene	ND	10.0	10.0	100	9.47	10.0	95	70-120	5	30
1,2-Dibromo-3-chloropropane	ND	8.69	10.0	87	8.78	10.0	88	50-130	1	30
1,2,4-Trichlorobenzene	ND	11.3	10.0	113	10.5	10.0	105	65-135	7	30
Hexachlorobutadiene	ND	11.1	10.0	111	9.51	10.0	95	50-140	16	30
Naphthalene	ND	10.2	10.0	102	9.71	10.0	97	55-140	5	30
1,2,3-Trichlorobenzene	ND	11.4	10.0	114	10.7	10.0	107	55-140	6	30

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1410790
Project:	JBLM LTM Log Center/TO-01	**Date Extracted:**	10/12/2014
Sample Matrix:	Water	**Date Analyzed:**	10/12/2014

Matrix Spike/Duplicate Matrix Spike Summary
Volatile Organic Compounds

Sample Name:	LGC140929T10-1	**Units:**	ug/L
Lab Code:	K1410790-010	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8260C	**Extraction Lot:**	KWG1413817

		LGC140929T10-1MS KWG1413817-1 Matrix Spike			LGC140929T10-1DMS KWG1413817-2 Duplicate Matrix Spike					
Analyte Name	**Sample Result**	**Result**	**Spike Amount**	**%Rec**	**Result**	**Spike Amount**	**%Rec**	**%Rec Limits**	**RPD**	**RPD Limit**
Dichlorodifluoromethane	ND	8.71	10.0	87	7.96	10.0	80	30-155	9	30
Chloromethane	ND	7.47	10.0	75	7.11	10.0	71	40-125	5	30
Vinyl Chloride	ND	9.16	10.0	92	8.54	10.0	85	50-145	7	30
Bromomethane	ND	9.01	10.0	90	8.32	10.0	83	30-145	8	30
Chloroethane	ND	10.7	10.0	107	9.55	10.0	96	60-135	12	30
Trichlorofluoromethane	ND	8.32	10.0	83	7.84	10.0	78	60-145	6	30
1,1-Dichloroethene	ND	9.91	10.0	99	9.18	10.0	92	70-130	8	30
Acetone	ND	46.9	50.0	94	45.6	50.0	91	40-140	3	30
Carbon Disulfide	ND	19.1	20.0	96	17.7	20.0	88	35-160	8	30
Methylene Chloride	ND	7.54	10.0	75	7.09	10.0	71	55-140	6	30
Methyl tert-Butyl Ether	ND	8.79	10.0	88	8.61	10.0	86	65-125	2	30
trans-1,2-Dichloroethene	ND	9.84	10.0	98	9.26	10.0	93	60-140	6	30
1,1-Dichloroethane	ND	9.67	10.0	97	9.08	10.0	91	70-135	6	30
2,2-Dichloropropane	ND	9.97	10.0	100	9.23	10.0	92	70-135	8	30
cis-1,2-Dichloroethene	ND	9.11	10.0	91	8.64	10.0	86	70-125	5	30
2-Butanone (MEK)	ND	46.5	50.0	93	44.7	50.0	89	30-150	4	30
Bromochloromethane	ND	9.76	10.0	98	9.20	10.0	92	65-130	6	30
Chloroform	ND	9.23	10.0	92	8.84	10.0	88	65-135	4	30
1,1,1-Trichloroethane (TCA)	ND	9.23	10.0	92	8.70	10.0	87	65-130	6	30
Carbon Tetrachloride	ND	9.45	10.0	95	8.79	10.0	88	65-140	7	30
1,1-Dichloropropene	ND	9.76	10.0	98	9.09	10.0	91	75-130	7	30
Benzene	ND	8.84	10.0	88	8.34	10.0	83	80-120	6	30
1,2-Dichloroethane (EDC)	ND	8.94	10.0	89	8.62	10.0	86	70-130	4	30
Trichloroethene (TCE)	ND	9.09	10.0	91	8.67	10.0	87	70-125	5	30
1,2-Dichloropropane	ND	9.04	10.0	90	8.52	10.0	85	75-125	6	30
Dibromomethane	ND	9.02	10.0	90	8.57	10.0	86	75-125	5	30
Bromodichloromethane	ND	8.71	10.0	87	8.31	10.0	83	75-120	5	30
cis-1,3-Dichloropropene	ND	8.88	10.0	89	8.35	10.0	84	70-130	6	30
4-Methyl-2-pentanone (MIBK)	ND	46.8	50.0	94	45.7	50.0	91	60-135	2	30
Toluene	ND	9.01	10.0	90	8.57	10.0	86	75-120	5	30
trans-1,3-Dichloropropene	ND	8.69	10.0	87	8.52	10.0	85	55-140	2	30
1,1,2-Trichloroethane	ND	9.23	10.0	92	9.07	10.0	91	75-125	2	30
Tetrachloroethene (PCE)	ND	9.82	10.0	98	9.31	10.0	93	45-150	5	30

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1410790
Project:	JBLM LTM Log Center/TO-01	**Date Extracted:**	10/12/2014
Sample Matrix:	Water	**Date Analyzed:**	10/12/2014

Matrix Spike/Duplicate Matrix Spike Summary
Volatile Organic Compounds

Sample Name:	LGC140929T10-1	**Units:**	ug/L
Lab Code:	K1410790-010	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8260C	**Extraction Lot:**	KWG1413817

		LGC140929T10-1MS KWG1413817-1 Matrix Spike			LGC140929T10-1DMS KWG1413817-2 Duplicate Matrix Spike					
Analyte Name	**Sample Result**	**Result**	**Spike Amount**	**%Rec**	**Result**	**Spike Amount**	**%Rec**	**%Rec Limits**	**RPD**	**RPD Limit**
2-Hexanone	ND	49.3	50.0	99	48.9	50.0	98	55-130	1	30
1,3-Dichloropropane	ND	9.08	10.0	91	9.03	10.0	90	75-125	1	30
Dibromochloromethane	ND	9.14	10.0	91	8.91	10.0	89	60-135	3	30
1,2-Dibromoethane (EDB)	ND	9.02	10.0	90	8.84	10.0	88	80-120	2	30
Chlorobenzene	ND	9.44	10.0	94	9.12	10.0	91	80-120	3	30
Ethylbenzene	ND	9.18	10.0	92	8.80	10.0	88	75-125	4	30
1,1,1,2-Tetrachloroethane	ND	9.05	10.0	91	9.09	10.0	91	80-130	0	30
m,p-Xylenes	ND	19.3	20.0	96	18.7	20.0	93	75-130	3	30
o-Xylene	ND	9.36	10.0	94	9.15	10.0	92	80-120	2	30
Styrene	ND	9.26	10.0	93	8.95	10.0	90	65-135	3	30
Bromoform	ND	9.06	10.0	91	8.94	10.0	89	70-130	1	30
Isopropylbenzene	ND	9.60	10.0	96	9.11	10.0	91	75-125	5	30
1,1,2,2-Tetrachloroethane	ND	9.11	10.0	91	8.97	10.0	90	65-130	2	30
Bromobenzene	ND	9.46	10.0	95	9.19	10.0	92	75-125	3	30
n-Propylbenzene	ND	9.38	10.0	94	9.09	10.0	91	70-130	3	30
1,2,3-Trichloropropane	ND	9.17	10.0	92	9.05	10.0	91	75-125	1	30
2-Chlorotoluene	ND	9.57	10.0	96	9.28	10.0	93	75-125	3	30
1,3,5-Trimethylbenzene	ND	9.37	10.0	94	9.07	10.0	91	75-130	3	30
4-Chlorotoluene	ND	9.18	10.0	92	8.83	10.0	88	75-130	4	30
tert-Butylbenzene	ND	9.43	10.0	94	9.01	10.0	90	70-130	5	30
1,2,4-Trimethylbenzene	ND	9.23	10.0	92	8.93	10.0	89	75-130	3	30
sec-Butylbenzene	ND	9.33	10.0	93	9.00	10.0	90	70-125	4	30
4-Isopropyltoluene	ND	9.59	10.0	96	9.30	10.0	93	75-130	3	30
1,3-Dichlorobenzene	ND	9.26	10.0	93	9.02	10.0	90	75-125	3	30
1,4-Dichlorobenzene	ND	9.25	10.0	93	9.05	10.0	91	75-125	2	30
n-Butylbenzene	ND	9.23	10.0	92	8.86	10.0	89	70-135	4	30
1,2-Dichlorobenzene	ND	9.06	10.0	91	8.95	10.0	90	70-120	1	30
1,2-Dibromo-3-chloropropane	ND	8.72	10.0	87	9.14	10.0	91	50-130	5	30
1,2,4-Trichlorobenzene	ND	8.99	10.0	90	8.83	10.0	88	65-135	2	30
Hexachlorobutadiene	ND	9.80	10.0	98	9.19	10.0	92	50-140	6	30
Naphthalene	ND	9.05	10.0	91	8.91	10.0	89	55-140	2	30
1,2,3-Trichlorobenzene	ND	9.09	10.0	91	8.94	10.0	89	55-140	2	30

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Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

QA/QC Report

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1410790
Project:	JBLM LTM Log Center/TO-01	**Date Extracted:**	10/12/2014
Sample Matrix:	Water	**Date Analyzed:**	10/12/2014

Matrix Spike/Duplicate Matrix Spike Summary
Volatile Organic Compounds

Sample Name:	LGC140929LC95D2-1	**Units:**	ug/L
Lab Code:	K1410790-020	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8260C	**Extraction Lot:**	KWG1413817

		LGC140929LC95D2-1MS KWG1413817-3 Matrix Spike			LGC140929LC95D2-1DMS KWG1413817-4 Duplicate Matrix Spike					
Analyte Name	**Sample Result**	**Result**	**Spike Amount**	**%Rec**	**Result**	**Spike Amount**	**%Rec**	**%Rec Limits**	**RPD**	**RPD Limit**
Dichlorodifluoromethane	ND	8.25	10.0	83	7.63	10.0	76	30-155	8	30
Chloromethane	ND	7.56	10.0	76	6.99	10.0	70	40-125	8	30
Vinyl Chloride	ND	9.07	10.0	91	8.31	10.0	83	50-145	9	30
Bromomethane	ND	8.90	10.0	89	8.28	10.0	83	30-145	7	30
Chloroethane	ND	10.4	10.0	104	9.63	10.0	96	60-135	8	30
Trichlorofluoromethane	ND	8.19	10.0	82	7.71	10.0	77	60-145	6	30
1,1-Dichloroethene	ND	9.84	10.0	98	9.36	10.0	94	70-130	5	30
Acetone	4.2	47.7	50.0	87	48.1	50.0	88	40-140	1	30
Carbon Disulfide	ND	18.8	20.0	94	17.3	20.0	87	35-160	8	30
Methylene Chloride	ND	7.44	10.0	74	7.03	10.0	70	55-140	6	30
Methyl tert-Butyl Ether	ND	8.83	10.0	88	8.40	10.0	84	65-125	5	30
trans-1,2-Dichloroethene	ND	9.78	10.0	98	8.94	10.0	89	60-140	9	30
1,1-Dichloroethane	ND	9.65	10.0	97	9.04	10.0	90	70-135	7	30
2,2-Dichloropropane	ND	9.53	10.0	95	8.82	10.0	88	70-135	8	30
cis-1,2-Dichloroethene	0.18	9.21	10.0	90	8.63	10.0	85	70-125	7	30
2-Butanone (MEK)	ND	44.8	50.0	90	46.2	50.0	92	30-150	3	30
Bromochloromethane	ND	9.68	10.0	97	9.21	10.0	92	65-130	5	30
Chloroform	ND	9.22	10.0	92	8.73	10.0	87	65-135	5	30
1,1,1-Trichloroethane (TCA)	ND	9.15	10.0	92	8.56	10.0	86	65-130	7	30
Carbon Tetrachloride	0.12	9.22	10.0	91	8.83	10.0	87	65-140	4	30
1,1-Dichloropropene	ND	9.83	10.0	98	9.16	10.0	92	75-130	7	30
Benzene	ND	8.76	10.0	88	8.22	10.0	82	80-120	6	30
1,2-Dichloroethane (EDC)	ND	8.78	10.0	88	8.56	10.0	86	70-130	3	30
Trichloroethene (TCE)	1.6	9.58	10.0	80	9.00	10.0	74	70-125	6	30
1,2-Dichloropropane	ND	8.84	10.0	88	8.59	10.0	86	75-125	3	30
Dibromomethane	ND	8.67	10.0	87	8.60	10.0	86	75-125	1	30
Bromodichloromethane	ND	8.66	10.0	87	8.41	10.0	84	75-120	3	30
cis-1,3-Dichloropropene	ND	8.83	10.0	88	8.31	10.0	83	70-130	6	30
4-Methyl-2-pentanone (MIBK)	ND	45.6	50.0	91	44.9	50.0	90	60-135	2	30
Toluene	ND	9.05	10.0	91	8.42	10.0	84	75-120	7	30
trans-1,3-Dichloropropene	ND	8.57	10.0	86	8.23	10.0	82	55-140	4	30
1,1,2-Trichloroethane	ND	9.31	10.0	93	9.09	10.0	91	75-125	2	30
Tetrachloroethene (PCE)	ND	9.80	10.0	98	9.01	10.0	90	45-150	8	30

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Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1410790
Project:	JBLM LTM Log Center/TO-01	**Date Extracted:**	10/12/2014
Sample Matrix:	Water	**Date Analyzed:**	10/12/2014

Matrix Spike/Duplicate Matrix Spike Summary
Volatile Organic Compounds

Sample Name:	LGC140929LC95D2-1	**Units:**	ug/L
Lab Code:	K1410790-020	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8260C	**Extraction Lot:**	KWG1413817

		LGC140929LC95D2-1MS KWG1413817-3 Matrix Spike			LGC140929LC95D2-1DMS KWG1413817-4 Duplicate Matrix Spike					
Analyte Name	**Sample Result**	**Result**	**Spike Amount**	**%Rec**	**Result**	**Spike Amount**	**%Rec**	**%Rec Limits**	**RPD**	**RPD Limit**
2-Hexanone	ND	48.8	50.0	98	47.2	50.0	94	55-130	3	30
1,3-Dichloropropane	ND	9.19	10.0	92	8.92	10.0	89	75-125	3	30
Dibromochloromethane	ND	9.20	10.0	92	8.74	10.0	87	60-135	5	30
1,2-Dibromoethane (EDB)	ND	8.85	10.0	89	8.86	10.0	89	80-120	0	30
Chlorobenzene	ND	9.46	10.0	95	8.87	10.0	89	80-120	6	30
Ethylbenzene	ND	9.24	10.0	92	8.79	10.0	88	75-125	5	30
1,1,1,2-Tetrachloroethane	ND	9.01	10.0	90	8.60	10.0	86	80-130	5	30
m,p-Xylenes	ND	19.3	20.0	97	18.2	20.0	91	75-130	6	30
o-Xylene	ND	9.35	10.0	94	8.74	10.0	87	80-120	7	30
Styrene	ND	9.36	10.0	94	8.88	10.0	89	65-135	5	30
Bromoform	ND	8.90	10.0	89	8.68	10.0	87	70-130	3	30
Isopropylbenzene	ND	9.59	10.0	96	8.97	10.0	90	75-125	7	30
1,1,2,2-Tetrachloroethane	ND	9.14	10.0	91	9.17	10.0	92	65-130	0	30
Bromobenzene	ND	9.48	10.0	95	9.09	10.0	91	75-125	4	30
n-Propylbenzene	ND	9.50	10.0	95	8.88	10.0	89	70-130	7	30
1,2,3-Trichloropropane	ND	9.08	10.0	91	8.85	10.0	89	75-125	3	30
2-Chlorotoluene	ND	9.72	10.0	97	8.96	10.0	90	75-125	8	30
1,3,5-Trimethylbenzene	ND	9.46	10.0	95	8.85	10.0	89	75-130	7	30
4-Chlorotoluene	ND	9.23	10.0	92	8.60	10.0	86	75-130	7	30
tert-Butylbenzene	ND	9.56	10.0	96	8.85	10.0	89	70-130	8	30
1,2,4-Trimethylbenzene	ND	9.34	10.0	93	8.72	10.0	87	75-130	7	30
sec-Butylbenzene	ND	9.47	10.0	95	8.75	10.0	88	70-125	8	30
4-Isopropyltoluene	ND	9.70	10.0	97	9.05	10.0	91	75-130	7	30
1,3-Dichlorobenzene	ND	9.35	10.0	94	8.86	10.0	89	75-125	5	30
1,4-Dichlorobenzene	ND	9.39	10.0	94	8.72	10.0	87	75-125	7	30
n-Butylbenzene	ND	9.43	10.0	94	8.70	10.0	87	70-135	8	30
1,2-Dichlorobenzene	ND	9.15	10.0	92	8.67	10.0	87	70-120	5	30
1,2-Dibromo-3-chloropropane	ND	9.09	10.0	91	8.57	10.0	86	50-130	6	30
1,2,4-Trichlorobenzene	ND	9.10	10.0	91	8.56	10.0	86	65-135	6	30
Hexachlorobutadiene	ND	9.71	10.0	97	9.04	10.0	90	50-140	7	30
Naphthalene	ND	9.09	10.0	91	8.80	10.0	88	55-140	3	30
1,2,3-Trichlorobenzene	ND	9.26	10.0	93	8.82	10.0	88	55-140	5	30

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QA/QC Report

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1410790
Project:	JBLM LTM Log Center/TO-01	**Date Extracted:**	10/13/2014
Sample Matrix:	Water	**Date Analyzed:**	10/13/2014

Matrix Spike/Duplicate Matrix Spike Summary
Volatile Organic Compounds

Sample Name:	LGC141001Well13-1	**Units:**	ug/L
Lab Code:	K1410790-037	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8260C	**Extraction Lot:**	KWG1413840

		LGC141001Well13-1MS KWG1413840-1 Matrix Spike			LGC141001Well13-1DMS KWG1413840-2 Duplicate Matrix Spike					
Analyte Name	**Sample Result**	**Result**	**Spike Amount**	**%Rec**	**Result**	**Spike Amount**	**%Rec**	**%Rec Limits**	**RPD**	**RPD Limit**
Dichlorodifluoromethane	ND	7.54	10.0	75	6.50	10.0	65	30-155	15	30
Chloromethane	ND	6.13	10.0	61	5.71	10.0	57	40-125	7	30
Vinyl Chloride	ND	7.68	10.0	77	6.81	10.0	68	50-145	12	30
Bromomethane	ND	7.50	10.0	75	7.06	10.0	71	30-145	6	30
Chloroethane	ND	8.96	10.0	90	7.93	10.0	79	60-135	12	30
Trichlorofluoromethane	ND	7.31	10.0	73	6.30	10.0	63	60-145	15	30
1,1-Dichloroethene	ND	9.35	10.0	94	8.33	10.0	83	70-130	12	30
Acetone	ND	39.9	50.0	80	39.0	50.0	78	40-140	3	30
Carbon Disulfide	ND	16.7	20.0	83	14.8	20.0	74	35-160	12	30
Methylene Chloride	ND	7.75	10.0	78	7.41	10.0	74	55-140	4	30
Methyl tert-Butyl Ether	ND	7.73	10.0	77	7.21	10.0	72	65-125	7	30
trans-1,2-Dichloroethene	ND	9.36	10.0	94	8.38	10.0	84	60-140	11	30
1,1-Dichloroethane	ND	8.77	10.0	88	8.03	10.0	80	70-135	9	30
2,2-Dichloropropane	ND	7.63	10.0	76	6.77	10.0	68 *	70-135	12	30
cis-1,2-Dichloroethene	ND	9.48	10.0	95	8.82	10.0	88	70-125	7	30
2-Butanone (MEK)	ND	43.9	50.0	88	46.4	50.0	93	30-150	5	30
Bromochloromethane	ND	10.4	10.0	104	10.0	10.0	100	65-130	4	30
Chloroform	ND	8.92	10.0	89	8.15	10.0	82	65-135	9	30
1,1,1-Trichloroethane (TCA)	ND	7.98	10.0	80	7.15	10.0	72	65-130	11	30
Carbon Tetrachloride	ND	8.92	10.0	89	7.94	10.0	79	65-140	12	30
1,1-Dichloropropene	ND	9.10	10.0	91	8.08	10.0	81	75-130	12	30
Benzene	ND	8.97	10.0	90	8.16	10.0	82	80-120	9	30
1,2-Dichloroethane (EDC)	ND	8.43	10.0	84	7.94	10.0	79	70-130	6	30
Trichloroethene (TCE)	0.22	9.05	10.0	88	8.19	10.0	80	70-125	10	30
1,2-Dichloropropane	ND	8.11	10.0	81	7.58	10.0	76	75-125	7	30
Dibromomethane	ND	8.97	10.0	90	8.82	10.0	88	75-125	2	30
Bromodichloromethane	ND	8.82	10.0	88	8.16	10.0	82	75-120	8	30
cis-1,3-Dichloropropene	ND	8.37	10.0	84	7.81	10.0	78	70-130	7	30
4-Methyl-2-pentanone (MIBK)	ND	41.0	50.0	82	40.2	50.0	80	60-135	2	30
Toluene	ND	9.23	10.0	92	8.40	10.0	84	75-120	9	30
trans-1,3-Dichloropropene	ND	7.68	10.0	77	7.49	10.0	75	55-140	3	30
1,1,2-Trichloroethane	ND	9.38	10.0	94	9.00	10.0	90	75-125	4	30
Tetrachloroethene (PCE)	ND	10.3	10.0	103	9.24	10.0	92	45-150	10	30

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Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1410790
Project:	JBLM LTM Log Center/TO-01	**Date Extracted:**	10/13/2014
Sample Matrix:	Water	**Date Analyzed:**	10/13/2014

Matrix Spike/Duplicate Matrix Spike Summary
Volatile Organic Compounds

Sample Name:	LGC141001Well13-1	**Units:**	ug/L
Lab Code:	K1410790-037	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8260C	**Extraction Lot:**	KWG1413840

		LGC141001Well13-1MS KWG1413840-1 Matrix Spike			LGC141001Well13-1DMS KWG1413840-2 Duplicate Matrix Spike					
Analyte Name	**Sample Result**	**Result**	**Spike Amount**	**%Rec**	**Result**	**Spike Amount**	**%Rec**	**%Rec Limits**	**RPD**	**RPD Limit**
2-Hexanone	ND	44.6	50.0	89	45.0	50.0	90	55-130	1	30
1,3-Dichloropropane	ND	9.27	10.0	93	9.03	10.0	90	75-125	3	30
Dibromochloromethane	ND	10.4	10.0	104	9.98	10.0	100	60-135	4	30
1,2-Dibromoethane (EDB)	ND	9.62	10.0	96	9.59	10.0	96	80-120	0	30
Chlorobenzene	ND	10.1	10.0	101	9.71	10.0	97	80-120	4	30
Ethylbenzene	ND	9.87	10.0	99	9.34	10.0	93	75-125	6	30
1,1,1,2-Tetrachloroethane	ND	10.2	10.0	102	9.90	10.0	99	80-130	3	30
m,p-Xylenes	ND	20.6	20.0	103	19.2	20.0	96	75-130	7	30
o-Xylene	ND	10.7	10.0	107	10.0	10.0	100	80-120	6	30
Styrene	ND	10.4	10.0	104	10.2	10.0	102	65-135	2	30
Bromoform	ND	11.2	10.0	112	11.1	10.0	111	70-130	1	30
Isopropylbenzene	ND	10.0	10.0	100	9.17	10.0	92	75-125	9	30
1,1,2,2-Tetrachloroethane	ND	8.06	10.0	81	7.93	10.0	79	65-130	2	30
Bromobenzene	ND	9.25	10.0	93	8.87	10.0	89	75-125	4	30
n-Propylbenzene	ND	8.14	10.0	81	7.51	10.0	75	70-130	8	30
1,2,3-Trichloropropane	ND	8.22	10.0	82	8.35	10.0	84	75-125	2	30
2-Chlorotoluene	ND	8.55	10.0	86	8.10	10.0	81	75-125	5	30
1,3,5-Trimethylbenzene	ND	8.77	10.0	88	8.32	10.0	83	75-130	5	30
4-Chlorotoluene	ND	8.29	10.0	83	7.81	10.0	78	75-130	6	30
tert-Butylbenzene	ND	8.97	10.0	90	8.25	10.0	83	70-130	8	30
1,2,4-Trimethylbenzene	ND	9.02	10.0	90	8.37	10.0	84	75-130	7	30
sec-Butylbenzene	ND	8.31	10.0	83	7.67	10.0	77	70-125	8	30
4-Isopropyltoluene	ND	9.03	10.0	90	8.41	10.0	84	75-130	7	30
1,3-Dichlorobenzene	ND	9.23	10.0	92	8.69	10.0	87	75-125	6	30
1,4-Dichlorobenzene	ND	9.05	10.0	91	8.56	10.0	86	75-125	6	30
n-Butylbenzene	ND	8.40	10.0	84	7.82	10.0	78	70-135	7	30
1,2-Dichlorobenzene	ND	9.14	10.0	91	8.65	10.0	87	70-120	6	30
1,2-Dibromo-3-chloropropane	ND	8.46	10.0	85	8.47	10.0	85	50-130	0	30
1,2,4-Trichlorobenzene	ND	10.1	10.0	101	9.66	10.0	97	65-135	4	30
Hexachlorobutadiene	ND	8.78	10.0	88	7.90	10.0	79	50-140	11	30
Naphthalene	ND	9.06	10.0	91	8.58	10.0	86	55-140	5	30
1,2,3-Trichlorobenzene	ND	10.3	10.0	103	9.72	10.0	97	55-140	6	30

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

QA/QC Report

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1410790
Project:	JBLM LTM Log Center/TO-01	**Date Extracted:**	10/10/2014
Sample Matrix:	Water	**Date Analyzed:**	10/10/2014

Lab Control Spike/Duplicate Lab Control Spike Summary
Volatile Organic Compounds

Extraction Method:	EPA 5030B	**Units:**	ug/L
Analysis Method:	8260C	**Basis:**	NA
		Level:	Low
		Extraction Lot:	KWG1413774

	Lab Control Sample KWG1413774-3 Lab Control Spike			Duplicate Lab Control Sample KWG1413774-5 Duplicate Lab Control Spike					
Analyte Name	**Result**	**Spike Amount**	**%Rec**	**Result**	**Spike Amount**	**%Rec**	**%Rec Limits**	**RPD**	**RPD Limit**
Dichlorodifluoromethane	6.42	10.0	64	5.92	10.0	59	30-155	8	30
Chloromethane	5.84	10.0	58	5.49	10.0	55	40-125	6	30
Vinyl Chloride	7.63	10.0	76	7.14	10.0	71	50-145	7	30
Bromomethane	7.24	10.0	72	7.01	10.0	70	30-145	3	30
Chloroethane	8.82	10.0	88	8.40	10.0	84	60-135	5	30
Trichlorofluoromethane	7.44	10.0	74	7.00	10.0	70	60-145	6	30
1,1-Dichloroethene	10.2	10.0	102	9.56	10.0	96	70-130	7	30
Acetone	45.6	50.0	91	44.7	50.0	89	40-140	2	30
Carbon Disulfide	17.2	20.0	86	16.0	20.0	80	35-160	7	30
Methylene Chloride	7.86	10.0	79	7.60	10.0	76	55-140	3	30
Methyl tert-Butyl Ether	7.83	10.0	78	7.94	10.0	79	65-125	1	30
trans-1,2-Dichloroethene	9.55	10.0	96	9.04	10.0	90	60-140	5	30
1,1-Dichloroethane	9.15	10.0	92	8.72	10.0	87	70-135	5	30
2,2-Dichloropropane	8.50	10.0	85	7.96	10.0	80	70-135	7	30
cis-1,2-Dichloroethene	9.59	10.0	96	9.16	10.0	92	70-125	5	30
2-Butanone (MEK)	48.4	50.0	97	47.8	50.0	96	30-150	1	30
Bromochloromethane	10.0	10.0	100	9.83	10.0	98	65-130	2	30
Chloroform	8.81	10.0	88	8.61	10.0	86	65-135	2	30
1,1,1-Trichloroethane (TCA)	8.79	10.0	88	8.25	10.0	83	65-130	6	30
Carbon Tetrachloride	9.48	10.0	95	8.87	10.0	89	65-140	7	30
1,1-Dichloropropene	9.58	10.0	96	9.01	10.0	90	75-130	6	30
Benzene	9.05	10.0	91	8.69	10.0	87	80-120	4	30
1,2-Dichloroethane (EDC)	8.38	10.0	84	8.43	10.0	84	70-130	1	30
Trichloroethene (TCE)	9.20	10.0	92	8.68	10.0	87	70-125	6	30
1,2-Dichloropropane	8.23	10.0	82	8.05	10.0	81	75-125	2	30
Dibromomethane	8.86	10.0	89	8.94	10.0	89	75-125	1	30
Bromodichloromethane	8.71	10.0	87	8.50	10.0	85	75-120	2	30
cis-1,3-Dichloropropene	8.63	10.0	86	8.58	10.0	86	70-130	1	30
4-Methyl-2-pentanone (MIBK)	42.2	50.0	84	42.1	50.0	84	60-135	0	30
Toluene	9.21	10.0	92	8.82	10.0	88	75-120	4	30
trans-1,3-Dichloropropene	8.36	10.0	84	8.25	10.0	83	55-140	1	30
1,1,2-Trichloroethane	9.24	10.0	92	9.24	10.0	92	75-125	0	30
Tetrachloroethene (PCE)	10.4	10.0	104	10.1	10.0	101	45-150	3	30
2-Hexanone	47.0	50.0	94	46.5	50.0	93	55-130	1	30
1,3-Dichloropropane	9.23	10.0	92	9.34	10.0	93	75-125	1	30

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1410790
Project:	JBLM LTM Log Center/TO-01	**Date Extracted:**	10/10/2014
Sample Matrix:	Water	**Date Analyzed:**	10/10/2014

Lab Control Spike/Duplicate Lab Control Spike Summary
Volatile Organic Compounds

Extraction Method:	EPA 5030B	**Units:**	ug/L
Analysis Method:	8260C	**Basis:**	NA
		Level:	Low
		Extraction Lot:	KWG1413774

	Lab Control Sample KWG1413774-3 Lab Control Spike			Duplicate Lab Control Sample KWG1413774-5 Duplicate Lab Control Spike					
Analyte Name	**Result**	**Spike Amount**	**%Rec**	**Result**	**Spike Amount**	**%Rec**	**%Rec Limits**	**RPD**	**RPD Limit**
Dibromochloromethane	10.4	10.0	104	10.4	10.0	104	60-135	0	30
1,2-Dibromoethane (EDB)	9.85	10.0	99	9.67	10.0	97	80-120	2	30
Chlorobenzene	10.1	10.0	101	9.86	10.0	99	80-120	3	30
Ethylbenzene	10.2	10.0	102	9.85	10.0	99	75-125	3	30
1,1,1,2-Tetrachloroethane	10.4	10.0	104	10.2	10.0	102	80-130	2	30
m,p-Xylenes	20.9	20.0	105	20.1	20.0	101	75-130	4	30
o-Xylene	10.9	10.0	109	10.5	10.0	105	80-120	3	30
Styrene	10.6	10.0	106	10.2	10.0	102	65-135	4	30
Bromoform	10.9	10.0	109	10.9	10.0	109	70-130	0	30
Isopropylbenzene	10.5	10.0	105	10.0	10.0	100	75-125	4	30
1,1,2,2-Tetrachloroethane	8.40	10.0	84	8.29	10.0	83	65-130	1	30
Bromobenzene	9.65	10.0	97	9.02	10.0	90	75-125	7	30
n-Propylbenzene	9.09	10.0	91	8.31	10.0	83	70-130	9	30
1,2,3-Trichloropropane	8.66	10.0	87	8.92	10.0	89	75-125	3	30
2-Chlorotoluene	9.28	10.0	93	8.54	10.0	85	75-125	8	30
1,3,5-Trimethylbenzene	9.53	10.0	95	8.94	10.0	89	75-130	6	30
4-Chlorotoluene	8.80	10.0	88	8.29	10.0	83	75-130	6	30
tert-Butylbenzene	9.95	10.0	100	9.17	10.0	92	70-130	8	30
1,2,4-Trimethylbenzene	9.46	10.0	95	9.01	10.0	90	75-130	5	30
sec-Butylbenzene	9.34	10.0	93	8.51	10.0	85	70-125	9	30
4-Isopropyltoluene	9.98	10.0	100	9.23	10.0	92	75-130	8	30
1,3-Dichlorobenzene	9.40	10.0	94	9.05	10.0	91	75-125	4	30
1,4-Dichlorobenzene	9.30	10.0	93	8.78	10.0	88	75-125	6	30
n-Butylbenzene	9.51	10.0	95	8.73	10.0	87	70-135	9	30
1,2-Dichlorobenzene	9.42	10.0	94	9.00	10.0	90	70-120	5	30
1,2-Dibromo-3-chloropropane	8.71	10.0	87	8.97	10.0	90	50-130	3	30
1,2,4-Trichlorobenzene	10.7	10.0	107	10.1	10.0	101	65-135	6	30
Hexachlorobutadiene	9.93	10.0	99	8.95	10.0	90	50-140	10	30
Naphthalene	10.0	10.0	100	9.35	10.0	94	55-140	7	30
1,2,3-Trichlorobenzene	10.7	10.0	107	10.1	10.0	101	55-140	6	30

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

QA/QC Report

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1410790
Project:	JBLM LTM Log Center/TO-01	**Date Extracted:**	10/12/2014
Sample Matrix:	Water	**Date Analyzed:**	10/12/2014

Lab Control Spike/Duplicate Lab Control Spike Summary
Volatile Organic Compounds

Extraction Method:	EPA 5030B	**Units:**	ug/L
Analysis Method:	8260C	**Basis:**	NA
		Level:	Low
		Extraction Lot:	KWG1413817

	Lab Control Sample KWG1413817-5 Lab Control Spike			Duplicate Lab Control Sample KWG1413817-6 Duplicate Lab Control Spike					
Analyte Name	**Result**	**Spike Amount**	**%Rec**	**Result**	**Spike Amount**	**%Rec**	**%Rec Limits**	**RPD**	**RPD Limit**
Dichlorodifluoromethane	8.18	10.0	82	7.55	10.0	76	30-155	8	30
Chloromethane	7.64	10.0	76	7.04	10.0	70	40-125	8	30
Vinyl Chloride	8.91	10.0	89	8.11	10.0	81	50-145	9	30
Bromomethane	8.74	10.0	87	8.28	10.0	83	30-145	5	30
Chloroethane	10.5	10.0	105	9.88	10.0	99	60-135	6	30
Trichlorofluoromethane	8.20	10.0	82	7.53	10.0	75	60-145	9	30
1,1-Dichloroethene	9.84	10.0	98	9.39	10.0	94	70-130	5	30
Acetone	55.6	50.0	111	55.1	50.0	110	40-140	1	30
Carbon Disulfide	18.6	20.0	93	17.2	20.0	86	35-160	8	30
Methylene Chloride	7.96	10.0	80	7.68	10.0	77	55-140	4	30
Methyl tert-Butyl Ether	9.29	10.0	93	8.89	10.0	89	65-125	4	30
trans-1,2-Dichloroethene	9.61	10.0	96	9.07	10.0	91	60-140	6	30
1,1-Dichloroethane	9.76	10.0	98	9.27	10.0	93	70-135	5	30
2,2-Dichloropropane	9.59	10.0	96	8.85	10.0	89	70-135	8	30
cis-1,2-Dichloroethene	9.31	10.0	93	8.72	10.0	87	70-125	7	30
2-Butanone (MEK)	53.2	50.0	106	52.0	50.0	104	30-150	2	30
Bromochloromethane	10.0	10.0	100	9.63	10.0	96	65-130	4	30
Chloroform	9.33	10.0	93	8.87	10.0	89	65-135	5	30
1,1,1-Trichloroethane (TCA)	9.36	10.0	94	8.49	10.0	85	65-130	10	30
Carbon Tetrachloride	9.33	10.0	93	8.64	10.0	86	65-140	8	30
1,1-Dichloropropene	9.70	10.0	97	8.92	10.0	89	75-130	8	30
Benzene	8.91	10.0	89	8.37	10.0	84	80-120	6	30
1,2-Dichloroethane (EDC)	9.30	10.0	93	9.06	10.0	91	70-130	3	30
Trichloroethene (TCE)	9.34	10.0	93	8.75	10.0	88	70-125	7	30
1,2-Dichloropropane	9.33	10.0	93	8.84	10.0	88	75-125	5	30
Dibromomethane	9.22	10.0	92	8.96	10.0	90	75-125	3	30
Bromodichloromethane	8.99	10.0	90	8.65	10.0	87	75-120	4	30
cis-1,3-Dichloropropene	9.24	10.0	92	8.78	10.0	88	70-130	5	30
4-Methyl-2-pentanone (MIBK)	48.4	50.0	97	48.4	50.0	97	60-135	0	30
Toluene	9.23	10.0	92	8.66	10.0	87	75-120	6	30
trans-1,3-Dichloropropene	8.92	10.0	89	8.65	10.0	87	55-140	3	30
1,1,2-Trichloroethane	9.66	10.0	97	9.54	10.0	95	75-125	1	30
Tetrachloroethene (PCE)	9.76	10.0	98	9.08	10.0	91	45-150	7	30
2-Hexanone	53.7	50.0	107	52.8	50.0	106	55-130	2	30
1,3-Dichloropropane	9.65	10.0	97	9.52	10.0	95	75-125	1	30

Results flagged with an asterisk (*) indicate values outside control criteria.

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QA/QC Report

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1410790
Project:	JBLM LTM Log Center/TO-01	**Date Extracted:**	10/12/2014
Sample Matrix:	Water	**Date Analyzed:**	10/12/2014

Lab Control Spike/Duplicate Lab Control Spike Summary
Volatile Organic Compounds

Extraction Method:	EPA 5030B	**Units:**	ug/L
Analysis Method:	8260C	**Basis:**	NA
		Level:	Low
		Extraction Lot:	KWG1413817

	Lab Control Sample KWG1413817-5 Lab Control Spike			Duplicate Lab Control Sample KWG1413817-6 Duplicate Lab Control Spike					
Analyte Name	**Result**	**Spike Amount**	**%Rec**	**Result**	**Spike Amount**	**%Rec**	**%Rec Limits**	**RPD**	**RPD Limit**
Dibromochloromethane	9.57	10.0	96	9.14	10.0	91	60-135	5	30
1,2-Dibromoethane (EDB)	9.33	10.0	93	9.30	10.0	93	80-120	0	30
Chlorobenzene	9.79	10.0	98	9.15	10.0	92	80-120	7	30
Ethylbenzene	9.32	10.0	93	8.78	10.0	88	75-125	6	30
1,1,1,2-Tetrachloroethane	9.36	10.0	94	9.21	10.0	92	80-130	2	30
m,p-Xylenes	19.6	20.0	98	18.5	20.0	93	75-130	6	30
o-Xylene	9.56	10.0	96	9.14	10.0	91	80-120	4	30
Styrene	9.57	10.0	96	8.81	10.0	88	65-135	8	30
Bromoform	9.51	10.0	95	9.25	10.0	93	70-130	3	30
Isopropylbenzene	9.58	10.0	96	9.05	10.0	91	75-125	6	30
1,1,2,2-Tetrachloroethane	9.27	10.0	93	8.98	10.0	90	65-130	3	30
Bromobenzene	9.92	10.0	99	9.31	10.0	93	75-125	6	30
n-Propylbenzene	9.72	10.0	97	8.94	10.0	89	70-130	8	30
1,2,3-Trichloropropane	9.38	10.0	94	9.34	10.0	93	75-125	0	30
2-Chlorotoluene	9.95	10.0	100	9.40	10.0	94	75-125	6	30
1,3,5-Trimethylbenzene	9.75	10.0	98	9.01	10.0	90	75-130	8	30
4-Chlorotoluene	9.62	10.0	96	8.97	10.0	90	75-130	7	30
tert-Butylbenzene	9.75	10.0	98	9.05	10.0	91	70-130	7	30
1,2,4-Trimethylbenzene	9.55	10.0	96	8.94	10.0	89	75-130	7	30
sec-Butylbenzene	9.62	10.0	96	8.84	10.0	88	70-125	8	30
4-Isopropyltoluene	9.95	10.0	100	9.25	10.0	93	75-130	7	30
1,3-Dichlorobenzene	9.85	10.0	99	9.12	10.0	91	75-125	8	30
1,4-Dichlorobenzene	9.69	10.0	97	9.11	10.0	91	75-125	6	30
n-Butylbenzene	9.54	10.0	95	8.88	10.0	89	70-135	7	30
1,2-Dichlorobenzene	9.69	10.0	97	9.09	10.0	91	70-120	6	30
1,2-Dibromo-3-chloropropane	9.06	10.0	91	8.84	10.0	88	50-130	2	30
1,2,4-Trichlorobenzene	9.38	10.0	94	8.87	10.0	89	65-135	6	30
Hexachlorobutadiene	10.1	10.0	101	9.13	10.0	91	50-140	10	30
Naphthalene	9.55	10.0	96	9.24	10.0	92	55-140	3	30
1,2,3-Trichlorobenzene	9.51	10.0	95	9.01	10.0	90	55-140	5	30

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

QA/QC Report

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1410790
Project:	JBLM LTM Log Center/TO-01	**Date Extracted:**	10/13/2014
Sample Matrix:	Water	**Date Analyzed:**	10/13/2014

Lab Control Spike/Duplicate Lab Control Spike Summary
Volatile Organic Compounds

Extraction Method:	EPA 5030B	**Units:**	ug/L
Analysis Method:	8260C	**Basis:**	NA
		Level:	Low
		Extraction Lot:	KWG1413833

	Lab Control Sample KWG1413833-3 Lab Control Spike			Duplicate Lab Control Sample KWG1413833-4 Duplicate Lab Control Spike					
Analyte Name	**Result**	**Spike Amount**	**%Rec**	**Result**	**Spike Amount**	**%Rec**	**%Rec Limits**	**RPD**	**RPD Limit**
Dichlorodifluoromethane	7.15	10.0	72	6.64	10.0	66	30-155	7	30
Chloromethane	7.21	10.0	72	6.56	10.0	66	40-125	9	30
Vinyl Chloride	7.99	10.0	80	7.21	10.0	72	50-145	10	30
Bromomethane	8.38	10.0	84	7.71	10.0	77	30-145	8	30
Chloroethane	9.94	10.0	99	8.59	10.0	86	60-135	15	30
Trichlorofluoromethane	7.21	10.0	72	6.48	10.0	65	60-145	11	30
1,1-Dichloroethene	8.93	10.0	89	8.19	10.0	82	70-130	9	30
Acetone	53.0	50.0	106	51.6	50.0	103	40-140	3	30
Carbon Disulfide	17.0	20.0	85	15.3	20.0	77	35-160	11	30
Methylene Chloride	7.98	10.0	80	7.23	10.0	72	55-140	10	30
Methyl tert-Butyl Ether	8.73	10.0	87	8.46	10.0	85	65-125	3	30
trans-1,2-Dichloroethene	9.16	10.0	92	8.39	10.0	84	60-140	9	30
1,1-Dichloroethane	9.25	10.0	93	8.53	10.0	85	70-135	8	30
2,2-Dichloropropane	8.81	10.0	88	7.89	10.0	79	70-135	11	30
cis-1,2-Dichloroethene	8.78	10.0	88	8.26	10.0	83	70-125	6	30
2-Butanone (MEK)	49.9	50.0	100	48.2	50.0	96	30-150	3	30
Bromochloromethane	9.53	10.0	95	9.01	10.0	90	65-130	6	30
Chloroform	9.13	10.0	91	8.21	10.0	82	65-135	11	30
1,1,1-Trichloroethane (TCA)	8.42	10.0	84	7.52	10.0	75	65-130	11	30
Carbon Tetrachloride	8.38	10.0	84	7.48	10.0	75	65-140	11	30
1,1-Dichloropropene	8.72	10.0	87	7.83	10.0	78	75-130	11	30
Benzene	8.44	10.0	84	7.82	10.0	78 *	80-120	8	30
1,2-Dichloroethane (EDC)	9.01	10.0	90	8.38	10.0	84	70-130	7	30
Trichloroethene (TCE)	8.83	10.0	88	7.87	10.0	79	70-125	11	30
1,2-Dichloropropane	9.02	10.0	90	8.37	10.0	84	75-125	7	30
Dibromomethane	8.88	10.0	89	8.51	10.0	85	75-125	4	30
Bromodichloromethane	8.69	10.0	87	8.19	10.0	82	75-120	6	30
cis-1,3-Dichloropropene	8.87	10.0	89	8.18	10.0	82	70-130	8	30
4-Methyl-2-pentanone (MIBK)	47.3	50.0	95	45.5	50.0	91	60-135	4	30
Toluene	8.82	10.0	88	8.06	10.0	81	75-120	9	30
trans-1,3-Dichloropropene	8.67	10.0	87	8.26	10.0	83	55-140	5	30
1,1,2-Trichloroethane	9.39	10.0	94	9.07	10.0	91	75-125	3	30
Tetrachloroethene (PCE)	8.77	10.0	88	8.12	10.0	81	45-150	8	30
2-Hexanone	51.7	50.0	103	50.0	50.0	100	55-130	3	30
1,3-Dichloropropane	9.47	10.0	95	8.95	10.0	90	75-125	6	30

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

QA/QC Report

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1410790
Project:	JBLM LTM Log Center/TO-01	**Date Extracted:**	10/13/2014
Sample Matrix:	Water	**Date Analyzed:**	10/13/2014

Lab Control Spike/Duplicate Lab Control Spike Summary
Volatile Organic Compounds

Extraction Method:	EPA 5030B	**Units:**	ug/L
Analysis Method:	8260C	**Basis:**	NA
		Level:	Low
		Extraction Lot:	KWG1413833

	Lab Control Sample KWG1413833-3 Lab Control Spike			Duplicate Lab Control Sample KWG1413833-4 Duplicate Lab Control Spike					
Analyte Name	**Result**	**Spike Amount**	**%Rec**	**Result**	**Spike Amount**	**%Rec**	**%Rec Limits**	**RPD**	**RPD Limit**
Dibromochloromethane	9.27	10.0	93	8.82	10.0	88	60-135	5	30
1,2-Dibromoethane (EDB)	8.95	10.0	90	8.75	10.0	88	80-120	2	30
Chlorobenzene	9.32	10.0	93	8.64	10.0	86	80-120	8	30
Ethylbenzene	8.77	10.0	88	8.27	10.0	83	75-125	6	30
1,1,1,2-Tetrachloroethane	9.05	10.0	91	8.34	10.0	83	80-130	8	30
m,p-Xylenes	18.4	20.0	92	17.0	20.0	85	75-130	8	30
o-Xylene	9.19	10.0	92	8.48	10.0	85	80-120	8	30
Styrene	9.05	10.0	91	8.29	10.0	83	65-135	9	30
Bromoform	9.00	10.0	90	8.70	10.0	87	70-130	3	30
Isopropylbenzene	8.96	10.0	90	8.20	10.0	82	75-125	9	30
1,1,2,2-Tetrachloroethane	9.24	10.0	92	8.92	10.0	89	65-130	4	30
Bromobenzene	9.49	10.0	95	8.80	10.0	88	75-125	8	30
n-Propylbenzene	8.97	10.0	90	8.16	10.0	82	70-130	9	30
1,2,3-Trichloropropane	8.88	10.0	89	8.92	10.0	89	75-125	0	30
2-Chlorotoluene	9.47	10.0	95	8.68	10.0	87	75-125	9	30
1,3,5-Trimethylbenzene	9.14	10.0	91	8.41	10.0	84	75-130	8	30
4-Chlorotoluene	9.12	10.0	91	8.34	10.0	83	75-130	9	30
tert-Butylbenzene	9.05	10.0	91	8.12	10.0	81	70-130	11	30
1,2,4-Trimethylbenzene	9.07	10.0	91	8.34	10.0	83	75-130	8	30
sec-Butylbenzene	8.74	10.0	87	7.90	10.0	79	70-125	10	30
4-Isopropyltoluene	9.14	10.0	91	8.27	10.0	83	75-130	10	30
1,3-Dichlorobenzene	9.25	10.0	93	8.71	10.0	87	75-125	6	30
1,4-Dichlorobenzene	9.30	10.0	93	8.63	10.0	86	75-125	7	30
n-Butylbenzene	8.65	10.0	87	7.95	10.0	80	70-135	8	30
1,2-Dichlorobenzene	9.23	10.0	92	8.61	10.0	86	70-120	7	30
1,2-Dibromo-3-chloropropane	8.96	10.0	90	8.62	10.0	86	50-130	4	30
1,2,4-Trichlorobenzene	9.04	10.0	90	8.49	10.0	85	65-135	6	30
Hexachlorobutadiene	9.25	10.0	93	8.09	10.0	81	50-140	13	30
Naphthalene	8.99	10.0	90	8.68	10.0	87	55-140	4	30
1,2,3-Trichlorobenzene	9.10	10.0	91	8.59	10.0	86	55-140	6	30

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

QA/QC Report

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1410790
Project:	JBLM LTM Log Center/TO-01	**Date Extracted:**	10/13/2014
Sample Matrix:	Water	**Date Analyzed:**	10/13/2014

Lab Control Spike/Duplicate Lab Control Spike Summary
Volatile Organic Compounds

Extraction Method:	EPA 5030B	**Units:**	ug/L
Analysis Method:	8260C	**Basis:**	NA
		Level:	Low
		Extraction Lot:	KWG1413840

	Lab Control Sample KWG1413840-3 Lab Control Spike			Duplicate Lab Control Sample KWG1413840-5 Duplicate Lab Control Spike					
Analyte Name	**Result**	**Spike Amount**	**%Rec**	**Result**	**Spike Amount**	**%Rec**	**%Rec Limits**	**RPD**	**RPD Limit**
Dichlorodifluoromethane	8.07	10.0	81	7.20	10.0	72	30-155	11	30
Chloromethane	6.32	10.0	63	5.83	10.0	58	40-125	8	30
Vinyl Chloride	8.09	10.0	81	7.33	10.0	73	50-145	10	30
Bromomethane	7.93	10.0	79	7.40	10.0	74	30-145	7	30
Chloroethane	8.93	10.0	89	8.33	10.0	83	60-135	7	30
Trichlorofluoromethane	7.74	10.0	77	6.93	10.0	69	60-145	11	30
1,1-Dichloroethene	10.0	10.0	100	9.10	10.0	91	70-130	10	30
Acetone	41.6	50.0	83	42.6	50.0	85	40-140	2	30
Carbon Disulfide	17.2	20.0	86	15.8	20.0	79	35-160	8	30
Methylene Chloride	7.81	10.0	78	7.39	10.0	74	55-140	6	30
Methyl tert-Butyl Ether	7.37	10.0	74	7.21	10.0	72	65-125	2	30
trans-1,2-Dichloroethene	9.66	10.0	97	8.66	10.0	87	60-140	11	30
1,1-Dichloroethane	8.86	10.0	89	8.34	10.0	83	70-135	6	30
2,2-Dichloropropane	7.77	10.0	78	7.23	10.0	72	70-135	7	30
cis-1,2-Dichloroethene	9.52	10.0	95	9.04	10.0	90	70-125	5	30
2-Butanone (MEK)	45.5	50.0	91	46.4	50.0	93	30-150	2	30
Bromochloromethane	10.2	10.0	102	9.70	10.0	97	65-130	5	30
Chloroform	8.78	10.0	88	8.30	10.0	83	65-135	6	30
1,1,1-Trichloroethane (TCA)	8.41	10.0	84	7.83	10.0	78	65-130	7	30
Carbon Tetrachloride	9.27	10.0	93	8.50	10.0	85	65-140	9	30
1,1-Dichloropropene	9.44	10.0	94	8.70	10.0	87	75-130	8	30
Benzene	8.93	10.0	89	8.32	10.0	83	80-120	7	30
1,2-Dichloroethane (EDC)	8.34	10.0	83	8.04	10.0	80	70-130	4	30
Trichloroethene (TCE)	9.04	10.0	90	8.26	10.0	83	70-125	9	30
1,2-Dichloropropane	8.02	10.0	80	7.64	10.0	76	75-125	5	30
Dibromomethane	9.09	10.0	91	8.62	10.0	86	75-125	5	30
Bromodichloromethane	8.59	10.0	86	8.27	10.0	83	75-120	4	30
cis-1,3-Dichloropropene	8.27	10.0	83	7.95	10.0	80	70-130	4	30
4-Methyl-2-pentanone (MIBK)	40.8	50.0	82	40.7	50.0	81	60-135	0	30
Toluene	9.22	10.0	92	8.70	10.0	87	75-120	6	30
trans-1,3-Dichloropropene	7.48	10.0	75	7.16	10.0	72	55-140	4	30
1,1,2-Trichloroethane	9.16	10.0	92	9.11	10.0	91	75-125	1	30
Tetrachloroethene (PCE)	10.5	10.0	105	9.89	10.0	99	45-150	6	30
2-Hexanone	46.8	50.0	94	43.9	50.0	88	55-130	6	30
1,3-Dichloropropane	9.12	10.0	91	9.01	10.0	90	75-125	1	30

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1410790
Project:	JBLM LTM Log Center/TO-01	**Date Extracted:**	10/13/2014
Sample Matrix:	Water	**Date Analyzed:**	10/13/2014

Lab Control Spike/Duplicate Lab Control Spike Summary
Volatile Organic Compounds

Extraction Method:	EPA 5030B	**Units:**	ug/L
Analysis Method:	8260C	**Basis:**	NA
		Level:	Low
		Extraction Lot:	KWG1413840

	Lab Control Sample KWG1413840-3 Lab Control Spike			Duplicate Lab Control Sample KWG1413840-5 Duplicate Lab Control Spike					
Analyte Name	**Result**	**Spike Amount**	**%Rec**	**Result**	**Spike Amount**	**%Rec**	**%Rec Limits**	**RPD**	**RPD Limit**
Dibromochloromethane	10.2	10.0	102	9.96	10.0	100	60-135	2	30
1,2-Dibromoethane (EDB)	9.70	10.0	97	9.65	10.0	97	80-120	1	30
Chlorobenzene	10.0	10.0	100	9.66	10.0	97	80-120	4	30
Ethylbenzene	10.0	10.0	100	9.60	10.0	96	75-125	4	30
1,1,1,2-Tetrachloroethane	10.3	10.0	103	9.80	10.0	98	80-130	5	30
m,p-Xylenes	20.6	20.0	103	19.6	20.0	98	75-130	5	30
o-Xylene	10.6	10.0	106	10.1	10.0	101	80-120	5	30
Styrene	10.5	10.0	105	10.0	10.0	100	65-135	4	30
Bromoform	10.8	10.0	108	10.6	10.0	106	70-130	3	30
Isopropylbenzene	10.3	10.0	103	9.65	10.0	97	75-125	7	30
1,1,2,2-Tetrachloroethane	7.85	10.0	79	7.94	10.0	79	65-130	1	30
Bromobenzene	9.15	10.0	92	8.72	10.0	87	75-125	5	30
n-Propylbenzene	8.46	10.0	85	7.88	10.0	79	70-130	7	30
1,2,3-Trichloropropane	8.30	10.0	83	8.02	10.0	80	75-125	3	30
2-Chlorotoluene	8.66	10.0	87	8.13	10.0	81	75-125	6	30
1,3,5-Trimethylbenzene	9.02	10.0	90	8.53	10.0	85	75-130	6	30
4-Chlorotoluene	8.27	10.0	83	7.90	10.0	79	75-130	5	30
tert-Butylbenzene	9.38	10.0	94	8.80	10.0	88	70-130	6	30
1,2,4-Trimethylbenzene	9.01	10.0	90	8.55	10.0	86	75-130	5	30
sec-Butylbenzene	8.77	10.0	88	8.17	10.0	82	70-125	7	30
4-Isopropyltoluene	9.43	10.0	94	8.79	10.0	88	75-130	7	30
1,3-Dichlorobenzene	9.10	10.0	91	8.73	10.0	87	75-125	4	30
1,4-Dichlorobenzene	8.87	10.0	89	8.40	10.0	84	75-125	5	30
n-Butylbenzene	8.78	10.0	88	8.21	10.0	82	70-135	7	30
1,2-Dichlorobenzene	9.09	10.0	91	8.64	10.0	86	70-120	5	30
1,2-Dibromo-3-chloropropane	8.35	10.0	84	8.41	10.0	84	50-130	1	30
1,2,4-Trichlorobenzene	10.3	10.0	103	9.95	10.0	100	65-135	4	30
Hexachlorobutadiene	9.25	10.0	93	8.84	10.0	88	50-140	5	30
Naphthalene	9.02	10.0	90	8.67	10.0	87	55-140	4	30
1,2,3-Trichlorobenzene	10.4	10.0	104	10.1	10.0	101	55-140	3	30

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

QA/QC Report

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1410790
Project:	JBLM LTM Log Center/TO-01	**Date Extracted:**	10/10/2014
Sample Matrix:	Water	**Date Analyzed:**	10/10/2014
		Time Analyzed:	14:38

Method Blank Summary
Volatile Organic Compounds

Sample Name:	Method Blank	**Instrument ID:**	MS13
Lab Code:	KWG1413774-4	**File ID:**	J:\MS13\DATA\101014\1010F011.D
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8260C	**Extraction Lot:**	KWG1413774

This Method Blank applies to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
Lab Control Sample	KWG1413774-3	J:\MS13\DATA\101014\1010F006.D	10/10/14	12:23
Duplicate Lab Control Sample	KWG1413774-5	J:\MS13\DATA\101014\1010F007.D	10/10/14	12:50
LGC140929BC1-1MS	KWG1413774-1	J:\MS13\DATA\101014\1010F008.D	10/10/14	13:17
LGC140929BC1-1DMS	KWG1413774-2	J:\MS13\DATA\101014\1010F009.D	10/10/14	13:44
TB-140929	K1410790-001	J:\MS13\DATA\101014\1010F012.D	10/10/14	15:05
LGC140929LC93D1-1	K1410790-002	J:\MS13\DATA\101014\1010F015.D	10/10/14	16:25
LGC140929LC93D2-1	K1410790-003	J:\MS13\DATA\101014\1010F016.D	10/10/14	16:52
LGC140929T13B-1	K1410790-004	J:\MS13\DATA\101014\1010F017.D	10/10/14	17:19
LGC140929LC225-1	K1410790-005	J:\MS13\DATA\101014\1010F018.D	10/10/14	17:46
LGC140929T05-1	K1410790-006	J:\MS13\DATA\101014\1010F019.D	10/10/14	18:13
LGC140929T06-1	K1410790-007	J:\MS13\DATA\101014\1010F020.D	10/10/14	18:40
LGC140929T11B-1	K1410790-008	J:\MS13\DATA\101014\1010F021.D	10/10/14	19:07
LGC140929BC1-1	K1410790-009	J:\MS13\DATA\101014\1010F022.D	10/10/14	19:34
LGC140929T15-1	K1410790-011	J:\MS13\DATA\101014\1010F023.D	10/10/14	20:01
LGC140929DUP4-1	K1410790-012	J:\MS13\DATA\101014\1010F024.D	10/10/14	20:28
LGC140929LC86D1-1	K1410790-013	J:\MS13\DATA\101014\1010F025.D	10/10/14	20:55
LGC140929LC86D2-1	K1410790-014	J:\MS13\DATA\101014\1010F026.D	10/10/14	21:22
LGC140929LC102D1-1	K1410790-015	J:\MS13\DATA\101014\1010F027.D	10/10/14	21:49
LGC140929LC102D2-1	K1410790-016	J:\MS13\DATA\101014\1010F028.D	10/10/14	22:16
LGC140929LC88D1-1	K1410790-017	J:\MS13\DATA\101014\1010F029.D	10/10/14	22:43

QA/QC Report

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1410790
Project:	JBLM LTM Log Center/TO-01	**Date Extracted:**	10/12/2014
Sample Matrix:	Water	**Date Analyzed:**	10/12/2014
		Time Analyzed:	14:49

Method Blank Summary
Volatile Organic Compounds

Sample Name:	Method Blank	**Instrument ID:**	MS27
Lab Code:	KWG1413817-7	**File ID:**	J:\MS27\DATA\101214\1012F013.D
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8260C	**Extraction Lot:**	KWG1413817

This Method Blank applies to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
Lab Control Sample	KWG1413817-5	J:\MS27\DATA\101214\1012F005.D	10/12/14	11:10
Duplicate Lab Control Sample	KWG1413817-6	J:\MS27\DATA\101214\1012F006.D	10/12/14	11:37
LGC140929T10-1MS	KWG1413817-1	J:\MS27\DATA\101214\1012F007.D	10/12/14	12:05
LGC140929T10-1DMS	KWG1413817-2	J:\MS27\DATA\101214\1012F008.D	10/12/14	12:32
LGC140929LC95D2-1MS	KWG1413817-3	J:\MS27\DATA\101214\1012F009.D	10/12/14	12:59
LGC140929LC95D2-1DMS	KWG1413817-4	J:\MS27\DATA\101214\1012F010.D	10/12/14	13:27
LGC140929T10-1	K1410790-010	J:\MS27\DATA\101214\1012F014.D	10/12/14	15:17
LGC140929LC88D2-1	K1410790-018	J:\MS27\DATA\101214\1012F015.D	10/12/14	15:44
LGC140929LC95D1-1	K1410790-019	J:\MS27\DATA\101214\1012F016.D	10/12/14	16:12
LGC140929LC95D2-1	K1410790-020	J:\MS27\DATA\101214\1012F017.D	10/12/14	16:39
LGC140930T04-1	K1410790-021	J:\MS27\DATA\101214\1012F023.D	10/12/14	19:24
LGC140930DUP5-1	K1410790-022	J:\MS27\DATA\101214\1012F024.D	10/12/14	19:51
LGC140930LC103D-1	K1410790-023	J:\MS27\DATA\101214\1012F025.D	10/12/14	20:19
LGC140930LC101D2-1	K1410790-024	J:\MS27\DATA\101214\1012F026.D	10/12/14	20:46
LGC140930LC101D1-1	K1410790-025	J:\MS27\DATA\101214\1012F027.D	10/12/14	21:13
LGC140930MAMCOF2-1	K1410790-026	J:\MS27\DATA\101214\1012F028.D	10/12/14	21:41

QA/QC Report

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1410790
Project:	JBLM LTM Log Center/TO-01	**Date Extracted:**	10/13/2014
Sample Matrix:	Water	**Date Analyzed:**	10/13/2014
		Time Analyzed:	13:48

Method Blank Summary
Volatile Organic Compounds

Sample Name:	Method Blank	**Instrument ID:**	MS27
Lab Code:	KWG1413833-5	**File ID:**	J:\MS27\DATA\101314\1013F010.D
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8260C	**Extraction Lot:**	KWG1413833

This Method Blank applies to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
Lab Control Sample	KWG1413833-3	J:\MS27\DATA\101314\1013F004.D	10/13/14	10:38
Duplicate Lab Control Sample	KWG1413833-4	J:\MS27\DATA\101314\1013F005.D	10/13/14	11:05
LGC140930LC109-1	K1410790-027	J:\MS27\DATA\101314\1013F019.D	10/13/14	17:55

QA/QC Report

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1410790
Project:	JBLM LTM Log Center/TO-01	**Date Extracted:**	10/13/2014
Sample Matrix:	Water	**Date Analyzed:**	10/13/2014
		Time Analyzed:	13:19

Method Blank Summary
Volatile Organic Compounds

Sample Name:	Method Blank	**Instrument ID:**	MS13
Lab Code:	KWG1413840-4	**File ID:**	J:\MS13\DATA\101314\1013F010.D
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8260C	**Extraction Lot:**	KWG1413840

This Method Blank applies to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
LGC141001Well13-1MS	KWG1413840-1	J:\MS13\DATA\101314\1013F005.D	10/13/14	11:04
LGC141001Well13-1DMS	KWG1413840-2	J:\MS13\DATA\101314\1013F006.D	10/13/14	11:31
Lab Control Sample	KWG1413840-3	J:\MS13\DATA\101314\1013F007.D	10/13/14	11:58
Duplicate Lab Control Sample	KWG1413840-5	J:\MS13\DATA\101314\1013F008.D	10/13/14	12:25
LGC140930LC03-1	K1410790-028	J:\MS13\DATA\101314\1013F014.D	10/13/14	15:07
LGC140930DUP9-1	K1410790-029	J:\MS13\DATA\101314\1013F015.D	10/13/14	15:34
LGC140930LC182-1	K1410790-030	J:\MS13\DATA\101314\1013F016.D	10/13/14	16:01
LGC140930LC16-1	K1410790-031	J:\MS13\DATA\101314\1013F017.D	10/13/14	16:28
LGC140930DUP1-1	K1410790-032	J:\MS13\DATA\101314\1013F018.D	10/13/14	16:55
LGC140930LC180-1	K1410790-033	J:\MS13\DATA\101314\1013F019.D	10/13/14	17:22
LGC141001LC223-1	K1410790-034	J:\MS13\DATA\101314\1013F020.D	10/13/14	17:49
LGC141001DUP3-1	K1410790-035	J:\MS13\DATA\101314\1013F021.D	10/13/14	18:16
LGC141001LC178-1	K1410790-036	J:\MS13\DATA\101314\1013F022.D	10/13/14	18:43
LGC141001Well13-1	K1410790-037	J:\MS13\DATA\101314\1013F023.D	10/13/14	19:10
LGC141001LC98D1-1	K1410790-038	J:\MS13\DATA\101314\1013F024.D	10/13/14	19:37
LGC141001DUP8-1	K1410790-039	J:\MS13\DATA\101314\1013F025.D	10/13/14	20:04
LGC141001LC98D2-1	K1410790-040	J:\MS13\DATA\101314\1013F026.D	10/13/14	20:30

QA/QC Report

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1410790
Project:	JBLM LTM Log Center/TO-01	**Date Extracted:**	10/10/2014
Sample Matrix:	Water	**Date Analyzed:**	10/10/2014
		Time Analyzed:	12:23

Lab Control Sample Summary
Volatile Organic Compounds

Sample Name:	Lab Control Sample	**Instrument ID:**	MS13
Lab Code:	KWG1413774-3	**File ID:**	J:\MS13\DATA\101014\1010F006.D
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8260C	**Extraction Lot:**	KWG1413774

This Lab Control Sample applies to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
LGC140929BC1-1MS	KWG1413774-1	J:\MS13\DATA\101014\1010F008.D	10/10/14	13:17
LGC140929BC1-1DMS	KWG1413774-2	J:\MS13\DATA\101014\1010F009.D	10/10/14	13:44
Method Blank	KWG1413774-4	J:\MS13\DATA\101014\1010F011.D	10/10/14	14:38
TB-140929	K1410790-001	J:\MS13\DATA\101014\1010F012.D	10/10/14	15:05
LGC140929LC93D1-1	K1410790-002	J:\MS13\DATA\101014\1010F015.D	10/10/14	16:25
LGC140929LC93D2-1	K1410790-003	J:\MS13\DATA\101014\1010F016.D	10/10/14	16:52
LGC140929T13B-1	K1410790-004	J:\MS13\DATA\101014\1010F017.D	10/10/14	17:19
LGC140929LC225-1	K1410790-005	J:\MS13\DATA\101014\1010F018.D	10/10/14	17:46
LGC140929T05-1	K1410790-006	J:\MS13\DATA\101014\1010F019.D	10/10/14	18:13
LGC140929T06-1	K1410790-007	J:\MS13\DATA\101014\1010F020.D	10/10/14	18:40
LGC140929T11B-1	K1410790-008	J:\MS13\DATA\101014\1010F021.D	10/10/14	19:07
LGC140929BC1-1	K1410790-009	J:\MS13\DATA\101014\1010F022.D	10/10/14	19:34
LGC140929T15-1	K1410790-011	J:\MS13\DATA\101014\1010F023.D	10/10/14	20:01
LGC140929DUP4-1	K1410790-012	J:\MS13\DATA\101014\1010F024.D	10/10/14	20:28
LGC140929LC86D1-1	K1410790-013	J:\MS13\DATA\101014\1010F025.D	10/10/14	20:55
LGC140929LC86D2-1	K1410790-014	J:\MS13\DATA\101014\1010F026.D	10/10/14	21:22
LGC140929LC102D1-1	K1410790-015	J:\MS13\DATA\101014\1010F027.D	10/10/14	21:49
LGC140929LC102D2-1	K1410790-016	J:\MS13\DATA\101014\1010F028.D	10/10/14	22:16
LGC140929LC88D1-1	K1410790-017	J:\MS13\DATA\101014\1010F029.D	10/10/14	22:43

QA/QC Report

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1410790
Project:	JBLM LTM Log Center/TO-01	**Date Extracted:**	10/12/2014
Sample Matrix:	Water	**Date Analyzed:**	10/12/2014
		Time Analyzed:	11:10

Lab Control Sample Summary
Volatile Organic Compounds

Sample Name:	Lab Control Sample	**Instrument ID:**	MS27
Lab Code:	KWG1413817-5	**File ID:**	J:\MS27\DATA\101214\1012F005.D
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8260C	**Extraction Lot:**	KWG1413817

This Lab Control Sample applies to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
LGC140929T10-1MS	KWG1413817-1	J:\MS27\DATA\101214\1012F007.D	10/12/14	12:05
LGC140929T10-1DMS	KWG1413817-2	J:\MS27\DATA\101214\1012F008.D	10/12/14	12:32
LGC140929LC95D2-1MS	KWG1413817-3	J:\MS27\DATA\101214\1012F009.D	10/12/14	12:59
LGC140929LC95D2-1DMS	KWG1413817-4	J:\MS27\DATA\101214\1012F010.D	10/12/14	13:27
Method Blank	KWG1413817-7	J:\MS27\DATA\101214\1012F013.D	10/12/14	14:49
LGC140929T10-1	K1410790-010	J:\MS27\DATA\101214\1012F014.D	10/12/14	15:17
LGC140929LC88D2-1	K1410790-018	J:\MS27\DATA\101214\1012F015.D	10/12/14	15:44
LGC140929LC95D1-1	K1410790-019	J:\MS27\DATA\101214\1012F016.D	10/12/14	16:12
LGC140929LC95D2-1	K1410790-020	J:\MS27\DATA\101214\1012F017.D	10/12/14	16:39
LGC140930T04-1	K1410790-021	J:\MS27\DATA\101214\1012F023.D	10/12/14	19:24
LGC140930DUP5-1	K1410790-022	J:\MS27\DATA\101214\1012F024.D	10/12/14	19:51
LGC140930LC103D-1	K1410790-023	J:\MS27\DATA\101214\1012F025.D	10/12/14	20:19
LGC140930LC101D2-1	K1410790-024	J:\MS27\DATA\101214\1012F026.D	10/12/14	20:46
LGC140930LC101D1-1	K1410790-025	J:\MS27\DATA\101214\1012F027.D	10/12/14	21:13
LGC140930MAMCOF2-1	K1410790-026	J:\MS27\DATA\101214\1012F028.D	10/12/14	21:41

QA/QC Report

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1410790
Project:	JBLM LTM Log Center/TO-01	**Date Extracted:**	10/13/2014
Sample Matrix:	Water	**Date Analyzed:**	10/13/2014
		Time Analyzed:	10:38

Lab Control Sample Summary
Volatile Organic Compounds

Sample Name:	Lab Control Sample	**Instrument ID:**	MS27
Lab Code:	KWG1413833-3	**File ID:**	J:\MS27\DATA\101314\1013F004.D
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8260C	**Extraction Lot:**	KWG1413833

This Lab Control Sample applies to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
Method Blank	KWG1413833-5	J:\MS27\DATA\101314\1013F010.D	10/13/14	13:48
LGC140930LC109-1	K1410790-027	J:\MS27\DATA\101314\1013F019.D	10/13/14	17:55

QA/QC Report

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1410790
Project:	JBLM LTM Log Center/TO-01	**Date Extracted:**	10/13/2014
Sample Matrix:	Water	**Date Analyzed:**	10/13/2014
		Time Analyzed:	11:58

Lab Control Sample Summary
Volatile Organic Compounds

Sample Name:	Lab Control Sample	**Instrument ID:**	MS13
Lab Code:	KWG1413840-3	**File ID:**	J:\MS13\DATA\101314\1013F007.D
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8260C	**Extraction Lot:**	KWG1413840

This Lab Control Sample applies to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
LGC141001Well13-1MS	KWG1413840-1	J:\MS13\DATA\101314\1013F005.D	10/13/14	11:04
LGC141001Well13-1DMS	KWG1413840-2	J:\MS13\DATA\101314\1013F006.D	10/13/14	11:31
Method Blank	KWG1413840-4	J:\MS13\DATA\101314\1013F010.D	10/13/14	13:19
LGC140930LC03-1	K1410790-028	J:\MS13\DATA\101314\1013F014.D	10/13/14	15:07
LGC140930DUP9-1	K1410790-029	J:\MS13\DATA\101314\1013F015.D	10/13/14	15:34
LGC140930LC182-1	K1410790-030	J:\MS13\DATA\101314\1013F016.D	10/13/14	16:01
LGC140930LC16-1	K1410790-031	J:\MS13\DATA\101314\1013F017.D	10/13/14	16:28
LGC140930DUP1-1	K1410790-032	J:\MS13\DATA\101314\1013F018.D	10/13/14	16:55
LGC140930LC180-1	K1410790-033	J:\MS13\DATA\101314\1013F019.D	10/13/14	17:22
LGC141001LC223-1	K1410790-034	J:\MS13\DATA\101314\1013F020.D	10/13/14	17:49
LGC141001DUP3-1	K1410790-035	J:\MS13\DATA\101314\1013F021.D	10/13/14	18:16
LGC141001LC178-1	K1410790-036	J:\MS13\DATA\101314\1013F022.D	10/13/14	18:43
LGC141001Well13-1	K1410790-037	J:\MS13\DATA\101314\1013F023.D	10/13/14	19:10
LGC141001LC98D1-1	K1410790-038	J:\MS13\DATA\101314\1013F024.D	10/13/14	19:37
LGC141001DUP8-1	K1410790-039	J:\MS13\DATA\101314\1013F025.D	10/13/14	20:04
LGC141001LC98D2-1	K1410790-040	J:\MS13\DATA\101314\1013F026.D	10/13/14	20:30

QA/QC Results

Client: Sealaska Environmental Services, LLC
Project: JBLM LTM Log Center/TO-01

Service Request: K1410790
Date Analyzed: 10/10/2014
Time Analyzed: 11:15

Tune Summary
Volatile Organic Compounds

File ID: J:\MS13\DATA\101014\1010F004.D
Instrument ID: MS13
Column:

Analysis Method: 8260C
Analysis Lot: KWG1413772

Target Mass	Relative to Mass	Lower Limit%	Upper Limit%	Relative Abundance %	Raw Abundance	Result Pass/Fail
50	95	15	40	16.3	8759	PASS
75	95	30	60	45.8	24525	PASS
95	95	100	100	100.0	53594	PASS
96	95	5	9	6.1	3257	PASS
173	174	0	2	0.3	129	PASS
174	95	50	120	90.4	48474	PASS
175	174	5	9	7.4	3576	PASS
176	174	95	101	96.7	46896	PASS
177	176	5	9	6.7	3135	PASS

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed	Q
Continuing Calibration Verification	KWG1413772-2	J:\MS13\DATA\101014\1010F005.D	10/10/2014	11:44	
Lab Control Sample	KWG1413774-3	J:\MS13\DATA\101014\1010F006.D	10/10/2014	12:23	
Duplicate Lab Control Sample	KWG1413774-5	J:\MS13\DATA\101014\1010F007.D	10/10/2014	12:50	
LGC140929BC1-1MS	KWG1413774-1	J:\MS13\DATA\101014\1010F008.D	10/10/2014	13:17	
LGC140929BC1-1DMS	KWG1413774-2	J:\MS13\DATA\101014\1010F009.D	10/10/2014	13:44	
Method Blank	KWG1413774-4	J:\MS13\DATA\101014\1010F011.D	10/10/2014	14:38	
TB-140929	K1410790-001	J:\MS13\DATA\101014\1010F012.D	10/10/2014	15:05	
LGC140929LC93D1-1	K1410790-002	J:\MS13\DATA\101014\1010F015.D	10/10/2014	16:25	
LGC140929LC93D2-1	K1410790-003	J:\MS13\DATA\101014\1010F016.D	10/10/2014	16:52	
LGC140929T13B-1	K1410790-004	J:\MS13\DATA\101014\1010F017.D	10/10/2014	17:19	
LGC140929LC225-1	K1410790-005	J:\MS13\DATA\101014\1010F018.D	10/10/2014	17:46	
LGC140929T05-1	K1410790-006	J:\MS13\DATA\101014\1010F019.D	10/10/2014	18:13	
LGC140929T06-1	K1410790-007	J:\MS13\DATA\101014\1010F020.D	10/10/2014	18:40	
LGC140929T11B-1	K1410790-008	J:\MS13\DATA\101014\1010F021.D	10/10/2014	19:07	
LGC140929BC1-1	K1410790-009	J:\MS13\DATA\101014\1010F022.D	10/10/2014	19:34	
LGC140929T15-1	K1410790-011	J:\MS13\DATA\101014\1010F023.D	10/10/2014	20:01	
LGC140929DUP4-1	K1410790-012	J:\MS13\DATA\101014\1010F024.D	10/10/2014	20:28	
LGC140929LC86D1-1	K1410790-013	J:\MS13\DATA\101014\1010F025.D	10/10/2014	20:55	
LGC140929LC86D2-1	K1410790-014	J:\MS13\DATA\101014\1010F026.D	10/10/2014	21:22	
LGC140929LC102D1-1	K1410790-015	J:\MS13\DATA\101014\1010F027.D	10/10/2014	21:49	
LGC140929LC102D2-1	K1410790-016	J:\MS13\DATA\101014\1010F028.D	10/10/2014	22:16	
LGC140929LC88D1-1	K1410790-017	J:\MS13\DATA\101014\1010F029.D	10/10/2014	22:43	

Results flagged with an asterisk (*) indicate the analysis performed outside specified tune window

QA/QC Results

Client: Sealaska Environmental Services, LLC
Project: JBLM LTM Log Center/TO-01

Service Request: K1410790
Date Analyzed: 10/12/2014
Time Analyzed: 10:03

Tune Summary
Volatile Organic Compounds

File ID: J:\MS27\DATA\101214\1012F003.D
Instrument ID: MS27
Column:

Analysis Method: 8260C
Analysis Lot: KWG1413816

Target Mass	Relative to Mass	Lower Limit%	Upper Limit%	Relative Abundance %	Raw Abundance	Result Pass/Fail
50	95	15	40	17.5	27698	PASS
75	95	30	60	49.1	78008	PASS
95	95	100	100	100.0	158720	PASS
96	95	5	9	6.8	10809	PASS
173	174	0	2	0.8	1149	PASS
174	95	50	120	89.2	141546	PASS
175	174	5	9	7.4	10470	PASS
176	174	95	101	97.2	137608	PASS
177	176	5	9	6.3	8714	PASS

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed	Q
Continuing Calibration Verification	KWG1413816-2	J:\MS27\DATA\101214\1012F004.D	10/12/2014	10:42	
Lab Control Sample	KWG1413817-5	J:\MS27\DATA\101214\1012F005.D	10/12/2014	11:10	
Duplicate Lab Control Sample	KWG1413817-6	J:\MS27\DATA\101214\1012F006.D	10/12/2014	11:37	
LGC140929T10-1MS	KWG1413817-1	J:\MS27\DATA\101214\1012F007.D	10/12/2014	12:05	
LGC140929T10-1DMS	KWG1413817-2	J:\MS27\DATA\101214\1012F008.D	10/12/2014	12:32	
LGC140929LC95D2-1MS	KWG1413817-3	J:\MS27\DATA\101214\1012F009.D	10/12/2014	12:59	
LGC140929LC95D2-1DMS	KWG1413817-4	J:\MS27\DATA\101214\1012F010.D	10/12/2014	13:27	
Method Blank	KWG1413817-7	J:\MS27\DATA\101214\1012F013.D	10/12/2014	14:49	
LGC140929T10-1	K1410790-010	J:\MS27\DATA\101214\1012F014.D	10/12/2014	15:17	
LGC140929LC88D2-1	K1410790-018	J:\MS27\DATA\101214\1012F015.D	10/12/2014	15:44	
LGC140929LC95D1-1	K1410790-019	J:\MS27\DATA\101214\1012F016.D	10/12/2014	16:12	
LGC140929LC95D2-1	K1410790-020	J:\MS27\DATA\101214\1012F017.D	10/12/2014	16:39	
LGC140930T04-1	K1410790-021	J:\MS27\DATA\101214\1012F023.D	10/12/2014	19:24	
LGC140930DUP5-1	K1410790-022	J:\MS27\DATA\101214\1012F024.D	10/12/2014	19:51	
LGC140930LC103D-1	K1410790-023	J:\MS27\DATA\101214\1012F025.D	10/12/2014	20:19	
LGC140930LC101D2-1	K1410790-024	J:\MS27\DATA\101214\1012F026.D	10/12/2014	20:46	
LGC140930LC101D1-1	K1410790-025	J:\MS27\DATA\101214\1012F027.D	10/12/2014	21:13	
LGC140930MAMCOF2-1	K1410790-026	J:\MS27\DATA\101214\1012F028.D	10/12/2014	21:41	

Results flagged with an asterisk (*) indicate the analysis performed outside specified tune window

QA/QC Results

Client: Sealaska Environmental Services, LLC
Project: JBLM LTM Log Center/TO-01

Service Request: K1410790
Date Analyzed: 10/13/2014
Time Analyzed: 09:12

Tune Summary
Volatile Organic Compounds

File ID: J:\MS27\DATA\101314\1013F002.D
Instrument ID: MS27
Column:

Analysis Method: 8260C
Analysis Lot: KWG1413832

Target Mass	Relative to Mass	Lower Limit%	Upper Limit%	Relative Abundance %	Raw Abundance	Result Pass/Fail
50	95	15	40	17.2	22335	PASS
75	95	30	60	46.5	60378	PASS
95	95	100	100	100.0	129933	PASS
96	95	5	9	6.5	8489	PASS
173	174	0	2	1.0	1129	PASS
174	95	50	120	90.8	117965	PASS
175	174	5	9	7.6	9000	PASS
176	174	95	101	95.9	113082	PASS
177	176	5	9	6.8	7719	PASS

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed	Q
Continuing Calibration Verification	KWG1413832-2	J:\MS27\DATA\101314\1013F003.D	10/13/2014	10:10	
Lab Control Sample	KWG1413833-3	J:\MS27\DATA\101314\1013F004.D	10/13/2014	10:38	
Duplicate Lab Control Sample	KWG1413833-4	J:\MS27\DATA\101314\1013F005.D	10/13/2014	11:05	
Method Blank	KWG1413833-5	J:\MS27\DATA\101314\1013F010.D	10/13/2014	13:48	
LGC140930LC109-1	K1410790-027	J:\MS27\DATA\101314\1013F019.D	10/13/2014	17:55	

Results flagged with an asterisk (*) indicate the analysis performed outside specified tune window

ALS Group USA, Corp. dba ALS Environmental

QA/QC Results

Client: Sealaska Environmental Services, LLC
Project: JBLM LTM Log Center/TO-01

Service Request: K1410790
Date Analyzed: 10/13/2014
Time Analyzed: 09:28

Tune Summary
Volatile Organic Compounds

File ID: J:\MS13\DATA\101314\1013F002.D
Instrument ID: MS13
Column:

Analysis Method: 8260C
Analysis Lot: KWG1413835

Target Mass	Relative to Mass	Lower Limit%	Upper Limit%	Relative Abundance %	Raw Abundance	Result Pass/Fail
50	95	15	40	15.7	7891	PASS
75	95	30	60	44.8	22565	PASS
95	95	100	100	100.0	50386	PASS
96	95	5	9	6.1	3080	PASS
173	174	0	2	0.0	0	PASS
174	95	50	120	89.3	44986	PASS
175	174	5	9	7.2	3250	PASS
176	174	95	101	96.6	43448	PASS
177	176	5	9	6.8	2946	PASS

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed	Q
Continuing Calibration Verification	KWG1413835-2	J:\MS13\DATA\101314\1013F003.D	10/13/2014	09:57	
LGC141001Well13-1MS	KWG1413840-1	J:\MS13\DATA\101314\1013F005.D	10/13/2014	11:04	
LGC141001Well13-1DMS	KWG1413840-2	J:\MS13\DATA\101314\1013F006.D	10/13/2014	11:31	
Lab Control Sample	KWG1413840-3	J:\MS13\DATA\101314\1013F007.D	10/13/2014	11:58	
Duplicate Lab Control Sample	KWG1413840-5	J:\MS13\DATA\101314\1013F008.D	10/13/2014	12:25	
Method Blank	KWG1413840-4	J:\MS13\DATA\101314\1013F010.D	10/13/2014	13:19	
LGC140930LC03-1	K1410790-028	J:\MS13\DATA\101314\1013F014.D	10/13/2014	15:07	
LGC140930DUP9-1	K1410790-029	J:\MS13\DATA\101314\1013F015.D	10/13/2014	15:34	
LGC140930LC182-1	K1410790-030	J:\MS13\DATA\101314\1013F016.D	10/13/2014	16:01	
LGC140930LC16-1	K1410790-031	J:\MS13\DATA\101314\1013F017.D	10/13/2014	16:28	
LGC140930DUP1-1	K1410790-032	J:\MS13\DATA\101314\1013F018.D	10/13/2014	16:55	
LGC140930LC180-1	K1410790-033	J:\MS13\DATA\101314\1013F019.D	10/13/2014	17:22	
LGC141001LC223-1	K1410790-034	J:\MS13\DATA\101314\1013F020.D	10/13/2014	17:49	
LGC141001DUP3-1	K1410790-035	J:\MS13\DATA\101314\1013F021.D	10/13/2014	18:16	
LGC141001LC178-1	K1410790-036	J:\MS13\DATA\101314\1013F022.D	10/13/2014	18:43	
LGC141001Well13-1	K1410790-037	J:\MS13\DATA\101314\1013F023.D	10/13/2014	19:10	
LGC141001LC98D1-1	K1410790-038	J:\MS13\DATA\101314\1013F024.D	10/13/2014	19:37	
LGC141001DUP8-1	K1410790-039	J:\MS13\DATA\101314\1013F025.D	10/13/2014	20:04	
LGC141001LC98D2-1	K1410790-040	J:\MS13\DATA\101314\1013F026.D	10/13/2014	20:30	

Results flagged with an asterisk (*) indicate the analysis performed outside specified tune window

QA/QC Results

Client: Sealaska Environmental Services, LLC **Service Request:** K1410790
Project: JBLM LTM Log Center/TO-01 **Calibration Date:** 09/11/2014

Initial Calibration Summary
Volatile Organic Compounds

Calibration ID: CAL13540 **Column:** MS
Instrument ID: MS13

Level ID	File ID	Level ID	File ID
A	J:\MS13\DATA\091014\0910F028.D	G	J:\MS13\DATA\091014\0910F034.D
B	J:\MS13\DATA\091014\0910F029.D	H	J:\MS13\DATA\091014\0910F035.D
C	J:\MS13\DATA\091014\0910F030.D	I	J:\MS13\DATA\091014\0910F036.D
D	J:\MS13\DATA\091014\0910F031.D	J	J:\MS13\DATA\091014\0910F037.D
E	J:\MS13\DATA\091014\0910F032.D	K	J:\MS13\DATA\091014\0910F038.D
F	J:\MS13\DATA\091014\0910F033.D		

Analyte Name	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF
Dichlorodifluoromethane	A	0.10	0.263	B	0.20	0.275	C	0.50	0.239	D	1.0	0.288	E	2.0	0.296
	F	5.0	0.236	G	10	0.283	H	20	0.266	I	40	0.323	J	60	0.315
	K	80	0.316												
Chloromethane				B	0.20	0.560	C	0.50	0.416	D	1.0	0.405	E	2.0	0.380
	F	5.0	0.332	G	10	0.369	H	20	0.347	I	40	0.376	J	60	0.375
	K	80	0.372												
Vinyl Chloride	A	0.10	0.295	B	0.20	0.306	C	0.50	0.299	D	1.0	0.320	E	2.0	0.315
	F	5.0	0.264	G	10	0.312	H	20	0.298	I	40	0.344	J	60	0.344
	K	80	0.344												
Bromomethane				B	0.20	0.168	C	0.50	0.173	D	1.0	0.169	E	2.0	0.167
	F	5.0	0.156	G	10	0.176	H	20	0.170	I	40	0.187	J	60	0.195
	K	80	0.194												
Chloroethane				B	0.20	0.223	C	0.50	0.200	D	1.0	0.177	E	2.0	0.152
	F	5.0	0.148	G	10	0.167	H	20	0.156	I	40	0.172	J	60	0.172
	K	80	0.171												
Trichlorofluoromethane	A	0.10	0.393	B	0.20	0.401	C	0.50	0.370	D	1.0	0.406	E	2.0	0.388
	F	5.0	0.314	G	10	0.378	H	20	0.361	I	40	0.433	J	60	0.427
	K	80	0.430												
1,1-Dichloroethene	A	0.10	0.190	B	0.20	0.220	C	0.50	0.182	D	1.0	0.186	E	2.0	0.186
	F	5.0	0.160	G	10	0.195	H	20	0.183	I	40	0.210	J	60	0.207
	K	80	0.209												
Acetone	A	4.0	0.0436	B	8.0	0.0386	C	20	0.0354	D	40	0.0339	E	80	0.0329
	F	100	0.0298	G	200	0.0348	H	400	0.0341	I	800	0.0337	J	1600	0.0345
	K	2000	0.0340												
Carbon Disulfide	A	0.10	0.954	B	0.20	0.822	C	0.50	0.709	D	1.0	0.696	E	2.0	0.672
	F	5.0	0.578	G	10	0.681	H	20	0.644	I	40	0.745	J	60	0.751
	K	80	0.752												
Methylene Chloride										D	1.0	0.355	E	2.0	0.283
	F	5.0	0.257	G	10	0.258	H	20	0.243	I	40	0.245	J	60	0.246
	K	80	0.243												

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† SPCC Compound **‡ CCC Compound**

Client: Sealaska Environmental Services, LLC **Service Request:** K1410790
Project: JBLM LTM Log Center/TO-01 **Calibration Date:** 09/11/2014

Initial Calibration Summary
Volatile Organic Compounds

Calibration ID: CAL13540 **Column:** MS
Instrument ID: MS13

Analyte Name	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF
Methyl tert-Butyl Ether	A	0.20	0.448	B	0.40	0.445	C	1.0	0.411	D	2.0	0.412	E	4.0	0.383
	F	10	0.402	G	20	0.434	H	40	0.424	I	80	0.439	J	120	0.451
	K	160	0.456												
trans-1,2-Dichloroethene	A	0.10	0.282	B	0.20	0.246	C	0.50	0.224	D	1.0	0.232	E	2.0	0.212
	F	5.0	0.200	G	10	0.232	H	20	0.222	I	40	0.240	J	60	0.242
	K	80	0.242												
1,1-Dichloroethane	A	0.10	0.382	B	0.20	0.481	C	0.50	0.421	D	1.0	0.436	E	2.0	0.419
	F	5.0	0.402	G	10	0.444	H	20	0.424	I	40	0.455	J	60	0.450
	K	80	0.451												
2,2-Dichloropropane				B	0.20	0.232	C	0.50	0.206	D	1.0	0.205	E	2.0	0.213
	F	5.0	0.179	G	10	0.215	H	20	0.214	I	40	0.257	J	60	0.267
	K	80	0.274												
cis-1,2-Dichloroethene	A	0.10	0.218	B	0.20	0.252	C	0.50	0.261	D	1.0	0.267	E	2.0	0.248
	F	5.0	0.247	G	10	0.271	H	20	0.263	I	40	0.276	J	60	0.277
	K	80	0.278												
2-Butanone (MEK)	A	4.0	0.0141	B	8.0	0.0136	C	20	0.0131	D	40	0.0137	E	80	0.0128
	F	100	0.0119	G	200	0.0145	H	400	0.0144	I	800	0.0139	J	1600	0.0148
	K	2000	0.0146												
Bromochloromethane							C	0.50	0.109	D	1.0	0.109	E	2.0	0.102
	F	5.0	0.107	G	10	0.114	H	20	0.108	I	40	0.110	J	60	0.112
	K	80	0.109												
Chloroform	A	0.10	0.426	B	0.20	0.483	C	0.50	0.407	D	1.0	0.426	E	2.0	0.401
	F	5.0	0.400	G	10	0.443	H	20	0.424	I	40	0.440	J	60	0.438
	K	80	0.433												
1,1,1-Trichloroethane (TCA)				B	0.20	0.329	C	0.50	0.303	D	1.0	0.332	E	2.0	0.319
	F	5.0	0.280	G	10	0.338	H	20	0.320	I	40	0.374	J	60	0.378
	K	80	0.379												
Carbon Tetrachloride	A	0.10	0.320	B	0.20	0.290	C	0.50	0.273	D	1.0	0.277	E	2.0	0.290
	F	5.0	0.247	G	10	0.290	H	20	0.282	I	40	0.333	J	60	0.335
	K	80	0.336												
1,1-Dichloropropene				B	0.20	0.295	C	0.50	0.292	D	1.0	0.304	E	2.0	0.294
	F	5.0	0.258	G	10	0.308	H	20	0.302	I	40	0.351	J	60	0.351
	K	80	0.353												
Benzene	A	0.10	0.996	B	0.20	1.09	C	0.50	1.04	D	1.0	1.02	E	2.0	0.989
	F	5.0	0.952	G	10	1.07	H	20	1.02	I	40	1.10	J	60	1.10
	K	80	1.10												

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Client: Sealaska Environmental Services, LLC **Service Request:** K1410790
Project: JBLM LTM Log Center/TO-01 **Calibration Date:** 09/11/2014

Initial Calibration Summary
Volatile Organic Compounds

Calibration ID: CAL13540 **Column:** MS
Instrument ID: MS13

Analyte Name	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF
1,2-Dichloroethane (EDC)				B	0.20	0.299	C	0.50	0.296	D	1.0	0.291	E	2.0	0.287
	F	5.0	0.281	G	10	0.301	H	20	0.284	I	40	0.280	J	60	0.280
	K	80	0.276												
Trichloroethene (TCE)				B	0.20	0.227	C	0.50	0.245	D	1.0	0.241	E	2.0	0.239
	F	5.0	0.220	G	10	0.252	H	20	0.244	I	40	0.271	J	60	0.276
	K	80	0.277												
1,2-Dichloropropane				B	0.20	0.289	C	0.50	0.247	D	1.0	0.264	E	2.0	0.240
	F	5.0	0.245	G	10	0.271	H	20	0.257	I	40	0.271	J	60	0.273
	K	80	0.273												
Dibromomethane							C	0.50	0.116	D	1.0	0.117	E	2.0	0.116
	F	5.0	0.118	G	10	0.120	H	20	0.116	I	40	0.118	J	60	0.119
	K	80	0.117												
Bromodichloromethane				B	0.20	0.332	C	0.50	0.309	D	1.0	0.310	E	2.0	0.292
	F	5.0	0.301	G	10	0.321	H	20	0.306	I	40	0.319	J	60	0.322
	K	80	0.323												
cis-1,3-Dichloropropene				B	0.20	0.309	C	0.50	0.326	D	1.0	0.317	E	2.0	0.304
	F	5.0	0.322	G	10	0.363	H	20	0.355	I	40	0.378	J	60	0.387
	K	80	0.392												
4-Methyl-2-pentanone (MIBK)	A	4.0	0.0602	B	8.0	0.0491	C	20	0.0465	D	40	0.0444	E	80	0.0430
	F	100	0.0405	G	200	0.0487	H	400	0.0490	I	800	0.0490	J	1600	0.0512
	K	2000	0.0506												
Toluene	A	0.10	0.645	B	0.20	0.672	C	0.50	0.667	D	1.0	0.639	E	2.0	0.628
	F	5.0	0.605	G	10	0.674	H	20	0.650	I	40	0.705	J	60	0.708
	K	80	0.708												
trans-1,3-Dichloropropene				B	0.20	0.688	C	0.50	0.632	D	1.0	0.569	E	2.0	0.573
	F	5.0	0.628	G	10	0.688	H	20	0.688	I	40	0.744	J	60	0.766
	K	80	0.785												
1,1,2-Trichloroethane				B	0.20	0.358	C	0.50	0.400	D	1.0	0.365	E	2.0	0.383
	F	5.0	0.403	G	10	0.419	H	20	0.401	I	40	0.406	J	60	0.408
	K	80	0.406												
Tetrachloroethene (PCE)				B	0.20	0.582	C	0.50	0.523	D	1.0	0.531	E	2.0	0.504
	F	5.0	0.455	G	10	0.529	H	20	0.511	I	40	0.589	J	60	0.590
	K	80	0.596												
2-Hexanone	A	4.0	0.0264	B	8.0	0.0294	C	20	0.0320	D	40	0.0326	E	80	0.0347
	F	100	0.0329	G	200	0.0401	H	400	0.0417	I	800	0.0420	J	1600	0.0433
	K	2000	0.0433												

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† SPCC Compound **‡ CCC Compound**

Client: Sealaska Environmental Services, LLC **Service Request:** K1410790
Project: JBLM LTM Log Center/TO-01 **Calibration Date:** 09/11/2014

Initial Calibration Summary
Volatile Organic Compounds

Calibration ID: CAL13540 **Column:** MS
Instrument ID: MS13

Analyte Name	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF
1,3-Dichloropropane	A	0.10	0.793	B	0.20	0.766	C	0.50	0.832	D	1.0	0.814	E	2.0	0.794
	F	5.0	0.808	G	10	0.856	H	20	0.826	I	40	0.844	J	60	0.839
	K	80	0.837												
Dibromochloromethane				B	0.20	0.472	C	0.50	0.511	D	1.0	0.505	E	2.0	0.496
	F	5.0	0.519	G	10	0.559	H	20	0.533	I	40	0.546	J	60	0.550
	K	80	0.550												
1,2-Dibromoethane (EDB)				B	0.20	0.391	C	0.50	0.416	D	1.0	0.399	E	2.0	0.387
	F	5.0	0.423	G	10	0.453	H	20	0.422	I	40	0.437	J	60	0.442
	K	80	0.440												
Chlorobenzene	A	0.10	1.79	B	0.20	1.90	C	0.50	1.77	D	1.0	1.87	E	2.0	1.73
	F	5.0	1.77	G	10	1.88	H	20	1.84	I	40	1.92	J	60	1.93
	K	80	1.93												
Ethylbenzene	A	0.10	0.814	B	0.20	1.02	C	0.50	0.882	D	1.0	0.884	E	2.0	0.918
	F	5.0	0.906	G	10	1.04	H	20	1.02	I	40	1.12	J	60	1.11
	K	80	1.13												
1,1,1,2-Tetrachloroethane	A	0.10	0.534	B	0.20	0.547	C	0.50	0.560	D	1.0	0.555	E	2.0	0.552
	F	5.0	0.563	G	10	0.611	H	20	0.597	I	40	0.623	J	60	0.627
	K	80	0.629												
m,p-Xylenes	A	0.20	0.953	B	0.40	1.17	C	1.0	1.09	D	2.0	1.11	E	4.0	1.14
	F	10	1.13	G	20	1.29	H	40	1.27	I	80	1.37	J	120	1.38
	K	160	1.39												
o-Xylene	A	0.10	0.900	B	0.20	0.890	C	0.50	0.986	D	1.0	1.07	E	2.0	1.03
	F	5.0	1.08	G	10	1.23	H	20	1.21	I	40	1.31	J	60	1.32
	K	80	1.33												
Styrene	A	0.10	0.792	B	0.20	0.770	C	0.50	0.805	D	1.0	0.849	E	2.0	0.853
	F	5.0	0.926	G	10	1.01	H	20	1.02	I	40	1.04	J	60	1.05
	K	80	1.06												
Bromoform				B	0.20	0.257	C	0.50	0.277	D	1.0	0.277	E	2.0	0.263
	F	5.0	0.282	G	10	0.298	H	20	0.300	I	40	0.314	J	60	0.318
	K	80	0.322												
Isopropylbenzene	A	0.10	2.30	B	0.20	2.51	C	0.50	2.43	D	1.0	2.74	E	2.0	2.69
	F	5.0	2.61	G	10	3.08	H	20	3.06	I	40	3.46	J	60	3.48
	K	80	3.51												
1,1,2,2-Tetrachloroethane				B	0.20	0.590	C	0.50	0.608	D	1.0	0.592	E	2.0	0.523
	F	5.0	0.574	G	10	0.598	H	20	0.583	I	40	0.575	J	60	0.567
	K	80	0.565												

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Client: Sealaska Environmental Services, LLC **Service Request:** K1410790
Project: JBLM LTM Log Center/TO-01 **Calibration Date:** 09/11/2014

Initial Calibration Summary
Volatile Organic Compounds

Calibration ID: CAL13540 **Column:** MS
Instrument ID: MS13

Analyte Name	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF
Bromobenzene	A	0.10	0.827	B	0.20	0.847	C	0.50	0.913	D	1.0	0.827	E	2.0	0.849
	F	5.0	0.876	G	10	0.907	H	20	0.911	I	40	0.934	J	60	0.928
	K	80	0.930												
n-Propylbenzene	A	0.10	3.69	B	0.20	3.67	C	0.50	3.88	D	1.0	3.85	E	2.0	3.94
	F	5.0	3.80	G	10	4.33	H	20	4.44	I	40	4.83	J	60	4.81
	K	80	4.83												
1,2,3-Trichloropropane							C	0.50	0.165	D	1.0	0.175	E	2.0	0.168
	F	5.0	0.168	G	10	0.172	H	20	0.175	I	40	0.170	J	60	0.168
	K	80	0.168												
2-Chlorotoluene	A	0.10	2.28	B	0.20	2.52	C	0.50	2.50	D	1.0	2.48	E	2.0	2.49
	F	5.0	2.50	G	10	2.70	H	20	2.72	I	40	2.84	J	60	2.83
	K	80	2.83												
1,3,5-Trimethylbenzene	A	0.10	2.34	B	0.20	2.47	C	0.50	2.52	D	1.0	2.60	E	2.0	2.67
	F	5.0	2.74	G	10	3.07	H	20	3.12	I	40	3.36	J	60	3.35
	K	80	3.36												
4-Chlorotoluene	A	0.10	2.67	B	0.20	2.77	C	0.50	2.90	D	1.0	2.78	E	2.0	2.85
	F	5.0	2.93	G	10	3.16	H	20	3.15	I	40	3.28	J	60	3.26
	K	80	3.26												
tert-Butylbenzene	A	0.10	1.95	B	0.20	1.96	C	0.50	2.04	D	1.0	2.16	E	2.0	2.15
	F	5.0	2.14	G	10	2.46	H	20	2.55	I	40	2.83	J	60	2.83
	K	80	2.82												
1,2,4-Trimethylbenzene	A	0.10	2.26	B	0.20	2.39	C	0.50	2.47	D	1.0	2.61	E	2.0	2.71
	F	5.0	2.81	G	10	3.17	H	20	3.20	I	40	3.37	J	60	3.36
	K	80	3.36												
sec-Butylbenzene	A	0.10	2.89	B	0.20	3.16	C	0.50	2.95	D	1.0	3.06	E	2.0	3.20
	F	5.0	3.08	G	10	3.56	H	20	3.65	I	40	4.06	J	60	4.03
	K	80	4.05												
4-Isopropyltoluene	A	0.10	2.28	B	0.20	2.44	C	0.50	2.39	D	1.0	2.50	E	2.0	2.64
	F	5.0	2.63	G	10	3.03	H	20	3.12	I	40	3.43	J	60	3.42
	K	80	3.43												
1,3-Dichlorobenzene	A	0.10	1.67	B	0.20	1.62	C	0.50	1.69	D	1.0	1.66	E	2.0	1.59
	F	5.0	1.67	G	10	1.79	H	20	1.79	I	40	1.85	J	60	1.84
	K	80	1.84												
1,4-Dichlorobenzene	A	0.10	1.78	B	0.20	1.85	C	0.50	1.87	D	1.0	1.74	E	2.0	1.66
	F	5.0	1.71	G	10	1.81	H	20	1.81	I	40	1.86	J	60	1.83
	K	80	1.84												

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Client: Sealaska Environmental Services, LLC **Service Request:** K1410790
Project: JBLM LTM Log Center/TO-01 **Calibration Date:** 09/11/2014

Initial Calibration Summary
Volatile Organic Compounds

Calibration ID: CAL13540 **Column:** MS
Instrument ID: MS13

Analyte Name	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF
n-Butylbenzene	A	0.10	2.36	B	0.20	2.22	C	0.50	2.19	D	1.0	2.21	E	2.0	2.27
	F	5.0	2.26	G	10	2.67	H	20	2.72	I	40	3.04	J	60	3.00
	K	80	3.00												
1,2-Dichlorobenzene	A	0.10	1.52	B	0.20	1.52	C	0.50	1.56	D	1.0	1.53	E	2.0	1.50
	F	5.0	1.54	G	10	1.65	H	20	1.65	I	40	1.66	J	60	1.64
	K	80	1.64												
1,2-Dibromo-3-chloropropane										D	1.0	0.0748	E	2.0	0.0691
	F	5.0	0.0739	G	10	0.0796	H	20	0.0775	I	40	0.0822	J	60	0.0838
	K	80	0.0825												
1,2,4-Trichlorobenzene	A	0.10	0.800	B	0.20	0.814	C	0.50	0.792	D	1.0	0.741	E	2.0	0.766
	F	5.0	0.830	G	10	0.920	H	20	0.956	I	40	1.02	J	60	1.02
	K	80	1.04												
Hexachlorobutadiene				B	0.20	0.488	C	0.50	0.458	D	1.0	0.440	E	2.0	0.439
	F	5.0	0.395	G	10	0.443	H	20	0.463	I	40	0.494	J	60	0.496
	K	80	0.494												
Naphthalene	A	0.10	0.979	B	0.20	0.929	C	0.50	0.959	D	1.0	0.856	E	2.0	0.939
	F	5.0	1.16	G	10	1.40	H	20	1.58	I	40	1.70	J	60	1.74
	K	80	1.79												
1,2,3-Trichlorobenzene	A	0.10	0.664	B	0.20	0.712	C	0.50	0.665	D	1.0	0.619	E	2.0	0.653
	F	5.0	0.714	G	10	0.796	H	20	0.828	I	40	0.854	J	60	0.857
	K	80	0.878												
Dibromofluoromethane	A	10	0.216	B	10	0.216	C	10	0.217	D	10	0.217	E	10	0.215
	F	10	0.212	G	10	0.216	H	10	0.210	I	10	0.207	J	10	0.206
	K	10	0.212												
1,2-Dichloroethane-d4	A	10	0.212	B	10	0.219	C	10	0.208	D	10	0.220	E	10	0.212
	F	10	0.207	G	10	0.211	H	10	0.201	I	10	0.202	J	10	0.202
	K	10	0.204												
Toluene-d8	A	10	0.939	B	10	0.948	C	10	0.953	D	10	0.982	E	10	0.987
	F	10	0.964	G	10	0.998	H	10	0.987	I	10	0.969	J	10	0.973
	K	10	0.969												
4-Bromofluorobenzene	A	10	0.772	B	10	0.765	C	10	0.799	D	10	0.815	E	10	0.823
	F	10	0.838	G	10	0.843	H	10	0.827	I	10	0.824	J	10	0.818
	K	10	0.824												

Results flagged with an asterisk (*) indicate values outside control criteria.

† SPCC Compound **‡ CCC Compound**

Client: Sealaska Environmental Services, LLC **Service Request:** K1410790
Project: JBLM LTM Log Center/TO-01 **Calibration Date:** 09/11/2014

Initial Calibration Summary
Volatile Organic Compounds

Calibration ID: CAL13540 **Column:** MS
Instrument ID: MS13

		Calibration Evaluation					RRF Evaluation		
Analyte Name	Compound Type	Fit Type	Eval.	Eval. Result	Q	Control Criteria	Average RRF	Q	Minimum RRF
Dichlorodifluoromethane	MS	AverageRF	% RSD	10.5		≤ 20	0.282		0.100
Chloromethane	MS	AverageRF	% RSD	16.1		≤ 20	0.393		0.100
Vinyl Chloride	MS	AverageRF	% RSD	7.9		≤ 20	0.313		0.100
Bromomethane	MS	AverageRF	% RSD	7.2		≤ 20	0.175		0.100
Chloroethane	MS	AverageRF	% RSD	13.0		≤ 20	0.174		0.100
Trichlorofluoromethane	MS	AverageRF	% RSD	9.0		≤ 20	0.391		0.100
1,1-Dichloroethene	MS	AverageRF	% RSD	8.8		≤ 20	0.193		.100
Acetone	MS	AverageRF	% RSD	10.1		≤ 20	0.0350		0.01
Carbon Disulfide	MS	AverageRF	% RSD	13.6		≤ 20	0.728		0.100
Methylene Chloride	MS	AverageRF	% RSD	14.3		≤ 20	0.266		0.100
Methyl tert-Butyl Ether	MS	AverageRF	% RSD	5.4		≤ 20	0.428		0.100
trans-1,2-Dichloroethene	MS	AverageRF	% RSD	9.0		≤ 20	0.234		0.100
1,1-Dichloroethane	MS	AverageRF	% RSD	6.3		≤ 20	0.433		.200
2,2-Dichloropropane	MS	AverageRF	% RSD	13.5		≤ 20	0.226		0.01
cis-1,2-Dichloroethene	MS	AverageRF	% RSD	6.9		≤ 20	0.260		0.100
2-Butanone (MEK)	MS	AverageRF	% RSD	6.4		≤ 20	0.0138		0.01
Bromochloromethane	MS	AverageRF	% RSD	3.0		≤ 20	0.109		0.01
Chloroform	MS	AverageRF	% RSD	5.4		≤ 20	0.429		0.200
1,1,1-Trichloroethane (TCA)	MS	AverageRF	% RSD	9.9		≤ 20	0.335		.100
Carbon Tetrachloride	MS	AverageRF	% RSD	9.9		≤ 20	0.298		0.100
1,1-Dichloropropene	MS	AverageRF	% RSD	10.0		≤ 20	0.311		0.01
Benzene	MS	AverageRF	% RSD	4.9		≤ 20	1.04		0.500
1,2-Dichloroethane (EDC)	MS	AverageRF	% RSD	3.0		≤ 20	0.288		0.100
Trichloroethene (TCE)	MS	AverageRF	% RSD	8.0		≤ 20	0.249		0.200
1,2-Dichloropropane	MS	AverageRF	% RSD	5.9		≤ 20	0.263		0.100
Dibromomethane	MS	AverageRF	% RSD	1.2		≤ 20	0.117		0.01
Bromodichloromethane	MS	AverageRF	% RSD	3.8		≤ 20	0.314		0.200
cis-1,3-Dichloropropene	MS	AverageRF	% RSD	9.7		≤ 20	0.345		0.200
4-Methyl-2-pentanone (MIBK)	MS	AverageRF	% RSD	10.6		≤ 20	0.0484		0.01
Toluene	MS	AverageRF	% RSD	5.2		≤ 20	0.664		0.400
trans-1,3-Dichloropropene	MS	AverageRF	% RSD	11.2		≤ 20	0.676		0.100
1,1,2-Trichloroethane	MS	AverageRF	% RSD	5.0		≤ 20	0.395		.100
Tetrachloroethene (PCE)	MS	AverageRF	% RSD	8.6		≤ 20	0.541		0.200
2-Hexanone	MS	AverageRF	% RSD	16.7		≤ 20	0.0362		0.015
1,3-Dichloropropane	MS	AverageRF	% RSD	3.3		≤ 20	0.819		0.01
Dibromochloromethane	MS	AverageRF	% RSD	5.4		≤ 20	0.524		0.100
1,2-Dibromoethane (EDB)	MS	AverageRF	% RSD	5.4		≤ 20	0.421		0.100
Chlorobenzene	MS	AverageRF	% RSD	3.9		≤ 20	1.85		0.500
Ethylbenzene	MS	AverageRF	% RSD	11.2		≤ 20	0.986		0.100
1,1,1,2-Tetrachloroethane	MS	AverageRF	% RSD	6.2		≤ 20	0.582		.01
m,p-Xylenes	MS	AverageRF	% RSD	11.6		≤ 20	1.21		0.100
o-Xylene	MS	AverageRF	% RSD	14.7		≤ 20	1.12		0.300

Results flagged with an asterisk (*) indicate values outside control criteria.

† SPCC Compound **‡ CCC Compound**

Client: Sealaska Environmental Services, LLC **Service Request:** K1410790
Project: JBLM LTM Log Center/TO-01 **Calibration Date:** 09/11/2014

Initial Calibration Summary
Volatile Organic Compounds

Calibration ID: CAL13540 **Column:** MS
Instrument ID: MS13

Analyte Name	Compound Type	Calibration Evaluation					RRF Evaluation		
		Fit Type	Eval.	Eval. Result	Q	Control Criteria	Average RRF	Q	Minimum RRF
Styrene	MS	AverageRF	% RSD	12.3		≤ 20	0.925		0.300
Bromoform	MS	AverageRF	% RSD	7.9		≤ 20	0.291		0.100
Isopropylbenzene	MS	AverageRF	% RSD	15.3		≤ 20	2.90		0.100
1,1,2,2-Tetrachloroethane	MS	AverageRF	% RSD	4.1		≤ 20	0.578		.300
Bromobenzene	MS	AverageRF	% RSD	4.8		≤ 20	0.886		0.01
n-Propylbenzene	MS	AverageRF	% RSD	11.3		≤ 20	4.19		0.01
1,2,3-Trichloropropane	MS	AverageRF	% RSD	2.0		≤ 20	0.170		0.01
2-Chlorotoluene	MS	AverageRF	% RSD	7.1		≤ 20	2.61		0.01
1,3,5-Trimethylbenzene	MS	AverageRF	% RSD	13.5		≤ 20	2.87		0.01
4-Chlorotoluene	MS	AverageRF	% RSD	7.5		≤ 20	3.00		0.01
tert-Butylbenzene	MS	AverageRF	% RSD	15.0		≤ 20	2.36		0.01
1,2,4-Trimethylbenzene	MS	AverageRF	% RSD	14.6		≤ 20	2.88		0.01
sec-Butylbenzene	MS	AverageRF	% RSD	13.5		≤ 20	3.43		0.01
4-Isopropyltoluene	MS	AverageRF	% RSD	15.8		≤ 20	2.85		0.01
1,3-Dichlorobenzene	MS	AverageRF	% RSD	5.5		≤ 20	1.73		0.600
1,4-Dichlorobenzene	MS	AverageRF	% RSD	3.8		≤ 20	1.80		0.500
n-Butylbenzene	MS	AverageRF	% RSD	13.9		≤ 20	2.54		0.01
1,2-Dichlorobenzene	MS	AverageRF	% RSD	4.1		≤ 20	1.58		0.400
1,2-Dibromo-3-chloropropane	MS	AverageRF	% RSD	6.5		≤ 20	0.0779		0.025
1,2,4-Trichlorobenzene	MS	AverageRF	% RSD	12.6		≤ 20	0.881		0.200
Hexachlorobutadiene	MS	AverageRF	% RSD	7.1		≤ 20	0.461		0.01
Naphthalene	MS	Quadratic(0,0)	COD	1.000		≥ 0.990	1.28		0.01
1,2,3-Trichlorobenzene	MS	AverageRF	% RSD	12.7		≤ 20	0.749		0.01
Dibromofluoromethane	SURR	AverageRF	% RSD	1.9		≤ 20	0.213		0.01
1,2-Dichloroethane-d4	SURR	AverageRF	% RSD	3.1		≤ 20	0.209		0.01
Toluene-d8	SURR	AverageRF	% RSD	1.9		≤ 20	0.970		0.01
4-Bromofluorobenzene	SURR	AverageRF	% RSD	3.1		≤ 20	0.813		0.01

Results flagged with an asterisk (*) indicate values outside control criteria.

† SPCC Compound **‡ CCC Compound**

Client: Sealaska Environmental Services, LLC
Project: JBLM LTM Log Center/TO-01

Service Request: K1410790
Calibration Date: 09/11/2014
Date Analyzed: 09/11/2014

Second Source Calibration Verification
Volatile Organic Compounds

Calibration Type: Internal Standard
Analysis Method: 8260C

Calibration ID: CAL13540
Units: PPB

File ID: J:\MS13\DATA\091014\0910F042.D

Analyte Name	Expected	Result	Average RF	SSV RF	%D	%Drift	Criteria	Curve Fit
Dichlorodifluoromethane	10	8.2	0.282	0.232	-18	NA	± 30 %	AverageRF
Chloromethane	10	7.6	0.393	0.298	-24	NA	± 30 %	AverageRF
Vinyl Chloride	10	8.6	0.313	0.269	-14	NA	± 30 %	AverageRF
Bromomethane	10	10	0.175	0.178	2	NA	± 30 %	AverageRF
Chloroethane	10	9.6	0.174	0.167	-4	NA	± 30 %	AverageRF
Trichlorofluoromethane	10	7.6	0.391	0.299	-24	NA	± 30 %	AverageRF
1,1-Dichloroethene	10	9.7	0.193	0.187	-3	NA	± 30 %	AverageRF
Acetone	50	55	0.0350	0.0384	10	NA	± 30 %	AverageRF
Carbon Disulfide	20	16	0.728	0.591	-19	NA	± 30 %	AverageRF
Methylene Chloride	10	8.3	0.266	0.222	-17	NA	± 30 %	AverageRF
Methyl tert-Butyl Ether	10	8.7	0.428	0.372	-13	NA	± 30 %	AverageRF
trans-1,2-Dichloroethene	10	9.2	0.234	0.215	-8	NA	± 30 %	AverageRF
1,1-Dichloroethane	10	9.8	0.433	0.425	-2	NA	± 30 %	AverageRF
2,2-Dichloropropane	10	8.3	0.226	0.187	-17	NA	± 30 %	AverageRF
cis-1,2-Dichloroethene	10	9.5	0.260	0.247	-5	NA	± 30 %	AverageRF
2-Butanone (MEK)	50	52	0.0138	0.0143	4	NA	± 30 %	AverageRF
Bromochloromethane	10	9.4	0.109	0.103	-6	NA	± 30 %	AverageRF
Chloroform	10	9.2	0.429	0.397	-8	NA	± 30 %	AverageRF
1,1,1-Trichloroethane (TCA)	10	9.0	0.335	0.301	-10	NA	± 30 %	AverageRF
Carbon Tetrachloride	10	8.8	0.298	0.262	-12	NA	± 30 %	AverageRF
1,1-Dichloropropene	10	9.3	0.311	0.289	-7	NA	± 30 %	AverageRF
Benzene	10	9.3	1.04	0.969	-7	NA	± 30 %	AverageRF
1,2-Dichloroethane (EDC)	10	9.3	0.288	0.268	-7	NA	± 30 %	AverageRF
Trichloroethene (TCE)	10	9.3	0.249	0.232	-7	NA	± 30 %	AverageRF
1,2-Dichloropropane	10	9.0	0.263	0.236	-10	NA	± 30 %	AverageRF
Dibromomethane	10	9.3	0.117	0.110	-7	NA	± 30 %	AverageRF
Bromodichloromethane	10	9.2	0.314	0.288	-8	NA	± 30 %	AverageRF
cis-1,3-Dichloropropene	10	9.1	0.345	0.315	-9	NA	± 30 %	AverageRF
4-Methyl-2-pentanone (MIBK)	50	48	0.0484	0.0462	-5	NA	± 30 %	AverageRF
Toluene	10	9.1	0.664	0.603	-9	NA	± 30 %	AverageRF
trans-1,3-Dichloropropene	10	8.1	0.676	0.550	-19	NA	± 30 %	AverageRF
1,1,2-Trichloroethane	10	9.2	0.395	0.362	-8	NA	± 30 %	AverageRF
Tetrachloroethene (PCE)	10	8.9	0.541	0.480	-11	NA	± 30 %	AverageRF
2-Hexanone	50	53	0.0362	0.0384	6	NA	± 30 %	AverageRF
1,3-Dichloropropane	10	9.3	0.819	0.761	-7	NA	± 30 %	AverageRF
Dibromochloromethane	10	9.1	0.524	0.479	-9	NA	± 30 %	AverageRF
1,2-Dibromoethane (EDB)	10	9.4	0.421	0.396	-6	NA	± 30 %	AverageRF
Chlorobenzene	10	8.9	1.85	1.65	-11	NA	± 30 %	AverageRF
Ethylbenzene	10	8.9	0.986	0.882	-11	NA	± 30 %	AverageRF
1,1,1,2-Tetrachloroethane	10	9.1	0.582	0.527	-9	NA	± 30 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† SPCC Compound **‡ CCC Compound**

Client: Sealaska Environmental Services, LLC
Project: JBLM LTM Log Center/TO-01

Service Request: K1410790
Calibration Date: 09/11/2014
Date Analyzed: 09/11/2014

Second Source Calibration Verification
Volatile Organic Compounds

Calibration Type: Internal Standard
Analysis Method: 8260C

Calibration ID: CAL13540
Units: PPB

Analyte Name	Expected	Result	Average RF	SSV RF	%D	%Drift	Criteria	Curve Fit
m,p-Xylenes	20	19	1.21	1.12	-7	NA	± 30 %	AverageRF
o-Xylene	10	9.5	1.12	1.07	-5	NA	± 30 %	AverageRF
Styrene	10	9.7	0.925	0.896	-3	NA	± 30 %	AverageRF
Bromoform	10	9.6	0.291	0.278	-4	NA	± 30 %	AverageRF
Isopropylbenzene	10	9.2	2.90	2.66	-8	NA	± 30 %	AverageRF
1,1,2,2-Tetrachloroethane	10	9.0	0.578	0.518	-10	NA	± 30 %	AverageRF
Bromobenzene	10	9.2	0.886	0.816	-8	NA	± 30 %	AverageRF
n-Propylbenzene	10	9.1	4.19	3.80	-9	NA	± 30 %	AverageRF
1,2,3-Trichloropropane	10	9.3	0.170	0.158	-7	NA	± 30 %	AverageRF
2-Chlorotoluene	10	9.6	2.61	2.50	-4	NA	± 30 %	AverageRF
1,3,5-Trimethylbenzene	10	9.6	2.87	2.75	-4	NA	± 30 %	AverageRF
4-Chlorotoluene	10	9.2	3.00	2.77	-8	NA	± 30 %	AverageRF
tert-Butylbenzene	10	9.5	2.36	2.23	-5	NA	± 30 %	AverageRF
1,2,4-Trimethylbenzene	10	9.7	2.88	2.79	-3	NA	± 30 %	AverageRF
sec-Butylbenzene	10	9.0	3.43	3.09	-10	NA	± 30 %	AverageRF
4-Isopropyltoluene	10	9.4	2.85	2.67	-6	NA	± 30 %	AverageRF
1,3-Dichlorobenzene	10	9.2	1.73	1.59	-8	NA	± 30 %	AverageRF
1,4-Dichlorobenzene	10	9.0	1.80	1.61	-10	NA	± 30 %	AverageRF
n-Butylbenzene	10	9.1	2.54	2.31	-9	NA	± 30 %	AverageRF
1,2-Dichlorobenzene	10	9.2	1.58	1.45	-8	NA	± 30 %	AverageRF
1,2-Dibromo-3-chloropropane	10	9.1	0.0779	0.0709	-9	NA	± 30 %	AverageRF
1,2,4-Trichlorobenzene	10	9.1	0.881	0.798	-9	NA	± 30 %	AverageRF
Hexachlorobutadiene	10	8.3	0.461	0.382	-17	NA	± 30 %	AverageRF
Naphthalene	10	7.8	1.28	1.23	NA	-22	± 30 %	Quadratic(0,0
1,2,3-Trichlorobenzene	10	9.3	0.749	0.697	-7	NA	± 30 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† SPCC Compound **‡ CCC Compound**

QA/QC Results

Client: Sealaska Environmental Services, LLC **Service Request:** K1410790
Project: JBLM LTM Log Center/TO-01 **Calibration Date:** 10/08/2014

Initial Calibration Summary
Volatile Organic Compounds

Calibration ID: CAL13596 **Column:** MS
Instrument ID: MS27

Level ID	File ID	Level ID	File ID
A	J:\MS27\DATA\100814\1008F004.D	G	J:\MS27\DATA\100814\1008F010.D
B	J:\MS27\DATA\100814\1008F005.D	H	J:\MS27\DATA\100814\1008F011.D
C	J:\MS27\DATA\100814\1008F006.D	I	J:\MS27\DATA\100814\1008F012.D
D	J:\MS27\DATA\100814\1008F007.D	J	J:\MS27\DATA\100814\1008F013.D
E	J:\MS27\DATA\100814\1008F008.D	K	J:\MS27\DATA\100814\1008F014.D
F	J:\MS27\DATA\100814\1008F009.D		

Analyte Name	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF
Dichlorodifluoromethane	A	0.10	0.306	B	0.20	0.327	C	0.50	0.288	D	1.0	0.338	E	2.0	0.257
	F	5.0	0.314	G	10	0.340	H	20	0.312	I	40	0.320	J	60	0.329
	K	80	0.341												
Chloromethane							C	0.50	0.439	D	1.0	0.450	E	2.0	0.358
	F	5.0	0.397	G	10	0.381	H	20	0.340	I	40	0.334	J	60	0.340
	K	80	0.347												
Vinyl Chloride	A	0.10	0.277	B	0.20	0.370	C	0.50	0.349	D	1.0	0.369	E	2.0	0.296
	F	5.0	0.333	G	10	0.361	H	20	0.330	I	40	0.343	J	60	0.352
	K	80	0.361												
Bromomethane							C	0.50	0.404	D	1.0	0.355	E	2.0	0.246
	F	5.0	0.232	G	10	0.223	H	20	0.205	I	40	0.204	J	60	0.208
Chloroethane							C	0.50	0.194	D	1.0	0.183	E	2.0	0.143
	F	5.0	0.181	G	10	0.172	H	20	0.160	I	40	0.165	J	60	0.166
	K	80	0.172												
Trichlorofluoromethane	A	0.10	0.357	B	0.20	0.430	C	0.50	0.418	D	1.0	0.457	E	2.0	0.376
	F	5.0	0.431	G	10	0.459	H	20	0.429	I	40	0.440	J	60	0.452
	K	80	0.465												
1,1-Dichloroethene				B	0.20	0.208	C	0.50	0.200	D	1.0	0.235	E	2.0	0.182
	F	5.0	0.214	G	10	0.225	H	20	0.207	I	40	0.217	J	60	0.223
	K	80	0.230												
Acetone	A	4.0	0.0385	B	8.0	0.0375	C	20	0.0367	D	40	0.0372	E	80	0.0330
	F	100	0.0338	G	200	0.0364	H	400	0.0386	I	800	0.0362	J	1600	0.0381
	K	2000	0.0402												
Carbon Disulfide	A	0.10	0.777	B	0.20	0.863	C	0.50	0.760	D	1.0	0.793	E	2.0	0.658
	F	5.0	0.769	G	10	0.822	H	20	0.756	I	40	0.799	J	60	0.823
	K	80	0.857												
Methylene Chloride							C	0.50	0.400	D	1.0	0.333	E	2.0	0.263
	F	5.0	0.261	G	10	0.272	H	20	0.248	I	40	0.252	J	60	0.259
	K	80	0.265												

Results flagged with an asterisk (*) indicate values outside control criteria.

† SPCC Compound **‡ CCC Compound**

Client: Sealaska Environmental Services, LLC **Service Request:** K1410790
Project: JBLM LTM Log Center/TO-01 **Calibration Date:** 10/08/2014

Initial Calibration Summary
Volatile Organic Compounds

Calibration ID: CAL13596 **Column:** MS
Instrument ID: MS27

Analyte Name	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF
Methyl tert-Butyl Ether	A	0.20	0.443	B	0.40	0.594	C	1.0	0.563	D	2.0	0.583	E	4.0	0.495
	F	10	0.556	G	20	0.600	H	40	0.562	I	80	0.568	J	120	0.584
	K	160	0.602												
trans-1,2-Dichloroethene				B	0.20	0.245	C	0.50	0.256	D	1.0	0.255	E	2.0	0.203
	F	5.0	0.240	G	10	0.260	H	20	0.243	I	40	0.247	J	60	0.256
	K	80	0.263												
1,1-Dichloroethane	A	0.10	0.435	B	0.20	0.457	C	0.50	0.432	D	1.0	0.453	E	2.0	0.386
	F	5.0	0.441	G	10	0.470	H	20	0.431	I	40	0.443	J	60	0.455
	K	80	0.466												
2,2-Dichloropropane				B	0.20	0.384	C	0.50	0.372	D	1.0	0.398	E	2.0	0.307
	F	5.0	0.349	G	10	0.366	H	20	0.339	I	40	0.348	J	60	0.350
	K	80	0.357												
cis-1,2-Dichloroethene	A	0.10	0.284	B	0.20	0.256	C	0.50	0.283	D	1.0	0.311	E	2.0	0.253
	F	5.0	0.283	G	10	0.301	H	20	0.274	I	40	0.286	J	60	0.296
	K	80	0.298												
2-Butanone (MEK)	A	4.0	0.0159	B	8.0	0.0179	C	20	0.0155	D	40	0.0164	E	80	0.0148
	F	100	0.0146	G	200	0.0160	H	400	0.0169	I	800	0.0163	J	1600	0.0170
	K	2000	0.0181												
Bromochloromethane				B	0.20	0.116	C	0.50	0.110	D	1.0	0.127	E	2.0	0.110
	F	5.0	0.132	G	10	0.138	H	20	0.131	I	40	0.135	J	60	0.139
	K	80	0.139												
Chloroform	A	0.10	0.376	B	0.20	0.497	C	0.50	0.421	D	1.0	0.479	E	2.0	0.400
	F	5.0	0.448	G	10	0.481	H	20	0.449	I	40	0.462	J	60	0.470
	K	80	0.483												
1,1,1-Trichloroethane (TCA)	A	0.10	0.352	B	0.20	0.375	C	0.50	0.402	D	1.0	0.422	E	2.0	0.330
	F	5.0	0.390	G	10	0.419	H	20	0.387	I	40	0.400	J	60	0.411
	K	80	0.421												
Carbon Tetrachloride	A	0.10	0.289	B	0.20	0.356	C	0.50	0.325	D	1.0	0.371	E	2.0	0.295
	F	5.0	0.345	G	10	0.365	H	20	0.348	I	40	0.359	J	60	0.370
	K	80	0.381												
1,1-Dichloropropene	A	0.10	0.313	B	0.20	0.350	C	0.50	0.315	D	1.0	0.348	E	2.0	0.293
	F	5.0	0.332	G	10	0.356	H	20	0.326	I	40	0.343	J	60	0.348
	K	80	0.360												
Benzene	A	0.10	1.29	B	0.20	1.13	C	0.50	1.10	D	1.0	1.10	E	2.0	0.900
	F	5.0	1.02	G	10	1.08	H	20	0.991	I	40	1.03	J	60	1.06
	K	80	1.08												

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† SPCC Compound **‡ CCC Compound**

Client: Sealaska Environmental Services, LLC **Service Request:** K1410790
Project: JBLM LTM Log Center/TO-01 **Calibration Date:** 10/08/2014

Initial Calibration Summary
Volatile Organic Compounds

Calibration ID: CAL13596 **Column:** MS
Instrument ID: MS27

Analyte Name	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF
1,2-Dichloroethane (EDC)	A	0.10	0.257	B	0.20	0.301	C	0.50	0.299	D	1.0	0.323	E	2.0	0.278
	F	5.0	0.299	G	10	0.320	H	20	0.298	I	40	0.303	J	60	0.308
	K	80	0.312												
Trichloroethene (TCE)	A	0.10	0.303	B	0.20	0.279	C	0.50	0.266	D	1.0	0.285	E	2.0	0.229
	F	5.0	0.277	G	10	0.284	H	20	0.263	I	40	0.273	J	60	0.280
	K	80	0.290												
1,2-Dichloropropane	A	0.10	0.266	B	0.20	0.243	C	0.50	0.268	D	1.0	0.273	E	2.0	0.234
	F	5.0	0.262	G	10	0.279	H	20	0.263	I	40	0.268	J	60	0.276
	K	80	0.281												
Dibromomethane	A	0.10	0.137	B	0.20	0.147	C	0.50	0.146	D	1.0	0.160	E	2.0	0.125
	F	5.0	0.142	G	10	0.151	H	20	0.141	I	40	0.143	J	60	0.147
	K	80	0.152												
Bromodichloromethane	A	0.10	0.356	B	0.20	0.338	C	0.50	0.352	D	1.0	0.344	E	2.0	0.294
	F	5.0	0.325	G	10	0.358	H	20	0.336	I	40	0.343	J	60	0.355
	K	80	0.366												
cis-1,3-Dichloropropene	A	0.10	0.391	B	0.20	0.422	C	0.50	0.400	D	1.0	0.405	E	2.0	0.358
	F	5.0	0.395	G	10	0.429	H	20	0.402	I	40	0.414	J	60	0.427
	K	80	0.435												
4-Methyl-2-pentanone (MIBK)	A	4.0	0.0695	B	8.0	0.0665	C	20	0.0563	D	40	0.0590	E	80	0.0516
	F	100	0.0515	G	200	0.0564	H	400	0.0603	I	800	0.0574			
Toluene	A	0.10	0.600	B	0.20	0.728	C	0.50	0.659	D	1.0	0.680	E	2.0	0.563
	F	5.0	0.637	G	10	0.688	H	20	0.639	I	40	0.659	J	60	0.683
	K	80	0.702												
trans-1,3-Dichloropropene				B	0.20	0.698	C	0.50	0.774	D	1.0	0.838	E	2.0	0.666
	F	5.0	0.795	G	10	0.844	H	20	0.792	I	40	0.823	J	60	0.837
	K	80	0.861												
1,1,2-Trichloroethane				B	0.20	0.401	C	0.50	0.380	D	1.0	0.441	E	2.0	0.354
	F	5.0	0.418	G	10	0.432	H	20	0.404	I	40	0.420	J	60	0.422
	K	80	0.430												
Tetrachloroethene (PCE)	A	0.10	0.523	B	0.20	0.598	C	0.50	0.581	D	1.0	0.584	E	2.0	0.489
	F	5.0	0.540	G	10	0.572	H	20	0.543	I	40	0.575	J	60	0.577
	K	80	0.591												
2-Hexanone	A	4.0	0.0394	B	8.0	0.0453	C	20	0.0420	D	40	0.0448	E	80	0.0384
	F	100	0.0388	G	200	0.0421	H	400	0.0461	I	800	0.0446			

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Client: Sealaska Environmental Services, LLC **Service Request:** K1410790
Project: JBLM LTM Log Center/TO-01 **Calibration Date:** 10/08/2014

Initial Calibration Summary
Volatile Organic Compounds

Calibration ID: CAL13596 **Column:** MS
Instrument ID: MS27

Analyte Name	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF
1,3-Dichloropropane	A	0.10	0.805	B	0.20	0.794	C	0.50	0.826	D	1.0	0.829	E	2.0	0.691
	F	5.0	0.805	G	10	0.837	H	20	0.794	I	40	0.810	J	60	0.811
	K	80	0.833												
Dibromochloromethane	A	0.10	0.603	B	0.20	0.594	C	0.50	0.542	D	1.0	0.620	E	2.0	0.505
	F	5.0	0.589	G	10	0.627	H	20	0.602	I	40	0.624	J	60	0.632
	K	80	0.650												
1,2-Dibromoethane (EDB)	A	0.10	0.453	B	0.20	0.512	C	0.50	0.498	D	1.0	0.505	E	2.0	0.413
	F	5.0	0.476	G	10	0.494	H	20	0.472	I	40	0.483	J	60	0.488
	K	80	0.498												
Chlorobenzene	A	0.10	1.60	B	0.20	1.80	C	0.50	1.79	D	1.0	1.86	E	2.0	1.52
	F	5.0	1.76	G	10	1.83	H	20	1.74	I	40	1.80	J	60	1.81
	K	80	1.86												
Ethylbenzene	A	0.10	0.960	B	0.20	0.907	C	0.50	0.931	D	1.0	1.01	E	2.0	0.812
	F	5.0	0.907	G	10	0.949	H	20	0.913	I	40	0.951	J	60	0.963
	K	80	0.994												
1,1,1,2-Tetrachloroethane	A	0.10	0.634	B	0.20	0.613	C	0.50	0.660	D	1.0	0.654	E	2.0	0.541
	F	5.0	0.635	G	10	0.660	H	20	0.625	I	40	0.649	J	60	0.655
	K	80	0.670												
m,p-Xylenes	A	0.20	0.922	B	0.40	1.12	C	1.0	1.12	D	2.0	1.17	E	4.0	0.962
	F	10	1.11	G	20	1.16	H	40	1.12	I	80	1.17	J	120	1.19
o-Xylene	A	0.10	1.05	B	0.20	1.06	C	0.50	1.11	D	1.0	1.16	E	2.0	0.955
	F	5.0	1.11	G	10	1.15	H	20	1.08	I	40	1.12	J	60	1.14
	K	80	1.17												
Styrene	A	0.10	0.897	B	0.20	0.861	C	0.50	0.878	D	1.0	0.920	E	2.0	0.740
	F	5.0	0.901	G	10	0.932	H	20	0.904	I	40	0.941	J	60	0.953
	K	80	0.950												
Bromoform				B	0.20	0.389	C	0.50	0.380	D	1.0	0.374	E	2.0	0.303
	F	5.0	0.349	G	10	0.382	H	20	0.368	I	40	0.392	J	60	0.396
	K	80	0.408												
Isopropylbenzene	A	0.10	2.17	B	0.20	2.92	C	0.50	2.78	D	1.0	2.90	E	2.0	2.43
	F	5.0	2.80	G	10	2.97	H	20	2.82	I	40	2.98	J	60	3.01
	K	80	3.10												
1,1,2,2-Tetrachloroethane				B	0.20	0.484	C	0.50	0.593	D	1.0	0.548	E	2.0	0.459
	F	5.0	0.504	G	10	0.541	H	20	0.516	I	40	0.535	J	60	0.524
	K	80	0.538												

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Client: Sealaska Environmental Services, LLC **Service Request:** K1410790
Project: JBLM LTM Log Center/TO-01 **Calibration Date:** 10/08/2014

Initial Calibration Summary
Volatile Organic Compounds

Calibration ID: CAL13596 **Column:** MS
Instrument ID: MS27

Analyte Name	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF
Bromobenzene	A	0.10	0.696	B	0.20	0.791	C	0.50	0.769	D	1.0	0.833	E	2.0	0.679
	F	5.0	0.741	G	10	0.790	H	20	0.747	I	40	0.771	J	60	0.776
	K	80	0.799												
n-Propylbenzene	A	0.10	3.43	B	0.20	3.46	C	0.50	3.32	D	1.0	3.60	E	2.0	2.94
	F	5.0	3.37	G	10	3.53	H	20	3.35	I	40	3.52	J	60	3.56
1,2,3-Trichloropropane							C	0.50	0.180	D	1.0	0.164	E	2.0	0.135
	F	5.0	0.151	G	10	0.159	H	20	0.148	I	40	0.149	J	60	0.150
	K	80	0.150												
2-Chlorotoluene	A	0.10	1.83	B	0.20	1.99	C	0.50	2.04	D	1.0	2.12	E	2.0	1.79
	F	5.0	1.98	G	10	2.08	H	20	1.97	I	40	2.06	J	60	2.06
	K	80	2.13												
1,3,5-Trimethylbenzene	A	0.10	2.15	B	0.20	2.58	C	0.50	2.34	D	1.0	2.59	E	2.0	2.11
	F	5.0	2.40	G	10	2.49	H	20	2.37	I	40	2.50	J	60	2.52
	K	80	2.58												
4-Chlorotoluene	A	0.10	2.02	B	0.20	2.39	C	0.50	2.17	D	1.0	2.30	E	2.0	1.86
	F	5.0	2.10	G	10	2.23	H	20	2.11	I	40	2.19	J	60	2.20
	K	80	2.26												
tert-Butylbenzene	A	0.10	1.98	B	0.20	2.23	C	0.50	2.17	D	1.0	2.21	E	2.0	1.77
	F	5.0	2.08	G	10	2.15	H	20	2.04	I	40	2.14	J	60	2.15
	K	80	2.22												
1,2,4-Trimethylbenzene	A	0.10	2.36	B	0.20	2.64	C	0.50	2.40	D	1.0	2.51	E	2.0	2.10
	F	5.0	2.41	G	10	2.54	H	20	2.42	I	40	2.52	J	60	2.53
	K	80	2.62												
sec-Butylbenzene	A	0.10	2.83	B	0.20	2.86	C	0.50	2.94	D	1.0	3.14	E	2.0	2.64
	F	5.0	2.98	G	10	3.14	H	20	2.97	I	40	3.12	J	60	3.16
	K	80	3.26												
4-Isopropyltoluene	A	0.10	2.17	B	0.20	2.50	C	0.50	2.44	D	1.0	2.61	E	2.0	2.17
	F	5.0	2.48	G	10	2.64	H	20	2.49	I	40	2.62	J	60	2.64
	K	80	2.73												
1,3-Dichlorobenzene	A	0.10	1.45	B	0.20	1.51	C	0.50	1.49	D	1.0	1.55	E	2.0	1.29
	F	5.0	1.42	G	10	1.50	H	20	1.42	I	40	1.47	J	60	1.47
	K	80	1.51												
1,4-Dichlorobenzene	A	0.10	1.47	B	0.20	1.61	C	0.50	1.44	D	1.0	1.57	E	2.0	1.31
	F	5.0	1.43	G	10	1.50	H	20	1.42	I	40	1.46	J	60	1.47
	K	80	1.51												

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Client: Sealaska Environmental Services, LLC **Service Request:** K1410790
Project: JBLM LTM Log Center/TO-01 **Calibration Date:** 10/08/2014

Initial Calibration Summary
Volatile Organic Compounds

Calibration ID: CAL13596 **Column:** MS
Instrument ID: MS27

Analyte Name	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF
n-Butylbenzene	A	0.10	2.41	B	0.20	2.52	C	0.50	2.28	D	1.0	2.46	E	2.0	2.03
	F	5.0	2.29	G	10	2.40	H	20	2.27	I	40	2.40	J	60	2.42
	K	80	2.49												
1,2-Dichlorobenzene				B	0.20	1.44	C	0.50	1.38	D	1.0	1.41	E	2.0	1.16
	F	5.0	1.30	G	10	1.38	H	20	1.30	I	40	1.34	J	60	1.35
	K	80	1.38												
1,2-Dibromo-3-chloropropane							C	0.50	0.0871	D	1.0	0.0832	E	2.0	0.0732
	F	5.0	0.0808	G	10	0.0822	H	20	0.0785	I	40	0.0801	J	60	0.0818
	K	80	0.0868												
1,2,4-Trichlorobenzene				B	0.20	1.17	C	0.50	1.05	D	1.0	1.08	E	2.0	0.895
	F	5.0	0.986	G	10	1.03	H	20	0.973	I	40	1.01	J	60	1.01
	K	80	1.04												
Hexachlorobutadiene				B	0.20	0.458	C	0.50	0.445	D	1.0	0.466	E	2.0	0.393
	F	5.0	0.431	G	10	0.452	H	20	0.420	I	40	0.431	J	60	0.434
	K	80	0.452												
Naphthalene				B	0.20	1.96	C	0.50	1.72	D	1.0	1.73	E	2.0	1.49
	F	5.0	1.66	G	10	1.76	H	20	1.67	I	40	1.75	J	60	1.79
	K	80	1.87												
1,2,3-Trichlorobenzene				B	0.20	1.03	C	0.50	0.912	D	1.0	0.945	E	2.0	0.775
	F	5.0	0.873	G	10	0.901	H	20	0.860	I	40	0.891	J	60	0.899
	K	80	0.928												
Dibromofluoromethane	A	10	0.268	B	10	0.270	C	10	0.268	D	10	0.273	E	10	0.271
	F	10	0.272	G	10	0.274	H	10	0.275	I	10	0.276	J	10	0.281
	K	10	0.284												
1,2-Dichloroethane-d4	A	10	0.254	B	10	0.256	C	10	0.257	D	10	0.250	E	10	0.251
	F	10	0.254	G	10	0.252	H	10	0.257	I	10	0.245	J	10	0.250
	K	10	0.247												
Toluene-d8	A	10	0.993	B	10	0.995	C	10	0.998	D	10	1.00	E	10	0.989
	F	10	0.993	G	10	1.01	H	10	1.01	I	10	0.996	J	10	1.01
	K	10	1.01												
4-Bromofluorobenzene	A	10	0.907	B	10	0.906	C	10	0.905	D	10	0.893	E	10	0.890
	F	10	0.914	G	10	0.905	H	10	0.923	I	10	0.921	J	10	0.921
	K	10	0.908												

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Client: Sealaska Environmental Services, LLC **Service Request:** K1410790
Project: JBLM LTM Log Center/TO-01 **Calibration Date:** 10/08/2014

Initial Calibration Summary
Volatile Organic Compounds

Calibration ID: CAL13596 **Column:** MS
Instrument ID: MS27

		Calibration Evaluation					RRF Evaluation		
Analyte Name	**Compound Type**	**Fit Type**	**Eval.**	**Eval. Result**	**Q**	**Control Criteria**	**Average RRF**	**Q**	**Minimum RRF**
Dichlorodifluoromethane	MS	AverageRF	% RSD	8.0		≤ 20	0.316		0.100
Chloromethane	MS	AverageRF	% RSD	11.7		≤ 20	0.376		0.100
Vinyl Chloride	MS	AverageRF	% RSD	8.7		≤ 20	0.340		0.100
Bromomethane	MS	Linear	R2	1.000		≥ 0.990	0.260		0.100
Chloroethane	MS	AverageRF	% RSD	8.6		≤ 20	0.171		0.100
Trichlorofluoromethane	MS	AverageRF	% RSD	8.0		≤ 20	0.429		0.100
1,1-Dichloroethene	MS	AverageRF	% RSD	7.3		≤ 20	0.214		.100
Acetone	MS	AverageRF	% RSD	5.7		≤ 20	0.0369		0.01
Carbon Disulfide	MS	AverageRF	% RSD	7.2		≤ 20	0.789		0.100
Methylene Chloride	MS	AverageRF	% RSD	17.7		≤ 20	0.284		0.100
Methyl tert-Butyl Ether	MS	AverageRF	% RSD	8.7		≤ 20	0.559		0.100
trans-1,2-Dichloroethene	MS	AverageRF	% RSD	6.9		≤ 20	0.247		0.100
1,1-Dichloroethane	MS	AverageRF	% RSD	5.2		≤ 20	0.443		.200
2,2-Dichloropropane	MS	AverageRF	% RSD	7.1		≤ 20	0.357		0.01
cis-1,2-Dichloroethene	MS	AverageRF	% RSD	6.3		≤ 20	0.284		0.100
2-Butanone (MEK)	MS	AverageRF	% RSD	6.9		≤ 20	0.0163		0.01
Bromochloromethane	MS	AverageRF	% RSD	8.9		≤ 20	0.128		0.01
Chloroform	MS	AverageRF	% RSD	8.4		≤ 20	0.452		0.200
1,1,1-Trichloroethane (TCA)	MS	AverageRF	% RSD	7.6		≤ 20	0.392		.100
Carbon Tetrachloride	MS	AverageRF	% RSD	8.9		≤ 20	0.346		0.100
1,1-Dichloropropene	MS	AverageRF	% RSD	6.3		≤ 20	0.335		0.01
Benzene	MS	AverageRF	% RSD	9.1		≤ 20	1.07		0.500
1,2-Dichloroethane (EDC)	MS	AverageRF	% RSD	6.2		≤ 20	0.300		0.100
Trichloroethene (TCE)	MS	AverageRF	% RSD	6.9		≤ 20	0.275		0.200
1,2-Dichloropropane	MS	AverageRF	% RSD	5.5		≤ 20	0.265		0.100
Dibromomethane	MS	AverageRF	% RSD	6.3		≤ 20	0.145		0.01
Bromodichloromethane	MS	AverageRF	% RSD	5.8		≤ 20	0.343		0.200
cis-1,3-Dichloropropene	MS	AverageRF	% RSD	5.4		≤ 20	0.407		0.200
4-Methyl-2-pentanone (MIBK)	MS	AverageRF	% RSD	10.3		≤ 20	0.0587		0.01
Toluene	MS	AverageRF	% RSD	7.1		≤ 20	0.658		0.400
trans-1,3-Dichloropropene	MS	AverageRF	% RSD	8.1		≤ 20	0.793		0.100
1,1,2-Trichloroethane	MS	AverageRF	% RSD	6.5		≤ 20	0.410		.100
Tetrachloroethene (PCE)	MS	AverageRF	% RSD	6.0		≤ 20	0.561		0.200
2-Hexanone	MS	AverageRF	% RSD	7.0		≤ 20	0.0424		0.015
1,3-Dichloropropane	MS	AverageRF	% RSD	5.0		≤ 20	0.803		0.01
Dibromochloromethane	MS	AverageRF	% RSD	7.0		≤ 20	0.599		0.100
1,2-Dibromoethane (EDB)	MS	AverageRF	% RSD	5.8		≤ 20	0.481		0.100
Chlorobenzene	MS	AverageRF	% RSD	6.1		≤ 20	1.76		0.500
Ethylbenzene	MS	AverageRF	% RSD	5.7		≤ 20	0.936		0.100
1,1,1,2-Tetrachloroethane	MS	AverageRF	% RSD	5.6		≤ 20	0.636		.01
m,p-Xylenes	MS	AverageRF	% RSD	8.2		≤ 20	1.10		0.100
o-Xylene	MS	AverageRF	% RSD	5.7		≤ 20	1.10		0.300

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Client: Sealaska Environmental Services, LLC **Service Request:** K1410790
Project: JBLM LTM Log Center/TO-01 **Calibration Date:** 10/08/2014

Initial Calibration Summary
Volatile Organic Compounds

Calibration ID: CAL13596 **Column:** MS
Instrument ID: MS27

Analyte Name	Compound Type	Calibration Evaluation					RRF Evaluation		
		Fit Type	Eval.	Eval. Result	Q	Control Criteria	Average RRF	Q	Minimum RRF
Styrene	MS	AverageRF	% RSD	6.7		≤ 20	0.898		0.300
Bromoform	MS	AverageRF	% RSD	8.0		≤ 20	0.374		0.100
Isopropylbenzene	MS	AverageRF	% RSD	9.8		≤ 20	2.81		0.100
1,1,2,2-Tetrachloroethane	MS	AverageRF	% RSD	7.1		≤ 20	0.524		.300
Bromobenzene	MS	AverageRF	% RSD	5.9		≤ 20	0.763		0.01
n-Propylbenzene	MS	AverageRF	% RSD	5.5		≤ 20	3.41		0.01
1,2,3-Trichloropropane	MS	AverageRF	% RSD	8.3		≤ 20	0.154		0.01
2-Chlorotoluene	MS	AverageRF	% RSD	5.5		≤ 20	2.00		0.01
1,3,5-Trimethylbenzene	MS	AverageRF	% RSD	6.9		≤ 20	2.42		0.01
4-Chlorotoluene	MS	AverageRF	% RSD	6.7		≤ 20	2.17		0.01
tert-Butylbenzene	MS	AverageRF	% RSD	6.4		≤ 20	2.10		0.01
1,2,4-Trimethylbenzene	MS	AverageRF	% RSD	6.1		≤ 20	2.46		0.01
sec-Butylbenzene	MS	AverageRF	% RSD	6.0		≤ 20	3.00		0.01
4-Isopropyltoluene	MS	AverageRF	% RSD	7.4		≤ 20	2.50		0.01
1,3-Dichlorobenzene	MS	AverageRF	% RSD	4.8		≤ 20	1.46		0.600
1,4-Dichlorobenzene	MS	AverageRF	% RSD	5.3		≤ 20	1.47		0.500
n-Butylbenzene	MS	AverageRF	% RSD	5.8		≤ 20	2.36		0.01
1,2-Dichlorobenzene	MS	AverageRF	% RSD	5.8		≤ 20	1.34		0.400
1,2-Dibromo-3-chloropropane	MS	AverageRF	% RSD	5.2		≤ 20	0.0815		0.025
1,2,4-Trichlorobenzene	MS	AverageRF	% RSD	6.9		≤ 20	1.02		0.200
Hexachlorobutadiene	MS	AverageRF	% RSD	4.8		≤ 20	0.438		0.01
Naphthalene	MS	AverageRF	% RSD	7.3		≤ 20	1.74		0.01
1,2,3-Trichlorobenzene	MS	AverageRF	% RSD	7.1		≤ 20	0.901		0.01
Dibromofluoromethane	SURR	AverageRF	% RSD	1.8		≤ 20	0.274		0.01
1,2-Dichloroethane-d4	SURR	AverageRF	% RSD	1.6		≤ 20	0.252		0.01
Toluene-d8	SURR	AverageRF	% RSD	0.8		≤ 20	1.00		0.01
4-Bromofluorobenzene	SURR	AverageRF	% RSD	1.2		≤ 20	0.908		0.01

Results flagged with an asterisk (*) indicate values outside control criteria.

† SPCC Compound **‡ CCC Compound**

QA/QC Results

Client: Sealaska Environmental Services, LLC
Project: JBLM LTM Log Center/TO-01

Service Request: K1410790
Calibration Date: 10/08/2014
Date Analyzed: 10/08/2014 - 10/09/2014

Second Source Calibration Verification
Volatile Organic Compounds

Calibration Type: Internal Standard
Analysis Method: 8260C

Calibration ID: CAL13596
Units: PPB

File ID: J:\MS27\DATA\100814\1008F017.D
J:\MS27\DATA\100814\1008F021.D

Analyte Name	Expected	Result	Average RF	SSV RF	%D	%Drift	Criteria	Curve Fit
Dichlorodifluoromethane	10	11	0.316	0.333	5	NA	± 30 %	AverageRF
Chloromethane	10	8.6	0.376	0.324	-14	NA	± 30 %	AverageRF
Vinyl Chloride	10	10	0.340	0.357	5	NA	± 30 %	AverageRF
Bromomethane	10	8.5	0.260	0.184	NA	-15	± 30 %	Linear
Chloroethane	10	12	0.171	0.206	21	NA	± 30 %	AverageRF
Trichlorofluoromethane	10	9.5	0.429	0.406	-5	NA	± 30 %	AverageRF
1,1-Dichloroethene	10	11	0.214	0.228	7	NA	± 30 %	AverageRF
Acetone	50	54	0.0369	0.0399	8	NA	± 30 %	AverageRF
Carbon Disulfide	20	20	0.789	0.796	1	NA	± 30 %	AverageRF
Methylene Chloride	10	8.9	0.284	0.253	-11	NA	± 30 %	AverageRF
Methyl tert-Butyl Ether	10	10	0.559	0.565	1	NA	± 30 %	AverageRF
trans-1,2-Dichloroethene	10	11	0.247	0.265	7	NA	± 30 %	AverageRF
1,1-Dichloroethane	10	11	0.443	0.485	10	NA	± 30 %	AverageRF
2,2-Dichloropropane	10	9.6	0.357	0.342	-4	NA	± 30 %	AverageRF
cis-1,2-Dichloroethene	10	10	0.284	0.296	4	NA	± 30 %	AverageRF
2-Butanone (MEK)	50	52	0.0163	0.0170	4	NA	± 30 %	AverageRF
Bromochloromethane	10	11	0.128	0.141	11	NA	± 30 %	AverageRF
Chloroform	10	12	0.452	0.547	21	NA	± 30 %	AverageRF
1,1,1-Trichloroethane (TCA)	10	11	0.392	0.412	5	NA	± 30 %	AverageRF
Carbon Tetrachloride	10	10	0.346	0.362	5	NA	± 30 %	AverageRF
1,1-Dichloropropene	10	11	0.335	0.356	6	NA	± 30 %	AverageRF
Benzene	10	10	1.07	1.07	0	NA	± 30 %	AverageRF
1,2-Dichloroethane (EDC)	10	11	0.300	0.319	6	NA	± 30 %	AverageRF
Trichloroethene (TCE)	10	10	0.275	0.280	2	NA	± 30 %	AverageRF
1,2-Dichloropropane	10	10	0.265	0.274	3	NA	± 30 %	AverageRF
Dibromomethane	10	10	0.145	0.146	1	NA	± 30 %	AverageRF
Bromodichloromethane	10	10	0.343	0.355	4	NA	± 30 %	AverageRF
cis-1,3-Dichloropropene	10	10	0.407	0.409	1	NA	± 30 %	AverageRF
4-Methyl-2-pentanone (MIBK)	50	51	0.0587	0.0597	2	NA	± 30 %	AverageRF
Toluene	10	10	0.658	0.671	2	NA	± 30 %	AverageRF
trans-1,3-Dichloropropene	10	9.6	0.793	0.764	-4	NA	± 30 %	AverageRF
1,1,2-Trichloroethane	10	10	0.410	0.419	2	NA	± 30 %	AverageRF
Tetrachloroethene (PCE)	10	10	0.561	0.580	3	NA	± 30 %	AverageRF
2-Hexanone	50	54	0.0424	0.0455	7	NA	± 30 %	AverageRF
1,3-Dichloropropane	10	10	0.803	0.824	3	NA	± 30 %	AverageRF
Dibromochloromethane	10	10	0.599	0.624	4	NA	± 30 %	AverageRF
1,2-Dibromoethane (EDB)	10	10	0.481	0.484	1	NA	± 30 %	AverageRF
Chlorobenzene	10	10	1.76	1.82	3	NA	± 30 %	AverageRF
Ethylbenzene	10	9.9	0.936	0.923	-1	NA	± 30 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† SPCC Compound **‡ CCC Compound**

QA/QC Results

Client: Sealaska Environmental Services, LLC
Project: JBLM LTM Log Center/TO-01

Service Request: K1410790
Calibration Date: 10/08/2014
Date Analyzed: 10/08/2014 - 10/09/2014

Second Source Calibration Verification
Volatile Organic Compounds

Calibration Type: Internal Standard
Analysis Method: 8260C

Calibration ID: CAL13596
Units: PPB

Analyte Name	Expected	Result	Average RF	SSV RF	%D	%Drift	Criteria	Curve Fit
1,1,1,2-Tetrachloroethane	10	10	0.636	0.638	0	NA	± 30 %	AverageRF
m,p-Xylenes	20	21	1.10	1.16	5	NA	± 30 %	AverageRF
o-Xylene	10	10	1.10	1.13	3	NA	± 30 %	AverageRF
Styrene	10	10	0.898	0.914	2	NA	± 30 %	AverageRF
Bromoform	10	10	0.374	0.381	2	NA	± 30 %	AverageRF
Isopropylbenzene	10	10	2.81	2.90	3	NA	± 30 %	AverageRF
1,1,2,2-Tetrachloroethane	10	9.8	0.524	0.512	-2	NA	± 30 %	AverageRF
Bromobenzene	10	10	0.763	0.783	3	NA	± 30 %	AverageRF
n-Propylbenzene	10	10	3.41	3.43	1	NA	± 30 %	AverageRF
1,2,3-Trichloropropane	10	9.8	0.154	0.151	-2	NA	± 30 %	AverageRF
2-Chlorotoluene	10	10	2.00	2.06	3	NA	± 30 %	AverageRF
1,3,5-Trimethylbenzene	10	10	2.42	2.46	2	NA	± 30 %	AverageRF
4-Chlorotoluene	10	10	2.17	2.16	0	NA	± 30 %	AverageRF
tert-Butylbenzene	10	10	2.10	2.13	1	NA	± 30 %	AverageRF
1,2,4-Trimethylbenzene	10	10	2.46	2.45	0	NA	± 30 %	AverageRF
sec-Butylbenzene	10	9.9	3.00	2.97	-1	NA	± 30 %	AverageRF
4-Isopropyltoluene	10	10	2.50	2.61	5	NA	± 30 %	AverageRF
1,3-Dichlorobenzene	10	10	1.46	1.49	2	NA	± 30 %	AverageRF
1,4-Dichlorobenzene	10	10	1.47	1.51	3	NA	± 30 %	AverageRF
n-Butylbenzene	10	10	2.36	2.35	0	NA	± 30 %	AverageRF
1,2-Dichlorobenzene	10	10	1.34	1.36	1	NA	± 30 %	AverageRF
1,2-Dibromo-3-chloropropane	10	9.5	0.0815	0.0778	-5	NA	± 30 %	AverageRF
1,2,4-Trichlorobenzene	10	10	1.02	1.03	1	NA	± 30 %	AverageRF
Hexachlorobutadiene	10	10	0.438	0.446	2	NA	± 30 %	AverageRF
Naphthalene	10	9.8	1.74	1.71	-2	NA	± 30 %	AverageRF
1,2,3-Trichlorobenzene	10	10	0.901	0.910	1	NA	± 30 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† SPCC Compound **‡ CCC Compound**

Client: Sealaska Environmental Services, LLC
Project: JBLM LTM Log Center/TO-01

Service Request: K1410790
Date Analyzed: 10/10/2014

Continuing Calibration Verification Summary
Volatile Organic Compounds

Calibration Type: Internal Standard
Analysis Method: 8260C

Calibration Date: 09/11/2014
Calibration ID: CAL13540
Analysis Lot: KWG1413772
Units: PPB

File ID: J:\MS13\DATA\101014\1010F005.D

Analyte Name	Expected	Result	Min RF	Average RF	CCV RF	%D		%Drift	Criteria	Curve Fit
Dichlorodifluoromethane	10	12	0.100	0.282	0.334	19		NA	± 20	AverageRF
Chloromethane	10	8.2	0.100	0.393	0.322	-18		NA	± 20	AverageRF
Vinyl Chloride	10	11	0.100	0.313	0.329	5		NA	± 20	AverageRF
Bromomethane	10	9.1	0.100	0.175	0.159	-9		NA	± 20	AverageRF
Chloroethane	10	9.3	0.100	0.174	0.162	-7		NA	± 20	AverageRF
Trichlorofluoromethane	10	11	0.100	0.391	0.431	10		NA	± 20	AverageRF
1,1-Dichloroethene	10	11	.100	0.193	0.218	13		NA	± 20	AverageRF
Acetone	200	150	0.01	0.0350	0.0259	-26	*	NA	± 20	AverageRF
Carbon Disulfide	10	10	0.100	0.728	0.753	3		NA	± 20	AverageRF
Methylene Chloride	10	9.1	0.100	0.266	0.241	-9		NA	± 20	AverageRF
Methyl tert-Butyl Ether	20	17	0.100	0.428	0.366	-15		NA	± 20	AverageRF
trans-1,2-Dichloroethene	10	11	0.100	0.234	0.246	5		NA	± 20	AverageRF
1,1-Dichloroethane	10	9.7	.200	0.433	0.421	-3		NA	± 20	AverageRF
2,2-Dichloropropane	10	10	0.01	0.226	0.226	0		NA	± 20	AverageRF
cis-1,2-Dichloroethene	10	10	0.100	0.260	0.270	4		NA	± 20	AverageRF
2-Butanone (MEK)	200	160	0.01	0.0138	0.0111	-19		NA	± 20	AverageRF
Bromochloromethane	10	10	0.01	0.109	0.112	2		NA	± 20	AverageRF
Chloroform	10	9.5	0.200	0.429	0.407	-5		NA	± 20	AverageRF
1,1,1-Trichloroethane (TCA)	10	10	.100	0.335	0.345	3		NA	± 20	AverageRF
Carbon Tetrachloride	10	11	0.100	0.298	0.337	13		NA	± 20	AverageRF
1,1-Dichloropropene	10	11	0.01	0.311	0.343	10		NA	± 20	AverageRF
Benzene	10	10	0.500	1.04	1.04	0		NA	± 20	AverageRF
1,2-Dichloroethane (EDC)	10	8.9	0.100	0.288	0.255	-11		NA	± 20	AverageRF
Trichloroethene (TCE)	10	10	0.200	0.249	0.259	4		NA	± 20	AverageRF
1,2-Dichloropropane	10	9.1	0.100	0.263	0.239	-9		NA	± 20	AverageRF
Dibromomethane	10	9.3	0.01	0.117	0.109	-7		NA	± 20	AverageRF
Bromodichloromethane	10	9.3	0.200	0.314	0.292	-7		NA	± 20	AverageRF
cis-1,3-Dichloropropene	10	9.5	0.200	0.345	0.329	-5		NA	± 20	AverageRF
4-Methyl-2-pentanone (MIBK)	200	150	0.01	0.0484	0.0374	-23	*	NA	± 20	AverageRF
Toluene	10	10	0.400	0.664	0.691	4		NA	± 20	AverageRF
trans-1,3-Dichloropropene	10	9.5	0.100	0.676	0.640	-5		NA	± 20	AverageRF
1,1,2-Trichloroethane	10	9.7	.100	0.395	0.381	-3		NA	± 20	AverageRF
Tetrachloroethene (PCE)	10	12	0.200	0.541	0.665	23	*	NA	± 20	AverageRF
2-Hexanone	200	170	0.015	0.0362	0.0317	-13		NA	± 20	AverageRF
1,3-Dichloropropane	10	9.8	0.01	0.819	0.800	-2		NA	± 20	AverageRF
Dibromochloromethane	10	11	0.100	0.524	0.564	8		NA	± 20	AverageRF
1,2-Dibromoethane (EDB)	10	10	0.100	0.421	0.427	1		NA	± 20	AverageRF
Chlorobenzene	10	11	0.500	1.85	2.05	11		NA	± 20	AverageRF
Ethylbenzene	10	12	0.100	0.986	1.16	18		NA	± 20	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† SPCC Compound **‡ CCC Compound**

Client: Sealaska Environmental Services, LLC
Project: JBLM LTM Log Center/TO-01

Service Request: K1410790
Date Analyzed: 10/10/2014

Continuing Calibration Verification Summary
Volatile Organic Compounds

Calibration Type: Internal Standard
Analysis Method: 8260C

Calibration Date: 09/11/2014
Calibration ID: CAL13540
Analysis Lot: KWG1413772
Units: PPB

Analyte Name	Expected	Result	Min RF	Average RF	CCV RF	%D		%Drift	Criteria	Curve Fit
1,1,1,2-Tetrachloroethane	10	11	.01	0.582	0.655	13		NA	± 20	AverageRF
m,p-Xylenes	20	24	0.100	1.21	1.43	18		NA	± 20	AverageRF
o-Xylene	10	12	0.300	1.12	1.35	20		NA	± 20	AverageRF
Styrene	10	11	0.300	0.925	1.06	14		NA	± 20	AverageRF
Bromoform	10	11	0.100	0.291	0.321	10		NA	± 20	AverageRF
Isopropylbenzene	10	12	0.100	2.90	3.52	22	*	NA	± 20	AverageRF
1,1,2,2-Tetrachloroethane	10	8.5	.300	0.578	0.489	-15		NA	± 20	AverageRF
Bromobenzene	10	9.8	0.01	0.886	0.870	-2		NA	± 20	AverageRF
n-Propylbenzene	10	10	0.01	4.19	4.26	2		NA	± 20	AverageRF
1,2,3-Trichloropropane	10	9.0	0.01	0.170	0.153	-10		NA	± 20	AverageRF
2-Chlorotoluene	10	9.5	0.01	2.61	2.48	-5		NA	± 20	AverageRF
1,3,5-Trimethylbenzene	10	11	0.01	2.87	3.02	5		NA	± 20	AverageRF
4-Chlorotoluene	10	9.5	0.01	3.00	2.86	-5		NA	± 20	AverageRF
tert-Butylbenzene	10	11	0.01	2.36	2.59	10		NA	± 20	AverageRF
1,2,4-Trimethylbenzene	10	10	0.01	2.88	3.00	4		NA	± 20	AverageRF
sec-Butylbenzene	10	11	0.01	3.43	3.69	8		NA	± 20	AverageRF
4-Isopropyltoluene	10	11	0.01	2.85	3.18	12		NA	± 20	AverageRF
1,3-Dichlorobenzene	10	10	0.600	1.73	1.72	0		NA	± 20	AverageRF
1,4-Dichlorobenzene	10	9.5	0.500	1.80	1.71	-5		NA	± 20	AverageRF
n-Butylbenzene	10	11	0.01	2.54	2.72	7		NA	± 20	AverageRF
1,2-Dichlorobenzene	10	9.7	0.400	1.58	1.53	-3		NA	± 20	AverageRF
1,2-Dibromo-3-chloropropane	10	9.1	0.025	0.0779	0.0711	-9		NA	± 20	AverageRF
1,2,4-Trichlorobenzene	10	11	0.200	0.881	0.992	13		NA	± 20	AverageRF
Hexachlorobutadiene	10	11	0.01	0.461	0.501	9		NA	± 20	AverageRF
Naphthalene	10	10	0.01	1.28	1.57	NA		0	± 20	Quadratic(0,0)
1,2,3-Trichlorobenzene	10	11	0.01	0.749	0.814	9		NA	± 20	AverageRF
Dibromofluoromethane	10	9.9	0.01	0.213	0.211	-1		NA	± 20	AverageRF
1,2-Dichloroethane-d4	10	8.9	0.01	0.209	0.187	-11		NA	± 20	AverageRF
Toluene-d8	10	10	0.01	0.970	0.994	2		NA	± 20	AverageRF
4-Bromofluorobenzene	10	10	0.01	0.813	0.840	3		NA	± 20	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† SPCC Compound **‡ CCC Compound**

Client: Sealaska Environmental Services, LLC
Project: JBLM LTM Log Center/TO-01

Service Request: K1410790
Date Analyzed: 10/12/2014

Continuing Calibration Verification Summary
Volatile Organic Compounds

Calibration Type: Internal Standard
Analysis Method: 8260C

Calibration Date: 10/08/2014
Calibration ID: CAL13596
Analysis Lot: KWG1413816
Units: PPB

File ID: J:\MS27\DATA\101214\1012F004.D

Analyte Name	Expected	Result	Min RF	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Dichlorodifluoromethane	10	9.9	0.100	0.316	0.311	-1	NA	± 20	AverageRF
Chloromethane	10	8.8	0.100	0.376	0.330	-12	NA	± 20	AverageRF
Vinyl Chloride	10	10	0.100	0.340	0.340	0	NA	± 20	AverageRF
Bromomethane	10	10	0.100	0.260	0.214	NA	0	± 20	Linear
Chloroethane	10	9.5	0.100	0.171	0.161	-6	NA	± 20	AverageRF
Trichlorofluoromethane	10	9.9	0.100	0.429	0.424	-1	NA	± 20	AverageRF
1,1-Dichloroethene	10	9.8	.100	0.214	0.210	-2	NA	± 20	AverageRF
Acetone	200	200	0.01	0.0369	0.0376	2	NA	± 20	AverageRF
Carbon Disulfide	10	9.6	0.100	0.789	0.761	-4	NA	± 20	AverageRF
Methylene Chloride	10	9.1	0.100	0.284	0.257	-9	NA	± 20	AverageRF
Methyl tert-Butyl Ether	20	20	0.100	0.559	0.546	-2	NA	± 20	AverageRF
trans-1,2-Dichloroethene	10	9.9	0.100	0.247	0.244	-1	NA	± 20	AverageRF
1,1-Dichloroethane	10	9.8	.200	0.443	0.432	-2	NA	± 20	AverageRF
2,2-Dichloropropane	10	10	0.01	0.357	0.357	0	NA	± 20	AverageRF
cis-1,2-Dichloroethene	10	9.7	0.100	0.284	0.276	-3	NA	± 20	AverageRF
2-Butanone (MEK)	200	200	0.01	0.0163	0.0166	1	NA	± 20	AverageRF
Bromochloromethane	10	10	0.01	0.128	0.130	2	NA	± 20	AverageRF
Chloroform	10	9.7	0.200	0.452	0.437	-3	NA	± 20	AverageRF
1,1,1-Trichloroethane (TCA)	10	9.6	.100	0.392	0.375	-4	NA	± 20	AverageRF
Carbon Tetrachloride	10	9.7	0.100	0.346	0.334	-3	NA	± 20	AverageRF
1,1-Dichloropropene	10	9.8	0.01	0.335	0.329	-2	NA	± 20	AverageRF
Benzene	10	9.3	0.500	1.07	0.994	-7	NA	± 20	AverageRF
1,2-Dichloroethane (EDC)	10	9.7	0.100	0.300	0.291	-3	NA	± 20	AverageRF
Trichloroethene (TCE)	10	9.6	0.200	0.275	0.265	-4	NA	± 20	AverageRF
1,2-Dichloropropane	10	9.8	0.100	0.265	0.258	-3	NA	± 20	AverageRF
Dibromomethane	10	9.6	0.01	0.145	0.139	-4	NA	± 20	AverageRF
Bromodichloromethane	10	9.4	0.200	0.343	0.322	-6	NA	± 20	AverageRF
cis-1,3-Dichloropropene	10	9.8	0.200	0.407	0.400	-2	NA	± 20	AverageRF
4-Methyl-2-pentanone (MIBK)	200	200	0.01	0.0587	0.0578	-2	NA	± 20	AverageRF
Toluene	10	9.7	0.400	0.658	0.637	-3	NA	± 20	AverageRF
trans-1,3-Dichloropropene	10	10	0.100	0.793	0.811	2	NA	± 20	AverageRF
1,1,2-Trichloroethane	10	10	.100	0.410	0.421	3	NA	± 20	AverageRF
Tetrachloroethene (PCE)	10	10	0.200	0.561	0.577	3	NA	± 20	AverageRF
2-Hexanone	200	210	0.015	0.0424	0.0455	7	NA	± 20	AverageRF
1,3-Dichloropropane	10	10	0.01	0.803	0.818	2	NA	± 20	AverageRF
Dibromochloromethane	10	10	0.100	0.599	0.600	0	NA	± 20	AverageRF
1,2-Dibromoethane (EDB)	10	9.9	0.100	0.481	0.475	-1	NA	± 20	AverageRF
Chlorobenzene	10	10	0.500	1.76	1.79	2	NA	± 20	AverageRF
Ethylbenzene	10	10	0.100	0.936	0.942	1	NA	± 20	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† SPCC Compound **‡ CCC Compound**

Client: Sealaska Environmental Services, LLC
Project: JBLM LTM Log Center/TO-01

Service Request: K1410790
Date Analyzed: 10/12/2014

Continuing Calibration Verification Summary
Volatile Organic Compounds

Calibration Type: Internal Standard
Analysis Method: 8260C

Calibration Date: 10/08/2014
Calibration ID: CAL13596
Analysis Lot: KWG1413816
Units: PPB

Analyte Name	Expected	Result	Min RF	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
1,1,1,2-Tetrachloroethane	10	10	.01	0.636	0.647	2	NA	± 20	AverageRF
m,p-Xylenes	20	21	0.100	1.10	1.16	5	NA	± 20	AverageRF
o-Xylene	10	10	0.300	1.10	1.12	2	NA	± 20	AverageRF
Styrene	10	10	0.300	0.898	0.894	0	NA	± 20	AverageRF
Bromoform	10	9.7	0.100	0.374	0.364	-3	NA	± 20	AverageRF
Isopropylbenzene	10	10	0.100	2.81	2.93	4	NA	± 20	AverageRF
1,1,2,2-Tetrachloroethane	10	10	.300	0.524	0.531	1	NA	± 20	AverageRF
Bromobenzene	10	10	0.01	0.763	0.779	2	NA	± 20	AverageRF
n-Propylbenzene	10	10	0.01	3.41	3.54	4	NA	± 20	AverageRF
1,2,3-Trichloropropane	10	10	0.01	0.154	0.153	-1	NA	± 20	AverageRF
2-Chlorotoluene	10	10	0.01	2.00	2.07	3	NA	± 20	AverageRF
1,3,5-Trimethylbenzene	10	10	0.01	2.42	2.49	3	NA	± 20	AverageRF
4-Chlorotoluene	10	10	0.01	2.17	2.22	2	NA	± 20	AverageRF
tert-Butylbenzene	10	10	0.01	2.10	2.13	1	NA	± 20	AverageRF
1,2,4-Trimethylbenzene	10	10	0.01	2.46	2.53	3	NA	± 20	AverageRF
sec-Butylbenzene	10	11	0.01	3.00	3.17	6	NA	± 20	AverageRF
4-Isopropyltoluene	10	10	0.01	2.50	2.62	5	NA	± 20	AverageRF
1,3-Dichlorobenzene	10	10	0.600	1.46	1.51	3	NA	± 20	AverageRF
1,4-Dichlorobenzene	10	10	0.500	1.47	1.50	2	NA	± 20	AverageRF
n-Butylbenzene	10	10	0.01	2.36	2.43	3	NA	± 20	AverageRF
1,2-Dichlorobenzene	10	10	0.400	1.34	1.38	3	NA	± 20	AverageRF
1,2-Dibromo-3-chloropropane	10	9.9	0.025	0.0815	0.0806	-1	NA	± 20	AverageRF
1,2,4-Trichlorobenzene	10	10	0.200	1.02	1.03	1	NA	± 20	AverageRF
Hexachlorobutadiene	10	11	0.01	0.438	0.464	6	NA	± 20	AverageRF
Naphthalene	10	9.8	0.01	1.74	1.71	-2	NA	± 20	AverageRF
1,2,3-Trichlorobenzene	10	10	0.01	0.901	0.913	1	NA	± 20	AverageRF
Dibromofluoromethane	10	9.4	0.01	0.274	0.258	-6	NA	± 20	AverageRF
1,2-Dichloroethane-d4	10	9.9	0.01	0.252	0.249	-1	NA	± 20	AverageRF
Toluene-d8	10	9.8	0.01	1.00	0.978	-2	NA	± 20	AverageRF
4-Bromofluorobenzene	10	9.8	0.01	0.908	0.889	-2	NA	± 20	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† SPCC Compound **‡ CCC Compound**

Client: Sealaska Environmental Services, LLC
Project: JBLM LTM Log Center/TO-01

Service Request: K1410790
Date Analyzed: 10/13/2014

Continuing Calibration Verification Summary
Volatile Organic Compounds

Calibration Type: Internal Standard
Analysis Method: 8260C

Calibration Date: 09/11/2014
Calibration ID: CAL13540
Analysis Lot: KWG1413835
Units: PPB

File ID: J:\MS13\DATA\101314\1013F003.D

Analyte Name	Expected	Result	Min RF	Average RF	CCV RF	%D		%Drift	Criteria	Curve Fit
Dichlorodifluoromethane	10	11	0.100	0.282	0.320	13		NA	± 20	AverageRF
Chloromethane	10	7.5	0.100	0.393	0.296	-25	*	NA	± 20	AverageRF
Vinyl Chloride	10	9.9	0.100	0.313	0.309	-1		NA	± 20	AverageRF
Bromomethane	10	7.9	0.100	0.175	0.139	-21	*	NA	± 20	AverageRF
Chloroethane	10	9.0	0.100	0.174	0.157	-10		NA	± 20	AverageRF
Trichlorofluoromethane	10	11	0.100	0.391	0.415	6		NA	± 20	AverageRF
1,1-Dichloroethene	10	12	.100	0.193	0.222	15		NA	± 20	AverageRF
Acetone	200	140	0.01	0.0350	0.0254	-28	*	NA	± 20	AverageRF
Carbon Disulfide	10	10	0.100	0.728	0.745	2		NA	± 20	AverageRF
Methylene Chloride	10	9.7	0.100	0.266	0.258	-3		NA	± 20	AverageRF
Methyl tert-Butyl Ether	20	17	0.100	0.428	0.358	-16		NA	± 20	AverageRF
trans-1,2-Dichloroethene	10	11	0.100	0.234	0.254	9		NA	± 20	AverageRF
1,1-Dichloroethane	10	9.9	.200	0.433	0.427	-1		NA	± 20	AverageRF
2,2-Dichloropropane	10	9.1	0.01	0.226	0.207	-9		NA	± 20	AverageRF
cis-1,2-Dichloroethene	10	11	0.100	0.260	0.277	7		NA	± 20	AverageRF
2-Butanone (MEK)	200	170	0.01	0.0138	0.0114	-17		NA	± 20	AverageRF
Bromochloromethane	10	12	0.01	0.109	0.126	16		NA	± 20	AverageRF
Chloroform	10	10	0.200	0.429	0.434	1		NA	± 20	AverageRF
1,1,1-Trichloroethane (TCA)	10	10	.100	0.335	0.339	1		NA	± 20	AverageRF
Carbon Tetrachloride	10	11	0.100	0.298	0.335	12		NA	± 20	AverageRF
1,1-Dichloropropene	10	11	0.01	0.311	0.342	10		NA	± 20	AverageRF
Benzene	10	10	0.500	1.04	1.09	5		NA	± 20	AverageRF
1,2-Dichloroethane (EDC)	10	9.3	0.100	0.288	0.267	-7		NA	± 20	AverageRF
Trichloroethene (TCE)	10	11	0.200	0.249	0.269	8		NA	± 20	AverageRF
1,2-Dichloropropane	10	9.2	0.100	0.263	0.241	-8		NA	± 20	AverageRF
Dibromomethane	10	10	0.01	0.117	0.119	1		NA	± 20	AverageRF
Bromodichloromethane	10	9.8	0.200	0.314	0.306	-2		NA	± 20	AverageRF
cis-1,3-Dichloropropene	10	9.5	0.200	0.345	0.327	-5		NA	± 20	AverageRF
4-Methyl-2-pentanone (MIBK)	200	150	0.01	0.0484	0.0362	-25	*	NA	± 20	AverageRF
Toluene	10	11	0.400	0.664	0.719	8		NA	± 20	AverageRF
trans-1,3-Dichloropropene	10	9.4	0.100	0.676	0.635	-6		NA	± 20	AverageRF
1,1,2-Trichloroethane	10	11	.100	0.395	0.419	6		NA	± 20	AverageRF
Tetrachloroethene (PCE)	10	13	0.200	0.541	0.693	28	*	NA	± 20	AverageRF
2-Hexanone	200	170	0.015	0.0362	0.0305	-16		NA	± 20	AverageRF
1,3-Dichloropropane	10	11	0.01	0.819	0.869	6		NA	± 20	AverageRF
Dibromochloromethane	10	12	0.100	0.524	0.620	18		NA	± 20	AverageRF
1,2-Dibromoethane (EDB)	10	11	0.100	0.421	0.452	7		NA	± 20	AverageRF
Chlorobenzene	10	12	0.500	1.85	2.19	19		NA	± 20	AverageRF
Ethylbenzene	10	12	0.100	0.986	1.20	22	*	NA	± 20	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† SPCC Compound **‡ CCC Compound**

Client: Sealaska Environmental Services, LLC
Project: JBLM LTM Log Center/TO-01

Service Request: K1410790
Date Analyzed: 10/13/2014

Continuing Calibration Verification Summary
Volatile Organic Compounds

Calibration Type: Internal Standard
Analysis Method: 8260C

Calibration Date: 09/11/2014
Calibration ID: CAL13540
Analysis Lot: KWG1413835
Units: PPB

Analyte Name	Expected	Result	Min RF	Average RF	CCV RF	%D		%Drift	Criteria	Curve Fit
1,1,1,2-Tetrachloroethane	10	12	.01	0.582	0.696	20		NA	± 20	AverageRF
m,p-Xylenes	20	25	0.100	1.21	1.50	24	*	NA	± 20	AverageRF
o-Xylene	10	13	0.300	1.12	1.43	27	*	NA	± 20	AverageRF
Styrene	10	12	0.300	0.925	1.13	22	*	NA	± 20	AverageRF
Bromoform	10	12	0.100	0.291	0.351	21	*	NA	± 20	AverageRF
Isopropylbenzene	10	13	0.100	2.90	3.64	26	*	NA	± 20	AverageRF
1,1,2,2-Tetrachloroethane	10	9.4	.300	0.578	0.543	-6		NA	± 20	AverageRF
Bromobenzene	10	11	0.01	0.886	0.965	9		NA	± 20	AverageRF
n-Propylbenzene	10	11	0.01	4.19	4.41	5		NA	± 20	AverageRF
1,2,3-Trichloropropane	10	9.6	0.01	0.170	0.164	-4		NA	± 20	AverageRF
2-Chlorotoluene	10	10	0.01	2.61	2.66	2		NA	± 20	AverageRF
1,3,5-Trimethylbenzene	10	11	0.01	2.87	3.22	12		NA	± 20	AverageRF
4-Chlorotoluene	10	10	0.01	3.00	3.02	1		NA	± 20	AverageRF
tert-Butylbenzene	10	12	0.01	2.36	2.75	17		NA	± 20	AverageRF
1,2,4-Trimethylbenzene	10	11	0.01	2.88	3.23	12		NA	± 20	AverageRF
sec-Butylbenzene	10	11	0.01	3.43	3.88	13		NA	± 20	AverageRF
4-Isopropyltoluene	10	12	0.01	2.85	3.34	17		NA	± 20	AverageRF
1,3-Dichlorobenzene	10	11	0.600	1.73	1.90	10		NA	± 20	AverageRF
1,4-Dichlorobenzene	10	11	0.500	1.80	1.92	7		NA	± 20	AverageRF
n-Butylbenzene	10	11	0.01	2.54	2.84	12		NA	± 20	AverageRF
1,2-Dichlorobenzene	10	11	0.400	1.58	1.71	8		NA	± 20	AverageRF
1,2-Dibromo-3-chloropropane	10	9.5	0.025	0.0779	0.0739	-5		NA	± 20	AverageRF
1,2,4-Trichlorobenzene	10	13	0.200	0.881	1.11	26	*	NA	± 20	AverageRF
Hexachlorobutadiene	10	12	0.01	0.461	0.532	15		NA	± 20	AverageRF
Naphthalene	10	11	0.01	1.28	1.70	NA		8	± 20	Quadratic(0,0)
1,2,3-Trichlorobenzene	10	13	0.01	0.749	0.936	25	*	NA	± 20	AverageRF
Dibromofluoromethane	10	9.9	0.01	0.213	0.210	-1		NA	± 20	AverageRF
1,2-Dichloroethane-d4	10	8.5	0.01	0.209	0.178	-15		NA	± 20	AverageRF
Toluene-d8	10	10	0.01	0.970	0.988	2		NA	± 20	AverageRF
4-Bromofluorobenzene	10	10	0.01	0.813	0.823	1		NA	± 20	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† SPCC Compound **‡ CCC Compound**

QA/QC Results

Client: Sealaska Environmental Services, LLC
Project: JBLM LTM Log Center/TO-01

Service Request: K1410790
Date Analyzed: 10/13/2014

Continuing Calibration Verification Summary
Volatile Organic Compounds

Calibration Type: Internal Standard
Analysis Method: 8260C

Calibration Date: 10/08/2014
Calibration ID: CAL13596
Analysis Lot: KWG1413832
Units: PPB

File ID: J:\MS27\DATA\101314\1013F003.D

Analyte Name	Expected	Result	Min RF	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Dichlorodifluoromethane	10	9.2	0.100	0.316	0.289	-8	NA	± 20	AverageRF
Chloromethane	10	8.6	0.100	0.376	0.324	-14	NA	± 20	AverageRF
Vinyl Chloride	10	9.6	0.100	0.340	0.326	-4	NA	± 20	AverageRF
Bromomethane	10	9.7	0.100	0.260	0.209	NA	-3	± 20	Linear
Chloroethane	10	9.5	0.100	0.171	0.162	-5	NA	± 20	AverageRF
Trichlorofluoromethane	10	9.7	0.100	0.429	0.413	-4	NA	± 20	AverageRF
1,1-Dichloroethene	10	9.6	.100	0.214	0.206	-4	NA	± 20	AverageRF
Acetone	200	200	0.01	0.0369	0.0366	-1	NA	± 20	AverageRF
Carbon Disulfide	10	9.6	0.100	0.789	0.761	-4	NA	± 20	AverageRF
Methylene Chloride	10	9.0	0.100	0.284	0.256	-10	NA	± 20	AverageRF
Methyl tert-Butyl Ether	20	19	0.100	0.559	0.538	-4	NA	± 20	AverageRF
trans-1,2-Dichloroethene	10	9.7	0.100	0.247	0.241	-3	NA	± 20	AverageRF
1,1-Dichloroethane	10	9.9	.200	0.443	0.436	-1	NA	± 20	AverageRF
2,2-Dichloropropane	10	10	0.01	0.357	0.355	0	NA	± 20	AverageRF
cis-1,2-Dichloroethene	10	9.7	0.100	0.284	0.277	-3	NA	± 20	AverageRF
2-Butanone (MEK)	200	190	0.01	0.0163	0.0158	-3	NA	± 20	AverageRF
Bromochloromethane	10	10	0.01	0.128	0.132	3	NA	± 20	AverageRF
Chloroform	10	9.9	0.200	0.452	0.446	-1	NA	± 20	AverageRF
1,1,1-Trichloroethane (TCA)	10	9.5	.100	0.392	0.371	-5	NA	± 20	AverageRF
Carbon Tetrachloride	10	9.5	0.100	0.346	0.327	-5	NA	± 20	AverageRF
1,1-Dichloropropene	10	9.7	0.01	0.335	0.323	-4	NA	± 20	AverageRF
Benzene	10	9.3	0.500	1.07	0.996	-7	NA	± 20	AverageRF
1,2-Dichloroethane (EDC)	10	9.7	0.100	0.300	0.291	-3	NA	± 20	AverageRF
Trichloroethene (TCE)	10	9.6	0.200	0.275	0.264	-4	NA	± 20	AverageRF
1,2-Dichloropropane	10	9.9	0.100	0.265	0.261	-1	NA	± 20	AverageRF
Dibromomethane	10	9.7	0.01	0.145	0.140	-3	NA	± 20	AverageRF
Bromodichloromethane	10	9.6	0.200	0.343	0.327	-4	NA	± 20	AverageRF
cis-1,3-Dichloropropene	10	9.9	0.200	0.407	0.402	-1	NA	± 20	AverageRF
4-Methyl-2-pentanone (MIBK)	200	190	0.01	0.0587	0.0547	-7	NA	± 20	AverageRF
Toluene	10	9.5	0.400	0.658	0.628	-5	NA	± 20	AverageRF
trans-1,3-Dichloropropene	10	10	0.100	0.793	0.821	4	NA	± 20	AverageRF
1,1,2-Trichloroethane	10	10	.100	0.410	0.429	5	NA	± 20	AverageRF
Tetrachloroethene (PCE)	10	10	0.200	0.561	0.579	3	NA	± 20	AverageRF
2-Hexanone	200	200	0.015	0.0424	0.0425	0	NA	± 20	AverageRF
1,3-Dichloropropane	10	10	0.01	0.803	0.822	2	NA	± 20	AverageRF
Dibromochloromethane	10	10	0.100	0.599	0.602	1	NA	± 20	AverageRF
1,2-Dibromoethane (EDB)	10	9.9	0.100	0.481	0.475	-1	NA	± 20	AverageRF
Chlorobenzene	10	10	0.500	1.76	1.79	1	NA	± 20	AverageRF
Ethylbenzene	10	10	0.100	0.936	0.933	0	NA	± 20	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† SPCC Compound **‡ CCC Compound**

Client: Sealaska Environmental Services, LLC
Project: JBLM LTM Log Center/TO-01

Service Request: K1410790
Date Analyzed: 10/13/2014

Continuing Calibration Verification Summary
Volatile Organic Compounds

Calibration Type: Internal Standard
Analysis Method: 8260C

Calibration Date: 10/08/2014
Calibration ID: CAL13596
Analysis Lot: KWG1413832
Units: PPB

Analyte Name	Expected	Result	Min RF	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
1,1,1,2-Tetrachloroethane	10	10	.01	0.636	0.642	1	NA	± 20	AverageRF
m,p-Xylenes	20	21	0.100	1.10	1.14	4	NA	± 20	AverageRF
o-Xylene	10	10	0.300	1.10	1.11	0	NA	± 20	AverageRF
Styrene	10	10	0.300	0.898	0.922	3	NA	± 20	AverageRF
Bromoform	10	9.9	0.100	0.374	0.370	-1	NA	± 20	AverageRF
Isopropylbenzene	10	10	0.100	2.81	2.89	3	NA	± 20	AverageRF
1,1,2,2-Tetrachloroethane	10	10	.300	0.524	0.529	1	NA	± 20	AverageRF
Bromobenzene	10	10	0.01	0.763	0.785	3	NA	± 20	AverageRF
n-Propylbenzene	10	10	0.01	3.41	3.53	4	NA	± 20	AverageRF
1,2,3-Trichloropropane	10	10	0.01	0.154	0.157	2	NA	± 20	AverageRF
2-Chlorotoluene	10	10	0.01	2.00	2.08	4	NA	± 20	AverageRF
1,3,5-Trimethylbenzene	10	10	0.01	2.42	2.51	4	NA	± 20	AverageRF
4-Chlorotoluene	10	10	0.01	2.17	2.23	3	NA	± 20	AverageRF
tert-Butylbenzene	10	10	0.01	2.10	2.15	2	NA	± 20	AverageRF
1,2,4-Trimethylbenzene	10	10	0.01	2.46	2.55	4	NA	± 20	AverageRF
sec-Butylbenzene	10	10	0.01	3.00	3.13	4	NA	± 20	AverageRF
4-Isopropyltoluene	10	11	0.01	2.50	2.63	5	NA	± 20	AverageRF
1,3-Dichlorobenzene	10	10	0.600	1.46	1.52	4	NA	± 20	AverageRF
1,4-Dichlorobenzene	10	10	0.500	1.47	1.52	4	NA	± 20	AverageRF
n-Butylbenzene	10	10	0.01	2.36	2.39	1	NA	± 20	AverageRF
1,2-Dichlorobenzene	10	10	0.400	1.34	1.38	3	NA	± 20	AverageRF
1,2-Dibromo-3-chloropropane	10	9.6	0.025	0.0815	0.0782	-4	NA	± 20	AverageRF
1,2,4-Trichlorobenzene	10	10	0.200	1.02	1.03	0	NA	± 20	AverageRF
Hexachlorobutadiene	10	10	0.01	0.438	0.460	5	NA	± 20	AverageRF
Naphthalene	10	9.9	0.01	1.74	1.72	-1	NA	± 20	AverageRF
1,2,3-Trichlorobenzene	10	10	0.01	0.901	0.923	3	NA	± 20	AverageRF
Dibromofluoromethane	10	9.7	0.01	0.274	0.265	-3	NA	± 20	AverageRF
1,2-Dichloroethane-d4	10	9.8	0.01	0.252	0.247	-2	NA	± 20	AverageRF
Toluene-d8	10	9.8	0.01	1.00	0.976	-3	NA	± 20	AverageRF
4-Bromofluorobenzene	10	9.9	0.01	0.908	0.895	-2	NA	± 20	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† SPCC Compound **‡ CCC Compound**

Client: Sealaska Environmental Services, LLC **Service Request:** K1410790
Project: JBLM LTM Log Center/TO-01

Analysis Run Log
Volatile Organic Compounds

Analysis Method: 8260C **Analysis Lot:** KWG1413772
Instrument ID: MS13

File ID	Sample Name	Lab Code	Date Analysis Started	Start Time	Q	Date Analysis Finished	Finish Time
1010F004.D	GC/MS Tuning - Bromofluorobenzene	KWG1413772-1	10/10/2014	11:15		10/10/2014	11:34
1010F005.D	Continuing Calibration Verification	KWG1413772-2	10/10/2014	11:44		10/10/2014	12:03
1010F006.D	Lab Control Sample	KWG1413774-3	10/10/2014	12:23		10/10/2014	12:42
1010F007.D	Duplicate Lab Control Sample	KWG1413774-5	10/10/2014	12:50		10/10/2014	13:09
1010F008.D	LGC140929BC1-1MS	KWG1413774-1	10/10/2014	13:17		10/10/2014	13:36
1010F009.D	LGC140929BC1-1DMS	KWG1413774-2	10/10/2014	13:44		10/10/2014	14:03
1010F011.D	Method Blank	KWG1413774-4	10/10/2014	14:38		10/10/2014	14:57
1010F012.D	TB-140929	K1410790-001	10/10/2014	15:05		10/10/2014	15:24
1010F013.D	ZZZZZZ	ZZZZZZ	10/10/2014	15:32		10/10/2014	15:51
1010F014.D	ZZZZZZ	ZZZZZZ	10/10/2014	15:58		10/10/2014	16:17
1010F015.D	LGC140929LC93D1-1	K1410790-002	10/10/2014	16:25		10/10/2014	16:44
1010F016.D	LGC140929LC93D2-1	K1410790-003	10/10/2014	16:52		10/10/2014	17:11
1010F017.D	LGC140929T13B-1	K1410790-004	10/10/2014	17:19		10/10/2014	17:38
1010F018.D	LGC140929LC225-1	K1410790-005	10/10/2014	17:46		10/10/2014	18:05
1010F019.D	LGC140929T05-1	K1410790-006	10/10/2014	18:13		10/10/2014	18:32
1010F020.D	LGC140929T06-1	K1410790-007	10/10/2014	18:40		10/10/2014	18:59
1010F021.D	LGC140929T11B-1	K1410790-008	10/10/2014	19:07		10/10/2014	19:26
1010F022.D	LGC140929BC1-1	K1410790-009	10/10/2014	19:34		10/10/2014	19:53
1010F023.D	LGC140929T15-1	K1410790-011	10/10/2014	20:01		10/10/2014	20:20
1010F024.D	LGC140929DUP4-1	K1410790-012	10/10/2014	20:28		10/10/2014	20:47
1010F025.D	LGC140929LC86D1-1	K1410790-013	10/10/2014	20:55		10/10/2014	21:14
1010F026.D	LGC140929LC86D2-1	K1410790-014	10/10/2014	21:22		10/10/2014	21:41
1010F027.D	LGC140929LC102D1-1	K1410790-015	10/10/2014	21:49		10/10/2014	22:08
1010F028.D	LGC140929LC102D2-1	K1410790-016	10/10/2014	22:16		10/10/2014	22:35
1010F029.D	LGC140929LC88D1-1	K1410790-017	10/10/2014	22:43		10/10/2014	23:02

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

Client: Sealaska Environmental Services, LLC **Service Request:** K1410790
Project: JBLM LTM Log Center/TO-01

Analysis Run Log
Volatile Organic Compounds

Analysis Method: 8260C **Analysis Lot:** KWG1413835
Instrument ID: MS13

File ID	Sample Name	Lab Code	Date Analysis Started	Start Time	Q	Date Analysis Finished	Finish Time
1013F002.D	GC/MS Tuning - Bromofluorobenzene	KWG1413835-1	10/13/2014	09:28		10/13/2014	09:47
1013F003.D	Continuing Calibration Verification	KWG1413835-2	10/13/2014	09:57		10/13/2014	10:16
1013F005.D	LGC141001Well13-1MS	KWG1413840-1	10/13/2014	11:04		10/13/2014	11:23
1013F006.D	LGC141001Well13-1DMS	KWG1413840-2	10/13/2014	11:31		10/13/2014	11:50
1013F007.D	Lab Control Sample	KWG1413840-3	10/13/2014	11:58		10/13/2014	12:17
1013F008.D	Duplicate Lab Control Sample	KWG1413840-5	10/13/2014	12:25		10/13/2014	12:44
1013F010.D	Method Blank	KWG1413840-4	10/13/2014	13:19		10/13/2014	13:38
1013F011.D	ZZZZZZ	ZZZZZZ	10/13/2014	13:46		10/13/2014	14:05
1013F012.D	ZZZZZZ	ZZZZZZ	10/13/2014	14:13		10/13/2014	14:32
1013F013.D	ZZZZZZ	ZZZZZZ	10/13/2014	14:40		10/13/2014	14:59
1013F014.D	LGC140930LC03-1	K1410790-028	10/13/2014	15:07		10/13/2014	15:26
1013F015.D	LGC140930DUP9-1	K1410790-029	10/13/2014	15:34		10/13/2014	15:53
1013F016.D	LGC140930LC182-1	K1410790-030	10/13/2014	16:01		10/13/2014	16:20
1013F017.D	LGC140930LC16-1	K1410790-031	10/13/2014	16:28		10/13/2014	16:47
1013F018.D	LGC140930DUP1-1	K1410790-032	10/13/2014	16:55		10/13/2014	17:14
1013F019.D	LGC140930LC180-1	K1410790-033	10/13/2014	17:22		10/13/2014	17:41
1013F020.D	LGC141001LC223-1	K1410790-034	10/13/2014	17:49		10/13/2014	18:08
1013F021.D	LGC141001DUP3-1	K1410790-035	10/13/2014	18:16		10/13/2014	18:35
1013F022.D	LGC141001LC178-1	K1410790-036	10/13/2014	18:43		10/13/2014	19:02
1013F023.D	LGC141001Well13-1	K1410790-037	10/13/2014	19:10		10/13/2014	19:29
1013F024.D	LGC141001LC98D1-1	K1410790-038	10/13/2014	19:37		10/13/2014	19:56
1013F025.D	LGC141001DUP8-1	K1410790-039	10/13/2014	20:04		10/13/2014	20:23
1013F026.D	LGC141001LC98D2-1	K1410790-040	10/13/2014	20:30		10/13/2014	20:49
1013F027.D	ZZZZZZ	ZZZZZZ	10/13/2014	20:57		10/13/2014	21:16
1013F028.D	ZZZZZZ	ZZZZZZ	10/13/2014	21:24		10/13/2014	21:43

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

Client: Sealaska Environmental Services, LLC **Service Request:** K1410790
Project: JBLM LTM Log Center/TO-01

Analysis Run Log
Volatile Organic Compounds

Analysis Method: 8260C **Analysis Lot:** KWG1413816
Instrument ID: MS27

File ID	Sample Name	Lab Code	Date Analysis Started	Start Time	Q	Date Analysis Finished	Finish Time
1012F003.D	GC/MS Tuning - Bromofluorobenzene	KWG1413816-1	10/12/2014	10:03		10/12/2014	10:20
1012F004.D	Continuing Calibration Verification	KWG1413816-2	10/12/2014	10:42		10/12/2014	10:59
1012F005.D	Lab Control Sample	KWG1413817-5	10/12/2014	11:10		10/12/2014	11:27
1012F006.D	Duplicate Lab Control Sample	KWG1413817-6	10/12/2014	11:37		10/12/2014	11:54
1012F007.D	LGC140929T10-1MS	KWG1413817-1	10/12/2014	12:05		10/12/2014	12:22
1012F008.D	LGC140929T10-1DMS	KWG1413817-2	10/12/2014	12:32		10/12/2014	12:49
1012F009.D	LGC140929LC95D2-1MS	KWG1413817-3	10/12/2014	12:59		10/12/2014	13:16
1012F010.D	LGC140929LC95D2-1DMS	KWG1413817-4	10/12/2014	13:27		10/12/2014	13:44
1012F013.D	Method Blank	KWG1413817-7	10/12/2014	14:49		10/12/2014	15:06
1012F014.D	LGC140929T10-1	K1410790-010	10/12/2014	15:17		10/12/2014	15:34
1012F015.D	LGC140929LC88D2-1	K1410790-018	10/12/2014	15:44		10/12/2014	16:01
1012F016.D	LGC140929LC95D1-1	K1410790-019	10/12/2014	16:12		10/12/2014	16:29
1012F017.D	LGC140929LC95D2-1	K1410790-020	10/12/2014	16:39		10/12/2014	16:56
1012F018.D	ZZZZZZ	ZZZZZZ	10/12/2014	17:07		10/12/2014	17:24
1012F019.D	ZZZZZZ	ZZZZZZ	10/12/2014	17:34		10/12/2014	17:51
1012F020.D	ZZZZZZ	ZZZZZZ	10/12/2014	18:01		10/12/2014	18:18
1012F021.D	ZZZZZZ	ZZZZZZ	10/12/2014	18:29		10/12/2014	18:46
1012F022.D	ZZZZZZ	ZZZZZZ	10/12/2014	18:56		10/12/2014	19:13
1012F023.D	LGC140930T04-1	K1410790-021	10/12/2014	19:24		10/12/2014	19:41
1012F024.D	LGC140930DUP5-1	K1410790-022	10/12/2014	19:51		10/12/2014	20:08
1012F025.D	LGC140930LC103D-1	K1410790-023	10/12/2014	20:19		10/12/2014	20:36
1012F026.D	LGC140930LC101D2-1	K1410790-024	10/12/2014	20:46		10/12/2014	21:03
1012F027.D	LGC140930LC101D1-1	K1410790-025	10/12/2014	21:13		10/12/2014	21:30
1012F028.D	LGC140930MAMCOF2-1	K1410790-026	10/12/2014	21:41		10/12/2014	21:58
1012F029.D	ZZZZZZ	ZZZZZZ	10/12/2014	22:08		10/12/2014	22:25

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

Client: Sealaska Environmental Services, LLC **Service Request:** K1410790
Project: JBLM LTM Log Center/TO-01

Analysis Run Log
Volatile Organic Compounds

Analysis Method: 8260C **Analysis Lot:** KWG1413832
Instrument ID: MS27

File ID	Sample Name	Lab Code	Date Analysis Started	Start Time	Q	Date Analysis Finished	Finish Time
1013F002.D	GC/MS Tuning - Bromofluorobenzene	KWG1413832-1	10/13/2014	09:12		10/13/2014	09:29
1013F003.D	Continuing Calibration Verification	KWG1413832-2	10/13/2014	10:10		10/13/2014	10:27
1013F004.D	Lab Control Sample	KWG1413833-3	10/13/2014	10:38		10/13/2014	10:55
1013F005.D	Duplicate Lab Control Sample	KWG1413833-4	10/13/2014	11:05		10/13/2014	11:22
1013F006.D	ZZZZZZ	ZZZZZZ	10/13/2014	11:44		10/13/2014	12:01
1013F007.D	ZZZZZZ	ZZZZZZ	10/13/2014	12:11		10/13/2014	12:28
1013F010.D	Method Blank	KWG1413833-5	10/13/2014	13:48		10/13/2014	14:05
1013F011.D	ZZZZZZ	ZZZZZZ	10/13/2014	14:16		10/13/2014	14:33
1013F012.D	ZZZZZZ	ZZZZZZ	10/13/2014	14:43		10/13/2014	15:00
1013F013.D	ZZZZZZ	ZZZZZZ	10/13/2014	15:10		10/13/2014	15:27
1013F014.D	ZZZZZZ	ZZZZZZ	10/13/2014	15:38		10/13/2014	15:55
1013F015.D	ZZZZZZ	ZZZZZZ	10/13/2014	16:05		10/13/2014	16:22
1013F016.D	ZZZZZZ	ZZZZZZ	10/13/2014	16:33		10/13/2014	16:50
1013F017.D	ZZZZZZ	ZZZZZZ	10/13/2014	17:00		10/13/2014	17:17
1013F018.D	ZZZZZZ	ZZZZZZ	10/13/2014	17:28		10/13/2014	17:45
1013F019.D	LGC140930LC109-1	K1410790-027	10/13/2014	17:55		10/13/2014	18:12
1013F020.D	ZZZZZZ	ZZZZZZ	10/13/2014	18:23		10/13/2014	18:40
1013F021.D	ZZZZZZ	ZZZZZZ	10/13/2014	18:50		10/13/2014	19:07
1013F022.D	ZZZZZZ	ZZZZZZ	10/13/2014	19:17		10/13/2014	19:34
1013F023.D	ZZZZZZ	ZZZZZZ	10/13/2014	19:45		10/13/2014	20:02
1013F024.D	ZZZZZZ	ZZZZZZ	10/13/2014	20:12		10/13/2014	20:29
1013F025.D	ZZZZZZ	ZZZZZZ	10/13/2014	20:40		10/13/2014	20:57
1013F027.D	ZZZZZZ	ZZZZZZ	10/13/2014	21:07		10/13/2014	21:24
1013F029.D	Continuing Calibration Verification	KWG1413832-3	10/13/2014	22:02		10/13/2014	22:19

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

QA/QC Results

Client: Sealaska Environmental Services, LLC
Project: JBLM LTM Log Center/TO-01
Sample Matrix: Water

Service Request: K1410790
Date Extracted: 10/10/2014

Extraction Prep Log
Volatile Organic Compounds

Extraction Method: EPA 5030B
Analysis Method: 8260C

Extraction Lot: KWG1413774
Level: Low

Sample Name	Lab Code	Date Collected	Date Received	Sample Amount	Final Volume	% Solids	Note
TB-140929	K1410790-001	09/29/14	10/02/14	10ml	10ml	NA	
LGC140929LC93D1-1	K1410790-002	09/29/14	10/02/14	10ml	10ml	NA	
LGC140929LC93D2-1	K1410790-003	09/29/14	10/02/14	10ml	10ml	NA	
LGC140929T13B-1	K1410790-004	09/29/14	10/02/14	10ml	10ml	NA	
LGC140929LC225-1	K1410790-005	09/29/14	10/02/14	10ml	10ml	NA	
LGC140929T05-1	K1410790-006	09/29/14	10/02/14	10ml	10ml	NA	
LGC140929T06-1	K1410790-007	09/29/14	10/02/14	10ml	10ml	NA	
LGC140929T11B-1	K1410790-008	09/29/14	10/02/14	10ml	10ml	NA	
LGC140929BC1-1	K1410790-009	09/29/14	10/02/14	10ml	10ml	NA	
LGC140929T15-1	K1410790-011	09/29/14	10/02/14	10ml	10ml	NA	
LGC140929DUP4-1	K1410790-012	09/29/14	10/02/14	10ml	10ml	NA	
LGC140929LC86D1-1	K1410790-013	09/29/14	10/02/14	10ml	10ml	NA	
LGC140929LC86D2-1	K1410790-014	09/29/14	10/02/14	10ml	10ml	NA	
LGC140929LC102D1-1	K1410790-015	09/29/14	10/02/14	10ml	10ml	NA	
LGC140929LC102D2-1	K1410790-016	09/29/14	10/02/14	10ml	10ml	NA	
LGC140929LC88D1-1	K1410790-017	09/29/14	10/02/14	10ml	10ml	NA	
Method Blank	KWG1413774-4	NA	NA	10ml	10ml	NA	
LGC140929BC1-1MS	KWG1413774-1	09/29/14	10/02/14	10ml	10ml	NA	
LGC140929BC1-1DMS	KWG1413774-2	09/29/14	10/02/14	10ml	10ml	NA	
Lab Control Sample	KWG1413774-3	NA	NA	10ml	10ml	NA	
Duplicate Lab Control Sample	KWG1413774-5	NA	NA	10ml	10ml	NA	

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

QA/QC Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1410790
Project:	JBLM LTM Log Center/TO-01	**Date Extracted:**	10/12/2014
Sample Matrix:	Water		

Extraction Prep Log
Volatile Organic Compounds

Extraction Method:	EPA 5030B	**Extraction Lot:**	KWG1413817
Analysis Method:	8260C	**Level:**	Low

Sample Name	Lab Code	Date Collected	Date Received	Sample Amount	Final Volume	% Solids	Note
LGC140929T10-1	K1410790-010	09/29/14	10/02/14	10ml	10ml	NA	
LGC140929LC88D2-1	K1410790-018	09/29/14	10/02/14	10ml	10ml	NA	
LGC140929LC95D1-1	K1410790-019	09/29/14	10/02/14	10ml	10ml	NA	
LGC140929LC95D2-1	K1410790-020	09/29/14	10/02/14	10ml	10ml	NA	
LGC140930T04-1	K1410790-021	09/30/14	10/02/14	10ml	10ml	NA	
LGC140930DUP5-1	K1410790-022	09/30/14	10/02/14	10ml	10ml	NA	
LGC140930LC103D-1	K1410790-023	09/30/14	10/02/14	10ml	10ml	NA	
LGC140930LC101D2-1	K1410790-024	09/30/14	10/02/14	10ml	10ml	NA	
LGC140930LC101D1-1	K1410790-025	09/30/14	10/02/14	10ml	10ml	NA	
LGC140930MAMCOF2-1	K1410790-026	09/30/14	10/02/14	10ml	10ml	NA	
Method Blank	KWG1413817-7	NA	NA	10ml	10ml	NA	
LGC140929T10-1MS	KWG1413817-1	09/29/14	10/02/14	10ml	10ml	NA	
LGC140929T10-1DMS	KWG1413817-2	09/29/14	10/02/14	10ml	10ml	NA	
LGC140929LC95D2-1MS	KWG1413817-3	09/29/14	10/02/14	10ml	10ml	NA	
LGC140929LC95D2-1DMS	KWG1413817-4	09/29/14	10/02/14	10ml	10ml	NA	
Lab Control Sample	KWG1413817-5	NA	NA	10ml	10ml	NA	
Duplicate Lab Control Sample	KWG1413817-6	NA	NA	10ml	10ml	NA	

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

QA/QC Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1410790
Project:	JBLM LTM Log Center/TO-01	**Date Extracted:**	10/13/2014
Sample Matrix:	Water		

Extraction Prep Log
Volatile Organic Compounds

Extraction Method:	EPA 5030B	**Extraction Lot:**	KWG1413833
Analysis Method:	8260C	**Level:**	Low

Sample Name	Lab Code	Date Collected	Date Received	Sample Amount	Final Volume	% Solids	Note
LGC140930LC109-1	K1410790-027	09/30/14	10/02/14	10ml	10ml	NA	
Method Blank	KWG1413833-5	NA	NA	10ml	10ml	NA	
Lab Control Sample	KWG1413833-3	NA	NA	10ml	10ml	NA	
Duplicate Lab Control Sample	KWG1413833-4	NA	NA	10ml	10ml	NA	

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

QA/QC Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1410790
Project:	JBLM LTM Log Center/TO-01	**Date Extracted:**	10/13/2014
Sample Matrix:	Water		

Extraction Prep Log
Volatile Organic Compounds

Extraction Method:	EPA 5030B	**Extraction Lot:**	KWG1413840
Analysis Method:	8260C	**Level:**	Low

Sample Name	Lab Code	Date Collected	Date Received	Sample Amount	Final Volume	% Solids	Note
LGC140930LC03-1	K1410790-028	09/30/14	10/02/14	10ml	10ml	NA	
LGC140930DUP9-1	K1410790-029	09/30/14	10/02/14	10ml	10ml	NA	
LGC140930LC182-1	K1410790-030	09/30/14	10/02/14	10ml	10ml	NA	
LGC140930LC16-1	K1410790-031	09/30/14	10/02/14	10ml	10ml	NA	
LGC140930DUP1-1	K1410790-032	09/30/14	10/02/14	10ml	10ml	NA	
LGC140930LC180-1	K1410790-033	09/30/14	10/02/14	10ml	10ml	NA	
LGC141001LC223-1	K1410790-034	10/01/14	10/02/14	10ml	10ml	NA	
LGC141001DUP3-1	K1410790-035	10/01/14	10/02/14	10ml	10ml	NA	
LGC141001LC178-1	K1410790-036	10/01/14	10/02/14	10ml	10ml	NA	
LGC141001Well13-1	K1410790-037	10/01/14	10/02/14	10ml	10ml	NA	
LGC141001LC98D1-1	K1410790-038	10/01/14	10/02/14	10ml	10ml	NA	
LGC141001DUP8-1	K1410790-039	10/01/14	10/02/14	10ml	10ml	NA	
LGC141001LC98D2-1	K1410790-040	10/01/14	10/02/14	10ml	10ml	NA	
Method Blank	KWG1413840-4	NA	NA	10ml	10ml	NA	
LGC141001Well13-1MS	KWG1413840-1	10/01/14	10/02/14	10ml	10ml	NA	
LGC141001Well13-1DMS	KWG1413840-2	10/01/14	10/02/14	10ml	10ml	NA	
Lab Control Sample	KWG1413840-3	NA	NA	10ml	10ml	NA	
Duplicate Lab Control Sample	KWG1413840-5	NA	NA	10ml	10ml	NA	

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

FOURTH QUARTER

ALS Environmental
ALS Group USA, Corp
1317 South 13th Avenue
Kelso, WA 98626
T: 1-360-577-7222
F: 1-360-636-1068
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December 16, 2014

Analytical Report for Service Request No: K1413309

Scott Elkind
Sealaska Environmental Services, LLC
18743 Front Street NE
P.O. Box 869
Poulsbo, WA 98370

RE: JBLM LTM/TO 01

Dear Scott:

Enclosed are the results of the sample(s) submitted to our laboratory on November 25, 2014. For your reference, these analyses have been assigned our service request number **K1413309**.

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. The test results meet requirements of the current NELAP standards, where applicable, and except as noted in the laboratory case narrative provided. For a specific list of NELAP-accredited analytes, refer to the certifications section at www.alsglobal.com. All results are intended to be considered in their entirety, and ALS Group USA Corp. dba ALS Environmental (ALS) is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report.

Please contact me if you have any questions. My extension is 3376. You may also contact me via email at gregory.salata@alsglobal.com.

Respectfully submitted,

ALS Group USA Corp. dba ALS Environmental

Gregory Salata

Gregory Salata, Ph.D.
Client Services Manager

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Table of Contents

Acronyms

Qualifiers

State Certifications, Accreditations, And Licenses

Case Narrative

Chain Of Custody

Volatile Organic Compounds By EPA Method 8260

Raw Data

Acronyms

ASTM	American Society for Testing and Materials
A2LA	American Association for Laboratory Accreditation
CARB	California Air Resources Board
CAS Number	Chemical Abstract Service registry Number
CFC	Chlorofluorocarbon
CFU	Colony-Forming Unit
DEC	Department of Environmental Conservation
DEQ	Department of Environmental Quality
DHS	Department of Health Services
DOE	Department of Ecology
DOH	Department of Health
EPA	U. S. Environmental Protection Agency
ELAP	Environmental Laboratory Accreditation Program
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
LOD	Limit of Detection
LOQ	Limit of Quantitation
LUFT	Leaking Underground Fuel Tank
M	Modified
MCL	Maximum Contaminant Level is the highest permissible concentration of a substance allowed in drinking water as established by the USEPA.
MDL	Method Detection Limit
MPN	Most Probable Number
MRL	Method Reporting Limit
NA	Not Applicable
NC	Not Calculated
NCASI	National Council of the Paper Industry for Air and Stream Improvement
ND	Not Detected
NIOSH	National Institute for Occupational Safety and Health
PQL	Practical Quantitation Limit
RCRA	Resource Conservation and Recovery Act
SIM	Selected Ion Monitoring
TPH	Total Petroleum Hydrocarbons
tr	Trace level is the concentration of an analyte that is less than the PQL but greater than or equal to the MDL.

Inorganic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable. See case narrative.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
E	The result is an estimate amount because the value exceeded the instrument calibration range.
J	The result is an estimated value.
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
i	The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
X	See case narrative.
Q	See case narrative. One or more quality control criteria was outside the limits.
H	The holding time for this test is immediately following sample collection. The samples were analyzed as soon as possible after receipt by the laboratory.

Metals Data Qualifiers

#	The control limit criteria is not applicable. See case narrative.
J	The result is an estimated value.
E	The percent difference for the serial dilution was greater than 10%, indicating a possible matrix interference in the sample.
M	The duplicate injection precision was not met.
N	The Matrix Spike sample recovery is not within control limits. See case narrative.
S	The reported value was determined by the Method of Standard Additions (MSA).
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
W	The post-digestion spike for furnace AA analysis is out of control limits, while sample absorbance is less than 50% of spike absorbance.
i	The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
X	See case narrative.
+	The correlation coefficient for the MSA is less than 0.995.
Q	See case narrative. One or more quality control criteria was outside the limits.

Organic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable. See case narrative.
A	A tentatively identified compound, a suspected aldol-condensation product.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
C	The analyte was qualitatively confirmed using GC/MS techniques, pattern recognition, or by comparing to historical data.
D	The reported result is from a dilution.
E	The result is an estimated value.
J	The result is an estimated value.
N	The result is presumptive. The analyte was tentatively identified, but a confirmation analysis was not performed.
P	The GC or HPLC confirmation criteria was exceeded. The relative percent difference is greater than 40% between the two analytical results.
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
i	The MRL/MDL or LOQ/LOD is elevated due to a chromatographic interference.
X	See case narrative.
Q	See case narrative. One or more quality control criteria was outside the limits.

Additional Petroleum Hydrocarbon Specific Qualifiers

F	The chromatographic fingerprint of the sample matches the elution pattern of the calibration standard.
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.
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.
O	The chromatographic fingerprint of the sample resembles an oil, but does not match the calibration standard.
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.

ALS Group USA Corp. dba ALS Environmental (ALS) - Kelso
State Certifications, Accreditations, and Licenses

Agency	Web Site	Number
Alaska DEC UST	http://dec.alaska.gov/applications/eh/ehllabreports/USTLabs.aspx	UST-040
Arizona DHS	http://www.azdhs.gov/lab/license/env.htm	AZ0339
Arkansas - DEQ	http://www.adeq.state.ar.us/techsvs/labcert.htm	88-0637
California DHS (ELAP)	http://www.cdph.ca.gov/certlic/labs/Pages/ELAP.aspx	2795
DOD ELAP	http://www.denix.osd.mil/edqw/Accreditation/AccreditedLabs.cfm	L14-51
Florida DOH	http://www.doh.state.fl.us/lab/EnvLabCert/WaterCert.htm	E87412
Hawaii DOH	Not available	-
Idaho DHW	http://www.healthandwelfare.idaho.gov/Health/Labs/CertificationDrinkingWaterLabs/tabid/1833/Default.aspx	-
ISO 17025	http://www.pjlabs.com/	L14-50
Louisiana DEQ	http://www.deq.louisiana.gov/portal/DIVISIONS/PublicParticipationandPermitSupport/LouisianaLaboratoryAccreditationProgram.aspx	03016
Maine DHS	Not available	WA01276
Michigan DEQ	http://www.michigan.gov/deq/0,1607,7-135-3307_4131_4156---,00.html	9949
Minnesota DOH	http://www.health.state.mn.us/accreditation	053-999-457
Montana DPHHS	http://www.dphhs.mt.gov/publichealth/	CERT0047
Nevada DEP	http://ndep.nv.gov/bsdw/labservice.htm	WA01276
New Jersey DEP	http://www.nj.gov/dep/oqa/	WA005
North Carolina DWQ	http://www.dwqlab.org/	605
Oklahoma DEQ	http://www.deq.state.ok.us/CSDnew/labcert.htm	9801
Oregon – DEQ (NELAP)	http://public.health.oregon.gov/LaboratoryServices/EnvironmentalLaboratoryAccreditation/Pages/index.aspx	WA100010
South Carolina DHEC	http://www.scdhec.gov/environment/envserv/	61002
Texas CEQ	http://www.tceq.texas.gov/field/qa/env_lab_accreditation.html	T104704427
Washington DOE	http://www.ecy.wa.gov/programs/eap/labs/lab-accreditation.html	C544
Wisconsin DNR	http://dnr.wi.gov/	998386840
Wyoming (EPA Region 8)	http://www.epa.gov/region8/water/dwhome/wyomingdi.html	-
Kelso Laboratory Website	www.alsglobal.com	NA

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. A complete listing of specific NELAP-certified analytes, can be found in the certification section at www.ALSGlobal.com or at the accreditation bodies web site.
Please refer to the certification and/or accreditation body's web site if samples are submitted for compliance purposes. The states highlighted above, require the analysis be listed on the state certification if used for compliance purposes and if the method/anlayte is offered by that state.

Case Narrative

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360)577-7222 Fax (360)636-1068
www.alsglobal.com

ALS ENVIRONMENTAL

Client:	Sealaska Environmental Services, LLC	**Service Request No.:**	K1413309
Project:	JBLM LTM/ TO 01	**Date Received:**	11/25/14
Sample Matrix:	Water		

Case Narrative

All analyses were performed consistent with the quality assurance program of ALS Environmental. This report contains analytical results for samples designated for Tier IV validation deliverables including summary forms and all of the associated raw data for each of the analyses. When appropriate to the method, method blank results have been reported with each analytical test.

Sample Receipt

Thirteen water samples were received for analysis at ALS Environmental on 11/25/14. The samples were received in good condition and consistent with the accompanying chain of custody form. The samples were stored in a refrigerator at 4ºC upon receipt at the laboratory.

Volatile Organic Compounds by EPA Method 8260

Calibration Verification Exceptions:
The following analytes were flagged as outside the control criterion for Continuing Calibration Verification (CCV) MS13\1203F004.D: Dichlorodifluoromethane, Chloromethane and Bromomethane. In accordance with the EPA Method, 80% or more of the CCV analytes must pass within 20% of the true value. The ALS SOP allows for 40% difference for the remaining analytes. The CCV met these criteria. The quality of the sample data was not significantly affected. No further corrective action was required.

Sample Notes and Discussion:
Manual integration of one or more chromatographic peaks was required to correct the integration performed by the automated data processing program. The manual integrations were performed in accordance with ALS policy, which is consistent with the National Environmental Laboratory Accreditation Program (NELAP), Department of Defense (DOD), and other certifying agencies. The analytes that required manual integrations are identified on each sample report contained in this data package.

No other anomalies associated with the analysis of these samples were observed.

Approved by_____

Chain of Custody

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360)577-7222 Fax (360)636-1068
www.alsglobal.com

ALS Environmental

CHAIN OF CUSTODY
52766

001

SR# K1413309

COC Set 1 of 2

COC#

1317 South 13th Ave, Kelso, WA 98626 Phone (360) 577-7222 / 800-695-7222 / FAX (360) 636-1068
www.alsglobal.com

Project Name	JBLM LTM
Project Number:	TO 01
Project Manager	SCOTT ELKINK
Company	SEALASKA
Address	18743 FRONT ST NE
Phone #	
email	scott.elkink@sealaska.com
Sampler Signature	
Sampler Printed Name	V. SUNRISE PATTERSON

CLIENT SAMPLE ID	LABID	SAMPLING Date	SAMPLING Time	Matrix	NUMBER OF CONTAINERS	6H: SM 9221 B / Tot Coli MT	48H: 300.0 / NO2	48H: 300.0 / NO3	48H: 300.0 / NO3 Diss	48H: SM 5210 B / BOD 5 Day	7D: SM 2540 C / TDS	14D: 8260C / VOC FP	14D: NWTPH-Dx / NW_TPH	14D: NWTPH-Gx / NW_GAS	14D: SM 2320 B / Alkalinity D	14D: SM 2320 B / Bicarb Alk	14D: SM 4500-CN- E / CN T	28D: 300.0 / Cl D	28D: 300.0 / SO4 D	28D: 353.2 / NO2 NO3 T	28D: 9060 / TOC T	28D: SM 4500-NH3 G / Ammonia	28D: SM 5220 C / COD T	180D: 200.7 / Metals D	180D: 200.7 / Metals T	1	2	3	Remarks
1. TB-141124	AP	11/24/14	1130	W								2																	
2. LGC141124MT3-1		11/24/14	1140	GW								3																	
3. LGC141124MT4-1		11/24/14	1155	GW								3																	
4. LGC141124LC135-1		11/24/14	1215	GW								3																	
5. LGC141124LC105-1		11/24/14	1230	GW								3																	
6. LGC141124DUP1-1		11/24/14	1235	GW								3																	
7. LGC141124LC103-1		11/24/14	1240	GW								6																	MS/MSD
8. LGC141124LC85-1		11/24/14	1245	GW								3																	
9. LGC141124MT2-1		11/24/14	1330	GW								3																	
10. LGC141124MT1-1		11/24/14	1345	GW								3																	

Report Requirements

___ I. Routine Report: Method Blank, Surrogate, as required

___ II. Report Dup., MS, MSD as required

___ III. CLP Like Summary (no raw data)

___ IV. Data Validation Report

___ V. EDD

Invoice Information

P.O.#_____

Bill To:_____

Turnaround Requirements

___ 24 hr. ___ 48 hr.

___ 5 Day

X Standard

Requested Report Date

Circle which metals are to be analyzed

Total Metals: Al As Sb Ba Be B Ca Cd Co Cr Cu Fe Pb Mg Mn Mo Ni K Ag Na Se Sr Tl Sn V Zn Hg

Dissolved Metals: Al As Sb Ba Be B Ca Cd Co Cr Cu Fe Pb Mg Mn Mo Ni K Ag Na Se Sr Tl Sn V Zn Hg

Special Instructions/Comments:

AS PER CONTRACT

*Indicate State Hydrocarbon Procedure: AK CA WI Northwest Other_____(Circle One)

Relinquished By:	Received By:	Relinquished By:	Received By:	Relinquished By:	Received By:
Signature	Signature	Signature	Signature Brian Kell	Signature	Signature
Printed Name V. SUNRISE PATTERSON	Printed Name	Printed Name	Printed Name ALS	Printed Name	Printed Name
Firm SEALASKA	Firm MC Delivery	Firm MC Delivery	Firm	Firm	Firm
Date/Time 11/25/14 0730	Date/Time	Date/Time	Date/Time 11/25/14 1100	Date/Time	Date/Time

ALS Environmental

CHAIN OF CUSTODY
52766

001

SR# KH13369

COC Set 2 of 2

COC#

1317 South 13th Ave, Kelso, WA 98626 Phone (360) 577-7222 / 800-695-7222 / FAX (360) 636-1068
www.alsglobal.com

Project Name	JBLM LTM
Project Number	T001
Project Manager	SCOTT ELKIND
Company	SEALASKA
Address	18743 FRONT ST NE
Phone #	
email	Scott.Elkind@sealaska.com
Sampler Signature	
Sampler Printed Name	V. SUNRISE PATTERSON

CLIENT SAMPLE ID	LABID	SAMPLING Date	SAMPLING Time	Matrix	NUMBER OF CONTAINERS	6H: SM 9221 B / Tot Coli MT	48H: 300.0 / NO2	48H: 300.0 / NO3	48H: 300.0 / NO3 Diss	48H: SM 5210 B / BOD 5 Day	7D: SM 2540 C / TDS	14D: 8260C / VOC FP	14D: NWTPH-Dx / NW_TPH	14D: NWTPH-Gx / NW_GAS	14D: SM 2320 B / Alkalinity D	14D: SM 2320 B / Bicarb Alk	14D: SM 4500-CN- E / CN T	28D: 300.0 / Cl D	28D: 300.0 / SO4 D	28D: 353.2 / NO2 NO3 T	28D: 9060 / TOC T	28D: SM 4500-NH3 G / Ammonia	28D: SM 5220 C / COD T	180D: 200.7 / Metals D	180D: 200.7 / Metals T	1	2	3	Remarks
1. LGC1411245PA352-1		11/24/14	1450	GW								3																	
2. LGC1411245PA354-1		11/24/14	1510	GW								3																	
3. LGC1411245T15-1		11/24/14	1545	GW								3																	
4.																													
5.																													
6.																													
7.																													
8.																													
9.																													
10.																													

Report Requirements

___ I. Routine Report: Method Blank, Surrogate, as required

___ II. Report Dup., MS, MSD as required

___ III. CLP Like Summary (no raw data)

___ IV. Data Validation Report

___ V. EDD

Invoice Information

P.O.#_____

Bill To:_____

Turnaround Requirements

___ 24 hr. ___ 48 hr.

___ 5 Day

X Standard

Requested Report Date

Circle which metals are to be analyzed

Total Metals: Al As Sb Ba Be B Ca Cd Co Cr Cu Fe Pb Mg Mn Mo Ni K Ag Na Se Sr Tl Sn V Zn Hg

Dissolved Metals: Al As Sb Ba Be B Ca Cd Co Cr Cu Fe Pb Mg Mn Mo Ni K Ag Na Se Sr Tl Sn V Zn Hg

Special Instructions/Comments:

X AS PER CONTRACT

*Indicate State Hydrocarbon Procedure: AK CA WI Northwest Other_____(Circle One)

Relinquished By:	Received By:	Relinquished By:	Received By:	Relinquished By:	Received By:
Signature	Signature	Signature	Signature Bobbi Kell	Signature	Signature
Printed Name V SUNRISE PATTERSON	Printed Name MC Delivery	Printed Name MC Delivery	Printed Name Bobbi Kell	Printed Name	Printed Name
Firm SEALASKA	Firm	Firm	Firm ALS	Firm	Firm
Date/Time 11/25/14 0730	Date/Time	Date/Time	Date/Time 11/25/14 1100	Date/Time	Date/Time

PC 6,29

Cooler Receipt and Preservation Form

Client / Project: Sealaska Service Request *K14* 13309

Received: 11/25/14 Opened: 11/25/14 By: BK Unloaded: 11/25/14 By: BK

1. Samples were received via? *Mail* *Fed Ex* *UPS* *DHL* *PDX* *Courier* *Hand Delivered* McDelivery
2. Samples were received in: (circle) *Cooler* *Box* *Envelope* *Other*_____ *NA*
3. Were custody seals on coolers? NA (Y) N If yes, how many and where? 2 front+back
   If present, were custody seals intact? (Y) N If present, were they signed and dated? (Y) N

Raw Cooler Temp	Corrected Cooler Temp	Raw Temp Blank	Corrected Temp Blank	Corr. Factor	Thermometer ID	Cooler/COC ID (NA)	Tracking Number NA	Filed
-6.2	-0.3	1.7	1.6	-.1	347		580080	

4. Packing material: *Inserts* *Baggies* *Bubble Wrap* *Gel Packs* *Wet Ice* *Dry Ice* *Sleeves* _____
5. Were custody papers properly filled out (ink, signed, etc.)? NA (Y) N
6. Did all bottles arrive in good condition (unbroken)? *Indicate in the table below.* NA (Y) N
7. Were all sample labels complete (i.e analysis, preservation, etc.)? NA (Y) N
8. Did all sample labels and tags agree with custody papers? *Indicate major discrepancies in the table on page 2.* NA (Y) N
9. Were appropriate bottles/containers and volumes received for the tests indicated? NA (Y) N
10. Were the pH-preserved bottles (*see SMO GEN SOP*) received at the appropriate pH? *Indicate in the table below* (NA) Y N
11. Were VOA vials received without headspace? *Indicate in the table below.* NA (Y) N
12. Was C12/Res negative? (NA) Y N

Sample ID on Bottle	Sample ID on COC	Identified by:

Sample ID	Bottle Count Bottle Type	Out of Temp	Head-space	Broke	pH	Reagent	Volume added	Reagent Lot Number	Initials	Time

Notes, Discrepancies, & Resolutions: _____

Page ____ *of* ____

Volatile Organic Compounds

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360)577-7222 Fax (360)636-1068
www.alsglobal.com

Client: Sealaska Environmental Services, LLC **Service Request:** K1413309
Project: JBLM LTM/TO 01

Cover Page - Organic Analysis Data Package
Volatile Organic Compounds

Sample Name	Lab Code	Date Collected	Date Received
TB-141124	K1413309-001	11/24/2014	11/25/2014
LGC141124MT3-1	K1413309-002	11/24/2014	11/25/2014
LGC141124MT4-1	K1413309-003	11/24/2014	11/25/2014
LGC141124LC135-1	K1413309-004	11/24/2014	11/25/2014
LGC141124LC10830-1	K1413309-005	11/24/2014	11/25/2014
LGC141124DUP1-1	K1413309-006	11/24/2014	11/25/2014
LGC141124LC10860-1	K1413309-007	11/24/2014	11/25/2014
LGC141124LC10885-1	K1413309-008	11/24/2014	11/25/2014
LGC141124MT2-1	K1413309-009	11/24/2014	11/25/2014
LGC141124MT1-1	K1413309-010	11/24/2014	11/25/2014
LGC14112485PA382-1	K1413309-011	11/24/2014	11/25/2014
LGC14112485PA384-1	K1413309-012	11/24/2014	11/25/2014
LGC141124T15-1	K1413309-013	11/24/2014	11/25/2014
LGC141124LC10860-1MS	KWG1415877-1	11/24/2014	11/25/2014
LGC141124LC10860-1DMS	KWG1415877-2	11/24/2014	11/25/2014

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1413309
Project:	JBLM LTM/TO 01	**Date Collected:**	11/24/2014
Sample Matrix:	Water	**Date Received:**	11/25/2014

Volatile Organic Compounds

Sample Name:	TB-141124	**Units:**	ug/L
Lab Code:	K1413309-001	**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
Dichlorodifluoromethane	ND	U	0.50	0.20	0.13	1	12/03/14	12/03/14	KWG1415877	*
Chloromethane	ND	U	0.50	0.20	0.068	1	12/03/14	12/03/14	KWG1415877	*
Vinyl Chloride	ND	U	0.50	0.10	0.075	1	12/03/14	12/03/14	KWG1415877	
Bromomethane	ND	U	0.50	0.30	0.10	1	12/03/14	12/03/14	KWG1415877	*
Chloroethane	ND	U	0.50	0.20	0.16	1	12/03/14	12/03/14	KWG1415877	
Trichlorofluoromethane	ND	U	0.50	0.20	0.12	1	12/03/14	12/03/14	KWG1415877	
1,1-Dichloroethene	ND	U	0.50	0.20	0.080	1	12/03/14	12/03/14	KWG1415877	
Acetone	ND	U	20	10	3.3	1	12/03/14	12/03/14	KWG1415877	
Carbon Disulfide	ND	U	0.50	0.20	0.069	1	12/03/14	12/03/14	KWG1415877	
Methylene Chloride	**0.23**	J	2.0	0.20	0.10	1	12/03/14	12/03/14	KWG1415877	
Methyl tert-Butyl Ether	ND	U	0.50	0.30	0.11	1	12/03/14	12/03/14	KWG1415877	
trans-1,2-Dichloroethene	ND	U	0.50	0.20	0.072	1	12/03/14	12/03/14	KWG1415877	
1,1-Dichloroethane	ND	U	0.50	0.20	0.077	1	12/03/14	12/03/14	KWG1415877	
2,2-Dichloropropane	ND	U	0.50	0.20	0.060	1	12/03/14	12/03/14	KWG1415877	
cis-1,2-Dichloroethene	ND	U	0.50	0.20	0.067	1	12/03/14	12/03/14	KWG1415877	
2-Butanone (MEK)	ND	U	20	4.0	1.9	1	12/03/14	12/03/14	KWG1415877	
Bromochloromethane	ND	U	0.50	0.20	0.16	1	12/03/14	12/03/14	KWG1415877	
Chloroform	ND	U	0.50	0.20	0.072	1	12/03/14	12/03/14	KWG1415877	
1,1,1-Trichloroethane (TCA)	ND	U	0.50	0.20	0.075	1	12/03/14	12/03/14	KWG1415877	
Carbon Tetrachloride	ND	U	0.50	0.20	0.096	1	12/03/14	12/03/14	KWG1415877	
1,1-Dichloropropene	ND	U	0.50	0.20	0.089	1	12/03/14	12/03/14	KWG1415877	
Benzene	ND	U	0.50	0.10	0.062	1	12/03/14	12/03/14	KWG1415877	
1,2-Dichloroethane (EDC)	ND	U	0.50	0.15	0.080	1	12/03/14	12/03/14	KWG1415877	
Trichloroethene (TCE)	ND	U	0.50	0.10	0.10	1	12/03/14	12/03/14	KWG1415877	
1,2-Dichloropropane	ND	U	0.50	0.20	0.095	1	12/03/14	12/03/14	KWG1415877	
Dibromomethane	ND	U	0.50	0.50	0.15	1	12/03/14	12/03/14	KWG1415877	
Bromodichloromethane	ND	U	0.50	0.30	0.091	1	12/03/14	12/03/14	KWG1415877	
cis-1,3-Dichloropropene	ND	U	0.50	0.20	0.18	1	12/03/14	12/03/14	KWG1415877	
4-Methyl-2-pentanone (MIBK)	ND	U	20	10	2.6	1	12/03/14	12/03/14	KWG1415877	
Toluene	ND	U	0.50	0.10	0.054	1	12/03/14	12/03/14	KWG1415877	
trans-1,3-Dichloropropene	ND	U	0.50	0.20	0.068	1	12/03/14	12/03/14	KWG1415877	
1,1,2-Trichloroethane	ND	U	0.50	0.40	0.14	1	12/03/14	12/03/14	KWG1415877	
Tetrachloroethene (PCE)	ND	U	0.50	0.20	0.099	1	12/03/14	12/03/14	KWG1415877	
2-Hexanone	ND	U	20	10	2.7	1	12/03/14	12/03/14	KWG1415877	

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1413309
Project:	JBLM LTM/TO 01	**Date Collected:**	11/24/2014
Sample Matrix:	Water	**Date Received:**	11/25/2014

Volatile Organic Compounds

Sample Name:	TB-141124	**Units:**	ug/L
Lab Code:	K1413309-001	**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
1,3-Dichloropropane	ND	U	0.50	0.30	0.14	1	12/03/14	12/03/14	KWG1415877	
Dibromochloromethane	ND	U	0.50	0.50	0.14	1	12/03/14	12/03/14	KWG1415877	
1,2-Dibromoethane (EDB)	ND	U	2.0	0.20	0.10	1	12/03/14	12/03/14	KWG1415877	
Chlorobenzene	ND	U	0.50	0.20	0.11	1	12/03/14	12/03/14	KWG1415877	
Ethylbenzene	ND	U	0.50	0.10	0.050	1	12/03/14	12/03/14	KWG1415877	
1,1,1,2-Tetrachloroethane	ND	U	0.50	0.20	0.11	1	12/03/14	12/03/14	KWG1415877	
m,p-Xylenes	ND	U	0.50	0.20	0.11	1	12/03/14	12/03/14	KWG1415877	
o-Xylene	ND	U	0.50	0.20	0.074	1	12/03/14	12/03/14	KWG1415877	
Styrene	ND	U	0.50	0.20	0.089	1	12/03/14	12/03/14	KWG1415877	
Bromoform	ND	U	0.50	0.50	0.16	1	12/03/14	12/03/14	KWG1415877	
Isopropylbenzene	ND	U	2.0	0.20	0.051	1	12/03/14	12/03/14	KWG1415877	
1,1,2,2-Tetrachloroethane	ND	U	0.50	0.20	0.16	1	12/03/14	12/03/14	KWG1415877	
Bromobenzene	ND	U	2.0	0.20	0.12	1	12/03/14	12/03/14	KWG1415877	
n-Propylbenzene	ND	U	2.0	0.20	0.054	1	12/03/14	12/03/14	KWG1415877	
1,2,3-Trichloropropane	ND	U	0.50	0.50	0.20	1	12/03/14	12/03/14	KWG1415877	
2-Chlorotoluene	ND	U	2.0	0.20	0.10	1	12/03/14	12/03/14	KWG1415877	
1,3,5-Trimethylbenzene	ND	U	2.0	0.20	0.089	1	12/03/14	12/03/14	KWG1415877	
4-Chlorotoluene	ND	U	2.0	0.20	0.13	1	12/03/14	12/03/14	KWG1415877	
tert-Butylbenzene	ND	U	2.0	0.20	0.059	1	12/03/14	12/03/14	KWG1415877	
1,2,4-Trimethylbenzene	ND	U	2.0	0.20	0.069	1	12/03/14	12/03/14	KWG1415877	
sec-Butylbenzene	ND	U	2.0	0.10	0.062	1	12/03/14	12/03/14	KWG1415877	
4-Isopropyltoluene	ND	U	2.0	0.20	0.060	1	12/03/14	12/03/14	KWG1415877	
1,3-Dichlorobenzene	ND	U	0.50	0.20	0.10	1	12/03/14	12/03/14	KWG1415877	
1,4-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	12/03/14	12/03/14	KWG1415877	
n-Butylbenzene	ND	U	2.0	0.10	0.054	1	12/03/14	12/03/14	KWG1415877	
1,2-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	12/03/14	12/03/14	KWG1415877	
1,2-Dibromo-3-chloropropane	ND	U	2.0	0.80	0.20	1	12/03/14	12/03/14	KWG1415877	
1,2,4-Trichlorobenzene	ND	U	2.0	0.30	0.096	1	12/03/14	12/03/14	KWG1415877	
Hexachlorobutadiene	ND	U	2.0	0.30	0.11	1	12/03/14	12/03/14	KWG1415877	
Naphthalene	ND	U	2.0	0.30	0.088	1	12/03/14	12/03/14	KWG1415877	
1,2,3-Trichlorobenzene	ND	U	2.0	0.40	0.11	1	12/03/14	12/03/14	KWG1415877	

* See Case Narrative

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1413309
Project:	JBLM LTM/TO 01	**Date Collected:**	11/24/2014
Sample Matrix:	Water	**Date Received:**	11/25/2014

Volatile Organic Compounds

Sample Name:	TB-141124	**Units:**	ug/L
Lab Code:	K1413309-001	**Basis:**	NA

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Dibromofluoromethane	103	85-115	12/03/14	Acceptable
1,2-Dichloroethane-d4	96	70-120	12/03/14	Acceptable
Toluene-d8	100	85-120	12/03/14	Acceptable
4-Bromofluorobenzene	99	75-120	12/03/14	Acceptable

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1413309
Project:	JBLM LTM/TO 01	**Date Collected:**	11/24/2014
Sample Matrix:	Water	**Date Received:**	11/25/2014

Volatile Organic Compounds

Sample Name:	LGC141124MT3-1	**Units:**	ug/L
Lab Code:	K1413309-002	**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
Dichlorodifluoromethane	ND	U	0.50	0.20	0.13	1	12/03/14	12/03/14	KWG1415877	*
Chloromethane	ND	U	0.50	0.20	0.068	1	12/03/14	12/03/14	KWG1415877	*
Vinyl Chloride	ND	U	0.50	0.10	0.075	1	12/03/14	12/03/14	KWG1415877	
Bromomethane	ND	U	0.50	0.30	0.10	1	12/03/14	12/03/14	KWG1415877	*
Chloroethane	ND	U	0.50	0.20	0.16	1	12/03/14	12/03/14	KWG1415877	
Trichlorofluoromethane	ND	U	0.50	0.20	0.12	1	12/03/14	12/03/14	KWG1415877	
1,1-Dichloroethene	ND	U	0.50	0.20	0.080	1	12/03/14	12/03/14	KWG1415877	
Acetone	**6.2**	J	20	10	3.3	1	12/03/14	12/03/14	KWG1415877	
Carbon Disulfide	ND	U	0.50	0.20	0.069	1	12/03/14	12/03/14	KWG1415877	
Methylene Chloride	ND	U	2.0	0.20	0.10	1	12/03/14	12/03/14	KWG1415877	
Methyl tert-Butyl Ether	ND	U	0.50	0.30	0.11	1	12/03/14	12/03/14	KWG1415877	
trans-1,2-Dichloroethene	ND	U	0.50	0.20	0.072	1	12/03/14	12/03/14	KWG1415877	
1,1-Dichloroethane	ND	U	0.50	0.20	0.077	1	12/03/14	12/03/14	KWG1415877	
2,2-Dichloropropane	ND	U	0.50	0.20	0.060	1	12/03/14	12/03/14	KWG1415877	
cis-1,2-Dichloroethene	**0.31**	J	0.50	0.20	0.067	1	12/03/14	12/03/14	KWG1415877	
2-Butanone (MEK)	ND	U	20	4.0	1.9	1	12/03/14	12/03/14	KWG1415877	
Bromochloromethane	ND	U	0.50	0.20	0.16	1	12/03/14	12/03/14	KWG1415877	
Chloroform	ND	U	0.50	0.20	0.072	1	12/03/14	12/03/14	KWG1415877	
1,1,1-Trichloroethane (TCA)	ND	U	0.50	0.20	0.075	1	12/03/14	12/03/14	KWG1415877	
Carbon Tetrachloride	ND	U	0.50	0.20	0.096	1	12/03/14	12/03/14	KWG1415877	
1,1-Dichloropropene	ND	U	0.50	0.20	0.089	1	12/03/14	12/03/14	KWG1415877	
Benzene	ND	U	0.50	0.10	0.062	1	12/03/14	12/03/14	KWG1415877	
1,2-Dichloroethane (EDC)	ND	U	0.50	0.15	0.080	1	12/03/14	12/03/14	KWG1415877	
Trichloroethene (TCE)	**4.6**		0.50	0.10	0.10	1	12/03/14	12/03/14	KWG1415877	
1,2-Dichloropropane	ND	U	0.50	0.20	0.095	1	12/03/14	12/03/14	KWG1415877	
Dibromomethane	ND	U	0.50	0.50	0.15	1	12/03/14	12/03/14	KWG1415877	
Bromodichloromethane	ND	U	0.50	0.30	0.091	1	12/03/14	12/03/14	KWG1415877	
cis-1,3-Dichloropropene	ND	U	0.50	0.20	0.18	1	12/03/14	12/03/14	KWG1415877	
4-Methyl-2-pentanone (MIBK)	ND	U	20	10	2.6	1	12/03/14	12/03/14	KWG1415877	
Toluene	ND	U	0.50	0.10	0.054	1	12/03/14	12/03/14	KWG1415877	
trans-1,3-Dichloropropene	ND	U	0.50	0.20	0.068	1	12/03/14	12/03/14	KWG1415877	
1,1,2-Trichloroethane	ND	U	0.50	0.40	0.14	1	12/03/14	12/03/14	KWG1415877	
Tetrachloroethene (PCE)	ND	U	0.50	0.20	0.099	1	12/03/14	12/03/14	KWG1415877	
2-Hexanone	ND	U	20	10	2.7	1	12/03/14	12/03/14	KWG1415877	

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1413309
Project:	JBLM LTM/TO 01	**Date Collected:**	11/24/2014
Sample Matrix:	Water	**Date Received:**	11/25/2014

Volatile Organic Compounds

Sample Name:	LGC141124MT3-1	**Units:**	ug/L
Lab Code:	K1413309-002	**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
1,3-Dichloropropane	ND	U	0.50	0.30	0.14	1	12/03/14	12/03/14	KWG1415877	
Dibromochloromethane	ND	U	0.50	0.50	0.14	1	12/03/14	12/03/14	KWG1415877	
1,2-Dibromoethane (EDB)	ND	U	2.0	0.20	0.10	1	12/03/14	12/03/14	KWG1415877	
Chlorobenzene	ND	U	0.50	0.20	0.11	1	12/03/14	12/03/14	KWG1415877	
Ethylbenzene	ND	U	0.50	0.10	0.050	1	12/03/14	12/03/14	KWG1415877	
1,1,1,2-Tetrachloroethane	ND	U	0.50	0.20	0.11	1	12/03/14	12/03/14	KWG1415877	
m,p-Xylenes	ND	U	0.50	0.20	0.11	1	12/03/14	12/03/14	KWG1415877	
o-Xylene	ND	U	0.50	0.20	0.074	1	12/03/14	12/03/14	KWG1415877	
Styrene	ND	U	0.50	0.20	0.089	1	12/03/14	12/03/14	KWG1415877	
Bromoform	ND	U	0.50	0.50	0.16	1	12/03/14	12/03/14	KWG1415877	
Isopropylbenzene	ND	U	2.0	0.20	0.051	1	12/03/14	12/03/14	KWG1415877	
1,1,2,2-Tetrachloroethane	ND	U	0.50	0.20	0.16	1	12/03/14	12/03/14	KWG1415877	
Bromobenzene	ND	U	2.0	0.20	0.12	1	12/03/14	12/03/14	KWG1415877	
n-Propylbenzene	ND	U	2.0	0.20	0.054	1	12/03/14	12/03/14	KWG1415877	
1,2,3-Trichloropropane	ND	U	0.50	0.50	0.20	1	12/03/14	12/03/14	KWG1415877	
2-Chlorotoluene	ND	U	2.0	0.20	0.10	1	12/03/14	12/03/14	KWG1415877	
1,3,5-Trimethylbenzene	ND	U	2.0	0.20	0.089	1	12/03/14	12/03/14	KWG1415877	
4-Chlorotoluene	ND	U	2.0	0.20	0.13	1	12/03/14	12/03/14	KWG1415877	
tert-Butylbenzene	ND	U	2.0	0.20	0.059	1	12/03/14	12/03/14	KWG1415877	
1,2,4-Trimethylbenzene	ND	U	2.0	0.20	0.069	1	12/03/14	12/03/14	KWG1415877	
sec-Butylbenzene	ND	U	2.0	0.10	0.062	1	12/03/14	12/03/14	KWG1415877	
4-Isopropyltoluene	ND	U	2.0	0.20	0.060	1	12/03/14	12/03/14	KWG1415877	
1,3-Dichlorobenzene	ND	U	0.50	0.20	0.10	1	12/03/14	12/03/14	KWG1415877	
1,4-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	12/03/14	12/03/14	KWG1415877	
n-Butylbenzene	ND	U	2.0	0.10	0.054	1	12/03/14	12/03/14	KWG1415877	
1,2-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	12/03/14	12/03/14	KWG1415877	
1,2-Dibromo-3-chloropropane	ND	U	2.0	0.80	0.20	1	12/03/14	12/03/14	KWG1415877	
1,2,4-Trichlorobenzene	ND	U	2.0	0.30	0.096	1	12/03/14	12/03/14	KWG1415877	
Hexachlorobutadiene	ND	U	2.0	0.30	0.11	1	12/03/14	12/03/14	KWG1415877	
Naphthalene	ND	U	2.0	0.30	0.088	1	12/03/14	12/03/14	KWG1415877	
1,2,3-Trichlorobenzene	ND	U	2.0	0.40	0.11	1	12/03/14	12/03/14	KWG1415877	

* See Case Narrative

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1413309
Project:	JBLM LTM/TO 01	**Date Collected:**	11/24/2014
Sample Matrix:	Water	**Date Received:**	11/25/2014

Volatile Organic Compounds

Sample Name:	LGC141124MT3-1	**Units:**	ug/L
Lab Code:	K1413309-002	**Basis:**	NA

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Dibromofluoromethane	101	85-115	12/03/14	Acceptable
1,2-Dichloroethane-d4	96	70-120	12/03/14	Acceptable
Toluene-d8	98	85-120	12/03/14	Acceptable
4-Bromofluorobenzene	101	75-120	12/03/14	Acceptable

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1413309
Project:	JBLM LTM/TO 01	**Date Collected:**	11/24/2014
Sample Matrix:	Water	**Date Received:**	11/25/2014

Volatile Organic Compounds

Sample Name:	LGC141124MT4-1	**Units:**	ug/L
Lab Code:	K1413309-003	**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
Dichlorodifluoromethane	ND	U	0.50	0.20	0.13	1	12/03/14	12/03/14	KWG1415877	*
Chloromethane	**0.080**	J	0.50	0.20	0.068	1	12/03/14	12/03/14	KWG1415877	*
Vinyl Chloride	ND	U	0.50	0.10	0.075	1	12/03/14	12/03/14	KWG1415877	
Bromomethane	ND	U	0.50	0.30	0.10	1	12/03/14	12/03/14	KWG1415877	*
Chloroethane	ND	U	0.50	0.20	0.16	1	12/03/14	12/03/14	KWG1415877	
Trichlorofluoromethane	ND	U	0.50	0.20	0.12	1	12/03/14	12/03/14	KWG1415877	
1,1-Dichloroethene	ND	U	0.50	0.20	0.080	1	12/03/14	12/03/14	KWG1415877	
Acetone	**6.9**	J	20	10	3.3	1	12/03/14	12/03/14	KWG1415877	
Carbon Disulfide	**0.070**	J	0.50	0.20	0.069	1	12/03/14	12/03/14	KWG1415877	
Methylene Chloride	ND	U	2.0	0.20	0.10	1	12/03/14	12/03/14	KWG1415877	
Methyl tert-Butyl Ether	ND	U	0.50	0.30	0.11	1	12/03/14	12/03/14	KWG1415877	
trans-1,2-Dichloroethene	ND	U	0.50	0.20	0.072	1	12/03/14	12/03/14	KWG1415877	
1,1-Dichloroethane	ND	U	0.50	0.20	0.077	1	12/03/14	12/03/14	KWG1415877	
2,2-Dichloropropane	ND	U	0.50	0.20	0.060	1	12/03/14	12/03/14	KWG1415877	
cis-1,2-Dichloroethene	**0.14**	J	0.50	0.20	0.067	1	12/03/14	12/03/14	KWG1415877	
2-Butanone (MEK)	ND	U	20	4.0	1.9	1	12/03/14	12/03/14	KWG1415877	
Bromochloromethane	ND	U	0.50	0.20	0.16	1	12/03/14	12/03/14	KWG1415877	
Chloroform	ND	U	0.50	0.20	0.072	1	12/03/14	12/03/14	KWG1415877	
1,1,1-Trichloroethane (TCA)	ND	U	0.50	0.20	0.075	1	12/03/14	12/03/14	KWG1415877	
Carbon Tetrachloride	ND	U	0.50	0.20	0.096	1	12/03/14	12/03/14	KWG1415877	
1,1-Dichloropropene	ND	U	0.50	0.20	0.089	1	12/03/14	12/03/14	KWG1415877	
Benzene	ND	U	0.50	0.10	0.062	1	12/03/14	12/03/14	KWG1415877	
1,2-Dichloroethane (EDC)	ND	U	0.50	0.15	0.080	1	12/03/14	12/03/14	KWG1415877	
Trichloroethene (TCE)	**1.8**		0.50	0.10	0.10	1	12/03/14	12/03/14	KWG1415877	
1,2-Dichloropropane	ND	U	0.50	0.20	0.095	1	12/03/14	12/03/14	KWG1415877	
Dibromomethane	ND	U	0.50	0.50	0.15	1	12/03/14	12/03/14	KWG1415877	
Bromodichloromethane	ND	U	0.50	0.30	0.091	1	12/03/14	12/03/14	KWG1415877	
cis-1,3-Dichloropropene	ND	U	0.50	0.20	0.18	1	12/03/14	12/03/14	KWG1415877	
4-Methyl-2-pentanone (MIBK)	ND	U	20	10	2.6	1	12/03/14	12/03/14	KWG1415877	
Toluene	ND	U	0.50	0.10	0.054	1	12/03/14	12/03/14	KWG1415877	
trans-1,3-Dichloropropene	ND	U	0.50	0.20	0.068	1	12/03/14	12/03/14	KWG1415877	
1,1,2-Trichloroethane	ND	U	0.50	0.40	0.14	1	12/03/14	12/03/14	KWG1415877	
Tetrachloroethene (PCE)	ND	U	0.50	0.20	0.099	1	12/03/14	12/03/14	KWG1415877	
2-Hexanone	ND	U	20	10	2.7	1	12/03/14	12/03/14	KWG1415877	

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1413309
Project:	JBLM LTM/TO 01	**Date Collected:**	11/24/2014
Sample Matrix:	Water	**Date Received:**	11/25/2014

Volatile Organic Compounds

Sample Name:	LGC141124MT4-1	**Units:**	ug/L
Lab Code:	K1413309-003	**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
1,3-Dichloropropane	ND	U	0.50	0.30	0.14	1	12/03/14	12/03/14	KWG1415877	
Dibromochloromethane	ND	U	0.50	0.50	0.14	1	12/03/14	12/03/14	KWG1415877	
1,2-Dibromoethane (EDB)	ND	U	2.0	0.20	0.10	1	12/03/14	12/03/14	KWG1415877	
Chlorobenzene	ND	U	0.50	0.20	0.11	1	12/03/14	12/03/14	KWG1415877	
Ethylbenzene	ND	U	0.50	0.10	0.050	1	12/03/14	12/03/14	KWG1415877	
1,1,1,2-Tetrachloroethane	ND	U	0.50	0.20	0.11	1	12/03/14	12/03/14	KWG1415877	
m,p-Xylenes	ND	U	0.50	0.20	0.11	1	12/03/14	12/03/14	KWG1415877	
o-Xylene	ND	U	0.50	0.20	0.074	1	12/03/14	12/03/14	KWG1415877	
Styrene	ND	U	0.50	0.20	0.089	1	12/03/14	12/03/14	KWG1415877	
Bromoform	ND	U	0.50	0.50	0.16	1	12/03/14	12/03/14	KWG1415877	
Isopropylbenzene	ND	U	2.0	0.20	0.051	1	12/03/14	12/03/14	KWG1415877	
1,1,2,2-Tetrachloroethane	ND	U	0.50	0.20	0.16	1	12/03/14	12/03/14	KWG1415877	
Bromobenzene	ND	U	2.0	0.20	0.12	1	12/03/14	12/03/14	KWG1415877	
n-Propylbenzene	ND	U	2.0	0.20	0.054	1	12/03/14	12/03/14	KWG1415877	
1,2,3-Trichloropropane	ND	U	0.50	0.50	0.20	1	12/03/14	12/03/14	KWG1415877	
2-Chlorotoluene	ND	U	2.0	0.20	0.10	1	12/03/14	12/03/14	KWG1415877	
1,3,5-Trimethylbenzene	ND	U	2.0	0.20	0.089	1	12/03/14	12/03/14	KWG1415877	
4-Chlorotoluene	ND	U	2.0	0.20	0.13	1	12/03/14	12/03/14	KWG1415877	
tert-Butylbenzene	ND	U	2.0	0.20	0.059	1	12/03/14	12/03/14	KWG1415877	
1,2,4-Trimethylbenzene	ND	U	2.0	0.20	0.069	1	12/03/14	12/03/14	KWG1415877	
sec-Butylbenzene	ND	U	2.0	0.10	0.062	1	12/03/14	12/03/14	KWG1415877	
4-Isopropyltoluene	ND	U	2.0	0.20	0.060	1	12/03/14	12/03/14	KWG1415877	
1,3-Dichlorobenzene	ND	U	0.50	0.20	0.10	1	12/03/14	12/03/14	KWG1415877	
1,4-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	12/03/14	12/03/14	KWG1415877	
n-Butylbenzene	ND	U	2.0	0.10	0.054	1	12/03/14	12/03/14	KWG1415877	
1,2-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	12/03/14	12/03/14	KWG1415877	
1,2-Dibromo-3-chloropropane	ND	U	2.0	0.80	0.20	1	12/03/14	12/03/14	KWG1415877	
1,2,4-Trichlorobenzene	ND	U	2.0	0.30	0.096	1	12/03/14	12/03/14	KWG1415877	
Hexachlorobutadiene	ND	U	2.0	0.30	0.11	1	12/03/14	12/03/14	KWG1415877	
Naphthalene	ND	U	2.0	0.30	0.088	1	12/03/14	12/03/14	KWG1415877	
1,2,3-Trichlorobenzene	ND	U	2.0	0.40	0.11	1	12/03/14	12/03/14	KWG1415877	

* See Case Narrative

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1413309
Project:	JBLM LTM/TO 01	**Date Collected:**	11/24/2014
Sample Matrix:	Water	**Date Received:**	11/25/2014

Volatile Organic Compounds

Sample Name:	LGC141124MT4-1	**Units:**	ug/L
Lab Code:	K1413309-003	**Basis:**	NA

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Dibromofluoromethane	104	85-115	12/03/14	Acceptable
1,2-Dichloroethane-d4	95	70-120	12/03/14	Acceptable
Toluene-d8	99	85-120	12/03/14	Acceptable
4-Bromofluorobenzene	99	75-120	12/03/14	Acceptable

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1413309
Project:	JBLM LTM/TO 01	**Date Collected:**	11/24/2014
Sample Matrix:	Water	**Date Received:**	11/25/2014

Volatile Organic Compounds

Sample Name:	LGC141124LC135-1	**Units:**	ug/L
Lab Code:	K1413309-004	**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
Dichlorodifluoromethane	ND	U	0.50	0.20	0.13	1	12/03/14	12/03/14	KWG1415877	*
Chloromethane	ND	U	0.50	0.20	0.068	1	12/03/14	12/03/14	KWG1415877	*
Vinyl Chloride	ND	U	0.50	0.10	0.075	1	12/03/14	12/03/14	KWG1415877	
Bromomethane	ND	U	0.50	0.30	0.10	1	12/03/14	12/03/14	KWG1415877	*
Chloroethane	ND	U	0.50	0.20	0.16	1	12/03/14	12/03/14	KWG1415877	
Trichlorofluoromethane	ND	U	0.50	0.20	0.12	1	12/03/14	12/03/14	KWG1415877	
1,1-Dichloroethene	ND	U	0.50	0.20	0.080	1	12/03/14	12/03/14	KWG1415877	
Acetone	**7.9**	J	20	10	3.3	1	12/03/14	12/03/14	KWG1415877	
Carbon Disulfide	ND	U	0.50	0.20	0.069	1	12/03/14	12/03/14	KWG1415877	
Methylene Chloride	ND	U	2.0	0.20	0.10	1	12/03/14	12/03/14	KWG1415877	
Methyl tert-Butyl Ether	ND	U	0.50	0.30	0.11	1	12/03/14	12/03/14	KWG1415877	
trans-1,2-Dichloroethene	ND	U	0.50	0.20	0.072	1	12/03/14	12/03/14	KWG1415877	
1,1-Dichloroethane	ND	U	0.50	0.20	0.077	1	12/03/14	12/03/14	KWG1415877	
2,2-Dichloropropane	ND	U	0.50	0.20	0.060	1	12/03/14	12/03/14	KWG1415877	
cis-1,2-Dichloroethene	**0.47**	J	0.50	0.20	0.067	1	12/03/14	12/03/14	KWG1415877	
2-Butanone (MEK)	ND	U	20	4.0	1.9	1	12/03/14	12/03/14	KWG1415877	
Bromochloromethane	ND	U	0.50	0.20	0.16	1	12/03/14	12/03/14	KWG1415877	
Chloroform	ND	U	0.50	0.20	0.072	1	12/03/14	12/03/14	KWG1415877	
1,1,1-Trichloroethane (TCA)	ND	U	0.50	0.20	0.075	1	12/03/14	12/03/14	KWG1415877	
Carbon Tetrachloride	ND	U	0.50	0.20	0.096	1	12/03/14	12/03/14	KWG1415877	
1,1-Dichloropropene	ND	U	0.50	0.20	0.089	1	12/03/14	12/03/14	KWG1415877	
Benzene	ND	U	0.50	0.10	0.062	1	12/03/14	12/03/14	KWG1415877	
1,2-Dichloroethane (EDC)	ND	U	0.50	0.15	0.080	1	12/03/14	12/03/14	KWG1415877	
Trichloroethene (TCE)	**50**		0.50	0.10	0.10	1	12/03/14	12/03/14	KWG1415877	
1,2-Dichloropropane	ND	U	0.50	0.20	0.095	1	12/03/14	12/03/14	KWG1415877	
Dibromomethane	ND	U	0.50	0.50	0.15	1	12/03/14	12/03/14	KWG1415877	
Bromodichloromethane	ND	U	0.50	0.30	0.091	1	12/03/14	12/03/14	KWG1415877	
cis-1,3-Dichloropropene	ND	U	0.50	0.20	0.18	1	12/03/14	12/03/14	KWG1415877	
4-Methyl-2-pentanone (MIBK)	ND	U	20	10	2.6	1	12/03/14	12/03/14	KWG1415877	
Toluene	ND	U	0.50	0.10	0.054	1	12/03/14	12/03/14	KWG1415877	
trans-1,3-Dichloropropene	ND	U	0.50	0.20	0.068	1	12/03/14	12/03/14	KWG1415877	
1,1,2-Trichloroethane	ND	U	0.50	0.40	0.14	1	12/03/14	12/03/14	KWG1415877	
Tetrachloroethene (PCE)	ND	U	0.50	0.20	0.099	1	12/03/14	12/03/14	KWG1415877	
2-Hexanone	ND	U	20	10	2.7	1	12/03/14	12/03/14	KWG1415877	

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1413309
Project:	JBLM LTM/TO 01	**Date Collected:**	11/24/2014
Sample Matrix:	Water	**Date Received:**	11/25/2014

Volatile Organic Compounds

Sample Name:	LGC141124LC135-1	**Units:**	ug/L
Lab Code:	K1413309-004	**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
1,3-Dichloropropane	ND	U	0.50	0.30	0.14	1	12/03/14	12/03/14	KWG1415877	
Dibromochloromethane	ND	U	0.50	0.50	0.14	1	12/03/14	12/03/14	KWG1415877	
1,2-Dibromoethane (EDB)	ND	U	2.0	0.20	0.10	1	12/03/14	12/03/14	KWG1415877	
Chlorobenzene	ND	U	0.50	0.20	0.11	1	12/03/14	12/03/14	KWG1415877	
Ethylbenzene	ND	U	0.50	0.10	0.050	1	12/03/14	12/03/14	KWG1415877	
1,1,1,2-Tetrachloroethane	ND	U	0.50	0.20	0.11	1	12/03/14	12/03/14	KWG1415877	
m,p-Xylenes	ND	U	0.50	0.20	0.11	1	12/03/14	12/03/14	KWG1415877	
o-Xylene	ND	U	0.50	0.20	0.074	1	12/03/14	12/03/14	KWG1415877	
Styrene	ND	U	0.50	0.20	0.089	1	12/03/14	12/03/14	KWG1415877	
Bromoform	ND	U	0.50	0.50	0.16	1	12/03/14	12/03/14	KWG1415877	
Isopropylbenzene	ND	U	2.0	0.20	0.051	1	12/03/14	12/03/14	KWG1415877	
1,1,2,2-Tetrachloroethane	ND	U	0.50	0.20	0.16	1	12/03/14	12/03/14	KWG1415877	
Bromobenzene	ND	U	2.0	0.20	0.12	1	12/03/14	12/03/14	KWG1415877	
n-Propylbenzene	ND	U	2.0	0.20	0.054	1	12/03/14	12/03/14	KWG1415877	
1,2,3-Trichloropropane	ND	U	0.50	0.50	0.20	1	12/03/14	12/03/14	KWG1415877	
2-Chlorotoluene	ND	U	2.0	0.20	0.10	1	12/03/14	12/03/14	KWG1415877	
1,3,5-Trimethylbenzene	ND	U	2.0	0.20	0.089	1	12/03/14	12/03/14	KWG1415877	
4-Chlorotoluene	ND	U	2.0	0.20	0.13	1	12/03/14	12/03/14	KWG1415877	
tert-Butylbenzene	ND	U	2.0	0.20	0.059	1	12/03/14	12/03/14	KWG1415877	
1,2,4-Trimethylbenzene	ND	U	2.0	0.20	0.069	1	12/03/14	12/03/14	KWG1415877	
sec-Butylbenzene	ND	U	2.0	0.10	0.062	1	12/03/14	12/03/14	KWG1415877	
4-Isopropyltoluene	ND	U	2.0	0.20	0.060	1	12/03/14	12/03/14	KWG1415877	
1,3-Dichlorobenzene	ND	U	0.50	0.20	0.10	1	12/03/14	12/03/14	KWG1415877	
1,4-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	12/03/14	12/03/14	KWG1415877	
n-Butylbenzene	ND	U	2.0	0.10	0.054	1	12/03/14	12/03/14	KWG1415877	
1,2-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	12/03/14	12/03/14	KWG1415877	
1,2-Dibromo-3-chloropropane	ND	U	2.0	0.80	0.20	1	12/03/14	12/03/14	KWG1415877	
1,2,4-Trichlorobenzene	ND	U	2.0	0.30	0.096	1	12/03/14	12/03/14	KWG1415877	
Hexachlorobutadiene	ND	U	2.0	0.30	0.11	1	12/03/14	12/03/14	KWG1415877	
Naphthalene	ND	U	2.0	0.30	0.088	1	12/03/14	12/03/14	KWG1415877	
1,2,3-Trichlorobenzene	ND	U	2.0	0.40	0.11	1	12/03/14	12/03/14	KWG1415877	

* See Case Narrative

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1413309
Project:	JBLM LTM/TO 01	**Date Collected:**	11/24/2014
Sample Matrix:	Water	**Date Received:**	11/25/2014

Volatile Organic Compounds

Sample Name:	LGC141124LC135-1	**Units:**	ug/L
Lab Code:	K1413309-004	**Basis:**	NA

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Dibromofluoromethane	104	85-115	12/03/14	Acceptable
1,2-Dichloroethane-d4	96	70-120	12/03/14	Acceptable
Toluene-d8	101	85-120	12/03/14	Acceptable
4-Bromofluorobenzene	98	75-120	12/03/14	Acceptable

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1413309
Project:	JBLM LTM/TO 01	**Date Collected:**	11/24/2014
Sample Matrix:	Water	**Date Received:**	11/25/2014

Volatile Organic Compounds

Sample Name:	LGC141124LC10830-1	**Units:**	ug/L
Lab Code:	K1413309-005	**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
Dichlorodifluoromethane	ND	U	0.50	0.20	0.13	1	12/03/14	12/03/14	KWG1415877	*
Chloromethane	**0.080**	J	0.50	0.20	0.068	1	12/03/14	12/03/14	KWG1415877	*
Vinyl Chloride	ND	U	0.50	0.10	0.075	1	12/03/14	12/03/14	KWG1415877	
Bromomethane	ND	U	0.50	0.30	0.10	1	12/03/14	12/03/14	KWG1415877	*
Chloroethane	ND	U	0.50	0.20	0.16	1	12/03/14	12/03/14	KWG1415877	
Trichlorofluoromethane	ND	U	0.50	0.20	0.12	1	12/03/14	12/03/14	KWG1415877	
1,1-Dichloroethene	ND	U	0.50	0.20	0.080	1	12/03/14	12/03/14	KWG1415877	
Acetone	**7.0**	J	20	10	3.3	1	12/03/14	12/03/14	KWG1415877	
Carbon Disulfide	ND	U	0.50	0.20	0.069	1	12/03/14	12/03/14	KWG1415877	
Methylene Chloride	ND	U	2.0	0.20	0.10	1	12/03/14	12/03/14	KWG1415877	
Methyl tert-Butyl Ether	ND	U	0.50	0.30	0.11	1	12/03/14	12/03/14	KWG1415877	
trans-1,2-Dichloroethene	ND	U	0.50	0.20	0.072	1	12/03/14	12/03/14	KWG1415877	
1,1-Dichloroethane	ND	U	0.50	0.20	0.077	1	12/03/14	12/03/14	KWG1415877	
2,2-Dichloropropane	ND	U	0.50	0.20	0.060	1	12/03/14	12/03/14	KWG1415877	
cis-1,2-Dichloroethene	ND	U	0.50	0.20	0.067	1	12/03/14	12/03/14	KWG1415877	
2-Butanone (MEK)	ND	U	20	4.0	1.9	1	12/03/14	12/03/14	KWG1415877	
Bromochloromethane	ND	U	0.50	0.20	0.16	1	12/03/14	12/03/14	KWG1415877	
Chloroform	ND	U	0.50	0.20	0.072	1	12/03/14	12/03/14	KWG1415877	
1,1,1-Trichloroethane (TCA)	ND	U	0.50	0.20	0.075	1	12/03/14	12/03/14	KWG1415877	
Carbon Tetrachloride	ND	U	0.50	0.20	0.096	1	12/03/14	12/03/14	KWG1415877	
1,1-Dichloropropene	ND	U	0.50	0.20	0.089	1	12/03/14	12/03/14	KWG1415877	
Benzene	ND	U	0.50	0.10	0.062	1	12/03/14	12/03/14	KWG1415877	
1,2-Dichloroethane (EDC)	ND	U	0.50	0.15	0.080	1	12/03/14	12/03/14	KWG1415877	
Trichloroethene (TCE)	**4.4**		0.50	0.10	0.10	1	12/03/14	12/03/14	KWG1415877	
1,2-Dichloropropane	ND	U	0.50	0.20	0.095	1	12/03/14	12/03/14	KWG1415877	
Dibromomethane	ND	U	0.50	0.50	0.15	1	12/03/14	12/03/14	KWG1415877	
Bromodichloromethane	ND	U	0.50	0.30	0.091	1	12/03/14	12/03/14	KWG1415877	
cis-1,3-Dichloropropene	ND	U	0.50	0.20	0.18	1	12/03/14	12/03/14	KWG1415877	
4-Methyl-2-pentanone (MIBK)	ND	U	20	10	2.6	1	12/03/14	12/03/14	KWG1415877	
Toluene	ND	U	0.50	0.10	0.054	1	12/03/14	12/03/14	KWG1415877	
trans-1,3-Dichloropropene	ND	U	0.50	0.20	0.068	1	12/03/14	12/03/14	KWG1415877	
1,1,2-Trichloroethane	ND	U	0.50	0.40	0.14	1	12/03/14	12/03/14	KWG1415877	
Tetrachloroethene (PCE)	ND	U	0.50	0.20	0.099	1	12/03/14	12/03/14	KWG1415877	
2-Hexanone	ND	U	20	10	2.7	1	12/03/14	12/03/14	KWG1415877	

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1413309
Project:	JBLM LTM/TO 01	**Date Collected:**	11/24/2014
Sample Matrix:	Water	**Date Received:**	11/25/2014

Volatile Organic Compounds

Sample Name:	LGC141124LC10830-1	**Units:**	ug/L
Lab Code:	K1413309-005	**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
1,3-Dichloropropane	ND	U	0.50	0.30	0.14	1	12/03/14	12/03/14	KWG1415877	
Dibromochloromethane	ND	U	0.50	0.50	0.14	1	12/03/14	12/03/14	KWG1415877	
1,2-Dibromoethane (EDB)	ND	U	2.0	0.20	0.10	1	12/03/14	12/03/14	KWG1415877	
Chlorobenzene	ND	U	0.50	0.20	0.11	1	12/03/14	12/03/14	KWG1415877	
Ethylbenzene	ND	U	0.50	0.10	0.050	1	12/03/14	12/03/14	KWG1415877	
1,1,1,2-Tetrachloroethane	ND	U	0.50	0.20	0.11	1	12/03/14	12/03/14	KWG1415877	
m,p-Xylenes	ND	U	0.50	0.20	0.11	1	12/03/14	12/03/14	KWG1415877	
o-Xylene	ND	U	0.50	0.20	0.074	1	12/03/14	12/03/14	KWG1415877	
Styrene	ND	U	0.50	0.20	0.089	1	12/03/14	12/03/14	KWG1415877	
Bromoform	ND	U	0.50	0.50	0.16	1	12/03/14	12/03/14	KWG1415877	
Isopropylbenzene	ND	U	2.0	0.20	0.051	1	12/03/14	12/03/14	KWG1415877	
1,1,2,2-Tetrachloroethane	ND	U	0.50	0.20	0.16	1	12/03/14	12/03/14	KWG1415877	
Bromobenzene	ND	U	2.0	0.20	0.12	1	12/03/14	12/03/14	KWG1415877	
n-Propylbenzene	ND	U	2.0	0.20	0.054	1	12/03/14	12/03/14	KWG1415877	
1,2,3-Trichloropropane	ND	U	0.50	0.50	0.20	1	12/03/14	12/03/14	KWG1415877	
2-Chlorotoluene	ND	U	2.0	0.20	0.10	1	12/03/14	12/03/14	KWG1415877	
1,3,5-Trimethylbenzene	ND	U	2.0	0.20	0.089	1	12/03/14	12/03/14	KWG1415877	
4-Chlorotoluene	ND	U	2.0	0.20	0.13	1	12/03/14	12/03/14	KWG1415877	
tert-Butylbenzene	ND	U	2.0	0.20	0.059	1	12/03/14	12/03/14	KWG1415877	
1,2,4-Trimethylbenzene	ND	U	2.0	0.20	0.069	1	12/03/14	12/03/14	KWG1415877	
sec-Butylbenzene	ND	U	2.0	0.10	0.062	1	12/03/14	12/03/14	KWG1415877	
4-Isopropyltoluene	ND	U	2.0	0.20	0.060	1	12/03/14	12/03/14	KWG1415877	
1,3-Dichlorobenzene	ND	U	0.50	0.20	0.10	1	12/03/14	12/03/14	KWG1415877	
1,4-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	12/03/14	12/03/14	KWG1415877	
n-Butylbenzene	ND	U	2.0	0.10	0.054	1	12/03/14	12/03/14	KWG1415877	
1,2-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	12/03/14	12/03/14	KWG1415877	
1,2-Dibromo-3-chloropropane	ND	U	2.0	0.80	0.20	1	12/03/14	12/03/14	KWG1415877	
1,2,4-Trichlorobenzene	ND	U	2.0	0.30	0.096	1	12/03/14	12/03/14	KWG1415877	
Hexachlorobutadiene	ND	U	2.0	0.30	0.11	1	12/03/14	12/03/14	KWG1415877	
Naphthalene	ND	U	2.0	0.30	0.088	1	12/03/14	12/03/14	KWG1415877	
1,2,3-Trichlorobenzene	ND	U	2.0	0.40	0.11	1	12/03/14	12/03/14	KWG1415877	

* See Case Narrative

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1413309
Project:	JBLM LTM/TO 01	**Date Collected:**	11/24/2014
Sample Matrix:	Water	**Date Received:**	11/25/2014

Volatile Organic Compounds

Sample Name:	LGC141124LC10830-1	**Units:**	ug/L
Lab Code:	K1413309-005	**Basis:**	NA

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Dibromofluoromethane	104	85-115	12/03/14	Acceptable
1,2-Dichloroethane-d4	97	70-120	12/03/14	Acceptable
Toluene-d8	101	85-120	12/03/14	Acceptable
4-Bromofluorobenzene	97	75-120	12/03/14	Acceptable

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1413309
Project:	JBLM LTM/TO 01	**Date Collected:**	11/24/2014
Sample Matrix:	Water	**Date Received:**	11/25/2014

Volatile Organic Compounds

Sample Name:	LGC141124DUP1-1	**Units:**	ug/L
Lab Code:	K1413309-006	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8260C		

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Dichlorodifluoromethane	ND	U	0.50	0.20	0.13	1	12/03/14	12/03/14	KWG1415877	*
Chloromethane	**0.080**	J	0.50	0.20	0.068	1	12/03/14	12/03/14	KWG1415877	*
Vinyl Chloride	ND	U	0.50	0.10	0.075	1	12/03/14	12/03/14	KWG1415877	
Bromomethane	ND	U	0.50	0.30	0.10	1	12/03/14	12/03/14	KWG1415877	*
Chloroethane	ND	U	0.50	0.20	0.16	1	12/03/14	12/03/14	KWG1415877	
Trichlorofluoromethane	ND	U	0.50	0.20	0.12	1	12/03/14	12/03/14	KWG1415877	
1,1-Dichloroethene	ND	U	0.50	0.20	0.080	1	12/03/14	12/03/14	KWG1415877	
Acetone	**5.7**	J	20	10	3.3	1	12/03/14	12/03/14	KWG1415877	
Carbon Disulfide	ND	U	0.50	0.20	0.069	1	12/03/14	12/03/14	KWG1415877	
Methylene Chloride	ND	U	2.0	0.20	0.10	1	12/03/14	12/03/14	KWG1415877	
Methyl tert-Butyl Ether	ND	U	0.50	0.30	0.11	1	12/03/14	12/03/14	KWG1415877	
trans-1,2-Dichloroethene	ND	U	0.50	0.20	0.072	1	12/03/14	12/03/14	KWG1415877	
1,1-Dichloroethane	ND	U	0.50	0.20	0.077	1	12/03/14	12/03/14	KWG1415877	
2,2-Dichloropropane	ND	U	0.50	0.20	0.060	1	12/03/14	12/03/14	KWG1415877	
cis-1,2-Dichloroethene	**0.070**	J	0.50	0.20	0.067	1	12/03/14	12/03/14	KWG1415877	
2-Butanone (MEK)	ND	U	20	4.0	1.9	1	12/03/14	12/03/14	KWG1415877	
Bromochloromethane	ND	U	0.50	0.20	0.16	1	12/03/14	12/03/14	KWG1415877	
Chloroform	ND	U	0.50	0.20	0.072	1	12/03/14	12/03/14	KWG1415877	
1,1,1-Trichloroethane (TCA)	ND	U	0.50	0.20	0.075	1	12/03/14	12/03/14	KWG1415877	
Carbon Tetrachloride	ND	U	0.50	0.20	0.096	1	12/03/14	12/03/14	KWG1415877	
1,1-Dichloropropene	ND	U	0.50	0.20	0.089	1	12/03/14	12/03/14	KWG1415877	
Benzene	ND	U	0.50	0.10	0.062	1	12/03/14	12/03/14	KWG1415877	
1,2-Dichloroethane (EDC)	ND	U	0.50	0.15	0.080	1	12/03/14	12/03/14	KWG1415877	
Trichloroethene (TCE)	**4.3**		0.50	0.10	0.10	1	12/03/14	12/03/14	KWG1415877	
1,2-Dichloropropane	ND	U	0.50	0.20	0.095	1	12/03/14	12/03/14	KWG1415877	
Dibromomethane	ND	U	0.50	0.50	0.15	1	12/03/14	12/03/14	KWG1415877	
Bromodichloromethane	ND	U	0.50	0.30	0.091	1	12/03/14	12/03/14	KWG1415877	
cis-1,3-Dichloropropene	ND	U	0.50	0.20	0.18	1	12/03/14	12/03/14	KWG1415877	
4-Methyl-2-pentanone (MIBK)	ND	U	20	10	2.6	1	12/03/14	12/03/14	KWG1415877	
Toluene	ND	U	0.50	0.10	0.054	1	12/03/14	12/03/14	KWG1415877	
trans-1,3-Dichloropropene	ND	U	0.50	0.20	0.068	1	12/03/14	12/03/14	KWG1415877	
1,1,2-Trichloroethane	ND	U	0.50	0.40	0.14	1	12/03/14	12/03/14	KWG1415877	
Tetrachloroethene (PCE)	ND	U	0.50	0.20	0.099	1	12/03/14	12/03/14	KWG1415877	
2-Hexanone	ND	U	20	10	2.7	1	12/03/14	12/03/14	KWG1415877	

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1413309
Project:	JBLM LTM/TO 01	**Date Collected:**	11/24/2014
Sample Matrix:	Water	**Date Received:**	11/25/2014

Volatile Organic Compounds

Sample Name:	LGC141124DUP1-1	**Units:**	ug/L
Lab Code:	K1413309-006	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8260C		

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,3-Dichloropropane	ND	U	0.50	0.30	0.14	1	12/03/14	12/03/14	KWG1415877	
Dibromochloromethane	ND	U	0.50	0.50	0.14	1	12/03/14	12/03/14	KWG1415877	
1,2-Dibromoethane (EDB)	ND	U	2.0	0.20	0.10	1	12/03/14	12/03/14	KWG1415877	
Chlorobenzene	ND	U	0.50	0.20	0.11	1	12/03/14	12/03/14	KWG1415877	
Ethylbenzene	ND	U	0.50	0.10	0.050	1	12/03/14	12/03/14	KWG1415877	
1,1,1,2-Tetrachloroethane	ND	U	0.50	0.20	0.11	1	12/03/14	12/03/14	KWG1415877	
m,p-Xylenes	ND	U	0.50	0.20	0.11	1	12/03/14	12/03/14	KWG1415877	
o-Xylene	ND	U	0.50	0.20	0.074	1	12/03/14	12/03/14	KWG1415877	
Styrene	ND	U	0.50	0.20	0.089	1	12/03/14	12/03/14	KWG1415877	
Bromoform	ND	U	0.50	0.50	0.16	1	12/03/14	12/03/14	KWG1415877	
Isopropylbenzene	ND	U	2.0	0.20	0.051	1	12/03/14	12/03/14	KWG1415877	
1,1,2,2-Tetrachloroethane	ND	U	0.50	0.20	0.16	1	12/03/14	12/03/14	KWG1415877	
Bromobenzene	ND	U	2.0	0.20	0.12	1	12/03/14	12/03/14	KWG1415877	
n-Propylbenzene	ND	U	2.0	0.20	0.054	1	12/03/14	12/03/14	KWG1415877	
1,2,3-Trichloropropane	ND	U	0.50	0.50	0.20	1	12/03/14	12/03/14	KWG1415877	
2-Chlorotoluene	ND	U	2.0	0.20	0.10	1	12/03/14	12/03/14	KWG1415877	
1,3,5-Trimethylbenzene	ND	U	2.0	0.20	0.089	1	12/03/14	12/03/14	KWG1415877	
4-Chlorotoluene	ND	U	2.0	0.20	0.13	1	12/03/14	12/03/14	KWG1415877	
tert-Butylbenzene	ND	U	2.0	0.20	0.059	1	12/03/14	12/03/14	KWG1415877	
1,2,4-Trimethylbenzene	ND	U	2.0	0.20	0.069	1	12/03/14	12/03/14	KWG1415877	
sec-Butylbenzene	ND	U	2.0	0.10	0.062	1	12/03/14	12/03/14	KWG1415877	
4-Isopropyltoluene	ND	U	2.0	0.20	0.060	1	12/03/14	12/03/14	KWG1415877	
1,3-Dichlorobenzene	ND	U	0.50	0.20	0.10	1	12/03/14	12/03/14	KWG1415877	
1,4-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	12/03/14	12/03/14	KWG1415877	
n-Butylbenzene	ND	U	2.0	0.10	0.054	1	12/03/14	12/03/14	KWG1415877	
1,2-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	12/03/14	12/03/14	KWG1415877	
1,2-Dibromo-3-chloropropane	ND	U	2.0	0.80	0.20	1	12/03/14	12/03/14	KWG1415877	
1,2,4-Trichlorobenzene	ND	U	2.0	0.30	0.096	1	12/03/14	12/03/14	KWG1415877	
Hexachlorobutadiene	ND	U	2.0	0.30	0.11	1	12/03/14	12/03/14	KWG1415877	
Naphthalene	ND	U	2.0	0.30	0.088	1	12/03/14	12/03/14	KWG1415877	
1,2,3-Trichlorobenzene	ND	U	2.0	0.40	0.11	1	12/03/14	12/03/14	KWG1415877	

* See Case Narrative

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1413309
Project:	JBLM LTM/TO 01	**Date Collected:**	11/24/2014
Sample Matrix:	Water	**Date Received:**	11/25/2014

Volatile Organic Compounds

Sample Name:	LGC141124DUP1-1	**Units:**	ug/L
Lab Code:	K1413309-006	**Basis:**	NA

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Dibromofluoromethane	103	85-115	12/03/14	Acceptable
1,2-Dichloroethane-d4	98	70-120	12/03/14	Acceptable
Toluene-d8	100	85-120	12/03/14	Acceptable
4-Bromofluorobenzene	102	75-120	12/03/14	Acceptable

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1413309
Project:	JBLM LTM/TO 01	**Date Collected:**	11/24/2014
Sample Matrix:	Water	**Date Received:**	11/25/2014

Volatile Organic Compounds

Sample Name:	LGC141124LC10860-1	**Units:**	ug/L
Lab Code:	K1413309-007	**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
Dichlorodifluoromethane	ND	U	0.50	0.20	0.13	1	12/03/14	12/03/14	KWG1415877	*
Chloromethane	ND	U	0.50	0.20	0.068	1	12/03/14	12/03/14	KWG1415877	*
Vinyl Chloride	ND	U	0.50	0.10	0.075	1	12/03/14	12/03/14	KWG1415877	
Bromomethane	ND	U	0.50	0.30	0.10	1	12/03/14	12/03/14	KWG1415877	*
Chloroethane	ND	U	0.50	0.20	0.16	1	12/03/14	12/03/14	KWG1415877	
Trichlorofluoromethane	ND	U	0.50	0.20	0.12	1	12/03/14	12/03/14	KWG1415877	
1,1-Dichloroethene	ND	U	0.50	0.20	0.080	1	12/03/14	12/03/14	KWG1415877	
Acetone	**7.5**	J	20	10	3.3	1	12/03/14	12/03/14	KWG1415877	
Carbon Disulfide	ND	U	0.50	0.20	0.069	1	12/03/14	12/03/14	KWG1415877	
Methylene Chloride	ND	U	2.0	0.20	0.10	1	12/03/14	12/03/14	KWG1415877	
Methyl tert-Butyl Ether	ND	U	0.50	0.30	0.11	1	12/03/14	12/03/14	KWG1415877	
trans-1,2-Dichloroethene	ND	U	0.50	0.20	0.072	1	12/03/14	12/03/14	KWG1415877	
1,1-Dichloroethane	ND	U	0.50	0.20	0.077	1	12/03/14	12/03/14	KWG1415877	
2,2-Dichloropropane	ND	U	0.50	0.20	0.060	1	12/03/14	12/03/14	KWG1415877	
cis-1,2-Dichloroethene	ND	U	0.50	0.20	0.067	1	12/03/14	12/03/14	KWG1415877	
2-Butanone (MEK)	ND	U	20	4.0	1.9	1	12/03/14	12/03/14	KWG1415877	
Bromochloromethane	ND	U	0.50	0.20	0.16	1	12/03/14	12/03/14	KWG1415877	
Chloroform	ND	U	0.50	0.20	0.072	1	12/03/14	12/03/14	KWG1415877	
1,1,1-Trichloroethane (TCA)	ND	U	0.50	0.20	0.075	1	12/03/14	12/03/14	KWG1415877	
Carbon Tetrachloride	ND	U	0.50	0.20	0.096	1	12/03/14	12/03/14	KWG1415877	
1,1-Dichloropropene	ND	U	0.50	0.20	0.089	1	12/03/14	12/03/14	KWG1415877	
Benzene	ND	U	0.50	0.10	0.062	1	12/03/14	12/03/14	KWG1415877	
1,2-Dichloroethane (EDC)	ND	U	0.50	0.15	0.080	1	12/03/14	12/03/14	KWG1415877	
Trichloroethene (TCE)	**4.9**		0.50	0.10	0.10	1	12/03/14	12/03/14	KWG1415877	
1,2-Dichloropropane	ND	U	0.50	0.20	0.095	1	12/03/14	12/03/14	KWG1415877	
Dibromomethane	ND	U	0.50	0.50	0.15	1	12/03/14	12/03/14	KWG1415877	
Bromodichloromethane	ND	U	0.50	0.30	0.091	1	12/03/14	12/03/14	KWG1415877	
cis-1,3-Dichloropropene	ND	U	0.50	0.20	0.18	1	12/03/14	12/03/14	KWG1415877	
4-Methyl-2-pentanone (MIBK)	ND	U	20	10	2.6	1	12/03/14	12/03/14	KWG1415877	
Toluene	ND	U	0.50	0.10	0.054	1	12/03/14	12/03/14	KWG1415877	
trans-1,3-Dichloropropene	ND	U	0.50	0.20	0.068	1	12/03/14	12/03/14	KWG1415877	
1,1,2-Trichloroethane	ND	U	0.50	0.40	0.14	1	12/03/14	12/03/14	KWG1415877	
Tetrachloroethene (PCE)	ND	U	0.50	0.20	0.099	1	12/03/14	12/03/14	KWG1415877	
2-Hexanone	ND	U	20	10	2.7	1	12/03/14	12/03/14	KWG1415877	

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1413309
Project:	JBLM LTM/TO 01	**Date Collected:**	11/24/2014
Sample Matrix:	Water	**Date Received:**	11/25/2014

Volatile Organic Compounds

Sample Name:	LGC141124LC10860-1	**Units:**	ug/L
Lab Code:	K1413309-007	**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
1,3-Dichloropropane	ND	U	0.50	0.30	0.14	1	12/03/14	12/03/14	KWG1415877	
Dibromochloromethane	ND	U	0.50	0.50	0.14	1	12/03/14	12/03/14	KWG1415877	
1,2-Dibromoethane (EDB)	ND	U	2.0	0.20	0.10	1	12/03/14	12/03/14	KWG1415877	
Chlorobenzene	ND	U	0.50	0.20	0.11	1	12/03/14	12/03/14	KWG1415877	
Ethylbenzene	ND	U	0.50	0.10	0.050	1	12/03/14	12/03/14	KWG1415877	
1,1,1,2-Tetrachloroethane	ND	U	0.50	0.20	0.11	1	12/03/14	12/03/14	KWG1415877	
m,p-Xylenes	ND	U	0.50	0.20	0.11	1	12/03/14	12/03/14	KWG1415877	
o-Xylene	ND	U	0.50	0.20	0.074	1	12/03/14	12/03/14	KWG1415877	
Styrene	ND	U	0.50	0.20	0.089	1	12/03/14	12/03/14	KWG1415877	
Bromoform	ND	U	0.50	0.50	0.16	1	12/03/14	12/03/14	KWG1415877	
Isopropylbenzene	ND	U	2.0	0.20	0.051	1	12/03/14	12/03/14	KWG1415877	
1,1,2,2-Tetrachloroethane	ND	U	0.50	0.20	0.16	1	12/03/14	12/03/14	KWG1415877	
Bromobenzene	ND	U	2.0	0.20	0.12	1	12/03/14	12/03/14	KWG1415877	
n-Propylbenzene	ND	U	2.0	0.20	0.054	1	12/03/14	12/03/14	KWG1415877	
1,2,3-Trichloropropane	ND	U	0.50	0.50	0.20	1	12/03/14	12/03/14	KWG1415877	
2-Chlorotoluene	ND	U	2.0	0.20	0.10	1	12/03/14	12/03/14	KWG1415877	
1,3,5-Trimethylbenzene	ND	U	2.0	0.20	0.089	1	12/03/14	12/03/14	KWG1415877	
4-Chlorotoluene	ND	U	2.0	0.20	0.13	1	12/03/14	12/03/14	KWG1415877	
tert-Butylbenzene	ND	U	2.0	0.20	0.059	1	12/03/14	12/03/14	KWG1415877	
1,2,4-Trimethylbenzene	ND	U	2.0	0.20	0.069	1	12/03/14	12/03/14	KWG1415877	
sec-Butylbenzene	ND	U	2.0	0.10	0.062	1	12/03/14	12/03/14	KWG1415877	
4-Isopropyltoluene	ND	U	2.0	0.20	0.060	1	12/03/14	12/03/14	KWG1415877	
1,3-Dichlorobenzene	ND	U	0.50	0.20	0.10	1	12/03/14	12/03/14	KWG1415877	
1,4-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	12/03/14	12/03/14	KWG1415877	
n-Butylbenzene	ND	U	2.0	0.10	0.054	1	12/03/14	12/03/14	KWG1415877	
1,2-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	12/03/14	12/03/14	KWG1415877	
1,2-Dibromo-3-chloropropane	ND	U	2.0	0.80	0.20	1	12/03/14	12/03/14	KWG1415877	
1,2,4-Trichlorobenzene	ND	U	2.0	0.30	0.096	1	12/03/14	12/03/14	KWG1415877	
Hexachlorobutadiene	ND	U	2.0	0.30	0.11	1	12/03/14	12/03/14	KWG1415877	
Naphthalene	ND	U	2.0	0.30	0.088	1	12/03/14	12/03/14	KWG1415877	
1,2,3-Trichlorobenzene	ND	U	2.0	0.40	0.11	1	12/03/14	12/03/14	KWG1415877	

* See Case Narrative

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1413309
Project:	JBLM LTM/TO 01	**Date Collected:**	11/24/2014
Sample Matrix:	Water	**Date Received:**	11/25/2014

Volatile Organic Compounds

Sample Name:	LGC141124LC10860-1	**Units:**	ug/L
Lab Code:	K1413309-007	**Basis:**	NA

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Dibromofluoromethane	106	85-115	12/03/14	Acceptable
1,2-Dichloroethane-d4	99	70-120	12/03/14	Acceptable
Toluene-d8	100	85-120	12/03/14	Acceptable
4-Bromofluorobenzene	100	75-120	12/03/14	Acceptable

Comments:

Analytical Results

Client: Sealaska Environmental Services, LLC
Project: JBLM LTM/TO 01
Sample Matrix: Water

Service Request: K1413309
Date Collected: 11/24/2014
Date Received: 11/25/2014

Volatile Organic Compounds

Sample Name: LGC141124LC10885-1
Lab Code: K1413309-008

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
Dichlorodifluoromethane	ND	U	0.50	0.20	0.13	1	12/03/14	12/03/14	KWG1415877	*
Chloromethane	ND	U	0.50	0.20	0.068	1	12/03/14	12/03/14	KWG1415877	*
Vinyl Chloride	ND	U	0.50	0.10	0.075	1	12/03/14	12/03/14	KWG1415877	
Bromomethane	ND	U	0.50	0.30	0.10	1	12/03/14	12/03/14	KWG1415877	*
Chloroethane	ND	U	0.50	0.20	0.16	1	12/03/14	12/03/14	KWG1415877	
Trichlorofluoromethane	ND	U	0.50	0.20	0.12	1	12/03/14	12/03/14	KWG1415877	
1,1-Dichloroethene	ND	U	0.50	0.20	0.080	1	12/03/14	12/03/14	KWG1415877	
Acetone	**6.0**	J	20	10	3.3	1	12/03/14	12/03/14	KWG1415877	
Carbon Disulfide	ND	U	0.50	0.20	0.069	1	12/03/14	12/03/14	KWG1415877	
Methylene Chloride	ND	U	2.0	0.20	0.10	1	12/03/14	12/03/14	KWG1415877	
Methyl tert-Butyl Ether	ND	U	0.50	0.30	0.11	1	12/03/14	12/03/14	KWG1415877	
trans-1,2-Dichloroethene	ND	U	0.50	0.20	0.072	1	12/03/14	12/03/14	KWG1415877	
1,1-Dichloroethane	ND	U	0.50	0.20	0.077	1	12/03/14	12/03/14	KWG1415877	
2,2-Dichloropropane	ND	U	0.50	0.20	0.060	1	12/03/14	12/03/14	KWG1415877	
cis-1,2-Dichloroethene	ND	U	0.50	0.20	0.067	1	12/03/14	12/03/14	KWG1415877	
2-Butanone (MEK)	ND	U	20	4.0	1.9	1	12/03/14	12/03/14	KWG1415877	
Bromochloromethane	ND	U	0.50	0.20	0.16	1	12/03/14	12/03/14	KWG1415877	
Chloroform	ND	U	0.50	0.20	0.072	1	12/03/14	12/03/14	KWG1415877	
1,1,1-Trichloroethane (TCA)	ND	U	0.50	0.20	0.075	1	12/03/14	12/03/14	KWG1415877	
Carbon Tetrachloride	ND	U	0.50	0.20	0.096	1	12/03/14	12/03/14	KWG1415877	
1,1-Dichloropropene	ND	U	0.50	0.20	0.089	1	12/03/14	12/03/14	KWG1415877	
Benzene	ND	U	0.50	0.10	0.062	1	12/03/14	12/03/14	KWG1415877	
1,2-Dichloroethane (EDC)	ND	U	0.50	0.15	0.080	1	12/03/14	12/03/14	KWG1415877	
Trichloroethene (TCE)	**0.19**	J	0.50	0.10	0.10	1	12/03/14	12/03/14	KWG1415877	
1,2-Dichloropropane	ND	U	0.50	0.20	0.095	1	12/03/14	12/03/14	KWG1415877	
Dibromomethane	ND	U	0.50	0.50	0.15	1	12/03/14	12/03/14	KWG1415877	
Bromodichloromethane	ND	U	0.50	0.30	0.091	1	12/03/14	12/03/14	KWG1415877	
cis-1,3-Dichloropropene	ND	U	0.50	0.20	0.18	1	12/03/14	12/03/14	KWG1415877	
4-Methyl-2-pentanone (MIBK)	ND	U	20	10	2.6	1	12/03/14	12/03/14	KWG1415877	
Toluene	ND	U	0.50	0.10	0.054	1	12/03/14	12/03/14	KWG1415877	
trans-1,3-Dichloropropene	ND	U	0.50	0.20	0.068	1	12/03/14	12/03/14	KWG1415877	
1,1,2-Trichloroethane	ND	U	0.50	0.40	0.14	1	12/03/14	12/03/14	KWG1415877	
Tetrachloroethene (PCE)	ND	U	0.50	0.20	0.099	1	12/03/14	12/03/14	KWG1415877	
2-Hexanone	ND	U	20	10	2.7	1	12/03/14	12/03/14	KWG1415877	

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1413309
Project:	JBLM LTM/TO 01	**Date Collected:**	11/24/2014
Sample Matrix:	Water	**Date Received:**	11/25/2014

Volatile Organic Compounds

Sample Name:	LGC141124LC10885-1	**Units:**	ug/L
Lab Code:	K1413309-008	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8260C		

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,3-Dichloropropane	ND	U	0.50	0.30	0.14	1	12/03/14	12/03/14	KWG1415877	
Dibromochloromethane	ND	U	0.50	0.50	0.14	1	12/03/14	12/03/14	KWG1415877	
1,2-Dibromoethane (EDB)	ND	U	2.0	0.20	0.10	1	12/03/14	12/03/14	KWG1415877	
Chlorobenzene	ND	U	0.50	0.20	0.11	1	12/03/14	12/03/14	KWG1415877	
Ethylbenzene	ND	U	0.50	0.10	0.050	1	12/03/14	12/03/14	KWG1415877	
1,1,1,2-Tetrachloroethane	ND	U	0.50	0.20	0.11	1	12/03/14	12/03/14	KWG1415877	
m,p-Xylenes	ND	U	0.50	0.20	0.11	1	12/03/14	12/03/14	KWG1415877	
o-Xylene	ND	U	0.50	0.20	0.074	1	12/03/14	12/03/14	KWG1415877	
Styrene	ND	U	0.50	0.20	0.089	1	12/03/14	12/03/14	KWG1415877	
Bromoform	ND	U	0.50	0.50	0.16	1	12/03/14	12/03/14	KWG1415877	
Isopropylbenzene	ND	U	2.0	0.20	0.051	1	12/03/14	12/03/14	KWG1415877	
1,1,2,2-Tetrachloroethane	ND	U	0.50	0.20	0.16	1	12/03/14	12/03/14	KWG1415877	
Bromobenzene	ND	U	2.0	0.20	0.12	1	12/03/14	12/03/14	KWG1415877	
n-Propylbenzene	ND	U	2.0	0.20	0.054	1	12/03/14	12/03/14	KWG1415877	
1,2,3-Trichloropropane	ND	U	0.50	0.50	0.20	1	12/03/14	12/03/14	KWG1415877	
2-Chlorotoluene	ND	U	2.0	0.20	0.10	1	12/03/14	12/03/14	KWG1415877	
1,3,5-Trimethylbenzene	ND	U	2.0	0.20	0.089	1	12/03/14	12/03/14	KWG1415877	
4-Chlorotoluene	ND	U	2.0	0.20	0.13	1	12/03/14	12/03/14	KWG1415877	
tert-Butylbenzene	ND	U	2.0	0.20	0.059	1	12/03/14	12/03/14	KWG1415877	
1,2,4-Trimethylbenzene	ND	U	2.0	0.20	0.069	1	12/03/14	12/03/14	KWG1415877	
sec-Butylbenzene	ND	U	2.0	0.10	0.062	1	12/03/14	12/03/14	KWG1415877	
4-Isopropyltoluene	ND	U	2.0	0.20	0.060	1	12/03/14	12/03/14	KWG1415877	
1,3-Dichlorobenzene	ND	U	0.50	0.20	0.10	1	12/03/14	12/03/14	KWG1415877	
1,4-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	12/03/14	12/03/14	KWG1415877	
n-Butylbenzene	ND	U	2.0	0.10	0.054	1	12/03/14	12/03/14	KWG1415877	
1,2-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	12/03/14	12/03/14	KWG1415877	
1,2-Dibromo-3-chloropropane	ND	U	2.0	0.80	0.20	1	12/03/14	12/03/14	KWG1415877	
1,2,4-Trichlorobenzene	ND	U	2.0	0.30	0.096	1	12/03/14	12/03/14	KWG1415877	
Hexachlorobutadiene	ND	U	2.0	0.30	0.11	1	12/03/14	12/03/14	KWG1415877	
Naphthalene	ND	U	2.0	0.30	0.088	1	12/03/14	12/03/14	KWG1415877	
1,2,3-Trichlorobenzene	ND	U	2.0	0.40	0.11	1	12/03/14	12/03/14	KWG1415877	

* See Case Narrative

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1413309
Project:	JBLM LTM/TO 01	**Date Collected:**	11/24/2014
Sample Matrix:	Water	**Date Received:**	11/25/2014

Volatile Organic Compounds

Sample Name:	LGC141124LC10885-1	**Units:**	ug/L
Lab Code:	K1413309-008	**Basis:**	NA

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Dibromofluoromethane	106	85-115	12/03/14	Acceptable
1,2-Dichloroethane-d4	98	70-120	12/03/14	Acceptable
Toluene-d8	100	85-120	12/03/14	Acceptable
4-Bromofluorobenzene	100	75-120	12/03/14	Acceptable

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1413309
Project:	JBLM LTM/TO 01	**Date Collected:**	11/24/2014
Sample Matrix:	Water	**Date Received:**	11/25/2014

Volatile Organic Compounds

Sample Name:	LGC141124MT2-1	**Units:**	ug/L
Lab Code:	K1413309-009	**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
Dichlorodifluoromethane	ND	U	0.50	0.20	0.13	1	12/03/14	12/03/14	KWG1415877	*
Chloromethane	**0.090**	J	0.50	0.20	0.068	1	12/03/14	12/03/14	KWG1415877	*
Vinyl Chloride	ND	U	0.50	0.10	0.075	1	12/03/14	12/03/14	KWG1415877	
Bromomethane	ND	U	0.50	0.30	0.10	1	12/03/14	12/03/14	KWG1415877	*
Chloroethane	ND	U	0.50	0.20	0.16	1	12/03/14	12/03/14	KWG1415877	
Trichlorofluoromethane	ND	U	0.50	0.20	0.12	1	12/03/14	12/03/14	KWG1415877	
1,1-Dichloroethene	ND	U	0.50	0.20	0.080	1	12/03/14	12/03/14	KWG1415877	
Acetone	**6.6**	J	20	10	3.3	1	12/03/14	12/03/14	KWG1415877	
Carbon Disulfide	ND	U	0.50	0.20	0.069	1	12/03/14	12/03/14	KWG1415877	
Methylene Chloride	ND	U	2.0	0.20	0.10	1	12/03/14	12/03/14	KWG1415877	
Methyl tert-Butyl Ether	ND	U	0.50	0.30	0.11	1	12/03/14	12/03/14	KWG1415877	
trans-1,2-Dichloroethene	ND	U	0.50	0.20	0.072	1	12/03/14	12/03/14	KWG1415877	
1,1-Dichloroethane	ND	U	0.50	0.20	0.077	1	12/03/14	12/03/14	KWG1415877	
2,2-Dichloropropane	ND	U	0.50	0.20	0.060	1	12/03/14	12/03/14	KWG1415877	
cis-1,2-Dichloroethene	**0.38**	J	0.50	0.20	0.067	1	12/03/14	12/03/14	KWG1415877	
2-Butanone (MEK)	ND	U	20	4.0	1.9	1	12/03/14	12/03/14	KWG1415877	
Bromochloromethane	ND	U	0.50	0.20	0.16	1	12/03/14	12/03/14	KWG1415877	
Chloroform	ND	U	0.50	0.20	0.072	1	12/03/14	12/03/14	KWG1415877	
1,1,1-Trichloroethane (TCA)	ND	U	0.50	0.20	0.075	1	12/03/14	12/03/14	KWG1415877	
Carbon Tetrachloride	ND	U	0.50	0.20	0.096	1	12/03/14	12/03/14	KWG1415877	
1,1-Dichloropropene	ND	U	0.50	0.20	0.089	1	12/03/14	12/03/14	KWG1415877	
Benzene	ND	U	0.50	0.10	0.062	1	12/03/14	12/03/14	KWG1415877	
1,2-Dichloroethane (EDC)	ND	U	0.50	0.15	0.080	1	12/03/14	12/03/14	KWG1415877	
Trichloroethene (TCE)	**7.8**		0.50	0.10	0.10	1	12/03/14	12/03/14	KWG1415877	
1,2-Dichloropropane	ND	U	0.50	0.20	0.095	1	12/03/14	12/03/14	KWG1415877	
Dibromomethane	ND	U	0.50	0.50	0.15	1	12/03/14	12/03/14	KWG1415877	
Bromodichloromethane	ND	U	0.50	0.30	0.091	1	12/03/14	12/03/14	KWG1415877	
cis-1,3-Dichloropropene	ND	U	0.50	0.20	0.18	1	12/03/14	12/03/14	KWG1415877	
4-Methyl-2-pentanone (MIBK)	ND	U	20	10	2.6	1	12/03/14	12/03/14	KWG1415877	
Toluene	ND	U	0.50	0.10	0.054	1	12/03/14	12/03/14	KWG1415877	
trans-1,3-Dichloropropene	ND	U	0.50	0.20	0.068	1	12/03/14	12/03/14	KWG1415877	
1,1,2-Trichloroethane	ND	U	0.50	0.40	0.14	1	12/03/14	12/03/14	KWG1415877	
Tetrachloroethene (PCE)	ND	U	0.50	0.20	0.099	1	12/03/14	12/03/14	KWG1415877	
2-Hexanone	ND	U	20	10	2.7	1	12/03/14	12/03/14	KWG1415877	

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1413309
Project:	JBLM LTM/TO 01	**Date Collected:**	11/24/2014
Sample Matrix:	Water	**Date Received:**	11/25/2014

Volatile Organic Compounds

Sample Name:	LGC141124MT2-1	**Units:**	ug/L
Lab Code:	K1413309-009	**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
1,3-Dichloropropane	ND	U	0.50	0.30	0.14	1	12/03/14	12/03/14	KWG1415877	
Dibromochloromethane	ND	U	0.50	0.50	0.14	1	12/03/14	12/03/14	KWG1415877	
1,2-Dibromoethane (EDB)	ND	U	2.0	0.20	0.10	1	12/03/14	12/03/14	KWG1415877	
Chlorobenzene	ND	U	0.50	0.20	0.11	1	12/03/14	12/03/14	KWG1415877	
Ethylbenzene	ND	U	0.50	0.10	0.050	1	12/03/14	12/03/14	KWG1415877	
1,1,1,2-Tetrachloroethane	ND	U	0.50	0.20	0.11	1	12/03/14	12/03/14	KWG1415877	
m,p-Xylenes	ND	U	0.50	0.20	0.11	1	12/03/14	12/03/14	KWG1415877	
o-Xylene	ND	U	0.50	0.20	0.074	1	12/03/14	12/03/14	KWG1415877	
Styrene	ND	U	0.50	0.20	0.089	1	12/03/14	12/03/14	KWG1415877	
Bromoform	ND	U	0.50	0.50	0.16	1	12/03/14	12/03/14	KWG1415877	
Isopropylbenzene	ND	U	2.0	0.20	0.051	1	12/03/14	12/03/14	KWG1415877	
1,1,2,2-Tetrachloroethane	ND	U	0.50	0.20	0.16	1	12/03/14	12/03/14	KWG1415877	
Bromobenzene	ND	U	2.0	0.20	0.12	1	12/03/14	12/03/14	KWG1415877	
n-Propylbenzene	ND	U	2.0	0.20	0.054	1	12/03/14	12/03/14	KWG1415877	
1,2,3-Trichloropropane	ND	U	0.50	0.50	0.20	1	12/03/14	12/03/14	KWG1415877	
2-Chlorotoluene	ND	U	2.0	0.20	0.10	1	12/03/14	12/03/14	KWG1415877	
1,3,5-Trimethylbenzene	ND	U	2.0	0.20	0.089	1	12/03/14	12/03/14	KWG1415877	
4-Chlorotoluene	ND	U	2.0	0.20	0.13	1	12/03/14	12/03/14	KWG1415877	
tert-Butylbenzene	ND	U	2.0	0.20	0.059	1	12/03/14	12/03/14	KWG1415877	
1,2,4-Trimethylbenzene	ND	U	2.0	0.20	0.069	1	12/03/14	12/03/14	KWG1415877	
sec-Butylbenzene	ND	U	2.0	0.10	0.062	1	12/03/14	12/03/14	KWG1415877	
4-Isopropyltoluene	ND	U	2.0	0.20	0.060	1	12/03/14	12/03/14	KWG1415877	
1,3-Dichlorobenzene	ND	U	0.50	0.20	0.10	1	12/03/14	12/03/14	KWG1415877	
1,4-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	12/03/14	12/03/14	KWG1415877	
n-Butylbenzene	ND	U	2.0	0.10	0.054	1	12/03/14	12/03/14	KWG1415877	
1,2-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	12/03/14	12/03/14	KWG1415877	
1,2-Dibromo-3-chloropropane	ND	U	2.0	0.80	0.20	1	12/03/14	12/03/14	KWG1415877	
1,2,4-Trichlorobenzene	ND	U	2.0	0.30	0.096	1	12/03/14	12/03/14	KWG1415877	
Hexachlorobutadiene	ND	U	2.0	0.30	0.11	1	12/03/14	12/03/14	KWG1415877	
Naphthalene	ND	U	2.0	0.30	0.088	1	12/03/14	12/03/14	KWG1415877	
1,2,3-Trichlorobenzene	ND	U	2.0	0.40	0.11	1	12/03/14	12/03/14	KWG1415877	

* See Case Narrative

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1413309
Project:	JBLM LTM/TO 01	**Date Collected:**	11/24/2014
Sample Matrix:	Water	**Date Received:**	11/25/2014

Volatile Organic Compounds

Sample Name:	LGC141124MT2-1	**Units:**	ug/L
Lab Code:	K1413309-009	**Basis:**	NA

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Dibromofluoromethane	104	85-115	12/03/14	Acceptable
1,2-Dichloroethane-d4	97	70-120	12/03/14	Acceptable
Toluene-d8	100	85-120	12/03/14	Acceptable
4-Bromofluorobenzene	100	75-120	12/03/14	Acceptable

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1413309
Project:	JBLM LTM/TO 01	**Date Collected:**	11/24/2014
Sample Matrix:	Water	**Date Received:**	11/25/2014

Volatile Organic Compounds

Sample Name:	LGC141124MT1-1	**Units:**	ug/L
Lab Code:	K1413309-010	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8260C		

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Dichlorodifluoromethane	ND	U	0.50	0.20	0.13	1	12/03/14	12/03/14	KWG1415877	*
Chloromethane	**0.10**	J	0.50	0.20	0.068	1	12/03/14	12/03/14	KWG1415877	*
Vinyl Chloride	ND	U	0.50	0.10	0.075	1	12/03/14	12/03/14	KWG1415877	
Bromomethane	ND	U	0.50	0.30	0.10	1	12/03/14	12/03/14	KWG1415877	*
Chloroethane	ND	U	0.50	0.20	0.16	1	12/03/14	12/03/14	KWG1415877	
Trichlorofluoromethane	ND	U	0.50	0.20	0.12	1	12/03/14	12/03/14	KWG1415877	
1,1-Dichloroethene	ND	U	0.50	0.20	0.080	1	12/03/14	12/03/14	KWG1415877	
Acetone	**5.1**	J	20	10	3.3	1	12/03/14	12/03/14	KWG1415877	
Carbon Disulfide	ND	U	0.50	0.20	0.069	1	12/03/14	12/03/14	KWG1415877	
Methylene Chloride	ND	U	2.0	0.20	0.10	1	12/03/14	12/03/14	KWG1415877	
Methyl tert-Butyl Ether	ND	U	0.50	0.30	0.11	1	12/03/14	12/03/14	KWG1415877	
trans-1,2-Dichloroethene	ND	U	0.50	0.20	0.072	1	12/03/14	12/03/14	KWG1415877	
1,1-Dichloroethane	ND	U	0.50	0.20	0.077	1	12/03/14	12/03/14	KWG1415877	
2,2-Dichloropropane	ND	U	0.50	0.20	0.060	1	12/03/14	12/03/14	KWG1415877	
cis-1,2-Dichloroethene	**0.31**	J	0.50	0.20	0.067	1	12/03/14	12/03/14	KWG1415877	
2-Butanone (MEK)	ND	U	20	4.0	1.9	1	12/03/14	12/03/14	KWG1415877	
Bromochloromethane	ND	U	0.50	0.20	0.16	1	12/03/14	12/03/14	KWG1415877	
Chloroform	ND	U	0.50	0.20	0.072	1	12/03/14	12/03/14	KWG1415877	
1,1,1-Trichloroethane (TCA)	ND	U	0.50	0.20	0.075	1	12/03/14	12/03/14	KWG1415877	
Carbon Tetrachloride	ND	U	0.50	0.20	0.096	1	12/03/14	12/03/14	KWG1415877	
1,1-Dichloropropene	ND	U	0.50	0.20	0.089	1	12/03/14	12/03/14	KWG1415877	
Benzene	ND	U	0.50	0.10	0.062	1	12/03/14	12/03/14	KWG1415877	
1,2-Dichloroethane (EDC)	ND	U	0.50	0.15	0.080	1	12/03/14	12/03/14	KWG1415877	
Trichloroethene (TCE)	**13**		0.50	0.10	0.10	1	12/03/14	12/03/14	KWG1415877	
1,2-Dichloropropane	ND	U	0.50	0.20	0.095	1	12/03/14	12/03/14	KWG1415877	
Dibromomethane	ND	U	0.50	0.50	0.15	1	12/03/14	12/03/14	KWG1415877	
Bromodichloromethane	ND	U	0.50	0.30	0.091	1	12/03/14	12/03/14	KWG1415877	
cis-1,3-Dichloropropene	ND	U	0.50	0.20	0.18	1	12/03/14	12/03/14	KWG1415877	
4-Methyl-2-pentanone (MIBK)	ND	U	20	10	2.6	1	12/03/14	12/03/14	KWG1415877	
Toluene	ND	U	0.50	0.10	0.054	1	12/03/14	12/03/14	KWG1415877	
trans-1,3-Dichloropropene	ND	U	0.50	0.20	0.068	1	12/03/14	12/03/14	KWG1415877	
1,1,2-Trichloroethane	ND	U	0.50	0.40	0.14	1	12/03/14	12/03/14	KWG1415877	
Tetrachloroethene (PCE)	ND	U	0.50	0.20	0.099	1	12/03/14	12/03/14	KWG1415877	
2-Hexanone	ND	U	20	10	2.7	1	12/03/14	12/03/14	KWG1415877	

Comments:

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1413309
Project:	JBLM LTM/TO 01	**Date Collected:**	11/24/2014
Sample Matrix:	Water	**Date Received:**	11/25/2014

Volatile Organic Compounds

Sample Name:	LGC141124MT1-1	**Units:**	ug/L
Lab Code:	K1413309-010	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8260C		

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,3-Dichloropropane	ND	U	0.50	0.30	0.14	1	12/03/14	12/03/14	KWG1415877	
Dibromochloromethane	ND	U	0.50	0.50	0.14	1	12/03/14	12/03/14	KWG1415877	
1,2-Dibromoethane (EDB)	ND	U	2.0	0.20	0.10	1	12/03/14	12/03/14	KWG1415877	
Chlorobenzene	ND	U	0.50	0.20	0.11	1	12/03/14	12/03/14	KWG1415877	
Ethylbenzene	ND	U	0.50	0.10	0.050	1	12/03/14	12/03/14	KWG1415877	
1,1,1,2-Tetrachloroethane	ND	U	0.50	0.20	0.11	1	12/03/14	12/03/14	KWG1415877	
m,p-Xylenes	ND	U	0.50	0.20	0.11	1	12/03/14	12/03/14	KWG1415877	
o-Xylene	ND	U	0.50	0.20	0.074	1	12/03/14	12/03/14	KWG1415877	
Styrene	ND	U	0.50	0.20	0.089	1	12/03/14	12/03/14	KWG1415877	
Bromoform	ND	U	0.50	0.50	0.16	1	12/03/14	12/03/14	KWG1415877	
Isopropylbenzene	ND	U	2.0	0.20	0.051	1	12/03/14	12/03/14	KWG1415877	
1,1,2,2-Tetrachloroethane	ND	U	0.50	0.20	0.16	1	12/03/14	12/03/14	KWG1415877	
Bromobenzene	ND	U	2.0	0.20	0.12	1	12/03/14	12/03/14	KWG1415877	
n-Propylbenzene	ND	U	2.0	0.20	0.054	1	12/03/14	12/03/14	KWG1415877	
1,2,3-Trichloropropane	ND	U	0.50	0.50	0.20	1	12/03/14	12/03/14	KWG1415877	
2-Chlorotoluene	ND	U	2.0	0.20	0.10	1	12/03/14	12/03/14	KWG1415877	
1,3,5-Trimethylbenzene	ND	U	2.0	0.20	0.089	1	12/03/14	12/03/14	KWG1415877	
4-Chlorotoluene	ND	U	2.0	0.20	0.13	1	12/03/14	12/03/14	KWG1415877	
tert-Butylbenzene	ND	U	2.0	0.20	0.059	1	12/03/14	12/03/14	KWG1415877	
1,2,4-Trimethylbenzene	ND	U	2.0	0.20	0.069	1	12/03/14	12/03/14	KWG1415877	
sec-Butylbenzene	ND	U	2.0	0.10	0.062	1	12/03/14	12/03/14	KWG1415877	
4-Isopropyltoluene	ND	U	2.0	0.20	0.060	1	12/03/14	12/03/14	KWG1415877	
1,3-Dichlorobenzene	ND	U	0.50	0.20	0.10	1	12/03/14	12/03/14	KWG1415877	
1,4-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	12/03/14	12/03/14	KWG1415877	
n-Butylbenzene	ND	U	2.0	0.10	0.054	1	12/03/14	12/03/14	KWG1415877	
1,2-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	12/03/14	12/03/14	KWG1415877	
1,2-Dibromo-3-chloropropane	ND	U	2.0	0.80	0.20	1	12/03/14	12/03/14	KWG1415877	
1,2,4-Trichlorobenzene	ND	U	2.0	0.30	0.096	1	12/03/14	12/03/14	KWG1415877	
Hexachlorobutadiene	ND	U	2.0	0.30	0.11	1	12/03/14	12/03/14	KWG1415877	
Naphthalene	ND	U	2.0	0.30	0.088	1	12/03/14	12/03/14	KWG1415877	
1,2,3-Trichlorobenzene	ND	U	2.0	0.40	0.11	1	12/03/14	12/03/14	KWG1415877	

* See Case Narrative

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1413309
Project:	JBLM LTM/TO 01	**Date Collected:**	11/24/2014
Sample Matrix:	Water	**Date Received:**	11/25/2014

Volatile Organic Compounds

Sample Name:	LGC141124MT1-1	**Units:**	ug/L
Lab Code:	K1413309-010	**Basis:**	NA

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Dibromofluoromethane	107	85-115	12/03/14	Acceptable
1,2-Dichloroethane-d4	103	70-120	12/03/14	Acceptable
Toluene-d8	101	85-120	12/03/14	Acceptable
4-Bromofluorobenzene	100	75-120	12/03/14	Acceptable

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1413309
Project:	JBLM LTM/TO 01	**Date Collected:**	11/24/2014
Sample Matrix:	Water	**Date Received:**	11/25/2014

Volatile Organic Compounds

Sample Name:	LGC14112485PA382-1	**Units:**	ug/L
Lab Code:	K1413309-011	**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
Dichlorodifluoromethane	ND	U	0.50	0.20	0.13	1	12/03/14	12/03/14	KWG1415877	*
Chloromethane	**0.10**	J	0.50	0.20	0.068	1	12/03/14	12/03/14	KWG1415877	*
Vinyl Chloride	ND	U	0.50	0.10	0.075	1	12/03/14	12/03/14	KWG1415877	
Bromomethane	ND	U	0.50	0.30	0.10	1	12/03/14	12/03/14	KWG1415877	*
Chloroethane	ND	U	0.50	0.20	0.16	1	12/03/14	12/03/14	KWG1415877	
Trichlorofluoromethane	ND	U	0.50	0.20	0.12	1	12/03/14	12/03/14	KWG1415877	
1,1-Dichloroethene	ND	U	0.50	0.20	0.080	1	12/03/14	12/03/14	KWG1415877	
Acetone	**6.3**	J	20	10	3.3	1	12/03/14	12/03/14	KWG1415877	
Carbon Disulfide	ND	U	0.50	0.20	0.069	1	12/03/14	12/03/14	KWG1415877	
Methylene Chloride	ND	U	2.0	0.20	0.10	1	12/03/14	12/03/14	KWG1415877	
Methyl tert-Butyl Ether	ND	U	0.50	0.30	0.11	1	12/03/14	12/03/14	KWG1415877	
trans-1,2-Dichloroethene	ND	U	0.50	0.20	0.072	1	12/03/14	12/03/14	KWG1415877	
1,1-Dichloroethane	ND	U	0.50	0.20	0.077	1	12/03/14	12/03/14	KWG1415877	
2,2-Dichloropropane	ND	U	0.50	0.20	0.060	1	12/03/14	12/03/14	KWG1415877	
cis-1,2-Dichloroethene	**0.23**	J	0.50	0.20	0.067	1	12/03/14	12/03/14	KWG1415877	
2-Butanone (MEK)	ND	U	20	4.0	1.9	1	12/03/14	12/03/14	KWG1415877	
Bromochloromethane	ND	U	0.50	0.20	0.16	1	12/03/14	12/03/14	KWG1415877	
Chloroform	**0.10**	J	0.50	0.20	0.072	1	12/03/14	12/03/14	KWG1415877	
1,1,1-Trichloroethane (TCA)	ND	U	0.50	0.20	0.075	1	12/03/14	12/03/14	KWG1415877	
Carbon Tetrachloride	ND	U	0.50	0.20	0.096	1	12/03/14	12/03/14	KWG1415877	
1,1-Dichloropropene	ND	U	0.50	0.20	0.089	1	12/03/14	12/03/14	KWG1415877	
Benzene	ND	U	0.50	0.10	0.062	1	12/03/14	12/03/14	KWG1415877	
1,2-Dichloroethane (EDC)	ND	U	0.50	0.15	0.080	1	12/03/14	12/03/14	KWG1415877	
Trichloroethene (TCE)	**9.6**		0.50	0.10	0.10	1	12/03/14	12/03/14	KWG1415877	
1,2-Dichloropropane	ND	U	0.50	0.20	0.095	1	12/03/14	12/03/14	KWG1415877	
Dibromomethane	ND	U	0.50	0.50	0.15	1	12/03/14	12/03/14	KWG1415877	
Bromodichloromethane	ND	U	0.50	0.30	0.091	1	12/03/14	12/03/14	KWG1415877	
cis-1,3-Dichloropropene	ND	U	0.50	0.20	0.18	1	12/03/14	12/03/14	KWG1415877	
4-Methyl-2-pentanone (MIBK)	ND	U	20	10	2.6	1	12/03/14	12/03/14	KWG1415877	
Toluene	ND	U	0.50	0.10	0.054	1	12/03/14	12/03/14	KWG1415877	
trans-1,3-Dichloropropene	ND	U	0.50	0.20	0.068	1	12/03/14	12/03/14	KWG1415877	
1,1,2-Trichloroethane	ND	U	0.50	0.40	0.14	1	12/03/14	12/03/14	KWG1415877	
Tetrachloroethene (PCE)	ND	U	0.50	0.20	0.099	1	12/03/14	12/03/14	KWG1415877	
2-Hexanone	ND	U	20	10	2.7	1	12/03/14	12/03/14	KWG1415877	

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1413309
Project:	JBLM LTM/TO 01	**Date Collected:**	11/24/2014
Sample Matrix:	Water	**Date Received:**	11/25/2014

Volatile Organic Compounds

Sample Name:	LGC14112485PA382-1	**Units:**	ug/L
Lab Code:	K1413309-011	**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
1,3-Dichloropropane	ND	U	0.50	0.30	0.14	1	12/03/14	12/03/14	KWG1415877	
Dibromochloromethane	ND	U	0.50	0.50	0.14	1	12/03/14	12/03/14	KWG1415877	
1,2-Dibromoethane (EDB)	ND	U	2.0	0.20	0.10	1	12/03/14	12/03/14	KWG1415877	
Chlorobenzene	ND	U	0.50	0.20	0.11	1	12/03/14	12/03/14	KWG1415877	
Ethylbenzene	ND	U	0.50	0.10	0.050	1	12/03/14	12/03/14	KWG1415877	
1,1,1,2-Tetrachloroethane	ND	U	0.50	0.20	0.11	1	12/03/14	12/03/14	KWG1415877	
m,p-Xylenes	ND	U	0.50	0.20	0.11	1	12/03/14	12/03/14	KWG1415877	
o-Xylene	ND	U	0.50	0.20	0.074	1	12/03/14	12/03/14	KWG1415877	
Styrene	ND	U	0.50	0.20	0.089	1	12/03/14	12/03/14	KWG1415877	
Bromoform	ND	U	0.50	0.50	0.16	1	12/03/14	12/03/14	KWG1415877	
Isopropylbenzene	ND	U	2.0	0.20	0.051	1	12/03/14	12/03/14	KWG1415877	
1,1,2,2-Tetrachloroethane	ND	U	0.50	0.20	0.16	1	12/03/14	12/03/14	KWG1415877	
Bromobenzene	ND	U	2.0	0.20	0.12	1	12/03/14	12/03/14	KWG1415877	
n-Propylbenzene	ND	U	2.0	0.20	0.054	1	12/03/14	12/03/14	KWG1415877	
1,2,3-Trichloropropane	ND	U	0.50	0.50	0.20	1	12/03/14	12/03/14	KWG1415877	
2-Chlorotoluene	ND	U	2.0	0.20	0.10	1	12/03/14	12/03/14	KWG1415877	
1,3,5-Trimethylbenzene	ND	U	2.0	0.20	0.089	1	12/03/14	12/03/14	KWG1415877	
4-Chlorotoluene	ND	U	2.0	0.20	0.13	1	12/03/14	12/03/14	KWG1415877	
tert-Butylbenzene	ND	U	2.0	0.20	0.059	1	12/03/14	12/03/14	KWG1415877	
1,2,4-Trimethylbenzene	ND	U	2.0	0.20	0.069	1	12/03/14	12/03/14	KWG1415877	
sec-Butylbenzene	ND	U	2.0	0.10	0.062	1	12/03/14	12/03/14	KWG1415877	
4-Isopropyltoluene	ND	U	2.0	0.20	0.060	1	12/03/14	12/03/14	KWG1415877	
1,3-Dichlorobenzene	ND	U	0.50	0.20	0.10	1	12/03/14	12/03/14	KWG1415877	
1,4-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	12/03/14	12/03/14	KWG1415877	
n-Butylbenzene	ND	U	2.0	0.10	0.054	1	12/03/14	12/03/14	KWG1415877	
1,2-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	12/03/14	12/03/14	KWG1415877	
1,2-Dibromo-3-chloropropane	ND	U	2.0	0.80	0.20	1	12/03/14	12/03/14	KWG1415877	
1,2,4-Trichlorobenzene	ND	U	2.0	0.30	0.096	1	12/03/14	12/03/14	KWG1415877	
Hexachlorobutadiene	ND	U	2.0	0.30	0.11	1	12/03/14	12/03/14	KWG1415877	
Naphthalene	ND	U	2.0	0.30	0.088	1	12/03/14	12/03/14	KWG1415877	
1,2,3-Trichlorobenzene	ND	U	2.0	0.40	0.11	1	12/03/14	12/03/14	KWG1415877	

* See Case Narrative

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1413309
Project:	JBLM LTM/TO 01	**Date Collected:**	11/24/2014
Sample Matrix:	Water	**Date Received:**	11/25/2014

Volatile Organic Compounds

Sample Name:	LGC14112485PA382-1	**Units:**	ug/L
Lab Code:	K1413309-011	**Basis:**	NA

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Dibromofluoromethane	105	85-115	12/03/14	Acceptable
1,2-Dichloroethane-d4	100	70-120	12/03/14	Acceptable
Toluene-d8	101	85-120	12/03/14	Acceptable
4-Bromofluorobenzene	101	75-120	12/03/14	Acceptable

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1413309
Project:	JBLM LTM/TO 01	**Date Collected:**	11/24/2014
Sample Matrix:	Water	**Date Received:**	11/25/2014

Volatile Organic Compounds

Sample Name:	LGC14112485PA384-1	**Units:**	ug/L
Lab Code:	K1413309-012	**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
Dichlorodifluoromethane	ND	U	0.50	0.20	0.13	1	12/03/14	12/03/14	KWG1415877	*
Chloromethane	**0.12**	J	0.50	0.20	0.068	1	12/03/14	12/03/14	KWG1415877	*
Vinyl Chloride	ND	U	0.50	0.10	0.075	1	12/03/14	12/03/14	KWG1415877	
Bromomethane	ND	U	0.50	0.30	0.10	1	12/03/14	12/03/14	KWG1415877	*
Chloroethane	ND	U	0.50	0.20	0.16	1	12/03/14	12/03/14	KWG1415877	
Trichlorofluoromethane	ND	U	0.50	0.20	0.12	1	12/03/14	12/03/14	KWG1415877	
1,1-Dichloroethene	ND	U	0.50	0.20	0.080	1	12/03/14	12/03/14	KWG1415877	
Acetone	**5.4**	J	20	10	3.3	1	12/03/14	12/03/14	KWG1415877	
Carbon Disulfide	ND	U	0.50	0.20	0.069	1	12/03/14	12/03/14	KWG1415877	
Methylene Chloride	ND	U	2.0	0.20	0.10	1	12/03/14	12/03/14	KWG1415877	
Methyl tert-Butyl Ether	ND	U	0.50	0.30	0.11	1	12/03/14	12/03/14	KWG1415877	
trans-1,2-Dichloroethene	ND	U	0.50	0.20	0.072	1	12/03/14	12/03/14	KWG1415877	
1,1-Dichloroethane	ND	U	0.50	0.20	0.077	1	12/03/14	12/03/14	KWG1415877	
2,2-Dichloropropane	ND	U	0.50	0.20	0.060	1	12/03/14	12/03/14	KWG1415877	
cis-1,2-Dichloroethene	ND	U	0.50	0.20	0.067	1	12/03/14	12/03/14	KWG1415877	
2-Butanone (MEK)	ND	U	20	4.0	1.9	1	12/03/14	12/03/14	KWG1415877	
Bromochloromethane	ND	U	0.50	0.20	0.16	1	12/03/14	12/03/14	KWG1415877	
Chloroform	ND	U	0.50	0.20	0.072	1	12/03/14	12/03/14	KWG1415877	
1,1,1-Trichloroethane (TCA)	ND	U	0.50	0.20	0.075	1	12/03/14	12/03/14	KWG1415877	
Carbon Tetrachloride	ND	U	0.50	0.20	0.096	1	12/03/14	12/03/14	KWG1415877	
1,1-Dichloropropene	ND	U	0.50	0.20	0.089	1	12/03/14	12/03/14	KWG1415877	
Benzene	ND	U	0.50	0.10	0.062	1	12/03/14	12/03/14	KWG1415877	
1,2-Dichloroethane (EDC)	ND	U	0.50	0.15	0.080	1	12/03/14	12/03/14	KWG1415877	
Trichloroethene (TCE)	ND	U	0.50	0.10	0.10	1	12/03/14	12/03/14	KWG1415877	
1,2-Dichloropropane	ND	U	0.50	0.20	0.095	1	12/03/14	12/03/14	KWG1415877	
Dibromomethane	ND	U	0.50	0.50	0.15	1	12/03/14	12/03/14	KWG1415877	
Bromodichloromethane	ND	U	0.50	0.30	0.091	1	12/03/14	12/03/14	KWG1415877	
cis-1,3-Dichloropropene	ND	U	0.50	0.20	0.18	1	12/03/14	12/03/14	KWG1415877	
4-Methyl-2-pentanone (MIBK)	ND	U	20	10	2.6	1	12/03/14	12/03/14	KWG1415877	
Toluene	ND	U	0.50	0.10	0.054	1	12/03/14	12/03/14	KWG1415877	
trans-1,3-Dichloropropene	ND	U	0.50	0.20	0.068	1	12/03/14	12/03/14	KWG1415877	
1,1,2-Trichloroethane	ND	U	0.50	0.40	0.14	1	12/03/14	12/03/14	KWG1415877	
Tetrachloroethene (PCE)	ND	U	0.50	0.20	0.099	1	12/03/14	12/03/14	KWG1415877	
2-Hexanone	ND	U	20	10	2.7	1	12/03/14	12/03/14	KWG1415877	

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1413309
Project:	JBLM LTM/TO 01	**Date Collected:**	11/24/2014
Sample Matrix:	Water	**Date Received:**	11/25/2014

Volatile Organic Compounds

Sample Name:	LGC14112485PA384-1	**Units:**	ug/L
Lab Code:	K1413309-012	**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
1,3-Dichloropropane	ND	U	0.50	0.30	0.14	1	12/03/14	12/03/14	KWG1415877	
Dibromochloromethane	ND	U	0.50	0.50	0.14	1	12/03/14	12/03/14	KWG1415877	
1,2-Dibromoethane (EDB)	ND	U	2.0	0.20	0.10	1	12/03/14	12/03/14	KWG1415877	
Chlorobenzene	ND	U	0.50	0.20	0.11	1	12/03/14	12/03/14	KWG1415877	
Ethylbenzene	ND	U	0.50	0.10	0.050	1	12/03/14	12/03/14	KWG1415877	
1,1,1,2-Tetrachloroethane	ND	U	0.50	0.20	0.11	1	12/03/14	12/03/14	KWG1415877	
m,p-Xylenes	ND	U	0.50	0.20	0.11	1	12/03/14	12/03/14	KWG1415877	
o-Xylene	ND	U	0.50	0.20	0.074	1	12/03/14	12/03/14	KWG1415877	
Styrene	ND	U	0.50	0.20	0.089	1	12/03/14	12/03/14	KWG1415877	
Bromoform	ND	U	0.50	0.50	0.16	1	12/03/14	12/03/14	KWG1415877	
Isopropylbenzene	ND	U	2.0	0.20	0.051	1	12/03/14	12/03/14	KWG1415877	
1,1,2,2-Tetrachloroethane	ND	U	0.50	0.20	0.16	1	12/03/14	12/03/14	KWG1415877	
Bromobenzene	ND	U	2.0	0.20	0.12	1	12/03/14	12/03/14	KWG1415877	
n-Propylbenzene	ND	U	2.0	0.20	0.054	1	12/03/14	12/03/14	KWG1415877	
1,2,3-Trichloropropane	ND	U	0.50	0.50	0.20	1	12/03/14	12/03/14	KWG1415877	
2-Chlorotoluene	ND	U	2.0	0.20	0.10	1	12/03/14	12/03/14	KWG1415877	
1,3,5-Trimethylbenzene	ND	U	2.0	0.20	0.089	1	12/03/14	12/03/14	KWG1415877	
4-Chlorotoluene	ND	U	2.0	0.20	0.13	1	12/03/14	12/03/14	KWG1415877	
tert-Butylbenzene	ND	U	2.0	0.20	0.059	1	12/03/14	12/03/14	KWG1415877	
1,2,4-Trimethylbenzene	ND	U	2.0	0.20	0.069	1	12/03/14	12/03/14	KWG1415877	
sec-Butylbenzene	ND	U	2.0	0.10	0.062	1	12/03/14	12/03/14	KWG1415877	
4-Isopropyltoluene	ND	U	2.0	0.20	0.060	1	12/03/14	12/03/14	KWG1415877	
1,3-Dichlorobenzene	ND	U	0.50	0.20	0.10	1	12/03/14	12/03/14	KWG1415877	
1,4-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	12/03/14	12/03/14	KWG1415877	
n-Butylbenzene	ND	U	2.0	0.10	0.054	1	12/03/14	12/03/14	KWG1415877	
1,2-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	12/03/14	12/03/14	KWG1415877	
1,2-Dibromo-3-chloropropane	ND	U	2.0	0.80	0.20	1	12/03/14	12/03/14	KWG1415877	
1,2,4-Trichlorobenzene	ND	U	2.0	0.30	0.096	1	12/03/14	12/03/14	KWG1415877	
Hexachlorobutadiene	ND	U	2.0	0.30	0.11	1	12/03/14	12/03/14	KWG1415877	
Naphthalene	ND	U	2.0	0.30	0.088	1	12/03/14	12/03/14	KWG1415877	
1,2,3-Trichlorobenzene	ND	U	2.0	0.40	0.11	1	12/03/14	12/03/14	KWG1415877	

* See Case Narrative

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1413309
Project:	JBLM LTM/TO 01	**Date Collected:**	11/24/2014
Sample Matrix:	Water	**Date Received:**	11/25/2014

Volatile Organic Compounds

Sample Name:	LGC14112485PA384-1	**Units:**	ug/L
Lab Code:	K1413309-012	**Basis:**	NA

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Dibromofluoromethane	105	85-115	12/03/14	Acceptable
1,2-Dichloroethane-d4	99	70-120	12/03/14	Acceptable
Toluene-d8	99	85-120	12/03/14	Acceptable
4-Bromofluorobenzene	98	75-120	12/03/14	Acceptable

Comments:

Analytical Results

Client: Sealaska Environmental Services, LLC
Project: JBLM LTM/TO 01
Sample Matrix: Water

Service Request: K1413309
Date Collected: 11/24/2014
Date Received: 11/25/2014

Volatile Organic Compounds

Sample Name: LGC141124T15-1
Lab Code: K1413309-013

Units: ug/L
Basis: NA

Extraction Method: EPA 5030B
Analysis Method: 8260C

Level: Low

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Dichlorodifluoromethane	ND	U	0.50	0.20	0.13	1	12/03/14	12/03/14	KWG1415877	*
Chloromethane	**0.10**	J	0.50	0.20	0.068	1	12/03/14	12/03/14	KWG1415877	*
Vinyl Chloride	ND	U	0.50	0.10	0.075	1	12/03/14	12/03/14	KWG1415877	
Bromomethane	ND	U	0.50	0.30	0.10	1	12/03/14	12/03/14	KWG1415877	*
Chloroethane	ND	U	0.50	0.20	0.16	1	12/03/14	12/03/14	KWG1415877	
Trichlorofluoromethane	ND	U	0.50	0.20	0.12	1	12/03/14	12/03/14	KWG1415877	
1,1-Dichloroethene	ND	U	0.50	0.20	0.080	1	12/03/14	12/03/14	KWG1415877	
Acetone	**6.3**	J	20	10	3.3	1	12/03/14	12/03/14	KWG1415877	
Carbon Disulfide	ND	U	0.50	0.20	0.069	1	12/03/14	12/03/14	KWG1415877	
Methylene Chloride	ND	U	2.0	0.20	0.10	1	12/03/14	12/03/14	KWG1415877	
Methyl tert-Butyl Ether	ND	U	0.50	0.30	0.11	1	12/03/14	12/03/14	KWG1415877	
trans-1,2-Dichloroethene	ND	U	0.50	0.20	0.072	1	12/03/14	12/03/14	KWG1415877	
1,1-Dichloroethane	ND	U	0.50	0.20	0.077	1	12/03/14	12/03/14	KWG1415877	
2,2-Dichloropropane	ND	U	0.50	0.20	0.060	1	12/03/14	12/03/14	KWG1415877	
cis-1,2-Dichloroethene	ND	U	0.50	0.20	0.067	1	12/03/14	12/03/14	KWG1415877	
2-Butanone (MEK)	ND	U	20	4.0	1.9	1	12/03/14	12/03/14	KWG1415877	
Bromochloromethane	ND	U	0.50	0.20	0.16	1	12/03/14	12/03/14	KWG1415877	
Chloroform	ND	U	0.50	0.20	0.072	1	12/03/14	12/03/14	KWG1415877	
1,1,1-Trichloroethane (TCA)	**0.19**	J	0.50	0.20	0.075	1	12/03/14	12/03/14	KWG1415877	
Carbon Tetrachloride	**0.39**	J	0.50	0.20	0.096	1	12/03/14	12/03/14	KWG1415877	
1,1-Dichloropropene	ND	U	0.50	0.20	0.089	1	12/03/14	12/03/14	KWG1415877	
Benzene	ND	U	0.50	0.10	0.062	1	12/03/14	12/03/14	KWG1415877	
1,2-Dichloroethane (EDC)	ND	U	0.50	0.15	0.080	1	12/03/14	12/03/14	KWG1415877	
Trichloroethene (TCE)	ND	U	0.50	0.10	0.10	1	12/03/14	12/03/14	KWG1415877	
1,2-Dichloropropane	ND	U	0.50	0.20	0.095	1	12/03/14	12/03/14	KWG1415877	
Dibromomethane	ND	U	0.50	0.50	0.15	1	12/03/14	12/03/14	KWG1415877	
Bromodichloromethane	ND	U	0.50	0.30	0.091	1	12/03/14	12/03/14	KWG1415877	
cis-1,3-Dichloropropene	ND	U	0.50	0.20	0.18	1	12/03/14	12/03/14	KWG1415877	
4-Methyl-2-pentanone (MIBK)	ND	U	20	10	2.6	1	12/03/14	12/03/14	KWG1415877	
Toluene	ND	U	0.50	0.10	0.054	1	12/03/14	12/03/14	KWG1415877	
trans-1,3-Dichloropropene	ND	U	0.50	0.20	0.068	1	12/03/14	12/03/14	KWG1415877	
1,1,2-Trichloroethane	ND	U	0.50	0.40	0.14	1	12/03/14	12/03/14	KWG1415877	
Tetrachloroethene (PCE)	ND	U	0.50	0.20	0.099	1	12/03/14	12/03/14	KWG1415877	
2-Hexanone	ND	U	20	10	2.7	1	12/03/14	12/03/14	KWG1415877	

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1413309
Project:	JBLM LTM/TO 01	**Date Collected:**	11/24/2014
Sample Matrix:	Water	**Date Received:**	11/25/2014

Volatile Organic Compounds

Sample Name:	LGC141124T15-1	**Units:**	ug/L
Lab Code:	K1413309-013	**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
1,3-Dichloropropane	ND	U	0.50	0.30	0.14	1	12/03/14	12/03/14	KWG1415877	
Dibromochloromethane	ND	U	0.50	0.50	0.14	1	12/03/14	12/03/14	KWG1415877	
1,2-Dibromoethane (EDB)	ND	U	2.0	0.20	0.10	1	12/03/14	12/03/14	KWG1415877	
Chlorobenzene	ND	U	0.50	0.20	0.11	1	12/03/14	12/03/14	KWG1415877	
Ethylbenzene	ND	U	0.50	0.10	0.050	1	12/03/14	12/03/14	KWG1415877	
1,1,1,2-Tetrachloroethane	ND	U	0.50	0.20	0.11	1	12/03/14	12/03/14	KWG1415877	
m,p-Xylenes	ND	U	0.50	0.20	0.11	1	12/03/14	12/03/14	KWG1415877	
o-Xylene	ND	U	0.50	0.20	0.074	1	12/03/14	12/03/14	KWG1415877	
Styrene	ND	U	0.50	0.20	0.089	1	12/03/14	12/03/14	KWG1415877	
Bromoform	ND	U	0.50	0.50	0.16	1	12/03/14	12/03/14	KWG1415877	
Isopropylbenzene	ND	U	2.0	0.20	0.051	1	12/03/14	12/03/14	KWG1415877	
1,1,2,2-Tetrachloroethane	ND	U	0.50	0.20	0.16	1	12/03/14	12/03/14	KWG1415877	
Bromobenzene	ND	U	2.0	0.20	0.12	1	12/03/14	12/03/14	KWG1415877	
n-Propylbenzene	ND	U	2.0	0.20	0.054	1	12/03/14	12/03/14	KWG1415877	
1,2,3-Trichloropropane	ND	U	0.50	0.50	0.20	1	12/03/14	12/03/14	KWG1415877	
2-Chlorotoluene	ND	U	2.0	0.20	0.10	1	12/03/14	12/03/14	KWG1415877	
1,3,5-Trimethylbenzene	ND	U	2.0	0.20	0.089	1	12/03/14	12/03/14	KWG1415877	
4-Chlorotoluene	ND	U	2.0	0.20	0.13	1	12/03/14	12/03/14	KWG1415877	
tert-Butylbenzene	ND	U	2.0	0.20	0.059	1	12/03/14	12/03/14	KWG1415877	
1,2,4-Trimethylbenzene	ND	U	2.0	0.20	0.069	1	12/03/14	12/03/14	KWG1415877	
sec-Butylbenzene	ND	U	2.0	0.10	0.062	1	12/03/14	12/03/14	KWG1415877	
4-Isopropyltoluene	ND	U	2.0	0.20	0.060	1	12/03/14	12/03/14	KWG1415877	
1,3-Dichlorobenzene	ND	U	0.50	0.20	0.10	1	12/03/14	12/03/14	KWG1415877	
1,4-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	12/03/14	12/03/14	KWG1415877	
n-Butylbenzene	ND	U	2.0	0.10	0.054	1	12/03/14	12/03/14	KWG1415877	
1,2-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	12/03/14	12/03/14	KWG1415877	
1,2-Dibromo-3-chloropropane	ND	U	2.0	0.80	0.20	1	12/03/14	12/03/14	KWG1415877	
1,2,4-Trichlorobenzene	ND	U	2.0	0.30	0.096	1	12/03/14	12/03/14	KWG1415877	
Hexachlorobutadiene	ND	U	2.0	0.30	0.11	1	12/03/14	12/03/14	KWG1415877	
Naphthalene	ND	U	2.0	0.30	0.088	1	12/03/14	12/03/14	KWG1415877	
1,2,3-Trichlorobenzene	ND	U	2.0	0.40	0.11	1	12/03/14	12/03/14	KWG1415877	

* See Case Narrative

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1413309
Project:	JBLM LTM/TO 01	**Date Collected:**	11/24/2014
Sample Matrix:	Water	**Date Received:**	11/25/2014

Volatile Organic Compounds

Sample Name:	LGC141124T15-1	**Units:**	ug/L
Lab Code:	K1413309-013	**Basis:**	NA

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Dibromofluoromethane	104	85-115	12/03/14	Acceptable
1,2-Dichloroethane-d4	97	70-120	12/03/14	Acceptable
Toluene-d8	100	85-120	12/03/14	Acceptable
4-Bromofluorobenzene	101	75-120	12/03/14	Acceptable

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1413309
Project:	JBLM LTM/TO 01	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA

Volatile Organic Compounds

Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	KWG1415877-4	**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
Dichlorodifluoromethane	ND	U	0.50	0.20	0.13	1	12/03/14	12/03/14	KWG1415877	*
Chloromethane	ND	U	0.50	0.20	0.068	1	12/03/14	12/03/14	KWG1415877	*
Vinyl Chloride	ND	U	0.50	0.10	0.075	1	12/03/14	12/03/14	KWG1415877	
Bromomethane	ND	U	0.50	0.30	0.10	1	12/03/14	12/03/14	KWG1415877	*
Chloroethane	ND	U	0.50	0.20	0.16	1	12/03/14	12/03/14	KWG1415877	
Trichlorofluoromethane	ND	U	0.50	0.20	0.12	1	12/03/14	12/03/14	KWG1415877	
1,1-Dichloroethene	ND	U	0.50	0.20	0.080	1	12/03/14	12/03/14	KWG1415877	
Acetone	ND	U	20	10	3.3	1	12/03/14	12/03/14	KWG1415877	
Carbon Disulfide	ND	U	0.50	0.20	0.069	1	12/03/14	12/03/14	KWG1415877	
Methylene Chloride	**0.35**	J	2.0	0.20	0.10	1	12/03/14	12/03/14	KWG1415877	
Methyl tert-Butyl Ether	ND	U	0.50	0.30	0.11	1	12/03/14	12/03/14	KWG1415877	
trans-1,2-Dichloroethene	ND	U	0.50	0.20	0.072	1	12/03/14	12/03/14	KWG1415877	
1,1-Dichloroethane	ND	U	0.50	0.20	0.077	1	12/03/14	12/03/14	KWG1415877	
2,2-Dichloropropane	ND	U	0.50	0.20	0.060	1	12/03/14	12/03/14	KWG1415877	
cis-1,2-Dichloroethene	ND	U	0.50	0.20	0.067	1	12/03/14	12/03/14	KWG1415877	
2-Butanone (MEK)	ND	U	20	4.0	1.9	1	12/03/14	12/03/14	KWG1415877	
Bromochloromethane	ND	U	0.50	0.20	0.16	1	12/03/14	12/03/14	KWG1415877	
Chloroform	ND	U	0.50	0.20	0.072	1	12/03/14	12/03/14	KWG1415877	
1,1,1-Trichloroethane (TCA)	ND	U	0.50	0.20	0.075	1	12/03/14	12/03/14	KWG1415877	
Carbon Tetrachloride	ND	U	0.50	0.20	0.096	1	12/03/14	12/03/14	KWG1415877	
1,1-Dichloropropene	ND	U	0.50	0.20	0.089	1	12/03/14	12/03/14	KWG1415877	
Benzene	ND	U	0.50	0.10	0.062	1	12/03/14	12/03/14	KWG1415877	
1,2-Dichloroethane (EDC)	ND	U	0.50	0.15	0.080	1	12/03/14	12/03/14	KWG1415877	
Trichloroethene (TCE)	ND	U	0.50	0.10	0.10	1	12/03/14	12/03/14	KWG1415877	
1,2-Dichloropropane	ND	U	0.50	0.20	0.095	1	12/03/14	12/03/14	KWG1415877	
Dibromomethane	ND	U	0.50	0.50	0.15	1	12/03/14	12/03/14	KWG1415877	
Bromodichloromethane	ND	U	0.50	0.30	0.091	1	12/03/14	12/03/14	KWG1415877	
cis-1,3-Dichloropropene	ND	U	0.50	0.20	0.18	1	12/03/14	12/03/14	KWG1415877	
4-Methyl-2-pentanone (MIBK)	ND	U	20	10	2.6	1	12/03/14	12/03/14	KWG1415877	
Toluene	ND	U	0.50	0.10	0.054	1	12/03/14	12/03/14	KWG1415877	
trans-1,3-Dichloropropene	ND	U	0.50	0.20	0.068	1	12/03/14	12/03/14	KWG1415877	
1,1,2-Trichloroethane	ND	U	0.50	0.40	0.14	1	12/03/14	12/03/14	KWG1415877	
Tetrachloroethene (PCE)	ND	U	0.50	0.20	0.099	1	12/03/14	12/03/14	KWG1415877	
2-Hexanone	ND	U	20	10	2.7	1	12/03/14	12/03/14	KWG1415877	

Comments:

Client: Sealaska Environmental Services, LLC
Project: JBLM LTM/TO 01
Sample Matrix: Water

Service Request: K1413309
Date Collected: NA
Date Received: NA

Volatile Organic Compounds

Sample Name: Method Blank
Lab Code: KWG1415877-4

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
1,3-Dichloropropane	ND	U	0.50	0.30	0.14	1	12/03/14	12/03/14	KWG1415877	
Dibromochloromethane	ND	U	0.50	0.50	0.14	1	12/03/14	12/03/14	KWG1415877	
1,2-Dibromoethane (EDB)	ND	U	2.0	0.20	0.10	1	12/03/14	12/03/14	KWG1415877	
Chlorobenzene	ND	U	0.50	0.20	0.11	1	12/03/14	12/03/14	KWG1415877	
Ethylbenzene	ND	U	0.50	0.10	0.050	1	12/03/14	12/03/14	KWG1415877	
1,1,1,2-Tetrachloroethane	ND	U	0.50	0.20	0.11	1	12/03/14	12/03/14	KWG1415877	
m,p-Xylenes	ND	U	0.50	0.20	0.11	1	12/03/14	12/03/14	KWG1415877	
o-Xylene	ND	U	0.50	0.20	0.074	1	12/03/14	12/03/14	KWG1415877	
Styrene	ND	U	0.50	0.20	0.089	1	12/03/14	12/03/14	KWG1415877	
Bromoform	ND	U	0.50	0.50	0.16	1	12/03/14	12/03/14	KWG1415877	
Isopropylbenzene	ND	U	2.0	0.20	0.051	1	12/03/14	12/03/14	KWG1415877	
1,1,2,2-Tetrachloroethane	ND	U	0.50	0.20	0.16	1	12/03/14	12/03/14	KWG1415877	
Bromobenzene	ND	U	2.0	0.20	0.12	1	12/03/14	12/03/14	KWG1415877	
n-Propylbenzene	ND	U	2.0	0.20	0.054	1	12/03/14	12/03/14	KWG1415877	
1,2,3-Trichloropropane	ND	U	0.50	0.50	0.20	1	12/03/14	12/03/14	KWG1415877	
2-Chlorotoluene	ND	U	2.0	0.20	0.10	1	12/03/14	12/03/14	KWG1415877	
1,3,5-Trimethylbenzene	ND	U	2.0	0.20	0.089	1	12/03/14	12/03/14	KWG1415877	
4-Chlorotoluene	ND	U	2.0	0.20	0.13	1	12/03/14	12/03/14	KWG1415877	
tert-Butylbenzene	ND	U	2.0	0.20	0.059	1	12/03/14	12/03/14	KWG1415877	
1,2,4-Trimethylbenzene	ND	U	2.0	0.20	0.069	1	12/03/14	12/03/14	KWG1415877	
sec-Butylbenzene	ND	U	2.0	0.10	0.062	1	12/03/14	12/03/14	KWG1415877	
4-Isopropyltoluene	ND	U	2.0	0.20	0.060	1	12/03/14	12/03/14	KWG1415877	
1,3-Dichlorobenzene	ND	U	0.50	0.20	0.10	1	12/03/14	12/03/14	KWG1415877	
1,4-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	12/03/14	12/03/14	KWG1415877	
n-Butylbenzene	ND	U	2.0	0.10	0.054	1	12/03/14	12/03/14	KWG1415877	
1,2-Dichlorobenzene	ND	U	0.50	0.20	0.12	1	12/03/14	12/03/14	KWG1415877	
1,2-Dibromo-3-chloropropane	ND	U	2.0	0.80	0.20	1	12/03/14	12/03/14	KWG1415877	
1,2,4-Trichlorobenzene	ND	U	2.0	0.30	0.096	1	12/03/14	12/03/14	KWG1415877	
Hexachlorobutadiene	ND	U	2.0	0.30	0.11	1	12/03/14	12/03/14	KWG1415877	
Naphthalene	ND	U	2.0	0.30	0.088	1	12/03/14	12/03/14	KWG1415877	
1,2,3-Trichlorobenzene	ND	U	2.0	0.40	0.11	1	12/03/14	12/03/14	KWG1415877	

* See Case Narrative

Comments:

Analytical Results

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1413309
Project:	JBLM LTM/TO 01	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA

Volatile Organic Compounds

Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	KWG1415877-4	**Basis:**	NA

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Dibromofluoromethane	103	85-115	12/03/14	Acceptable
1,2-Dichloroethane-d4	98	70-120	12/03/14	Acceptable
Toluene-d8	100	85-120	12/03/14	Acceptable
4-Bromofluorobenzene	102	75-120	12/03/14	Acceptable

Comments:

Client: Sealaska Environmental Services, LLC **Service Request:** K1413309
Project: JBLM LTM/TO 01
Sample Matrix: Water

Surrogate Recovery Summary
Volatile Organic Compounds

Extraction Method: EPA 5030B **Units:** Percent
Analysis Method: 8260C **Level:** Low

Sample Name	Lab Code	Sur1	Sur2	Sur3	Sur4
TB-141124	K1413309-001	103	96	100	99
LGC141124MT3-1	K1413309-002	101	96	98	101
LGC141124MT4-1	K1413309-003	104	95	99	99
LGC141124LC135-1	K1413309-004	104	96	101	98
LGC141124LC10830-1	K1413309-005	104	97	101	97
LGC141124DUP1-1	K1413309-006	103	98	100	102
LGC141124LC10860-1	K1413309-007	106	99	100	100
LGC141124LC10885-1	K1413309-008	106	98	100	100
LGC141124MT2-1	K1413309-009	104	97	100	100
LGC141124MT1-1	K1413309-010	107	103	101	100
LGC14112485PA382-1	K1413309-011	105	100	101	101
LGC14112485PA384-1	K1413309-012	105	99	99	98
LGC141124T15-1	K1413309-013	104	97	100	101
Method Blank	KWG1415877-4	103	98	100	102
LGC141124LC10860-1MS	KWG1415877-1	102	95	100	105
LGC141124LC10860-1DMS	KWG1415877-2	102	97	101	105
Lab Control Sample	KWG1415877-3	101	95	101	104

Surrogate Recovery Control Limits (%)

Sur1	= Dibromofluoromethane	85-115
Sur2	= 1,2-Dichloroethane-d4	70-120
Sur3	= Toluene-d8	85-120
Sur4	= 4-Bromofluorobenzene	75-120

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

QA/QC Report

Client: Sealaska Environmental Services, LLC
Project: JBLM LTM/TO 01

Service Request: K1413309
Date Analyzed: 12/03/2014
Time Analyzed: 09:21

Internal Standard Area and RT Summary
Volatile Organic Compounds

File ID: J:\MS13\DATA\120314\1203F004.D
Instrument ID: MS13
Analysis Method: 8260C

Lab Code: KWG1415876-2
Analysis Lot: KWG1415876

		Fluorobenzene		Chlorobenzene-d5		1,4-Dichlorobenzene-d4	
		Area	**RT**	**Area**	**RT**	**Area**	**RT**
	Results ==>	467,399	6.11	175,220	12.02	180,190	15.05
	Upper Limit ==>	934,798	6.61	350,440	12.52	360,380	15.55
	Lower Limit ==>	233,700	5.61	87,610	11.52	90,095	14.55
	ICAL Result ==>	496,760	6.11	186,416	12.02	185,863	15.05
Associated Analyses							
Lab Control Sample	KWG1415877-3	462,351	6.11	174,956	12.02	179,079	15.05
LGC141124LC10860-1MS	KWG1415877-1	452,544	6.11	168,203	12.03	173,388	15.05
LGC141124LC10860-1DMS	KWG1415877-2	460,379	6.11	175,003	12.03	178,500	15.05
Method Blank	KWG1415877-4	453,322	6.11	173,563	12.02	177,596	15.05
TB-141124	K1413309-001	454,532	6.11	174,568	12.02	175,682	15.05
LGC141124MT3-1	K1413309-002	458,000	6.11	170,629	12.02	171,790	15.05
LGC141124MT4-1	K1413309-003	447,605	6.11	170,480	12.02	169,652	15.05
LGC141124LC135-1	K1413309-004	454,881	6.11	178,101	12.02	173,091	15.05
LGC141124LC10830-1	K1413309-005	453,800	6.11	176,020	12.02	175,043	15.05
LGC141124DUP1-1	K1413309-006	444,275	6.11	168,749	12.02	171,442	15.05
LGC141124LC10860-1	K1413309-007	450,911	6.11	174,979	12.02	175,577	15.05
LGC141124LC10885-1	K1413309-008	448,612	6.11	174,269	12.03	172,878	15.05
LGC141124MT2-1	K1413309-009	447,965	6.11	170,882	12.02	169,784	15.05
LGC141124MT1-1	K1413309-010	447,323	6.11	174,988	12.02	179,611	15.05
LGC14112485PA382-1	K1413309-011	444,096	6.11	172,215	12.02	173,246	15.05
LGC14112485PA384-1	K1413309-012	447,486	6.11	171,180	12.02	175,739	15.05
LGC141124T15-1	K1413309-013	443,199	6.11	168,685	12.02	170,437	15.05

Results flagged with an asterisk (*) indicate values outside control criteria.

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1413309
Project:	JBLM LTM/TO 01	**Date Extracted:**	12/03/2014
Sample Matrix:	Water	**Date Analyzed:**	12/03/2014

Matrix Spike/Duplicate Matrix Spike Summary
Volatile Organic Compounds

Sample Name:	LGC141124LC10860-1	**Units:**	ug/L
Lab Code:	K1413309-007	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8260C	**Extraction Lot:**	KWG1415877

		LGC141124LC10860-1MS KWG1415877-1 Matrix Spike			LGC141124LC10860-1DMS KWG1415877-2 Duplicate Matrix Spike					
Analyte Name	**Sample Result**	**Result**	**Spike Amount**	**%Rec**	**Result**	**Spike Amount**	**%Rec**	**%Rec Limits**	**RPD**	**RPD Limit**
Dichlorodifluoromethane	ND	8.62	10.0	86	7.42	10.0	74	30-155	15	30
Chloromethane	ND	7.16	10.0	72	6.40	10.0	64	40-125	11	30
Vinyl Chloride	ND	8.14	10.0	81	7.10	10.0	71	50-145	14	30
Bromomethane	ND	7.19	10.0	72	6.26	10.0	63	30-145	14	30
Chloroethane	ND	9.80	10.0	98	8.90	10.0	89	60-135	10	30
Trichlorofluoromethane	ND	7.14	10.0	71	6.47	10.0	65	60-145	10	30
1,1-Dichloroethene	ND	10.0	10.0	100	9.06	10.0	91	70-130	10	30
Acetone	7.5	47.3	50.0	80	47.8	50.0	81	40-140	1	30
Carbon Disulfide	ND	17.9	20.0	90	15.8	20.0	79	35-160	13	30
Methylene Chloride	ND	8.40	10.0	84	7.82	10.0	78	55-140	7	30
Methyl tert-Butyl Ether	ND	11.4	10.0	114	11.2	10.0	112	65-125	2	30
trans-1,2-Dichloroethene	ND	10.1	10.0	101	8.93	10.0	89	60-140	12	30
1,1-Dichloroethane	ND	10.1	10.0	101	9.10	10.0	91	70-135	10	30
2,2-Dichloropropane	ND	11.1	10.0	111	9.93	10.0	99	70-135	11	30
cis-1,2-Dichloroethene	ND	9.98	10.0	100	9.14	10.0	91	70-125	9	30
2-Butanone (MEK)	ND	55.4	50.0	111	54.5	50.0	109	30-150	2	30
Bromochloromethane	ND	10.4	10.0	104	10.2	10.0	102	65-130	2	30
Chloroform	ND	9.68	10.0	97	9.00	10.0	90	65-135	7	30
1,1,1-Trichloroethane (TCA)	ND	9.90	10.0	99	8.91	10.0	89	65-130	11	30
Carbon Tetrachloride	ND	9.21	10.0	92	8.16	10.0	82	65-140	12	30
1,1-Dichloropropene	ND	9.56	10.0	96	8.50	10.0	85	75-130	12	30
Benzene	ND	9.90	10.0	99	9.02	10.0	90	80-120	9	30
1,2-Dichloroethane (EDC)	ND	9.42	10.0	94	8.88	10.0	89	70-130	6	30
Trichloroethene (TCE)	4.9	13.9	10.0	91	12.7	10.0	78	70-125	9	30
1,2-Dichloropropane	ND	9.49	10.0	95	8.93	10.0	89	75-125	6	30
Dibromomethane	ND	10.2	10.0	102	9.70	10.0	97	75-125	5	30
Bromodichloromethane	ND	9.84	10.0	98	9.30	10.0	93	75-120	6	30
cis-1,3-Dichloropropene	ND	10.6	10.0	106	9.89	10.0	99	70-130	6	30
4-Methyl-2-pentanone (MIBK)	ND	53.9	50.0	108	52.9	50.0	106	60-135	2	30
Toluene	ND	9.58	10.0	96	8.64	10.0	86	75-120	10	30
trans-1,3-Dichloropropene	ND	10.1	10.0	101	9.28	10.0	93	55-140	8	30
1,1,2-Trichloroethane	ND	10.5	10.0	105	9.65	10.0	97	75-125	9	30
Tetrachloroethene (PCE)	ND	10.2	10.0	102	8.78	10.0	88	45-150	15	30

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1413309
Project:	JBLM LTM/TO 01	**Date Extracted:**	12/03/2014
Sample Matrix:	Water	**Date Analyzed:**	12/03/2014

Matrix Spike/Duplicate Matrix Spike Summary
Volatile Organic Compounds

Sample Name:	LGC141124LC10860-1	**Units:**	ug/L
Lab Code:	K1413309-007	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8260C	**Extraction Lot:**	KWG1415877

		LGC141124LC10860-1MS KWG1415877-1 Matrix Spike			LGC141124LC10860-1DMS KWG1415877-2 Duplicate Matrix Spike					
Analyte Name	**Sample Result**	**Result**	**Spike Amount**	**%Rec**	**Result**	**Spike Amount**	**%Rec**	**%Rec Limits**	**RPD**	**RPD Limit**
2-Hexanone	ND	51.1	50.0	102	49.1	50.0	98	55-130	4	30
1,3-Dichloropropane	ND	9.50	10.0	95	9.13	10.0	91	75-125	4	30
Dibromochloromethane	ND	10.3	10.0	103	9.64	10.0	96	60-135	7	30
1,2-Dibromoethane (EDB)	ND	10.4	10.0	104	9.91	10.0	99	80-120	5	30
Chlorobenzene	ND	10.2	10.0	102	9.11	10.0	91	80-120	12	30
Ethylbenzene	ND	10.1	10.0	101	8.88	10.0	89	75-125	13	30
1,1,1,2-Tetrachloroethane	ND	10.2	10.0	102	9.32	10.0	93	80-130	9	30
m,p-Xylenes	ND	20.7	20.0	103	18.7	20.0	94	75-130	10	30
o-Xylene	ND	10.5	10.0	105	9.66	10.0	97	80-120	9	30
Styrene	ND	11.0	10.0	110	9.89	10.0	99	65-135	10	30
Bromoform	ND	11.1	10.0	111	10.3	10.0	103	70-130	7	30
Isopropylbenzene	ND	10.1	10.0	101	8.95	10.0	90	75-125	12	30
1,1,2,2-Tetrachloroethane	ND	9.67	10.0	97	9.10	10.0	91	65-130	6	30
Bromobenzene	ND	9.94	10.0	99	9.38	10.0	94	75-125	6	30
n-Propylbenzene	ND	9.44	10.0	94	8.44	10.0	84	70-130	11	30
1,2,3-Trichloropropane	ND	9.65	10.0	97	9.11	10.0	91	75-125	6	30
2-Chlorotoluene	ND	9.79	10.0	98	8.94	10.0	89	75-125	9	30
1,3,5-Trimethylbenzene	ND	10.1	10.0	101	9.11	10.0	91	75-130	11	30
4-Chlorotoluene	ND	9.22	10.0	92	8.42	10.0	84	75-130	9	30
tert-Butylbenzene	ND	9.74	10.0	97	8.79	10.0	88	70-130	10	30
1,2,4-Trimethylbenzene	ND	10.6	10.0	106	9.47	10.0	95	75-130	11	30
sec-Butylbenzene	ND	9.22	10.0	92	8.21	10.0	82	70-125	12	30
4-Isopropyltoluene	ND	10.2	10.0	102	9.25	10.0	93	75-130	10	30
1,3-Dichlorobenzene	ND	9.76	10.0	98	8.99	10.0	90	75-125	8	30
1,4-Dichlorobenzene	ND	9.63	10.0	96	8.79	10.0	88	75-125	9	30
n-Butylbenzene	ND	9.89	10.0	99	8.86	10.0	89	70-135	11	30
1,2-Dichlorobenzene	ND	9.84	10.0	98	9.08	10.0	91	70-120	8	30
1,2-Dibromo-3-chloropropane	ND	10.6	10.0	106	10.4	10.0	104	50-130	2	30
1,2,4-Trichlorobenzene	ND	10.6	10.0	106	9.68	10.0	97	65-135	9	30
Hexachlorobutadiene	ND	9.36	10.0	94	7.95	10.0	80	50-140	16	30
Naphthalene	ND	11.5	10.0	115	10.9	10.0	109	55-140	5	30
1,2,3-Trichlorobenzene	ND	10.8	10.0	108	10.0	10.0	100	55-140	8	30

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Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

QA/QC Report

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1413309
Project:	JBLM LTM/TO 01	**Date Extracted:**	12/03/2014
Sample Matrix:	Water	**Date Analyzed:**	12/03/2014

Lab Control Spike Summary
Volatile Organic Compounds

Extraction Method:	EPA 5030B	**Units:**	ug/L
Analysis Method:	8260C	**Basis:**	NA
		Level:	Low
		Extraction Lot:	KWG1415877

Lab Control Sample
KWG1415877-3
Lab Control Spike

Analyte Name	Result	Spike Amount	%Rec	%Rec Limits
Dichlorodifluoromethane	7.77	10.0	78	30-155
Chloromethane	6.62	10.0	66	40-125
Vinyl Chloride	7.62	10.0	76	50-145
Bromomethane	6.70	10.0	67	30-145
Chloroethane	9.10	10.0	91	60-135
Trichlorofluoromethane	6.70	10.0	67	60-145
1,1-Dichloroethene	9.29	10.0	93	70-130
Acetone	51.5	50.0	103	40-140
Carbon Disulfide	16.8	20.0	84	35-160
Methylene Chloride	8.61	10.0	86	55-140
Methyl tert-Butyl Ether	11.1	10.0	111	65-125
trans-1,2-Dichloroethene	9.38	10.0	94	60-140
1,1-Dichloroethane	9.71	10.0	97	70-135
2,2-Dichloropropane	10.4	10.0	104	70-135
cis-1,2-Dichloroethene	9.45	10.0	95	70-125
2-Butanone (MEK)	59.1	50.0	118	30-150
Bromochloromethane	10.5	10.0	105	65-130
Chloroform	9.28	10.0	93	65-135
1,1,1-Trichloroethane (TCA)	9.44	10.0	94	65-130
Carbon Tetrachloride	8.63	10.0	86	65-140
1,1-Dichloropropene	8.98	10.0	90	75-130
Benzene	9.44	10.0	94	80-120
1,2-Dichloroethane (EDC)	9.02	10.0	90	70-130
Trichloroethene (TCE)	8.90	10.0	89	70-125
1,2-Dichloropropane	9.32	10.0	93	75-125
Dibromomethane	10.0	10.0	100	75-125
Bromodichloromethane	9.49	10.0	95	75-120
cis-1,3-Dichloropropene	10.2	10.0	102	70-130
4-Methyl-2-pentanone (MIBK)	55.3	50.0	111	60-135
Toluene	9.24	10.0	92	75-120
trans-1,3-Dichloropropene	9.54	10.0	95	55-140
1,1,2-Trichloroethane	9.71	10.0	97	75-125
Tetrachloroethene (PCE)	9.36	10.0	94	45-150
2-Hexanone	52.7	50.0	105	55-130
1,3-Dichloropropane	9.16	10.0	92	75-125

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

QA/QC Report

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1413309
Project:	JBLM LTM/TO 01	**Date Extracted:**	12/03/2014
Sample Matrix:	Water	**Date Analyzed:**	12/03/2014

Lab Control Spike Summary
Volatile Organic Compounds

Extraction Method:	EPA 5030B	**Units:**	ug/L
Analysis Method:	8260C	**Basis:**	NA
		Level:	Low
		Extraction Lot:	KWG1415877

Lab Control Sample
KWG1415877-3
Lab Control Spike

Analyte Name	Result	Spike Amount	%Rec	%Rec Limits
Dibromochloromethane	10.1	10.0	101	60-135
1,2-Dibromoethane (EDB)	10.2	10.0	102	80-120
Chlorobenzene	9.62	10.0	96	80-120
Ethylbenzene	9.53	10.0	95	75-125
1,1,1,2-Tetrachloroethane	9.92	10.0	99	80-130
m,p-Xylenes	19.6	20.0	98	75-130
o-Xylene	9.92	10.0	99	80-120
Styrene	10.6	10.0	106	65-135
Bromoform	10.7	10.0	107	70-130
Isopropylbenzene	9.44	10.0	94	75-125
1,1,2,2-Tetrachloroethane	9.25	10.0	93	65-130
Bromobenzene	9.59	10.0	96	75-125
n-Propylbenzene	8.85	10.0	89	70-130
1,2,3-Trichloropropane	9.32	10.0	93	75-125
2-Chlorotoluene	9.26	10.0	93	75-125
1,3,5-Trimethylbenzene	9.57	10.0	96	75-130
4-Chlorotoluene	8.84	10.0	88	75-130
tert-Butylbenzene	9.04	10.0	90	70-130
1,2,4-Trimethylbenzene	9.89	10.0	99	75-130
sec-Butylbenzene	8.60	10.0	86	70-125
4-Isopropyltoluene	9.63	10.0	96	75-130
1,3-Dichlorobenzene	9.40	10.0	94	75-125
1,4-Dichlorobenzene	9.22	10.0	92	75-125
n-Butylbenzene	9.19	10.0	92	70-135
1,2-Dichlorobenzene	9.52	10.0	95	70-120
1,2-Dibromo-3-chloropropane	10.6	10.0	106	50-130
1,2,4-Trichlorobenzene	10.3	10.0	103	65-135
Hexachlorobutadiene	8.69	10.0	87	50-140
Naphthalene	11.3	10.0	113	55-140
1,2,3-Trichlorobenzene	10.6	10.0	106	55-140

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

QA/QC Report

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1413309
Project:	JBLM LTM/TO 01	**Date Extracted:**	12/03/2014
Sample Matrix:	Water	**Date Analyzed:**	12/03/2014
		Time Analyzed:	12:15

Method Blank Summary
Volatile Organic Compounds

Sample Name:	Method Blank	**Instrument ID:**	MS13
Lab Code:	KWG1415877-4	**File ID:**	J:\MS13\DATA\120314\1203F010.D
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8260C	**Extraction Lot:**	KWG1415877

This Method Blank applies to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
Lab Control Sample	KWG1415877-3	J:\MS13\DATA\120314\1203F005.D	12/03/14	09:59
LGC141124LC10860-1MS	KWG1415877-1	J:\MS13\DATA\120314\1203F006.D	12/03/14	10:26
LGC141124LC10860-1DMS	KWG1415877-2	J:\MS13\DATA\120314\1203F007.D	12/03/14	10:53
TB-141124	K1413309-001	J:\MS13\DATA\120314\1203F012.D	12/03/14	13:09
LGC141124MT3-1	K1413309-002	J:\MS13\DATA\120314\1203F013.D	12/03/14	13:36
LGC141124MT4-1	K1413309-003	J:\MS13\DATA\120314\1203F014.D	12/03/14	14:03
LGC141124LC135-1	K1413309-004	J:\MS13\DATA\120314\1203F015.D	12/03/14	14:30
LGC141124LC10830-1	K1413309-005	J:\MS13\DATA\120314\1203F016.D	12/03/14	14:57
LGC141124DUP1-1	K1413309-006	J:\MS13\DATA\120314\1203F017.D	12/03/14	15:24
LGC141124LC10860-1	K1413309-007	J:\MS13\DATA\120314\1203F018.D	12/03/14	15:51
LGC141124LC10885-1	K1413309-008	J:\MS13\DATA\120314\1203F019.D	12/03/14	16:18
LGC141124MT2-1	K1413309-009	J:\MS13\DATA\120314\1203F020.D	12/03/14	16:45
LGC141124MT1-1	K1413309-010	J:\MS13\DATA\120314\1203F021.D	12/03/14	17:12
LGC14112485PA382-1	K1413309-011	J:\MS13\DATA\120314\1203F022.D	12/03/14	17:39
LGC14112485PA384-1	K1413309-012	J:\MS13\DATA\120314\1203F023.D	12/03/14	18:07
LGC141124T15-1	K1413309-013	J:\MS13\DATA\120314\1203F024.D	12/03/14	18:34

QA/QC Report

Client:	Sealaska Environmental Services, LLC	**Service Request:**	K1413309
Project:	JBLM LTM/TO 01	**Date Extracted:**	12/03/2014
Sample Matrix:	Water	**Date Analyzed:**	12/03/2014
		Time Analyzed:	09:59

Lab Control Sample Summary
Volatile Organic Compounds

Sample Name:	Lab Control Sample	**Instrument ID:**	MS13
Lab Code:	KWG1415877-3	**File ID:**	J:\MS13\DATA\120314\1203F005.D
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8260C	**Extraction Lot:**	KWG1415877

This Lab Control Sample applies to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
LGC141124LC10860-1MS	KWG1415877-1	J:\MS13\DATA\120314\1203F006.D	12/03/14	10:26
LGC141124LC10860-1DMS	KWG1415877-2	J:\MS13\DATA\120314\1203F007.D	12/03/14	10:53
Method Blank	KWG1415877-4	J:\MS13\DATA\120314\1203F010.D	12/03/14	12:15
TB-141124	K1413309-001	J:\MS13\DATA\120314\1203F012.D	12/03/14	13:09
LGC141124MT3-1	K1413309-002	J:\MS13\DATA\120314\1203F013.D	12/03/14	13:36
LGC141124MT4-1	K1413309-003	J:\MS13\DATA\120314\1203F014.D	12/03/14	14:03
LGC141124LC135-1	K1413309-004	J:\MS13\DATA\120314\1203F015.D	12/03/14	14:30
LGC141124LC10830-1	K1413309-005	J:\MS13\DATA\120314\1203F016.D	12/03/14	14:57
LGC141124DUP1-1	K1413309-006	J:\MS13\DATA\120314\1203F017.D	12/03/14	15:24
LGC141124LC10860-1	K1413309-007	J:\MS13\DATA\120314\1203F018.D	12/03/14	15:51
LGC141124LC10885-1	K1413309-008	J:\MS13\DATA\120314\1203F019.D	12/03/14	16:18
LGC141124MT2-1	K1413309-009	J:\MS13\DATA\120314\1203F020.D	12/03/14	16:45
LGC141124MT1-1	K1413309-010	J:\MS13\DATA\120314\1203F021.D	12/03/14	17:12
LGC14112485PA382-1	K1413309-011	J:\MS13\DATA\120314\1203F022.D	12/03/14	17:39
LGC14112485PA384-1	K1413309-012	J:\MS13\DATA\120314\1203F023.D	12/03/14	18:07
LGC141124T15-1	K1413309-013	J:\MS13\DATA\120314\1203F024.D	12/03/14	18:34

Client: Sealaska Environmental Services, LLC
Project: JBLM LTM/TO 01

Service Request: K1413309
Date Analyzed: 12/03/2014
Time Analyzed: 08:52

Tune Summary
Volatile Organic Compounds

File ID: J:\MS13\DATA\120314\1203F003.D
Instrument ID: MS13
Column:

Analysis Method: 8260C
Analysis Lot: KWG1415876

Target Mass	Relative to Mass	Lower Limit%	Upper Limit%	Relative Abundance %	Raw Abundance	Result Pass/Fail
50	95	15	40	16.3	5810	PASS
75	95	30	60	46.3	16523	PASS
95	95	100	100	100.0	35707	PASS
96	95	5	9	6.3	2248	PASS
173	174	0	2	0.3	100	PASS
174	95	50	120	102.2	36478	PASS
175	174	5	9	7.6	2758	PASS
176	174	95	101	96.2	35081	PASS
177	176	5	9	7.2	2534	PASS

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed	Q
Continuing Calibration Verification	KWG1415876-2	J:\MS13\DATA\120314\1203F004.D	12/03/2014	09:21	
Lab Control Sample	KWG1415877-3	J:\MS13\DATA\120314\1203F005.D	12/03/2014	09:59	
LGC141124LC10860-1MS	KWG1415877-1	J:\MS13\DATA\120314\1203F006.D	12/03/2014	10:26	
LGC141124LC10860-1DMS	KWG1415877-2	J:\MS13\DATA\120314\1203F007.D	12/03/2014	10:53	
Method Blank	KWG1415877-4	J:\MS13\DATA\120314\1203F010.D	12/03/2014	12:15	
TB-141124	K1413309-001	J:\MS13\DATA\120314\1203F012.D	12/03/2014	13:09	
LGC141124MT3-1	K1413309-002	J:\MS13\DATA\120314\1203F013.D	12/03/2014	13:36	
LGC141124MT4-1	K1413309-003	J:\MS13\DATA\120314\1203F014.D	12/03/2014	14:03	
LGC141124LC135-1	K1413309-004	J:\MS13\DATA\120314\1203F015.D	12/03/2014	14:30	
LGC141124LC10830-1	K1413309-005	J:\MS13\DATA\120314\1203F016.D	12/03/2014	14:57	
LGC141124DUP1-1	K1413309-006	J:\MS13\DATA\120314\1203F017.D	12/03/2014	15:24	
LGC141124LC10860-1	K1413309-007	J:\MS13\DATA\120314\1203F018.D	12/03/2014	15:51	
LGC141124LC10885-1	K1413309-008	J:\MS13\DATA\120314\1203F019.D	12/03/2014	16:18	
LGC141124MT2-1	K1413309-009	J:\MS13\DATA\120314\1203F020.D	12/03/2014	16:45	
LGC141124MT1-1	K1413309-010	J:\MS13\DATA\120314\1203F021.D	12/03/2014	17:12	
LGC14112485PA382-1	K1413309-011	J:\MS13\DATA\120314\1203F022.D	12/03/2014	17:39	
LGC14112485PA384-1	K1413309-012	J:\MS13\DATA\120314\1203F023.D	12/03/2014	18:07	
LGC141124T15-1	K1413309-013	J:\MS13\DATA\120314\1203F024.D	12/03/2014	18:34	

Results flagged with an asterisk (*) indicate the analysis performed outside specified tune window

Client: Sealaska Environmental Services, LLC **Service Request:** K1413309
Project: JBLM LTM/TO 01 **Calibration Date:** 10/17/2014

Initial Calibration Summary
Volatile Organic Compounds

Calibration ID: CAL13625 **Column:** MS
Instrument ID: MS13

Level ID	File ID
A	J:\MS13\DATA\101714\1017F011.D
B	J:\MS13\DATA\101714\1017F012.D
C	J:\MS13\DATA\101714\1017F013.D
D	J:\MS13\DATA\101714\1017F014.D
E	J:\MS13\DATA\101714\1017F015.D
F	J:\MS13\DATA\101714\1017F016.D
G	J:\MS13\DATA\101714\1017F017.D
H	J:\MS13\DATA\101714\1017F018.D
I	J:\MS13\DATA\101714\1017F019.D
J	J:\MS13\DATA\101714\1017F020.D
K	J:\MS13\DATA\101714\1017F021.D
L	J:\MS13\DATA\101714\1017F022.D

Analyte Name	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF
Dichlorodifluoromethane	A	0.10	0.427	B	0.20	0.337	C	0.50	0.342	D	1.0	0.358	E	2.0	0.384
	F	4.0	0.355	G	5.0	0.371	H	10	0.337	I	20	0.345	J	40	0.319
	K	60	0.341	L	80	0.324									
Chloromethane				B	0.20	0.433	C	0.50	0.432	D	1.0	0.423	E	2.0	0.386
	F	4.0	0.358	G	5.0	0.362	H	10	0.329	I	20	0.324	J	40	0.305
	K	60	0.309	L	80	0.299									
Vinyl Chloride	A	0.10	0.338	B	0.20	0.275	C	0.50	0.333	D	1.0	0.330	E	2.0	0.318
	F	4.0	0.306	G	5.0	0.325	H	10	0.297	I	20	0.311	J	40	0.295
	K	60	0.309	L	80	0.300									
Bromomethane	A	0.10	0.285	B	0.20	0.215	C	0.50	0.254	D	1.0	0.238	E	2.0	0.204
	F	4.0	0.183	G	5.0	0.191	H	10	0.180	I	20	0.180	J	40	0.177
	K	60	0.184	L	80	0.182									
Chloroethane	A	0.10	0.178	B	0.20	0.179	C	0.50	0.165	D	1.0	0.168	E	2.0	0.158
	F	4.0	0.148	G	5.0	0.163	H	10	0.150	I	20	0.158	J	40	0.150
	K	60	0.155	L	80	0.151									
Trichlorofluoromethane	A	0.10	0.582	B	0.20	0.477	C	0.50	0.517	D	1.0	0.509	E	2.0	0.487
	F	4.0	0.474	G	5.0	0.494	H	10	0.457	I	20	0.481	J	40	0.449
	K	60	0.481	L	80	0.459									
1,1-Dichloroethene	A	0.10	0.212	B	0.20	0.207	C	0.50	0.235	D	1.0	0.235	E	2.0	0.220
	F	4.0	0.219	G	5.0	0.226	H	10	0.216	I	20	0.219	J	40	0.210
	K	60	0.219	L	80	0.214									
Acetone	A	4.0	0.0456	B	8.0	0.0345	C	20	0.0338	D	40	0.0330	E	80	0.0253
	F	88	0.0303	G	100	0.0272	H	200	0.0281	I	400	0.0287	J	800	0.0295
	K	1600	0.0300	L	2000	0.0298									
Carbon Disulfide				B	0.20	0.894	C	0.50	0.839	D	1.0	0.777	E	2.0	0.738
	F	4.0	0.704	G	5.0	0.733	H	10	0.705	I	20	0.725	J	40	0.691
	K	60	0.727	L	80	0.710									
Methylene Chloride										D	1.0	0.352	E	2.0	0.301
	F	4.0	0.253	G	5.0	0.256	H	10	0.249	I	20	0.241	J	40	0.239
	K	60	0.240	L	80	0.234									

Results flagged with an asterisk (*) indicate values outside control criteria.

† **SPCC Compound** ‡ **CCC Compound**

Client: Sealaska Environmental Services, LLC **Service Request:** K1413309
Project: JBLM LTM/TO 01 **Calibration Date:** 10/17/2014

Initial Calibration Summary
Volatile Organic Compounds

Calibration ID: CAL13625 **Column:** MS
Instrument ID: MS13

Analyte Name	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF
Methyl tert-Butyl Ether	A	0.20	0.328	B	0.40	0.273	C	1.0	0.318	D	2.0	0.330	E	4.0	0.315
	F	8.0	0.310	G	10	0.333	H	20	0.348	I	40	0.352	J	80	0.382
	K	120	0.387	L	160	0.392									
trans-1,2-Dichloroethene	A	0.10	0.323	B	0.20	0.236	C	0.50	0.273	D	1.0	0.269	E	2.0	0.255
	F	4.0	0.239	G	5.0	0.258	H	10	0.244	I	20	0.249	J	40	0.246
	K	60	0.249	L	80	0.244									
1,1-Dichloroethane				B	0.20	0.405	C	0.50	0.429	D	1.0	0.424	E	2.0	0.415
	F	4.0	0.406	G	5.0	0.429	H	10	0.421	I	20	0.429	J	40	0.429
	K	60	0.433	L	80	0.423									
2,2-Dichloropropane							C	0.50	0.220	D	1.0	0.215	E	2.0	0.192
	F	4.0	0.199	G	5.0	0.209	H	10	0.199	I	20	0.216	J	40	0.219
	K	60	0.237	L	80	0.238									
cis-1,2-Dichloroethene	A	0.10	0.349	B	0.20	0.271	C	0.50	0.297	D	1.0	0.289	E	2.0	0.276
	F	4.0	0.269	G	5.0	0.277	H	10	0.279	I	20	0.283	J	40	0.281
	K	60	0.281	L	80	0.278									
2-Butanone (MEK)	A	4.0	0.0107	B	8.0	0.0103	C	20	0.0115	D	40	0.0120	E	80	0.00916
	F	88	0.0119	G	100	0.0104	H	200	0.0116	I	400	0.0118	J	800	0.0126
	K	1600	0.0130	L	2000	0.0130									
Bromochloromethane	A	0.10	0.128	B	0.20	0.105	C	0.50	0.111	D	1.0	0.131	E	2.0	0.122
	F	4.0	0.118	G	5.0	0.121	H	10	0.123	I	20	0.125	J	40	0.127
	K	60	0.126	L	80	0.123									
Chloroform	A	0.10	0.483	B	0.20	0.438	C	0.50	0.466	D	1.0	0.487	E	2.0	0.436
	F	4.0	0.431	G	5.0	0.455	H	10	0.452	I	20	0.452	J	40	0.453
	K	60	0.450	L	80	0.440									
1,1,1-Trichloroethane (TCA)	A	0.10	0.383	B	0.20	0.334	C	0.50	0.344	D	1.0	0.356	E	2.0	0.336
	F	4.0	0.347	G	5.0	0.370	H	10	0.355	I	20	0.380	J	40	0.376
	K	60	0.399	L	80	0.396									
Carbon Tetrachloride	A	0.10	0.389	B	0.20	0.341	C	0.50	0.400	D	1.0	0.387	E	2.0	0.369
	F	4.0	0.358	G	5.0	0.379	H	10	0.365	I	20	0.379	J	40	0.366
	K	60	0.386	L	80	0.377									
1,1-Dichloropropene	A	0.10	0.421	B	0.20	0.353	C	0.50	0.354	D	1.0	0.357	E	2.0	0.351
	F	4.0	0.342	G	5.0	0.360	H	10	0.345	I	20	0.362	J	40	0.347
	K	60	0.361	L	80	0.353									
Benzene	A	0.10	1.14	B	0.20	0.933	C	0.50	1.07	D	1.0	1.10	E	2.0	1.04
	F	4.0	1.02	G	5.0	1.07	H	10	1.05	I	20	1.05	J	40	1.05
	K	60	1.06	L	80	1.04									

Results flagged with an asterisk (*) indicate values outside control criteria.

† SPCC Compound **‡ CCC Compound**

Client: Sealaska Environmental Services, LLC **Service Request:** K1413309
Project: JBLM LTM/TO 01 **Calibration Date:** 10/17/2014

Initial Calibration Summary
Volatile Organic Compounds

Calibration ID: CAL13625 **Column:** MS
Instrument ID: MS13

Analyte Name	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF
1,2-Dichloroethane (EDC)	A	0.10	0.317	B	0.20	0.302	C	0.50	0.311	D	1.0	0.321	E	2.0	0.283
	F	4.0	0.277	G	5.0	0.302	H	10	0.295	I	20	0.291	J	40	0.296
	K	60	0.291	L	80	0.285									
Trichloroethene (TCE)	A	0.10	0.325	B	0.20	0.291	C	0.50	0.259	D	1.0	0.283	E	2.0	0.276
	F	4.0	0.260	G	5.0	0.276	H	10	0.275	I	20	0.280	J	40	0.274
	K	60	0.282	L	80	0.278									
1,2-Dichloropropane				B	0.20	0.217	C	0.50	0.233	D	1.0	0.232	E	2.0	0.221
	F	4.0	0.217	G	5.0	0.232	H	10	0.234	I	20	0.236	J	40	0.241
	K	60	0.246	L	80	0.244									
Dibromomethane	A	0.10	0.118	B	0.20	0.119	C	0.50	0.111	D	1.0	0.122	E	2.0	0.111
	F	4.0	0.114	G	5.0	0.117	H	10	0.119	I	20	0.120	J	40	0.121
	K	60	0.121	L	80	0.118									
Bromodichloromethane	A	0.10	0.320	B	0.20	0.311	C	0.50	0.293	D	1.0	0.340	E	2.0	0.294
	F	4.0	0.307	G	5.0	0.316	H	10	0.326	I	20	0.327	J	40	0.332
	K	60	0.333	L	80	0.327									
cis-1,3-Dichloropropene				B	0.20	0.223	C	0.50	0.282	D	1.0	0.291	E	2.0	0.277
	F	4.0	0.284	G	5.0	0.302	H	10	0.321	I	20	0.345	J	40	0.370
	K	60	0.375	L	80	0.375									
4-Methyl-2-pentanone (MIBK)	A	4.0	0.0442	B	8.0	0.0327	C	20	0.0325	D	40	0.0329	E	80	0.0272
	F	88	0.0361	G	100	0.0320	H	200	0.0366	I	400	0.0383	J	800	0.0412
	K	1600	0.0433	L	2000	0.0436									
Toluene	A	0.10	0.886	B	0.20	0.712	C	0.50	0.717	D	1.0	0.766	E	2.0	0.702
	F	4.0	0.684	G	5.0	0.710	H	10	0.709	I	20	0.726	J	40	0.716
	K	60	0.725	L	80	0.713									
trans-1,3-Dichloropropene				B	0.20	0.504	C	0.50	0.534	D	1.0	0.556	E	2.0	0.512
	F	4.0	0.518	G	5.0	0.561	H	10	0.608	I	20	0.652	J	40	0.713
	K	60	0.749	L	80	0.775									
1,1,2-Trichloroethane				B	0.20	0.311	C	0.50	0.368	D	1.0	0.401	E	2.0	0.366
	F	4.0	0.368	G	5.0	0.395	H	10	0.397	I	20	0.393	J	40	0.401
	K	60	0.394	L	80	0.397									
Tetrachloroethene (PCE)				B	0.20	0.673	C	0.50	0.713	D	1.0	0.767	E	2.0	0.700
	F	4.0	0.678	G	5.0	0.720	H	10	0.689	I	20	0.719	J	40	0.685
	K	60	0.706	L	80	0.706									
2-Hexanone	A	4.0	0.0204	B	8.0	0.0190	C	20	0.0228	D	40	0.0253	E	80	0.0222
	F	88	0.0290	G	100	0.0263	H	200	0.0317	I	400	0.0339	J	800	0.0369
	K	1600	0.0389	L	2000	0.0404									

Results flagged with an asterisk (*) indicate values outside control criteria.

† SPCC Compound **‡ CCC Compound**

Client: Sealaska Environmental Services, LLC **Service Request:** K1413309
Project: JBLM LTM/TO 01 **Calibration Date:** 10/17/2014

Initial Calibration Summary
Volatile Organic Compounds

Calibration ID: CAL13625 **Column:** MS
Instrument ID: MS13

Analyte Name	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF
1,3-Dichloropropane	A	0.10	0.973	B	0.20	0.769	C	0.50	0.838	D	1.0	0.887	E	2.0	0.787
	F	4.0	0.764	G	5.0	0.820	H	10	0.824	I	20	0.824	J	40	0.837
	K	60	0.838	L	80	0.837									
Dibromochloromethane							C	0.50	0.584	D	1.0	0.612	E	2.0	0.576
	F	4.0	0.559	G	5.0	0.604	H	10	0.624	I	20	0.610	J	40	0.639
	K	60	0.629	L	80	0.636									
1,2-Dibromoethane (EDB)				B	0.20	0.376	C	0.50	0.430	D	1.0	0.417	E	2.0	0.421
	F	4.0	0.419	G	5.0	0.447	H	10	0.450	I	20	0.450	J	40	0.462
	K	60	0.465	L	80	0.463									
Chlorobenzene	A	0.10	2.18	B	0.20	1.96	C	0.50	2.13	D	1.0	2.09	E	2.0	2.02
	F	4.0	2.04	G	5.0	2.11	H	10	2.13	I	20	2.13	J	40	2.12
	K	60	2.13	L	80	2.13									
Ethylbenzene	A	0.10	1.18	B	0.20	1.04	C	0.50	0.998	D	1.0	1.07	E	2.0	1.11
	F	4.0	1.12	G	5.0	1.17	H	10	1.17	I	20	1.20	J	40	1.17
	K	60	1.19	L	80	1.20									
1,1,1,2-Tetrachloroethane	A	0.10	0.674	B	0.20	0.601	C	0.50	0.682	D	1.0	0.694	E	2.0	0.635
	F	4.0	0.641	G	5.0	0.688	H	10	0.704	I	20	0.709	J	40	0.707
	K	60	0.720	L	80	0.730									
m,p-Xylenes	A	0.20	1.40	B	0.40	1.10	C	1.0	1.21	D	2.0	1.37	E	4.0	1.33
	F	8.0	1.36	G	10	1.46	H	20	1.45	I	40	1.47	J	80	1.44
	K	120	1.47	L	160	1.48									
o-Xylene	A	0.10	1.24	B	0.20	0.996	C	0.50	1.20	D	1.0	1.28	E	2.0	1.22
	F	4.0	1.27	G	5.0	1.37	H	10	1.36	I	20	1.41	J	40	1.39
	K	60	1.39	L	80	1.41									
Styrene	A	0.10	0.791	B	0.20	0.881	C	0.50	0.854	D	1.0	0.912	E	2.0	0.935
	F	4.0	0.973	G	5.0	1.03	H	10	1.08	I	20	1.12	J	40	1.11
	K	60	1.10	L	80	1.11									
Bromoform							C	0.50	0.298	D	1.0	0.339	E	2.0	0.320
	F	4.0	0.321	G	5.0	0.346	H	10	0.351	I	20	0.358	J	40	0.372
	K	60	0.373	L	80	0.381									
Isopropylbenzene	A	0.10	2.98	B	0.20	2.88	C	0.50	2.98	D	1.0	3.32	E	2.0	3.34
	F	4.0	3.39	G	5.0	3.67	H	10	3.60	I	20	3.78	J	40	3.67
	K	60	3.74	L	80	3.79									
1,1,2,2-Tetrachloroethane	A	0.10	0.568	B	0.20	0.387	C	0.50	0.453	D	1.0	0.485	E	2.0	0.461
	F	4.0	0.456	G	5.0	0.476	H	10	0.480	I	20	0.484	J	40	0.471
	K	60	0.480	L	80	0.490									

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† SPCC Compound **‡ CCC Compound**

Client: Sealaska Environmental Services, LLC **Service Request:** K1413309
Project: JBLM LTM/TO 01 **Calibration Date:** 10/17/2014

Initial Calibration Summary
Volatile Organic Compounds

Calibration ID: CAL13625 **Column:** MS
Instrument ID: MS13

Analyte Name	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF
Bromobenzene	A	0.10	1.01	B	0.20	0.843	C	0.50	0.946	D	1.0	0.931	E	2.0	0.868
	F	4.0	0.845	G	5.0	0.915	H	10	0.897	I	20	0.927	J	40	0.912
	K	60	0.941	L	80	0.939									
n-Propylbenzene	A	0.10	3.89	B	0.20	3.39	C	0.50	3.77	D	1.0	4.03	E	2.0	3.89
	F	4.0	4.03	G	5.0	4.28	H	10	4.12	I	20	4.32	J	40	4.13
	K	60	4.38	L	80	4.39									
1,2,3-Trichloropropane				B	0.20	0.172	C	0.50	0.154	D	1.0	0.149	E	2.0	0.137
	F	4.0	0.140	G	5.0	0.148	H	10	0.156	I	20	0.155	J	40	0.153
	K	60	0.157	L	80	0.157									
2-Chlorotoluene	A	0.10	2.60	B	0.20	2.14	C	0.50	2.29	D	1.0	2.50	E	2.0	2.39
	F	4.0	2.42	G	5.0	2.55	H	10	2.46	I	20	2.54	J	40	2.45
	K	60	2.56	L	80	2.57									
1,3,5-Trimethylbenzene	A	0.10	2.54	B	0.20	2.14	C	0.50	2.42	D	1.0	2.68	E	2.0	2.65
	F	4.0	2.80	G	5.0	3.00	H	10	2.99	I	20	3.12	J	40	3.04
	K	60	3.18	L	80	3.21									
4-Chlorotoluene	A	0.10	3.41	B	0.20	2.46	C	0.50	2.69	D	1.0	2.92	E	2.0	2.75
	F	4.0	2.77	G	5.0	2.98	H	10	2.92	I	20	2.94	J	40	2.86
	K	60	2.98	L	80	2.98									
tert-Butylbenzene	A	0.10	2.53	B	0.20	1.99	C	0.50	2.35	D	1.0	2.47	E	2.0	2.39
	F	4.0	2.53	G	5.0	2.69	H	10	2.56	I	20	2.75	J	40	2.62
	K	60	2.78	L	80	2.79									
1,2,4-Trimethylbenzene	A	0.10	2.26	B	0.20	1.82	C	0.50	2.26	D	1.0	2.57	E	2.0	2.56
	F	4.0	2.72	G	5.0	2.93	H	10	2.93	I	20	3.07	J	40	3.03
	K	60	3.15	L	80	3.19									
sec-Butylbenzene	A	0.10	3.51	B	0.20	2.76	C	0.50	3.20	D	1.0	3.45	E	2.0	3.36
	F	4.0	3.47	G	5.0	3.74	H	10	3.58	I	20	3.76	J	40	3.61
	K	60	3.80	L	80	3.86									
4-Isopropyltoluene	A	0.10	2.50	B	0.20	2.05	C	0.50	2.43	D	1.0	2.68	E	2.0	2.72
	F	4.0	2.93	G	5.0	3.19	H	10	3.09	I	20	3.25	J	40	3.16
	K	60	3.33	L	80	3.38									
1,3-Dichlorobenzene	A	0.10	2.11	B	0.20	1.56	C	0.50	1.83	D	1.0	1.87	E	2.0	1.72
	F	4.0	1.69	G	5.0	1.80	H	10	1.79	I	20	1.81	J	40	1.78
	K	60	1.83	L	80	1.85									
1,4-Dichlorobenzene	A	0.10	2.27	B	0.20	1.81	C	0.50	1.89	D	1.0	1.83	E	2.0	1.73
	F	4.0	1.69	G	5.0	1.82	H	10	1.80	I	20	1.82	J	40	1.79
	K	60	1.85	L	80	1.85									

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† SPCC Compound **‡ CCC Compound**

Client: Sealaska Environmental Services, LLC **Service Request:** K1413309
Project: JBLM LTM/TO 01 **Calibration Date:** 10/17/2014

Initial Calibration Summary
Volatile Organic Compounds

Calibration ID: CAL13625 **Column:** MS
Instrument ID: MS13

Analyte Name	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF
n-Butylbenzene	A	0.10	2.53	B	0.20	1.87	C	0.50	2.16	D	1.0	2.24	E	2.0	2.23
	F	4.0	2.33	G	5.0	2.56	H	10	2.48	I	20	2.66	J	40	2.58
	K	60	2.72	L	80	2.76									
1,2-Dichlorobenzene	A	0.10	1.75	B	0.20	1.48	C	0.50	1.60	D	1.0	1.64	E	2.0	1.51
	F	4.0	1.52	G	5.0	1.62	H	10	1.59	I	20	1.61	J	40	1.59
	K	60	1.64	L	80	1.65									
1,2-Dibromo-3-chloropropane							C	0.50	0.0579	D	1.0	0.0720	E	2.0	0.0580
	F	4.0	0.0669	G	5.0	0.0717	H	10	0.0717	I	20	0.0714	J	40	0.0752
	K	60	0.0792	L	80	0.0821									
1,2,4-Trichlorobenzene	A	0.10	1.30	B	0.20	0.870	C	0.50	0.888	D	1.0	0.968	E	2.0	0.887
	F	4.0	0.885	G	5.0	0.998	H	10	0.997	I	20	1.04	J	40	1.05
	K	60	1.10	L	80	1.11									
Hexachlorobutadiene	A	0.10	0.732	B	0.20	0.551	C	0.50	0.575	D	1.0	0.540	E	2.0	0.497
	F	4.0	0.503	G	5.0	0.528	H	10	0.513	I	20	0.533	J	40	0.524
	K	60	0.548	L	80	0.561									
Naphthalene							C	0.50	0.846	D	1.0	0.922	E	2.0	0.934
	F	4.0	1.03	G	5.0	1.16	H	10	1.35	I	20	1.53	J	40	1.59
	K	60	1.68	L	80	1.71									
1,2,3-Trichlorobenzene	A	0.10	0.872	B	0.20	0.785	C	0.50	0.740	D	1.0	0.810	E	2.0	0.742
	F	4.0	0.805	G	5.0	0.864	H	10	0.887	I	20	0.918	J	40	0.925
	K	60	0.943	L	80	0.962									
Dibromofluoromethane	A	10	0.222	B	10	0.219	C	10	0.223	D	10	0.222	E	10	0.221
	F	10	0.221	G	10	0.220	H	10	0.221	I	10	0.217	J	10	0.220
	K	10	0.217	L	10	0.212									
1,2-Dichloroethane-d4	A	10	0.209	B	10	0.205	C	10	0.205	D	10	0.209	E	10	0.199
	F	10	0.197	G	10	0.201	H	10	0.202	I	10	0.200	J	10	0.199
	K	10	0.194	L	10	0.194									
Toluene-d8	A	10	0.966	B	10	0.949	C	10	0.977	D	10	1.00	E	10	0.994
	F	10	0.996	G	10	0.996	H	10	1.02	I	10	1.01	J	10	1.01
	K	10	1.02	L	10	0.993									
4-Bromofluorobenzene	A	10	0.792	B	10	0.817	C	10	0.818	D	10	0.837	E	10	0.846
	F	10	0.823	G	10	0.843	H	10	0.849	I	10	0.847	J	10	0.840
	K	10	0.818	L	10	0.822									

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† SPCC Compound **‡ CCC Compound**

Client: Sealaska Environmental Services, LLC **Service Request:** K1413309
Project: JBLM LTM/TO 01 **Calibration Date:** 10/17/2014

Initial Calibration Summary
Volatile Organic Compounds

Calibration ID: CAL13625 **Column:** MS
Instrument ID: MS13

		Calibration Evaluation					RRF Evaluation		
Analyte Name	**Compound Type**	**Fit Type**	**Eval.**	**Eval. Result**	**Q**	**Control Criteria**	**Average RRF**	**Q**	**Minimum RRF**
Dichlorodifluoromethane	MS	AverageRF	% RSD	8.4		≤ 20	0.353		0.100
Chloromethane	MS	AverageRF	% RSD	14.4		≤ 20	0.360		0.100
Vinyl Chloride	MS	AverageRF	% RSD	5.9		≤ 20	0.311		0.100
Bromomethane	MS	AverageRF	% RSD	17.2		≤ 20	0.206		0.100
Chloroethane	MS	AverageRF	% RSD	6.7		≤ 20	0.160		0.100
Trichlorofluoromethane	MS	AverageRF	% RSD	7.3		≤ 20	0.489		0.100
1,1-Dichloroethene	MS	AverageRF	% RSD	4.1		≤ 20	0.219		.100
Acetone	MS	AverageRF	% RSD	16.7		≤ 20	0.0313		0.01
Carbon Disulfide	MS	AverageRF	% RSD	8.5		≤ 20	0.749		0.100
Methylene Chloride	MS	AverageRF	% RSD	14.9		≤ 20	0.263		0.100
Methyl tert-Butyl Ether	MS	AverageRF	% RSD	10.4		≤ 20	0.339		0.100
trans-1,2-Dichloroethene	MS	AverageRF	% RSD	9.2		≤ 20	0.257		0.100
1,1-Dichloroethane	MS	AverageRF	% RSD	2.3		≤ 20	0.422		.200
2,2-Dichloropropane	MS	AverageRF	% RSD	7.2		≤ 20	0.214		0.01
cis-1,2-Dichloroethene	MS	AverageRF	% RSD	7.4		≤ 20	0.286		0.100
2-Butanone (MEK)	MS	AverageRF	% RSD	10.1		≤ 20	0.0115		0.01
Bromochloromethane	MS	AverageRF	% RSD	6.0		≤ 20	0.122		0.01
Chloroform	MS	AverageRF	% RSD	3.9		≤ 20	0.454		0.200
1,1,1-Trichloroethane (TCA)	MS	AverageRF	% RSD	6.1		≤ 20	0.365		.100
Carbon Tetrachloride	MS	AverageRF	% RSD	4.3		≤ 20	0.375		0.100
1,1-Dichloropropene	MS	AverageRF	% RSD	5.8		≤ 20	0.359		0.01
Benzene	MS	AverageRF	% RSD	4.7		≤ 20	1.05		0.500
1,2-Dichloroethane (EDC)	MS	AverageRF	% RSD	4.6		≤ 20	0.298		0.100
Trichloroethene (TCE)	MS	AverageRF	% RSD	6.0		≤ 20	0.280		0.200
1,2-Dichloropropane	MS	AverageRF	% RSD	4.4		≤ 20	0.232		0.100
Dibromomethane	MS	AverageRF	% RSD	3.3		≤ 20	0.118		0.01
Bromodichloromethane	MS	AverageRF	% RSD	4.7		≤ 20	0.319		0.200
cis-1,3-Dichloropropene	MS	AverageRF	% RSD	15.5		≤ 20	0.313		0.200
4-Methyl-2-pentanone (MIBK)	MS	AverageRF	% RSD	14.9		≤ 20	0.0367		0.01
Toluene	MS	AverageRF	% RSD	7.2		≤ 20	0.731		0.400
trans-1,3-Dichloropropene	MS	AverageRF	% RSD	16.4		≤ 20	0.607		0.100
1,1,2-Trichloroethane	MS	AverageRF	% RSD	7.1		≤ 20	0.381		.100
Tetrachloroethene (PCE)	MS	AverageRF	% RSD	3.7		≤ 20	0.705		0.200
2-Hexanone	MS	Quadratic(0,0)	COD	1.000		≥ 0.990	0.0289		0.015
1,3-Dichloropropane	MS	AverageRF	% RSD	6.7		≤ 20	0.833		0.01
Dibromochloromethane	MS	AverageRF	% RSD	4.4		≤ 20	0.607		0.100
1,2-Dibromoethane (EDB)	MS	AverageRF	% RSD	6.2		≤ 20	0.436		0.100
Chlorobenzene	MS	AverageRF	% RSD	2.9		≤ 20	2.10		0.500
Ethylbenzene	MS	AverageRF	% RSD	5.9		≤ 20	1.14		0.100
1,1,1,2-Tetrachloroethane	MS	AverageRF	% RSD	5.6		≤ 20	0.682		.01
m,p-Xylenes	MS	AverageRF	% RSD	8.5		≤ 20	1.38		0.100
o-Xylene	MS	AverageRF	% RSD	9.4		≤ 20	1.30		0.300

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† SPCC Compound **‡ CCC Compound**

Client: Sealaska Environmental Services, LLC **Service Request:** K1413309
Project: JBLM LTM/TO 01 **Calibration Date:** 10/17/2014

Initial Calibration Summary
Volatile Organic Compounds

Calibration ID: CAL13625 **Column:** MS
Instrument ID: MS13

Analyte Name	Compound Type	Calibration Evaluation					RRF Evaluation		
		Fit Type	Eval.	Eval. Result	Q	Control Criteria	Average RRF	Q	Minimum RRF
Styrene	MS	AverageRF	% RSD	11.7		≤ 20	0.991		0.300
Bromoform	MS	AverageRF	% RSD	7.7		≤ 20	0.346		0.100
Isopropylbenzene	MS	AverageRF	% RSD	9.7		≤ 20	3.43		0.100
1,1,2,2-Tetrachloroethane	MS	AverageRF	% RSD	8.5		≤ 20	0.474		.300
Bromobenzene	MS	AverageRF	% RSD	5.2		≤ 20	0.915		0.01
n-Propylbenzene	MS	AverageRF	% RSD	7.1		≤ 20	4.05		0.01
1,2,3-Trichloropropane	MS	AverageRF	% RSD	6.0		≤ 20	0.153		0.01
2-Chlorotoluene	MS	AverageRF	% RSD	5.4		≤ 20	2.46		0.01
1,3,5-Trimethylbenzene	MS	AverageRF	% RSD	11.9		≤ 20	2.81		0.01
4-Chlorotoluene	MS	AverageRF	% RSD	7.8		≤ 20	2.89		0.01
tert-Butylbenzene	MS	AverageRF	% RSD	8.9		≤ 20	2.54		0.01
1,2,4-Trimethylbenzene	MS	AverageRF	% RSD	15.7		≤ 20	2.71		0.01
sec-Butylbenzene	MS	AverageRF	% RSD	8.7		≤ 20	3.51		0.01
4-Isopropyltoluene	MS	AverageRF	% RSD	14.4		≤ 20	2.89		0.01
1,3-Dichlorobenzene	MS	AverageRF	% RSD	7.1		≤ 20	1.80		0.600
1,4-Dichlorobenzene	MS	AverageRF	% RSD	7.8		≤ 20	1.85		0.500
n-Butylbenzene	MS	AverageRF	% RSD	11.0		≤ 20	2.43		0.01
1,2-Dichlorobenzene	MS	AverageRF	% RSD	4.4		≤ 20	1.60		0.400
1,2-Dibromo-3-chloropropane	MS	AverageRF	% RSD	11.2		≤ 20	0.0706		0.025
1,2,4-Trichlorobenzene	MS	AverageRF	% RSD	12.4		≤ 20	1.01		0.200
Hexachlorobutadiene	MS	AverageRF	% RSD	11.2		≤ 20	0.550		0.01
Naphthalene	MS	Quadratic(0,0)	COD	0.999		≥ 0.990	1.27		0.01
1,2,3-Trichlorobenzene	MS	AverageRF	% RSD	9.0		≤ 20	0.854		0.01
Dibromofluoromethane	SURR	AverageRF	% RSD	1.3		≤ 20	0.220		0.01
1,2-Dichloroethane-d4	SURR	AverageRF	% RSD	2.4		≤ 20	0.201		0.01
Toluene-d8	SURR	AverageRF	% RSD	2.2		≤ 20	0.994		0.01
4-Bromofluorobenzene	SURR	AverageRF	% RSD	2.1		≤ 20	0.829		0.01

Results flagged with an asterisk (*) indicate values outside control criteria.

† SPCC Compound **‡ CCC Compound**

Client: Sealaska Environmental Services, LLC
Project: JBLM LTM/TO 01

Service Request: K1413309
Calibration Date: 10/17/2014
Date Analyzed: 10/17/2014

Second Source Calibration Verification
Volatile Organic Compounds

Calibration Type: Internal Standard
Analysis Method: 8260C

Calibration ID: CAL13625
Units: PPB

File ID: J:\MS13\DATA\101714\1017F026.D
J:\MS13\DATA\102014\1020F005.D

Analyte Name	Expected	Result	Average RF	SSV RF	%D	%Drift	Criteria	Curve Fit
Dichlorodifluoromethane	10	7.3	0.353	0.259	-27	NA	± 30 %	AverageRF
Chloromethane	10	7.3	0.360	0.262	-27	NA	± 30 %	AverageRF
Vinyl Chloride	10	8.3	0.311	0.257	-17	NA	± 30 %	AverageRF
Bromomethane	10	7.8	0.206	0.160	-22	NA	± 30 %	AverageRF
Chloroethane	10	9.9	0.160	0.159	-1	NA	± 30 %	AverageRF
Trichlorofluoromethane	10	7.5	0.489	0.365	-25	NA	± 30 %	AverageRF
1,1-Dichloroethene	10	9.8	0.219	0.215	-2	NA	± 30 %	AverageRF
Acetone	50	56	0.0313	0.0351	12	NA	± 30 %	AverageRF
Carbon Disulfide	20	19	0.749	0.702	-6	NA	± 30 %	AverageRF
Methylene Chloride	10	8.6	0.263	0.225	-14	NA	± 30 %	AverageRF
Methyl tert-Butyl Ether	10	10	0.339	0.351	4	NA	± 30 %	AverageRF
trans-1,2-Dichloroethene	10	9.5	0.257	0.245	-5	NA	± 30 %	AverageRF
1,1-Dichloroethane	10	10	0.422	0.427	1	NA	± 30 %	AverageRF
2,2-Dichloropropane	10	8.8	0.214	0.189	-12	NA	± 30 %	AverageRF
cis-1,2-Dichloroethene	10	9.8	0.286	0.281	-2	NA	± 30 %	AverageRF
2-Butanone (MEK)	50	57	0.0115	0.0130	13	NA	± 30 %	AverageRF
Bromochloromethane	10	10	0.122	0.123	1	NA	± 30 %	AverageRF
Chloroform	10	9.6	0.454	0.436	-4	NA	± 30 %	AverageRF
1,1,1-Trichloroethane (TCA)	10	9.4	0.365	0.342	-6	NA	± 30 %	AverageRF
Carbon Tetrachloride	10	9.1	0.375	0.340	-9	NA	± 30 %	AverageRF
1,1-Dichloropropene	10	9.4	0.359	0.339	-6	NA	± 30 %	AverageRF
Benzene	10	9.7	1.05	1.01	-3	NA	± 30 %	AverageRF
1,2-Dichloroethane (EDC)	10	9.7	0.298	0.288	-3	NA	± 30 %	AverageRF
Trichloroethene (TCE)	10	9.2	0.280	0.258	-8	NA	± 30 %	AverageRF
1,2-Dichloropropane	10	9.6	0.232	0.224	-4	NA	± 30 %	AverageRF
Dibromomethane	10	10	0.118	0.119	1	NA	± 30 %	AverageRF
Bromodichloromethane	10	9.9	0.319	0.315	-1	NA	± 30 %	AverageRF
cis-1,3-Dichloropropene	10	10	0.313	0.313	0	NA	± 30 %	AverageRF
4-Methyl-2-pentanone (MIBK)	50	54	0.0367	0.0395	8	NA	± 30 %	AverageRF
Toluene	10	9.2	0.731	0.676	-8	NA	± 30 %	AverageRF
trans-1,3-Dichloropropene	10	8.7	0.607	0.529	-13	NA	± 30 %	AverageRF
1,1,2-Trichloroethane	10	9.7	0.381	0.369	-3	NA	± 30 %	AverageRF
Tetrachloroethene (PCE)	10	8.9	0.705	0.624	-11	NA	± 30 %	AverageRF
2-Hexanone	50	51	0.0289	0.0336	NA	1	± 30 %	Quadratic(0,0
1,3-Dichloropropane	10	9.2	0.833	0.767	-8	NA	± 30 %	AverageRF
Dibromochloromethane	10	9.6	0.607	0.583	-4	NA	± 30 %	AverageRF
1,2-Dibromoethane (EDB)	10	9.6	0.436	0.420	-4	NA	± 30 %	AverageRF
Chlorobenzene	10	9.3	2.10	1.96	-7	NA	± 30 %	AverageRF
Ethylbenzene	10	9.1	1.14	1.04	-9	NA	± 30 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† SPCC Compound **‡ CCC Compound**

Client: Sealaska Environmental Services, LLC
Project: JBLM LTM/TO 01

Service Request: K1413309
Calibration Date: 10/17/2014
Date Analyzed: 10/17/2014

Second Source Calibration Verification
Volatile Organic Compounds

Calibration Type: Internal Standard
Analysis Method: 8260C

Calibration ID: CAL13625
Units: PPB

Analyte Name	Expected	Result	Average RF	SSV RF	%D	%Drift	Criteria	Curve Fit
1,1,1,2-Tetrachloroethane	10	9.5	0.682	0.646	-5	NA	± 30 %	AverageRF
m,p-Xylenes	20	19	1.38	1.32	-4	NA	± 30 %	AverageRF
o-Xylene	10	9.7	1.30	1.26	-3	NA	± 30 %	AverageRF
Styrene	10	10	0.991	1.01	2	NA	± 30 %	AverageRF
Bromoform	10	9.8	0.346	0.337	-2	NA	± 30 %	AverageRF
Isopropylbenzene	10	9.5	3.43	3.25	-5	NA	± 30 %	AverageRF
1,1,2,2-Tetrachloroethane	10	9.4	0.474	0.444	-6	NA	± 30 %	AverageRF
Bromobenzene	10	9.6	0.915	0.881	-4	NA	± 30 %	AverageRF
n-Propylbenzene	10	9.4	4.05	3.79	-6	NA	± 30 %	AverageRF
1,2,3-Trichloropropane	10	9.4	0.153	0.144	-6	NA	± 30 %	AverageRF
2-Chlorotoluene	10	9.8	2.46	2.42	-2	NA	± 30 %	AverageRF
1,3,5-Trimethylbenzene	10	10	2.81	2.81	0	NA	± 30 %	AverageRF
4-Chlorotoluene	10	9.3	2.89	2.68	-7	NA	± 30 %	AverageRF
tert-Butylbenzene	10	9.5	2.54	2.40	-5	NA	± 30 %	AverageRF
1,2,4-Trimethylbenzene	10	10	2.71	2.73	1	NA	± 30 %	AverageRF
sec-Butylbenzene	10	9.1	3.51	3.21	-9	NA	± 30 %	AverageRF
4-Isopropyltoluene	10	9.9	2.89	2.86	-1	NA	± 30 %	AverageRF
1,3-Dichlorobenzene	10	9.4	1.80	1.70	-6	NA	± 30 %	AverageRF
1,4-Dichlorobenzene	10	9.2	1.85	1.70	-8	NA	± 30 %	AverageRF
n-Butylbenzene	10	9.3	2.43	2.26	-7	NA	± 30 %	AverageRF
1,2-Dichlorobenzene	10	9.5	1.60	1.52	-5	NA	± 30 %	AverageRF
1,2-Dibromo-3-chloropropane	10	9.7	0.0706	0.0686	-3	NA	± 30 %	AverageRF
1,2,4-Trichlorobenzene	10	9.4	1.01	0.951	-6	NA	± 30 %	AverageRF
Hexachlorobutadiene	10	8.8	0.550	0.483	-12	NA	± 30 %	AverageRF
Naphthalene	10	8.8	1.27	1.30	NA	-12	± 30 %	Quadratic(0,0
1,2,3-Trichlorobenzene	10	9.8	0.854	0.839	-2	NA	± 30 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† SPCC Compound **‡ CCC Compound**

Client: Sealaska Environmental Services, LLC
Project: JBLM LTM/TO 01

Service Request: K1413309
Date Analyzed: 12/03/2014

Continuing Calibration Verification Summary
Volatile Organic Compounds

Calibration Type: Internal Standard
Analysis Method: 8260C

Calibration Date: 10/17/2014
Calibration ID: CAL13625
Analysis Lot: KWG1415876
Units: PPB

File ID: J:\MS13\DATA\120314\1203F004.D

Analyte Name	Expected	Result	Min RF	Average RF	CCV RF	%D		%Drift	Criteria	Curve Fit
Dichlorodifluoromethane	10	7.3	0.100	0.353	0.258	-27	*	NA	± 20	AverageRF
Chloromethane	10	6.6	0.100	0.360	0.239	-34	*	NA	± 20	AverageRF
Vinyl Chloride	10	8.2	0.100	0.311	0.254	-19		NA	± 20	AverageRF
Bromomethane	10	6.7	0.100	0.206	0.139	-33	*	NA	± 20	AverageRF
Chloroethane	10	8.3	0.100	0.160	0.133	-17		NA	± 20	AverageRF
Trichlorofluoromethane	10	8.5	0.100	0.489	0.413	-15		NA	± 20	AverageRF
1,1-Dichloroethene	10	9.0	.100	0.219	0.196	-11		NA	± 20	AverageRF
Acetone	200	180	0.01	0.0313	0.0285	-9		NA	± 20	AverageRF
Carbon Disulfide	10	9.0	0.100	0.749	0.672	-10		NA	± 20	AverageRF
Methylene Chloride	10	8.5	0.100	0.263	0.224	-15		NA	± 20	AverageRF
Methyl tert-Butyl Ether	20	23	0.100	0.339	0.394	16		NA	± 20	AverageRF
trans-1,2-Dichloroethene	10	9.1	0.100	0.257	0.233	-10		NA	± 20	AverageRF
1,1-Dichloroethane	10	9.2	.200	0.422	0.388	-8		NA	± 20	AverageRF
2,2-Dichloropropane	10	11	0.01	0.214	0.228	6		NA	± 20	AverageRF
cis-1,2-Dichloroethene	10	9.4	0.100	0.286	0.269	-6		NA	± 20	AverageRF
2-Butanone (MEK)	200	220	0.01	0.0115	0.0127	11		NA	± 20	AverageRF
Bromochloromethane	10	10	0.01	0.122	0.122	1		NA	± 20	AverageRF
Chloroform	10	9.2	0.200	0.454	0.417	-8		NA	± 20	AverageRF
1,1,1-Trichloroethane (TCA)	10	9.9	.100	0.365	0.362	-1		NA	± 20	AverageRF
Carbon Tetrachloride	10	8.9	0.100	0.375	0.332	-11		NA	± 20	AverageRF
1,1-Dichloropropene	10	8.8	0.01	0.359	0.317	-12		NA	± 20	AverageRF
Benzene	10	9.4	0.500	1.05	0.984	-6		NA	± 20	AverageRF
1,2-Dichloroethane (EDC)	10	8.9	0.100	0.298	0.265	-11		NA	± 20	AverageRF
Trichloroethene (TCE)	10	9.3	0.200	0.280	0.259	-7		NA	± 20	AverageRF
1,2-Dichloropropane	10	9.7	0.100	0.232	0.225	-3		NA	± 20	AverageRF
Dibromomethane	10	9.5	0.01	0.118	0.112	-5		NA	± 20	AverageRF
Bromodichloromethane	10	9.5	0.200	0.319	0.302	-5		NA	± 20	AverageRF
cis-1,3-Dichloropropene	10	11	0.200	0.313	0.329	5		NA	± 20	AverageRF
4-Methyl-2-pentanone (MIBK)	200	220	0.01	0.0367	0.0408	11		NA	± 20	AverageRF
Toluene	10	9.4	0.400	0.731	0.685	-6		NA	± 20	AverageRF
trans-1,3-Dichloropropene	10	10	0.100	0.607	0.635	4		NA	± 20	AverageRF
1,1,2-Trichloroethane	10	9.7	.100	0.381	0.369	-3		NA	± 20	AverageRF
Tetrachloroethene (PCE)	10	9.7	0.200	0.705	0.685	-3		NA	± 20	AverageRF
2-Hexanone	200	210	0.015	0.0289	0.0358	NA		6	± 20	Quadratic(0,0)
1,3-Dichloropropane	10	9.2	0.01	0.833	0.770	-8		NA	± 20	AverageRF
Dibromochloromethane	10	9.9	0.100	0.607	0.600	-1		NA	± 20	AverageRF
1,2-Dibromoethane (EDB)	10	10	0.100	0.436	0.436	0		NA	± 20	AverageRF
Chlorobenzene	10	9.8	0.500	2.10	2.06	-2		NA	± 20	AverageRF
Ethylbenzene	10	10	0.100	1.14	1.13	-1		NA	± 20	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† SPCC Compound **‡ CCC Compound**

Client: Sealaska Environmental Services, LLC
Project: JBLM LTM/TO 01

Service Request: K1413309
Date Analyzed: 12/03/2014

Continuing Calibration Verification Summary
Volatile Organic Compounds

Calibration Type: Internal Standard
Analysis Method: 8260C

Calibration Date: 10/17/2014
Calibration ID: CAL13625
Analysis Lot: KWG1415876
Units: PPB

Analyte Name	Expected	Result	Min RF	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
1,1,1,2-Tetrachloroethane	10	10	.01	0.682	0.690	1	NA	± 20	AverageRF
m,p-Xylenes	20	21	0.100	1.38	1.42	3	NA	± 20	AverageRF
o-Xylene	10	10	0.300	1.30	1.34	4	NA	± 20	AverageRF
Styrene	10	11	0.300	0.991	1.07	8	NA	± 20	AverageRF
Bromoform	10	11	0.100	0.346	0.368	6	NA	± 20	AverageRF
Isopropylbenzene	10	10	0.100	3.43	3.52	3	NA	± 20	AverageRF
1,1,2,2-Tetrachloroethane	10	9.4	.300	0.474	0.445	-6	NA	± 20	AverageRF
Bromobenzene	10	9.8	0.01	0.915	0.897	-2	NA	± 20	AverageRF
n-Propylbenzene	10	9.4	0.01	4.05	3.82	-6	NA	± 20	AverageRF
1,2,3-Trichloropropane	10	9.2	0.01	0.153	0.141	-8	NA	± 20	AverageRF
2-Chlorotoluene	10	9.4	0.01	2.46	2.30	-6	NA	± 20	AverageRF
1,3,5-Trimethylbenzene	10	10	0.01	2.81	2.82	0	NA	± 20	AverageRF
4-Chlorotoluene	10	9.3	0.01	2.89	2.69	-7	NA	± 20	AverageRF
tert-Butylbenzene	10	9.7	0.01	2.54	2.46	-3	NA	± 20	AverageRF
1,2,4-Trimethylbenzene	10	11	0.01	2.71	2.84	5	NA	± 20	AverageRF
sec-Butylbenzene	10	9.6	0.01	3.51	3.36	-4	NA	± 20	AverageRF
4-Isopropyltoluene	10	10	0.01	2.89	2.95	2	NA	± 20	AverageRF
1,3-Dichlorobenzene	10	9.5	0.600	1.80	1.71	-5	NA	± 20	AverageRF
1,4-Dichlorobenzene	10	9.4	0.500	1.85	1.73	-6	NA	± 20	AverageRF
n-Butylbenzene	10	10	0.01	2.43	2.44	0	NA	± 20	AverageRF
1,2-Dichlorobenzene	10	9.6	0.400	1.60	1.53	-4	NA	± 20	AverageRF
1,2-Dibromo-3-chloropropane	10	11	0.025	0.0706	0.0775	10	NA	± 20	AverageRF
1,2,4-Trichlorobenzene	10	10	0.200	1.01	1.06	5	NA	± 20	AverageRF
Hexachlorobutadiene	10	9.3	0.01	0.550	0.510	-7	NA	± 20	AverageRF
Naphthalene	10	11	0.01	1.27	1.70	NA	14	± 20	Quadratic(0,0)
1,2,3-Trichlorobenzene	10	11	0.01	0.854	0.906	6	NA	± 20	AverageRF
Dibromofluoromethane	10	10	0.01	0.220	0.220	0	NA	± 20	AverageRF
1,2-Dichloroethane-d4	10	9.5	0.01	0.201	0.191	-5	NA	± 20	AverageRF
Toluene-d8	10	10	0.01	0.994	0.991	0	NA	± 20	AverageRF
4-Bromofluorobenzene	10	11	0.01	0.829	0.877	6	NA	± 20	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† SPCC Compound **‡ CCC Compound**

Client: Sealaska Environmental Services, LLC **Service Request:** K1413309
Project: JBLM LTM/TO 01

Analysis Run Log
Volatile Organic Compounds

Analysis Method: 8260C **Analysis Lot:** KWG1415876
Instrument ID: MS13

File ID	Sample Name	Lab Code	Date Analysis Started	Start Time	Q	Date Analysis Finished	Finish Time
1203F003.D	GC/MS Tuning - Bromofluorobenzene	KWG1415876-1	12/3/2014	08:52		12/3/2014	09:11
1203F004.D	Continuing Calibration Verification	KWG1415876-2	12/3/2014	09:21		12/3/2014	09:40
1203F005.D	Lab Control Sample	KWG1415877-3	12/3/2014	09:59		12/3/2014	10:18
1203F006.D	LGC141124LC10860-1MS	KWG1415877-1	12/3/2014	10:26		12/3/2014	10:45
1203F007.D	LGC141124LC10860-1DMS	KWG1415877-2	12/3/2014	10:53		12/3/2014	11:12
1203F010.D	Method Blank	KWG1415877-4	12/3/2014	12:15		12/3/2014	12:34
1203F011.D	ZZZZZZ	ZZZZZZ	12/3/2014	12:42		12/3/2014	13:01
1203F012.D	TB-141124	K1413309-001	12/3/2014	13:09		12/3/2014	13:28
1203F013.D	LGC141124MT3-1	K1413309-002	12/3/2014	13:36		12/3/2014	13:55
1203F014.D	LGC141124MT4-1	K1413309-003	12/3/2014	14:03		12/3/2014	14:22
1203F015.D	LGC141124LC135-1	K1413309-004	12/3/2014	14:30		12/3/2014	14:49
1203F016.D	LGC141124LC10830-1	K1413309-005	12/3/2014	14:57		12/3/2014	15:16
1203F017.D	LGC141124DUP1-1	K1413309-006	12/3/2014	15:24		12/3/2014	15:43
1203F018.D	LGC141124LC10860-1	K1413309-007	12/3/2014	15:51		12/3/2014	16:10
1203F019.D	LGC141124LC10885-1	K1413309-008	12/3/2014	16:18		12/3/2014	16:37
1203F020.D	LGC141124MT2-1	K1413309-009	12/3/2014	16:45		12/3/2014	17:04
1203F021.D	LGC141124MT1-1	K1413309-010	12/3/2014	17:12		12/3/2014	17:31
1203F022.D	LGC14112485PA382-1	K1413309-011	12/3/2014	17:39		12/3/2014	17:58
1203F023.D	LGC14112485PA384-1	K1413309-012	12/3/2014	18:07		12/3/2014	18:26
1203F024.D	LGC141124T15-1	K1413309-013	12/3/2014	18:34		12/3/2014	18:53
1203F025.D	ZZZZZZ	ZZZZZZ	12/3/2014	19:01		12/3/2014	19:20
1203F026.D	ZZZZZZ	ZZZZZZ	12/3/2014	19:28		12/3/2014	19:47
1203F027.D	ZZZZZZ	ZZZZZZ	12/3/2014	19:55		12/3/2014	20:14
1203F028.D	ZZZZZZ	ZZZZZZ	12/3/2014	20:22		12/3/2014	20:41

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

QA/QC Results

Client: Sealaska Environmental Services, LLC
Project: JBLM LTM/TO 01
Sample Matrix: Water

Service Request: K1413309
Date Extracted: 12/03/2014

Extraction Prep Log
Volatile Organic Compounds

Extraction Method: EPA 5030B
Analysis Method: 8260C

Extraction Lot: KWG1415877
Level: Low

Sample Name	Lab Code	Date Collected	Date Received	Sample Amount	Final Volume	% Solids	Note
TB-141124	K1413309-001	11/24/14	11/25/14	10ml	10ml	NA	
LGC141124MT3-1	K1413309-002	11/24/14	11/25/14	10ml	10ml	NA	
LGC141124MT4-1	K1413309-003	11/24/14	11/25/14	10ml	10ml	NA	
LGC141124LC135-1	K1413309-004	11/24/14	11/25/14	10ml	10ml	NA	
LGC141124LC10830-1	K1413309-005	11/24/14	11/25/14	10ml	10ml	NA	
LGC141124DUP1-1	K1413309-006	11/24/14	11/25/14	10ml	10ml	NA	
LGC141124LC10860-1	K1413309-007	11/24/14	11/25/14	10ml	10ml	NA	
LGC141124LC10885-1	K1413309-008	11/24/14	11/25/14	10ml	10ml	NA	
LGC141124MT2-1	K1413309-009	11/24/14	11/25/14	10ml	10ml	NA	
LGC141124MT1-1	K1413309-010	11/24/14	11/25/14	10ml	10ml	NA	
LGC14112485PA382-1	K1413309-011	11/24/14	11/25/14	10ml	10ml	NA	
LGC14112485PA384-1	K1413309-012	11/24/14	11/25/14	10ml	10ml	NA	
LGC141124T15-1	K1413309-013	11/24/14	11/25/14	10ml	10ml	NA	
Method Blank	KWG1415877-4	NA	NA	10ml	10ml	NA	
LGC141124LC10860-1MS	KWG1415877-1	11/24/14	11/25/14	10ml	10ml	NA	
LGC141124LC10860-1DMS	KWG1415877-2	11/24/14	11/25/14	10ml	10ml	NA	
Lab Control Sample	KWG1415877-3	NA	NA	10ml	10ml	NA	

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

APPENDIX C

FIELD NOTES AND FORMS (BY QUARTER)

FIRST QUARTER

1Q2014 Groundwater Sampling Event - LogRAM
Joint Base Lewis-McChord, Washington 98433

Monitoring Well	PDB Installation DTW Date	Depth to Water (Median DTW)	Sample Date	Sample Time	Notes
85-PA-381	14FEB14	11.95 10.3	26MAR14	1345	
85-PA-382	13FEB14	11.3	26MAR14	1350	
85-PA-384	13FEB14	25.0	26MAR14	0915	DUP-5 @ 0800
BC1			20MAR14	1205	
CM-2	12FEB14	20.6 19.7	20MAR14	1250	
FL-1	13FEB14	10.2 9.3	24MAR14	1405	DUP-3 @ 0800
FL-2	14FEB14	13.7 13.2	25MAR14	1030	
FL-3	13FEB14	14.15 12.1	26MAR14 ~~26MAR14~~	1445	
FL-4a	13FEB14		24MAR14	1303	
FL-4b	13FEB14	12.4 11.5	24MAR14	1305	
FL-6	19FEB14	11.15 12.3	20MAR14	1040	
LC-01	18FEB14	14.8 16.1	25MAR14	1405	
LC-03	18FEB14	16.55 16.7	26MAR14	1250	BLADDER PUMP
LC-05	18FEB14	24.3 23.4			
LC-06	18FEB14	23.6 22.9	26MAR14 ~~25MAR14~~	~~1350~~ 1240	~~DUP-7 @ 0830~~ BLADDER PUMP
LC-10	13FEB14	25.0 23.5			
LC-14a	19FEB14	12.3 11.8	28MAR14	0915	
LC-16	19FEB14	10.47 12.4	26MAR14	1410	DUP-8 0835
LC-18	18FEB14	19.5 20.2			

Field Technician Signature:

1Q2014 Groundwater Sampling Event - LogRAM
Joint Base Lewis-McChord, Washington 98433

Monitoring Well	PDB Installation DTW Date	Depth to Water (Median DTW)	Sample Date	Sample Time	Notes
LC-19a	13 FEB 14	24.35 25.1	24MAR14	1335	
LC-20	13FEB14	26.15 25.0	24MAR14	1350	
LC-21c	14FEB14	14.75 14.1	25MAR14	1120	
LC-24	18FEB14	17.0 15.6	~~25MAR14~~ 26MAR14	~~1120~~ 1150	P-PUMP
LC-26	14FEB14	5.4 4.4	26MAR14	1130	
LC-26D	14FEB14	8.1 7.6			
LC-27	18 FEB 14	9.2 10.3	25MAR14	1310	
LC-34	14FEB14	27.6 25.9	24MAR14	1255	
LC-35D	18FEB14	25.15 25.0			
LC-39	19 FEB 14	18.2 18.3			PDB HANGER IN WELL GATE OUT
LC-40	18FEB14	24.45 23.9			
LC-40D	18FEB14	117.5 95.8			
LC-41a	13 FEB 14	26.65 25.0	25MAR14	1435	
LC-41b	19FEB14		20MAR14	1025	BLDG. 966083 DUP-1 0800
LC-41D	13 FEB 14	26.4 37.2			
LC-47a	13 FEB 14	21.4 22.9			
LC-47D	13 FEB 14	25.9 24.8	25MAR14	1415	DUP-5 @ 0930
LC-49	CANNOT REMOVE WELL, NEEDS TO	23.4	PDB HANGER FROM BE REPAIRED		BROKEN CASING
LC-50	14FEB14	6.6 7.0			

Field Technician Signature:

1Q2014 Groundwater Sampling Event - LogRAM
Joint Base Lewis-McChord, Washington 98433

Monitoring Well	PDB Installation DTW Date	Depth to Water (Median DTW)	Sample Date	Sample Time	Notes
LC-50D	14FEB14	6.95 6.1	25MAR14	1045	
LC-53	14FEB14	10.35 10.0	24MAR14	1320	
LC-57	18FEB14	15.9 16.6	25MAR14	1335	
LC-61b	12FEB14	25.4 [redacted] 24.7	20MAR14	1320	
LC-64a	18FEB14	8.4 8.0	25MAR14	1210	
LC-64b	19FEB14	X	25MAR14	1212	
LC-66b	18FEB14	27.4 26.5	26MAR ~~25MAR~~ 14	1305	
LC-66D	18FEB14	90.15 75.9	26MAR14	1310	
LC-67D	13FEB14	91.15 71.3	26MAR14	1340	
LC-68D	13FEB14	27.4 25.2	24MAR14	1230	
LC-69D	13FEB14	30.5 27.4	25MAR14	1420	
LC-70D	13FEB14	52.15 46.0	X	X	
LC-72D	13FEB14	108.4 86.1	26MAR14	1450	
LC-73D	13FEB14	115.1 92.0	X	X	
LC-74D	13FEB14	126.4 98.7	27MAR14	0910	
LC-75D	13FEB14	43.25 40.8	26MAR14	0920	
LC-76D	12FEB14	132.6 110.6	X	X	
LC-77D	19FEB14	103.6 91.7	28MAR14	0900	
LC-79D	18FEB14	82.5 69.1	X	X	

Field Technician Signature:

1Q2014 Groundwater Sampling Event - LogRAM
Joint Base Lewis-McChord, Washington 98433

Monitoring Well	PDB Installation DTW Date	Depth to Water (Median DTW)	Sample Date	Sample Time	Notes
LC-80D	12FEB14	110.35 87.2			
LC-81D	11FEB14	124.9 103.3			
LC-82D	12FEB14	126.45 102.9			
LC-83D	12FEB14	119.5 93.4			
LC-84D-1	12FEB14	121.0 100.8	26MAR14	1505	
LC-84D-2	12FEB14		26MAR14	1510	
LC-85D-1	12FEB14	130.55 108.3	27MAR14	1140	
LC-85D-2	12FEB14		27MAR14	1145	
LC-86D-1	11FEB14	117.85 99.3	20MAR14	1350	
LC-86D-2	11FEB14		20MAR14	1355	
LC-87D-1	11FEB14	125.55 104.2	20MAR14	1330	
LC-87D-2	11FEB14		20MAR14	1335	
LC-88D-1	11FEB14	156.35 149.6	27MAR14	1020	
LC-88D-2	11FEB14		27MAR14	1025	DUP 20 000
LC-89D-1	11FEB14	140.0 130.9	20MAR14	1405	
LC-89D-2	11FEB14		20MAR14	1410	
LC-90D-1	12FEB14	120.8 104.4	26MAR14	1515	
LC-90D-2	12FEB14		26MAR14	1520	
LC-91D-1	11FEB14	144.85 136.0	27MAR14	1105	

Field Technician Signature:

1Q2014 Groundwater Sampling Event - LogRAM
Joint Base Lewis-McChord, Washington 98433

Monitoring Well	PDB Installation DTW Date	Depth to Water (Median DTW)	Sample Date	Sample Time	Notes
LC-91D-2	11FEB14		27MAR14	1110	
LC-92D-1	18FEB14	168.9 166.5	27MAR14	0900	
LC-92D-2	18FEB14		27MAR14	0905	
LC-93D-1	11FEB14	162.0 160.2	27MAR14	0915	
LC-93D-2	11FEB14		27MAR14	0920	
LC-94D-1	11FEB14	141.4 137.3	27MAR14	0955	
LC-94D-2	11FEB14		27MAR14	1000	
LC-95D-1	11FEB14	147.9 145.1	2MAR14	0930	
LC-95D-2	11FEB14		27MAR14	0935	
LC-96D	13FEB14	124.35 99.6	27MAR14	0855	
LC-97D	13FEB14	117.35 94.3	27MAR14	0925	DUP-10@0730
LC-98D-1	12FEB14	127.5 104.4	27MAR14	1350	
LC-98D-2	12FEB14		27MAR14	1355	
LC-99D	13FEB14	122.5 95.7	27MAR14	0915	DUP-9@0700
LC-101D-1	12FEB14	125.1 104.4	27MAR14	0940	
LC-101D-2	12FEB14		27MAR14	0945	DUP-11@0630
LC-102D-1	11FEB14	135.3 122.7	27MAR14	1045	
LC-102D-2	11FEB14		27MAR14	1050	
LC-103D	14FEB14	119.8 95.1	26MAR14	1440	

Field Technician Signature:

1Q2014 Groundwater Sampling Event - LogRAM
Joint Base Lewis-McChord, Washington 98433

Monitoring Well	PDB Installation DTW Date	Depth to Water (Median DTW)	Sample Date	Sample Time	Notes
LC-104D	11 FEB 14	138.5			
LC-108	18 FEB 14	11.55 11.8	25 MAR 14	1135	
LC-109	19 FEB 14		26 MAR 14	1050	
LC-110		16.0			COVERED OVER (DEBRIS)
LC-111A	18 FEB 14	16.9 17.9			
LC-111b	18 FEB 14		27 MAR 14	1320	
LC-112	18 FEB 14	18.55 19.0			
LC-113	18 FEB 14	18.8 18.4			
LC-114		17.1			UNDER A VEHICLE
LC-115	18 FEB 14	17.15 16.3			
LC-116	18 FEB 14	17.35 16.6			
LC-116b	19 FEB 14		27 MAR 14	1335	
LC-117		17.9			COVERED BY DUMPSTER
LC-118	18 FEB 14	19.75 19.5			
LC-119	18 FEB 14	18.8 18.0			
LC-120		15.1			COVERED OVER (ROADWAY) IN CONSTRUCTION AREA
LC-121	18 FEB 14	15.0 14.7			
LC-122b	19 FEB 14		28 MAR 14	0835	
LC-123		19.6			COVERED OVER (DEBRIS) IN CONSTRUCTION AREA

Field Technician Signature:

1Q2014 Groundwater Sampling Event - LogRAM
Joint Base Lewis-McChord, Washington 98433

Monitoring Well	PDB Installation DTW Date	Depth to Water (Median DTW)	Sample Date	Sample Time	Notes
LC-124	19FEB14	20.5 20.7	28MAR14	0845	
LC-125		18.2			DECOMISSIONED WELL
LC-126	19FEB14	110.35 90.2	28MAR14	0940	
LC-128	19FEB14		28 MAR14	0905	
LC-132	18FEB14	27.65 26.5	26MAR14	1325 ~~1300~~	GRUNDFOS PUMP
LC-135	18FEB14	11.8	26 MAR 14	1145	GRUNDFOS PUMP DUP-7 @ 0830
LC-137b	14FEB14	25.2 25.7	25 MAR 14	1103	
LC-137c	14FEB14		25MAR14	1105	
LC-160	18FEB14	10.6 13.7	25MAR14	1230	DUP-4 @ 0900
LC-166D	11 FEB14	34.45 29.4			
LC-167	19FEB14	27.4 27.6	28MAR14	0825	
LC-168	18FEB14	17.7 16.8			
LC-170	14FEB14	15.45 14.8			
LC-177	14FEB14	13.55 12.9			
LC-178	13 FEB14	14.75 11.3	26MAR14	1055	P PUMP
LC-180	14FEB14	6.5 6.2	26MAR14	1000	P PUMP
LC-182	14 FEB14	5.1 5.0	26MAR14	1020	P PUMP
LC-216	19FEB14		26MAR14	1330	
LC-217	18 FEB 14		26MAR14	1425	

Field Technician Signature:

1Q2014 Groundwater Sampling Event - LogRAM
Joint Base Lewis-McChord, Washington 98433

Monitoring Well	PDB Installation DTW Date	Depth to Water (Median DTW)	Sample Date	Sample Time	Notes
LC-218	13FEB14	8.4 (8.1)	24MAR14	1415	
LC-219	19FEB14		28MAR14	0925	
LC-222	13FEB14	11.6 (11.8)	24MAR14	1425	
LC-223	13FEB14	12.55 (12.5)	24MAR14	1435	
LC-224	13FEB14	9.2 (9.1)	24MAR14	1420	
LC-225	12FEB14		20MAR14	1140	
LC-226	12FEB14		20MAR14	1230	DUP2 0905
LF4-MW-02c	11FEB14	122.1 (114.8)			
LF4-MW-04	11FEB14	151.2 (146.0)			
LF4-MW-09b	11FEB14	144.95 (141.6)			
LF4-MW-12b	11FEB14	146.75 (143.5)			
LF4-MW-14	11FEB14	147.4 (143.8)			
LX-1					
LX-2			27MAR14	1305	
LX-3			27MAR14	1300	
LX-4			27MAR14	1255	
LX-5			27MAR14	1250	
LX-6			27MAR14	1245	
LX-7			27MAR14	1240	

Field Technician Signature:

1Q2014 Groundwater Sampling Event - LogRAM
Joint Base Lewis-McChord, Washington 98433

Monitoring Well	PDB Installation DTW Date	Depth to Water (Median DTW)	Sample Date	Sample Time	Notes
LX-8					NOT RUNNING
LX-9			27MAR14	1230	
LX-10			27MAR14	1225	
LX-11			27MAR14	1155	
LX-12			27MAR14	1150	
LX-13			27MAR14	1145	
LX-14			27MAR14	1140	
LX-15			27MAR14	1135	
MAMC-1			20MAR14	1005	
MAMC-3			20MAR14	0950	
MAMC-4			20MAR14	WELL IS	NOT RUNNING
MAMC-6			20MAR14	1000	
MT-1	14FEB14	26.7 26.8	25MAR14	1100	
MT-2	18FEB14	11.4 13.2	25MAR14	1050	
MT-3	18FEB14	13.2 14.3	26MAR14	1125	P-PUMP
MT-4	18FEB14	13.15 13.8	25MAR14	1325	
MT-5	18FEB14	9.45 11.6			
MT-6	18FEB14	10.2 11.8			
PW-1			25MAR14	1240	

Field Technician Signature:

1Q2014 Groundwater Sampling Event - LogRAM
Joint Base Lewis-McChord, Washington 98433

Monitoring Well	PDB Installation DTW Date	Depth to Water (Median DTW)	Sample Date	Sample Time	Notes
PW-2			25MAR14	1245	
PW-3			25MAR14	1250	
PW-4			~~25MAR14~~	~~1255~~	NOT RUNNING
PW-5			25MAR14	1255	
PW-6					NOT RUNNING
PW-7			25MAR14	1300	
PW-8			25MAR14	1305	
SLAP-1			27MAR14	1000	FLOW - 140.0 LVL - 25.2
SLAP-2			27MAR14	1010	FLOW - 124.8 LVL - 34.1 DUP-12 @0600
SLAP-3			27MAR14	1020	FLOW - 170.5 LVL - 33.4
SLAP-4			27MAR14	1030	FLOW - 424.6 LVL - 40.9
SLAP-5			27MAR14	1040	FLOW - 450.0 LVL - 34.2
SLAP-6			27MAR14	1050	FLOW - 199.8 LVL - 41.3
SRCMW-01b	19FEB14	135.1			PDB IN WELL
SW-MC-07			26MAR14	0945	
SW-MC-08			26MAR14	0950	
SW-MC-09			26MAR14	0955	
T-04	13FEB14	28.75 28.0	28MAR14	0955	
T-05	20FEB14	22.5 23.5	20MAR14	1130	NO PDB PURGED FOR 15 MIN. BEFORE SAMPLING. INITIAL DTW - 21.15 FINAL DTW - 21.15

Field Technician Signature:

1Q2014 Groundwater Sampling Event - LogRAM
Joint Base Lewis-McChord, Washington 98433

Monitoring Well	PDB Installation DTW Date	Depth to Water (Median DTW)	Sample Date	Sample Time	Notes
T-06	12FEB14	27.5 26.8	20MAR14	1200	
T-10	12FEB14		20MAR14	1145	
T-11b	12FEB14	35.05 34.5	20MAR14	1155	
T-13b	12FEB14	34.55 33.7	20MAR14	1215	
T-15	12FEB14	24.6	20MAR14	1245	
Well 13			20MAR14	0905	

Well 13 POC WTP - Doug Kohl WTP - 253-967-2527, WWTP - 253-967-7453, douglas.a.kohl.civ@mail.mil
Madigan Wells - Frank Krause franklin.krause@us.army.mil
LC-41b POC - ?

LC-63A ⇒ 23.4 / 12 FEB 14 (I-5, EXIT 122 OFFRAMP)

20 FEB 14
~~MW~~ MT-3, LC-135 STILL NEED PDBS ~~INSTALLED~~

13 LEVDA 2 FEB 14 DTW =

NO PDB'S: LC-135, LC-24, MT-3

26MAR 14 1430 - MAMC-OF-02 SAMPLE TIME

SLAP CONTROL BUILDING: I - 1010 E - 1012 28MAR14

TP-FLOW: 1557. SUMP-LVL: 6.85

Field Technician Signature:

LC-16

253 512 8428

253 512 8307

253 512 8919

8605 - CLOUSE

COOLER OF ICE
COCS
VOA BLOCKS

SECOND QUARTER

SLAP SYSTEM INSPECTION 23JUN14

1015 AT SLAP-1

PRES - 25 FLOW P2PE - 137 FLOW WALL - 140.1

LVL - 23.7 DTW - 142.50

1030 SLAP-2

PRES - 27 FLOW P2PE - 124.1 FLOW WALL - 125.1

LVL - 32.4 DTW - 122.60

1035 SLAP-3

PRES - 124 FLOW P2PE - 170.1 FLOW WALL - 170.3

LVL - 30.5 DTW - 127.60

1040 SLAP-4

PRES - 23 FLOW P2PE - 423 FLOW WALL - 425.4

LVL - 38.9 DTW - 122.808

1055 SLAP-5

PRES - 19 FLOW P2PE - 446.8 FLOW WALL - 450

LVL - DTW - 128.65

31.9

P6 1 OF 2

23JUN14

2Q2014 Groundwater Sampling Event - LogRAM
Joint Base Lewis-McChord, Washington 98433

Monitoring Well	PDB Installation Date	Sample Date	Sample Time	Notes
85-PA-382	22MAY14	12JUN14	1120	LogCenter
85-PA-384	22MAY14	12JUN14	1100	LogCenter
LC-108	22MAY14	12JUN14	1245	2 PDBs IN WELL 1@BOTTOM 1@ ≈30 FT/BGS * LF2
LC-135	22MAY14	12JUN14	1250	LF2
MT-1	22MAY14	12JUN14	1135	LogCenter DUP-1@0900
MT-2	22MAY14	12JUN14	1155	LF2
MT-3	22MAY14	12JUN14	1230	LF2
MT-4	22MAY14	12JUN14	1235	LF2
T-15	~~22MAY14~~ 03JUN14	20JUN14	1045	DUP-5@1100 Camp Murray PDB WAS RE DEPLOYED ON 03 JUNE 14 AFTER WELL WAS DEVELOPED

22MAY14
0935 T. LYNOTT & J BECHER AT SCAP-1 FOR MONTHLY INSPECTION PRES - 25 FLOW PZPE - 137.9 FLOW WELL - 140, LVL - 25.6 DTW = 140.55

0950 SCAP-2 PRES - 28 FLOW PZPE - 124.3 FLOW WELL - 125.2 LVL - 33.6 DTW - 121.23

0955 SCAP-3 PRES - 24 FLOW PZPE - 169.6 FLOW WELL - 169.8 LVL - 32.4 DTW - 125.33

0958 SCAP-4 PRES - 23 FLOW PZPE - 423.6 FLOW WELL - 425 LVL - 40.3 DTW - 120.7

* LC-108-1 @1245
LC-108-2

Field Technician Signature

LOGRAM SLAP SYSTEM INSPECTION 22MAY14

TIMOTI J BECKER

1000 SLAP-5 PRES-18 FLOW PIPE - 448.2 FLOW WALL - 450.1

LVL - 33.4 DTW - 127.17

1005 SLAP-6 PRES-16 FLOW PIPE - 198.7 FLOW WALL - 199.6

LVL - 40.9 DTW - 128.1

1010 INFLUENT SAMPLE TIME

1015 EFFLUENT SAMPLE TIME

SYSTEM PRES - 52 PSI PUMP 2 IS RUNNING

VFD 2 - 85.2% SP 90.3 A 2740 Hz

TP FLOW WALL - 154.4 TP FLOW PIPE - 150.3.9 LVL - 6.8

DONE W/ SLAP SYSTEM INSPECTION.

1050 I-5 SYSTEM INFLUENT SAMPLE

1055 I-5 SYSTEM EFFLUENT SAMPLE

SLAP SYSTEM INSPECTION 23JUN14

1100 SLAP-6

PRES - 26 FLOW PIPE - 199.1 FLOW WALL - 200

LVL - 39.4 DTW - 129.95

1115 INFLUENT SAMPLE TIME

1120 EFFLUENT SAMPLE TIME

PUMP #2 RUNNING - 53PSI

VFD #2 — 85.7% SP 90.2A 3174#

TP FLOW WALL - 1537

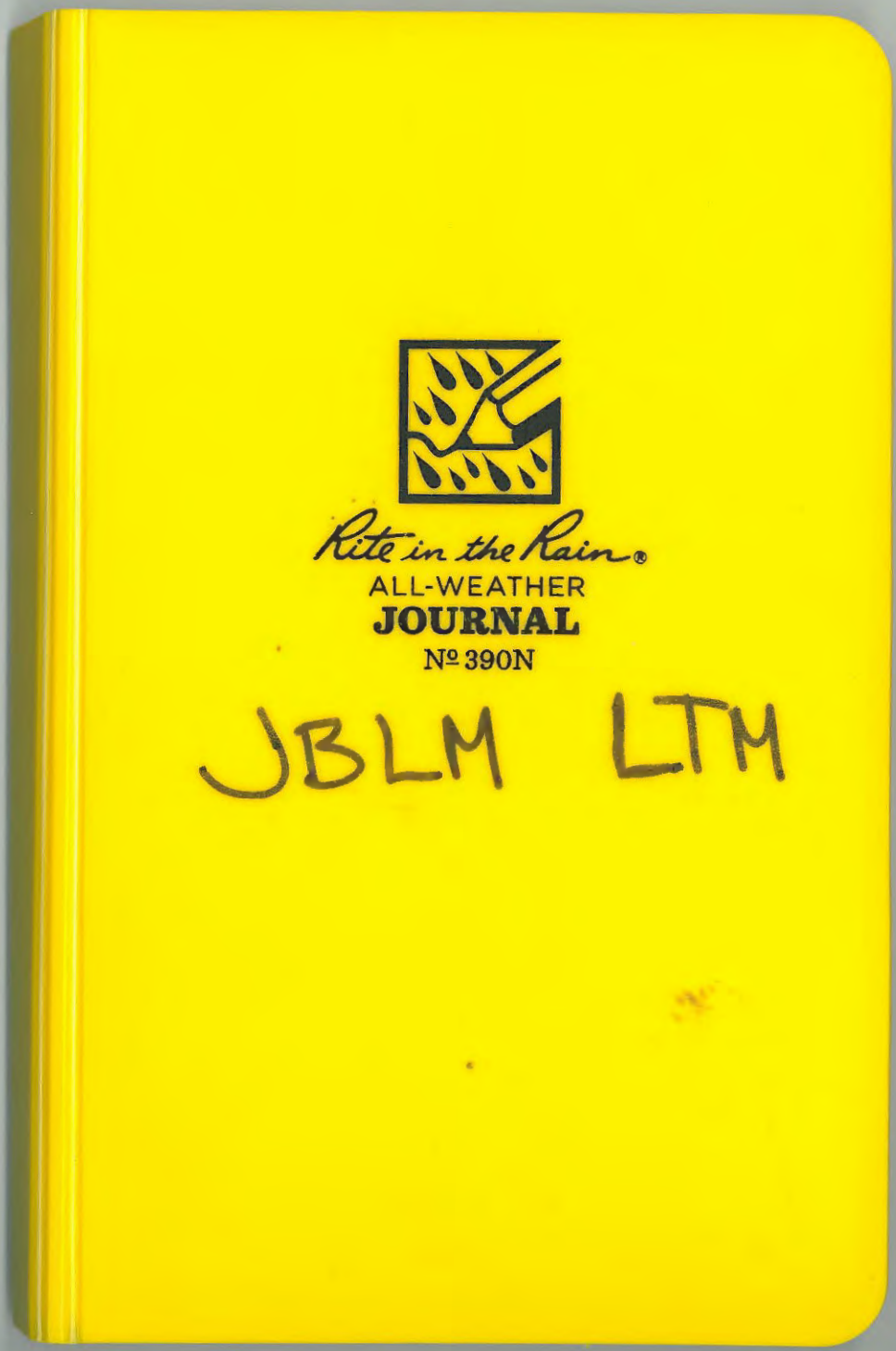
TP FLOW PIPE - 1541.7

SUMP LVL - 6.82

1125 OFFSITE

Tom Lynch 23JUN14 PG 2 OF 2

THIRD QUARTER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Project Contact List

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Well Access

Log Center Well 13 Water treatment facility
Andy Davis
253.967.7453 (Main Line)

American Cu Claire Mancilla
AOC 9.2 253.912.3228

Public Works - Paul Windrel
912-3223

Log Center Well LC-68D
Smitty Cell 253.722.6778

Sept 02, 2014 TO 001
Tues JBLM

0630 S. Patterson, B. Kercher onsite to collect depth to water and install passive diffusion bags (PDB) at Logistics Center Site

Health and Safety briefing:
- Thermal Stress
- Vehicle operations
- Slips, trips, falls
- Pinch Points
- Cuts and Scrapes
- Buddy System
- Emergency Communication
- Emergency equipment locations
- Weather: Rain High of 68°f Light Wind.

0700 Install PDBs and collect depth to water and depth to bottom when possible

Well ID	DTW	DTB	PDB
LC-86D-1	118.59	-	Yes
LC-86D-2	-	-	Yes
LC-88D-1	158.02	-	Yes
LC-88D-2	-	-	Yes
LC-93D-1	164.64	-	Yes
LC-93D-2	-	-	Yes

Ben Keeler 9/2/14

Sept 02, 2014 Tues — JBLM TO 001

Well ID	DTW	DTB	PDB
LC-95D-1	149.85	-	Yes
LC-95D-2	-	-	Yes
~~LC-96D~~	~~124.46~~	~~-~~	~~Yes~~
~~LC-98D-1~~	~~127.76~~	~~-~~	~~Yes~~
~~LC-98D-2~~	~~-~~	~~-~~	~~Yes~~
LC-102D-1	136.40	-	Yes
LC-102D-2	-	-	Yes
LC-225	-	-	Yes
T-04	-	-	Yes

1300 Finish for the day
1330 B Kercher, S. Patterson off site

Beth Kercher 9/2/14

Sept 03, 2014 Weds — JBLM TO 01

0630 S. Patterson, B. Kercher arrive onsite
Weather: Partly Cloudy High 72°f Light wind.
Health and Safety briefing topics:
- thermal Stress
- Vehicle operations
- Slips, trips, falls
- Pinch points
- Cuts and scraps
- Buddy System
- Emergency Communication
- Emergency equipment locations,
- Hospital Route

0700 Begin Collecting depth to water and install PDBs at logistic center wells.

Well ID	DTW	DTB	PDB
85-PA-382	11.95	63.20	Yes
85-PA-384	27.69	62.25	Yes
FI-1	10.43	-	Yes
LC-74D	126.60	-	Yes
LC-98D-1	127.76	-	Yes
LC-98D-2	-	-	Yes

Beth Kercher 9/3/14

Sept 03, 2014 Weds — JBLM TO 01

Well ID	DTW	DTB	PDB
LC-99D	122.70	-	Yes
LC-101D-1	125.52	-	Yes
LC-101D-2	-	-	Yes
LC-103D	119.98	-	Yes
LC-108(30)	14.5	-	Yes
LC-108(60)	-	-	Yes
LC-108(85)	-	-	Yes
LC-111B	-	-	Yes
LC-116B	-	-	Yes
LC-135	14.0	37.18	Yes
LC-218	8.62	20.12	Yes
LC-223	11.75	18.2	Yes
LC-224	9.32	18.25	Yes
MT-1	27.19	-	Yes
MT-2	13.88	-	Yes
MT-3	15.31	23.90	Yes
MT-4	14.85	22.65	Yes
LC-116	19.03	-	~~Yes~~ No
~~LC-117~~	*	*	
LC-118	21.50	-	No
LC-119	20.54	48.51	No

1530 Off site - B. Kercher, S Patterson

Beth P. Kercher 9/5/14

JBLM TO 01 — Sept 04, 2014 Thurs

0630 S. Patterson, B. Kercher onsite
Sunny High of 77°f wind 5-10 mph
Tasks for the day:
Collect DTW/DTB Measurements and Install PDBs at Logistics Center
Health and Safety briefing topics include:
- Thermal Stress
- Vehicle operations
- Slip, trips, falls
- Pinch Points
- Cuts and scrapes
- Buddy System
- Emergency Communication
- Emergency equipment
- Hospital routes

0700 Begin water level and PDB installation

Well ID	DTW	DTB	PDB
LC-01	17.51	-	Yes
LC-96D	124.46	-	Yes
LC-122B	-	-	Yes
LC-124	22.78	48.60	yes
T-04	29.24	-	Yes

Beth P Kercher 9/4/14

Sept 04 2014 Thurs — TO 01 JBLM

Well ID	DTW	DTB	PDB
T-05	24.72	–	Yes
T-06	28.00	71.35	Yes
T-10	–	–	Yes
T-11B	35.55	79.16	Yes
T-13B	34.98	78.30	Yes
LC-121	17.85	–	No
LC-123	22.82	48.65	No

1530 S. Patterson, B. Kercher off Site

Beth Kercher 9/4/14

Sept. 05, 2014 Fri — JBLM TO 01

0630 S. Patterson B. Kercher onsite
Weather: Sunny High 83°f
Wind @ 5-10 mph.
Daily activities: DTW/DTB Measurement
Install PDBs
Health and Safety briefing topics:
- Thermal Stress
- Vehicle operations
- Slips, trips, falls
- Pinch Points
- Cuts + Scrapes
- Buddy System
- Emergency Communication
- Emergency equipment location
- Hospital Route

0700 Begin collecting DTW/DTB and installing PDBs
0830 Meet Tom Lynott at Building 1202 to help find wells.
1330 Drop Tom off at Building 1202
1530 off site for the day
B. Kercher S. Patterson

Beth Kercher
BPR 090514

Sept 05 2014 fri — JBLM TO 01

Well ID	DTW	DTB	PDB
LC-16	12.89	-	Yes
~~LC-41B~~	-	-	~~Yes~~
LC-109	-	-	Yes
LC-226	-	-	Yes
LC-26D	5.76	-	No
FL-6	14.07	-	No
LC-24	18.80	-	No
LC-26D	8.74	-	No
LC-57	17.61	-	No
LC-27	11.46	-	No
LC-53	10.79	-	No

Beth K. Kercher 9/5/14

Sept 08, 2014 Mon — JBLM TO 01

0630 S. Patterson on site
AM. Cloudy PM. Mostly Cloudy
High 74°F Wind 10-15 MPH
Daily activities: Collect DTW/DTB Measurements at Logistics Center
Health and Safety topics include:
- Thermal Stress
- Vehicle operations
- Slips, trips, falls
- Pinch Points
- Cuts and Scrapes
- Emergency Communication
- Emergency equipment locations
- Hospital Route

0830 B. Kercher on site

Well ID	DTW	DTB	~~PDB~~
FL-2	14.01	43.35	
FL-4B	12.57	38.59	
LC-20	27.23	43.33	
LC-21C	15.55	141.88	
LC-34	28.19	35.10	
LC-47D	27.23	-	
LC-49	Dry	4.22	49A Nearby Broken Casing
LC-50D	7.85	161.87	

Beth Kercher 9/8/14

Sept 08, 2014 Mon — JBLM TO 01

Well ID	DTW	DTB
LC-64A	11.29	30.24
LC-66B	29.30	74.70
LC-66D	91.49	19.50
LC-05	26.29	57.32
LC-10	25.94	40.55
LC-18	20.92	43.30
LC-35D	27.17	–
LC-47A	22.16	33.10
LC-50	7.12	27.35
LC-113	20.95	43.95
LC-114	20.15	49.03
LC-115	19.07	49.10
LC-117	20.70	49.16
LC-160	13.32	91.70
LC-168	19.59	39.49
LC-170	16.06	25.10
LC-178	11.25	19.80
LC-180	6.59	8.85
LC-182	5.21	22.50
LC-03	19.13	61.60
LC-06	25.74	60.54
LC-132	29.53	52.41
LC-137B	26.11	53.16

Beth Kercher 9/8/14

Sept 09, 2014 Tues — JBLM TO 01

0630 S. Patterson onsite
Weather Partly to Mostly Cloudy
High 72°F light winds
Health and Safety topics include:
- Thermal Stress
- Vehicle operations
- Slips, trips falls
- Pinch points
- Cuts + Scrapes
- Emergency Communication
- Emergency equipment Controls
- Hospital Route
- Watch out for hitch

Daily activities Collect DTW/DTB Measurements and remove brush from Logistics Center

0850 B. Kercher onsite.

Well ID	DTW	DTB
85-PA-381	12.73	55.03
CM-2	21.15	33.93
f1-3	14.65	46.13
LC-61B	26.12	–
LC-67D	91.16	–
LC-68D	28.54	–

Beth Kercher 9/9/14

Sept 09, 2014 JBLM TO1
Tues

Well ID	DTW	DTB
LF4-MW-02C	123.50	–
LF4-MW-04	152.93	–
LF4-MW-09B	146.80	–
LF4-MW-12B	148.52	–
LF4-MW-14	149.26	–
SRCMW-01B	137.23	–
T-15	25.75	–
LC-73D	114.87	–
LC-80D	110.23	–
LC-81D	123.75	–
LC-82D	126.13	–
LC-83D	118.83	–
LC-104D	140.46	–
LC-111A	19.30	45.78
LC-72D	108.20	–
LC-75D	43.46	–
LC-87D-1	125.20	–
LC-91D-1	145.93	–
LC-92D-1	171.64	–
LC-94D-1	143.34	–
LC-166D	34.57	–

0800 Pick up keys from BLM
BPR 9/9/14

Sept 09, 2014 JBLM TO 01
Tues
1530 B. Kercher S. Patterson
off site

Brian Kercher 9/9/14

Sept 10, 2014 JBLM T001
Weds

0630 S. Patterson onsite
Weather: Partly Cloudy High of 72°f
Daily activity Collect water level from Logistic Center wells
Health and Safety topics include:
- Emergency Communication
- Emergency equipment locations
- Hospital Route
- Cuts and Scrapes
- Pinch Points
- Biological hazards: Animals, Plants, insects
- Slips, trips, falls
- Thermal Stress
- Vehicle operations

0830 B Kercher onsite

Well ID	DTW	DTB
LC-19A	25.13	—
LC-41A	27.50	96.35
LC-126	20.02	—
LC-40D	117.88	—
LC-70D	54.50	—
LC-76D	132.32	—
LC-39	20.69	44.35

Sept 10, 2014 JBLM T001
Weds

Well ID	DTW	DTB
LC-79D	84.38	—
LC-110	18.08	47.28
LC-112	20.90	49.25
LC-69D	31.01	—
LC-84D-1	119.87	—
LC-85D-1	132.30	—
LC-90D-1	121.13	—
LC-97D	118.88	
LC-98D-1	127.17	

1330 B. Kercher offsite
1530 S. Patterson offsite

LC-41B	27.93	
LC-40	26.88	74.39

9/10/2014
Beth T. Kercher

Sept 11, 2014 JBLM TO 01
Thurs
0630 S. Patterson onsite
Weather: Partly Cloudy in Morning to Sunny afternoon high 76° Wind 5-10mph.
Daily activities: DTW/DTB Measurements at Logistic Center Landfill 5 and FLAD AOC 8-4
Health and Safety topics include:
- Thermal Stress
- Vehicle operations
- Slips, trips, falls
- Pinch points
- Cuts and scrapes.
- Emergency Communication
- Emergency equipment locations
- Hospital Route
- Biological hazards

0830 B. Kercher onsite
Logistic Center

~~DA~~ Well ID	DTW	DTB
LC-14A	14.59	—
LC-41D	36.45	
LC-77D	104.20	
LC-167	29.71	

BPK 9/11/14

Sept 11, 2014 JBLM TO 01
Thurs
Landfill 5

Well ID	Time	DTW	
C-53	1205	23.85	
93-3-VD	1209	BPK ~~16.75~~	21.29
93-2-VD	1213	16.75	
93-1-VD	1216	16.46	
D-2	1218	19.51	
88-LS-AM-VD	1233	19.82	
D-3	1237	14.75	
MW-2008-4	1255	24.93	
MW-2008-3 BPK	1258	34.07	insects
MW-2008-2	1302	30.82	
MW-2008-1	1305	24.55	
D-1	1308	19.75	
92-1-VD	1312	23.50	
92-3-VD	1314	22.18	
92-2-VD	1316	17.18	
C5-1A	1322	20.50	
C5-2	1324	19.56	
C5-4	1337	23.17	No cap
AEP-2	1427	17.50	
AEP-1	1357	17.74	
88-2-VD	Paved over		

BPK 9/11/14

Sept 11, 2014 JBLM TO01
Thurs

FIAO Site AOC 8-4		DTW
MW 4	1447	21.82
MW 5	1438	21.24 NOCAF
MW 6	1456	19.47
MW 7	1450	22.44
MW 8	1443	21.93

1530 Off Site - S. Patterson
B. Kercher

Beth P. Kercher 9/11/2014

JBLM Sept. 15, 2014
TO 01 Mon
0630 ~~B. Kercher~~ BPK S. Patterson,
T. Malamakal arrive onsite
Daily activities include:
- MOB
- Test equipment
- Collect Samples
- De Mob

At Landfill 5,
0650 health and Safety briefing
topics include
- Thermal Stress
- Vehicle operations
- Slips, trips and falls
- Punch points
- Cuts and Scrapes
- Emergency Communication
- Emergency equipment
- Hospital Route
- Biting/ Stinging insects
- Biological hazards Plants and animals.

0700 Calibrate horiba

Ph	Cond	Turb	DO	Temp	ORP
4.0	5.66	0	10.3	15.6	253

Beth Kercher 9/15/14

Sept 15, 2014 Mon — JBLM TOO1

0830 Arrive at Landfill 5
B. Kercher onsite
Review H+S. Check in @ office
0900 Arrive onsite LS-3
Set up to Sample
0912 DTW 23.9 ft btoc
0930 Set flow rate 400 ml/min
0934 connect to flow cell BKR
Collect parameters on Purge form
1005 Parameters Stabilize
Purge Vol: 14.00 Ph: 6.0
Spec Cond: 0.227 ms/cm
Turb. 0 NTU DO: 0.3 mg/L
Temp: 16.4°C ORP: 125 mv
1010 Collect Sample
LF5140915LS3-1
3-40ml VOA w/ HCl VOCs EPA 8260C
1-250ml poly w/ HNO_3 Total Metals EPA 200.7 200 Series
1-250ml poly w/ HNO_3 Field filtered Dissolved Metals EPA 200.7 200 Series
9/15/14 BKR Kercher

JBLM TO 01 — Sept 15, 2014 Mon

1-250 ml up poly EPA 300.0 352.1 Nitrate
1-250 ml up poly Dissolved Ca, Na, Mg, K, Fe, Mn EPA 200 Series field filtered
1-250 ml up poly HCO_3, Alk, SM 2320 field filtered
1-250 ml up poly Cl, SO_4 EPA 300.0 field filtered
1-500 ml up poly TSS SM2540D
1-500 ml poly w/ H_2SO_4 Ammonia EPA 350.2 BKR
2X-250 ml Amber w/ H_2SO_4 - TOC EPA 415.1
1-250 ml poly up TDS EPA ~~160.1~~ 160.1 BKR
1030 On Site 93-E-VD
Set up Sampling equipment
1047 DTW 16.84 ft btoc
1050 Start purge, Set flowrate 480 ml/min
1053 Complete purging and Collect parameters on Sample/purge form
1114 Parameters Stabilize
BKR Poole Kercher 9/15/14

Sept 15, 2014 JBLM
Mon TO 01
Purge Vol: 12.0 Liters
Ph: 6.1 Spec Cond ms/cm
0.138 Turb: 0 NTU DO: 5.3 mg/L
Temp: 18.6°C ORP: 165 mv
1115 Collect Sample:
LF5140915922VD-1
3-40 ml VOA w/ HCL VOCs
EPA 8260C
1-250 ml poly w/ HNO_3
Total Metals EPA 200.7
1-250 ml poly w/ HNO_3
field filtered Dissolved
Metals EPA 200.7
1-250 ml up poly Nitrate
EPA ~~300.0~~ 352.1 field
1-250 ml up poly filtered
Ca, Na, Mg, K, Fe, Mn
EPA 200 Series
1-250 ml up poly HCO_3
and ALK EPA SM 2320
1-250 ml up poly Cl, SO_2
EPA 300.0 field filtered
1-500 ml BPK up poly TSS
EPA SM2540D
9/15/14 Beth Kerchu

JBLM Sept 15, 2014
TO 01 Mon
-1-500 ml poly w/ H_2SO_4
BPK Amonia EPA 350.1M
2+ BPK -250 ml Amber w/ H_2SO_4 TOC
EPA 415.1
1-250 ml up poly TDS EPA 360.1
1145 Onsite at Well 88-2S-AM-VD
Set up Sampling equipment
trim brush around well
1158 DTW 19.81 ft btoc
Begin pumping and set
flow rate < 1/2 L/~~min~~ BPK 30 sec
BPK ~~1229~~ 1208 Collect parameters on
Purge form
1229 Parameters Stabilize
Purge volume: 14.0 L
Ph: 6.1 Spec Cond: 0.347 ms/cm
Turb: 14 NTU DO: 0.2 mg/L
Temp: 15.3°C ORP: -52 mv
1230 Collect Sample:
LF5140915882SAMVD-1
3-40 ml VOA w/ HCL VOCs
EPA 8260C
1-250 ml poly w/ HNO_3
Total Metals EPA 200.7
Beth Kerchu 9/15/14

Sept 15, 2014 JBLM
Mon TO 01

1 - 250 ml poly w/ HNO_3 field filtered Dissolved Metals EPA 200.7
1 - 250 ml poly up Nitrate EPA ~~300.0~~ BPK 352.1
1 - 250 ml poly up field filtered Ca, Na, Mg, K, Fe, Mn EPA 200 Series
1 - 250 ml up poly HCO_3 and ALK EPA SM E320
1 - 250 ml up Poly Cl, SO_4 EPA 300.0 field filtered
1 - 500 ml up poly TSS EPA SM E540
1 - 500 ml poly w/ H_2SO_4 BPK Amonia EPA 350.1M
2 - 250 ml Amber w/ H_2SO_4 TOC EPA 415.1
1245 Collect Dulicate Sample LFS140915DUP-1 from well 88-LS-AM-VD for same ~~parame~~ BPK Analysis and bottles listed above.

Beth Karcher 9/15/14

JBLM
TO 01

Sept 15, 2014
Mon

1315 On site at well D-3
Set up Sample equipment
1322 DTW 14.82 ft btoc
1325 Begin Purging Set flow rate to 2 1/2 L/30 sec.
1328 Collect parameters on Purge form
1343 Parameters Stabilize
total Vol: 10.0 L PH: 6.5
Spec Cond: 0.107 MS/CM
Turb: 12 NTU DO: 5.0 mg/L
Temp: 17.4°C ORP: 141 MV
1345 Collect Sample:
LFS140915 03-1
3 - 40 ml VOA w/ HCL VOCs EPA 8260 C
1 - 250 ml poly w/ HNO_3 Total Metals EPA 200.7
1 - 250 ml poly w/ HNO_3 field filtered Dissolved Metals EPA 200.7
1 - 250 ml up poly Nitrate EPA ~~300.0~~ BPK 352.1
1 - 250 ml up Poly Ca, Na, Mg, K, Fe, Mn EPA 200 Series field filtered BPK

9/15/14

Sept 15, 2014 JBLM
Mon TO01

1 - 250 ml up poly HCO_3
and ALK (Phenol) EPA SM2320
1 - 250 ml Poly Cl, SO_2
EPA 300.0 Bild filtered
1 - 500 ml up Poly TSS
EPA SM 2540D
1 - 500 ml poly H_2SO_4
Amonia EPA 350.1M
1 - 250 ml Amber w/ H_2SO_4
TOC EPA 415.1
2 BPL + - ~~200~~ BPL 250 ml up poly
TDS EPA 360.
1445 Arrive at Building 1202
De Mob
1550 Calibrate ~~PID~~ BPK Horiba. Trouble
Calibrating
1608 Horiba Calibration

Ph	Cond	Turb	DO	Temp	ORP
4.0	4.22	0	9.3	22.0	270

1615 S. Patterson, T. Malamalcal
B Kercher offsite

Beth Kercher 9/15/2014

JBLM Sept 16, 2014
TO 01 Tues

0630 S. Patterson T. Malamalcal
onsite at Building 1202
Weather: Mixed Sun and
Clouds Chance of Showers
Hi 76° Wind 5-10mph.
0700 Health and Safety Meeting
topics include:
- Vehicle operations
- Thermal Stress
- Pinch points
- Cuts and Scrapes
- Hot Surfaces
- Emergency Communication
- Emergency equipment locations
- Hospital Route
- Biological Hazards
- Plant and animals
- Biting/Stinging insects
- Heavy lifting Ergonomics
- Slips, trips falls
- Splash hazards
0730 MOB for todays activities
GW Sampling and DTW
Collection
Beth Kercher 9/16/14

September 16, 2014 JBLM
Tues TO 01

0830 Arrive onsite at 76 Gas station to Meet WC Delivery for Sample delivery to lab.

0845 Arrive onsite. AOC 8-4
B Kercher, on site
Review H+S

0900 Arrive onsite at well AOIII-MW08
DTW = 22.00 ft btoc
DTB = 23.15 ft btoc

0915 Begin purging well with dedicated bailer
Remove 3 Casing Volumes
2.6 Liters

0930 Collect Sample
~~BPA~~ AOIII AOC140916AOIIIMW08
2-1L Amber w/HCl
NWTPH-Dx for DRO and RRO

0940 Collect Duplicate Sample
AOC140916DUP1
2-1L Amber w/HCl
NWTPH-Dx for DRO and RRO

Beth Kercher 9/16/15

JBLM Sept 16, 2014
TO 01 Tues

0950 Arrive at well AOIII-MW04
DTW = 21.95 ft btoc
DTB = 22.83 ft btoc

0955 Begin purging well with dedicated bailer. Remove 3 times Casing Volume 1.74 Liters

1010 Collect Sample
AOC140916AOIIIMW04
2-1L Amber w/HCl for NWTPH-~~B~~ Dx DRO and RRO

1030 Arrive at well AOIII-MW07
DTW = 22.59 ft btoc
DTB = 29.00 ft btoc

1040 Begin purging well with dedicated bailer. Purge 3 times Casing Volume = 11.78 Liters

1110 Collect Sample
AOC140916AOIIIMW07
2-1L Amber with HCl for NWTPH-Dx DRO RRO

1125 Arrive at well AOIII-MW06
DTW = 19.53 btoc
DTB = 25.83 btoc

Beth Kercher 9/16/15

Sept 16, 2014 JBLM
Tues T001

1130 Begin purging with dedicated bailer Remove 3 Casing volumes = 12.09L

1200 Collect Sample AOC140916AOC111MW06
6-12 Amber w/HCL
NWTPH-Dx DRO, RRO
MS/MSD.

1300 Arrive at Site AOC 8-2
Collect water levels

Time	Well ID	DTW	DTB
13:11	4131-MW04	24.60	27.40
1315	4131-MW05	24.08	27.60
1320	4131-MW03	26.76	30.0
1328	4131-MW01	26.19	37.70
1335	4131-MW06	25.64	33.12

1415 Arrive at Site AOC 9-2
Collect depth to water Calibrate PID = 108.2

Time	Well ID	DTW	DTB	PID
1422	96-A17-5	26.66	46.10	0.0
1426	96-A17-6	26.59	43.20	0.0
1430	96-A17-4	27.99	30.64	0.0
1435	07-A17-7	26.76	28.34	0.0
1440	BAL Ø 95-A17-2	27.70	37.70	0.0

Beth Kercher 9/16/15

JBLM Sept 16, 2014
T001 Tues

Time	Well ID	DTW	DTB	PID
1445	10-A17-8	27.13	38.30	5.0

1450 Meet Manager of ACU to gain access to well 95-A17-3a

1454	95-A17-3a	28.07	31.31	0.0
1520	95-A17-1	28.67	-	0.0

1530 Arrive at 76 Station to pick up bottles from MC delivery and get gas.

1500 Arrive at Building 1202 DeMOB.

1630 S. Patterson, T Malamakal B Kercher offsite

Beth Kercher 9/16/15

Sept 12, 2014 JBLM
Weds TO01

0630 S. Patterson and T. Malavarkal arrive at Building 1202
MOB for days activities sampling GW at LF5
Weather: ~~Thermal Stress~~ BPR
Cloudy Hi 72°f light wind
Chance of Rain
0700 Health and Safety briefing topics include:
- Thermal Stress
- Vehicle operations
- Slips trips falls
- Pinch points
- Cuts and scrapes
- Emergency Communication
- Emergency Equipment
- Hospital Route
- Biting/Stinging insects
- Biological Hazards
- Plants and animals
- Heavy Lifting Ergonomics
- Dermal contact
- Proper PPE - Modified level D

0730 Calibrate Horiba
Ph 4.0
Cond 3.85 mS/cm
Turb: 0 NTU
DO: 9.4 mg/L
Temp: 18.0 °C
ORP: 270 MV

Beth Kercher 9/17/14

JBLM TO 01 Sept 12, 2014
- Secure items in truck
0800 Arrive at Landfill 5
Check in at office
0830 Arrive onsite at well 93-LF5-3-VD
Set up to Sample well with Peristaltic pump
0840 DTW = 21.35 ft btoc
DTB = 29.90 ft btoc
0908 Start pump set flow rate: 340 ml/min
0920 Connect to flow cell Complete Purging on field form
0943 Parameters Stablize
Total Purge volume: 12.0
Ph: 6.4 Spec Cond: 0.109 mS/cm
Turb: 5 NTU DO: 1.3 mg/L
Temp 18.3°C ORP: 92 MV
0945 Collect Sample LF5140917953VD1
3-40ml VOA w/HCl VOCs 8260C
1-250ml poly w/ HNO_3 Total Metals 200 Series EPA 200.7
1-250ml poly w/ HNO_3 field filtered. DISS Metals 200.7 200 Series

Beth Kercher 9/17/14

Sept 17, 2014 JBLM
Weds TO 01

1 - 500ml poly field filtered
NO_3, SO_4 EPA 300.0
HCO_3, Alk SM 2320B field filtered
1 - 250 ml poly up. NO_2 NO_3
EPA 300.0
1 - 250 ml poly up. field filtered
Cl EPA 300.0
1 - 1000 ml poly up. TSS, TDS
EPA SM2540C
1 - 500ml poly w/ H_2SO_4 NH_3
EPA SM4500-NH_3 G
2 - 250 ml AMBer w/ H_2SO_4
TOC EPA 415.1

1000 Arrive at well: 93-1-VD
Set up to Sample well via peristaltic pump.
1012 DTW = 16.52 ft btoc
DTB = 24.51 ft btoc
1018 Begin pumping and set flow rate at 520ml/Min
1020 Connect to flow Cell. Purge until water quality Stabilizes parameters Collected on on field form

Beth Kercher 9/17/14

JBLM Sept 16, 2014
TO 01 Weds

1031 Parameters stabilize total gallons purged = 10.0 liters
ph 6.0 Spec Cond: 0.130 mS/cm
Turb: 18 NTU DO: 4.7 mg/L
Temp. 15.7°C ORP: 197
1035 Collect Sample:
LFS1409179331VD-1
3 - 40 ml VOA w/HCL VOCs
EPA 8260C
1 - 250 ml poly w/HNO_3
Total Metals 200 Series
EPA 200.7
1 - 250 ml poly w/HNO_3 field filtered Dissolved Metals
200.7 EPA 200.7 200 series
1 - 500ml poly up. field filtered
NO_3 SO_4 EPA 300.0
HCO_3 Alk SM 2320B
1 - 250 ml poly up NO_2 NO_3
EPA 300.0
1 - 250 ml poly up field filtered
Cl EPA 300.0
1 - 1000 ml poly up TSS TDS
SM2540C

Beth Kercher 9/17/14

Sept 17, 2014 JBLM
Weds TO 01

1 - 500 ml poly w/ H_2SO_4
NH_3 SM4500-NH_3 G
2 - 250 ml Amber w/ H_2SO_4
TOC EPA 415.1 *T.M offsite*
1115 Arrive at Well 92-1-VD
Set up to Sample with dedicated Submersible
1133 DTW = 23.64 ft btoc
DTB = 31.00 ft btoc
1137 Start pump Set flow Rate
510 ml/min
1141 Connect to flow cell Complete purging and collecting parameters on field form
1210 Well Stabilized
total Volume purged 20.0 liters
ph: 5.6 Spec Cond: 0.121
Turb 31 NTU DO: 2.8 mg/L
Temp: 14.7°C ORP: 238
1210 Collect Sample:
LF5140917921VD-1 with MS/MSD
9 - 40 ml VOA w/ HCL VOCs EPA 8260C
3 - 250 ml poly w/ HNO_3 total Metals 200.8 EPA 200 Series
Beth Kercher 9/17/14

JBLM Sept 17, 2014
TO 01 Weds

3 - 250 ml poly w/ HNO_3 field filtered Dis Metals 200.7
200 Series
3 - 500 ml poly up field filtered NO_3 SO_4 EPA 300.0
3 HCO_3 ALK SM2320B
3 - 250 ml poly up NO_2 NO_3 EPA 300.0
3 - 250 ml poly field filtered Cl EPA 300.0
3 - 1000 ml poly up TSS TDS EPA SM2540C
3 - 500 ml poly w/ H_2SO_4 NH_3 EPA, SM4500-NH_3-G
6 - 250 ml Amber w/ H_2SO_4 TOC 415.1
1300 Arrive at Well: 92-3-VD
Set up to Same with dedicated Submersible pump
1320 DTW = 22.35 ft btoc
DTB = 30.50 ft btoc
1326 Start pump Set flow rate 400 ml/min
1330 Connect flow cell
Beth Kercher 9/17/14

Sept 17, 2014 JBLM
Weds TO 01
Field parameters Collected on Purge Form
1400 Parameters Stabilize
Total Volume Purged = 26.0 Liters
pH: 5.9 Spec Cond: 0.087 MS/CM
Turb: 31 NTU DO: 6.4 mg/L
Temp: 15.9°C ORP: 201 MV
1400 Collect Sample: LFS1409179ZVD1
3-40 ML VOAs w/HCL EPA 8260C
1-~~total Metals~~ BPR 250 ML poly w/HNO_3 total Metals 200.7 EPA 200 Series
1-250 ML poly w/HNO_3 field filtered Dis Metals 200.7 EPA 200 Series
1-500 ML poly up field filtered NO_3, SO_4 EPA 300.0
HCO_3 Alk SM2320B
1-250 ML poly up NO_2 NO_3 EPA 300.0
1-250 ML poly up field filtered Cl EPA 300.0
1-1000 ML up poly TSS, TDS EPA SM2540C
1-500 ML poly w/H_2SO_4 NH_3 EPA SM4500-NH_3-G
Beth Kercher 9/17/14

JBLM Sept 17, 2014
TO 01 Weds
2-250 ML Amber w/H_2SO_4 TOC EPA 415.1
1415 Arrive at well: 9Z-2-VD
Set up DPE to sample with dedicated submersible pump.
1428 DTW = 18.30 ft btoc
DTB = 28.00 ft btoc
1430 Start pump Set flow rate at 350 ML/Min *T.M on site*
1432 Connect to flow Cell Collect Parameters on purge form
1513 Well Stabilized
total volume purged: 16.8 Liters
pH: 6.0 Spec Cond: 0.090 MS/CM
Turb: 37 NTU DO: 4.3 mg/L
Temp: 14.6°C ORP: 232
1515 Collect Sample:
LFS1409179ZVD-1
3-40 ML VOAs w/HCL VOCs 8260C
1-250 ML poly w/HNO_3 tot Metals 200.7 EPA 200 Series
1-250 ML poly w/HNO_3 field filtered Dis Metals 200.7 EPA 200 Series
Beth Kercher 9/17/14

Sept 17, 2014 JBLM
Weds TO 01

1 - 500 ml poly up field filtered
NO_3 SO_4 EPA 300.0
HCO_3 ALK SM2320B
1 - 250 ml poly up NO_2 NO_3
EPA 300.0
1 - 250 ml poly up field filtered
Cl EPA 300.0
1 - 1000 ml poly up TSS TDS
SM2540C
1 - 500ml poly w/ H_2SO_4
NH_3 EPA SM4500-NH_3-G
2 - 250 ml Amber w/ H_2SO_4
TOC EPA 415.1
1530 Arrive at Landfill 2 to dispose of purge water at the treatment System.
1630 S. Patterson B. Kercher
T. Malamakal off Site

Bebe Kercher

JBLM Sept 18, 2014
TO 01 Thurs

0630 S. Patterson, T. Malamakal on site
Pack samples for Shipment at Building 1202
Weather: Showers early, then Cloudy in the afternoon High 71°C, wind 5-10 mph 40% of rain
0700 Health and Safety topics include:
- Thermal Stress
- Vehicle operations
- Slips, trips, falls
- Pinch point
- Cuts and Scrapes
- Emergency communications
- Emergency equipment
- Hospital Route
- Biting Stinging insects
- Biological hazards
- Plants and animals
- Heavy lifting, ergonomics
- Dermal Contact
- Proper PPE - Modified Level D

Bebe Kercher 9/18/14

Sept 18, 2014 JBLM
Thurs TO 01

- Secure items in truck
- Drum handling

0830 Meet MC Delivery at 76 Station in Dupont
0845 Meet B. Kercher at Landfill
0915 Set up at well AEP-1
0925 DTW: 17.56 ft btoc
DTB: 31.60 ft btoc
Set up to Sample
0932 Start Pump Set Flow Rate at 300ml/Min
0934 Connect to flow Cell Complete purge on field form
0950 Parameters Stablize
total Vol Purged: 14.0 Liters
PH: 6.1 Spc Cond: 0.08 MS/CM
turb: 20 NTU DO: 8.5 mg/L
temp: 15.2°C ORP: 249 mV
0953 Collect Sample:
GS140918AEP1-1
3- 40 ml VOA w/HCl VOC 8260C
1- ~~500~~ 250 ml Poly w/HNO3
9/18/14 Beth Kercher

JBLM
TO 01
Sept 18, 2014
Thurs

total Metals 200.7
1- 250 ml poly w/HNO3 field filter
Dis. Metals 200.7 200 Series
1- 500ml Poly up NO3 ~~&~~ SO4
EPA 300.0 NO3 ALK field filtered
SM 2320B
1- 250 ml poly up NO2 NO3 300.0
1- 250ml poly up field filtered
of EPA 350.2
1- 1000 ml poly up TSS TDS
SM 2540C
1- 500 ml poly w/ H2SO4
NH3 SM 4500 NH3 G
2- 250ml Amber w/ H2SO4
TOC 415.1
1015 Arrive at AEP-2
Set up to Sample
1022 DTW: 17.65 ft btoc
DTB: 26.67 ft btoc
1035 Begin Pump Set flow Rate at 350 ml/min
1036 Connect to flow Cell Complete Purge info on field form
9/18/14 Beth Kercher

Sept 18, 2014 Thurs — SBLM TO 01

1107 Parameters Stablize
total purge volume: 11.7 liter
ph: 5.9 Spec Cond: 0.106 mg/cm
turb: 73 NTU DO: 5.5 mg/L
temp: 13.9°C ORP: 279 mV

1107 Collect Sample: LF5140918AEP2-1
3 - 40 ml VOAs w/HCL VOCs 8260C
1 - 250 ml poly w/ HNO_3 tot Metals 200.7 200 Series
1 - 250 ml poly w/ HNO_3 Dis Metals 200.7 200 Series field filtered
1 - 500 ml poly up field filtered NO_2 SO_4 EPA 300.00 HCO_3 ALK SM 2320B
1 - 250 ml poly up NO_2 NO_3 300.0
1 - 250 ml poly up field filtered Cl EPA 300.0
1 - 1000 ml poly up TSS TDS SM 2540C
1 - 500 ml poly up w/ H_2SO_4 NH_3 SM 4500-NH_3-G
Beth Kerchner 9/18/14

SBLM TO 01 — Sept 18, 2014 Thurs

2 - 250 ml Amber w/ H_2SO_4 TOC 415.1 BPK

1130 Set up at LM-6
Collect grab Sample via disposible bailer

1210 Collect Sample: LF5140918LM6-1

1240 Collect Duplicate Sample LF5140918DUP2
LF5140918LM6-1 Analysis:
3 - 40 ml VOA w/ HCl VOCS 8260C
1 - 250 ml poly w/ HNO_3 total Metals 200.7 200 Series
1 - 250 ml poly w/ HNO_3 Dis Metals 200.7 200 Series field filtered
1 - 500 ml poly up NO_3 SO_4 EPA 300 HCO_3 ALK SM 2320B field filtered
1 - 250 ml poly up NO_2 NO_3 300.0
1 - 250 ml poly up field filtered Cl EPA 300.0
3 - 1000 ml poly up TSS TDS SM 2540C BOD SM 5210B
MS/MSD
Beth Kerchner 9/18/14

Sept 18, 2014 JBLM
Thurs TO01

3 - 500ml poly w/ H_2SO_4
NH_3 SM4500 - NH_3 - G
COD SM5220 MS/MSD
2 - 250ml Amber w/ H_2SO_4
TOC 415.1
3 - 1L Poly w/ NaOH Cyanide
SM4500CNE MS/MSD
3 - 250ml sterile poly w/ NaS_2O_3
total Coliform SM9221B MS/MSD
1240 LF5140918DUP-2 Analyed for
3 - 40ml VOCs w/ HCL VOCs
8260C
1 - 250ml poly w/ HNO_3 total
Metals 200.7 200 series
1 - 500ml poly up field
filtered NO_3 SO_4 EPA 300.0
HCO_3 Alk SM2320B
1 - 250ml poly up NO_2 NO_3
300.0
1 - 250ml poly up field
filtered Cl EPA 300.0
1 - 1000ml poly TSS TDS
SM2540C ~~D~~ BPK BOD
SM5210B
Beth Kercher 9/18/14

JBLM Sept 18, 2014
TO01 Thurs

1 - 500ml poly w/ H_2SO_4
NH_3 SM4500 - NH_3 G
COD SM5220
2 - 250ml Amber w/ H_2SO_4
TOC 415.1
1 - 1L Poly w/ NaOH Cyanide
SM4500CNE
1 - 250ml sterile poly w/ NaS_2O_3
total Coliform SM9221B
0900 Calibrated Horiba
ph 4.0 Cond 3.79 mS/cm
turb: 1NTU DO 9.4 mg/L
temp 17.3°C ORP 283 MV
1330 Arrive at Building 1202
De MOB
1340 Calibrate Horiba
Phi 4.0 Cond: 4.03 turb: 0
DO 9.7 temp 19.8°C ORP 285
1430 Offsite - S. Patterson, B. Kercher
T. Malamakal

Beth Kercher 9/18/14

BPK
Sept ~~19~~ 22, 2014 JBLM
Mon TO 01

0630 S. Patterson T. Malamakal
onsite at Building 1202
0700 Health and Safety topics
include:
- Thermal Stress
- Vehicle operations
- Slips trips falls
- Pinch points
- Cuts + Scrapes
- Buddy system
- Emergency communication
- Emergency equipment locations
- Hospital route
- Watch out for hitch
- Biological Hazards: plants, animals + insects
- Heavy lifting
- Ergonomics Splash
Weather: Cloudy w/ pm peeks of sunshine Hi - 74°F Wind 5-10 mph
Daily activities include MOB and Sample AOC 8-2
9/22/14 Beth Kercher

JBLM Sept 22, 2014
TO 01 Mon

0730 Calibrate horiba
Ph 4.0 Cond: 3.~~85~~ 78 ms/cm
turb: 0 NTU DO: 9.~~48~~ mg/L
temp: 18.0 °C ORP ~~290~~ 256 mV
MOB to AOC 8-2
0800 Arrive at Well 4131-MW04
Set up bladder pump hose fittings are wrong size. Change fittings and Set up to Sample
0836 DTW: 24.76 ft btoc
DTB: 27.40 btoc
0840 Start pump Set flow Rate: 460 ml/min
0850 Connect to flow Cell
B. Kercher onsite
Complete purging on field form
0914 Parameters Stablize
tot Vol Purged 19.8 ph 6.2
Spec Cond 0.078 ms/cm
turb: 22 NTU DO: 9.0 mg/L
BPK 0920 temp: 13.3 °C ORP: 240 mV
~~0914~~ Collect Sample: AOC1409224131MW04
2 - 1L amber w/ HCL NWTPH-Px
TPH-D and TPH-O
9/22/14 Beth Kercher

Sept 22, 2014 JBLM
Mon TO 01
~~0630~~
0915 Arrive at well 4131-MW05
Set up to sample with
bladder pump
0933 DTW: 24.33 ft btoc
DTB: 27.60 ft btoc
0936 Start pump, Set flow
rate: 480 ml/min
0939 Connect to flow cell
Collect parameters on purge
form
0954 Parameters Stabilize
total purge vol: 9.80 L
ph: 6.4 Spec Cond: 0.102
turb: ~~0.10Z NTU~~ 18 NTU
DO: 9.5 mg/L temp: 13.5°C
BSK ORP: 255 mV
0954 1000 Collect Sample
AOC140922413IMW05
2-1L Amber w/HCL TPH-D
TPH-O NWTPH-Dx
1010 Arrive at well
4131-MW-02
1018 DTW: 25.15 ft btoc
9/22/14 Beth Kercher

JBLM Sept 22 2014
TO 01 Mon
DTB: 27.42 ft btoc
1032 Started pump Set flow
rate at 360 ml/min
1043 Connect to flow cell
Complete collecting parameters
on purge form
1107 Parameters Stabilize
total Vol purged: 26.5
ph 6.3 Spec Cond 0.163 ms/cm
turb 78 NTU DO 1.4 mg/L
temp 12.8°C ORP: 26
Collect Sample: AOC140922413IMW02
2-1L Amber w/HCL TPH-D
TPH-O NWTPH-Dx
1115 Arrive at well 4131-MW03
Set up to sample with
dedicated bladder pump.
1129 DTW 27.9 ft btoc
DTB 30.0 ft btoc
1134 Start pump Set flow rate at
300 ml/min
1135 Connect to flow cell
1136 5.0 liters removed well
dry DTW: 29.78 ft btoc
Beth Kercher 9/22/14

Sept 22 2014 JBLM
Mon TO 01

Ph 6.6 Spec Cond 0.130 MS/CM
turb - SNTU DO: 6.1 mg/L
temp: 12.8°C ORP: -30 MV
1139 Pumped dry. Wait to recharge.
1200 Collect Sample:
AOC1409224BLMW03
2-1L Amber w/HCL TPH-D
TPH-O NWTPH-Dx
1215 Arrive at Building 1202 Nob to Sample Site AOC 9-7 PID Bump test 99.5 PPM
1250 Arrive at site AOC 9-7
Set up at Well: 10-A17-8 to Sample
1300 DTW: 27.36 ft btoc
DTB: 38.30 ft btoc
1307 Started pump Set up flow rate at 420 ml/min
1313 Connect flow cell Complete purge information on field form
13:31 Parameters Stabilize
total volume purged: 11.25L

9/22/14 Beth Kercher

JBLM
TO 01
Sept 22, 2014
~~TUE~~ Mon

Ph 6.4 Spec Cond: 0.159
turb 42 DO 4.4 MV temp 18.98
ORP: -21 MV
1331 Collect Sample:
AOC1409221OA178
2 1L Amber w/HCL TPH-D
TPH-O NWTPH-Dx
1415 Set up at well
~~PPM~~ 95 A17-2
1430 DTW: 27.60 ft btoc
1435 Start pump Set flow Rate @ 220 ml/Min
1438 Connect to flow cell Collect parameters on purge form
1459 Parameters Stabilize
total vol purged: 11.0 Liters
Ph: 6.5 Spec Cond 0.147 MS/CM
turb: 110 NTU DO 5.9 mg/L
temp: 17.2°C ORP: 173 MV
1500 Collect Sample AOC1409229SAIE
9 1L Amber w/HCL TPH-D
TPH-O NWTPH-Dx for MS/MSD

Beth Kercher 9/22/14

Sept 22, 2014 JBUM
Mon TO 01

1530 Arrive at Building 1202
DeMob.
1430 Calibrate Horiba
PH 4.0 Cond: 4.76 turbid 0
DO 9.4 temp 21.7 ORP 295
1445 B Kercher, S Patterson
T Malamud at off site

Beth Kercher 9/22/14

JBUM Sept 23, 2014
TO 01 Tues

1000 Arrive at Building 1202
B Kercher S. Patterson
MoB to Complete Site ACC 9-2
~~1030 Arrive at Well~~, BHC
1015 Health and Safety Meeting
topics include
- Thermal Stress
- Modified Level D PPE
- Vehicle operations
- Slips, trips, falls
- Pinch Points
- Cuts and Scrapes
- Buddy System
- Emergency Communication
- Emergency equipment location
- Hospital Route
- ~~Watch out for the~~ BHC
- Biological hazards
- Heavy lifting
- Splash hazard.

Weather Cloudy w/ sun peeks of sunshine Hi 74°F wind 5-10 mph 20% Chance of Rain

Beth Kercher 9/23/14

Sept 23, 2014 JBLM
Tues TO 01

1030 Arrive at Site AOC 9-2
Set up at well 07-A17-7
1045 DTW: 26.97 ft btoc
~~DTB~~: D to top of pump: 28.34
1058 Start pump Set flow rate:
320 ml/min
1100 Connect to flow Cell Continue
Collecting parameters on
Purge form
1125 Parameters Stabilize
total Vol Purged: 9.0 liters
PH: 6.2 Spec Cond: 0.101
turb: 42 NTU DO: ~~DH~~ 2.0 mg/L
temp: 14.0°C ORP: 2mv
1125 Collect Sample:
AOC1409230HA177
2-1L Amber TPH-D
TPH-O NWTPH-Dx
1130 Arrive at well
95-A17-30a
1145 DTW: 28.35 ft btoc
DTB: 31.31 ft btoc
1147 Start pump Set flow.
Rate at 340 ml/min
Beth Kerchen 9/23/14

JBLM Sept 23, 2014
TO 01 Tues

1150 Connect to flow Cell
Collect parameters on purge
form
1204 Parameters Stabilize
total purge vol: 6.0 L
PH 6.3 Cond: 0.147 mS/cm
turb: 24 NTU DO: 2.9 mg/L
temp: 14.7° C ORP: 47 mv
1206 Collect Sample
AOC1409230SA173A
2-1L Amber w/ HCL TPH-D
TPH-O NWTPH-Dx
1230 Arrive at Building 1202
De Mob and Mob for LF2
1315 Arrive at Landfill 2
1335 Arrive at Well LC-135
Collect Sample
LG1409230LC135-1
3-40ml VOA 8260C VOCs
1340 Arrive at well LC-108
Collect Sample
LG1409230LC0830-1
3-40ml VOA w/HCL VOCs 8260C
1350 Collect Sample: LG1409230LC0830-1
Beth Kerchen 9/23/2014

Sept 23, 2014 TO 01 JBCM
Tues
3 - 40 ml VOA w/HCL VOCs 8260C
1400 Collect Sample LG1409231610885-1
3- 40ml VOA w/HCL ~~VOA~~ BPK
VOCs 8260C.
Kercher off site BPK
1450 ~~Collect Sample~~ BPK
Arrive at well MT-4
Collect Sample:
LG1409231MT4-1 from PDB
3- 40ml VOA w/HCL VOCs 8260C
1510 Arrive at well MT-3
Collect Sample
LG1409231MT3-1
3- 40 ml VOA w/HCL VOCs 8260C
1535 Arrive at well MT-2
Collect Sample
LG1409231MT2-1
3- 40ml VOA w/HCL VOCs 8260C
1550 Arrive at well MT-1
Beth Kercher 9/23/14

JBCM Sept 23, 2014
TO 01 Tues
1550 Collect Sample: LG1409231MT1-1
3 40 ml VOA w/ HCL
VOCs 8260C
1615 Arrive at Building 1202
DeMOB
1630 S Patterson T Malamakal
offsite

Beth Kercher 9/23/2014

Sept 24, 2014 JBLM
Weds TO 01

0830 B. Kercher, T MalaMakal on site at Building 1202
0845 Health and Safety Meeting topics included:
- Thermal Stress
- Vehicle Operations
- Slips trips falls
- Pinch Points
- Modified Level D PPE
- Buddy System
- Hospital Route
- Emergency Communication

Weather: Overcast Rain High 70°F Cleaning in the afternoon.
Mob to Collect Samples at Logistic Center from PDBs.
0950 Arrive at LC-1
0955 Collect Sample:
~~LG1409242C1-1~~
3-40 ml VOA w/HCl VOCs 8260C
1010 Arrive at well LC-218
Collect Sample LG1409242C218-1

Beth Kercher 9/24/14

JBLM Sept 24, 2014
TO 01 Weds

3-40 ml VOA w/HCl VOCs 8260C
1050 Arrive at well LC-224
1100 Collect Sample LG1409242C224-1
3-40 ml VOA w/HCl VOCs 8260C
1130 Arrive at well LC-01
1135 Collect Sample LG1409242C01-1
6 3-40 ml VOA w/HCl VOC 8260C and MS/MSD
1140 Arrive at well LC-74D
Collect Sample LG1409242C74D-1
3 40ml VOA w/HCl VOCs 8260C
1200 Arrive at well LC-1126B
Collect Sample: LG1409242C1126B-1
3-ml VOA w/HCl VOCs 8260C
1210 Arrive at well LC-1115
Collect Sample: LG1409242C1115B-1
3-40ml VOA w/HCl VOCs 8260C

Beth Kercher 9/24/14

Sept 24 2014 JBLM
Weds TO 01

1230 Arrive at Well 85-PA-382
Collect Sample:
LG140924 85PA382-1
3-40ml VOA w/ HCL VOCs
8260C

1250 Arrive at Well 85-PA-384 Collect Sample:
LG140924 85PA384-1
3-40ml VOAs w/ HCL
VOCs 8260C

1300 S Patterson onsite at Site. AOC 10-8
Review health and Safety Plan. Collect depth to water from wells at AOC 10-10

Time	Well	DTW	DTB
	JP-MW-02		
1402	JP-MW-01	40.48	—
1410	AOC 10-8-BES	40.05	48.00
1425	JP-MW-03	39.65	—

1430 Arrive at Logistic Center Well LC-124
Collect Sample LG140924LC124-1

9/24/14 Beth Kercher

JBLM Sept 24, 2014
TO 01 Weds

3-40ml VOA w/ HCL VOCs 8260C

1435 Collect Duplicate Sample LG140924DUP2-1 from Well LC-124
3-~~4~~ BPK 40ml VOAs w/ HCL VOCs 8260C

1455 Arrive at Well LC-122B
Collect Sample
LG140924LC122B-1
3-40ml VOA w/ HCL VOCs 8260C

1515 Arrive at Well LC-161B
Collect Sample.
LG140924LC161B-1
3-40ml VOAs w/ HCL VOCs 8260C

1545 Arrive at Well LC-226
Collect sample:
LG140924LC226-1
3-40ml VOAs w/ HCL VOCs 8260C

1600 Arrive at Building 1202, DeMob

Beth Kercher 9/24/14

Sept 25, 2014 JBLM
Thurs TO 01

0830 B. Thomas, T. Malatmakal
W. Kaage Arrive on
Site at Building 1202
0845 Health and Safety
Meeting topics include
· Thermal Stress
· Modified Level D PPE
· Splash hazards
· Punch Points
· Hospital Route.
Weather Mostly Cloudy
hi 72°F.
0900 MoB to Slap wells
B Kercher onsite
Safety Briefing
0945 ~~to~~ BPK Collect Sample
LGC140925SIAP6-1
3-40ml VOA w/HCL VOCs
8260C
1000 MoB to Madigan
1022 Collected BPK Sample
LGC140925MAMC3-1 from MAMC-3
3-40ml VOA w/HCL VOCs
8260C
Beth Kercher 9/25/14

JBLM Sept 25, 2014
TO 01 Thurs
1031 Arrive at Well MAMC-4
Collect Sample:
LGC140925MAMC4-1
3-40ml VOAs w/HCL ~~VOAs~~ 3ml
VOC 8260C
1117 Arrive at Well LC-96D
Collect Sample
LGC140925LC96D-1
3-40ml VOAs w/HCL VOCs 8260
~~1150~~ 1140 Arrive at well
LC-74D Collect Sample:
LGC140925LC74D-1
3-40ml VOAs w/HCL
VOCs 8260C
1150 Arrive at Well LC-99D
Collect Sample:
LGC140925LC99D-1
3-40ml VOA w/HCL
VOC 8260C
1200 S. Patterson on Site
Calibrate Horiba
Ph Cond turb DO temp ORP

Beth Kercher 9/25/14

Sept 25, 2014 Thurs — JBLM TO 01

1330 Arrive B. Kercher and S. Patterson arrive at Site AOC 10-8
Set up to Bail well AOC 10-8-B04
1540 DTW = 40.65 ft btoc
DTB = 48.00
Bail 3x Casing Volume: 13.3 Liters
1420 Collect Sample:
AOC140925AOC108B05
2 - 1L AMber w/HCL TPH-D
TPH-O NWTPH-Dx
1430 Arrive at well JP-MW02
1445 DTW = 39.15 ft btoc
DTB = 51.0
1455 Start Pump, Set flow Rate = 420 ML/Min
1456 Connect to flow Cell Complete Collecting Parameters on purge form
1512 Parameters Stabilize total vol purged 9.24 Liters
Beth Kercher 9/25/14

JBLM TO 01 — Sept 25, 2014 Thurs

Ph 6.4 Spec Cond: 0.123 MS/MC turb 37 NTU DO 7.9 Mg/L temp 16.1°C ORP 125 MV
1515 Collect Sample
AOC140925JPMW02-X
2 - 1L AMber w/HCL TPH-D
TPH-O NWTPH-Dx
1530 Arrive at Building 1202 DeMob and pack Samples
1630 S. Patterson B. Kercher Offsite
1545 Calibrate Horiba
Ph Cond DO turb DO temp ORP
3.9 3.97 MS/cm 0 NTU 9.5 Mg/L 19.0°C 282 MV

Beth Kercher 9/25/14

Sept 26, 2014 JBLM
Fri TO 01

0800 B. Kercher, B. Thomas
T. Malamakal, S. Patterson
onsite at Building 1202
to pack Samples and
Complete paperwork

0930 B. Kercher and
Patterson arrive
at LFS to collect
Sample from well LM16

0950 Collect Sample
LF5140926 LM16-1A
2 - 250 ml Sterile Poly
w/ NaS_2O_3 total Coliform
SM9222B

0955 Collect Duplicate Sample
LF5140926 DUP-2A
1 - 250 ml Sterile Poly w/
NaS_2O_3 total Coliform
SM9222B.

1000 Arrive at Dupont 776
Station to Meet MC
Delivery and Relinquish
Samples

1015 B. Kercher S Patterson
Off Site

9/26/14 Ben Kercher

JBLM Sept 29, 2014
TO 01 Mon

0630 S. Patterson T. Malamakal
onsite at Building 1202
Weather: Overcast Scattered
Showers High 65°F

0645 health and Safety meeting
- Topics include:
- Thermal Stress
- Vehicle operations
- Splash Hazards
- Level D PPE
- Slips trips falls
- Hospital Route

0730 MOB to Sample wells
at Logistic Center

0800 Arrive at wells LC98D-1
and LC98D-2 Deploy PDBs

0830 Arrive at Building 1202

0900 B Kercher and B. Thomas
onsite Review health and
0930 Safety

0900 Arrive at Building 2012
Meet Bill Myers to pick up
Keys

0835 Arrive at well LC93D-1

Ben Kercher 9/29/14

Sept 29, 2014 Mon JBLM
TO 01

0835 Collect Sample:
LGC140929LC93D1-1
3-40ml VOA w/HCL
VOCs 8260C

0845 Arrive at well LC-93D2
Collect Sample:
LGC140929LC93D2-1
3-40ml VOA w/HCL VOCs
8260C

1020 Arrive at Well T-13B
Collect Sample:
LGC140929T13B-1
3-40ml VOA w/HCL VOCs
8260C

1030 Arrive at Well LC-225
Collect Sample:
LGC140929LC225-1
3-40ml VOA w/HCL VOCs
8260C

1045 Arrive at Well T-05
Collect Sample:
LGC140929T05-1
3-40ml VOA w/HCL VOCs
8260C

1100 Arrive at Well T-06

Beth Kerchu 9/29/14

JBLM Sept 29, 2014
TO 01 Mon

1100 Collect Sample:
LGC140929T06-1
3-40ml VOAs w/HCL VOCs
8260C

1110 Arrive at Well T-11B
Collect Sample:
LGC140929T11B-1
3-40ml VOA w/HCL VOCs
8260C

1135 Arrive at Well BC-1
Collect Sample:
LGC140929BC1-1
6-40ml VOAs w/HCL VOCs
8260C and MS/MSD

1225 Arrive at Well T-15
Collect Sample:
LGC140930T15-1
3-40ml VOA w/HCL VOCs 8260

1230 Duplicate Sample
LGC140930DUP4-1
3-40ml VOA w/HCL VOCs 8260

1155 Arrive at Well T-10
Collect Sample: LGC140929T10-1
3-40ml VOA w/HCL VOCs 8260C

Beth Kerchu 9/29/14

Sept 29, 2014 JBLM
Mon TO 01

1240 Arrive at Well ~~8~~ BPK LC86D-1
Collect Sample
LGC140929LC86D1-1
3-40ml VOAs w/ HCL VOCs
8260C

1245 Arrive at Well LC86D-2
Collect Sample LGC140929LC86D2-1
3-40ml VOAs w/ HCL VOCs
8260C

1305 Arrive at Well LC102D-1
Collect Sample LGC140929LC102D1-1
3 40ml VOAs w/ HCL VOCs
8260C

1315 Arrive at Well LC102D2-
Collect Sample LGC140929LC102D2-1
3 40ml VOAs w/ HCL VOCs
8260C

1330 Arrive at Well LC88D-1
Collect Sample LGC140929LC88D1-1
3-40ml VOAs w/ HCL VOCs 8260C

1340 Arrive at Well LC88D-2
Collect Sample LGC140929LC88D2-1
3-40ml BPK ~~w/ HCL~~ VOAs w/ HCL
VOCs 8260C

Beth Kercher 9/29/14

JBLM Sept 29, 2014
TO 01 Mon

1400 Arrive at Well LC95D-1
Collect Sample:
LGC140929LC95D1-1
3-40ml VOA w/ HCL ~~VOA~~ BPK
VOC 8260

1410 Arrive at Well LC-95D-2
LGC140929LC95D2-1
Collect Sample ↑
3-40ml VOA w/ HCL VOCs
8260C

1430 Arrive at Building 1202
DeMoB

1500 Offsite B. Kercher, S Patterson

Beth Kercher 9/29/2014

Sept 30, 2014 JBLM
Tues TO 01

0430 S. Patterson, T. Matamakal Onsite at Building 1202
Weather: Sunshine and Cloud Mix Slight Chance of Rain High 64° Wind 5-10 mph.
0445 Health and Safety Meeting topics include:
- Thermal Stress
- Vehicle operations
- Slips, trips falls
- Punch points
- Level D PPE Modified
- Buddy System
- Hospital Route
- Emergency Communication

0700 Mob to Sample Logistic Center Wells
0745 Arrive at Well T-04
Collect Sample:
LGC140929T04-1
3 40ml VOA w/ HCl VOC 8260
0750 Collect duplicate Sample from T-04

Beth Kercher 9/30/14

JBLM Sept 30, 2014
TO 01 Tues

LGC140929DUP5-1
3-40ml VOAs w/ HCl ~~VOA BPK~~ VOC 8260C
0810 Arrive at Well LC-103-D1
Collect Sample LGC140930LC103D1-1
3-40ml VOAs w/ HCl VOCs 8260C
0835 Arrive at Well LC101D-2
Collect Sample: ~~BPK~~
LGC140930LC101D2-1
3-40ml VOA w/ HCl VOCs 8260C
0840 Arrive at Well LC-101D-1
Collect Sample:
LGC140930LC101D1-1
3-40ml VOA w/ HCl VOCs 8260C
0900 Arrive at ~~Well~~ BPK Building 1202
B Kercher on Site Review Health and Safety Plan.
0915 Arrive at Building 2012B to pick up Key to LC-109 from R. Stinchfield.

Beth Kercher 9/30/14

Sept 30, 2014 JBLM
Tues TO 01.

1015 Arrive at Sample location MANCOF-2

1020 Collect Sample LGC140930MANCOF2-1
3 - 40 ml VOA w/ HCL VOC 8260C

1045 Arrive at Well LC-109-1
LGC140930LC109-1
3 - 40 ml VOA w/HCL VOCs 8260C BPK

~~1115~~ BPK 1110 Arrive at Well LC-03-1
~~1125~~ BPK Started Purge Pump
Set purge rate to 550 ml/min purged 8.25 L prior to Sampling.

1125 Collect Sample: LGC140930LC03-1
3-40 ml VOAs w/ HCL VOCs 8260C

1135 Collect Duplicate Sample
LGC140930DUP9-1
3 40ml VOA w/ HCL VOC 8260C

1150 Arrive at well LC-182
Beth Kercher 9/30/14

JBLM Sept 30, 2014
TO 01 Tues

1155 Started peristaltic pump Set pump rate @ 220 ml/min purged 3.3 L prior to Sampling.

1215 Collect Sample LGC140930LC182-1
3-40 ml VOAs w/ HCL ~~BPK~~ VOCs 8260C.

1230 Arrive at Building 2012B Return Key to Ralph Strickland

1300 Arrive at National Guard laydown area. Meet Sgt Clavo to access well LC-116

1310 Arrive at well LC-116
Collect Sample:
LGC140930LC116-1
3-40 ml VOA w/ HCL VOCs
BPK ~~Beth~~ 8260C

1315 Collect duplicate Sample
LGC140930DUP1-1
3 40ml VOA w/ HCL VOCs 8260

1350 Arrive at Well LC-180
Set up to pump with peristaltic
Beth Kercher 9/30/14

Sept 30, 2014 JBLM
Tues TO 01

1355 Started pump Set flow
Rate to 320 ml/L purged
4.8 liters prior to Sampling
1410 Collect Sample
LGC140930LC180-1
3 -40 ml VOA w/ HCL VOCs
8260
1430 Arrive at Building 1202
DeMOB
1500 B Kercher, S. Patterson
of Site

Beth Kercher 9/30/14

JBLM Oct 1, 2014
TO 01 Wede

0630 S Patterson, T Malamakal
Arrive onsite at Building 1202
0645 Health and Safety Meeting
topics include:
- Thermal Stress
- Vehicle operations
- Slips, trips, falls
- Pinch Points
- Level D PPE Modified
- Buddy System
- Hospital Route
- Emergency communication

Weather: Partly Cloudy Hi 66°F
Wind 5-10 mph
MOB to Complete Logistic
Center Sampling
0800 Arrive at Well LC-223
Set up to Sample with peristaltic
pump. intake depth 15ft bgs
0815 Started pump Set purge
Rate of 270 ml/min
purged 4.05 L prior to
Sampling. LC9410012C223-1
0830 Collect Sample ~~LCG301~~ BPK
Beth Kercher 10/1/14

Oct 1, 2014 JBLM
Weds TO 01
3-40 ml VOA w/ ~~VOC~~ BPK HCL
VOCs 8260C
0835 Collect DUP from well
LC-223
Sample: LG141001DUP3-1
3-40 ml VOA w/ HCL VOC
8260C
0840 B Kercher onsite at JBLM
Water treatment facility
Call 253-967-7453
Andy Davis will meet
At Well 13 to give Site
Access in 20 mins
0900 T Malamakal and S. Patterson
arrive at Well LC-178
Set up to Sample with
Peristaltic pump
0903 Started pump Set flow
Rate 220 ml/min purged
3.3 L prior to Sampling
0920 Collect Sample
LGC141001LC178-1
3-40 ml VOA w/ HCL VOC
8260C
Beth Kercher 10/1/14

JBLM Oct 1, 2014
TO 01 Weds
0920 B Kercher and T Malamakal
arrive at Well 13
0925 Collect Sample
LGC141001Well13-1
9-40 ml VOAs w/ HCL VOCs
8260C with MS/MSD.
1030 Arrive at Well LC-98D1
Set up to pump with sub pump.
1040 Start pump Set flow rate
at 220 ml/min purged 3.3 L
prior to Sampling
1100 Collect Sample: LGC141001LC98D1-1
3-40 ml VOA w/ HCL VOCs 8260C
1105 Collect dup Sample
LGC141001DUP8-1
3-40 ml VOA w/ HCL VOCs 8260C
1115 Set up to Sample Well
LC 98-D2
1125 Started pump set purge rate
at 420 ml/min. total volume
purged: 6.3 L prior to
Sampling.
1140 Collect Sample: LGC141001LC98D2-1
3-40 ml VOA w/ HCL VOCs 8260C
Beth Kercher 10/1/14

Oct 1, 2014 JBLM
Weds TO 01

1215 Arrive at Building
1207 DeMob
1330 B. Kercher T Malayakal
S. Patterson offsite

Beth P. Kercher 10/1/14

Oct 20, 2014 JBLM
Mon TO 01

0700 S. Patterson, B. Kircher
T. Malayakal onsite
Weather: Periods of rain A few
Rumbles of thunder possible
High 61°f Winds 10-15 mph
70% Chance of Rain
0715 Health and Safety meeting
topics include:
- Thermal Stress
- Vehicle operations
- Slips, trips, falls
- Proper PPE - Modified level D.
- Proper lifting
- Pinch Points
- Cuts and scrapes
- Emergency Communication
- Emergency equipment
- Hospital Route
- Hydration

0730 MOB
0845 Tom Lynott onsite. Review
Health and Safety
0900 Arrive at building 2012 to
pick up a Radio

Beth Kercher 10/20/14

FOURTH QUARTER

Oct 20, 2014 JBLM
Mon TO 01

1627 Parameters Stabilize
DTW: 38.53 ft. pH: 6.24.
Spec. Cond: 0.095 mS/cm
turb: 0.2 NTU DO: 10.86
temp: 14.43°C ORP: 298 mV

1630 Collect Sample
A1A141020981AMW01
2 1L up Amber
EPA Method SW846-8330
Nitroaromatics/nitramines

Collect DTW

Well	Time	DTW
01-1A-MW11	15:56	45.65
01-1A-MW13	1650	39.00
01-1A-MW06	1655	40.00

1715 Arrive at Landfill 2
Dispose water in treatment system.
1745 B. Kercher S Patterson offsite

Beth Kercher
10/20/14

TO 01 JBLM LOG CENTER LTM 11/5/14
0630 A. LEWIS, S. PATTERSON, T. MALAMAKAL
ON SITE BUILDING 1202
CONDUCT TAILGATE SAFETY BRIEFING
SSHO S. PATTERSON
SOME TOPICS INCLUDED:
- THERMAL STRESS
- VEHICLE OPERATIONS
- SLIPS, TRIPS, FALLS
- CUTS & SCRAPES
- PROPER PPE - MODIFIED LEVEL D
  - SAFETY GLASSES, GLOVES, STEEL TOED BOOTS

Wx: AM-SHOWERS PM-RAIN Hi-60°F Light wind 90% chance of rain ≈ 0.25 in.
MOB TRUCK FOR SAMPLING
A. LEWIS, S. PATTERSON INSTALL PDBs

WELL ID	DTW	DTB	PDBs INSTALLED	NOTES
T-15	25.24	-	1 PDB INSTALLED	
85-PA-382	10.73	-	1 PDB INSTALLED	
85-PA-384	23.60	-	1 PDB INSTALLED	NO CAP
LC-135	14.09	-	1 PDB INSTALLED	NO CAP
LC-108	14.75	100.87	3 PDBs INSTALLED 30 ft btoc 60 ft btoc 85 ft btoc	NO CAP
MT-3	15.14	-	1 PDB INSTALLED	
MT-4	14.73	-	1 PDB INSTALLED	
MT-2	13.84	27.60	1 PDB INSTALLED	
MT-1	26.82	37.14	1 PDB INSTALLED	

11/5/14

TO 01 JBLM LTM/O 11/5/14

1030 ONSITE @ LANDFILL 2 SHED W/ T. MALAMAKAL
DISCUSS PLANS FOR SPACE
A. LEWIS, S. PATTERSON OFF SITE TO PURCHASE CLEANING SUPPLIES
CLEAN AND ORGANIZE SHED
B. THOMAS ON SITE
B. THOMAS OFF SITE

1400 DEMOB/MOB
LEAVE TOYOTA ON SITE

1430 A. LEWIS, S. PATTERSON OFF SITE

11/5/14

TO 01 JBLM LTM/O 11/12/14

0645 A. LEWIS, S. PATTERSON, K. WATSON,
T. MALAMAKAL ON SITE
CONDUCT TAILGATE SAFETY BRIEFING
SSHO - S. PATTERSON
TOPICS INCLUDED:
- THERMAL STRESS
- PROPER LIFTING
- CUTS & SCRAPES
- BIOLOGICAL HAZARDS
- PROPER PPE - MODIFIED LEVEL D
- SAFETY GLASSES & BOOTS, GLOVES

CLEAN AND ORGANIZE LAND FILL 2 SHED
DISPOSE OF TRASH AND RECYCLING INTO APPROPRIATE CONTAINERS
A. LEWIS, S. PATTERSON OFF SITE TO PURCHASE SUPPLIES
A. LEWIS, S. PATTERSON, K. WATSON, T. MALAMAKAL ON SITE BUILDING 1202 MOB SUPPLIES FOR TRANSPORT TO LANDFILL 2 SHED
DEMOB AT LANDFILL 2 SHED CLEAN AND ORGANIZE
B. THOMAS ONSITE
B. THOMAS OFFSITE

1450 A. LEWIS, S. PATTERSON, K. WATSON OFF SITE

11/12/14

TO 01 JBLM LOG CENTER LTM 11/24/14

1000 S. PATTERSON, J. HIGHSTONE, T. MALAMAKAL ON SITE

CONDUCT TAILGATE SAFETY BRIEFING SSHO - S. PATTERSON

TOPICS INCLUDED:

- SLIPS, TRIPS, FALLS
- PINCH POINTS
- VEHICLE OPERATIONS
- CUTS & SCRAPES
- EMERGENCY COMMUNICATION

-PROPER PPE - MODIFIED LEVEL D

-SAFETY GLASSES & BOOTS, GLOVES

SHOWED JOHN HIGHSTONE AROUND LF2

MOB TRUCK FOR SAMPLING

B. THOMAS ON SITE

S. PATTERSON, T. MALAMAKAL BEGIN SAMPLING

1130 PREPARE TRIP BLANK TB-141124
2-40mL VOA W/HCl VOCs 8260C

1135 ON SITE MT-3

1140 COLLECT SAMPLE VIA PDB
SAMPLE ID: LGC141124MT3-1
3-40mL VOA W/HCl VOC 8260C

1150 ON SITE MT-4
RETREIVE PDB

TO 01 JBLM LOG CENTER LTM 11/24/14

1155 COLLECT SAMPLE LGC141124MT4-1
3-40mL VOA W/HCl VOCs 8260C

1210 ON SITE LC-135
RETRIEVE PDB

1215 COLLECT SAMPLE LGC141124LC135-1
3-40mL VOA W/HCl VOCs 8260C
INSTALL 4in J-PLUG

1225 ON SITE LC-108
RETRIEVE PDB 30 ft btoc

1230 COLLECT SAMPLE LGC141124LC10830-1
3-40mL VOA W/HCl VOCs 8260C

1235 COLLECT DUP SAMPLE LGC141124DUP1-1
3-40mL VOA W/HCl VOCs 8260C
RETRIEVE PDB 60 ft btoc

1240 COLLECT MS/MSD SAMPLE LGC141124LC10860-1
6-40mL VOA W/HCl VOCs 8260C
~~1245~~ RETRIEVE PDB 85 ft btoc

1245 COLLECT SAMPLE LGC141124LC10885-1
3-40mL VOA W/HCl VOCs 8260C / INSTALL J-PLUG

LANDFILL 2 GATE LOCKED
GOT A HOLD OF B. THOMAS TO CONTACT OTHER CONTRACTOR TO OPEN GATE

1325 ON SITE MT-2
RETRIEVE PDB

1330 COLLECT SAMPLE LGC141124MT2-1

11/24/14

TO 01 JBLM LOG CENTER LTM 11/24/14
3-40 mL VOA w/HCl VOCs 8260C
1340 ON SITE MT-1
RETRIEVE PDB
1345 COLLECT SAMPLE LGC141124MT1-1
3-40 mL VOA w/HCl VOCs 8260C
MEET J. HIGHSTONE & B. THOMAS AT SITE TRAILER
S. PATTERSON, J HIGHSTONE, T. MALAMAKAL
RESUME SAMPLING
1445 ON SITE 85-PA-382
RETRIEVE PDB
1450 COLLECT SAMPLE LGC141124 85PA382-1
3-40mL VOA w/HCl VOCs 8260C
1505 ON SITE 85-PA-384
RETRIEVE PDB
1510 COLLECT SAMPLE LGC141124 85PA384-1
3-40mL VOA w/HCl VOCs 8260C
INSTALL 2IN J-PLUG
J. HIGHSTONE OFF SITE
1540 ON SITE T-15
RETRIEVE PDB
1545 COLLECT SAMPLE LGC141124-T15-1
3-40mL VOA w/HCl VOCs 8260C
DEMOB/CHANGE ICE IN SAMPLE COOLER
1630 S. PATTERSON, T. MALAMAKAL OFF SITE
11/24/14

TO 01 JBLM LOG CENTER LTM 11/25/14
0650 S. PATTERSON PACK SAMPLES FOR SHIPMENT
- PURCASE ICE FOR COOLER
- QC COC
- PACK COOLER
- TAPE & SEAL

0740 SHIP ONE COOLER VIA MC DELIVER TO ALS
0800 S. PATTERSON DRIVE TO A. LEWIS HOUSE TO PICK UP SUPPLIES
0900 S. PATTERSON WORK COMPLETED FOR PROJECT FOR DAY

11/25/14

APPENDIX D

HISTORICAL DEPTH TO WATER MEASUREMENTS AND SEA LEVEL AQUIFER TREND GRAPHS

Appendix D - Historical Depth to Water Measurements and Sea Level Aquifer Trend Graphs

Historical Depth to Water measurements

Log RAM, Joint Base Lewis-McChord, Washington 98433

Well ID	Date	Measuring Pt	Depth to SWL	GW Elev	Aquifer
Vashon Aquifer					
85-PA-381	4/23/1997	269.14	6.94	262.20	Vashon
85-PA-381	7/16/1997	269.14	14.69	254.45	Vashon
85-PA-381	10/16/1997	269.14	14.83	254.31	Vashon
85-PA-381	1/30/1998	269.14	10.28	258.86	Vashon
85-PA-381	4/2/1998	269.14	12.48	256.66	Vashon
85-PA-381	7/7/1998	269.14	14.39	254.75	Vashon
85-PA-381	9/22/1998	269.14	17.63	251.51	Vashon
85-PA-381	12/1/1998	269.14	7.00	262.14	Vashon
85-PA-381	3/1/1999	269.14	9.50	259.64	Vashon
85-PA-381	6/1/1999	269.14	9.87	259.27	Vashon
85-PA-381	9/1/1999	269.14	16.65	252.49	Vashon
85-PA-381	12/1/1999	269.14	9.28	259.86	Vashon
85-PA-381	3/1/2000	269.14	8.00	261.14	Vashon
85-PA-381	6/1/2000	269.14	11.11	258.03	Vashon
85-PA-381	9/1/2000	268.85	16.91	251.94	Vashon
85-PA-381	12/1/2000	268.85	17.13	251.72	Vashon
85-PA-381	3/1/2001	268.85	17.21	251.64	Vashon
85-PA-381	6/1/2001	268.85	16.36	252.49	Vashon
85-PA-381	9/1/2001	268.85	19.58	249.27	Vashon
85-PA-381	12/1/2001	268.85	8.78	260.07	Vashon
85-PA-381	4/1/2002	268.85	8.86	259.99	Vashon
85-PA-381	6/1/2002	268.85	10.14	258.71	Vashon
85-PA-381	9/1/2002	268.85	12.94	255.91	Vashon
85-PA-381	2/3/2003	268.85	9.26	259.59	Vashon
85-PA-381	3/3/2003	268.85	10.76	258.09	Vashon
85-PA-381	7/1/2003	268.85	14.20	254.65	Vashon
85-PA-381	10/4/2004	268.85	18.82	250.03	Vashon
85-PA-381	4/15/2005	268.85	14.55	254.30	Vashon
85-PA-381	7/29/2005	268.85	16.50	252.35	Vashon
85-PA-381	9/6/2005	268.85	17.81	251.04	Vashon
85-PA-381	3/20/2006	268.85	10.39	258.46	Vashon
85-PA-381	9/20/2006	268.85	15.77	253.08	Vashon
85-PA-381	3/21/2007	268.85	9.24	259.61	Vashon
85-PA-381	9/28/2007	268.85	14.44	254.41	Vashon
85-PA-381	3/25/2008	268.85	11.89	256.96	Vashon
85-PA-381	10/8/2008	268.85	17.60	251.25	Vashon
85-PA-381	2/5/2009	268.85	11.65	257.20	Vashon
85-PA-381	8/4/2009	268.85	13.03	255.82	Vashon
85-PA-381	2/10/2010	268.85	10.55	258.30	Vashon
85-PA-381	8/10/2010	268.85	11.52	257.33	Vashon
85-PA-381	2/16/2011	268.85	9.72	259.13	Vashon
85-PA-381	8/8/2011	268.85	12.17	256.68	Vashon
85-PA-381	3/1/2012	268.85	11.66	257.19	Vashon
85-PA-381	7/31/2012	268.85	12.00	256.85	Vashon
85-PA-381	2/6/2013	269.17	11.21	257.96	Vashon
85-PA-381	8/7/2013	269.17	13.75	255.42	Vashon
85-PA-382	8/7/2012	265.20	11.00	254.2	Vashon
85-PA-382	2/6/2013	265.2	10.37	254.83	Vashon
85-PA-382	8/7/2013	265.2	13.02	252.18	Vashon
85-PA-383	4/23/1997	269.93	7.95	261.98	Vashon
85-PA-383	7/16/1997	269.93	16.14	253.79	Vashon
85-PA-383	10/16/1997	269.93	16.18	253.75	Vashon
85-PA-383	1/30/1998	269.93	11.48	258.45	Vashon

Historical Depth to Water measurements

Log RAM, Joint Base Lewis-McChord, Washington 98433

Well ID	Date	Measuring Pt	Depth to SWL	GW Elev	Aquifer
85-PA-383	4/2/1998	269.93	13.58	256.35	Vashon
85-PA-383	7/7/1998	269.93	15.95	253.98	Vashon
85-PA-383	9/22/1998	269.93	19.14	250.79	Vashon
85-PA-383	12/1/1998	269.93	8.12	261.81	Vashon
85-PA-383	3/1/1999	269.93	10.81	259.12	Vashon
85-PA-383	6/1/1999	269.93	11.43	258.50	Vashon
85-PA-383	9/1/1999	269.93	18.12	251.81	Vashon
85-PA-383	12/1/1999	269.93	10.77	259.16	Vashon
85-PA-383	3/1/2000	269.93	9.61	260.32	Vashon
85-PA-383	6/1/2000	269.93	12.83	257.10	Vashon
85-PA-383	9/1/2000	269.73	18.22	251.51	Vashon
85-PA-383	12/1/2000	269.73	18.39	251.34	Vashon
85-PA-383	3/1/2001	269.73	18.57	251.16	Vashon
85-PA-383	6/1/2001	269.73	17.95	251.78	Vashon
85-PA-383	9/1/2001	269.73	20.75	248.98	Vashon
85-PA-383	12/1/2001	269.73	10.02	259.71	Vashon
85-PA-383	4/1/2002	269.73	10.49	259.24	Vashon
85-PA-383	6/1/2002	269.73	12.07	257.66	Vashon
85-PA-383	9/1/2002	269.73	14.30	255.43	Vashon
85-PA-383	2/3/2003	269.73	10.80	258.93	Vashon
85-PA-383	3/3/2003	269.73	12.28	257.45	Vashon
85-PA-383	7/1/2003	269.73	15.72	254.01	Vashon
85-PA-383	10/4/2004	269.73	17.98	251.75	Vashon
85-PA-383	4/15/2005	269.73	15.73	254.00	Vashon
85-PA-383	8/30/2005	269.73	18.86	250.87	Vashon
85-PA-383	3/20/2006	269.73	11.67	258.06	Vashon
85-PA-384	6/1/1999	279.15	10.20	268.95	Vashon
85-PA-384	9/1/1999	279.15	31.62	247.53	Vashon
85-PA-384	12/1/1999	279.15	23.38	255.77	Vashon
85-PA-384	3/1/2000	279.15	22.83	256.32	Vashon
85-PA-384	6/1/2000	279.15	30.60	248.55	Vashon
85-PA-384	9/1/2000	279.15	38.30	240.85	Vashon
85-PA-384	12/1/2000	279.15	30.53	248.62	Vashon
85-PA-384	3/1/2001	279.18	31.37	247.81	Vashon
85-PA-384	12/1/2001	279.18	25.62	253.56	Vashon
85-PA-384	4/1/2002	279.18	22.93	256.25	Vashon
85-PA-384	6/1/2002	279.18	26.77	252.41	Vashon
85-PA-384	9/1/2002	279.18	35.12	244.06	Vashon
85-PA-384	2/3/2003	279.18	23.99	255.19	Vashon
85-PA-384	3/3/2003	279.18	29.54	249.64	Vashon
85-PA-384	7/1/2003	279.18	30.14	249.04	Vashon
85-PA-384	2/12/2013	279.5	23.35	256.15	Vashon
85-PA-384	8/7/2013	279.5	29.78	249.72	Vashon
85-PA-384	2/13/2014	279.50	25.00	254.50	Vashon
85-PA-384	9/3/2014	279.50	27.69	251.81	Vashon
9700-MW1	6/1/1999	277.68	23.87	253.81	Vashon
9700-MW1	9/1/1999	277.68	11.55	266.13	Vashon
9700-MW1	12/1/1999	277.68	10.10	267.58	Vashon
9700-MW1	3/1/2000	277.68	9.62	268.06	Vashon
9700-MW1	6/1/2000	277.68	10.52	267.16	Vashon
9700-MW1	9/1/2000	277.68	11.40	266.28	Vashon
9700-MW1	12/1/2000	277.68	11.46	266.22	Vashon
9700-MW1	3/1/2001	278.12	11.59	266.53	Vashon
9700-MW1	12/1/2001	278.12	9.95	268.17	Vashon

Appendix D - Historical Depth to Water Measurements and Sea Level Aquifer Trend Graphs

Historical Depth to Water measurements

Log RAM, Joint Base Lewis-McChord, Washington 98433

Well ID	Date	Measuring Pt	Depth to SWL	GW Elev	Aquifer
9700-MW1	4/1/2002	278.12	9.59	268.53	Vashon
9700-MW1	6/1/2002	278.12	10.87	267.25	Vashon
9700-MW1	9/1/2002	278.12	11.26	266.86	Vashon
9700-MW1	2/3/2003	278.12	10.42	267.70	Vashon
9700-MW1	3/3/2003	278.12	10.50	267.62	Vashon
CM-2	10/4/2004	262.52	23.20	239.32	Vashon
CM-2	3/25/2008	262.52	20.01	242.51	Vashon
CM-2	10/8/2008	262.52	24.08	238.44	Vashon
CM-2	2/6/2009	262.52	19.33	243.19	Vashon
CM-2	8/6/2009	262.52	21.38	241.14	Vashon
CM-2	2/9/2010	262.52	17.90	244.62	Vashon
CM-2	8/13/2010	262.52	20.28	242.24	Vashon
CM-2	2/15/2011	262.52	17.95	244.57	Vashon
CM-2	8/9/2011	262.52	20.25	242.27	Vashon
CM-2	3/1/2012	262.52	18.90	243.62	Vashon
CM-2	8/7/2012	262.52	20.30	242.22	Vashon
CM-2	2/12/2013	262.52	20.03	242.49	Vashon
CM-2	8/6/2013	262.52	21.65	240.87	Vashon
CM-2	2/12/2014	262.52	20.60	241.92	Vashon
CM-2	9/9/2014	262.52	21.15	241.37	Vashon
FL-1	4/6/2005	278.12	10.64	267.48	Vashon
FL-1	7/21/2005	278.12	11.12	267.00	Vashon
FL-1	3/20/2006	278.12	9.26	268.86	Vashon
FL-1	9/20/2006	278.12	11.27	266.85	Vashon
FL-1	3/21/2007	278.12	8.84	269.28	Vashon
FL-1	9/28/2007	278.12	11.06	267.06	Vashon
FL-1	10/8/2008	278.12	11.52	266.60	Vashon
FL-1	2/3/2009	278.12	10.22	267.90	Vashon
FL-1	8/4/2009	278.12	11.20	266.92	Vashon
FL-1	2/11/2010	278.12	9.75	268.37	Vashon
FL-1	8/10/2010	278.12	10.14	267.98	Vashon
FL-1	2/16/2011	278.12	9.25	268.87	Vashon
FL-1	8/10/2011	278.12	10.00	268.12	Vashon
FL-1	2/22/2012	278.12	9.42	268.70	Vashon
FL-1	7/31/2012	278.12	10.21	267.91	Vashon
FL-1	2/6/2013	278.12	9.80	268.32	Vashon
FL-1	8/8/2013	278.12	10.60	267.52	Vashon
FL-01	2/12/2014	278.12	10.20	267.92	Vashon
FL-01	9/3/2014	278.12	10.43	267.69	Vashon
FL-2	2/3/2003	282.27	13.31	268.96	Vashon
FL-2	3/3/2003	282.27	13.96	268.31	Vashon
FL-2	7/1/2003	282.27	14.23	268.04	Vashon
FL-2	10/4/2004	282.27	14.86	267.41	Vashon
FL-2	4/6/2005	285.59	14.11	271.48	Vashon
FL-2	7/29/2005	285.59	14.76	270.83	Vashon
FL-2	9/21/2005	285.59	15.37	270.22	Vashon
FL-2	3/17/2006	285.59	12.37	273.22	Vashon
FL-2	9/20/2006	285.59	14.96	270.63	Vashon
FL-2	3/19/2007	285.59	11.87	273.72	Vashon
FL-2	9/28/2007	285.59	14.65	270.94	Vashon
FL-2	3/25/2008	285.59	13.00	272.59	Vashon
FL-2	10/8/2008	285.59	15.20	270.39	Vashon
FL-2	2/3/2009	285.59	13.60	271.99	Vashon
FL-2	8/3/2009	285.59	14.73	270.86	Vashon

Historical Depth to Water measurements

Log RAM, Joint Base Lewis-McChord, Washington 98433

Well ID	Date	Measuring Pt	Depth to SWL	GW Elev	Aquifer
FL-2	2/11/2010	285.59	12.80	272.79	Vashon
FL-2	8/9/2010	285.59	13.61	271.98	Vashon
FL-2	2/16/2011	285.59	12.40	273.19	Vashon
FL-2	8/10/2011	285.59	13.52	272.07	Vashon
FL-2	2/22/2012	285.59	12.85	272.74	Vashon
FL-2	7/31/2012	285.59	13.65	271.94	Vashon
FL-2	2/5/2013	285.59	13.14	272.45	Vashon
FL-2	8/7/2013	285.59	14.10	271.49	Vashon
FL-02	14-Feb-14	285.59	13.70	271.89	Vashon
FL-02	08-Sep-14	285.59	14.01	271.58	Vashon
FL-3	12/1/2001	265.36	11.07	254.29	Vashon
FL-3	4/1/2002	265.36	11.47	253.89	Vashon
FL-3	6/1/2002	265.36	12.87	252.49	Vashon
FL-3	9/1/2002	265.36	14.50	250.86	Vashon
FL-3	2/3/2003	265.36	11.52	253.84	Vashon
FL-3	7/1/2003	265.36	15.41	249.95	Vashon
FL-3	10/4/2004	265.36	17.23	248.13	Vashon
FL-3	4/15/2005	265.36	15.47	249.89	Vashon
FL-3	7/29/2005	265.36	17.05	248.31	Vashon
FL-3	9/26/2005	265.36	18.25	247.11	Vashon
FL-3	3/20/2006	265.36	11.50	253.86	Vashon
FL-3	9/21/2006	265.36	17.07	248.29	Vashon
FL-3	3/21/2007	265.36	10.61	254.75	Vashon
FL-3	9/27/2007	265.36	15.40	249.96	Vashon
FL-3	3/25/2008	265.36	13.43	251.93	Vashon
FL-3	2/5/2009	265.36	12.70	252.66	Vashon
FL-3	8/6/2009	265.36	14.75	250.61	Vashon
FL-3	2/9/2010	265.36	11.42	253.94	Vashon
FL-3	8/13/2010	265.36	13.75	251.61	Vashon
FL-3	2/17/2011	265.36	11.40	253.96	Vashon
FL-3	8/8/2011	265.36	13.83	251.53	Vashon
FL-3	3/2/2012	265.36	12.80	252.56	Vashon
FL-3	7/31/2012	265.36	13.64	251.72	Vashon
FL-3	2/5/2013	265.36	12.91	252.45	Vashon
FL-3	8/6/2013	265.36	15.30	250.06	Vashon
FL-03	2/13/2014	265.36	14.15	251.21	Vashon
FL-03	9/9/2014	265.36	14.65	250.71	Vashon
FL-4a	12/1/2001	279.00	11.59	267.41	Vashon
FL-4a	4/1/2002	279.00	10.51	268.49	Vashon
FL-4a	6/1/2002	279.00	11.53	267.47	Vashon
FL-4a	9/1/2002	279.00	13.07	265.93	Vashon
FL-4a	2/3/2003	279.00	11.03	267.97	Vashon
FL-4a	3/3/2003	279.00	12.28	266.72	Vashon
FL-4a	7/1/2003	279.00	12.36	266.64	Vashon
FL-4a	10/4/2004	279.00	13.74	265.26	Vashon
FL-4a	4/15/2005	279.00	13.43	265.57	Vashon
FL-4a	7/21/2005	279.00	13.40	265.60	Vashon
FL-4a	9/19/2005	279.00	13.93	265.07	Vashon
FL-4a	3/17/2006	279.00	10.09	268.91	Vashon
FL-4a	9/20/2006	279.00	13.01	265.99	Vashon
FL-4a	3/21/2007	279.00	9.92	269.08	Vashon
FL-4a	9/28/2007	279.00	12.70	266.30	Vashon
FL-4a	3/25/2008	279.00	11.28	267.72	Vashon
FL-4a	10/8/2008	279.00	13.65	265.35	Vashon

Well ID	Date	Measuring Pt	Depth to SWL	GW Elev	Aquifer
FL-4a	2/3/2009	279.00	11.86	267.14	Vashon
FL-4a	8/3/2009	279.00	12.96	266.04	Vashon
FL-4b	12/1/2001	279.48	12.17	267.31	Vashon
FL-4b	4/1/2002	279.48	11.26	268.22	Vashon
FL-4b	6/1/2002	279.48	11.20	268.28	Vashon
FL-4b	9/1/2002	279.48	13.56	265.92	Vashon
FL-4b	2/3/2003	279.48	10.98	268.50	Vashon
FL-4b	3/3/2003	279.48	12.83	266.65	Vashon
FL-4b	7/1/2003	279.48	12.80	266.68	Vashon
FL-4b	10/4/2004	279.48	13.74	265.74	Vashon
FL-4b	4/15/2005	279.48	13.00	266.48	Vashon
FL-4b	7/19/2005	279.48	16.96	262.52	Vashon
FL-4b	9/19/2005	279.48	13.35	266.13	Vashon
FL-4b	3/17/2006	279.48	10.91	268.57	Vashon
FL-4b	9/20/2006	279.48	13.49	265.99	Vashon
FL-4b	3/21/2007	279.48	10.80	268.68	Vashon
FL-4b	9/28/2007	279.48	13.22	266.26	Vashon
FL-4b	3/25/2008	279.48	11.99	267.49	Vashon
FL-4b	10/8/2008	279.48	14.05	265.43	Vashon
FL-4b	2/3/2009	279.48	12.45	267.03	Vashon
FL-4b	8/3/2009	279.48	13.41	266.07	Vashon
FL-4b	2/11/2010	279.48	12.00	267.48	Vashon
FL-4b	8/13/2010	279.48	12.20	267.28	Vashon
FL-4b	2/16/2011	279.48	11.31	268.17	Vashon
FL-4b	8/10/2011	279.48	11.70	267.78	Vashon
FL-4b	2/23/2012	279.48	11.76	267.72	Vashon
FL-4b	8/2/2012	279.48	12.24	267.24	Vashon
FL-4b	2/6/2013	279.48	11.80	267.68	Vashon
FL-4b	8/8/2013	279.48	12.80	266.68	Vashon
FL-04b	2/13/2014	279.48	12.40	267.08	Vashon
FL-04b	9/8/2014	279.48	12.37	267.11	Vashon
FL-6	12/1/2001	267.98	10.93	257.05	Vashon
FL-6	4/1/2002	267.98	11.08	256.90	Vashon
FL-6	6/1/2002	267.98	12.36	255.62	Vashon
FL-6	9/1/2002	267.98	15.75	252.23	Vashon
FL-6	2/3/2003	267.98	11.50	256.48	Vashon
FL-6	3/3/2003	267.98	12.89	255.09	Vashon
FL-6	7/1/2003	267.98	15.53	252.45	Vashon
FL-6	10/4/2004	267.98	17.89	250.09	Vashon
FL-6	4/14/2005	267.98	15.86	252.12	Vashon
FL-6	7/29/2005	267.98	16.50	251.48	Vashon
FL-6	9/26/2005	267.98	18.52	249.46	Vashon
FL-6	3/17/2006	267.98	11.81	256.17	Vashon
FL-6	9/25/2006	267.98	16.87	251.11	Vashon
FL-6	3/22/2007	267.98	10.73	257.25	Vashon
FL-6	10/19/2007	267.98	15.64	252.34	Vashon
FL-6	3/25/2008	267.98	13.35	254.63	Vashon
FL-6	10/8/2008	267.98	18.37	249.61	Vashon
FL-6	2/5/2009	267.98	12.73	255.25	Vashon
FL-6	8/5/2009	267.98	13.95	254.03	Vashon
FL-6	2/10/2010	267.98	11.55	256.43	Vashon
FL-6	8/11/2010	267.98	13.21	254.77	Vashon
FL-6	2/16/2011	267.98	11.30	256.68	Vashon
FL-6	8/9/2011	267.98	13.62	254.36	Vashon

Well ID	Date	Measuring Pt	Depth to SWL	GW Elev	Aquifer
FL-6	2/29/2012	267.98	13.11	254.87	Vashon
FL-6	8/3/2012	267.98	13.25	254.73	Vashon
FL-6	2/12/2013	267.98	13.23	254.75	Vashon
FL-6	8/9/2013	267.98	15.95	252.03	Vashon
FL-06	2/19/2014	267.98	11.15	256.83	Vashon
FL-06	9/5/2014	267.98	14.07	253.91	Vashon
LC-01	12/1/1998	276.85	12.97	263.88	Vashon
LC-01	3/1/1999	276.85	14.76	262.09	Vashon
LC-01	6/1/1999	276.85	17.01	259.84	Vashon
LC-01	9/1/1999	276.85	19.79	257.06	Vashon
LC-01	12/1/1999	276.85	15.80	261.05	Vashon
LC-01	3/1/2000	276.85	15.37	261.48	Vashon
LC-01	6/1/2000	276.85	17.61	259.24	Vashon
LC-01	9/1/2000	277.01	19.99	257.02	Vashon
LC-01	12/1/2000	277.01	18.74	258.27	Vashon
LC-01	3/1/2001	276.05	18.36	257.69	Vashon
LC-01	6/1/2001	276.05	19.18	256.87	Vashon
LC-01	9/1/2001	276.05	21.71	254.34	Vashon
LC-01	12/1/2001	276.05	16.34	259.71	Vashon
LC-01	4/1/2002	276.05	14.57	261.48	Vashon
LC-01	6/1/2002	276.05	17.20	258.85	Vashon
LC-01	9/1/2002	276.05	18.74	257.31	Vashon
LC-01	2/3/2003	276.05	17.14	258.91	Vashon
LC-01	3/3/2003	276.05	16.05	260.00	Vashon
LC-01	7/1/2003	276.05	17.87	258.18	Vashon
LC-01	10/4/2004	276.05	19.78	256.27	Vashon
LC-01	2/10/2010	276.05	15.00	261.05	Vashon
LC-01	6/3/2010	276.05	15.89	260.16	Vashon
LC-01	8/10/2010	276.05	17.35	258.70	Vashon
LC-01	2/16/2011	276.05	14.90	261.15	Vashon
LC-01	8/10/2011	276.05	16.90	259.15	Vashon
LC-01	2/23/2012	276.05	15.13	260.92	Vashon
LC-01	7/31/2012	276.05	16.98	259.07	Vashon
LC-01	2/6/2013	276.05	15.57	260.48	Vashon
LC-01	8/7/2013	276.05	17.95	258.1	Vashon
LC-01	2/18/2014	276.05	14.80	261.25	Vashon
LC-01	9/4/2014	276.05	17.51	258.54	Vashon
LC-03	4/23/1997	275.97	13.16	262.81	Vashon
LC-03	7/16/1997	275.97	19.13	256.84	Vashon
LC-03	10/16/1997	275.97	19.20	256.77	Vashon
LC-03	1/30/1998	275.97	15.36	260.61	Vashon
LC-03	4/2/1998	275.97	16.55	259.42	Vashon
LC-03	7/7/1998	275.97	20.60	255.37	Vashon
LC-03	9/22/1998	275.97	22.00	253.97	Vashon
LC-03	12/1/1998	275.97	14.50	261.47	Vashon
LC-03	3/1/1999	275.97	16.25	259.72	Vashon
LC-03	6/1/1999	275.97	18.60	257.37	Vashon
LC-03	9/1/1999	275.97	21.76	254.21	Vashon
LC-03	12/1/1999	275.97	15.84	260.13	Vashon
LC-03	3/1/2000	275.97	16.76	259.21	Vashon
LC-03	6/1/2000	275.97	19.19	256.78	Vashon
LC-03	3/1/2001	274.95	20.20	254.75	Vashon
LC-03	6/1/2001	274.95	21.32	253.63	Vashon
LC-03	9/1/2001	274.95	23.94	251.01	Vashon

Well ID	Date	Measuring Pt	Depth to SWL	GW Elev	Aquifer
LC-03	12/1/2001	274.95	17.63	257.32	Vashon
LC-03	4/1/2002	274.95	15.76	259.19	Vashon
LC-03	6/1/2002	274.95	17.56	257.39	Vashon
LC-03	9/1/2002	274.95	20.59	254.36	Vashon
LC-03	2/3/2003	274.95	16.70	258.25	Vashon
LC-03	3/3/2003	274.95	17.03	257.92	Vashon
LC-03	7/1/2003	274.95	19.43	255.52	Vashon
LC-03	10/4/2004	274.95	21.28	253.67	Vashon
LC-03	4/6/2005	274.95	18.58	256.37	Vashon
LC-03	7/29/2005	274.95	20.15	254.80	Vashon
LC-03	8/29/2005	274.95	20.97	253.98	Vashon
LC-03	3/17/2006	274.95	15.71	259.24	Vashon
LC-03	9/19/2006	274.95	20.43	254.52	Vashon
LC-03	3/20/2007	274.95	15.21	259.74	Vashon
LC-03	10/4/2007	274.95	19.76	255.19	Vashon
LC-03	3/25/2008	274.95	17.28	257.67	Vashon
LC-03	10/8/2008	274.95	21.25	253.70	Vashon
LC-03	2/5/2009	274.95	16.64	258.31	Vashon
LC-03	8/4/2009	274.95	19.63	255.32	Vashon
LC-03	2/10/2010	274.95	16.15	258.80	Vashon
LC-03	8/10/2010	274.95	18.70	256.25	Vashon
LC-03	2/16/2011	274.95	16.10	258.85	Vashon
LC-03	8/10/2011	274.95	18.30	256.65	Vashon
LC-03	2/23/2012	274.95	16.44	258.51	Vashon
LC-03	7/31/2012	274.95	17.46	257.49	Vashon
LC-03	2/6/2013	274.95	16.80	258.15	Vashon
LC-03	8/7/2013	274.95	19.50	255.45	Vashon
LC- 03	2/18/2014	274.95	16.55	258.40	Vashon
LC- 03	9/8/2014	274.95	19.13	255.82	Vashon
LC-05	10/7/1996	278.74	28.84	249.90	Vashon
LC-05	1/24/1997	278.74	21.05	257.69	Vashon
LC-05	4/23/1997	278.74	20.75	257.99	Vashon
LC-05	7/16/1997	278.74	26.93	251.81	Vashon
LC-05	10/16/1997	278.74	27.10	251.64	Vashon
LC-05	1/30/1998	278.74	22.95	255.79	Vashon
LC-05	4/2/1998	278.74	24.49	254.25	Vashon
LC-05	7/7/1998	278.74	28.15	250.59	Vashon
LC-05	9/22/1998	278.74	30.40	248.34	Vashon
LC-05	12/1/1998	278.74	21.15	257.59	Vashon
LC-05	3/1/1999	278.74	23.29	255.45	Vashon
LC-05	6/1/1999	278.74	25.16	253.58	Vashon
LC-05	9/1/1999	278.74	30.02	248.72	Vashon
LC-05	12/1/1999	278.74	24.08	254.66	Vashon
LC-05	3/1/2000	278.74	23.39	255.35	Vashon
LC-05	6/1/2000	278.74	25.92	252.82	Vashon
LC-05	9/1/2000	278.84	29.84	249.00	Vashon
LC-05	12/1/2000	278.84	29.25	249.59	Vashon
LC-05	3/1/2001	278.08	28.77	249.31	Vashon
LC-05	6/1/2001	278.08	29.20	248.88	Vashon
LC-05	9/1/2001	278.08	31.03	247.05	Vashon
LC-05	12/1/2001	278.08	24.01	254.07	Vashon
LC-05	4/1/2002	278.08	22.82	255.26	Vashon
LC-05	6/1/2002	278.08	24.81	253.27	Vashon
LC-05	9/1/2002	278.08	26.69	251.39	Vashon

Well ID	Date	Measuring Pt	Depth to SWL	GW Elev	Aquifer
LC-05	2/3/2003	278.08	23.81	254.27	Vashon
LC-05	3/3/2003	278.08	24.43	253.65	Vashon
LC-05	7/1/2003	278.08	26.92	251.16	Vashon
LC-05	10/4/2004	278.08	29.32	248.76	Vashon
LC-05	4/8/2005	278.08	26.77	251.31	Vashon
LC-05	7/20/2005	278.08	27.69	250.39	Vashon
LC-05	3/14/2006	278.08	22.94	255.14	Vashon
LC-05	9/20/2006	278.08	28.17	249.91	Vashon
LC-05	3/21/2007	278.08	22.35	255.73	Vashon
LC-05	9/28/2007	278.08	27.16	250.92	Vashon
LC-05	3/25/2008	278.08	24.60	253.48	Vashon
LC-05	10/8/2008	278.08	29.72	248.36	Vashon
LC-05	2/5/2009	278.08	23.67	254.41	Vashon
LC-05	8/4/2009	278.08	26.91	251.17	Vashon
LC-05	2/10/2010	278.08	22.70	255.38	Vashon
LC-05	8/11/2010	278.08	25.40	252.68	Vashon
LC-05	2/16/2011	278.08	23.15	254.93	Vashon
LC-05	8/9/2011	278.08	25.50	252.58	Vashon
LC-05	2/29/2012	278.08	24.12	253.96	Vashon
LC-05	7/31/2012	278.08	25.45	252.63	Vashon
LC-05	2/6/2013	278.08	24.31	253.77	Vashon
LC-05	8/7/2013	278.08	27.10	250.98	Vashon
LC- 05	2/18/2014	278.08	24.30	253.78	Vashon
LC- 05	9/8/2014	278.08	26.29	251.79	Vashon
LC-06	4/23/1997	286.20	20.95	265.25	Vashon
LC-06	7/16/1997	286.20	25.91	260.29	Vashon
LC-06	10/16/1997	286.20	25.74	260.46	Vashon
LC-06	1/30/1998	286.20	22.25	263.95	Vashon
LC-06	4/2/1998	286.20	23.59	262.61	Vashon
LC-06	7/7/1998	286.20	25.98	260.22	Vashon
LC-06	9/22/1998	286.20	26.81	259.39	Vashon
LC-06	12/1/1998	286.20	19.89	266.31	Vashon
LC-06	3/1/1999	286.20	22.97	263.23	Vashon
LC-06	6/1/1999	286.20	25.52	260.68	Vashon
LC-06	9/1/1999	286.20	27.65	258.55	Vashon
LC-06	12/1/1999	286.20	23.02	263.18	Vashon
LC-06	3/1/2000	286.20	22.55	263.65	Vashon
LC-06	6/1/2000	286.20	24.99	261.21	Vashon
LC-06	9/1/2000	286.45	27.79	258.66	Vashon
LC-06	12/1/2000	286.45	26.60	259.85	Vashon
LC-06	3/1/2001	286.44	26.29	260.15	Vashon
LC-06	6/1/2001	286.44	27.30	259.14	Vashon
LC-06	9/1/2001	286.44	29.99	256.45	Vashon
LC-06	12/1/2001	286.44	21.75	264.69	Vashon
LC-06	4/1/2002	286.44	22.75	263.69	Vashon
LC-06	6/1/2002	286.44	22.39	264.05	Vashon
LC-06	9/1/2002	286.44	26.76	259.68	Vashon
LC-06	2/3/2003	286.44	22.03	264.41	Vashon
LC-06	3/3/2003	286.44	24.58	261.86	Vashon
LC-06	7/1/2003	286.44	25.99	260.45	Vashon
LC-06	10/4/2004	286.44	27.48	258.96	Vashon
LC-06	4/14/2005	286.44	24.97	261.47	Vashon
LC-06	7/29/2005	286.44	26.60	259.84	Vashon
LC-06	9/6/2005	286.44	27.23	259.21	Vashon

Well ID	Date	Measuring Pt	Depth to SWL	GW Elev	Aquifer
LC-06	3/17/2006	286.44	22.78	263.66	Vashon
LC-06	9/19/2006	286.44	26.59	259.85	Vashon
LC-06	3/20/2007	286.44	22.01	264.43	Vashon
LC-06	9/28/2007	286.44	26.18	260.26	Vashon
LC-06	3/25/2008	286.44	24.40	262.04	Vashon
LC-06	10/8/2008	286.44	27.28	259.16	Vashon
LC-06	2/5/2009	286.44	23.78	262.66	Vashon
LC-06	8/4/2009	286.44	26.15	260.29	Vashon
LC-06	2/10/2010	286.44	23.40	263.04	Vashon
LC-06	8/10/2010	286.44	25.60	260.84	Vashon
LC-06	2/16/2011	286.44	23.25	263.19	Vashon
LC-06	8/10/2011	286.44	25.19	261.25	Vashon
LC-06	2/23/2012	286.44	23.49	262.95	Vashon
LC-06	7/31/2012	286.44	25.33	261.11	Vashon
LC-06	2/6/2013	286.44	24.00	262.44	Vashon
LC-06	8/7/2013	286.44	26.00	260.44	Vashon
LC- 06	2/18/2014	286.44	23.60	262.84	Vashon
LC- 06	9/8/2014	286.44	25.74	260.70	Vashon
LC-08	10/4/2004	275.31	49.04	226.27	Vashon
LC-10	4/6/2005	287.99	25.19	262.80	Vashon
LC-10	7/29/2005	287.99	27.03	260.96	Vashon
LC-10	3/17/2006	287.99	22.86	265.13	Vashon
LC-10	9/26/2006	287.99	26.87	261.12	Vashon
LC-10	3/23/2007	287.99	21.12	266.87	Vashon
LC-10	9/28/2007	287.99	26.37	261.62	Vashon
LC-10	3/25/2008	287.99	24.54	263.45	Vashon
LC-10	10/8/2008	287.99	27.32	260.67	Vashon
LC-10	2/5/2009	287.99	24.10	263.89	Vashon
LC-10	8/4/2009	287.99	26.32	261.67	Vashon
LC-10	2/10/2010	287.99	23.50	264.49	Vashon
LC-10	8/10/2010	287.99	25.72	262.27	Vashon
LC-10	2/16/2011	287.99	23.46	264.53	Vashon
LC-10	8/8/2011	287.99	25.15	262.84	Vashon
LC-10	2/29/2012	287.99	23.78	264.21	Vashon
LC-10	7/31/2012	287.99	25.50	262.49	Vashon
LC-10	2/6/2013	287.99	24.22	263.77	Vashon
LC-10	8/8/2013	287.99	26.30	261.69	Vashon
LC- 10	2/13/2014	287.99	25.00	262.99	Vashon
LC- 10	9/8/2014	287.99	25.94	262.05	Vashon
LC-101	10/7/1996	272.68	24.22	248.46	Vashon
LC-101	1/24/1997	272.68	16.54	256.14	Vashon
LC-101	4/23/1997	272.68	18.62	254.06	Vashon
LC-101	7/16/1997	272.68	22.28	250.40	Vashon
LC-101	10/16/1997	272.68	22.54	250.14	Vashon
LC-101	1/30/1998	272.68	18.37	254.31	Vashon
LC-101	4/2/1998	272.68	19.72	252.96	Vashon
LC-101	7/7/1998	272.68	22.98	249.70	Vashon
LC-101	9/22/1998	272.68	25.35	247.33	Vashon
LC-101	12/1/1998	272.68	16.10	256.58	Vashon
LC-101	3/1/1999	272.68	18.20	254.48	Vashon
LC-101	6/1/1999	272.68	20.14	252.54	Vashon
LC-101	9/1/1999	272.68	24.95	247.73	Vashon
LC-101	12/1/1999	272.68	18.81	253.87	Vashon
LC-101	3/1/2000	272.68	18.21	254.47	Vashon

Historical Depth to Water measurements

Log RAM, Joint Base Lewis-McChord, Washington 98433

Well ID	Date	Measuring Pt	Depth to SWL	GW Elev	Aquifer
LC-101	6/1/2000	272.68	20.64	252.04	Vashon
LC-101	9/1/2000	272.62	24.60	248.02	Vashon
LC-101	12/1/2000	272.62	24.78	247.84	Vashon
LC-101	3/1/2001	272.62	24.14	248.48	Vashon
LC-101	6/1/2001	272.62	23.89	248.73	Vashon
LC-101	9/1/2001	272.62	26.51	246.11	Vashon
LC-101	12/1/2001	272.62	18.48	254.14	Vashon
LC-101	4/1/2002	272.62	18.49	254.13	Vashon
LC-101	6/1/2002	272.62	19.17	253.45	Vashon
LC-101	9/1/2002	272.62	21.63	250.99	Vashon
LC-101	2/3/2003	272.62	19.36	253.26	Vashon
LC-101	3/3/2003	272.62	19.93	252.69	Vashon
LC-101	7/1/2003	272.62	22.44	250.18	Vashon
LC-101	10/4/2004	272.62	24.94	247.68	Vashon
LC-103	10/7/1996	291.62	30.70	260.92	Vashon
LC-103	1/24/1997	291.62	24.00	267.62	Vashon
LC-103	4/23/1997	291.62	25.55	266.07	Vashon
LC-103	7/16/1997	291.62	29.77	261.85	Vashon
LC-103	10/16/1997	291.62	29.56	262.06	Vashon
LC-103	1/30/1998	291.62	25.80	265.82	Vashon
LC-103	4/2/1998	291.62	27.19	264.43	Vashon
LC-103	7/7/1998	291.62	29.80	261.82	Vashon
LC-103	9/22/1998	291.62	30.32	261.30	Vashon
LC-103	12/1/1998	291.62	23.25	268.37	Vashon
LC-108	10/7/1996	281.20	16.45	264.75	Vashon
LC-108	1/24/1997	281.20	10.46	270.74	Vashon
LC-108	4/23/1997	281.20	11.07	270.13	Vashon
LC-108	7/16/1997	281.20	14.91	266.29	Vashon
LC-108	10/16/1997	281.20	16.20	265.00	Vashon
LC-108	1/30/1998	281.20	11.75	269.45	Vashon
LC-108	4/2/1998	281.20	12.34	268.86	Vashon
LC-108	7/7/1998	281.20	15.86	265.34	Vashon
LC-108	9/22/1998	281.20	18.64	262.56	Vashon
LC-108	12/1/1998	281.20	10.21	270.99	Vashon
LC-108	3/1/1999	281.20	11.70	269.50	Vashon
LC-108	6/1/1999	281.20	14.68	266.52	Vashon
LC-108	9/1/1999	281.20	18.85	262.35	Vashon
LC-108	12/1/1999	281.20	12.73	268.47	Vashon
LC-108	3/1/2000	281.20	11.78	269.42	Vashon
LC-108	6/1/2000	281.20	14.59	266.61	Vashon
LC-108	9/1/2000	281.23	17.91	263.32	Vashon
LC-108	12/1/2000	281.23	18.15	263.08	Vashon
LC-108	3/1/2001	281.22	18.09	263.13	Vashon
LC-108	6/1/2001	281.22	17.47	263.75	Vashon
LC-108	9/1/2001	281.22	18.82	262.40	Vashon
LC-108	9/25/2006	281.22	14.88	266.34	Vashon
LC-108	3/22/2007	281.22	10.22	271.00	Vashon
LC-108	4/3/2008	281.22	13.49	267.73	Vashon
LC-108	10/8/2008	281.22	17.91	263.31	Vashon
LC-108	2/3/2009	281.22	13.79	267.43	Vashon
LC-108	8/3/2009	281.22	13.38	267.84	Vashon
LC-108	2/11/2010	281.22	12.70	268.52	Vashon
LC-108	8/10/2010	281.22	15.32	265.90	Vashon
LC-108	2/14/2011	281.22	12.70	268.52	Vashon

Well ID	Date	Measuring Pt	Depth to SWL	GW Elev	Aquifer
LC-108	8/10/2011	281.22	12.80	268.42	Vashon
LC-108	2/22/2012	281.22	13.18	268.04	Vashon
LC-108	7/31/2012	281.22	14.98	266.24	Vashon
LC-108	2/7/2013	281.22	13.49	267.73	Vashon
LC-108	8/7/2013	281.22	15.68	265.54	Vashon
LC-108	2/18/2014	281.22	11.55	269.67	Vashon
LC-108	9/3/2014	281.22	14.50	266.72	Vashon
LC-109	1/24/1997	267.78	10.93	256.85	Vashon
LC-109	4/23/1997	267.78	13.65	254.13	Vashon
LC-11	7/16/1997	289.69	27.07	262.62	Vashon
LC-11	1/30/1998	289.69	23.01	266.68	Vashon
LC-11	4/2/1998	289.69	24.47	265.22	Vashon
LC-11	7/7/1998	289.69	28.30	261.39	Vashon
LC-11	9/22/1998	289.69	29.30	260.39	Vashon
LC-11	12/1/1998	289.69	21.45	268.24	Vashon
LC-11	3/1/1999	289.69	23.82	265.87	Vashon
LC-11	6/1/1999	289.69	26.72	262.97	Vashon
LC-11	9/1/1999	289.69	29.15	260.54	Vashon
LC-11	12/1/1999	289.69	25.23	264.46	Vashon
LC-11	3/1/2000	289.69	24.74	264.95	Vashon
LC-11	6/1/2000	289.69	27.31	262.38	Vashon
LC-11	9/1/2000	289.91	28.18	261.73	Vashon
LC-11	12/1/2000	289.91	27.90	262.01	Vashon
LC-11	3/1/2001	288.73	27.59	261.14	Vashon
LC-11	6/1/2001	288.73	28.82	259.91	Vashon
LC-11	9/1/2001	288.73	30.83	257.90	Vashon
LC-11	12/1/2001	288.73	23.73	265.00	Vashon
LC-11	4/1/2002	288.73	23.74	264.99	Vashon
LC-11	6/1/2002	288.73	24.01	264.72	Vashon
LC-11	9/1/2002	288.73	27.60	261.13	Vashon
LC-11	2/3/2003	288.73	23.88	264.85	Vashon
LC-11	3/3/2003	288.73	25.75	262.98	Vashon
LC-11	7/1/2003	288.73	27.23	261.50	Vashon
LC-110	10/7/1996	269.31	21.48	247.83	Vashon
LC-110	1/24/1997	269.31	13.66	255.65	Vashon
LC-110	4/23/1997	269.31	16.49	252.82	Vashon
LC-110	7/16/1997	269.31	19.64	249.67	Vashon
LC-110	10/16/1997	269.31	19.72	249.59	Vashon
LC-110	1/30/1998	269.31	15.88	253.43	Vashon
LC-110	4/2/1998	269.31	17.83	251.48	Vashon
LC-110	7/7/1998	269.31	20.10	249.21	Vashon
LC-110	9/22/1998	269.31	22.20	247.11	Vashon
LC-110	12/1/1998	269.31	12.93	256.38	Vashon
LC-110	3/1/1999	269.31	15.64	253.67	Vashon
LC-110	6/1/1999	269.31	17.28	252.03	Vashon
LC-110	9/1/1999	269.31	22.30	247.01	Vashon
LC-110	12/1/1999	269.31	16.06	253.25	Vashon
LC-110	3/1/2000	269.31	15.14	254.17	Vashon
LC-110	6/1/2000	269.31	17.61	251.70	Vashon
LC-110	9/1/2000	269.27	21.83	247.44	Vashon
LC-110	12/1/2000	269.27	22.04	247.23	Vashon
LC-110	3/1/2001	269.27	21.80	247.47	Vashon
LC-110	6/1/2001	269.27	21.15	248.12	Vashon
LC-110	9/1/2001	269.27	23.27	246.00	Vashon

Well ID	Date	Measuring Pt	Depth to SWL	GW Elev	Aquifer
LC-110	12/1/2001	269.27	15.31	253.96	Vashon
LC-110	4/1/2002	269.27	15.65	253.62	Vashon
LC-110	6/1/2002	269.27	15.94	253.33	Vashon
LC-110	9/1/2002	269.27	18.01	251.26	Vashon
LC-110	2/3/2003	269.27	16.92	252.35	Vashon
LC-110	3/3/2003	269.27	17.40	251.87	Vashon
LC-110	7/1/2003	269.27	20.32	248.95	Vashon
LC-110	10/4/2004	269.27	22.02	247.25	Vashon
LC-110	4/14/2005	269.27	29.40	239.87	Vashon
LC-110	7/19/2005	269.27	20.83	248.44	Vashon
LC-110	11/4/2005	269.27	22.32	246.95	Vashon
LC-110	3/14/2006	269.27	16.02	253.25	Vashon
LC-110	9/21/2006	269.27	21.15	248.12	Vashon
LC-110	3/23/2007	269.27	14.19	255.08	Vashon
LC-110	9/28/2007	269.27	18.21	251.06	Vashon
LC-110	3/25/2008	269.27	16.80	252.47	Vashon
LC-110	10/8/2008	269.27	21.72	247.55	Vashon
LC-110	2/5/2009	269.27	15.92	253.35	Vashon
LC-110	8/5/2009	269.27	18.12	251.15	Vashon
LC-110	2/10/2010	269.27	14.30	254.97	Vashon
LC-110	8/12/2010	269.27	17.33	251.94	Vashon
LC-110	2/16/2011	269.27	14.98	254.29	Vashon
LC-110	8/9/2011	269.27	17.23	252.04	Vashon
LC-110	3/1/2012	269.27	16.18	253.09	Vashon
LC-110	8/2/2012	269.27	17.00	252.27	Vashon
LC-110	2/7/2013	269.27	16.68	252.59	Vashon
LC-110	9/10/2014	269.27	18.08	251.19	Vashon
LC-111	10/7/1996	270.06	22.37	247.69	Vashon
LC-111	1/24/1997	270.06	14.41	255.65	Vashon
LC-111	4/23/1997	270.06	11.23	258.83	Vashon
LC-111	7/16/1997	270.06	20.47	249.59	Vashon
LC-111	10/16/1997	270.06	20.50	249.56	Vashon
LC-111	1/30/1998	270.06	16.53	253.53	Vashon
LC-111	4/2/1998	270.06	18.50	251.56	Vashon
LC-111	7/7/1998	270.06	20.92	249.14	Vashon
LC-111	9/22/1998	270.06	22.92	247.14	Vashon
LC-111	12/1/1998	270.06	13.55	256.51	Vashon
LC-111	3/1/1999	270.06	16.10	253.96	Vashon
LC-111	6/1/1999	270.06	17.86	252.20	Vashon
LC-111	9/1/1999	270.06	22.95	247.11	Vashon
LC-111	12/1/1999	270.06	16.83	253.23	Vashon
LC-111	3/1/2000	270.06	15.95	254.11	Vashon
LC-111	6/1/2000	270.06	18.46	251.60	Vashon
LC-111	9/1/2000	270.06	22.73	247.33	Vashon
LC-111	12/1/2000	270.06	22.92	247.14	Vashon
LC-111	3/1/2001	270.06	22.68	247.38	Vashon
LC-111	6/1/2001	270.06	22.08	247.98	Vashon
LC-111	9/1/2001	270.06	24.23	245.83	Vashon
LC-111	12/1/2001	270.06	16.18	253.88	Vashon
LC-111	4/1/2002	270.06	16.37	253.69	Vashon
LC-111	6/1/2002	270.06	16.87	253.19	Vashon
LC-111	9/1/2002	270.06	18.56	251.50	Vashon
LC-111	2/3/2003	270.06	17.23	252.83	Vashon
LC-111	3/3/2003	270.06	18.18	251.88	Vashon

Historical Depth to Water measurements

Log RAM, Joint Base Lewis-McChord, Washington 98433

Well ID	Date	Measuring Pt	Depth to SWL	GW Elev	Aquifer
LC-111	7/1/2003	270.06	20.62	249.44	Vashon
LC-111a	10/4/2004	270.06	22.90	247.16	Vashon
LC-111a	4/8/2005	270.06	20.71	249.35	Vashon
LC-111a	7/19/2005	270.06	21.66	248.40	Vashon
LC-111a	11/4/2005	270.06	23.10	246.96	Vashon
LC-111a	3/14/2006	270.06	16.74	253.32	Vashon
LC-111a	9/21/2006	270.06	21.83	248.23	Vashon
LC-111a	3/23/2007	270.06	15.21	254.85	Vashon
LC-111a	9/28/2007	270.06	19.27	250.79	Vashon
LC-111a	3/25/2008	270.06	17.86	252.20	Vashon
LC-111a	10/8/2008	270.06	23.02	247.04	Vashon
LC-111a	2/5/2009	270.06	19.72	250.34	Vashon
LC-111a	8/5/2009	270.06	19.42	250.64	Vashon
LC-111a	2/10/2010	270.06	15.10	254.96	Vashon
LC-111a	8/12/2010	270.06	18.63	251.43	Vashon
LC-111a	2/16/2011	270.06	16.02	254.04	Vashon
LC-111a	8/9/2011	270.06	18.33	251.73	Vashon
LC-111a	3/1/2012	270.06	17.22	252.84	Vashon
LC-111a	8/2/2012	270.06	18.10	251.96	Vashon
LC-111a	2/7/2013	270.06	17.83	252.23	Vashon
LC-111a	2/18/2014	270.06	16.90	253.16	Vashon
LC-111a	9/9/2014	270.06	19.30	250.76	Vashon
LC-111a	8/7/2013	270.06	20.40	249.66	Vashon
LC-111b	7/7/1998	270.22	28.42	241.80	Vashon
LC-111b	9/22/1998	270.22	29.67	240.55	Vashon
LC-111b	12/1/1998	270.22	20.45	249.77	Vashon
LC-111b	3/1/1999	270.22	23.19	247.03	Vashon
LC-111b	6/1/1999	270.22	25.29	244.93	Vashon
LC-111b	9/1/1999	270.22	29.68	240.54	Vashon
LC-111b	12/1/1999	270.22	24.44	245.78	Vashon
LC-111b	3/1/2000	270.22	23.67	246.55	Vashon
LC-111b	6/1/2000	270.22	25.98	244.24	Vashon
LC-111b	3/1/2001	270.20	28.65	241.55	Vashon
LC-111b	6/1/2001	270.20	28.63	241.57	Vashon
LC-111b	9/1/2001	270.20	30.29	239.91	Vashon
LC-111b	12/1/2001	270.20	23.42	246.78	Vashon
LC-111b	4/1/2002	270.20	23.45	246.75	Vashon
LC-111b	6/1/2002	270.20	24.16	246.04	Vashon
LC-111b	9/1/2002	270.20	26.37	243.83	Vashon
LC-111b	2/3/2003	270.20	24.35	245.85	Vashon
LC-111b	3/3/2003	270.20	25.04	245.16	Vashon
LC-111b	7/1/2003	270.20	27.17	243.03	Vashon
LC-111b	10/4/2004	270.20	29.04	241.16	Vashon
LC-111b	4/8/2005	270.20	27.88	242.32	Vashon
LC-111b	7/19/2005	270.20	28.37	241.83	Vashon
LC-111b	9/7/2005	270.20	30.07	240.13	Vashon
LC-111b	3/14/2006	270.20	22.99	247.21	Vashon
LC-111b	9/21/2006	270.20	25.88	244.32	Vashon
LC-111b	3/23/2007	270.20	19.43	250.77	Vashon
LC-111b	9/19/2007	270.20	25.28	244.92	Vashon
LC-111b	3/25/2008	270.20	22.60	247.60	Vashon
LC-111b	10/8/2008	270.20	27.07	243.13	Vashon
LC-111b	2/3/2009	270.20	16.85	253.35	Vashon
LC-111b	8/5/2009	270.20	25.25	244.95	Vashon

Well ID	Date	Measuring Pt	Depth to SWL	GW Elev	Aquifer
LC-112	4/23/1997	271.14	18.45	252.69	Vashon
LC-112	7/16/1997	271.14	21.77	249.37	Vashon
LC-112	10/16/1997	271.14	21.79	249.35	Vashon
LC-112	1/30/1998	271.14	17.71	253.43	Vashon
LC-112	4/2/1998	271.14	19.50	251.64	Vashon
LC-112	7/7/1998	271.14	22.14	249.00	Vashon
LC-112	6/1/1999	271.14	19.67	251.47	Vashon
LC-112	12/1/1999	271.14	18.12	253.02	Vashon
LC-112	3/1/2000	271.14	17.64	253.50	Vashon
LC-112	6/1/2000	271.14	19.80	251.34	Vashon
LC-112	9/1/2000	271.13	24.03	247.10	Vashon
LC-112	12/1/2000	271.13	24.23	246.90	Vashon
LC-112	3/1/2001	271.13	23.88	247.25	Vashon
LC-112	6/1/2001	271.13	23.30	247.83	Vashon
LC-112	9/1/2001	271.13	25.42	245.71	Vashon
LC-112	12/1/2001	271.13	17.42	253.71	Vashon
LC-112	4/1/2002	271.13	17.50	253.63	Vashon
LC-112	6/1/2002	271.13	18.47	252.66	Vashon
LC-112	9/1/2002	271.13	20.40	250.73	Vashon
LC-112	2/3/2003	271.13	18.96	252.17	Vashon
LC-112	3/3/2003	271.13	19.34	251.79	Vashon
LC-112	7/1/2003	271.13	21.38	249.75	Vashon
LC-112	10/4/2004	271.13	24.15	246.98	Vashon
LC-112	4/8/2005	271.13	21.85	249.28	Vashon
LC-112	9/22/2006	271.13	22.91	248.22	Vashon
LC-112	10/19/2007	271.13	20.69	250.44	Vashon
LC-112	10/8/2008	271.13	24.44	246.69	Vashon
LC-112	2/5/2009	271.13	18.06	253.07	Vashon
LC-112	8/5/2009	271.13	21.02	250.11	Vashon
LC-112	2/10/2010	271.13	16.55	254.58	Vashon
LC-112	8/12/2010	271.13	20.05	251.08	Vashon
LC-112	2/16/2011	271.13	17.32	253.81	Vashon
LC-112	8/9/2011	271.13	19.60	251.53	Vashon
LC-112	2/29/2012	271.13	18.98	252.15	Vashon
LC-112	8/2/2012	271.13	20.03	251.10	Vashon
LC-112	2/7/2013	271.13	19.68	251.45	Vashon
LC-112	8/7/2013	271.13	21.80	249.33	Vashon
LC-112	2/18/2014	271.13	18.55	252.58	Vashon
LC-112	9/10/2014	271.13	20.90	250.23	Vashon
LC-113	10/7/1996	271.41	24.13	247.28	Vashon
LC-113	4/8/2005	271.39	21.67	249.72	Vashon
LC-113	7/19/2005	271.39	22.56	248.83	Vashon
LC-113	11/4/2005	271.39	24.42	246.97	Vashon
LC-113	3/14/2006	271.39	17.71	253.68	Vashon
LC-113	9/21/2006	271.39	22.96	248.43	Vashon
LC-113	3/23/2007	271.39	17.22	254.17	Vashon
LC-113	9/28/2007	271.39	21.68	249.71	Vashon
LC-113	3/25/2008	271.39	19.36	252.03	Vashon
LC-113	10/8/2008	271.39	24.42	246.97	Vashon
LC-113	2/5/2009	271.39	18.39	253.00	Vashon
LC-113	8/5/2009	271.39	21.29	250.10	Vashon
LC-113	2/10/2010	271.39	17.10	254.29	Vashon
LC-113	8/12/2010	271.39	20.30	251.09	Vashon
LC-113	2/16/2011	271.39	17.87	253.52	Vashon

Well ID	Date	Measuring Pt	Depth to SWL	GW Elev	Aquifer
LC-113	8/9/2011	271.39	20.15	251.24	Vashon
LC-113	3/1/2012	271.39	19.02	252.37	Vashon
LC-113	8/2/2012	271.39	20.16	251.23	Vashon
LC-113	2/7/2013	271.39	19.10	252.29	Vashon
LC-113	8/7/2013	271.39	21.80	249.59	Vashon
LC-113	2/18/2014	271.39	18.80	252.59	Vashon
LC-113	9/8/2014	271.39	20.95	250.44	Vashon
LC-114	10/7/1996	270.53	22.54	247.99	Vashon
LC-114	1/24/1997	270.53	14.81	255.72	Vashon
LC-114	4/23/1997	270.53	17.28	253.25	Vashon
LC-114	7/16/1997	270.53	20.61	249.92	Vashon
LC-114	10/16/1997	270.53	20.64	249.89	Vashon
LC-114	1/30/1998	270.53	16.71	253.82	Vashon
LC-114	4/2/1998	270.53	18.47	252.06	Vashon
LC-114	9/22/1998	270.53	22.80	247.73	Vashon
LC-114	12/1/1998	270.53	13.87	256.66	Vashon
LC-114	3/1/1999	270.53	16.58	253.95	Vashon
LC-114	6/1/1999	270.53	18.66	251.87	Vashon
LC-114	9/1/1999	270.53	23.25	247.28	Vashon
LC-114	12/1/1999	270.53	17.09	253.44	Vashon
LC-114	3/1/2000	270.53	16.41	254.12	Vashon
LC-114	6/1/2000	270.53	18.83	251.70	Vashon
LC-114	9/1/2000	270.50	22.52	247.98	Vashon
LC-114	12/1/2000	270.50	22.67	247.83	Vashon
LC-114	3/1/2001	270.50	22.28	248.22	Vashon
LC-114	6/1/2001	270.50	21.81	248.69	Vashon
LC-114	9/1/2001	270.50	24.31	246.19	Vashon
LC-114	12/1/2001	270.50	16.24	254.26	Vashon
LC-114	4/1/2002	270.50	16.55	253.95	Vashon
LC-114	6/1/2002	270.50	16.22	254.28	Vashon
LC-114	9/1/2002	270.50	19.37	251.13	Vashon
LC-114	2/3/2003	270.50	17.76	252.74	Vashon
LC-114	3/3/2003	270.50	18.47	252.03	Vashon
LC-114	7/1/2003	270.50	20.78	249.72	Vashon
LC-114	10/4/2004	270.50	23.08	247.42	Vashon
LC-114	4/8/2005	270.50	20.67	249.83	Vashon
LC-114	7/19/2005	270.50	21.52	248.98	Vashon
LC-114	11/4/2005	270.50	23.20	247.30	Vashon
LC-114	3/14/2006	270.50	16.81	253.69	Vashon
LC-114	9/21/2006	270.50	22.00	248.50	Vashon
LC-114	3/23/2007	270.50	16.29	254.21	Vashon
LC-114	9/28/2007	270.50	21.07	249.43	Vashon
LC-114	3/25/2008	270.50	18.73	251.77	Vashon
LC-114	10/8/2008	270.50	23.62	246.88	Vashon
LC-114	2/5/2009	270.50	17.32	253.18	Vashon
LC-114	8/5/2009	270.50	20.63	249.87	Vashon
LC-114	2/10/2010	270.50	16.20	254.30	Vashon
LC-114	8/12/2010	270.50	19.13	251.37	Vashon
LC-114	2/16/2011	270.50	17.32	253.18	Vashon
LC-114	8/9/2011	270.50	19.60	250.90	Vashon
LC-114	3/1/2012	270.50	18.36	252.14	Vashon
LC-114	8/2/2012	270.50	19.51	250.99	Vashon
LC-114	2/7/2013	270.5	17.81	252.69	Vashon
LC-114	8/9/2013	270.5	21.10	249.4	Vashon

Well ID	Date	Measuring Pt	Depth to SWL	GW Elev	Aquifer
LC-114	9/8/2014	270.5	20.15	250.35	Vashon
LC-115	10/7/1996	270.21	21.85	248.36	Vashon
LC-115	1/24/1997	270.21	14.07	256.14	Vashon
LC-115	4/23/1997	270.21	16.38	253.83	Vashon
LC-115	7/16/1997	270.21	19.96	250.25	Vashon
LC-115	10/16/1997	270.21	20.03	250.18	Vashon
LC-115	1/30/1998	270.21	15.94	254.27	Vashon
LC-115	4/2/1998	270.21	17.48	252.73	Vashon
LC-115	7/7/1998	270.21	20.31	249.90	Vashon
LC-115	9/22/1998	270.21	22.45	247.76	Vashon
LC-115	12/1/1998	270.21	13.44	256.77	Vashon
LC-115	3/1/1999	270.21	16.28	253.93	Vashon
LC-115	6/1/1999	270.21	18.22	251.99	Vashon
LC-115	9/1/1999	270.21	22.68	247.53	Vashon
LC-115	12/1/1999	270.21	16.33	253.88	Vashon
LC-115	3/1/2000	270.21	15.67	254.54	Vashon
LC-115	6/1/2000	270.21	18.12	252.09	Vashon
LC-115	9/1/2000	270.16	21.79	248.37	Vashon
LC-115	12/1/2000	270.16	21.98	248.18	Vashon
LC-115	3/1/2001	270.16	21.51	248.65	Vashon
LC-115	6/1/2001	270.16	21.12	249.04	Vashon
LC-115	9/1/2001	270.16	23.24	246.92	Vashon
LC-115	12/1/2001	270.16	15.22	254.94	Vashon
LC-115	4/1/2002	270.16	15.70	254.46	Vashon
LC-115	6/1/2002	270.16	16.16	254.00	Vashon
LC-115	9/1/2002	270.16	18.27	251.89	Vashon
LC-115	2/3/2003	270.16	16.77	253.39	Vashon
LC-115	3/3/2003	270.16	17.42	252.74	Vashon
LC-115	7/1/2003	270.16	19.80	250.36	Vashon
LC-115	10/4/2004	270.16	22.12	248.04	Vashon
LC-115	4/8/2005	270.16	19.57	250.59	Vashon
LC-115	7/19/2005	270.16	20.40	249.76	Vashon
LC-115	11/4/2005	270.16	22.31	247.85	Vashon
LC-115	3/14/2006	270.16	15.80	254.36	Vashon
LC-115	9/21/2006	270.16	20.99	249.17	Vashon
LC-115	3/23/2007	270.16	15.25	254.91	Vashon
LC-115	9/28/2007	270.16	20.40	249.76	Vashon
LC-115	3/25/2008	270.16	17.57	252.59	Vashon
LC-115	10/8/2008	270.16	22.52	247.64	Vashon
LC-115	2/5/2009	270.16	16.26	253.90	Vashon
LC-115	8/5/2009	270.16	19.78	250.38	Vashon
LC-115	2/10/2010	270.16	15.35	254.81	Vashon
LC-115	8/12/2010	270.16	18.20	251.96	Vashon
LC-115	2/16/2011	270.16	16.18	253.98	Vashon
LC-115	8/9/2011	270.16	18.60	251.56	Vashon
LC-115	3/1/2012	270.16	17.05	253.11	Vashon
LC-115	8/2/2012	270.16	18.40	251.76	Vashon
LC-115	2/7/2013	270.16	17.23	252.93	Vashon
LC-115	8/7/2013	270.16	19.90	250.26	Vashon
LC-115	2/18/2014	270.16	17.15	253.01	Vashon
LC-115	9/8/2014	270.16	19.07	251.09	Vashon
LC-116	10/7/1996	270.49	22.31	248.18	Vashon
LC-116	1/24/1997	270.49	14.60	255.89	Vashon
LC-116	4/23/1997	270.49	16.77	253.72	Vashon

Historical Depth to Water measurements

Log RAM, Joint Base Lewis-McChord, Washington 98433

Well ID	Date	Measuring Pt	Depth to SWL	GW Elev	Aquifer
LC-116	7/16/1997	270.49	20.45	250.04	Vashon
LC-116	10/16/1997	270.49	20.58	249.91	Vashon
LC-116	1/30/1998	270.49	16.44	254.05	Vashon
LC-116	4/2/1998	270.49	17.90	252.59	Vashon
LC-116	7/7/1998	270.49	20.82	249.67	Vashon
LC-116	9/22/1998	270.49	23.00	247.49	Vashon
LC-116	12/1/1998	270.49	14.04	256.45	Vashon
LC-116	3/1/1999	270.49	16.78	253.71	Vashon
LC-116	6/1/1999	270.49	18.72	251.77	Vashon
LC-116	9/1/1999	270.49	23.15	247.34	Vashon
LC-116	12/1/1999	270.49	16.73	253.76	Vashon
LC-116	3/1/2000	270.49	16.15	254.34	Vashon
LC-116	6/1/2000	270.49	18.56	251.93	Vashon
LC-116	9/1/2000	270.50	21.97	248.53	Vashon
LC-116	12/1/2000	270.50	22.38	248.12	Vashon
LC-116	3/1/2001	270.50	21.92	248.58	Vashon
LC-116	6/1/2001	270.50	21.52	248.98	Vashon
LC-116	9/1/2001	270.50	24.04	246.46	Vashon
LC-116	12/1/2001	270.50	15.99	254.51	Vashon
LC-116	4/1/2002	270.50	16.13	254.37	Vashon
LC-116	6/1/2002	270.50	16.73	253.77	Vashon
LC-116	9/1/2002	270.50	19.03	251.47	Vashon
LC-116	2/3/2003	270.50	17.24	253.26	Vashon
LC-116	3/3/2003	270.50	17.71	252.79	Vashon
LC-116	7/1/2003	270.50	20.06	250.44	Vashon
LC-116	10/4/2004	270.50	22.40	248.10	Vashon
LC-116	4/8/2005	270.50	19.71	250.79	Vashon
LC-116	7/19/2005	270.50	20.58	249.92	Vashon
LC-116	11/4/2005	270.50	22.66	247.84	Vashon
LC-116	3/14/2006	270.50	16.07	254.43	Vashon
LC-116	9/21/2006	270.50	21.15	249.35	Vashon
LC-116	3/23/2007	270.50	15.52	254.98	Vashon
LC-116	9/28/2007	270.50	20.90	249.60	Vashon
LC-116	3/25/2008	270.50	17.66	252.84	Vashon
LC-116	10/8/2008	270.50	22.85	247.65	Vashon
LC-116	2/5/2009	270.50	16.47	254.03	Vashon
LC-116	8/5/2009	270.50	20.20	250.30	Vashon
LC-116	2/10/2010	270.50	15.58	254.92	Vashon
LC-116	8/12/2010	270.50	18.60	251.90	Vashon
LC-116	2/16/2011	270.50	16.25	254.25	Vashon
LC-116	8/9/2011	270.50	19.05	251.45	Vashon
LC-116	3/1/2012	270.50	17.20	253.30	Vashon
LC-116	8/2/2012	270.50	18.56	251.94	Vashon
LC-116	2/7/2013	270.5	17.08	253.42	Vashon
LC-116	8/7/2013	270.5	20.10	250.4	Vashon
LC-116	2/18/2014	270.5	17.35	253.15	Vashon
LC-116	9/3/2014	270.5	19.03	251.47	Vashon
LC-116b	7/7/1998	270.56	27.00	243.56	Vashon
LC-116b	12/1/1998	270.56	19.82	250.74	Vashon
LC-116b	3/1/1999	270.56	22.02	248.54	Vashon
LC-116b	6/1/1999	270.56	24.27	246.29	Vashon
LC-116b	9/1/1999	270.56	28.35	242.21	Vashon
LC-116b	12/1/1999	270.56	23.58	246.98	Vashon
LC-116b	3/1/2000	270.56	23.11	247.45	Vashon

Well ID	Date	Measuring Pt	Depth to SWL	GW Elev	Aquifer
LC-116b	6/1/2000	270.56	25.48	245.08	Vashon
LC-116b	9/1/2000	271.23	28.60	242.63	Vashon
LC-116b	12/1/2000	271.23	28.51	242.72	Vashon
LC-116b	3/1/2001	271.05	27.83	243.22	Vashon
LC-116b	6/1/2001	271.05	28.22	242.83	Vashon
LC-116b	9/1/2001	271.05	30.02	241.03	Vashon
LC-116b	12/1/2001	271.05	23.22	247.83	Vashon
LC-116b	4/1/2002	271.05	22.68	248.37	Vashon
LC-116b	6/1/2002	271.05	23.74	247.31	Vashon
LC-116b	9/1/2002	271.05	25.86	245.19	Vashon
LC-116b	2/3/2003	271.05	24.11	246.94	Vashon
LC-116b	3/3/2003	271.05	24.53	246.52	Vashon
LC-116b	7/1/2003	271.05	26.46	244.59	Vashon
LC-116b	10/4/2004	271.05	28.44	242.61	Vashon
LC-116b	4/8/2005	271.05	26.90	244.15	Vashon
LC-116b	7/20/2005	271.05	27.43	243.62	Vashon
LC-116b	9/8/2005	271.05	29.02	242.03	Vashon
LC-116b	3/14/2006	271.05	22.48	248.57	Vashon
LC-116b	9/21/2006	271.05	27.92	243.13	Vashon
LC-116b	3/23/2007	271.05	23.73	247.32	Vashon
LC-116b	3/25/2008	271.05	26.62	244.43	Vashon
LC-116b	10/8/2008	271.05	25.03	246.02	Vashon
LC-116b	2/5/2009	271.05	18.64	252.41	Vashon
LC-116b	8/5/2009	271.05	27.00	244.05	Vashon
LC-117	10/7/1996	271.86	23.79	248.07	Vashon
LC-117	1/24/1997	271.86	16.02	255.84	Vashon
LC-117	4/23/1997	271.86	18.18	253.68	Vashon
LC-117	7/16/1997	271.86	21.95	249.91	Vashon
LC-117	10/16/1997	271.86	22.10	249.76	Vashon
LC-117	1/30/1998	271.86	17.86	254.00	Vashon
LC-117	4/2/1998	271.86	19.35	252.51	Vashon
LC-117	7/7/1998	271.86	22.31	249.55	Vashon
LC-117	9/22/1998	271.86	24.47	247.39	Vashon
LC-117	12/1/1998	271.86	15.32	256.54	Vashon
LC-117	3/1/1999	271.86	17.78	254.08	Vashon
LC-117	6/1/1999	271.86	19.74	252.12	Vashon
LC-117	9/1/1999	271.86	24.15	247.71	Vashon
LC-117	12/1/1999	271.86	18.03	253.83	Vashon
LC-117	3/1/2000	271.86	17.45	254.41	Vashon
LC-117	6/1/2000	271.86	19.95	251.91	Vashon
LC-117	9/1/2000	271.85	23.25	248.60	Vashon
LC-117	12/1/2000	271.85	23.81	248.04	Vashon
LC-117	3/1/2001	271.85	23.34	248.51	Vashon
LC-117	6/1/2001	271.85	22.87	248.98	Vashon
LC-117	9/1/2001	271.85	24.99	246.86	Vashon
LC-117	12/1/2001	271.85	16.95	254.90	Vashon
LC-117	4/1/2002	271.85	17.46	254.39	Vashon
LC-117	6/1/2002	271.85	18.01	253.84	Vashon
LC-117	9/1/2002	271.85	20.10	251.75	Vashon
LC-117	2/3/2003	271.85	18.49	253.36	Vashon
LC-117	3/3/2003	271.85	18.94	252.91	Vashon
LC-117	7/1/2003	271.85	21.41	250.44	Vashon
LC-117	10/4/2004	271.85	23.72	248.13	Vashon
LC-117	4/8/2005	271.85	21.00	250.85	Vashon

Well ID	Date	Measuring Pt	Depth to SWL	GW Elev	Aquifer
LC-117	7/19/2005	271.85	21.86	249.99	Vashon
LC-117	11/4/2005	271.85	24.10	247.75	Vashon
LC-117	3/14/2006	271.85	17.32	254.53	Vashon
LC-117	9/21/2006	271.85	22.42	249.43	Vashon
LC-117	3/23/2007	271.85	16.77	255.08	Vashon
LC-117	10/8/2008	271.85	24.68	247.17	Vashon
LC-117	2/5/2009	271.85	18.05	253.80	Vashon
LC-117	8/12/2010	271.85	20.37	251.48	Vashon
LC-117	3/1/2012	271.85	18.80	253.05	Vashon
LC-117	8/2/2012	271.85	19.42	252.43	Vashon
LC-117	2/7/2013	271.85	18.55	253.3	Vashon
LC-117	9/8/2014	271.85	20.70	251.15	Vashon
LC-118	10/7/1996	273.31	24.20	249.11	Vashon
LC-118	1/24/1997	273.31	16.73	256.58	Vashon
LC-118	4/23/1997	273.31	18.80	254.51	Vashon
LC-118	7/16/1997	273.31	22.46	250.85	Vashon
LC-118	10/16/1997	273.31	22.63	250.68	Vashon
LC-118	1/30/1998	273.31	18.55	254.76	Vashon
LC-118	4/2/1998	273.31	19.96	253.35	Vashon
LC-118	7/7/1998	273.31	22.90	250.41	Vashon
LC-118	9/22/1998	273.31	25.24	248.07	Vashon
LC-118	12/1/1998	273.31	16.34	256.97	Vashon
LC-118	3/1/1999	273.31	18.70	254.61	Vashon
LC-118	6/1/1999	273.31	20.66	252.65	Vashon
LC-118	9/1/1999	273.31	25.00	248.31	Vashon
LC-118	12/1/1999	273.31	19.00	254.31	Vashon
LC-118	3/1/2000	273.31	18.47	254.84	Vashon
LC-118	6/1/2000	273.31	20.88	252.43	Vashon
LC-118	9/1/2000	273.31	24.51	248.80	Vashon
LC-118	12/1/2000	273.31	25.69	247.62	Vashon
LC-118	3/1/2001	273.31	26.88	246.43	Vashon
LC-118	6/1/2001	273.31	24.30	249.01	Vashon
LC-118	9/1/2001	273.31	26.41	246.90	Vashon
LC-118	12/1/2001	273.31	18.36	254.95	Vashon
LC-118	4/1/2002	273.31	18.62	254.69	Vashon
LC-118	6/1/2002	273.31	19.24	254.07	Vashon
LC-118	9/1/2002	273.31	21.46	251.85	Vashon
LC-118	2/3/2003	273.31	19.89	253.42	Vashon
LC-118	3/3/2003	273.31	20.06	253.25	Vashon
LC-118	7/1/2003	273.31	22.38	250.93	Vashon
LC-118	10/4/2004	273.31	24.67	248.64	Vashon
LC-118	4/8/2005	273.31	28.55	244.76	Vashon
LC-118	7/20/2005	273.31	22.79	250.52	Vashon
LC-118	11/4/2005	273.31	29.63	243.68	Vashon
LC-118	3/14/2006	273.31	29.26	244.05	Vashon
LC-118	9/21/2006	273.31	23.42	249.89	Vashon
LC-118	3/23/2007	273.31	17.92	255.39	Vashon
LC-118	9/28/2007	273.31	22.97	250.34	Vashon
LC-118	3/25/2008	273.31	20.00	253.31	Vashon
LC-118	10/8/2008	273.31	25.05	248.26	Vashon
LC-118	2/5/2009	273.31	19.16	254.15	Vashon
LC-118	8/5/2009	273.31	22.35	250.96	Vashon
LC-118	2/10/2010	273.31	18.25	255.06	Vashon
LC-118	8/12/2010	273.31	21.11	252.20	Vashon

Well ID	Date	Measuring Pt	Depth to SWL	GW Elev	Aquifer
LC-118	2/16/2011	273.31	18.63	254.68	Vashon
LC-118	8/9/2011	273.31	21.06	252.25	Vashon
LC-118	3/1/2012	273.31	19.45	253.86	Vashon
LC-118	8/2/2012	273.31	21.80	251.51	Vashon
LC-118	2/7/2013	273.31	20.42	252.89	Vashon
LC-118	8/7/2013	273.31	22.40	250.91	Vashon
LC-118	2/18/2014	273.31	19.75	253.56	Vashon
LC-118	9/3/2014	273.31	21.50	251.81	Vashon
LC-119	10/7/1996	272.46	22.87	249.59	Vashon
LC-119	1/24/1997	272.46	15.64	256.82	Vashon
LC-119	4/23/1997	272.46	17.69	254.77	Vashon
LC-119	7/16/1997	272.46	21.23	251.23	Vashon
LC-119	10/16/1997	272.46	21.41	251.05	Vashon
LC-119	1/30/1998	272.46	17.47	254.99	Vashon
LC-119	4/2/1998	272.46	18.85	253.61	Vashon
LC-119	7/7/1998	272.46	21.70	250.76	Vashon
LC-119	9/22/1998	272.46	24.03	248.43	Vashon
LC-119	12/1/1998	272.46	15.31	257.15	Vashon
LC-119	3/1/1999	272.46	17.72	254.74	Vashon
LC-119	6/1/1999	272.46	19.66	252.80	Vashon
LC-119	9/1/1999	272.46	23.91	248.55	Vashon
LC-119	12/1/1999	272.46	17.97	254.49	Vashon
LC-119	3/1/2000	272.46	17.45	255.01	Vashon
LC-119	6/1/2000	272.46	19.83	252.63	Vashon
LC-119	9/1/2000	272.46	23.41	249.05	Vashon
LC-119	12/1/2000	272.46	23.47	248.99	Vashon
LC-119	3/1/2001	272.46	22.82	249.64	Vashon
LC-119	6/1/2001	272.46	22.65	249.81	Vashon
LC-119	9/1/2001	272.46	24.77	247.69	Vashon
LC-119	12/1/2001	272.46	16.74	255.72	Vashon
LC-119	4/1/2002	272.46	17.63	254.83	Vashon
LC-119	6/1/2002	272.46	17.40	255.06	Vashon
LC-119	9/1/2002	272.46	19.89	252.57	Vashon
LC-119	2/3/2003	272.46	18.28	254.18	Vashon
LC-119	3/3/2003	272.46	19.12	253.34	Vashon
LC-119	7/1/2003	272.46	21.34	251.12	Vashon
LC-119	10/4/2004	272.46	23.54	248.92	Vashon
LC-119	4/18/2005	272.46	20.81	251.65	Vashon
LC-119	7/21/2005	272.46	21.73	250.73	Vashon
LC-119	10/8/2008	272.46	23.92	248.54	Vashon
LC-119	2/5/2009	272.46	18.35	254.11	Vashon
LC-119	8/5/2009	272.46	21.33	251.13	Vashon
LC-119	2/10/2010	272.46	17.50	254.96	Vashon
LC-119	8/12/2010	272.46	20.19	252.27	Vashon
LC-119	2/16/2011	272.46	17.85	254.61	Vashon
LC-119	8/9/2011	272.46	20.00	252.46	Vashon
LC-119	2/24/2012	272.46	18.44	254.02	Vashon
LC-119	8/2/2012	272.46	20.18	252.28	Vashon
LC-119	2/7/2013	272.46	18.64	253.82	Vashon
LC-119	8/7/2013	272.46	21.30	251.16	Vashon
LC-119	2/18/2014	272.46	18.80	253.66	Vashon
LC-119	9/3/2014	272.46	20.54	251.92	Vashon
LC-12	10/7/1996	278.24	28.05	250.19	Vashon
LC-12	1/24/1997	278.24	22.20	256.04	Vashon

Well ID	Date	Measuring Pt	Depth to SWL	GW Elev	Aquifer
LC-12	4/23/1997	278.24	24.00	254.24	Vashon
LC-12	7/16/1997	278.24	26.95	251.29	Vashon
LC-12	10/16/1997	278.24	27.06	251.18	Vashon
LC-12	1/30/1998	278.24	23.70	254.54	Vashon
LC-12	4/2/1998	278.24	25.00	253.24	Vashon
LC-12	7/7/1998	278.24	28.25	249.99	Vashon
LC-12	9/22/1998	278.24	29.90	248.34	Vashon
LC-12	12/1/1998	278.24	21.85	256.39	Vashon
LC-12	3/1/1999	278.24	24.55	253.69	Vashon
LC-12	6/1/1999	278.24	26.25	251.99	Vashon
LC-12	9/1/1999	278.24	29.50	248.74	Vashon
LC-12	12/1/1999	278.24	24.12	254.12	Vashon
LC-12	3/1/2000	278.24	24.57	253.67	Vashon
LC-12	6/1/2000	278.24	25.92	252.32	Vashon
LC-12	9/1/2000	278.15	28.67	249.48	Vashon
LC-12	12/1/2000	278.15	28.60	249.55	Vashon
LC-12	3/1/2001	278.15	28.19	249.96	Vashon
LC-12	6/1/2001	278.15	28.01	250.14	Vashon
LC-12	9/1/2001	278.15	30.59	247.56	Vashon
LC-12	12/1/2001	278.15	25.01	253.14	Vashon
LC-12	4/1/2002	278.15	24.01	254.14	Vashon
LC-12	6/1/2002	278.15	25.79	252.36	Vashon
LC-12	9/1/2002	278.15	27.98	250.17	Vashon
LC-12	2/3/2003	278.15	24.94	253.21	Vashon
LC-12	3/3/2003	278.15	25.36	252.79	Vashon
LC-12	7/1/2003	278.15	27.20	250.95	Vashon
LC-12	10/4/2004	278.15	28.74	249.41	Vashon
LC-120	10/7/1996	269.51	19.76	249.75	Vashon
LC-120	1/24/1997	269.51	12.61	256.90	Vashon
LC-120	4/23/1997	269.51	14.67	254.84	Vashon
LC-120	7/16/1997	269.51	18.18	251.33	Vashon
LC-120	10/16/1997	269.51	18.34	251.17	Vashon
LC-120	1/30/1998	269.51	14.45	255.06	Vashon
LC-120	4/2/1998	269.51	15.87	253.64	Vashon
LC-120	7/7/1998	269.51	18.62	250.89	Vashon
LC-120	9/22/1998	269.51	20.90	248.61	Vashon
LC-120	12/1/1998	269.51	12.31	257.20	Vashon
LC-120	3/1/1999	269.51	14.80	254.71	Vashon
LC-120	6/1/1999	269.51	16.75	252.76	Vashon
LC-120	9/1/1999	269.51	20.95	248.56	Vashon
LC-120	12/1/1999	269.51	14.93	254.58	Vashon
LC-120	3/1/2000	269.51	14.44	255.07	Vashon
LC-120	6/1/2000	269.51	16.80	252.71	Vashon
LC-120	9/1/2000	269.50	20.34	249.16	Vashon
LC-120	12/1/2000	269.50	20.33	249.17	Vashon
LC-120	3/1/2001	269.50	19.72	249.78	Vashon
LC-120	6/1/2001	269.50	19.62	249.88	Vashon
LC-120	9/1/2001	269.50	21.24	248.26	Vashon
LC-120	12/1/2001	269.50	13.25	256.25	Vashon
LC-120	4/1/2002	269.50	14.55	254.95	Vashon
LC-120	6/1/2002	269.50	13.94	255.56	Vashon
LC-120	9/1/2002	269.50	18.40	251.10	Vashon
LC-120	2/3/2003	269.50	15.68	253.82	Vashon
LC-120	3/3/2003	269.50	17.08	252.42	Vashon

Well ID	Date	Measuring Pt	Depth to SWL	GW Elev	Aquifer
LC-120	7/1/2003	269.50	18.33	251.17	Vashon
LC-120	10/4/2004	269.50	20.39	249.11	Vashon
LC-120	4/14/2005	269.50	17.58	251.92	Vashon
LC-120	7/21/2005	269.50	18.68	250.82	Vashon
LC-120	11/4/2005	269.50	20.77	248.73	Vashon
LC-120	3/14/2006	269.50	14.42	255.08	Vashon
LC-120	9/25/2006	269.50	19.53	249.97	Vashon
LC-120	3/23/2007	269.50	14.15	255.35	Vashon
LC-120	9/28/2007	269.50	19.01	250.49	Vashon
LC-120	3/25/2008	269.50	16.22	253.28	Vashon
LC-120	10/8/2008	269.50	20.85	248.65	Vashon
LC-120	2/5/2009	269.50	15.43	254.07	Vashon
LC-120	8/5/2009	269.50	18.31	251.19	Vashon
LC-120	2/9/2010	269.50	14.50	255.00	Vashon
LC-120	8/12/2010	269.50	17.15	252.35	Vashon
LC-120	2/17/2011	269.50	14.88	254.62	Vashon
LC-120	8/9/2011	269.50	17.00	252.50	Vashon
LC-120	3/1/2012	269.50	15.48	254.02	Vashon
LC-120	8/1/2012	269.50	16.92	252.58	Vashon
LC-120	2/7/2013	269.50	15.73	253.77	Vashon
LC-121	10/7/1996	268.89	19.94	248.95	Vashon
LC-121	1/24/1997	268.89	11.85	257.04	Vashon
LC-121	4/23/1997	268.89	13.88	255.01	Vashon
LC-121	7/16/1997	268.89	17.37	251.52	Vashon
LC-121	10/16/1997	268.89	18.55	250.34	Vashon
LC-121	1/30/1998	268.89	13.68	255.21	Vashon
LC-121	4/2/1998	268.89	15.08	253.81	Vashon
LC-121	6/1/1999	268.89	15.90	252.99	Vashon
LC-121	9/1/1999	268.89	20.02	248.87	Vashon
LC-121	12/1/1999	268.89	14.18	254.71	Vashon
LC-121	3/1/2000	268.89	13.67	255.22	Vashon
LC-121	6/1/2000	268.89	16.04	252.85	Vashon
LC-121	9/1/2000	268.97	19.55	249.42	Vashon
LC-121	12/1/2000	268.97	19.56	249.41	Vashon
LC-121	3/1/2001	268.97	18.90	250.07	Vashon
LC-121	6/1/2001	268.97	18.78	250.19	Vashon
LC-121	9/1/2001	268.97	21.42	247.55	Vashon
LC-121	12/1/2001	268.97	13.39	255.58	Vashon
LC-121	4/1/2002	268.97	13.82	255.15	Vashon
LC-121	6/1/2002	268.97	13.87	255.10	Vashon
LC-121	9/1/2002	268.97	16.02	252.95	Vashon
LC-121	2/3/2003	268.97	14.91	254.06	Vashon
LC-121	3/3/2003	268.97	15.30	253.67	Vashon
LC-121	7/1/2003	268.97	17.53	251.44	Vashon
LC-121	10/4/2004	268.97	19.61	249.36	Vashon
LC-121	4/14/2005	268.97	16.82	252.15	Vashon
LC-121	7/21/2005	268.97	17.95	251.02	Vashon
LC-121	11/4/2005	268.97	20.00	248.97	Vashon
LC-121	3/14/2006	268.97	13.71	255.26	Vashon
LC-121	9/25/2006	268.97	18.82	250.15	Vashon
LC-121	3/23/2007	268.97	13.38	255.59	Vashon
LC-121	9/28/2007	268.97	18.21	250.76	Vashon
LC-121	3/25/2008	268.97	15.43	253.54	Vashon
LC-121	2/5/2009	268.97	14.70	254.27	Vashon

Appendix D - Historical Depth to Water Measurements and Sea Level Aquifer Trend Graphs

Historical Depth to Water measurements

Log RAM, Joint Base Lewis-McChord, Washington 98433

Well ID	Date	Measuring Pt	Depth to SWL	GW Elev	Aquifer
LC-121	8/5/2009	268.97	17.50	251.47	Vashon
LC-121	2/9/2010	268.97	14.50	254.47	Vashon
LC-121	8/12/2010	268.97	17.65	251.32	Vashon
LC-121	2/17/2011	268.97	14.12	254.85	Vashon
LC-121	8/9/2011	268.97	16.25	252.72	Vashon
LC-121	3/1/2012	268.97	14.73	254.24	Vashon
LC-121	8/1/2012	268.97	16.20	252.77	Vashon
LC-121	2/7/2013	268.97	15.41	253.56	Vashon
LC-121	8/8/2013	268.97	17.55	251.42	Vashon
LC-121	2/18/2014	268.97	15.00	253.97	Vashon
LC-121	9/4/2014	268.97	17.85	251.12	Vashon
LC-122	10/7/1996	269.32	19.30	250.02	Vashon
LC-122	1/24/1997	269.32	12.23	257.09	Vashon
LC-122	4/23/1997	269.32	14.26	255.06	Vashon
LC-122	7/16/1997	269.32	17.76	251.56	Vashon
LC-122	10/16/1997	269.32	17.91	251.41	Vashon
LC-122	1/30/1998	269.32	14.04	255.28	Vashon
LC-122	4/2/1998	269.32	15.43	253.89	Vashon
LC-122	7/7/1998	269.32	18.20	251.12	Vashon
LC-122	9/22/1998	269.32	20.37	248.95	Vashon
LC-122	12/1/1998	269.32	11.91	257.41	Vashon
LC-122	3/1/1999	269.32	14.60	254.72	Vashon
LC-122	6/1/1999	269.32	15.99	253.33	Vashon
LC-122	9/1/1999	269.32	20.07	249.25	Vashon
LC-122	12/1/1999	269.32	14.55	254.77	Vashon
LC-122	3/1/2000	269.32	14.01	255.31	Vashon
LC-122	6/1/2000	269.32	16.42	252.90	Vashon
LC-122	9/1/2000	268.32	19.89	248.43	Vashon
LC-122	12/1/2000	268.32	19.90	248.42	Vashon
LC-122	3/1/2001	269.32	19.25	250.07	Vashon
LC-122	6/1/2001	269.32	19.15	250.17	Vashon
LC-122	9/1/2001	269.32	22.77	246.55	Vashon
LC-122	12/1/2001	269.32	14.71	254.61	Vashon
LC-122	4/1/2002	269.32	14.20	255.12	Vashon
LC-122	6/1/2002	269.32	15.72	253.60	Vashon
LC-122	9/1/2002	269.32	17.09	252.23	Vashon
LC-122	2/3/2003	269.32	15.25	254.07	Vashon
LC-122	3/3/2003	269.32	15.67	253.65	Vashon
LC-122	7/1/2003	269.32	17.89	251.43	Vashon
LC-122	10/4/2004	269.32	19.94	249.38	Vashon
LC-122	4/14/2005	269.32	17.17	252.15	Vashon
LC-122	11/4/2005	269.32	20.33	248.99	Vashon
LC-122	9/25/2006	269.32	23.15	246.17	Vashon
LC-122	3/23/2007	269.32	13.75	255.57	Vashon
LC-122	9/28/2007	269.32	18.57	250.75	Vashon
LC-122	10/8/2008	269.32	20.45	248.87	Vashon
LC-122b	7/7/1998	269.91	24.70	245.21	Vashon
LC-122b	9/22/1998	269.91	26.88	243.03	Vashon
LC-122b	12/1/1998	269.91	18.28	251.63	Vashon
LC-122b	3/1/1999	269.91	20.12	249.79	Vashon
LC-122b	6/1/1999	269.91	20.25	249.66	Vashon
LC-122b	9/1/1999	269.91	24.23	245.68	Vashon
LC-122b	12/1/1999	269.91	18.91	251.00	Vashon
LC-122b	3/1/2000	269.91	18.42	251.49	Vashon

Historical Depth to Water measurements

Log RAM, Joint Base Lewis-McChord, Washington 98433

Well ID	Date	Measuring Pt	Depth to SWL	GW Elev	Aquifer
LC-122b	6/1/2000	269.91	20.81	249.10	Vashon
LC-122b	3/1/2001	269.91	25.02	244.89	Vashon
LC-122b	6/1/2001	269.91	25.31	244.60	Vashon
LC-122b	9/1/2001	269.91	27.93	241.98	Vashon
LC-122b	12/1/2001	269.91	21.18	248.73	Vashon
LC-122b	4/1/2002	269.91	18.06	251.85	Vashon
LC-122b	6/1/2002	269.91	21.89	248.02	Vashon
LC-122b	9/1/2002	269.91	22.66	247.25	Vashon
LC-122b	2/3/2003	269.91	20.83	249.08	Vashon
LC-122b	3/3/2003	269.91	21.08	248.83	Vashon
LC-122b	7/1/2003	269.91	23.04	246.87	Vashon
LC-122b	10/4/2004	269.91	25.28	244.63	Vashon
LC-122b	4/14/2005	269.91	22.15	247.76	Vashon
LC-122b	9/8/2005	269.91	24.50	245.41	Vashon
LC-122b	3/14/2006	269.91	18.30	251.61	Vashon
LC-122b	9/25/2006	269.91	23.15	246.76	Vashon
LC-122b	3/23/2007	269.91	18.90	251.01	Vashon
LC-122b	9/28/2007	269.91	23.90	246.01	Vashon
LC-122b	3/25/2008	269.91	21.20	248.71	Vashon
LC-122b	10/8/2008	269.91	24.21	245.70	Vashon
LC-122b	2/11/2009	269.91	19.78	250.13	Vashon
LC-122b	8/5/2009	269.91	21.73	248.18	Vashon
LC-123	10/7/1996	274.90	24.88	250.02	Vashon
LC-123	1/24/1997	274.90	17.79	257.11	Vashon
LC-123	4/23/1997	274.90	19.82	255.08	Vashon
LC-123	6/1/1999	274.90	32.04	242.86	Vashon
LC-123	9/1/1999	274.90	26.19	248.71	Vashon
LC-123	12/1/1999	274.90	20.10	254.80	Vashon
LC-123	3/1/2000	274.90	19.62	255.28	Vashon
LC-123	6/1/2000	274.90	21.96	252.94	Vashon
LC-123	9/1/2000	274.91	25.46	249.45	Vashon
LC-123	12/1/2000	274.91	25.47	249.44	Vashon
LC-123	3/1/2001	274.91	24.81	250.10	Vashon
LC-123	6/1/2001	274.91	24.71	250.20	Vashon
LC-123	9/1/2001	274.91	25.33	249.58	Vashon
LC-123	12/1/2001	274.91	17.33	257.58	Vashon
LC-123	4/1/2002	274.91	19.76	255.15	Vashon
LC-123	6/1/2002	274.91	18.02	256.89	Vashon
LC-123	9/1/2002	274.91	20.96	253.95	Vashon
LC-123	2/3/2003	274.91	18.89	256.02	Vashon
LC-123	3/3/2003	274.91	21.22	253.69	Vashon
LC-123	7/1/2003	274.91	23.48	251.43	Vashon
LC-123	10/4/2004	274.91	25.53	249.38	Vashon
LC-123	4/14/2005	274.91	22.74	252.17	Vashon
LC-123	7/21/2005	274.91	23.86	251.05	Vashon
LC-123	11/4/2005	274.91	25.92	248.99	Vashon
LC-123	3/14/2006	274.91	19.66	255.25	Vashon
LC-123	9/25/2006	274.91	24.76	250.15	Vashon
LC-123	3/23/2007	274.91	19.32	255.59	Vashon
LC-123	9/28/2007	274.91	24.15	250.76	Vashon
LC-123	3/25/2008	274.91	15.20	259.71	Vashon
LC-123	10/8/2008	274.91	26.03	248.88	Vashon
LC-123	2/5/2009	274.91	20.58	254.33	Vashon
LC-123	8/5/2009	274.91	23.43	251.48	Vashon

Well ID	Date	Measuring Pt	Depth to SWL	GW Elev	Aquifer
LC-123	2/9/2010	274.91	19.80	255.11	Vashon
LC-123	8/12/2010	274.91	22.40	252.51	Vashon
LC-123	2/17/2011	274.91	20.10	254.81	Vashon
LC-123	8/9/2011	274.91	22.15	252.76	Vashon
LC-123	3/1/2012	274.91	20.67	254.24	Vashon
LC-123	8/1/2012	274.91	22.15	252.76	Vashon
LC-123	2/7/2013	274.91	20.06	254.85	Vashon
LC-123	9/4/2014	274.91	22.82	252.09	Vashon
LC-124	10/7/1996	274.91	24.86	250.05	Vashon
LC-124	1/24/1997	274.91	17.73	257.18	Vashon
LC-124	4/23/1997	274.91	19.76	255.15	Vashon
LC-124	7/16/1997	274.91	23.29	251.62	Vashon
LC-124	10/16/1997	274.91	23.45	251.46	Vashon
LC-124	1/30/1998	274.91	19.56	255.35	Vashon
LC-124	4/2/1998	274.91	20.95	253.96	Vashon
LC-124	7/7/1998	274.91	23.72	251.19	Vashon
LC-124	9/22/1998	274.91	25.94	248.97	Vashon
LC-124	12/1/1998	274.91	17.42	257.49	Vashon
LC-124	3/1/1999	274.91	19.78	255.13	Vashon
LC-124	6/1/1999	274.91	21.79	253.12	Vashon
LC-124	9/1/1999	274.91	25.89	249.02	Vashon
LC-124	12/1/1999	274.91	20.07	254.84	Vashon
LC-124	3/1/2000	274.91	19.58	255.33	Vashon
LC-124	6/1/2000	274.91	21.64	253.27	Vashon
LC-124	9/1/2000	274.88	25.45	249.43	Vashon
LC-124	12/1/2000	274.88	25.45	249.43	Vashon
LC-124	3/1/2001	274.88	24.78	250.10	Vashon
LC-124	6/1/2001	274.88	24.69	250.19	Vashon
LC-124	9/1/2001	274.88	27.20	247.68	Vashon
LC-124	12/1/2001	274.88	19.25	255.63	Vashon
LC-124	4/1/2002	274.88	19.72	255.16	Vashon
LC-124	6/1/2002	274.88	19.82	255.06	Vashon
LC-124	9/1/2002	274.88	22.22	252.66	Vashon
LC-124	2/3/2003	274.88	20.79	254.09	Vashon
LC-124	3/3/2003	274.88	21.19	253.69	Vashon
LC-124	7/1/2003	274.88	23.43	251.45	Vashon
LC-124	10/4/2004	274.88	25.57	249.31	Vashon
LC-124	9/28/2007	274.88	24.12	250.76	Vashon
LC-124	3/25/2008	274.88	21.37	253.51	Vashon
LC-124	10/8/2008	274.88	26.00	248.88	Vashon
LC-124	2/5/2009	274.88	20.59	254.29	Vashon
LC-124	8/5/2009	274.88	23.41	251.47	Vashon
LC-124	2/9/2010	274.88	19.80	255.08	Vashon
LC-124	8/12/2010	274.88	22.35	252.53	Vashon
LC-124	2/17/2011	274.88	20.10	254.78	Vashon
LC-124	8/9/2011	274.88	22.07	252.81	Vashon
LC-124	3/1/2012	274.88	20.61	254.27	Vashon
LC-124	8/1/2012	274.88	22.10	252.78	Vashon
LC-124	2/7/2013	274.88	20.74	254.14	Vashon
LC-124	8/8/2013	274.88	24.20	250.68	Vashon
LC-124	2/19/2014	274.88	20.50	254.38	Vashon
LC-124	9/4/2014	274.88	22.78	252.10	Vashon
LC-125	10/7/1996	271.62	22.63	248.99	Vashon
LC-125	1/24/1997	271.62	15.90	255.72	Vashon

Well ID	Date	Measuring Pt	Depth to SWL	GW Elev	Aquifer
LC-125	4/23/1997	271.62	18.15	253.47	Vashon
LC-125	7/16/1997	271.62	21.34	250.28	Vashon
LC-125	10/16/1997	271.62	21.31	250.31	Vashon
LC-125	1/30/1998	271.62	17.91	253.71	Vashon
LC-125	4/2/1998	271.62	19.68	251.94	Vashon
LC-125	7/7/1998	271.62	21.84	249.78	Vashon
LC-125	9/22/1998	271.62	23.73	247.89	Vashon
LC-125	12/1/1998	271.62	15.30	256.32	Vashon
LC-125	3/1/1999	271.62	17.90	253.72	Vashon
LC-125	6/1/1999	271.62	19.51	252.11	Vashon
LC-125	9/1/1999	271.62	24.02	247.60	Vashon
LC-125	12/1/1999	271.62	18.20	253.42	Vashon
LC-125	3/1/2000	271.62	17.34	254.28	Vashon
LC-125	6/1/2000	271.62	19.61	252.01	Vashon
LC-125	9/1/2000	271.57	23.17	248.40	Vashon
LC-125	12/1/2000	271.57	23.29	248.28	Vashon
LC-125	3/1/2001	271.57	23.12	248.45	Vashon
LC-125	6/1/2001	271.57	22.52	249.05	Vashon
LC-125	9/1/2001	271.57	24.74	246.83	Vashon
LC-125	12/1/2001	271.57	20.79	250.78	Vashon
LC-125	4/1/2002	271.57	17.81	253.76	Vashon
LC-125	6/1/2002	271.57	21.42	250.15	Vashon
LC-125	9/1/2002	271.57	22.07	249.50	Vashon
LC-125	2/3/2003	271.57	18.40	253.17	Vashon
LC-125	3/3/2003	271.57	19.46	252.11	Vashon
LC-125	7/1/2003	271.57	21.63	249.94	Vashon
LC-125	10/4/2004	271.57	32.12	239.45	Vashon
LC-125	4/8/2005	271.57	21.77	249.80	Vashon
LC-125	7/19/2005	271.57	22.67	248.90	Vashon
LC-125	3/17/2006	271.57	18.06	253.51	Vashon
LC-125	3/23/2007	271.57	17.04	254.53	Vashon
LC-125	3/25/2008	271.57	19.59	251.98	Vashon
LC-125	10/8/2008	271.57	24.12	247.45	Vashon
LC-125	2/5/2009	271.57	18.80	252.77	Vashon
LC-125	8/5/2009	271.57	20.78	250.79	Vashon
LC-125	2/10/2010	271.57	17.75	253.82	Vashon
LC-125	8/11/2010	271.57	19.93	251.64	Vashon
LC-125	2/16/2011	271.57	17.80	253.77	Vashon
LC-125	8/9/2011	271.57	19.97	251.60	Vashon
LC-125	2/28/2012	271.57	18.98	252.59	Vashon
LC-125	8/1/2012	271.57	19.89	251.68	Vashon
LC-125	2/12/2013	271.57	19.42	252.15	Vashon
LC-125	8/9/2013	271.57	21.45	250.12	Vashon
LC-127	10/7/1996	266.64	17.68	248.96	Vashon
LC-127	1/24/1997	266.64	11.10	255.54	Vashon
LC-127	4/23/1997	266.64	13.16	253.48	Vashon
LC-127	7/16/1997	266.64	16.30	250.34	Vashon
LC-127	10/16/1997	266.64	16.40	250.24	Vashon
LC-127	1/30/1998	266.64	12.86	253.78	Vashon
LC-127	4/2/1998	266.64	14.23	252.41	Vashon
LC-127	7/7/1998	266.64	16.77	249.87	Vashon
LC-127	9/22/1998	266.64	18.68	247.96	Vashon
LC-127	12/1/1998	266.64	10.67	255.97	Vashon
LC-127	3/1/1999	266.64	13.20	253.44	Vashon

Well ID	Date	Measuring Pt	Depth to SWL	GW Elev	Aquifer
LC-127	6/1/1999	266.64	14.97	251.67	Vashon
LC-127	9/1/1999	266.64	18.87	247.77	Vashon
LC-127	12/1/1999	266.64	13.31	253.33	Vashon
LC-127	3/1/2000	266.64	12.74	253.90	Vashon
LC-127	6/1/2000	266.64	14.99	251.65	Vashon
LC-127	9/1/2000	266.63	18.21	248.42	Vashon
LC-127	12/1/2000	266.63	18.27	248.36	Vashon
LC-127	3/1/2001	266.63	17.75	248.88	Vashon
LC-127	6/1/2001	266.63	17.57	249.06	Vashon
LC-127	9/1/2001	266.63	19.19	247.44	Vashon
LC-127	12/1/2001	266.63	16.70	249.93	Vashon
LC-127	4/1/2002	266.63	13.01	253.62	Vashon
LC-127	6/1/2002	266.63	17.10	249.53	Vashon
LC-127	9/1/2002	266.63	18.09	248.54	Vashon
LC-127	2/3/2003	266.63	13.97	252.66	Vashon
LC-127	3/3/2003	266.63	14.44	252.19	Vashon
LC-127	7/1/2003	266.63	16.57	250.06	Vashon
LC-127	10/4/2004	266.63	18.64	247.99	Vashon
LC-128	1/24/1997	277.82	24.95	252.87	Vashon
LC-128	4/23/1997	277.82	26.87	250.95	Vashon
LC-128	7/16/1997	277.82	30.39	247.43	Vashon
LC-128	10/16/1997	277.82	30.38	247.44	Vashon
LC-128	1/30/1998	277.82	26.77	251.05	Vashon
LC-128	4/2/1998	277.82	28.03	249.79	Vashon
LC-128	7/7/1998	277.82	30.80	247.02	Vashon
LC-128	9/22/1998	277.82	33.07	244.75	Vashon
LC-128	12/1/1998	277.82	24.19	253.63	Vashon
LC-128	3/1/1999	277.82	27.46	250.36	Vashon
LC-128	6/1/1999	277.82	29.36	248.46	Vashon
LC-128	9/1/1999	277.82	33.52	244.30	Vashon
LC-128	12/1/1999	277.82	27.37	250.45	Vashon
LC-128	3/1/2000	277.82	26.72	251.10	Vashon
LC-128	6/1/2000	277.82	29.06	248.76	Vashon
LC-128	9/1/2000	277.92	32.53	245.39	Vashon
LC-128	12/1/2000	277.92	32.60	245.32	Vashon
LC-128	3/1/2001	277.92	31.94	245.98	Vashon
LC-128	6/1/2001	277.92	31.85	246.07	Vashon
LC-128	9/1/2001	277.92	34.96	242.96	Vashon
LC-128	12/1/2001	277.92	29.84	248.08	Vashon
LC-128	4/1/2002	277.92	26.90	251.02	Vashon
LC-128	6/1/2002	277.92	29.99	247.93	Vashon
LC-128	9/1/2002	277.92	30.89	247.03	Vashon
LC-128	2/3/2003	277.92	28.17	249.75	Vashon
LC-128	3/3/2003	277.92	28.50	249.42	Vashon
LC-128	7/1/2003	277.92	30.71	247.21	Vashon
LC-128	10/4/2004	277.92	32.63	245.29	Vashon
LC-128	4/14/2005	277.92	30.15	247.77	Vashon
LC-128	7/21/2005	277.92	31.26	246.66	Vashon
LC-128	9/6/2005	277.92	32.92	245.00	Vashon
LC-128	3/28/2006	277.92	27.13	250.79	Vashon
LC-128	9/25/2006	277.92	31.60	246.32	Vashon
LC-128	3/22/2007	277.92	26.69	251.23	Vashon
LC-128	9/28/2007	277.92	31.25	246.67	Vashon
LC-128	3/25/2008	277.92	28.12	249.80	Vashon

Well ID	Date	Measuring Pt	Depth to SWL	GW Elev	Aquifer
LC-128	10/8/2008	277.92	31.97	245.95	Vashon
LC-128	2/5/2009	277.92	26.35	251.57	Vashon
LC-128	8/5/2009	277.92	30.55	247.37	Vashon
LC-129	10/7/1996	279.75	26.54	253.21	Vashon
LC-129	1/24/1997	279.75	22.47	257.28	Vashon
LC-129	4/23/1997	279.75	24.27	255.48	Vashon
LC-129	7/16/1997	279.75	26.34	253.41	Vashon
LC-129	10/16/1997	279.75	26.45	253.30	Vashon
LC-129	1/30/1998	279.75	24.12	255.63	Vashon
LC-129	4/2/1998	279.75	25.12	254.63	Vashon
LC-129	7/7/1998	279.75	26.63	253.12	Vashon
LC-129	9/22/1998	279.75	27.65	252.10	Vashon
LC-129	12/1/1998	279.75	22.22	257.53	Vashon
LC-129	3/1/1999	279.75	24.80	254.95	Vashon
LC-129	6/1/1999	279.75	26.23	253.52	Vashon
LC-129	9/1/1999	279.75	27.98	251.77	Vashon
LC-129	12/1/1999	279.75	24.61	255.14	Vashon
LC-129	3/1/2000	279.75	24.17	255.58	Vashon
LC-129	6/1/2000	279.75	25.92	253.83	Vashon
LC-129	9/1/2000	279.68	27.39	252.29	Vashon
LC-129	12/1/2000	279.68	27.37	252.31	Vashon
LC-129	3/1/2001	279.68	26.96	252.72	Vashon
LC-129	6/1/2001	279.68	27.10	252.58	Vashon
LC-129	9/1/2001	279.68	29.72	249.96	Vashon
LC-129	12/1/2001	279.68	25.42	254.26	Vashon
LC-129	4/1/2002	279.68	24.36	255.32	Vashon
LC-129	6/1/2002	279.68	26.01	253.67	Vashon
LC-129	9/1/2002	279.68	28.41	251.27	Vashon
LC-129	2/3/2003	279.68	25.09	254.59	Vashon
LC-129	3/3/2003	279.68	25.40	254.28	Vashon
LC-129	7/1/2003	279.68	26.44	253.24	Vashon
LC-129	10/4/2004	279.68	26.99	252.69	Vashon
LC-13	10/7/1996	278.98	28.32	250.66	Vashon
LC-13	1/24/1997	278.98	21.53	257.45	Vashon
LC-13	4/23/1997	278.98	23.50	255.48	Vashon
LC-13	7/16/1997	278.98	26.91	252.07	Vashon
LC-13	10/16/1997	278.98	27.05	251.93	Vashon
LC-13	1/30/1998	278.98	23.36	255.62	Vashon
LC-13	4/2/1998	278.98	24.65	254.33	Vashon
LC-13	7/7/1998	278.98	28.40	250.58	Vashon
LC-13	12/1/1998	278.98	21.24	257.74	Vashon
LC-13	3/1/1999	278.98	24.30	254.68	Vashon
LC-13	6/1/1999	278.98	26.22	252.76	Vashon
LC-13	9/1/1999	278.98	29.98	249.00	Vashon
LC-13	12/1/1999	278.98	23.83	255.15	Vashon
LC-13	3/1/2000	278.98	24.51	254.47	Vashon
LC-13	6/1/2000	278.98	25.67	253.31	Vashon
LC-13	9/1/2000	278.98	28.91	250.07	Vashon
LC-13	12/1/2000	278.98	28.88	250.10	Vashon
LC-13	3/1/2001	278.98	28.21	250.77	Vashon
LC-13	6/1/2001	278.98	28.17	250.81	Vashon
LC-13	9/1/2001	278.98	30.32	248.66	Vashon
LC-13	12/1/2001	278.98	24.80	254.18	Vashon
LC-13	4/1/2002	278.98	23.53	255.45	Vashon

Well ID	Date	Measuring Pt	Depth to SWL	GW Elev	Aquifer
LC-13	6/1/2002	278.98	25.03	253.95	Vashon
LC-13	9/1/2002	278.98	27.53	251.45	Vashon
LC-13	2/3/2003	278.98	24.90	254.08	Vashon
LC-13	3/3/2003	278.98	24.88	254.10	Vashon
LC-13	7/1/2003	278.98	27.04	251.94	Vashon
LC-13	10/4/2004	278.98	29.07	249.91	Vashon
LC-130	10/7/1996	278.12	28.01	250.11	Vashon
LC-130	1/24/1997	278.12	20.97	257.15	Vashon
LC-130	4/23/1997	278.12	22.97	255.15	Vashon
LC-130	7/16/1997	278.12	26.48	251.64	Vashon
LC-130	10/16/1997	278.12	26.63	251.49	Vashon
LC-130	1/30/1998	278.12	22.78	255.34	Vashon
LC-130	4/2/1998	278.12	24.10	254.02	Vashon
LC-130	7/7/1998	278.12	26.93	251.19	Vashon
LC-130	9/22/1998	278.12	28.11	250.01	Vashon
LC-130	12/1/1998	278.12	20.65	257.47	Vashon
LC-130	3/1/1999	278.12	23.14	254.98	Vashon
LC-130	6/1/1999	278.12	25.08	253.04	Vashon
LC-130	9/1/1999	278.12	29.19	248.93	Vashon
LC-130	12/1/1999	278.12	23.23	254.89	Vashon
LC-130	3/1/2000	278.12	22.75	255.37	Vashon
LC-130	6/1/2000	278.12	25.13	252.99	Vashon
LC-130	9/1/2000	278.45	28.60	249.85	Vashon
LC-130	12/1/2000	278.45	28.59	249.86	Vashon
LC-130	3/1/2001	278.45	27.94	250.51	Vashon
LC-130	6/1/2001	278.45	27.85	250.60	Vashon
LC-130	9/1/2001	278.45	29.47	248.98	Vashon
LC-130	12/1/2001	278.45	25.06	253.39	Vashon
LC-130	4/1/2002	278.45	22.92	255.53	Vashon
LC-130	6/1/2002	278.45	25.75	252.70	Vashon
LC-130	9/1/2002	278.45	27.29	251.16	Vashon
LC-130	2/3/2003	278.45	23.96	254.49	Vashon
LC-130	3/3/2003	278.45	24.32	254.13	Vashon
LC-130	7/1/2003	278.45	26.60	251.85	Vashon
LC-130	10/4/2004	278.45	28.67	249.78	Vashon
LC-131	10/7/1996	275.85	24.66	251.19	Vashon
LC-131	1/24/1997	275.85	16.79	259.06	Vashon
LC-131	4/23/1997	275.85	20.42	255.43	Vashon
LC-131	7/16/1997	275.85	22.95	252.90	Vashon
LC-131	10/16/1997	275.85	23.10	252.75	Vashon
LC-131	1/30/1998	275.85	18.70	257.15	Vashon
LC-131	4/2/1998	275.85	20.81	255.04	Vashon
LC-131	7/7/1998	275.85	23.08	252.77	Vashon
LC-131	9/22/1998	275.85	25.72	250.13	Vashon
LC-131	12/1/1998	275.85	15.54	260.31	Vashon
LC-131	3/1/1999	275.85	18.10	257.75	Vashon
LC-131	6/1/1999	275.85	19.26	256.59	Vashon
LC-131	9/1/1999	275.85	25.40	250.45	Vashon
LC-131	12/1/1999	275.85	18.32	257.53	Vashon
LC-131	3/1/2000	275.85	17.25	258.60	Vashon
LC-131	6/1/2000	275.85	20.15	255.70	Vashon
LC-131	9/1/2000	275.91	24.32	251.59	Vashon
LC-131	12/1/2000	275.91	25.52	250.39	Vashon
LC-131	3/1/2001	275.91	25.48	250.43	Vashon

Well ID	Date	Measuring Pt	Depth to SWL	GW Elev	Aquifer
LC-131	6/1/2001	275.91	24.75	251.16	Vashon
LC-131	9/1/2001	275.91	27.52	248.39	Vashon
LC-131	12/1/2001	275.91	28.92	246.99	Vashon
LC-131	4/1/2002	275.91	17.70	258.21	Vashon
LC-131	6/1/2002	275.91	29.62	246.29	Vashon
LC-131	9/1/2002	275.91	29.97	245.94	Vashon
LC-131	2/3/2003	275.91	18.59	257.32	Vashon
LC-131	3/3/2003	275.91	19.76	256.15	Vashon
LC-131	7/1/2003	275.91	22.87	253.04	Vashon
LC-131	10/4/2004	275.91	25.30	250.61	Vashon
LC-132	10/7/1996	282.33	31.96	250.37	Vashon
LC-132	1/24/1997	282.33	24.36	257.97	Vashon
LC-132	4/23/1997	282.33	26.70	255.63	Vashon
LC-132	7/16/1997	282.33	30.20	252.13	Vashon
LC-132	10/16/1997	282.33	30.31	252.02	Vashon
LC-132	1/30/1998	282.33	26.30	256.03	Vashon
LC-132	4/2/1998	282.33	27.74	254.59	Vashon
LC-132	7/7/1998	282.33	30.62	251.71	Vashon
LC-132	9/22/1998	282.33	32.92	249.41	Vashon
LC-132	12/1/1998	282.33	23.90	258.43	Vashon
LC-132	3/1/1999	282.33	26.46	255.87	Vashon
LC-132	6/1/1999	282.33	28.26	254.07	Vashon
LC-132	9/1/1999	282.33	33.03	249.30	Vashon
LC-132	12/1/1999	282.33	26.60	255.73	Vashon
LC-132	3/1/2000	282.33	26.03	256.30	Vashon
LC-132	6/1/2000	282.33	28.47	253.86	Vashon
LC-132	9/1/2000	282.32	32.45	249.87	Vashon
LC-132	12/1/2000	282.32	32.52	249.80	Vashon
LC-132	3/1/2001	282.32	31.99	250.33	Vashon
LC-132	6/1/2001	282.32	31.78	250.54	Vashon
LC-132	9/1/2001	282.32	32.61	249.71	Vashon
LC-132	3/3/2003	282.32	27.72	254.60	Vashon
LC-132	7/1/2003	282.32	30.25	252.07	Vashon
LC-132	10/4/2004	282.32	32.61	249.71	Vashon
LC-132	4/8/2005	282.32	30.02	252.30	Vashon
LC-132	7/20/2005	282.32	30.97	251.35	Vashon
LC-132	9/9/2005	282.32	29.96	252.36	Vashon
LC-132	3/17/2006	282.32	26.39	255.93	Vashon
LC-132	9/20/2006	282.32	31.50	250.82	Vashon
LC-132	3/21/2007	282.32	25.75	256.57	Vashon
LC-132	9/25/2007	282.32	30.38	251.94	Vashon
LC-132	3/25/2008	282.32	27.92	254.40	Vashon
LC-132	10/8/2008	282.32	33.00	249.32	Vashon
LC-132	2/5/2009	282.32	27.20	255.12	Vashon
LC-132	8/4/2009	282.32	29.87	252.45	Vashon
LC-132	2/10/2010	282.32	26.35	255.97	Vashon
LC-132	8/11/2010	282.32	28.85	253.47	Vashon
LC-132	2/16/2011	282.32	26.50	255.82	Vashon
LC-132	8/9/2011	282.32	28.78	253.54	Vashon
LC-132	2/29/2012	282.32	27.38	254.94	Vashon
LC-132	7/31/2012	282.32	28.65	253.67	Vashon
LC-132	2/6/2013	282.32	27.43	254.89	Vashon
LC-132	8/7/2013	282.32	30.20	252.12	Vashon
LC-132	2/18/2014	282.32	27.65	254.67	Vashon

Well ID	Date	Measuring Pt	Depth to SWL	GW Elev	Aquifer
LC-132	9/8/2014	282.32	29.53	252.79	Vashon
LC-133	10/7/1996	281.78	15.06	266.72	Vashon
LC-133	1/24/1997	281.78	11.07	270.71	Vashon
LC-133	4/23/1997	281.78	11.65	270.13	Vashon
LC-133	7/16/1997	281.78	14.20	267.58	Vashon
LC-133	10/16/1997	281.78	14.43	267.35	Vashon
LC-133	1/30/1998	281.78	12.28	269.50	Vashon
LC-133	4/2/1998	281.78	12.81	268.97	Vashon
LC-133	7/7/1998	281.78	14.30	267.48	Vashon
LC-133	9/22/1998	281.78	16.13	265.65	Vashon
LC-133	12/1/1998	281.78	10.88	270.90	Vashon
LC-133	3/1/1999	281.78	12.20	269.58	Vashon
LC-133	6/1/1999	281.78	13.97	267.81	Vashon
LC-133	9/1/1999	281.78	16.11	265.67	Vashon
LC-133	12/1/1999	281.78	13.13	268.65	Vashon
LC-133	3/1/2000	281.78	12.51	269.27	Vashon
LC-133	6/1/2000	281.78	13.80	267.98	Vashon
LC-133	9/1/2000	281.77	15.74	266.03	Vashon
LC-133	12/1/2000	281.77	16.30	265.47	Vashon
LC-133	3/1/2001	281.77	16.04	265.73	Vashon
LC-133	6/1/2001	281.77	15.27	266.50	Vashon
LC-133	9/1/2001	281.77	16.87	264.90	Vashon
LC-133	12/1/2001	281.77	13.47	268.30	Vashon
LC-133	4/1/2002	281.77	12.06	269.71	Vashon
LC-133	6/1/2002	281.77	13.99	267.78	Vashon
LC-133	9/1/2002	281.77	14.88	266.89	Vashon
LC-133	2/3/2003	281.77	12.78	268.99	Vashon
LC-133	3/3/2003	281.77	13.72	268.05	Vashon
LC-133	7/1/2003	281.77	13.88	267.89	Vashon
LC-133	10/4/2004	281.77	16.41	265.36	Vashon
LC-134	4/23/1997	277.72	6.07	271.65	Vashon
LC-134	7/16/1997	277.72	9.50	268.22	Vashon
LC-134	10/16/1997	277.72	9.72	268.00	Vashon
LC-134	1/30/1998	277.72	6.89	270.83	Vashon
LC-134	4/2/1998	277.72	7.75	269.97	Vashon
LC-134	7/7/1998	277.72	9.48	268.24	Vashon
LC-134	9/22/1998	277.72	11.00	266.72	Vashon
LC-134	12/1/1998	277.72	5.75	271.97	Vashon
LC-134	3/1/1999	277.72	7.40	270.32	Vashon
LC-134	6/1/1999	277.72	9.43	268.29	Vashon
LC-134	9/1/1999	277.72	11.46	266.26	Vashon
LC-134	12/1/1999	277.72	8.30	269.42	Vashon
LC-134	3/1/2000	277.72	7.62	270.10	Vashon
LC-134	6/1/2000	277.72	9.06	268.66	Vashon
LC-134	9/1/2000	277.74	10.83	266.91	Vashon
LC-135	10/7/1996	282.32	13.77	268.55	Vashon
LC-135	1/24/1997	282.32	9.39	272.93	Vashon
LC-135	4/23/1997	282.32	9.99	272.33	Vashon
LC-135	7/16/1997	282.32	13.08	269.24	Vashon
LC-135	10/16/1997	282.32	13.32	269.00	Vashon
LC-135	1/30/1998	282.32	10.84	271.48	Vashon
LC-135	4/2/1998	282.32	11.35	270.97	Vashon
LC-135	7/7/1998	282.32	13.19	269.13	Vashon
LC-135	9/22/1998	282.32	14.70	267.62	Vashon

Well ID	Date	Measuring Pt	Depth to SWL	GW Elev	Aquifer
LC-135	12/1/1998	282.32	9.33	272.99	Vashon
LC-135	3/1/1999	282.32	10.60	271.72	Vashon
LC-135	6/1/1999	282.32	12.85	269.47	Vashon
LC-135	9/1/1999	282.32	15.00	267.32	Vashon
LC-135	12/1/1999	282.32	11.97	270.35	Vashon
LC-135	3/1/2000	282.32	11.29	271.03	Vashon
LC-135	6/1/2000	282.32	12.86	269.46	Vashon
LC-135	9/1/2000	282.33	14.69	267.64	Vashon
LC-135	12/1/2000	282.33	15.21	267.12	Vashon
LC-135	3/1/2001	282.33	14.93	267.40	Vashon
LC-135	6/1/2001	282.33	14.35	267.98	Vashon
LC-135	9/1/2001	282.33	15.72	266.61	Vashon
LC-135	12/1/2001	282.33	12.01	270.32	Vashon
LC-135	4/1/2002	282.33	10.79	271.54	Vashon
LC-135	6/1/2002	282.33	12.87	269.46	Vashon
LC-135	9/1/2002	282.33	14.79	267.54	Vashon
LC-135	2/3/2003	282.33	12.50	269.83	Vashon
LC-135	3/3/2003	282.33	12.89	269.44	Vashon
LC-135	7/1/2003	282.33	13.51	268.82	Vashon
LC-135	10/4/2004	282.33	15.89	266.44	Vashon
LC-135	8/30/2011	282.33	13.65	268.68	Vashon
LC-135	2/22/2012	282.33	12.81	269.52	Vashon
LC-135	7/31/2012	282.33	13.71	269.23	Vashon
LC-135	2/7/2013	282.33	12.88	269.45	Vashon
LC-135	8/7/2013	282.33	14.40	267.93	Vashon
LC-135	2/18/2014	282.33	11.80	270.53	Vashon
LC-135	9/3/2014	282.33	14.00	268.33	Vashon
LC-136a	4/23/1997	279.60	11.96	267.64	Vashon
LC-136a	7/16/1997	279.60	15.93	263.67	Vashon
LC-136a	10/16/1997	279.60	16.03	263.57	Vashon
LC-136a	1/30/1998	279.60	13.47	266.13	Vashon
LC-136a	4/2/1998	279.60	14.08	265.52	Vashon
LC-136a	7/7/1998	279.60	15.90	263.70	Vashon
LC-136a	9/22/1998	279.60	17.46	262.14	Vashon
LC-136a	12/1/1998	279.60	11.93	267.67	Vashon
LC-136a	3/1/1999	279.60	13.75	265.85	Vashon
LC-136a	6/1/1999	279.60	15.56	264.04	Vashon
LC-136a	9/1/1999	279.60	17.65	261.95	Vashon
LC-136a	12/1/1999	279.60	14.41	265.19	Vashon
LC-136a	3/1/2000	279.60	13.82	265.78	Vashon
LC-136a	6/1/2000	279.60	15.08	264.52	Vashon
LC-136a	9/1/2000	279.62	16.84	262.78	Vashon
LC-136a	12/1/2000	279.62	17.13	262.49	Vashon
LC-136a	3/1/2001	279.62	17.09	262.53	Vashon
LC-136a	6/1/2001	279.62	16.38	263.24	Vashon
LC-136a	9/1/2001	279.62	18.12	261.50	Vashon
LC-136a	12/1/2001	279.62	14.43	265.19	Vashon
LC-136a	4/1/2002	279.62	12.17	267.45	Vashon
LC-136a	6/1/2002	279.62	14.26	265.36	Vashon
LC-136a	9/1/2002	279.62	15.84	263.78	Vashon
LC-136a	2/3/2003	279.62	13.85	265.77	Vashon
LC-136a	3/3/2003	279.62	14.81	264.81	Vashon
LC-136a	7/1/2003	279.62	13.92	265.70	Vashon
LC-136a	10/4/2004	279.62	17.18	262.44	Vashon

Well ID	Date	Measuring Pt	Depth to SWL	GW Elev	Aquifer
LC-136a	8/17/2005	279.62	12.37	267.25	Vashon
LC-136b	12/1/1998	279.21	11.82	267.39	Vashon
LC-136b	3/1/1999	279.21	13.79	265.42	Vashon
LC-136b	6/1/1999	279.21	15.45	263.76	Vashon
LC-136b	9/1/1999	279.21	17.22	261.99	Vashon
LC-136b	12/1/1999	279.21	14.31	264.90	Vashon
LC-136b	3/1/2000	279.21	13.71	265.50	Vashon
LC-136b	6/1/2000	279.21	15.12	264.09	Vashon
LC-136b	9/1/2000	279.20	16.53	262.67	Vashon
LC-136b	12/1/2000	279.20	16.76	262.44	Vashon
LC-136b	3/1/2001	279.20	16.26	262.94	Vashon
LC-136b	6/1/2001	279.20	16.82	262.38	Vashon
LC-136b	9/1/2001	279.20	16.90	262.30	Vashon
LC-136b	12/1/2001	279.20	14.00	265.20	Vashon
LC-136b	4/1/2002	279.20	12.84	266.36	Vashon
LC-136b	6/1/2002	279.20	14.88	264.32	Vashon
LC-136b	9/1/2002	279.20	15.48	263.72	Vashon
LC-136b	2/3/2003	279.20	13.40	265.80	Vashon
LC-136b	3/3/2003	279.20	14.42	264.78	Vashon
LC-136b	7/1/2003	279.20	13.02	266.18	Vashon
LC-136b	10/4/2004	279.20	16.27	262.93	Vashon
LC-136b	8/17/2005	279.20	12.17	267.03	Vashon
LC-137a	4/23/1997	291.46	23.86	267.60	Vashon
LC-137a	7/16/1997	291.46	27.68	263.78	Vashon
LC-137a	10/16/1997	291.46	27.61	263.85	Vashon
LC-137a	1/30/1998	291.46	25.07	266.39	Vashon
LC-137a	4/2/1998	291.46	26.01	265.45	Vashon
LC-137a	7/7/1998	291.46	27.73	263.73	Vashon
LC-137a	9/22/1998	291.46	28.86	262.60	Vashon
LC-137a	12/1/1998	291.46	23.00	268.46	Vashon
LC-137a	3/1/1999	291.46	25.30	266.16	Vashon
LC-137a	6/1/1999	291.46	27.14	264.32	Vashon
LC-137a	9/1/1999	291.46	28.88	262.58	Vashon
LC-137a	12/1/1999	291.46	26.07	265.39	Vashon
LC-137a	3/1/2000	291.46	25.37	266.09	Vashon
LC-137a	6/1/2000	291.46	27.00	264.46	Vashon
LC-137a	9/1/2000	291.50	28.47	263.03	Vashon
LC-137a	12/1/2000	291.50	28.28	263.22	Vashon
LC-137a	3/1/2001	291.50	28.30	263.20	Vashon
LC-137a	6/1/2001	291.50	28.02	263.48	Vashon
LC-137a	9/1/2001	291.50	29.56	261.94	Vashon
LC-137b	12/1/1998	291.26	22.94	268.32	Vashon
LC-137b	3/1/1999	291.26	26.65	264.61	Vashon
LC-137b	6/1/1999	291.26	27.55	263.71	Vashon
LC-137b	9/1/1999	291.26	29.35	261.91	Vashon
LC-137b	12/1/1999	291.26	26.05	265.21	Vashon
LC-137b	3/1/2000	291.26	25.34	265.92	Vashon
LC-137b	6/1/2000	291.26	26.95	264.31	Vashon
LC-137b	9/1/2000	291.26	28.45	262.81	Vashon
LC-137b	12/1/2000	291.26	28.30	262.96	Vashon
LC-137b	3/1/2001	291.26	28.31	262.95	Vashon
LC-137b	6/1/2001	291.26	27.99	263.27	Vashon
LC-137b	9/1/2001	291.26	29.52	261.74	Vashon
LC-137b	12/1/2001	291.26	25.06	266.20	Vashon

Well ID	Date	Measuring Pt	Depth to SWL	GW Elev	Aquifer
LC-137b	4/1/2002	291.26	25.22	266.04	Vashon
LC-137b	6/1/2002	291.26	26.55	264.71	Vashon
LC-137b	9/1/2002	291.26	28.02	263.24	Vashon
LC-137b	2/3/2003	291.26	26.50	264.76	Vashon
LC-137b	3/3/2003	291.26	26.83	264.43	Vashon
LC-137b	7/1/2003	291.26	25.90	265.36	Vashon
LC-137b	10/4/2004	291.26	28.89	262.37	Vashon
LC-137b	4/1/2005	291.26	23.72	267.54	Vashon
LC-137b	7/21/2005	291.26	25.37	265.89	Vashon
LC-137b	8/29/2005	291.26	25.79	265.47	Vashon
LC-137b	3/20/2006	291.26	23.09	268.17	Vashon
LC-137b	9/20/2006	291.26	25.61	265.65	Vashon
LC-137b	3/20/2007	291.26	22.59	268.67	Vashon
LC-137b	3/25/2008	291.26	25.61	265.65	Vashon
LC-137b	10/8/2008	291.26	28.18	263.08	Vashon
LC-137b	2/3/2009	291.26	25.65	265.61	Vashon
LC-137b	8/3/2009	291.26	26.15	265.11	Vashon
LC-137b	2/11/2010	291.26	25.08	266.18	Vashon
LC-137b	8/9/2010	291.26	26.48	264.78	Vashon
LC-137b	2/14/2011	291.26	24.88	266.38	Vashon
LC-137b	8/10/2011	291.26	25.35	265.91	Vashon
LC-137b	2/22/2012	291.26	24.98	266.28	Vashon
LC-137b	7/31/2012	291.26	26.29	264.97	Vashon
LC-137b	2/6/2013	291.26	25.45	265.81	Vashon
LC-137b	8/8/2013	291.26	26.75	264.51	Vashon
LC-137b	2/14/2014	291.26	25.20	266.06	Vashon
LC-137b	9/8/2014	291.26	26.11	265.15	Vashon
LC-137c	12/1/1998	291.48	23.93	267.55	Vashon
LC-137c	3/1/1999	291.48	26.20	265.28	Vashon
LC-137c	6/1/1999	291.48	28.00	263.48	Vashon
LC-137c	9/1/1999	291.48	29.73	261.75	Vashon
LC-137c	12/1/1999	291.48	26.68	264.80	Vashon
LC-137c	3/1/2000	291.48	26.03	265.45	Vashon
LC-137c	6/1/2000	291.48	27.48	264.00	Vashon
LC-137c	9/1/2000	291.50	28.85	262.65	Vashon
LC-137c	12/1/2000	291.50	28.93	262.57	Vashon
LC-137c	3/1/2001	291.50	28.85	262.65	Vashon
LC-137c	6/1/2001	291.50	28.56	262.94	Vashon
LC-137c	9/1/2001	291.50	29.71	261.79	Vashon
LC-137c	12/1/2001	291.50	25.80	265.70	Vashon
LC-137c	4/1/2002	291.50	25.63	265.87	Vashon
LC-137c	6/1/2002	291.50	26.70	264.80	Vashon
LC-137c	9/1/2002	291.50	28.47	263.03	Vashon
LC-137c	2/3/2003	291.50	26.40	265.10	Vashon
LC-137c	3/3/2003	291.50	27.20	264.30	Vashon
LC-137c	7/1/2003	291.50	25.72	265.78	Vashon
LC-137c	10/4/2004	291.50	29.13	262.37	Vashon
LC-137c	4/1/2005	291.50	24.40	267.10	Vashon
LC-137c	7/21/2005	291.50	24.60	266.90	Vashon
LC-137c	8/29/2005	291.50	25.17	266.33	Vashon
LC-137c	3/20/2006	291.50	21.97	269.53	Vashon
LC-137c	9/20/2006	291.50	24.85	266.65	Vashon
LC-137c	3/20/2007	291.50	21.65	269.85	Vashon
LC-137c	3/25/2008	291.50	24.97	266.53	Vashon

Well ID	Date	Measuring Pt	Depth to SWL	GW Elev	Aquifer
LC-137c	10/8/2008	291.50	27.95	263.55	Vashon
LC-137c	2/3/2009	291.50	25.05	266.45	Vashon
LC-137c	8/3/2009	291.50	25.88	265.62	Vashon
LC-139	10/7/1996	278.25	10.16	268.09	Vashon
LC-139	1/24/1997	278.25	6.04	272.21	Vashon
LC-139	4/23/1997	278.25	6.63	271.62	Vashon
LC-139	7/16/1997	278.25	9.42	268.83	Vashon
LC-139	10/16/1997	278.25	9.65	268.60	Vashon
LC-139	1/30/1998	278.25	7.39	270.86	Vashon
LC-139	4/2/1998	278.25	7.91	270.34	Vashon
LC-139	7/7/1998	278.25	9.53	268.72	Vashon
LC-139	9/22/1998	278.25	11.00	267.25	Vashon
LC-139	12/1/1998	278.25	5.85	272.40	Vashon
LC-139	3/1/1999	278.25	7.30	270.95	Vashon
LC-139	6/1/1999	278.25	9.41	268.84	Vashon
LC-139	9/1/1999	278.25	11.35	266.90	Vashon
LC-139	12/1/1999	278.25	8.49	269.76	Vashon
LC-139	3/1/2000	278.25	7.79	270.46	Vashon
LC-139	6/1/2000	278.25	9.23	269.02	Vashon
LC-139	9/1/2000	278.24	10.97	267.27	Vashon
LC-139	12/1/2000	278.24	11.48	266.76	Vashon
LC-139	3/1/2001	278.24	11.17	267.07	Vashon
LC-139	6/1/2001	278.24	10.56	267.68	Vashon
LC-139	9/1/2001	278.24	12.03	266.21	Vashon
LC-139	12/1/2001	278.24	9.67	268.57	Vashon
LC-139	4/1/2002	278.24	7.22	271.02	Vashon
LC-139	6/1/2002	278.24	10.47	267.77	Vashon
LC-139	9/1/2002	278.24	11.16	267.08	Vashon
LC-139	2/3/2003	278.24	8.38	269.86	Vashon
LC-139	3/3/2003	278.24	9.25	268.99	Vashon
LC-139	7/1/2003	278.24	9.75	268.49	Vashon
LC-139	10/4/2004	278.24	12.21	266.03	Vashon
LC-140	12/1/1998	290.39	22.60	267.79	Vashon
LC-140	3/1/1999	290.39	25.66	264.73	Vashon
LC-140	6/1/1999	290.39	27.81	262.58	Vashon
LC-140	9/1/1999	290.39	29.38	261.01	Vashon
LC-140	12/1/1999	290.39	25.58	264.81	Vashon
LC-140	3/1/2000	290.39	25.03	265.36	Vashon
LC-140	6/1/2000	290.39	27.24	263.15	Vashon
LC-140	9/1/2000	290.40	28.42	261.98	Vashon
LC-140	12/1/2000	290.40	28.19	262.21	Vashon
LC-140	3/1/2001	290.40	28.10	262.30	Vashon
LC-140	6/1/2001	290.40	28.74	261.66	Vashon
LC-140	9/1/2001	290.40	30.36	260.04	Vashon
LC-140	12/1/2001	290.40	25.01	265.39	Vashon
LC-140	4/1/2002	290.40	25.71	264.69	Vashon
LC-140	6/1/2002	290.40	25.61	264.79	Vashon
LC-140	9/1/2002	290.40	28.01	262.39	Vashon
LC-140	2/3/2003	290.40	24.90	265.50	Vashon
LC-140	3/3/2003	290.40	27.39	263.01	Vashon
LC-140	7/1/2003	290.40	27.86	262.54	Vashon
LC-140	10/4/2004	290.40	29.72	260.68	Vashon
LC-141	1/24/1997	289.81	24.15	265.66	Vashon
LC-141	4/23/1997	289.81	25.46	264.35	Vashon

Well ID	Date	Measuring Pt	Depth to SWL	GW Elev	Aquifer
LC-141	7/16/1997	289.81	29.73	260.08	Vashon
LC-141	10/16/1997	289.81	29.13	260.68	Vashon
LC-141	1/30/1998	289.81	25.32	264.49	Vashon
LC-141	4/2/1998	289.81	26.71	263.10	Vashon
LC-141	7/7/1998	289.81	28.97	260.84	Vashon
LC-141	9/22/1998	289.81	28.21	261.60	Vashon
LC-141	12/1/1998	289.81	21.82	267.99	Vashon
LC-141	3/1/1999	289.81	24.39	265.42	Vashon
LC-141	6/1/1999	289.81	26.64	263.17	Vashon
LC-141	9/1/1999	289.81	28.57	261.24	Vashon
LC-141	12/1/1999	289.81	24.92	264.89	Vashon
LC-141	3/1/2000	289.81	24.15	265.66	Vashon
LC-141	6/1/2000	289.81	26.64	263.17	Vashon
LC-141	9/1/2000	289.80	27.98	261.82	Vashon
LC-141	12/1/2000	289.80	27.72	262.08	Vashon
LC-141	3/1/2001	289.80	27.61	262.19	Vashon
LC-141	6/1/2001	289.80	29.07	260.73	Vashon
LC-141	9/1/2001	289.80	31.57	258.23	Vashon
LC-141	12/1/2001	289.80	27.14	262.66	Vashon
LC-141	4/1/2002	289.80	26.00	263.80	Vashon
LC-141	6/1/2002	289.80	27.69	262.11	Vashon
LC-141	9/1/2002	289.80	29.14	260.66	Vashon
LC-141	2/3/2003	289.80	26.70	263.10	Vashon
LC-141	3/3/2003	289.80	27.83	261.97	Vashon
LC-141	7/1/2003	289.80	27.38	262.42	Vashon
LC-141	10/4/2004	289.80	30.38	259.42	Vashon
LC-142	12/1/1998	286.90	18.90	268.00	Vashon
LC-142	3/1/1999	286.90	21.39	265.51	Vashon
LC-142	6/1/1999	286.90	23.76	263.14	Vashon
LC-142	9/1/1999	286.90	25.88	261.02	Vashon
LC-142	12/1/1999	286.90	22.12	264.78	Vashon
LC-142	3/1/2000	286.90	21.44	265.46	Vashon
LC-142	6/1/2000	286.90	23.90	263.00	Vashon
LC-142	9/1/2000	286.89	25.55	261.34	Vashon
LC-142	12/1/2000	286.89	25.31	261.58	Vashon
LC-142	3/1/2001	286.89	25.10	261.79	Vashon
LC-142	6/1/2001	286.89	25.73	261.16	Vashon
LC-142	9/1/2001	286.89	27.69	259.20	Vashon
LC-142	12/1/2001	286.89	22.12	264.77	Vashon
LC-142	4/1/2002	286.89	22.10	264.79	Vashon
LC-142	6/1/2002	286.89	22.14	264.75	Vashon
LC-142	9/1/2002	286.89	24.57	262.32	Vashon
LC-142	2/3/2003	286.89	22.86	264.03	Vashon
LC-142	3/3/2003	286.89	23.99	262.90	Vashon
LC-142	7/1/2003	286.89	24.78	262.11	Vashon
LC-142	10/4/2004	286.89	26.88	260.01	Vashon
LC-143	1/24/1997	288.30	21.27	267.03	Vashon
LC-143	4/23/1997	288.30	22.72	265.58	Vashon
LC-143	7/16/1997	288.30	26.75	261.55	Vashon
LC-143	10/16/1997	288.30	26.27	262.03	Vashon
LC-143	1/30/1998	288.30	22.97	265.33	Vashon
LC-143	4/2/1998	288.30	24.31	263.99	Vashon
LC-143	7/7/1998	288.30	26.59	261.71	Vashon
LC-143	9/22/1998	288.30	26.79	261.51	Vashon

Well ID	Date	Measuring Pt	Depth to SWL	GW Elev	Aquifer
LC-143	12/1/1998	288.30	20.38	267.92	Vashon
LC-143	3/1/1999	288.30	22.85	265.45	Vashon
LC-143	6/1/1999	288.30	25.11	263.19	Vashon
LC-143	9/1/1999	288.30	26.99	261.31	Vashon
LC-143	12/1/1999	288.30	23.46	264.84	Vashon
LC-143	3/1/2000	288.30	22.79	265.51	Vashon
LC-143	6/1/2000	288.30	25.19	263.11	Vashon
LC-143	9/1/2000	288.29	26.67	261.62	Vashon
LC-143	12/1/2000	288.29	26.28	262.01	Vashon
LC-143	3/1/2001	288.29	26.16	262.13	Vashon
LC-143	6/1/2001	288.29	26.78	261.51	Vashon
LC-143	9/1/2001	288.29	28.87	259.42	Vashon
LC-143	12/1/2001	288.29	23.37	264.92	Vashon
LC-143	4/1/2002	288.29	23.65	264.64	Vashon
LC-143	6/1/2002	288.29	23.88	264.41	Vashon
LC-143	9/1/2002	288.29	25.67	262.62	Vashon
LC-143	2/3/2003	288.29	24.31	263.98	Vashon
LC-143	3/3/2003	288.29	25.37	262.92	Vashon
LC-143	7/1/2003	288.29	26.05	262.24	Vashon
LC-143	10/4/2004	288.29	28.05	260.24	Vashon
LC-144a	4/23/1997	292.00	25.46	266.54	Vashon
LC-144a	7/16/1997	292.00	29.61	262.39	Vashon
LC-144a	10/16/1997	292.00	29.46	262.54	Vashon
LC-144a	4/2/1998	292.00	27.71	264.29	Vashon
LC-144a	7/7/1998	292.00	29.63	262.37	Vashon
LC-144a	9/22/1998	292.00	29.61	262.39	Vashon
LC-144a	12/1/1998	292.00	23.96	268.04	Vashon
LC-144a	3/1/1999	292.00	26.40	265.60	Vashon
LC-144a	6/1/1999	292.00	28.41	263.59	Vashon
LC-144a	9/1/1999	292.00	29.85	262.15	Vashon
LC-144a	12/1/1999	292.00	26.86	265.14	Vashon
LC-144a	3/1/2000	292.00	26.32	265.68	Vashon
LC-144a	6/1/2000	292.00	28.30	263.70	Vashon
LC-144a	9/1/2000	291.96	29.44	262.52	Vashon
LC-144a	12/1/2000	291.96	29.22	262.74	Vashon
LC-144a	3/1/2001	291.96	29.20	262.76	Vashon
LC-144a	6/1/2001	291.96	29.82	262.14	Vashon
LC-144a	9/1/2001	291.96	31.28	260.68	Vashon
LC-144a	12/1/2001	291.96	26.01	265.95	Vashon
LC-144a	4/1/2002	291.96	27.12	264.84	Vashon
LC-144a	6/1/2002	291.96	27.14	264.82	Vashon
LC-144a	9/1/2002	291.96	29.47	262.49	Vashon
LC-144a	2/3/2003	291.96	27.58	264.38	Vashon
LC-144a	3/3/2003	291.96	28.66	263.30	Vashon
LC-144a	7/1/2003	291.96	28.66	263.30	Vashon
LC-144a	10/4/2004	291.96	30.61	261.35	Vashon
LC-144b	12/1/1998	292.95	24.93	268.02	Vashon
LC-145	10/7/1996	281.72	11.61	270.11	Vashon
LC-145	1/24/1997	281.72	8.48	273.24	Vashon
LC-145	4/23/1997	281.72	9.01	272.71	Vashon
LC-145	7/16/1997	281.72	11.24	270.48	Vashon
LC-145	10/16/1997	281.72	11.43	270.29	Vashon
LC-145	1/30/1998	281.72	9.71	272.01	Vashon
LC-145	4/2/1998	281.72	10.07	271.65	Vashon

Well ID	Date	Measuring Pt	Depth to SWL	GW Elev	Aquifer
LC-145	7/7/1998	281.72	11.40	270.32	Vashon
LC-145	9/22/1998	281.72	12.49	269.23	Vashon
LC-145	12/1/1998	281.72	8.65	273.07	Vashon
LC-145	3/1/1999	281.72	9.80	271.92	Vashon
LC-145	6/1/1999	281.72	11.55	270.17	Vashon
LC-145	9/1/1999	281.72	12.95	268.77	Vashon
LC-145	12/1/1999	281.72	10.83	270.89	Vashon
LC-145	3/1/2000	281.72	10.28	271.44	Vashon
LC-145	6/1/2000	281.72	11.41	270.31	Vashon
LC-145	9/1/2000	281.79	12.58	269.21	Vashon
LC-145	12/1/2000	281.79	12.92	268.87	Vashon
LC-145	3/1/2001	281.79	12.80	268.99	Vashon
LC-145	6/1/2001	281.79	12.28	269.51	Vashon
LC-145	9/1/2001	281.79	13.00	268.79	Vashon
LC-145	12/1/2001	281.79	8.97	272.82	Vashon
LC-145	4/1/2002	281.79	9.86	271.93	Vashon
LC-145	6/1/2002	281.79	9.67	272.12	Vashon
LC-145	9/1/2002	281.79	11.40	270.39	Vashon
LC-145	2/3/2003	281.79	10.70	271.09	Vashon
LC-145	3/3/2003	281.79	11.31	270.48	Vashon
LC-145	7/1/2003	281.79	12.20	269.59	Vashon
LC-146	10/7/1996	279.56	8.53	271.03	Vashon
LC-146	1/24/1997	279.56	5.59	273.97	Vashon
LC-146	4/23/1997	279.56	6.11	273.45	Vashon
LC-146	7/16/1997	279.56	8.30	271.26	Vashon
LC-146	10/16/1997	279.56	8.45	271.11	Vashon
LC-146	1/30/1998	279.56	6.97	272.59	Vashon
LC-146	4/2/1998	279.56	7.30	272.26	Vashon
LC-146	7/7/1998	279.56	8.46	271.10	Vashon
LC-146	9/22/1998	279.56	9.43	270.13	Vashon
LC-146	12/1/1998	279.56	5.91	273.65	Vashon
LC-146	3/1/1999	279.56	6.85	272.71	Vashon
LC-146	6/1/1999	279.56	8.60	270.96	Vashon
LC-146	9/1/1999	279.56	9.75	269.81	Vashon
LC-146	12/1/1999	279.56	8.04	271.52	Vashon
LC-146	3/1/2000	279.56	7.50	272.06	Vashon
LC-146	6/1/2000	279.56	8.51	271.05	Vashon
LC-146	9/1/2000	279.64	9.49	270.15	Vashon
LC-146	12/1/2000	279.64	9.83	269.81	Vashon
LC-147	10/7/1996	279.63	8.60	271.03	Vashon
LC-147	1/24/1997	279.63	5.31	274.32	Vashon
LC-147	4/23/1997	279.63	5.84	273.79	Vashon
LC-147	7/16/1997	279.63	8.28	271.35	Vashon
LC-147	10/16/1997	279.63	8.44	271.19	Vashon
LC-147	1/30/1998	279.63	6.89	272.74	Vashon
LC-147	4/2/1998	279.63	7.20	272.43	Vashon
LC-147	7/7/1998	279.63	8.46	271.17	Vashon
LC-147	9/22/1998	279.63	9.60	270.03	Vashon
LC-147	12/1/1998	279.63	5.68	273.95	Vashon
LC-147	3/1/1999	279.63	6.55	273.08	Vashon
LC-147	6/1/1999	279.63	8.49	271.14	Vashon
LC-147	9/1/1999	279.63	9.84	269.79	Vashon
LC-147	12/1/1999	279.63	8.03	271.60	Vashon
LC-147	3/1/2000	279.63	7.39	272.24	Vashon

Well ID	Date	Measuring Pt	Depth to SWL	GW Elev	Aquifer
LC-147	6/1/2000	279.63	8.51	271.12	Vashon
LC-147	9/1/2000	279.69	9.70	269.99	Vashon
LC-147	12/1/2000	279.69	10.06	269.63	Vashon
LC-147	3/1/2001	279.69	9.92	269.77	Vashon
LC-147	6/1/2001	279.69	9.30	270.39	Vashon
LC-147	9/1/2001	279.69	10.03	269.66	Vashon
LC-147	12/1/2001	279.69	8.09	271.60	Vashon
LC-147	4/1/2002	279.69	6.87	272.82	Vashon
LC-147	6/1/2002	279.69	8.47	271.22	Vashon
LC-147	9/1/2002	279.69	10.29	269.40	Vashon
LC-147	2/3/2003	279.69	7.94	271.75	Vashon
LC-147	3/3/2003	279.69	8.46	271.23	Vashon
LC-147	7/1/2003	279.69	9.18	270.51	Vashon
LC-147	10/4/2004	279.69	11.17	268.52	Vashon
LC-149a	1/24/1997	307.67	31.41	276.26	Vashon
LC-149a	4/23/1997	307.67	31.58	276.09	Vashon
LC-149a	7/16/1997	307.67	35.22	272.45	Vashon
LC-149a	10/16/1997	307.67	35.40	272.27	Vashon
LC-149a	1/30/1998	307.67	33.53	274.14	Vashon
LC-149a	4/2/1998	307.67	33.97	273.70	Vashon
LC-149a	7/7/1998	307.67	35.33	272.34	Vashon
LC-149a	9/22/1998	307.67	36.18	271.49	Vashon
LC-149a	12/1/1998	307.67	32.20	275.47	Vashon
LC-149a	3/1/1999	307.67	32.18	275.49	Vashon
LC-149a	6/1/1999	307.67	35.29	272.38	Vashon
LC-149a	9/1/1999	307.67	36.58	271.09	Vashon
LC-149a	12/1/1999	307.67	34.84	272.83	Vashon
LC-149a	3/1/2000	307.67	34.12	273.55	Vashon
LC-149a	6/1/2000	307.67	35.04	272.63	Vashon
LC-149a	9/1/2000	307.74	36.17	271.57	Vashon
LC-149a	12/1/2000	307.74	36.75	270.99	Vashon
LC-149a	3/1/2001	307.74	36.48	271.26	Vashon
LC-149a	6/1/2001	307.74	36.15	271.59	Vashon
LC-149a	9/1/2001	307.74	36.97	270.77	Vashon
LC-149c	4/23/1997	307.86	30.72	277.14	Vashon
LC-149c	7/16/1997	307.86	35.38	272.48	Vashon
LC-149c	1/30/1998	307.86	33.73	274.13	Vashon
LC-149c	4/2/1998	307.86	34.11	273.75	Vashon
LC-149c	7/7/1998	307.86	35.49	272.37	Vashon
LC-149c	9/22/1998	307.86	36.34	271.52	Vashon
LC-149c	12/1/1998	307.86	32.37	275.49	Vashon
LC-149c	3/1/1999	307.86	33.38	274.48	Vashon
LC-149c	6/1/1999	307.86	35.41	272.45	Vashon
LC-149c	9/1/1999	307.86	36.19	271.67	Vashon
LC-149c	12/1/1999	307.86	35.05	272.81	Vashon
LC-149c	3/1/2000	307.86	34.32	273.54	Vashon
LC-149c	6/1/2000	307.86	35.24	272.62	Vashon
LC-149c	9/1/2000	307.96	36.37	271.59	Vashon
LC-149c	12/1/2000	307.96	36.96	271.00	Vashon
LC-149c	3/1/2001	307.96	36.70	271.26	Vashon
LC-149c	6/1/2001	307.96	36.37	271.59	Vashon
LC-149c	9/1/2001	307.96	37.18	270.78	Vashon
LC-149c	12/1/2001	307.96	32.49	275.47	Vashon
LC-149c	4/1/2002	307.96	33.69	274.27	Vashon

Well ID	Date	Measuring Pt	Depth to SWL	GW Elev	Aquifer
LC-149c	6/1/2002	307.96	33.98	273.98	Vashon
LC-149c	9/1/2002	307.96	35.92	272.04	Vashon
LC-149c	2/3/2003	307.96	33.70	274.26	Vashon
LC-149c	3/3/2003	307.96	35.65	272.31	Vashon
LC-149c	7/1/2003	307.96	35.66	272.30	Vashon
LC-149c	10/4/2004	307.96	37.26	270.70	Vashon
LC-149d	7/7/1998	308.19	35.62	272.57	Vashon
LC-149d	12/1/1998	308.19	32.58	275.61	Vashon
LC-149d	3/1/1999	308.19	32.83	275.36	Vashon
LC-149d	6/1/1999	308.19	35.79	272.40	Vashon
LC-149d	9/1/1999	308.19	37.30	270.89	Vashon
LC-149d	12/1/1999	308.19	35.30	272.89	Vashon
LC-149d	3/1/2000	308.19	34.42	273.77	Vashon
LC-149d	6/1/2000	308.19	35.34	272.85	Vashon
LC-149d	9/1/2000	308.29	36.61	271.68	Vashon
LC-149d	12/1/2000	308.29	37.27	271.02	Vashon
LC-149d	3/1/2001	308.29	37.03	271.26	Vashon
LC-149d	6/1/2001	308.29	36.63	271.66	Vashon
LC-149d	9/1/2001	308.29	37.50	270.79	Vashon
LC-14a	4/23/1997	265.15	9.61	255.54	Vashon
LC-14a	7/16/1997	265.15	14.82	250.33	Vashon
LC-14a	10/16/1997	265.15	14.92	250.23	Vashon
LC-14a	1/30/1998	265.15	11.45	253.70	Vashon
LC-14a	4/2/1998	265.15	12.84	252.31	Vashon
LC-14a	7/7/1998	265.15	15.25	249.90	Vashon
LC-14a	9/22/1998	265.15	17.18	247.97	Vashon
LC-14a	12/1/1998	265.15	9.30	255.85	Vashon
LC-14a	3/1/1999	265.15	11.35	253.80	Vashon
LC-14a	6/1/1999	265.15	13.01	252.14	Vashon
LC-14a	9/1/1999	265.15	16.88	248.27	Vashon
LC-14a	12/1/1999	265.15	11.73	253.42	Vashon
LC-14a	3/1/2000	265.15	11.19	253.96	Vashon
LC-14a	6/1/2000	265.15	13.40	251.75	Vashon
LC-14a	9/1/2000	264.97	16.55	248.42	Vashon
LC-14a	12/1/2000	264.97	16.59	248.38	Vashon
LC-14a	3/1/2001	264.97	16.09	248.88	Vashon
LC-14a	6/1/2001	264.97	15.91	249.06	Vashon
LC-14a	9/1/2001	264.97	18.64	246.33	Vashon
LC-14a	12/1/2001	264.97	14.57	250.40	Vashon
LC-14a	4/1/2002	264.97	11.50	253.47	Vashon
LC-14a	6/1/2002	264.97	14.98	249.99	Vashon
LC-14a	2/3/2003	264.97	12.42	252.55	Vashon
LC-14a	3/3/2003	264.97	12.91	252.06	Vashon
LC-14a	7/1/2003	264.97	15.01	249.96	Vashon
LC-14a	10/4/2004	264.97	16.94	248.03	Vashon
LC-14a	4/14/2005	264.97	14.53	250.44	Vashon
LC-14a	7/21/2005	264.97	15.60	249.37	Vashon
LC-14a	9/6/2005	264.97	17.20	247.77	Vashon
LC-14a	3/20/2006	264.97	11.75	253.22	Vashon
LC-14a	9/25/2006	264.97	16.33	248.64	Vashon
LC-14a	3/22/2007	264.97	11.08	253.89	Vashon
LC-14a	9/28/2007	264.97	15.53	249.44	Vashon
LC-14a	10/8/2008	264.97	17.49	247.48	Vashon
LC-14a	2/5/2009	264.97	12.42	252.55	Vashon

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LC-14a	8/5/2009	264.97	14.87	250.10	Vashon
LC-14a	2/9/2010	264.97	11.70	253.27	Vashon
LC-14a	8/12/2010	264.97	13.90	251.07	Vashon
LC-14a	2/17/2011	264.97	11.77	253.20	Vashon
LC-14a	8/9/2011	264.97	13.90	251.07	Vashon
LC-14a	3/1/2012	264.97	12.55	252.42	Vashon
LC-14a	8/1/2012	264.97	13.75	251.22	Vashon
LC-14a	2/7/2013	264.97	12.84	252.13	Vashon
LC-14a	8/8/2013	264.97	15.10	249.87	Vashon
LC- 14a	2/19/2014	264.97	12.30	252.67	Vashon
LC- 14a	9/11/2014	264.97	14.59	250.38	Vashon
LC-150	10/7/1996	280.78	18.88	261.90	Vashon
LC-150	1/24/1997	280.78	14.85	265.93	Vashon
LC-150	4/23/1997	280.78	15.69	265.09	Vashon
LC-150	7/16/1997	280.78	18.89	261.89	Vashon
LC-150	10/16/1997	280.78	19.25	261.53	Vashon
LC-150	1/30/1998	280.78	15.05	265.73	Vashon
LC-150	4/2/1998	280.78	17.16	263.62	Vashon
LC-150	7/7/1998	280.78	19.45	261.33	Vashon
LC-150	9/22/1998	280.78	21.22	259.56	Vashon
LC-150	12/1/1998	280.78	15.45	265.33	Vashon
LC-150	3/1/1999	280.78	17.57	263.21	Vashon
LC-150	6/1/1999	280.78	19.39	261.39	Vashon
LC-150	9/1/1999	280.78	22.08	258.70	Vashon
LC-150	12/1/1999	280.78	18.91	261.87	Vashon
LC-150	3/1/2000	280.78	18.85	261.93	Vashon
LC-150	6/1/2000	280.78	27.97	252.81	Vashon
LC-150	9/1/2000	280.79	22.08	258.71	Vashon
LC-150	12/1/2000	280.79	22.07	258.72	Vashon
LC-150	3/1/2001	280.79	22.19	258.60	Vashon
LC-150	6/1/2001	280.79	21.12	259.67	Vashon
LC-150	9/1/2001	280.79	22.51	258.28	Vashon
LC-150	12/1/2001	280.79	18.69	262.10	Vashon
LC-150	4/1/2002	280.79	11.20	269.59	Vashon
LC-150	6/1/2002	280.79	19.72	261.07	Vashon
LC-150	9/1/2002	280.79	21.12	259.67	Vashon
LC-150	2/3/2003	280.79	18.14	262.65	Vashon
LC-150	3/3/2003	280.79	17.84	262.95	Vashon
LC-150	7/1/2003	280.79	18.66	262.13	Vashon
LC-150	10/4/2004	280.79	18.70	262.09	Vashon
LC-151	10/7/1996	289.46	28.75	260.71	Vashon
LC-151	1/24/1997	289.46	23.22	266.24	Vashon
LC-151	4/23/1997	289.46	23.52	265.94	Vashon
LC-151	7/16/1997	289.46	28.06	261.40	Vashon
LC-151	10/16/1997	289.46	27.85	261.61	Vashon
LC-151	1/30/1998	289.46	24.80	264.66	Vashon
LC-151	4/2/1998	289.46	26.06	263.40	Vashon
LC-151	7/7/1998	289.46	28.10	261.36	Vashon
LC-151	9/22/1998	289.46	27.28	262.18	Vashon
LC-151	12/1/1998	289.46	21.47	267.99	Vashon
LC-151	3/1/1999	289.46	24.14	265.32	Vashon
LC-151	6/1/1999	289.46	26.17	263.29	Vashon
LC-151	9/1/1999	289.46	27.77	261.69	Vashon
LC-151	12/1/1999	289.46	24.43	265.03	Vashon

Well ID	Date	Measuring Pt	Depth to SWL	GW Elev	Aquifer
LC-151	3/1/2000	289.46	23.85	265.61	Vashon
LC-151	6/1/2000	289.46	25.94	263.52	Vashon
LC-151	9/1/2000	289.44	27.09	262.35	Vashon
LC-151	12/1/2000	289.44	26.90	262.54	Vashon
LC-151	3/1/2001	289.44	26.84	262.60	Vashon
LC-151	6/1/2001	289.44	28.28	261.16	Vashon
LC-151	9/1/2001	289.44	29.28	260.16	Vashon
LC-151	12/1/2001	289.44	25.28	264.16	Vashon
LC-151	4/1/2002	289.44	25.42	264.02	Vashon
LC-151	6/1/2002	289.44	26.10	263.34	Vashon
LC-151	9/1/2002	289.44	29.14	260.30	Vashon
LC-151	2/3/2003	289.44	25.93	263.51	Vashon
LC-151	3/3/2003	289.44	27.05	262.39	Vashon
LC-151	7/1/2003	289.44	26.46	262.98	Vashon
LC-151	10/4/2004	289.44	29.20	260.24	Vashon
LC-152	10/7/1996	289.39	28.64	260.75	Vashon
LC-152	1/24/1997	289.39	22.57	266.82	Vashon
LC-152	4/23/1997	289.39	23.81	265.58	Vashon
LC-152	7/16/1997	289.39	27.90	261.49	Vashon
LC-152	10/16/1997	289.39	27.56	261.83	Vashon
LC-152	1/30/1998	289.39	24.19	265.20	Vashon
LC-152	4/2/1998	289.39	25.50	263.89	Vashon
LC-152	7/7/1998	289.39	27.70	261.69	Vashon
LC-152	9/22/1998	289.39	27.65	261.74	Vashon
LC-152	12/1/1998	289.39	21.48	267.91	Vashon
LC-152	3/1/1999	289.39	24.29	265.10	Vashon
LC-152	6/1/1999	289.39	26.47	262.92	Vashon
LC-152	9/1/1999	289.39	28.25	261.14	Vashon
LC-152	12/1/1999	289.39	24.48	264.91	Vashon
LC-152	3/1/2000	289.39	23.80	265.59	Vashon
LC-152	6/1/2000	289.39	26.16	263.23	Vashon
LC-152	9/1/2000	289.40	27.48	261.92	Vashon
LC-152	12/1/2000	289.40	27.29	262.11	Vashon
LC-152	3/1/2001	289.40	27.18	262.22	Vashon
LC-152	6/1/2001	289.40	28.05	261.35	Vashon
LC-152	9/1/2001	289.40	29.94	259.46	Vashon
LC-152	12/1/2001	289.40	25.00	264.40	Vashon
LC-152	4/1/2002	289.40	24.90	264.50	Vashon
LC-152	6/1/2002	289.40	26.14	263.26	Vashon
LC-152	9/1/2002	289.40	28.96	260.44	Vashon
LC-152	2/3/2003	289.40	25.47	263.93	Vashon
LC-152	3/3/2003	289.40	26.60	262.80	Vashon
LC-152	7/1/2003	289.40	26.89	262.51	Vashon
LC-152	10/4/2004	289.40	29.02	260.38	Vashon
LC-153	10/7/1996	279.88	17.99	261.89	Vashon
LC-153	1/24/1997	279.88	14.02	265.86	Vashon
LC-153	4/23/1997	279.88	14.86	265.02	Vashon
LC-153	7/16/1997	279.88	18.04	261.84	Vashon
LC-153	10/16/1997	279.88	18.45	261.43	Vashon
LC-153	1/30/1998	279.88	14.12	265.76	Vashon
LC-153	4/2/1998	279.88	16.35	263.53	Vashon
LC-153	7/7/1998	279.88	18.66	261.22	Vashon
LC-153	9/22/1998	279.88	20.47	259.41	Vashon
LC-153	12/1/1998	279.88	14.73	265.15	Vashon

Well ID	Date	Measuring Pt	Depth to SWL	GW Elev	Aquifer
LC-153	3/1/1999	279.88	16.59	263.29	Vashon
LC-153	6/1/1999	279.88	18.32	261.56	Vashon
LC-153	9/1/1999	279.88	21.21	258.67	Vashon
LC-153	12/1/1999	279.88	18.30	261.58	Vashon
LC-153	3/1/2000	279.88	18.11	261.77	Vashon
LC-153	6/1/2000	279.88	19.30	260.58	Vashon
LC-153	9/1/2000	280.03	21.43	258.60	Vashon
LC-153	12/1/2000	280.03	21.53	258.50	Vashon
LC-153	3/1/2001	280.03	21.71	258.32	Vashon
LC-153	6/1/2001	280.03	20.58	259.45	Vashon
LC-153	9/1/2001	280.03	22.02	258.01	Vashon
LC-153	12/1/2001	280.83	18.06	262.77	Vashon
LC-153	4/1/2002	280.83	11.15	269.68	Vashon
LC-153	6/1/2002	280.83	18.96	261.87	Vashon
LC-153	9/1/2002	280.83	21.32	259.51	Vashon
LC-153	2/3/2003	280.83	17.56	263.27	Vashon
LC-153	3/3/2003	280.83	16.86	263.97	Vashon
LC-153	7/1/2003	280.83	17.99	262.84	Vashon
LC-153	10/4/2004	280.83	18.33	262.50	Vashon
LC-154	10/16/1997	290.54	28.52	262.02	Vashon
LC-154	1/30/1998	290.54	25.20	265.34	Vashon
LC-154	4/2/1998	290.54	26.49	264.05	Vashon
LC-154	7/7/1998	290.54	28.80	261.74	Vashon
LC-154	9/22/1998	290.54	28.61	261.93	Vashon
LC-154	12/1/1998	290.54	22.60	267.94	Vashon
LC-154	3/1/1999	290.54	25.50	265.04	Vashon
LC-154	6/1/1999	290.54	27.60	262.94	Vashon
LC-154	9/1/1999	290.54	29.26	261.28	Vashon
LC-154	12/1/1999	290.54	25.63	264.91	Vashon
LC-154	3/1/2000	290.54	25.06	265.48	Vashon
LC-154	6/1/2000	290.54	27.25	263.29	Vashon
LC-154	9/1/2000	290.54	28.49	262.05	Vashon
LC-154	12/1/2000	290.54	28.30	262.24	Vashon
LC-154	3/1/2001	290.54	28.21	262.33	Vashon
LC-154	6/1/2001	290.54	29.09	261.45	Vashon
LC-154	9/1/2001	290.54	32.60	257.94	Vashon
LC-154	12/1/2001	290.54	27.10	263.44	Vashon
LC-154	4/1/2002	290.54	25.84	264.70	Vashon
LC-154	6/1/2002	290.54	27.91	262.63	Vashon
LC-154	9/1/2002	290.54	29.23	261.31	Vashon
LC-154	2/3/2003	290.54	26.40	264.14	Vashon
LC-154	3/3/2003	290.54	27.57	262.97	Vashon
LC-154	7/1/2003	290.54	27.81	262.73	Vashon
LC-154	10/4/2004	290.54	30.22	260.32	Vashon
LC-155	10/7/1996	279.05	19.96	259.09	Vashon
LC-155	1/24/1997	279.05	14.60	264.45	Vashon
LC-155	4/23/1997	279.05	14.86	264.19	Vashon
LC-155	7/16/1997	279.05	17.23	261.82	Vashon
LC-155	10/16/1997	279.05	17.02	262.03	Vashon
LC-155	1/30/1998	279.05	14.25	264.80	Vashon
LC-155	4/2/1998	279.05	14.07	264.98	Vashon
LC-155	7/7/1998	279.05	15.94	263.11	Vashon
LC-155	9/22/1998	279.05	17.14	261.91	Vashon
LC-155	12/1/1998	279.05	11.72	267.33	Vashon

Well ID	Date	Measuring Pt	Depth to SWL	GW Elev	Aquifer
LC-155	3/1/1999	279.05	13.40	265.65	Vashon
LC-155	6/1/1999	279.05	15.56	263.49	Vashon
LC-155	9/1/1999	279.05	17.45	261.60	Vashon
LC-155	12/1/1999	279.05	14.16	264.89	Vashon
LC-155	3/1/2000	279.05	13.56	265.49	Vashon
LC-155	6/1/2000	279.05	14.65	264.40	Vashon
LC-155	9/1/2000	278.98	16.32	262.66	Vashon
LC-155	12/1/2000	278.98	16.72	262.26	Vashon
LC-155	3/1/2001	278.98	16.57	262.41	Vashon
LC-155	6/1/2001	278.98	15.89	263.09	Vashon
LC-155	9/1/2001	278.98	17.56	261.42	Vashon
LC-155	12/1/2001	278.98	14.02	264.96	Vashon
LC-155	4/1/2002	278.98	11.46	267.52	Vashon
LC-155	6/1/2002	278.98	14.72	264.26	Vashon
LC-155	9/1/2002	278.98	15.66	263.32	Vashon
LC-155	2/3/2003	278.98	13.31	265.67	Vashon
LC-155	3/3/2003	278.98	14.22	264.76	Vashon
LC-155	7/1/2003	278.98	13.38	265.60	Vashon
LC-155	10/4/2004	278.98	16.54	262.44	Vashon
LC-156	10/7/1996	278.77	13.22	265.55	Vashon
LC-156	1/24/1997	278.77	7.85	270.92	Vashon
LC-156	4/23/1997	278.77	9.41	269.36	Vashon
LC-156	7/16/1997	278.77	12.19	266.58	Vashon
LC-156	10/16/1997	278.77	12.28	266.49	Vashon
LC-156	1/30/1998	278.77	10.09	268.68	Vashon
LC-156	4/2/1998	278.77	10.49	268.28	Vashon
LC-156	7/7/1998	278.77	12.18	266.59	Vashon
LC-156	9/22/1998	278.77	14.25	264.52	Vashon
LC-156	12/1/1998	278.77	8.55	270.22	Vashon
LC-156	3/1/1999	278.77	9.64	269.13	Vashon
LC-156	6/1/1999	278.77	11.38	267.39	Vashon
LC-156	9/1/1999	278.77	13.56	265.21	Vashon
LC-156	12/1/1999	278.77	10.55	268.22	Vashon
LC-156	3/1/2000	278.77	9.89	268.88	Vashon
LC-156	6/1/2000	278.77	11.25	267.52	Vashon
LC-156	9/1/2000	278.76	13.53	265.23	Vashon
LC-156	12/1/2000	278.76	14.24	264.52	Vashon
LC-156	3/1/2001	278.76	13.95	264.81	Vashon
LC-156	6/1/2001	278.76	13.01	265.75	Vashon
LC-156	9/1/2001	278.76	15.63	263.13	Vashon
LC-156	12/1/2001	278.76	12.68	266.08	Vashon
LC-156	4/1/2002	278.76	9.40	269.36	Vashon
LC-156	6/1/2002	278.76	13.47	265.29	Vashon
LC-156	9/1/2002	278.76	14.47	264.29	Vashon
LC-156	2/3/2003	278.76	11.54	267.22	Vashon
LC-156	3/3/2003	278.76	11.46	267.30	Vashon
LC-156	7/1/2003	278.76	11.36	267.40	Vashon
LC-156	10/4/2004	278.76	14.62	264.14	Vashon
LC-157	1/24/1997	290.10	23.20	266.90	Vashon
LC-157	4/23/1997	290.10	24.23	265.87	Vashon
LC-157	7/16/1997	290.10	28.54	261.56	Vashon
LC-157	10/16/1997	290.10	28.31	261.79	Vashon
LC-157	1/30/1998	290.10	24.86	265.24	Vashon
LC-157	4/2/1998	290.10	26.17	263.93	Vashon

Well ID	Date	Measuring Pt	Depth to SWL	GW Elev	Aquifer
LC-157	7/7/1998	290.10	28.52	261.58	Vashon
LC-157	9/22/1998	290.10	28.35	261.75	Vashon
LC-157	12/1/1998	290.10	22.08	268.02	Vashon
LC-157	3/1/1999	290.10	24.74	265.36	Vashon
LC-157	6/1/1999	290.10	26.94	263.16	Vashon
LC-157	9/1/1999	290.10	28.75	261.35	Vashon
LC-157	12/1/1999	290.10	25.15	264.95	Vashon
LC-157	3/1/2000	290.10	24.56	265.54	Vashon
LC-157	6/1/2000	290.10	26.85	263.25	Vashon
LC-157	9/1/2000	290.08	28.25	261.83	Vashon
LC-157	12/1/2000	290.08	28.04	262.04	Vashon
LC-157	3/1/2001	290.08	27.87	262.21	Vashon
LC-157	6/1/2001	290.08	28.82	261.26	Vashon
LC-157	9/1/2001	290.08	15.23	274.85	Vashon
LC-157	12/1/2001	290.08	25.36	264.72	Vashon
LC-157	4/1/2002	290.08	25.52	264.56	Vashon
LC-157	6/1/2002	290.08	26.32	263.76	Vashon
LC-157	9/1/2002	290.08	28.90	261.18	Vashon
LC-157	2/3/2003	290.08	26.14	263.94	Vashon
LC-157	3/3/2003	290.08	27.30	262.78	Vashon
LC-157	7/1/2003	290.08	27.53	262.55	Vashon
LC-157	10/4/2004	290.08	29.81	260.27	Vashon
LC-158	10/7/1996	278.09	10.45	267.64	Vashon
LC-158	1/24/1997	278.09	6.31	271.78	Vashon
LC-158	4/23/1997	278.09	6.91	271.18	Vashon
LC-158	7/16/1997	278.09	9.54	268.55	Vashon
LC-158	10/16/1997	278.09	9.76	268.33	Vashon
LC-158	1/30/1998	278.09	7.53	270.56	Vashon
LC-158	4/2/1998	278.09	8.10	269.99	Vashon
LC-158	7/7/1998	278.09	9.64	268.45	Vashon
LC-158	9/22/1998	278.09	11.21	266.88	Vashon
LC-158	12/1/1998	278.09	6.05	272.04	Vashon
LC-158	3/1/1999	278.09	7.40	270.69	Vashon
LC-158	6/1/1999	278.09	9.41	268.68	Vashon
LC-158	9/1/1999	278.09	11.32	266.77	Vashon
LC-158	12/1/1999	278.09	8.51	269.58	Vashon
LC-158	3/1/2000	278.09	7.88	270.21	Vashon
LC-158	6/1/2000	278.09	9.26	268.83	Vashon
LC-158	9/1/2000	278.10	11.07	267.03	Vashon
LC-158	12/1/2000	278.10	11.66	266.44	Vashon
LC-158	3/1/2001	278.10	11.25	266.85	Vashon
LC-158	6/1/2001	278.10	10.57	267.53	Vashon
LC-158	9/1/2001	278.10	13.04	265.06	Vashon
LC-158	12/1/2001	278.10	10.64	267.46	Vashon
LC-158	4/1/2002	278.10	7.36	270.74	Vashon
LC-158	6/1/2002	278.10	10.74	267.36	Vashon
LC-158	9/1/2002	278.10	11.66	266.44	Vashon
LC-158	2/3/2003	278.10	8.39	269.71	Vashon
LC-158	3/3/2003	278.10	9.22	268.88	Vashon
LC-158	7/1/2003	278.10	9.69	268.41	Vashon
LC-158	10/4/2004	278.10	13.23	264.87	Vashon
LC-159	10/16/1997	280.57	17.57	263.00	Vashon
LC-159	1/30/1998	280.57	15.25	265.32	Vashon
LC-159	4/2/1998	280.57	15.90	264.67	Vashon

Well ID	Date	Measuring Pt	Depth to SWL	GW Elev	Aquifer
LC-159	7/7/1998	280.57	17.56	263.01	Vashon
LC-159	9/22/1998	280.57	18.80	261.77	Vashon
LC-159	12/1/1998	280.57	13.61	266.96	Vashon
LC-159	3/1/1999	280.57	15.90	264.67	Vashon
LC-159	6/1/1999	280.57	17.65	262.92	Vashon
LC-159	9/1/1999	280.57	19.45	261.12	Vashon
LC-159	12/1/1999	280.57	16.22	264.35	Vashon
LC-159	3/1/2000	280.57	16.66	263.91	Vashon
LC-159	6/1/2000	280.57	16.92	263.65	Vashon
LC-159	9/1/2000	281.09	18.32	262.77	Vashon
LC-159	12/1/2000	281.09	18.46	262.63	Vashon
LC-159	3/1/2001	280.03	18.36	261.67	Vashon
LC-159	6/1/2001	280.03	19.09	260.94	Vashon
LC-159	9/1/2001	280.03	19.07	260.96	Vashon
LC-159	12/1/2001	280.03	16.22	263.81	Vashon
LC-159	4/1/2002	280.03	15.08	264.95	Vashon
LC-159	6/1/2002	280.03	16.90	263.13	Vashon
LC-159	9/1/2002	280.03	18.01	262.02	Vashon
LC-159	2/3/2003	280.03	15.59	264.44	Vashon
LC-159	3/3/2003	280.03	16.57	263.46	Vashon
LC-159	7/1/2003	280.03	15.19	264.84	Vashon
LC-159	10/4/2004	280.03	18.82	261.21	Vashon
LC-16	12/1/2001	266.95	10.96	255.99	Vashon
LC-16	4/1/2002	266.95	11.28	255.67	Vashon
LC-16	6/1/2002	266.95	13.12	253.83	Vashon
LC-16	9/1/2002	266.95	15.60	251.35	Vashon
LC-16	2/3/2003	266.95	12.11	254.84	Vashon
LC-16	3/3/2003	266.95	13.68	253.27	Vashon
LC-16	7/1/2003	266.95	14.94	252.01	Vashon
LC-16	10/4/2004	266.95	17.03	249.92	Vashon
LC-16	3/17/2005	266.95	15.61	251.34	Vashon
LC-16	7/21/2005	266.95	15.36	251.59	Vashon
LC-16	10/26/2005	266.95	17.77	249.18	Vashon
LC-16	3/30/2006	266.95	11.55	255.40	Vashon
LC-16	9/25/2006	266.95	16.35	250.60	Vashon
LC-16	3/22/2007	266.95	10.50	256.45	Vashon
LC-16	10/5/2007	266.95	15.55	251.40	Vashon
LC-16	3/25/2008	266.95	12.76	254.19	Vashon
LC-16	10/8/2008	266.95	17.45	249.50	Vashon
LC-16	2/5/2009	266.95	12.07	254.88	Vashon
LC-16	8/5/2009	266.95	14.97	251.98	Vashon
LC-16	2/9/2010	266.95	11.60	255.35	Vashon
LC-16	8/10/2010	266.95	13.93	253.02	Vashon
LC-16	2/17/2011	266.95	11.47	255.48	Vashon
LC-16	8/9/2011	266.95	13.92	253.03	Vashon
LC-16	2/29/2012	266.95	12.05	254.90	Vashon
LC-16	8/1/2012	266.95	13.64	253.31	Vashon
LC-16	2/13/2013	266.95	11.09	255.86	Vashon
LC-16	8/7/2013	266.95	13.50	253.45	Vashon
LC- 16	2/19/2014	266.95	10.47	256.48	Vashon
LC- 16	9/5/2014	266.95	12.89	254.06	Vashon
LC-160	12/1/1998	279.92	11.75	268.17	Vashon
LC-160	3/1/1999	279.92	13.86	266.06	Vashon
LC-160	6/1/1999	279.92	15.56	264.36	Vashon

Well ID	Date	Measuring Pt	Depth to SWL	GW Elev	Aquifer
LC-160	9/1/1999	279.92	17.25	262.67	Vashon
LC-160	12/1/1999	279.92	14.20	265.72	Vashon
LC-160	3/1/2000	279.92	14.49	265.43	Vashon
LC-160	6/1/2000	279.92	14.90	265.02	Vashon
LC-160	9/1/2000	279.92	16.28	263.64	Vashon
LC-160	12/1/2000	279.92	16.44	263.48	Vashon
LC-160	3/1/2001	279.74	16.40	263.34	Vashon
LC-160	6/1/2001	279.74	16.97	262.77	Vashon
LC-160	9/1/2001	279.74	17.10	262.64	Vashon
LC-160	12/1/2001	279.74	13.66	266.08	Vashon
LC-160	4/1/2002	279.74	13.13	266.61	Vashon
LC-160	6/1/2002	279.74	14.66	265.08	Vashon
LC-160	9/1/2002	279.74	16.96	262.78	Vashon
LC-160	2/3/2003	279.74	13.69	266.05	Vashon
LC-160	3/3/2003	279.74	14.66	265.08	Vashon
LC-160	7/1/2003	279.74	13.59	266.15	Vashon
LC-160	10/4/2004	279.74	16.53	263.21	Vashon
LC-160	9/25/2006	279.74	13.44	266.30	Vashon
LC-160	3/22/2007	279.74	9.60	270.14	Vashon
LC-160	10/19/2007	279.74	14.89	264.85	Vashon
LC-160	4/3/2008	279.74	13.22	266.52	Vashon
LC-160	10/8/2008	279.74	16.52	263.22	Vashon
LC-160	2/3/2009	279.74	13.47	266.27	Vashon
LC-160	8/3/2009	279.74	12.38	267.36	Vashon
LC-160	2/11/2010	279.74	12.80	266.94	Vashon
LC-160	8/10/2010	279.74	14.35	265.39	Vashon
LC-160	2/14/2011	279.74	12.50	267.24	Vashon
LC-160	8/10/2011	279.74	13.03	266.71	Vashon
LC-160	2/22/2012	279.74	12.85	266.89	Vashon
LC-160	7/31/2012	279.74	14.02	265.72	Vashon
LC-160	2/7/2013	279.74	13.04	266.7	Vashon
LC-160	8/7/2013	279.74	14.55	265.19	Vashon
LC-160	2/18/2014	279.74	10.60	269.14	Vashon
LC-160	9/8/2014	279.74	13.32	266.42	Vashon
LC-161	10/7/1996	282.62	13.11	269.51	Vashon
LC-161	1/24/1997	282.62	7.75	274.87	Vashon
LC-161	4/23/1997	282.62	9.36	273.26	Vashon
LC-161	7/16/1997	282.62	12.55	270.07	Vashon
LC-161	10/16/1997	282.62	12.82	269.80	Vashon
LC-161	1/30/1998	282.62	10.36	272.26	Vashon
LC-161	4/2/1998	282.62	10.82	271.80	Vashon
LC-161	7/7/1998	282.62	12.68	269.94	Vashon
LC-161	9/22/1998	282.62	14.10	268.52	Vashon
LC-161	12/1/1998	282.62	8.80	273.82	Vashon
LC-161	3/1/1999	282.62	9.49	273.13	Vashon
LC-161	6/1/1999	282.62	12.88	269.74	Vashon
LC-161	9/1/1999	282.62	14.78	267.84	Vashon
LC-161	12/1/1999	282.62	11.59	271.03	Vashon
LC-161	3/1/2000	282.62	10.85	271.77	Vashon
LC-161	6/1/2000	282.62	12.42	270.20	Vashon
LC-161	9/1/2000	282.62	14.12	268.50	Vashon
LC-161	12/1/2000	282.62	14.65	267.97	Vashon
LC-162	10/7/1996	279.43	10.45	268.98	Vashon
LC-162	1/24/1997	279.43	6.15	273.28	Vashon

Well ID	Date	Measuring Pt	Depth to SWL	GW Elev	Aquifer
LC-162	4/23/1997	279.43	6.74	272.69	Vashon
LC-162	7/16/1997	279.43	9.77	269.66	Vashon
LC-162	10/16/1997	279.43	10.06	269.37	Vashon
LC-162	1/30/1998	279.43	7.64	271.79	Vashon
LC-162	4/2/1998	279.43	8.12	271.31	Vashon
LC-162	7/7/1998	279.43	9.90	269.53	Vashon
LC-162	9/22/1998	279.43	11.32	268.11	Vashon
LC-162	12/1/1998	279.43	6.10	273.33	Vashon
LC-162	3/1/1999	279.43	7.78	271.65	Vashon
LC-162	6/1/1999	279.43	10.03	269.40	Vashon
LC-162	9/1/1999	279.43	12.05	267.38	Vashon
LC-162	12/1/1999	279.43	8.80	270.63	Vashon
LC-162	3/1/2000	279.43	8.10	271.33	Vashon
LC-162	6/1/2000	279.43	9.62	269.81	Vashon
LC-162	9/1/2000	279.45	11.34	268.11	Vashon
LC-162	12/1/2000	279.45	11.85	267.60	Vashon
LC-163	10/7/1996	273.96	22.90	251.06	Vashon
LC-163	1/24/1997	273.96	15.38	258.58	Vashon
LC-163	4/23/1997	273.96	18.71	255.25	Vashon
LC-163	7/16/1997	273.96	21.08	252.88	Vashon
LC-163	10/16/1997	273.96	21.25	252.71	Vashon
LC-163	1/30/1998	273.96	17.23	256.73	Vashon
LC-163	4/2/1998	273.96	19.27	254.69	Vashon
LC-163	7/7/1998	273.96	21.18	252.78	Vashon
LC-163	9/22/1998	273.96	23.90	250.06	Vashon
LC-163	12/1/1998	273.96	14.35	259.61	Vashon
LC-163	3/1/1999	273.96	16.61	257.35	Vashon
LC-163	6/1/1999	273.96	17.78	256.18	Vashon
LC-163	9/1/1999	273.96	23.59	250.37	Vashon
LC-163	12/1/1999	273.96	17.27	256.69	Vashon
LC-163	3/1/2000	273.96	15.97	257.99	Vashon
LC-163	6/1/2000	273.96	18.56	255.40	Vashon
LC-163	9/1/2000	273.68	23.47	250.21	Vashon
LC-163	12/1/2000	273.68	23.74	249.94	Vashon
LC-163	3/1/2001	273.68	23.71	249.97	Vashon
LC-163	6/1/2001	273.68	22.87	250.81	Vashon
LC-163	9/1/2001	273.68	25.54	248.14	Vashon
LC-163	12/1/2001	273.68	16.52	257.16	Vashon
LC-163	4/1/2002	273.68	16.45	257.23	Vashon
LC-163	6/1/2002	273.68	17.94	255.74	Vashon
LC-163	9/1/2002	273.68	18.90	254.78	Vashon
LC-163	2/3/2003	273.68	17.42	256.26	Vashon
LC-163	3/3/2003	273.68	18.36	255.32	Vashon
LC-163	7/1/2003	273.68	21.11	252.57	Vashon
LC-163	10/4/2004	273.68	23.55	250.13	Vashon
LC-165	10/7/1996	273.82	26.08	247.74	Vashon
LC-165	1/24/1997	273.82	19.33	254.49	Vashon
LC-165	4/23/1997	273.82	21.13	252.69	Vashon
LC-165	7/16/1997	273.82	24.52	249.30	Vashon
LC-165	10/16/1997	273.82	24.66	249.16	Vashon
LC-165	1/30/1998	273.82	21.10	252.72	Vashon
LC-165	4/2/1998	273.82	21.93	251.89	Vashon
LC-165	7/7/1998	273.82	24.85	248.97	Vashon
LC-165	9/22/1998	273.82	27.21	246.61	Vashon

Well ID	Date	Measuring Pt	Depth to SWL	GW Elev	Aquifer
LC-165	12/1/1998	273.82	19.10	254.72	Vashon
LC-165	3/1/1999	273.82	21.25	252.57	Vashon
LC-165	6/1/1999	273.82	23.10	250.72	Vashon
LC-165	9/1/1999	273.82	27.00	246.82	Vashon
LC-165	12/1/1999	273.82	21.58	252.24	Vashon
LC-165	3/1/2000	273.82	21.13	252.69	Vashon
LC-165	6/1/2000	273.82	23.36	250.46	Vashon
LC-165	9/1/2000	273.52	26.85	246.67	Vashon
LC-165	12/1/2000	273.52	26.64	246.88	Vashon
LC-165	3/1/2001	273.52	25.96	247.56	Vashon
LC-165	6/1/2001	273.52	25.89	247.63	Vashon
LC-165	9/1/2001	273.52	28.32	245.20	Vashon
LC-165	12/1/2001	273.52	23.64	249.88	Vashon
LC-165	4/1/2002	273.52	21.24	252.28	Vashon
LC-165	6/1/2002	273.52	24.28	249.24	Vashon
LC-165	9/1/2002	273.52	25.24	248.28	Vashon
LC-165	2/3/2003	273.52	22.27	251.25	Vashon
LC-165	3/3/2003	273.52	22.62	250.90	Vashon
LC-165	7/1/2003	273.52	24.85	248.67	Vashon
LC-165	10/4/2004	273.52	24.68	248.84	Vashon
LC-167	10/7/1996	281.83	31.11	250.72	Vashon
LC-167	1/24/1997	281.83	24.73	257.10	Vashon
LC-167	4/23/1997	281.83	26.72	255.11	Vashon
LC-167	7/16/1997	281.83	29.65	252.18	Vashon
LC-167	10/16/1997	281.83	30.06	251.77	Vashon
LC-167	1/30/1998	281.83	26.50	255.33	Vashon
LC-167	4/2/1998	281.83	27.80	254.03	Vashon
LC-167	7/7/1998	281.83	30.30	251.53	Vashon
LC-167	9/22/1998	281.83	31.96	249.87	Vashon
LC-167	12/1/1998	281.83	24.42	257.41	Vashon
LC-167	3/1/1999	281.83	27.27	254.56	Vashon
LC-167	6/1/1999	281.83	29.17	252.66	Vashon
LC-167	9/1/1999	281.83	32.47	249.36	Vashon
LC-167	12/1/1999	281.83	27.00	254.83	Vashon
LC-167	3/1/2000	281.83	26.50	255.33	Vashon
LC-167	6/1/2000	281.83	28.77	253.06	Vashon
LC-167	9/1/2000	281.79	31.63	250.16	Vashon
LC-167	12/1/2000	281.79	31.61	250.18	Vashon
LC-167	3/1/2001	281.79	31.13	250.66	Vashon
LC-167	6/1/2001	281.79	31.07	250.72	Vashon
LC-167	9/1/2001	281.79	32.69	249.10	Vashon
LC-167	12/1/2001	281.79	27.50	254.29	Vashon
LC-167	4/1/2002	281.79	26.68	255.11	Vashon
LC-167	6/1/2002	281.79	28.47	253.32	Vashon
LC-167	9/1/2002	281.79	40.01	241.78	Vashon
LC-167	2/3/2003	281.79	27.68	254.11	Vashon
LC-167	3/3/2003	281.79	28.03	253.76	Vashon
LC-167	7/1/2003	281.79	30.08	251.71	Vashon
LC-167	10/4/2004	281.79	31.65	250.14	Vashon
LC-167	7/21/2005	281.79	30.40	251.39	Vashon
LC-167	9/26/2005	281.79	31.09	250.70	Vashon
LC-167	3/20/2006	281.79	27.67	254.12	Vashon
LC-167	9/25/2006	281.79	31.19	250.60	Vashon
LC-167	3/22/2007	281.79	26.25	255.54	Vashon

Well ID	Date	Measuring Pt	Depth to SWL	GW Elev	Aquifer
LC-167	9/28/2007	281.79	30.65	251.14	Vashon
LC-167	3/25/2008	281.79	28.22	253.57	Vashon
LC-167	10/8/2008	281.79	32.15	249.64	Vashon
LC-167	2/5/2009	281.79	27.58	254.21	Vashon
LC-167	8/5/2009	281.79	30.00	251.79	Vashon
LC-167	2/9/2010	281.79	26.80	254.99	Vashon
LC-167	8/12/2010	281.79	29.20	252.59	Vashon
LC-167	2/17/2011	281.79	26.92	254.87	Vashon
LC-167	8/9/2011	281.79	28.92	252.87	Vashon
LC-167	2/28/2012	281.79	27.50	254.29	Vashon
LC-167	8/1/2012	281.79	28.92	252.87	Vashon
LC-167	2/7/2013	281.79	29.14	252.65	Vashon
LC-167	8/8/2013	281.79	30.10	251.69	Vashon
LC-167	2/19/2014	281.79	27.40	254.39	Vashon
LC-167	9/11/2014	281.79	29.71	252.08	Vashon
LC-168	1/24/1997	271.72	14.40	257.32	Vashon
LC-168	4/23/1997	271.72	16.43	255.29	Vashon
LC-168	7/16/1997	271.72	19.99	251.73	Vashon
LC-168	10/16/1997	271.72	20.15	251.57	Vashon
LC-168	1/30/1998	271.72	16.25	255.47	Vashon
LC-168	4/2/1998	271.72	16.43	255.29	Vashon
LC-168	7/7/1998	271.72	20.43	251.29	Vashon
LC-168	9/22/1998	271.72	22.62	249.10	Vashon
LC-168	12/1/1998	271.72	14.06	257.66	Vashon
LC-168	3/1/1999	271.72	16.15	255.57	Vashon
LC-168	6/1/1999	271.72	18.13	253.59	Vashon
LC-168	9/1/1999	271.72	22.20	249.52	Vashon
LC-168	12/1/1999	271.72	16.65	255.07	Vashon
LC-168	3/1/2000	271.72	16.19	255.53	Vashon
LC-168	6/1/2000	271.72	18.60	253.12	Vashon
LC-168	9/1/2000	271.71	22.16	249.55	Vashon
LC-168	12/1/2000	271.71	22.13	249.58	Vashon
LC-168	3/1/2001	271.71	21.47	250.24	Vashon
LC-168	6/1/2001	271.71	21.37	250.34	Vashon
LC-168	9/1/2001	271.71	22.99	248.72	Vashon
LC-168	12/1/2001	271.71	13.90	257.81	Vashon
LC-168	4/1/2002	271.71	16.37	255.34	Vashon
LC-168	6/1/2002	271.71	14.99	256.72	Vashon
LC-168	9/1/2002	271.71	18.49	253.22	Vashon
LC-168	2/3/2003	271.71	17.13	254.58	Vashon
LC-168	3/3/2003	271.71	17.80	253.91	Vashon
LC-168	7/1/2003	271.71	20.12	251.59	Vashon
LC-168	10/4/2004	271.71	22.27	249.44	Vashon
LC-168	4/14/2005	271.71	19.37	252.34	Vashon
LC-168	7/20/2005	271.71	20.58	251.13	Vashon
LC-168	3/17/2006	271.71	16.37	255.34	Vashon
LC-168	9/20/2006	271.71	21.26	250.45	Vashon
LC-168	3/20/2007	271.71	15.87	255.84	Vashon
LC-168	9/28/2007	271.71	20.77	250.94	Vashon
LC-168	3/25/2008	271.71	17.93	253.78	Vashon
LC-168	10/8/2008	271.71	22.68	249.03	Vashon
LC-168	2/5/2009	271.71	17.25	254.46	Vashon
LC-168	9/8/2009	271.71	20.03	251.68	Vashon
LC-168	2/10/2010	271.71	16.45	255.26	Vashon

Well ID	Date	Measuring Pt	Depth to SWL	GW Elev	Aquifer
LC-168	8/10/2010	271.71	19.06	252.65	Vashon
LC-168	2/16/2011	271.71	16.70	255.01	Vashon
LC-168	8/10/2011	271.71	18.82	252.89	Vashon
LC-168	2/28/2012	271.71	17.24	254.47	Vashon
LC-168	7/31/2012	271.71	18.73	252.98	Vashon
LC-168	2/5/2013	271.71	17.35	254.36	Vashon
LC-168	8/7/2013	271.71	20.15	251.56	Vashon
LC-168	2/18/2014	271.71	17.70	254.01	Vashon
LC-168	9/8/2014	271.71	19.59	252.12	Vashon
LC-169	3/3/2003	284.16	15.72	268.44	Vashon
LC-169	7/1/2003	284.16	16.03	268.13	Vashon
LC-169	10/4/2004	284.16	17.77	266.39	Vashon
LC-170	3/3/2003	284.12	15.99	268.13	Vashon
LC-170	7/1/2003	284.12	16.24	267.88	Vashon
LC-170	10/4/2004	284.12	16.84	267.28	Vashon
LC-170	4/6/2005	284.12	16.18	267.94	Vashon
LC-170	7/29/2005	284.12	16.85	267.27	Vashon
LC-170	3/17/2006	281.12	14.49	266.63	Vashon
LC-170	9/20/2006	281.12	17.03	264.09	Vashon
LC-170	3/21/2007	281.12	14.02	267.10	Vashon
LC-170	9/28/2007	281.12	16.65	264.47	Vashon
LC-170	3/25/2008	281.12	15.17	265.95	Vashon
LC-170	10/8/2008	281.12	17.18	263.94	Vashon
LC-170	2/3/2009	281.12	16.66	264.46	Vashon
LC-170	9/8/2009	281.12	16.80	264.32	Vashon
LC-170	2/11/2010	281.12	15.15	265.97	Vashon
LC-170	8/9/2010	281.12	15.61	265.51	Vashon
LC-170	2/16/2011	281.12	14.75	266.37	Vashon
LC-170	8/10/2011	281.12	15.70	265.42	Vashon
LC-170	2/22/2012	281.12	14.89	266.23	Vashon
LC-170	8/1/2012	281.12	15.68	265.44	Vashon
LC-170	2/6/2013	281.12	15.20	265.92	Vashon
LC-170	8/7/2013	281.12	16.15	264.97	Vashon
LC-170	2/14/2014	281.12	15.45	265.67	Vashon
LC-170	9/8/2014	281.12	19.59	261.53	Vashon
LC-172	3/3/2003	287.17	18.82	268.35	Vashon
LC-172	7/1/2003	287.17	19.06	268.11	Vashon
LC-172	10/4/2004	287.17	19.55	267.62	Vashon
LC-173	3/3/2003	283.83	15.24	268.59	Vashon
LC-173	7/1/2003	283.83	15.55	268.28	Vashon
LC-173	10/4/2004	283.83	16.12	267.71	Vashon
LC-174	3/3/2003	283.52	13.49	270.03	Vashon
LC-174	7/1/2003	283.52	14.27	269.25	Vashon
LC-174	10/4/2004	283.52	15.31	268.21	Vashon
LC-175	3/3/2003	284.18	14.99	269.19	Vashon
LC-175	10/4/2004	284.18	16.95	267.23	Vashon
LC-176	3/3/2003	285.05	14.82	270.23	Vashon
LC-176	10/4/2004	285.05	17.82	267.23	Vashon
LC-177	3/3/2003	284.53	13.19	271.34	Vashon
LC-177	10/4/2004	284.53	15.08	269.45	Vashon
LC-177	4/1/2005	284.53	8.82	275.71	Vashon
LC-177	10/8/2008	284.53	15.18	269.35	Vashon
LC-177	2/3/2009	284.53	12.90	271.63	Vashon
LC-177	9/8/2009	284.53	14.04	270.49	Vashon

Well ID	Date	Measuring Pt	Depth to SWL	GW Elev	Aquifer
LC-177	2/11/2010	284.53	12.65	271.88	Vashon
LC-177	8/9/2010	284.53	13.60	270.93	Vashon
LC-177	2/14/2011	284.53	12.53	272.00	Vashon
LC-177	8/8/2011	284.53	13.22	271.31	Vashon
LC-177	2/22/2012	284.53	14.95	269.58	Vashon
LC-177	7/31/2012	284.53	13.56	270.97	Vashon
LC-177	2/7/2013	284.53	12.89	271.64	Vashon
LC-177	8/7/2013	284.53	13.90	270.63	Vashon
LC-177	2/14/2014	284.53	13.35	271.18	Vashon
LC-177	9/5/2014	284.53	13.67	270.86	Vashon
LC-178	3/3/2003	278.52	11.43	267.09	Vashon
LC-178	7/1/2003	278.52	11.41	267.11	Vashon
LC-178	10/4/2004	278.52	13.27	265.25	Vashon
LC-178	4/6/2005	278.52	12.84	265.68	Vashon
LC-178	7/29/2005	278.52	13.19	265.33	Vashon
LC-178	3/14/2006	278.52	11.22	267.30	Vashon
LC-178	9/25/2006	278.52	12.92	265.60	Vashon
LC-178	3/21/2007	278.52	11.25	267.27	Vashon
LC-178	9/26/2007	278.52	12.82	265.70	Vashon
LC-178	3/25/2008	278.52	14.70	263.82	Vashon
LC-178	10/8/2008	278.52	12.70	265.82	Vashon
LC-178	2/6/2009	278.52	11.97	266.55	Vashon
LC-178	9/8/2009	278.52	12.46	266.06	Vashon
LC-178	2/11/2010	278.52	11.25	267.27	Vashon
LC-178	8/10/2010	278.52	11.02	267.50	Vashon
LC-178	2/16/2011	278.52	10.55	267.97	Vashon
LC-178	8/10/2011	278.52	10.70	267.82	Vashon
LC-178	2/23/2012	278.52	11.12	267.40	Vashon
LC-178	8/3/2012	278.52	11.28	267.24	Vashon
LC-178	2/6/2013	278.52	11.28	267.24	Vashon
LC-178	8/8/2013	278.52	11.70	266.82	Vashon
LC-178	2/13/2014	278.52	14.75	263.77	Vashon
LC-178	9/8/2014	278.52	11.25	267.27	Vashon
LC-18	12/1/1998	283.94	17.10	266.84	Vashon
LC-18	3/1/1999	283.94	19.10	264.84	Vashon
LC-18	6/1/1999	283.94	20.72	263.22	Vashon
LC-18	9/1/1999	283.94	22.10	261.84	Vashon
LC-18	12/1/1999	283.94	19.73	264.21	Vashon
LC-18	3/1/2000	283.94	19.19	264.75	Vashon
LC-18	6/1/2000	283.94	20.92	263.02	Vashon
LC-18	9/1/2000	284.11	22.34	261.77	Vashon
LC-18	12/1/2000	284.11	21.68	262.43	Vashon
LC-18	3/1/2001	283.89	21.74	262.15	Vashon
LC-18	6/1/2001	283.89	22.10	261.79	Vashon
LC-18	9/1/2001	283.89	23.28	260.61	Vashon
LC-18	12/1/2001	283.89	33.45	250.44	Vashon
LC-18	4/1/2002	283.89	19.45	264.44	Vashon
LC-18	6/1/2002	283.89	33.99	249.90	Vashon
LC-18	9/1/2002	283.89	23.01	260.88	Vashon
LC-18	2/3/2003	283.89	33.69	250.20	Vashon
LC-18	3/3/2003	283.89	20.70	263.19	Vashon
LC-18	7/1/2003	283.89	21.39	262.50	Vashon
LC-18	10/4/2004	283.89	22.54	261.35	Vashon
LC-18	4/6/2005	283.89	20.75	263.14	Vashon

Well ID	Date	Measuring Pt	Depth to SWL	GW Elev	Aquifer
LC-18	3/14/2006	283.89	19.21	264.68	Vashon
LC-18	3/20/2007	283.89	18.52	265.37	Vashon
LC-18	9/28/2007	283.89	21.30	262.59	Vashon
LC-18	3/25/2008	283.89	20.21	263.68	Vashon
LC-18	10/8/2008	283.89	22.20	261.69	Vashon
LC-18	2/5/2009	283.89	20.17	263.72	Vashon
LC-18	8/4/2009	283.89	21.55	262.34	Vashon
LC-18	2/10/2010	283.89	19.65	264.24	Vashon
LC-18	8/10/2010	283.89	20.85	263.04	Vashon
LC-18	2/16/2011	283.89	19.32	264.57	Vashon
LC-18	8/8/2011	283.89	20.47	263.42	Vashon
LC-18	2/23/2012	283.89	19.42	264.47	Vashon
LC-18	7/31/2012	283.89	20.65	263.24	Vashon
LC-18	2/7/2013	283.89	19.95	263.94	Vashon
LC-18	8/8/2013	283.89	21.17	262.72	Vashon
LC- 18	2/18/2014	283.89	19.50	264.39	Vashon
LC- 18	9/8/2014	283.89	20.92	262.97	Vashon
LC-180	3/3/2003	273.24	6.59	266.65	Vashon
LC-180	10/4/2004	273.24	6.77	266.47	Vashon
LC-180	7/29/2005	273.24	7.10	266.14	Vashon
LC-180	10/27/2005	273.24	7.27	265.97	Vashon
LC-180	9/29/2006	273.24	6.97	266.27	Vashon
LC-180	3/28/2007	273.24	5.81	267.43	Vashon
LC-180	10/4/2007	273.24	2.60	270.64	Vashon
LC-180	3/25/2008	273.24	6.16	267.08	Vashon
LC-180	10/8/2008	273.24	7.12	266.12	Vashon
LC-180	2/3/2009	273.24	6.60	266.64	Vashon
LC-180	9/8/2009	273.24	7.20	266.04	Vashon
LC-180	2/11/2010	273.24	6.15	267.09	Vashon
LC-180	8/9/2010	273.24	5.90	267.34	Vashon
LC-180	2/16/2011	273.24	5.40	267.84	Vashon
LC-180	8/10/2011	273.24	5.89	267.35	Vashon
LC-180	2/23/2012	273.24	5.84	267.40	Vashon
LC-180	8/1/2012	273.24	6.42	266.82	Vashon
LC-180	2/6/2013	273.24	6.12	267.12	Vashon
LC-180	8/7/2013	273.24	6.68	266.56	Vashon
LC-180	2/14/2014	273.24	6.50	266.74	Vashon
LC-180	9/8/2014	273.24	6.59	266.65	Vashon
LC-181	3/3/2003	281.27	13.24	268.03	Vashon
LC-181	10/4/2004	281.27	14.00	267.27	Vashon
LC-182	3/3/2003	272.44	5.20	267.24	Vashon
LC-182	7/1/2003	272.44	5.20	267.24	Vashon
LC-182	10/4/2004	272.44	5.89	266.55	Vashon
LC-182	2/3/2009	272.44	4.98	267.46	Vashon
LC-182	8/4/2009	272.44	6.28	266.16	Vashon
LC-182	2/11/2010	272.44	4.80	267.64	Vashon
LC-182	8/9/2010	272.44	4.82	267.62	Vashon
LC-182	2/16/2011	272.44	4.32	268.12	Vashon
LC-182	8/10/2011	272.44	4.92	267.52	Vashon
LC-182	2/23/2012	272.44	4.90	267.54	Vashon
LC-182	8/1/2012	272.44	5.20	267.24	Vashon
LC-182	2/6/2013	272.44	4.87	267.57	Vashon
LC-182	8/7/2013	272.44	5.40	267.04	Vashon
LC-183	3/3/2003	306.63	36.33	270.30	Vashon

Well ID	Date	Measuring Pt	Depth to SWL	GW Elev	Aquifer
LC-183	7/1/2003	306.63	36.44	270.19	Vashon
LC-183	10/4/2004	306.63	37.95	268.68	Vashon
LC-187-1	7/1/2003	281.42	12.67	268.75	Vashon
LC-187-1	10/4/2004	281.42	14.63	266.79	Vashon
LC-187-2	7/1/2003	281.42	12.67	268.75	Vashon
LC-187-2	10/4/2004	281.42	14.52	266.90	Vashon
LC-187-3	7/1/2003	281.42	12.38	269.04	Vashon
LC-187-3	10/4/2004	281.42	14.40	267.02	Vashon
LC-187-4	7/1/2003	281.42	12.35	269.07	Vashon
LC-187-4	10/4/2004	281.42	13.12	268.30	Vashon
LC-191-3	7/1/2003	285.19	16.54	268.65	Vashon
LC-191-3	10/4/2004	285.19	18.04	267.15	Vashon
LC-191-4	7/1/2003	285.19	16.50	268.69	Vashon
LC-191-4	10/4/2004	285.19	18.03	267.16	Vashon
LC-191-5	7/1/2003	285.19	16.11	269.08	Vashon
LC-191-5	10/4/2004	285.19	17.99	267.20	Vashon
LC-191-6	7/1/2003	285.19	16.24	268.95	Vashon
LC-191-6	10/4/2004	285.19	18.23	266.96	Vashon
LC-193-1	7/1/2003	286.77	17.89	268.88	Vashon
LC-193-1	10/4/2004	286.77	19.09	267.68	Vashon
LC-193-3	7/1/2003	286.77	17.71	269.06	Vashon
LC-193-3	10/4/2004	286.77	18.96	267.81	Vashon
LC-193-5	7/1/2003	286.77	15.35	271.42	Vashon
LC-193-5	10/4/2004	286.77	18.58	268.19	Vashon
LC-19a	12/1/1998	290.53	23.00	267.53	Vashon
LC-19a	3/1/1999	290.53	24.95	265.58	Vashon
LC-19a	6/1/1999	290.53	26.94	263.59	Vashon
LC-19a	9/1/1999	290.53	28.40	262.13	Vashon
LC-19a	12/1/1999	290.53	25.57	264.96	Vashon
LC-19a	3/1/2000	290.53	25.31	265.22	Vashon
LC-19a	6/1/2000	290.53	27.02	263.51	Vashon
LC-19a	9/1/2000	290.90	28.43	262.47	Vashon
LC-19a	12/1/2000	290.90	27.93	262.97	Vashon
LC-19a	3/1/2001	290.61	27.90	262.71	Vashon
LC-19a	6/1/2001	290.61	28.96	261.65	Vashon
LC-19a	9/1/2001	290.61	30.16	260.45	Vashon
LC-19a	12/1/2001	290.61	25.41	265.20	Vashon
LC-19a	4/1/2002	290.61	25.97	264.64	Vashon
LC-19a	6/1/2002	290.61	27.60	263.01	Vashon
LC-19a	9/1/2002	290.61	28.96	261.65	Vashon
LC-19a	2/3/2003	290.61	26.43	264.18	Vashon
LC-19a	3/3/2003	290.61	27.48	263.13	Vashon
LC-19a	7/1/2003	290.61	27.41	263.20	Vashon
LC-19a	3/16/2006	290.61	22.94	267.67	Vashon
LC-19a	9/25/2006	290.61	25.22	265.39	Vashon
LC-19a	3/23/2007	290.61	22.31	268.30	Vashon
LC-19a	9/28/2007	290.61	25.32	265.29	Vashon
LC-19a	10/8/2008	290.61	26.15	264.46	Vashon
LC-19a	2/5/2009	290.61	24.04	266.57	Vashon
LC-19a	8/4/2009	290.61	25.41	265.20	Vashon
LC-19a	2/10/2010	290.61	23.60	267.01	Vashon
LC-19a	8/10/2010	290.61	25.06	265.55	Vashon
LC-19a	2/16/2011	290.61	23.35	267.26	Vashon
LC-19a	2/29/2012	290.61	23.62	266.99	Vashon

Well ID	Date	Measuring Pt	Depth to SWL	GW Elev	Aquifer
LC-19a	8/2/2012	290.61	24.92	265.69	Vashon
LC-19a	2/7/2013	290.61	24.05	266.56	Vashon
LC-19a	8/8/2013	290.61	25.40	265.21	Vashon
LC- 19a	2/13/2014	290.61	24.35	266.26	Vashon
LC- 19a	9/10/2014	290.61	25.13	265.48	Vashon
LC-19b	12/1/1998	290.70	22.90	267.80	Vashon
LC-19b	3/1/1999	290.70	24.95	265.75	Vashon
LC-19b	6/1/1999	290.70	27.05	263.65	Vashon
LC-19b	9/1/1999	290.70	28.42	262.28	Vashon
LC-19b	12/1/1999	290.70	25.87	264.83	Vashon
LC-19b	3/1/2000	290.70	25.32	265.38	Vashon
LC-19b	6/1/2000	290.70	27.08	263.62	Vashon
LC-19b	9/1/2000	290.75	28.47	262.28	Vashon
LC-19b	12/1/2000	290.75	27.92	262.83	Vashon
LC-19b	3/1/2001	290.42	27.91	262.51	Vashon
LC-19b	6/1/2001	290.42	28.57	261.85	Vashon
LC-19b	9/1/2001	290.42	29.71	260.71	Vashon
LC-19c	12/1/1998	290.48	22.80	267.68	Vashon
LC-19c	3/1/1999	290.48	24.71	265.77	Vashon
LC-19c	6/1/1999	290.48	26.70	263.78	Vashon
LC-19c	9/1/1999	290.48	28.11	262.37	Vashon
LC-19c	12/1/1999	290.48	25.63	264.85	Vashon
LC-19c	3/1/2000	290.48	25.07	265.41	Vashon
LC-19c	6/1/2000	290.48	26.80	263.68	Vashon
LC-19c	9/1/2000	290.68	28.18	262.50	Vashon
LC-19c	12/1/2000	290.68	27.72	262.96	Vashon
LC-19c	3/1/2001	290.42	27.67	262.75	Vashon
LC-19c	6/1/2001	290.42	28.71	261.71	Vashon
LC-19c	9/1/2001	290.42	29.93	260.49	Vashon
LC-20	7/16/1997	291.06	27.57	263.49	Vashon
LC-20	10/16/1997	291.06	27.47	263.59	Vashon
LC-20	1/30/1998	291.06	23.95	267.11	Vashon
LC-20	4/2/1998	291.06	25.16	265.90	Vashon
LC-20	7/7/1998	291.06	27.78	263.28	Vashon
LC-20	9/22/1998	291.06	29.30	261.76	Vashon
LC-20	12/1/1998	291.06	21.84	269.22	Vashon
LC-20	3/1/1999	291.06	23.92	267.14	Vashon
LC-20	6/1/1999	291.06	26.29	264.77	Vashon
LC-20	9/1/1999	291.06	29.00	262.06	Vashon
LC-20	12/1/1999	291.06	25.14	265.92	Vashon
LC-20	3/1/2000	291.06	24.54	266.52	Vashon
LC-20	6/1/2000	291.06	26.68	264.38	Vashon
LC-20	9/1/2000	291.02	29.13	261.89	Vashon
LC-20	12/1/2000	291.02	28.76	262.26	Vashon
LC-20	3/1/2001	291.02	28.42	262.60	Vashon
LC-20	6/1/2001	291.02	28.87	262.15	Vashon
LC-20	9/1/2001	291.02	31.49	259.53	Vashon
LC-20	12/1/2001	290.88	24.52	266.36	Vashon
LC-20	4/1/2002	290.88	24.64	266.24	Vashon
LC-20	6/1/2002	290.88	26.50	264.38	Vashon
LC-20	9/1/2002	290.88	28.92	261.96	Vashon
LC-20	2/3/2003	290.88	26.03	264.85	Vashon
LC-20	3/3/2003	290.88	26.74	264.14	Vashon
LC-20	7/1/2003	290.88	27.89	262.99	Vashon

Well ID	Date	Measuring Pt	Depth to SWL	GW Elev	Aquifer
LC-20	4/6/2005	290.88	26.30	264.58	Vashon
LC-20	7/29/2005	290.88	28.28	262.60	Vashon
LC-20	9/27/2005	290.88	29.23	261.65	Vashon
LC-20	3/17/2006	290.88	24.05	266.83	Vashon
LC-20	9/21/2006	290.88	28.28	262.60	Vashon
LC-20	3/22/2007	290.88	23.47	267.41	Vashon
LC-20	9/25/2007	290.88	28.40	262.48	Vashon
LC-20	3/25/2008	290.88	25.67	265.21	Vashon
LC-20	10/8/2008	290.88	29.14	261.74	Vashon
LC-20	2/5/2009	290.88	25.36	265.52	Vashon
LC-20	8/4/2009	290.88	27.65	263.23	Vashon
LC-20	2/10/2010	290.88	25.00	265.88	Vashon
LC-20	8/10/2010	290.88	27.05	263.83	Vashon
LC-20	2/16/2011	290.88	24.81	266.07	Vashon
LC-20	8/8/2011	290.88	26.32	264.56	Vashon
LC-20	2/23/2012	290.88	24.96	265.92	Vashon
LC-20	7/31/2012	290.88	26.74	264.14	Vashon
LC-20	2/6/2013	290.88	25.50	265.38	Vashon
LC-20	8/8/2013	290.88	27.65	263.23	Vashon
LC- 20	2/13/2014	290.88	26.15	264.73	Vashon
LC- 20	9/8/2014	290.88	27.23	263.65	Vashon
LC-202	8/30/2011	278.92	10.62	268.30	Vashon
LC-21	10/7/1996	280.27	19.45	260.82	Vashon
LC-21	4/23/1997	280.27	9.03	271.24	Vashon
LC-21	7/16/1997	280.27	22.21	258.06	Vashon
LC-21	10/16/1997	280.27	18.69	261.58	Vashon
LC-21	1/30/1998	280.27	9.83	270.44	Vashon
LC-21	4/2/1998	280.27	10.54	269.73	Vashon
LC-21	7/7/1998	280.27	18.16	262.11	Vashon
LC-21	9/22/1998	280.27	19.75	260.52	Vashon
LC-21	12/1/1998	280.27	8.48	271.79	Vashon
LC-21	3/1/1999	280.27	9.00	271.27	Vashon
LC-21	6/1/1999	280.27	12.61	267.66	Vashon
LC-21	9/1/1999	280.27	19.35	260.92	Vashon
LC-21	12/1/1999	280.27	11.88	268.39	Vashon
LC-21	3/1/2000	280.27	10.10	270.17	Vashon
LC-21	6/1/2000	280.27	15.52	264.75	Vashon
LC-21	9/1/2000	281.95	22.29	259.66	Vashon
LC-21	12/1/2000	281.95	22.37	259.58	Vashon
LC-21	3/1/2001	281.95	22.49	259.46	Vashon
LC-21	6/1/2001	281.95	22.06	259.89	Vashon
LC-21	9/1/2001	281.95	23.10	258.85	Vashon
LC-21	2/3/2003	281.95	19.56	262.39	Vashon
LC-21	3/3/2003	281.95	20.44	261.51	Vashon
LC-21	7/1/2003	281.95	15.96	265.99	Vashon
LC-21	10/4/2004	281.95	22.52	259.43	Vashon
LC-216	10/4/2004	277.57	32.86	244.71	Vashon
LC-216	11/1/2004	277.57	33.03	244.54	Vashon
LC-216	2/15/2005	277.57	30.81	246.76	Vashon
LC-216	6/15/2005	277.57	30.22	247.35	Vashon
LC-216	9/14/2005	277.57	32.81	244.76	Vashon
LC-216	12/29/2005	277.57	30.00	247.57	Vashon
LC-216	3/13/2006	277.57	26.41	251.16	Vashon
LC-216	9/20/2006	277.57	31.61	245.96	Vashon

Well ID	Date	Measuring Pt	Depth to SWL	GW Elev	Aquifer
LC-216	3/21/2007	277.57	27.40	250.17	Vashon
LC-216	9/28/2007	277.57	31.34	246.23	Vashon
LC-216	3/25/2008	277.57	29.49	248.08	Vashon
LC-216	10/8/2008	277.57	30.56	247.01	Vashon
LC-216	2/5/2009	277.57	24.58	252.99	Vashon
LC-216	8/3/2009	277.57	30.92	246.65	Vashon
LC-217	10/4/2004	271.94	20.40	251.54	Vashon
LC-217	11/1/2004	271.94	21.89	250.05	Vashon
LC-217	2/15/2005	271.94	20.00	251.94	Vashon
LC-217	6/17/2005	271.94	18.77	253.17	Vashon
LC-217	9/19/2005	271.94	21.70	250.24	Vashon
LC-217	12/29/2005	271.94	17.98	253.96	Vashon
LC-217	3/21/2006	271.94	14.65	257.29	Vashon
LC-217	9/21/2006	271.94	19.91	252.03	Vashon
LC-217	3/21/2007	271.94	13.13	258.81	Vashon
LC-217	9/27/2007	271.94	18.22	253.72	Vashon
LC-217	3/25/2008	271.94	16.12	255.82	Vashon
LC-217	10/8/2008	271.94	21.62	250.32	Vashon
LC-217	2/5/2009	271.94	15.70	256.24	Vashon
LC-217	8/6/2009	271.94	17.23	254.71	Vashon
LC-218	10/4/2004	276.34	9.60	266.74	Vashon
LC-218	11/1/2004	276.34	9.75	266.59	Vashon
LC-218	2/15/2005	276.34	9.23	267.11	Vashon
LC-218	6/16/2005	276.34	9.31	267.03	Vashon
LC-218	9/14/2005	276.34	9.88	266.46	Vashon
LC-218	12/21/2005	276.34	9.64	266.70	Vashon
LC-218	3/7/2006	276.34	7.57	268.77	Vashon
LC-218	9/20/2006	276.34	9.45	266.89	Vashon
LC-218	3/21/2007	276.34	2.18	274.16	Vashon
LC-218	9/28/2007	276.34	9.28	267.06	Vashon
LC-218	3/25/2008	276.34	8.05	268.29	Vashon
LC-218	10/8/2008	276.34	9.72	266.62	Vashon
LC-218	2/3/2009	276.34	8.50	267.84	Vashon
LC-218	8/4/2009	276.34	9.41	266.93	Vashon
LC-218	2/11/2010	276.34	8.05	268.29	Vashon
LC-218	8/10/2010	276.34	8.35	267.99	Vashon
LC-218	2/16/2011	276.34	7.50	268.84	Vashon
LC-218	8/10/2011	276.34	8.15	268.19	Vashon
LC-218	2/22/2012	276.34	7.70	268.64	Vashon
LC-218	8/2/2012	276.34	8.42	267.92	Vashon
LC-218	2/6/2013	276.34	8.00	268.34	Vashon
LC-218	8/8/2013	276.34	8.82	267.52	Vashon
LC-218	2/13/2014	276.34	8.40	267.94	Vashon
LC-218	9/3/2014	276.34	8.62	267.72	Vashon
LC-219	10/4/2004	275.23	31.60	243.63	Vashon
LC-219	11/1/2004	275.23	32.05	243.18	Vashon
LC-219	2/15/2005	275.23	30.71	244.52	Vashon
LC-219	6/15/2005	275.23	30.02	245.21	Vashon
LC-219	9/19/2005	275.23	32.88	242.35	Vashon
LC-219	12/30/2005	275.23	29.30	245.93	Vashon
LC-219	3/8/2006	275.23	25.14	250.09	Vashon
LC-219	9/25/2006	275.23	31.07	244.16	Vashon
LC-219	3/22/2007	275.23	25.85	249.38	Vashon
LC-219	9/28/2007	275.23	29.39	245.84	Vashon

Well ID	Date	Measuring Pt	Depth to SWL	GW Elev	Aquifer
LC-219	3/25/2008	275.23	27.28	247.95	Vashon
LC-219	10/8/2008	275.23	31.50	243.73	Vashon
LC-219	2/5/2009	275.23	26.16	249.07	Vashon
LC-219	8/5/2009	275.23	29.52	245.71	Vashon
LC-21b	9/1/2000	281.75	19.45	262.30	Vashon
LC-21b	12/1/2000	281.75	19.54	262.21	Vashon
LC-21b	3/1/2001	281.75	19.51	262.24	Vashon
LC-21b	6/1/2001	281.75	19.16	262.59	Vashon
LC-21b	9/1/2001	281.75	20.27	261.48	Vashon
LC-222	3/25/2008	279.43	11.79	267.64	Vashon
LC-222	10/8/2008	279.43	12.94	266.49	Vashon
LC-222	2/3/2009	279.43	11.72	267.71	Vashon
LC-222	8/4/2009	279.43	12.58	266.85	Vashon
LC-222	2/11/2010	279.43	11.30	268.13	Vashon
LC-222	8/10/2010	279.43	11.48	267.95	Vashon
LC-222	2/16/2011	279.43	10.70	268.73	Vashon
LC-222	8/10/2011	279.43	11.23	268.20	Vashon
LC-222	2/23/2012	279.43	10.94	268.49	Vashon
LC-222	8/2/2012	279.43	11.55	267.88	Vashon
LC-222	2/6/2013	279.43	12.04	267.39	Vashon
LC-222	8/8/2013	279.43	12.00	267.43	Vashon
LC-222	2/13/2014	279.43	11.60	267.83	Vashon
LC-222	9/8/2014	279.43	12.66	266.77	Vashon
LC-223	3/25/2008	279.60	12.25	267.35	Vashon
LC-223	10/8/2008	279.60	13.84	265.76	Vashon
LC-223	2/3/2009	279.60	12.67	266.93	Vashon
LC-223	8/4/2009	279.60	13.47	266.13	Vashon
LC-223	2/11/2010	279.60	12.25	267.35	Vashon
LC-223	8/10/2010	279.60	12.39	267.21	Vashon
LC-223	2/16/2011	279.60	11.67	267.93	Vashon
LC-223	8/10/2011	279.60	12.10	267.50	Vashon
LC-223	2/23/2012	279.60	11.90	267.70	Vashon
LC-223	8/2/2012	279.60	12.46	267.14	Vashon
LC-223	2/6/2013	279.6	11.18	268.42	Vashon
LC-223	8/8/2013	279.6	12.90	266.7	Vashon
LC-223	2/13/2014	279.6	12.55	267.05	Vashon
LC-223	9/3/2014	279.6	11.73	267.87	Vashon
LC-224	3/3/2003	276.66	9.23	267.43	Vashon
LC-224	10/4/2004	276.66	9.40	267.26	Vashon
LC-224	3/25/2008	276.63	8.90	267.73	Vashon
LC-224	10/8/2008	276.63	10.40	266.23	Vashon
LC-224	2/3/2009	276.63	9.35	267.28	Vashon
LC-224	8/4/2009	276.63	10.15	266.48	Vashon
LC-224	2/11/2010	276.63	8.90	267.73	Vashon
LC-224	8/10/2010	276.63	8.98	267.65	Vashon
LC-224	2/16/2011	276.63	8.25	268.38	Vashon
LC-224	8/10/2011	276.63	8.77	267.86	Vashon
LC-224	2/23/2012	276.63	8.57	268.06	Vashon
LC-224	8/2/2012	276.63	9.14	267.49	Vashon
LC-224	2/6/2013	276.63	8.77	267.86	Vashon
LC-224	8/8/2013	276.63	9.58	267.05	Vashon
LC-224	2/13/2014	276.63	9.20	267.43	Vashon
LC-224	9/3/2014	276.63	9.32	267.31	Vashon
LC-225	3/25/2008	274.79	36.91	237.88	Vashon

Well ID	Date	Measuring Pt	Depth to SWL	GW Elev	Aquifer
LC-225	10/8/2008	274.79	40.55	234.24	Vashon
LC-225	2/6/2009	274.79	37.50	237.29	Vashon
LC-225	8/6/2009	274.79	31.88	242.91	Vashon
LC-226	3/25/2008	267.57	29.20	238.37	Vashon
LC-226	10/8/2008	267.57	33.00	234.57	Vashon
LC-226	2/6/2009	267.57	29.49	238.08	Vashon
LC-226	8/6/2009	267.57	38.97	228.60	Vashon
LC-24	10/7/1996	286.69	17.15	269.54	Vashon
LC-24	1/24/1997	286.69	12.17	274.52	Vashon
LC-24	4/23/1997	286.69	12.76	273.93	Vashon
LC-24	7/16/1997	286.69	16.42	270.27	Vashon
LC-24	10/16/1997	286.69	16.77	269.92	Vashon
LC-24	1/30/1998	286.69	14.06	272.63	Vashon
LC-24	4/2/1998	286.69	14.55	272.14	Vashon
LC-24	12/1/1998	286.69	12.52	274.17	Vashon
LC-24	3/1/1999	286.69	13.12	273.57	Vashon
LC-24	6/1/1999	286.69	15.99	270.70	Vashon
LC-24	9/1/1999	286.69	18.15	268.54	Vashon
LC-24	12/1/1999	286.69	15.65	271.04	Vashon
LC-24	3/1/2000	286.69	15.17	271.52	Vashon
LC-24	6/1/2000	286.69	16.27	270.42	Vashon
LC-24	9/1/2000	286.91	18.20	268.71	Vashon
LC-24	12/1/2000	286.91	18.80	268.11	Vashon
LC-24	3/1/2001	286.70	18.51	268.19	Vashon
LC-24	6/1/2001	286.70	18.16	268.54	Vashon
LC-24	9/1/2001	286.70	19.13	267.57	Vashon
LC-24	12/1/2001	286.70	15.84	270.86	Vashon
LC-24	4/1/2002	286.70	14.07	272.63	Vashon
LC-24	6/1/2002	286.70	15.99	270.71	Vashon
LC-24	9/1/2002	286.70	17.65	269.05	Vashon
LC-24	2/3/2003	286.70	15.70	271.00	Vashon
LC-24	3/3/2003	286.70	16.46	270.24	Vashon
LC-24	7/1/2003	286.70	17.02	269.68	Vashon
LC-24	10/4/2004	286.70	19.48	267.22	Vashon
LC-24	4/1/2005	286.70	18.98	267.72	Vashon
LC-24	7/29/2005	286.70	19.69	267.01	Vashon
LC-24	10/27/2005	286.70	21.23	265.47	Vashon
LC-24	3/14/2006	286.70	15.45	271.25	Vashon
LC-24	9/20/2006	286.70	19.78	266.92	Vashon
LC-24	3/22/2007	286.70	15.24	271.46	Vashon
LC-24	10/19/2007	286.70	20.21	266.49	Vashon
LC-24	4/3/2008	286.70	17.65	269.05	Vashon
LC-24	10/8/2008	286.70	21.18	265.52	Vashon
LC-24	2/3/2009	286.70	17.57	269.13	Vashon
LC-24	8/3/2009	286.70	19.22	267.48	Vashon
LC-24	2/11/2010	286.70	17.20	269.50	Vashon
LC-24	8/9/2010	286.70	18.62	268.08	Vashon
LC-24	2/14/2011	286.70	17.10	269.60	Vashon
LC-24	8/8/2011	286.70	17.90	268.80	Vashon
LC-24	2/22/2012	286.70	17.54	269.16	Vashon
LC-24	7/31/2012	286.70	18.40	268.30	Vashon
LC-24	2/7/2013	286.7	17.58	269.12	Vashon
LC-24	8/7/2013	286.7	19.18	267.52	Vashon
LC- 24	2/18/2014	286.7	17.00	269.70	Vashon

Well ID	Date	Measuring Pt	Depth to SWL	GW Elev	Aquifer
LC- 24	9/5/2014	286.7	18.80	267.90	Vashon
LC-25	4/1/2005	276.01	9.35	266.66	Vashon
LC-26	4/23/1997	277.11	2.46	274.65	Vashon
LC-26	7/16/1997	277.11	5.65	271.46	Vashon
LC-26	10/16/1997	277.11	5.82	271.29	Vashon
LC-26	1/30/1998	277.11	4.35	272.76	Vashon
LC-26	4/2/1998	277.11	4.61	272.50	Vashon
LC-26	7/7/1998	277.11	6.10	271.01	Vashon
LC-26	9/22/1998	277.11	7.04	270.07	Vashon
LC-26	12/1/1998	277.11	2.80	274.31	Vashon
LC-26	3/1/1999	277.11	3.23	273.88	Vashon
LC-26	6/1/1999	277.11	4.95	272.16	Vashon
LC-26	9/1/1999	277.11	6.15	270.96	Vashon
LC-26	12/1/1999	277.11	4.87	272.24	Vashon
LC-26	3/1/2000	277.11	4.36	272.75	Vashon
LC-26	6/1/2000	277.11	4.76	272.35	Vashon
LC-26	9/1/2000	276.56	8.77	267.79	Vashon
LC-26	12/1/2000	276.56	6.09	270.47	Vashon
LC-26	3/1/2001	276.02	5.97	270.05	Vashon
LC-26	6/1/2001	276.02	5.99	270.03	Vashon
LC-26	9/1/2001	276.02	6.05	269.97	Vashon
LC-26	12/1/2001	276.02	3.98	272.04	Vashon
LC-26	4/1/2002	276.02	3.27	272.75	Vashon
LC-26	6/1/2002	276.02	5.75	270.27	Vashon
LC-26	9/1/2002	276.02	6.34	269.68	Vashon
LC-26	2/3/2003	276.02	4.19	271.83	Vashon
LC-26	3/3/2003	276.02	4.68	271.34	Vashon
LC-26	7/1/2003	276.02	5.54	270.48	Vashon
LC-26	10/4/2004	276.02	7.25	268.77	Vashon
LC-26	7/29/2005	276.02	9.77	266.25	Vashon
LC-26	3/16/2006	276.02	3.50	272.52	Vashon
LC-26	9/20/2006	276.02	6.48	269.54	Vashon
LC-26	3/22/2007	276.02	3.40	272.62	Vashon
LC-26	4/3/2008	276.02	4.98	271.04	Vashon
LC-26	10/8/2008	276.02	7.39	268.63	Vashon
LC-26	2/3/2009	276.02	5.12	270.90	Vashon
LC-26	8/3/2009	276.02	6.11	269.91	Vashon
LC-26	2/11/2010	276.02	4.80	271.22	Vashon
LC-26	8/10/2010	276.02	5.65	270.37	Vashon
LC-26	2/14/2011	276.02	4.62	271.40	Vashon
LC-26	8/8/2011	276.02	5.25	270.77	Vashon
LC-26	2/22/2012	276.02	5.00	271.02	Vashon
LC-26	7/31/2012	276.02	5.56	270.46	Vashon
LC-26	2/7/2013	276.02	5.03	270.99	Vashon
LC-26	8/7/2013	276.02	6.00	270.02	Vashon
LC- 26	2/15/2014	276.02	5.40	270.62	Vashon
LC- 26	9/5/2014	276.02	5.76	270.26	Vashon
LC-27	12/1/1998	279.54	8.35	271.19	Vashon
LC-27	3/1/1999	279.54	9.15	270.39	Vashon
LC-27	6/1/1999	279.54	10.72	268.82	Vashon
LC-27	9/1/1999	279.54	12.29	267.25	Vashon
LC-27	12/1/1999	279.54	10.48	269.06	Vashon
LC-27	3/1/2000	279.54	9.93	269.61	Vashon
LC-27	6/1/2000	279.54	10.68	268.86	Vashon

Well ID	Date	Measuring Pt	Depth to SWL	GW Elev	Aquifer
LC-27	9/1/2000	279.85	12.18	267.67	Vashon
LC-27	12/1/2000	279.85	12.43	267.42	Vashon
LC-27	3/1/2001	279.45	12.35	267.10	Vashon
LC-27	6/1/2001	279.45	12.34	267.11	Vashon
LC-27	9/1/2001	279.45	12.88	266.57	Vashon
LC-27	12/1/2001	279.45	9.08	270.37	Vashon
LC-27	4/1/2002	279.45	9.23	270.22	Vashon
LC-27	6/1/2002	279.45	9.98	269.47	Vashon
LC-27	9/1/2002	279.45	11.90	267.55	Vashon
LC-27	2/3/2003	279.45	9.79	269.66	Vashon
LC-27	3/3/2003	279.45	10.91	268.54	Vashon
LC-27	7/1/2003	279.45	10.90	268.55	Vashon
LC-27	10/4/2004	279.45	12.46	266.99	Vashon
LC-27	9/25/2006	279.45	11.96	267.49	Vashon
LC-27	3/22/2007	279.45	8.81	270.64	Vashon
LC-27	4/3/2008	279.45	10.70	268.75	Vashon
LC-27	10/8/2008	279.45	13.58	265.87	Vashon
LC-27	2/3/2009	279.45	10.78	268.67	Vashon
LC-27	8/3/2009	279.45	11.35	268.10	Vashon
LC-27	2/11/2010	279.45	10.30	269.15	Vashon
LC-27	8/10/2010	279.45	11.50	267.95	Vashon
LC-27	2/14/2011	279.45	10.20	269.25	Vashon
LC-27	8/10/2011	279.45	10.70	268.75	Vashon
LC-27	2/22/2012	279.45	10.36	269.09	Vashon
LC-27	7/31/2012	279.45	11.30	268.15	Vashon
LC-27	2/7/2013	279.45	10.51	268.94	Vashon
LC-27	8/7/2013	279.45	11.85	267.6	Vashon
LC-27	2/18/2014	279.45	9.20	270.25	Vashon
LC-27	9/5/2014	279.45	11.46	267.99	Vashon
LC-29	1/24/1997	266.48	2.97	263.51	Vashon
LC-29	4/23/1997	266.48	9.52	256.96	Vashon
LC-29	1/30/1998	266.48	9.42	257.06	Vashon
LC-29	4/2/1998	266.48	11.45	255.03	Vashon
LC-29	12/1/2001	266.52	8.53	257.99	Vashon
LC-29	4/1/2002	266.52	8.43	258.09	Vashon
LC-29	6/1/2002	266.52	9.01	257.51	Vashon
LC-29	9/1/2002	266.52	10.50	256.02	Vashon
LC-29	2/3/2003	266.52	9.10	257.42	Vashon
LC-29	3/3/2003	266.52	10.55	255.97	Vashon
LC-29	7/1/2003	266.52	13.20	253.32	Vashon
LC-29	10/4/2004	266.52	15.89	250.63	Vashon
LC-30	12/1/1998	272.21	13.48	258.73	Vashon
LC-30	3/1/1999	272.21	14.30	257.91	Vashon
LC-30	6/1/1999	272.21	16.13	256.08	Vashon
LC-30	9/1/1999	272.21	17.88	254.33	Vashon
LC-30	12/1/1999	272.21	15.74	256.47	Vashon
LC-30	3/1/2000	272.21	15.13	257.08	Vashon
LC-30	6/1/2000	272.21	16.45	255.76	Vashon
LC-30	9/1/2000	272.21	17.96	254.25	Vashon
LC-30	12/1/2000	272.21	18.36	253.85	Vashon
LC-30	3/1/2001	272.21	18.21	254.00	Vashon
LC-30	6/1/2001	272.21	17.75	254.46	Vashon
LC-30	9/1/2001	272.21	18.73	253.48	Vashon
LC-32	7/7/1998	268.88	16.52	252.36	Vashon

Historical Depth to Water measurements

Log RAM, Joint Base Lewis-McChord, Washington 98433

Well ID	Date	Measuring Pt	Depth to SWL	GW Elev	Aquifer
LC-32	9/22/1998	268.88	19.10	249.78	Vashon
LC-32	12/1/1998	268.88	9.86	259.02	Vashon
LC-32	3/1/1999	268.88	12.03	256.85	Vashon
LC-32	6/1/2000	268.88	14.02	254.86	Vashon
LC-32	9/1/2000	268.85	18.60	250.25	Vashon
LC-32	12/1/2000	268.85	18.82	250.03	Vashon
LC-32	3/1/2001	268.85	18.78	250.07	Vashon
LC-32	6/1/2001	268.85	17.67	251.18	Vashon
LC-32	9/1/2001	268.85	19.68	249.17	Vashon
LC-32	12/1/2001	268.85	15.01	253.84	Vashon
LC-32	4/1/2002	268.85	12.39	256.46	Vashon
LC-32	6/1/2002	268.85	15.54	253.31	Vashon
LC-32	9/1/2002	268.85	16.30	252.55	Vashon
LC-32	2/3/2003	268.85	12.81	256.04	Vashon
LC-32	3/3/2003	268.85	14.11	254.74	Vashon
LC-32	7/1/2003	268.85	16.48	252.37	Vashon
LC-32	10/4/2004	268.85	16.77	252.08	Vashon
LC-34	12/1/2001	289.08	24.36	264.72	Vashon
LC-34	4/1/2002	289.08	24.74	264.34	Vashon
LC-34	6/1/2002	289.08	26.30	262.78	Vashon
LC-34	9/1/2002	289.08	27.80	261.28	Vashon
LC-34	2/3/2003	289.08	24.80	264.28	Vashon
LC-34	3/3/2003	289.08	25.90	263.18	Vashon
LC-34	7/1/2003	289.08	27.03	262.05	Vashon
LC-34	10/4/2004	289.08	28.08	261.00	Vashon
LC-34	10/26/2005	289.08	29.65	259.43	Vashon
LC-34	10/9/2007	289.08	28.88	260.20	Vashon
LC-34	10/8/2008	289.08	29.58	259.50	Vashon
LC-34	2/3/2009	289.08	27.01	262.07	Vashon
LC-34	8/3/2009	289.08	28.75	260.33	Vashon
LC-34	2/11/2010	289.08	26.70	262.38	Vashon
LC-34	8/9/2010	289.08	28.02	261.06	Vashon
LC-34	2/14/2011	289.08	26.40	262.68	Vashon
LC-34	8/10/2011	289.08	27.78	261.30	Vashon
LC-34	2/29/2012	289.08	18.86	270.22	Vashon
LC-34	8/3/2012	289.08	27.20	261.88	Vashon
LC-34	2/6/2013	289.08	27.04	262.04	Vashon
LC-34	8/8/2013	289.08	28.42	260.66	Vashon
LC- 34	2/14/2014	289.08	27.60	261.48	Vashon
LC- 34	9/8/2014	289.08	28.19	260.89	Vashon
LC-37	10/7/1996	281.33	31.10	250.23	Vashon
LC-37	1/24/1997	281.33	25.86	255.47	Vashon
LC-37	4/23/1997	281.33	27.57	253.76	Vashon
LC-37	7/16/1997	281.33	30.13	251.20	Vashon
LC-37	10/16/1997	281.33	30.24	251.09	Vashon
LC-37	1/30/1998	281.33	27.25	254.08	Vashon
LC-37	4/2/1998	281.33	28.41	252.92	Vashon
LC-37	7/7/1998	281.33	30.52	250.81	Vashon
LC-37	9/22/1998	281.33	32.10	249.23	Vashon
LC-37	12/1/1998	281.33	25.65	255.68	Vashon
LC-37	3/1/1999	281.33	27.75	253.58	Vashon
LC-37	6/1/1999	281.33	29.13	252.20	Vashon
LC-37	9/1/1999	281.33	32.12	249.21	Vashon
LC-37	12/1/1999	281.33	27.68	253.65	Vashon

Well ID	Date	Measuring Pt	Depth to SWL	GW Elev	Aquifer
LC-37	3/1/2000	281.33	27.29	254.04	Vashon
LC-37	6/1/2000	281.33	29.20	252.13	Vashon
LC-37	9/1/2000	281.27	31.77	249.50	Vashon
LC-37	12/1/2000	281.27	31.69	249.58	Vashon
LC-37	3/1/2001	281.27	31.26	250.01	Vashon
LC-37	6/1/2001	281.27	31.19	250.08	Vashon
LC-37	9/1/2001	281.27	33.70	247.57	Vashon
LC-37	12/1/2001	281.27	27.90	253.37	Vashon
LC-37	4/1/2002	281.27	27.56	253.71	Vashon
LC-37	6/1/2002	281.27	28.60	252.67	Vashon
LC-37	9/1/2002	281.27	31.05	250.22	Vashon
LC-37	2/3/2003	281.27	28.31	252.96	Vashon
LC-37	3/3/2003	281.27	28.62	252.65	Vashon
LC-37	7/1/2003	281.27	30.32	250.95	Vashon
LC-37	10/4/2004	281.27	31.77	249.50	Vashon
LC-38	1/24/1997	272.41	19.52	252.89	Vashon
LC-38	4/23/1997	272.41	21.11	251.30	Vashon
LC-38	7/16/1997	272.41	25.21	247.20	Vashon
LC-38	1/30/1998	272.41	21.61	250.80	Vashon
LC-38	4/2/1998	272.41	23.02	249.39	Vashon
LC-38	7/7/1998	272.41	25.88	246.53	Vashon
LC-38	9/22/1998	272.41	27.85	244.56	Vashon
LC-38	12/1/1998	272.41	18.85	253.56	Vashon
LC-38	3/1/1999	272.41	20.91	251.50	Vashon
LC-38	6/1/1999	272.41	23.36	249.05	Vashon
LC-38	9/1/1999	272.41	27.60	244.81	Vashon
LC-38	12/1/1999	272.41	21.27	251.14	Vashon
LC-38	3/1/2000	272.41	21.61	250.80	Vashon
LC-38	6/1/2000	272.41	23.82	248.59	Vashon
LC-38	9/1/2000	274.30	26.93	247.37	Vashon
LC-38	12/1/2000	274.30	27.51	246.79	Vashon
LC-38	3/1/2001	274.30	27.13	247.17	Vashon
LC-38	6/1/2001	274.30	26.82	247.48	Vashon
LC-38	9/1/2001	274.30	29.44	244.86	Vashon
LC-38	12/1/2001	274.30	21.58	252.72	Vashon
LC-38	4/1/2002	274.30	21.82	252.48	Vashon
LC-38	6/1/2002	274.30	21.90	252.40	Vashon
LC-38	9/1/2002	274.30	23.52	250.78	Vashon
LC-38	2/3/2003	274.30	23.21	251.09	Vashon
LC-38	3/3/2003	274.30	23.65	250.65	Vashon
LC-38	7/1/2003	274.30	25.74	248.56	Vashon
LC-38	10/4/2004	274.30	27.69	246.61	Vashon
LC-38a	10/7/1996	272.96	23.97	248.99	Vashon
LC-38a	1/24/1997	272.96	16.46	256.50	Vashon
LC-38a	4/23/1997	272.96	18.52	254.44	Vashon
LC-38a	7/16/1997	272.96	22.23	250.73	Vashon
LC-38a	10/16/1997	272.96	22.40	250.56	Vashon
LC-38a	1/30/1998	272.96	18.29	254.67	Vashon
LC-38a	4/2/1998	272.96	19.63	253.33	Vashon
LC-38a	7/7/1998	272.96	22.75	250.21	Vashon
LC-38a	9/22/1998	272.96	25.14	247.82	Vashon
LC-38a	12/1/1998	272.96	16.08	256.88	Vashon
LC-38a	3/1/1999	272.96	18.10	254.86	Vashon
LC-38a	6/1/1999	272.96	19.97	252.99	Vashon

Well ID	Date	Measuring Pt	Depth to SWL	GW Elev	Aquifer
LC-38a	9/1/1999	272.96	24.60	248.36	Vashon
LC-38a	12/1/1999	272.96	18.27	254.69	Vashon
LC-38a	3/1/2000	272.96	18.18	254.78	Vashon
LC-38a	6/1/2000	272.96	20.58	252.38	Vashon
LC-38a	9/1/2000	273.52	24.41	249.11	Vashon
LC-38a	12/1/2000	273.52	24.54	248.98	Vashon
LC-38a	3/1/2001	273.52	23.92	249.60	Vashon
LC-38a	6/1/2001	273.52	23.68	249.84	Vashon
LC-38a	9/1/2001	273.52	26.30	247.22	Vashon
LC-38a	12/1/2001	273.52	18.39	255.13	Vashon
LC-38a	4/1/2002	273.52	18.43	255.09	Vashon
LC-38a	6/1/2002	273.52	18.76	254.76	Vashon
LC-38a	9/1/2002	273.52	20.46	253.06	Vashon
LC-38a	2/3/2003	273.52	19.28	254.24	Vashon
LC-38a	3/3/2003	273.52	19.84	253.68	Vashon
LC-38a	7/1/2003	273.52	22.37	251.15	Vashon
LC-38a	10/4/2004	273.52	27.11	246.41	Vashon
LC-39	10/7/1996	270.15	21.69	248.46	Vashon
LC-39	1/24/1997	270.15	16.00	254.15	Vashon
LC-39	4/23/1997	270.15	17.95	252.20	Vashon
LC-39	7/16/1997	270.15	20.63	249.52	Vashon
LC-39	10/16/1997	270.15	20.62	249.53	Vashon
LC-39	1/30/1998	270.15	17.79	252.36	Vashon
LC-39	4/2/1998	270.15	19.33	250.82	Vashon
LC-39	7/7/1998	270.15	21.35	248.80	Vashon
LC-39	9/22/1998	270.15	22.85	247.30	Vashon
LC-39	12/1/1998	270.15	15.58	254.57	Vashon
LC-39	3/1/1999	270.15	17.45	252.70	Vashon
LC-39	6/1/1999	270.15	19.01	251.14	Vashon
LC-39	9/1/1999	270.15	22.60	247.55	Vashon
LC-39	12/1/1999	270.15	18.21	251.94	Vashon
LC-39	3/1/2000	270.15	17.47	252.68	Vashon
LC-39	6/1/2000	270.15	19.48	250.67	Vashon
LC-39	9/1/2000	271.17	22.26	248.91	Vashon
LC-39	9/1/2000	270.15	26.37	243.78	Vashon
LC-39	12/1/2000	271.17	22.28	248.89	Vashon
LC-39	12/1/2000	270.15	25.91	244.24	Vashon
LC-39	3/1/2001	271.17	22.10	249.07	Vashon
LC-39	6/1/2001	271.17	21.72	249.45	Vashon
LC-39	9/1/2001	271.17	22.99	248.18	Vashon
LC-39	12/1/2001	270.17	17.93	252.24	Vashon
LC-39	4/1/2002	270.17	17.96	252.21	Vashon
LC-39	6/1/2002	270.17	18.40	251.77	Vashon
LC-39	9/1/2002	270.17	20.06	250.11	Vashon
LC-39	2/3/2003	270.17	18.33	251.84	Vashon
LC-39	3/3/2003	270.17	19.42	250.75	Vashon
LC-39	7/1/2003	270.17	21.20	248.97	Vashon
LC-39	10/4/2004	270.17	22.88	247.29	Vashon
LC-39	4/6/2005	270.17	21.38	248.79	Vashon
LC-39	3/31/2006	270.17	18.46	251.71	Vashon
LC-39	9/21/2006	270.17	22.67	247.50	Vashon
LC-39	3/23/2007	270.17	17.38	252.79	Vashon
LC-39	9/24/2007	270.17	21.27	248.90	Vashon
LC-39	4/3/2008	270.17	19.70	250.47	Vashon

Well ID	Date	Measuring Pt	Depth to SWL	GW Elev	Aquifer
LC-39	10/8/2008	270.17	23.55	246.62	Vashon
LC-39	2/5/2009	270.17	18.99	251.18	Vashon
LC-39	8/5/2009	270.17	20.45	249.72	Vashon
LC-39	2/9/2010	270.17	18.20	251.97	Vashon
LC-39	8/12/2010	270.17	19.50	250.67	Vashon
LC-39	2/17/2011	270.17	18.00	252.17	Vashon
LC-39	8/9/2011	270.17	19.98	250.19	Vashon
LC-39	2/28/2012	270.17	18.86	251.31	Vashon
LC-39	8/1/2012	270.17	19.80	250.37	Vashon
LC-39	2/12/2013	270.17	19.30	250.87	Vashon
LC-39	8/8/2013	270.17	21.20	248.97	Vashon
LC- 39	2/19/2014	270.17	18.20	251.97	Vashon
LC- 39	9/10/2014	270.17	20.69	249.48	Vashon
LC-40	4/14/2005	279.56	27.47	252.09	Vashon
LC-40	7/20/2005	279.56	28.95	250.61	Vashon
LC-40	3/17/2006	278.39	23.91	254.48	Vashon
LC-40	9/20/2006	278.39	29.10	249.29	Vashon
LC-40	3/23/2007	278.39	22.51	255.88	Vashon
LC-40	10/19/2007	278.39	27.20	251.19	Vashon
LC-40	10/8/2008	278.39	30.50	247.89	Vashon
LC-40	2/5/2009	278.39	24.34	254.05	Vashon
LC-40	8/4/2009	278.39	26.76	251.63	Vashon
LC-40	2/10/2010	278.39	22.90	255.49	Vashon
LC-40	8/11/2010	278.39	25.95	252.44	Vashon
LC-40	2/16/2011	278.39	23.50	254.89	Vashon
LC-40	8/9/2011	278.39	25.20	253.19	Vashon
LC-40	2/28/2012	278.39	24.00	254.39	Vashon
LC-40	7/31/2012	278.39	25.82	252.57	Vashon
LC-40	2/6/2013	278.39	33.93	244.46	Vashon
LC-40	8/7/2013	278.39	27.75	250.64	Vashon
LC- 40	2/18/2014	278.39	24.45	253.94	Vashon
LC- 40	9/10/2014	278.39	26.88	251.51	Vashon
LC-41a	4/23/1997	283.54	22.05	261.49	Vashon
LC-41a	7/16/1997	283.54	28.92	254.62	Vashon
LC-41a	10/16/1997	283.54	28.66	254.88	Vashon
LC-41a	1/30/1998	283.54	28.25	255.29	Vashon
LC-41a	4/2/1998	283.54	26.24	257.30	Vashon
LC-41a	7/7/1998	283.54	29.04	254.50	Vashon
LC-41a	3/1/1999	283.54	24.70	258.84	Vashon
LC-41a	6/1/1999	283.54	25.79	257.75	Vashon
LC-41a	9/1/1999	283.54	32.25	251.29	Vashon
LC-41a	12/1/1999	283.54	23.79	259.75	Vashon
LC-41a	3/1/2000	283.54	22.77	260.77	Vashon
LC-41a	6/1/2000	283.54	25.91	257.63	Vashon
LC-41a	9/1/2000	283.58	31.50	252.08	Vashon
LC-41a	12/1/2000	283.58	30.92	252.66	Vashon
LC-41a	3/1/2001	283.58	31.21	252.37	Vashon
LC-41a	6/1/2001	283.58	30.75	252.83	Vashon
LC-41a	9/1/2001	283.58	34.01	249.57	Vashon
LC-41a	12/1/2001	283.58	30.91	252.67	Vashon
LC-41a	4/1/2002	283.58	23.40	260.18	Vashon
LC-41a	6/1/2002	283.58	31.66	251.92	Vashon
LC-41a	9/1/2002	283.58	33.92	249.66	Vashon
LC-41a	2/3/2003	283.58	24.03	259.55	Vashon

Well ID	Date	Measuring Pt	Depth to SWL	GW Elev	Aquifer
LC-41a	3/3/2003	283.58	25.27	258.31	Vashon
LC-41a	7/1/2003	283.58	28.74	254.84	Vashon
LC-41a	10/4/2004	283.58	31.47	252.11	Vashon
LC-41a	4/6/2005	283.58	29.00	254.58	Vashon
LC-41a	9/7/2005	283.58	32.55	251.03	Vashon
LC-41a	3/17/2006	283.58	24.54	259.04	Vashon
LC-41a	9/21/2006	283.58	30.52	253.06	Vashon
LC-41a	9/28/2007	283.58	28.70	254.88	Vashon
LC-41a	4/3/2008	283.58	26.12	257.46	Vashon
LC-41a	10/8/2008	283.58	32.10	251.48	Vashon
LC-41a	2/5/2009	283.58	25.82	257.76	Vashon
LC-41a	8/4/2009	283.58	27.95	255.63	Vashon
LC-41a	2/10/2010	283.58	24.60	258.98	Vashon
LC-41a	8/10/2010	283.58	26.39	257.19	Vashon
LC-41a	2/16/2011	283.58	24.17	259.41	Vashon
LC-41a	8/10/2011	283.58	26.92	256.66	Vashon
LC-41a	2/29/2012	283.58	25.71	257.87	Vashon
LC-41a	7/31/2012	283.58	26.59	256.99	Vashon
LC-41a	2/6/2013	283.58	25.69	257.89	Vashon
LC-41a	8/8/2013	283.58	28.45	255.13	Vashon
LC- 41a	2/13/2014	283.58	26.65	256.93	Vashon
LC- 41a	9/10/2014	283.58	27.50	256.08	Vashon
LC-41b	12/1/2001	283.60	23.75	259.85	Vashon
LC-41b	4/1/2002	283.60	23.77	259.83	Vashon
LC-41b	6/1/2002	283.60	24.19	259.41	Vashon
LC-41b	9/1/2002	283.60	30.10	253.50	Vashon
LC-41b	2/3/2003	283.60	24.42	259.18	Vashon
LC-41b	3/3/2003	283.60	25.64	257.96	Vashon
LC-41b	7/1/2003	283.60	29.08	254.52	Vashon
LC-41b	10/4/2004	283.60	31.73	251.87	Vashon
LC-41b	10/25/2005	283.60	34.46	249.14	Vashon
LC-41b	3/16/2006	283.60	24.79	258.81	Vashon
LC-41b	9/21/2006	283.60	30.90	252.70	Vashon
LC-41b	3/22/2007	283.60	23.92	259.68	Vashon
LC-41b	9/28/2007	283.60	29.07	254.53	Vashon
LC-41b	4/3/2008	283.60	32.17	251.43	Vashon
LC-41b	10/8/2008	283.60	38.90	244.70	Vashon
LC-41b	2/5/2009	283.60	26.09	257.51	Vashon
LC-44a	4/23/1997	271.51	8.20	263.31	Vashon
LC-44a	7/16/1997	271.51	16.55	254.96	Vashon
LC-44a	10/16/1997	271.51	16.52	254.99	Vashon
LC-44a	1/30/1998	271.51	11.58	259.93	Vashon
LC-44a	4/2/1998	271.51	13.25	258.26	Vashon
LC-44a	7/7/1998	271.51	16.86	254.65	Vashon
LC-44a	9/22/1998	271.51	18.47	253.04	Vashon
LC-44a	12/1/1998	271.51	9.15	262.36	Vashon
LC-44a	3/1/1999	271.51	11.35	260.16	Vashon
LC-44a	6/1/1999	271.51	14.20	257.31	Vashon
LC-44a	9/1/1999	271.51	18.18	253.33	Vashon
LC-44a	12/1/1999	271.51	12.03	259.48	Vashon
LC-44a	3/1/2000	271.51	11.57	259.94	Vashon
LC-44a	6/1/2000	271.51	14.76	256.75	Vashon
LC-44a	9/1/2000	271.51	18.10	253.41	Vashon
LC-44a	12/1/2000	271.51	17.72	253.79	Vashon

Well ID	Date	Measuring Pt	Depth to SWL	GW Elev	Aquifer
LC-44a	3/1/2001	271.51	17.27	254.24	Vashon
LC-44a	6/1/2001	271.51	17.27	254.24	Vashon
LC-44a	9/1/2001	271.51	20.86	250.65	Vashon
LC-47	4/6/2005	282.41	21.84	260.57	Vashon
LC-47	3/17/2006	282.41	19.08	263.33	Vashon
LC-47	9/20/2006	282.41	23.00	259.41	Vashon
LC-47a	9/28/2007	280.73	22.52	258.21	Vashon
LC-47a	3/25/2008	280.73	20.80	259.93	Vashon
LC-47a	10/8/2008	280.73	23.99	256.74	Vashon
LC-47a	10/8/2008	280.73	23.99	256.74	Vashon
LC-47a	2/11/2009	280.73	22.88	257.85	Vashon
LC-47a	8/4/2009	280.73	25.00	255.73	Vashon
LC-47a	2/10/2010	280.73	24.50	256.23	Vashon
LC-47a	8/10/2010	280.73	23.90	256.83	Vashon
LC-47a	2/16/2011	280.73	21.25	259.48	Vashon
LC-47a	8/8/2011	280.73	23.87	256.86	Vashon
LC-47a	2/23/2012	280.73	22.16	258.57	Vashon
LC-47a	7/31/2012	280.73	21.71	259.02	Vashon
LC-47a	2/8/2013	280.73	20.44	260.29	Vashon
LC-47a	8/8/2013	280.73	25.00	255.73	Vashon
LC- 47a	2/13/2014	280.73	21.40	259.33	Vashon
LC- 47a	9/8/2014	280.73	22.16	258.57	Vashon
LC-49	4/23/1997	285.99	20.97	265.02	Vashon
LC-49	7/16/1997	285.99	25.08	260.91	Vashon
LC-49	10/16/1997	285.99	24.92	261.07	Vashon
LC-49	1/30/1998	285.99	22.25	263.74	Vashon
LC-49	4/2/1998	285.99	23.52	262.47	Vashon
LC-49	7/7/1998	285.99	25.16	260.83	Vashon
LC-49	9/22/1998	285.99	25.42	260.57	Vashon
LC-49	12/1/1998	285.99	19.84	266.15	Vashon
LC-49	3/1/1999	285.99	23.40	262.59	Vashon
LC-49	6/1/1999	285.99	25.03	260.96	Vashon
LC-49	9/1/1999	285.99	26.38	259.61	Vashon
LC-49	12/1/1999	285.99	22.69	263.30	Vashon
LC-49	3/1/2000	285.99	22.27	263.72	Vashon
LC-49	6/1/2000	285.99	24.40	261.59	Vashon
LC-49	9/1/2000	286.21	25.37	260.84	Vashon
LC-49	12/1/2000	286.21	25.16	261.05	Vashon
LC-49	3/1/2001	286.21	25.09	261.12	Vashon
LC-49	6/1/2001	286.21	25.14	261.07	Vashon
LC-49	9/1/2001	286.21	28.01	258.20	Vashon
LC-49	12/1/2001	286.21	22.78	263.43	Vashon
LC-49	4/1/2002	286.21	22.73	263.48	Vashon
LC-49	6/1/2002	286.21	22.99	263.22	Vashon
LC-49	9/1/2002	286.21	31.73	254.48	Vashon
LC-49	2/3/2003	286.21	22.51	263.70	Vashon
LC-49	3/3/2003	286.21	23.90	262.31	Vashon
LC-49	7/1/2003	286.21	25.93	260.28	Vashon
LC-49	10/4/2004	286.21	25.63	260.58	Vashon
LC-49	4/15/2005	286.21	24.26	261.95	Vashon
LC-49	7/21/2005	286.21	25.37	260.84	Vashon
LC-49	8/18/2005	286.21	25.44	260.77	Vashon
LC-49	3/17/2006	286.21	22.75	263.46	Vashon
LC-49	9/20/2006	286.21	25.10	261.11	Vashon

Well ID	Date	Measuring Pt	Depth to SWL	GW Elev	Aquifer
LC-49	3/20/2007	286.21	22.85	263.36	Vashon
LC-49	9/28/2007	286.21	23.89	262.32	Vashon
LC-49	3/25/2008	286.21	23.65	262.56	Vashon
LC-49	10/8/2008	286.21	25.22	260.99	Vashon
LC-49	2/5/2009	286.21	23.42	262.79	Vashon
LC-49	8/4/2009	286.21	24.96	261.25	Vashon
LC-49	2/10/2010	286.21	22.90	263.31	Vashon
LC-49	8/10/2010	286.21	24.44	261.77	Vashon
LC-49	2/16/2011	286.21	22.70	263.51	Vashon
LC-49	8/8/2011	286.21	24.15	262.06	Vashon
LC-49	2/23/2012	286.21	22.92	263.29	Vashon
LC-49	7/31/2012	286.21	24.65	261.56	Vashon
LC-49	2/8/2013	286.21	23.37	262.84	Vashon
LC-49a	3/3/2003	285.30	22.84	262.46	Vashon
LC-49a	7/1/2003	285.30	23.73	261.57	Vashon
LC-49a	10/4/2004	285.30	24.37	260.93	Vashon
LC-50	12/1/1998	272.56	4.08	268.48	Vashon
LC-50	6/1/1999	272.56	7.18	265.38	Vashon
LC-50	9/1/1999	272.56	8.79	263.77	Vashon
LC-50	12/1/1999	272.56	6.46	266.10	Vashon
LC-50	3/1/2000	272.56	6.04	266.52	Vashon
LC-50	6/1/2000	272.56	7.10	265.46	Vashon
LC-50	9/1/2000	272.56	7.81	264.75	Vashon
LC-50	12/1/2000	272.56	7.72	264.84	Vashon
LC-50	3/1/2001	272.64	7.76	264.88	Vashon
LC-50	6/1/2001	272.64	7.63	265.01	Vashon
LC-50	9/1/2001	272.64	8.49	264.15	Vashon
LC-50	12/1/2001	272.64	6.40	266.24	Vashon
LC-50	4/1/2002	272.64	6.18	266.46	Vashon
LC-50	6/1/2002	272.64	6.98	265.66	Vashon
LC-50	9/1/2002	272.64	7.19	265.45	Vashon
LC-50	2/3/2003	272.64	6.90	265.74	Vashon
LC-50	3/3/2003	272.64	7.00	265.64	Vashon
LC-50	7/1/2003	272.64	7.14	265.50	Vashon
LC-50	10/4/2004	272.64	7.92	264.72	Vashon
LC-50	4/1/2005	272.64	6.60	266.04	Vashon
LC-50	7/21/2005	272.64	7.29	265.35	Vashon
LC-50	3/14/2006	272.64	4.82	267.82	Vashon
LC-50	9/25/2006	272.64	10.47	262.17	Vashon
LC-50	9/28/2007	272.64	7.63	265.01	Vashon
LC-50	4/3/2008	272.64	6.49	266.15	Vashon
LC-50	10/8/2008	272.64	7.18	265.46	Vashon
LC-50	2/5/2009	272.64	9.65	262.99	Vashon
LC-50	2/11/2010	272.64	6.30	266.34	Vashon
LC-50	8/10/2010	272.64	7.03	265.61	Vashon
LC-50	2/16/2011	272.64	6.13	266.51	Vashon
LC-50	8/10/2011	272.64	6.80	265.84	Vashon
LC-50	2/22/2012	272.64	6.12	266.52	Vashon
LC-50	7/31/2012	272.64	6.98	265.66	Vashon
LC-50	2/6/2013	272.64	6.55	266.09	Vashon
LC-50	8/8/2013	272.64	7.20	265.44	Vashon
LC- 50	2/14/2014	272.64	6.60	266.04	Vashon
LC- 50	9/8/2014	272.64	7.12	265.52	Vashon
LC-51	4/23/1997	274.22	3.85	270.37	Vashon

Well ID	Date	Measuring Pt	Depth to SWL	GW Elev	Aquifer
LC-51	7/16/1997	274.22	6.38	267.84	Vashon
LC-51	10/16/1997	274.22	6.47	267.75	Vashon
LC-51	1/30/1998	274.22	4.84	269.38	Vashon
LC-51	4/2/1998	274.22	5.27	268.95	Vashon
LC-51	7/7/1998	274.22	6.80	267.42	Vashon
LC-51	9/22/1998	274.22	7.80	266.42	Vashon
LC-51	12/1/1998	274.22	3.95	270.27	Vashon
LC-51	3/1/1999	274.22	4.85	269.37	Vashon
LC-51	6/1/1999	274.22	6.25	267.97	Vashon
LC-51	9/1/1999	274.22	7.48	266.74	Vashon
LC-51	12/1/1999	274.22	5.68	268.54	Vashon
LC-51	3/1/2000	274.22	5.52	268.70	Vashon
LC-51	6/1/2000	274.22	6.26	267.96	Vashon
LC-51	9/1/2000	274.22	7.33	266.89	Vashon
LC-51	12/1/2000	274.22	7.44	266.78	Vashon
LC-51	3/1/2001	274.02	7.52	266.50	Vashon
LC-51	6/1/2001	274.02	7.61	266.41	Vashon
LC-51	9/1/2001	274.02	8.04	265.98	Vashon
LC-51	12/1/2001	274.02	6.44	267.58	Vashon
LC-51	4/1/2002	274.02	5.03	268.99	Vashon
LC-51	6/1/2002	274.02	6.97	267.05	Vashon
LC-51	9/1/2002	274.02	7.10	266.92	Vashon
LC-51	2/3/2003	274.02	5.40	268.62	Vashon
LC-51	3/3/2003	274.02	6.13	267.89	Vashon
LC-51	7/1/2003	274.02	4.40	269.62	Vashon
LC-51	10/4/2004	274.02	7.15	266.87	Vashon
LC-52	12/1/2001	275.85	6.90	268.95	Vashon
LC-52	4/1/2002	275.85	6.43	269.42	Vashon
LC-52	6/1/2002	275.85	7.52	268.33	Vashon
LC-52	9/1/2002	275.85	8.25	267.60	Vashon
LC-52	2/3/2003	275.85	6.88	268.97	Vashon
LC-52	3/3/2003	275.85	7.40	268.45	Vashon
LC-52	7/1/2003	275.85	7.59	268.26	Vashon
LC-52	10/4/2004	275.85	8.27	267.58	Vashon
LC-53	4/23/1997	277.59	8.49	269.10	Vashon
LC-53	7/16/1997	277.59	11.14	266.45	Vashon
LC-53	10/16/1997	277.59	11.14	266.45	Vashon
LC-53	1/30/1998	277.59	9.45	268.14	Vashon
LC-53	4/2/1998	277.59	10.11	267.48	Vashon
LC-53	7/7/1998	277.59	11.48	266.11	Vashon
LC-53	9/22/1998	277.59	12.04	265.55	Vashon
LC-53	12/1/1998	277.59	8.34	269.25	Vashon
LC-53	3/1/1999	277.59	9.63	267.96	Vashon
LC-53	6/1/1999	277.59	10.89	266.70	Vashon
LC-53	9/1/1999	277.59	11.88	265.71	Vashon
LC-53	12/1/1999	277.59	10.50	267.09	Vashon
LC-53	3/1/2000	277.59	10.06	267.53	Vashon
LC-53	6/1/2000	277.59	10.83	266.76	Vashon
LC-53	9/1/2000	277.73	11.39	266.34	Vashon
LC-53	12/1/2000	277.73	11.67	266.06	Vashon
LC-53	3/1/2001	277.38	11.79	265.59	Vashon
LC-53	6/1/2001	277.38	12.05	265.33	Vashon
LC-53	9/1/2001	277.38	12.50	264.88	Vashon
LC-53	12/1/2001	277.38	8.92	268.46	Vashon

Well ID	Date	Measuring Pt	Depth to SWL	GW Elev	Aquifer
LC-53	4/1/2002	277.38	9.80	267.58	Vashon
LC-53	6/1/2002	277.38	9.42	267.96	Vashon
LC-53	9/1/2002	277.38	11.10	266.28	Vashon
LC-53	2/3/2003	277.38	9.01	268.37	Vashon
LC-53	3/3/2003	277.38	10.78	266.60	Vashon
LC-53	7/1/2003	277.38	11.01	266.37	Vashon
LC-53	10/4/2004	277.38	11.83	265.55	Vashon
LC-53	4/11/2005	277.38	10.53	266.85	Vashon
LC-53	10/31/2005	277.38	11.90	265.48	Vashon
LC-53	3/16/2006	277.38	9.45	267.93	Vashon
LC-53	9/20/2006	277.38	11.48	265.90	Vashon
LC-53	3/20/2007	277.38	8.92	268.46	Vashon
LC-53	3/25/2008	277.38	10.01	267.37	Vashon
LC-53	10/8/2008	277.38	11.77	265.61	Vashon
LC-53	2/3/2009	277.38	10.40	266.98	Vashon
LC-53	8/3/2009	277.38	11.37	266.01	Vashon
LC-53	2/11/2010	277.38	9.95	267.43	Vashon
LC-53	8/9/2010	277.38	10.52	266.86	Vashon
LC-53	2/14/2011	277.38	9.65	267.73	Vashon
LC-53	8/10/2011	277.38	10.37	267.01	Vashon
LC-53	2/22/2012	277.38	9.63	267.75	Vashon
LC-53	8/3/2012	277.38	10.59	266.79	Vashon
LC-53	2/6/2013	277.38	10.08	267.3	Vashon
LC-53	8/8/2013	277.38	10.95	266.43	Vashon
LC- 53	2/14/2014	277.38	10.35	267.03	Vashon
LC- 53	9/5/2014	277.38	10.79	266.59	Vashon
LC-57	12/1/2001	286.04	17.02	269.02	Vashon
LC-57	4/1/2002	286.04	16.52	269.52	Vashon
LC-57	6/1/2002	286.04	17.55	268.49	Vashon
LC-57	9/1/2002	286.04	18.50	267.54	Vashon
LC-57	2/3/2003	286.04	18.52	267.52	Vashon
LC-57	3/3/2003	286.04	17.62	268.42	Vashon
LC-57	7/1/2003	286.04	17.82	268.22	Vashon
LC-57	10/4/2004	286.04	18.43	267.61	Vashon
LC-57	4/1/2005	286.04	17.72	268.32	Vashon
LC-57	7/29/2005	286.04	18.47	267.57	Vashon
LC-57	9/21/2005	286.04	19.09	266.95	Vashon
LC-57	3/14/2006	286.04	16.13	269.91	Vashon
LC-57	9/20/2006	286.04	18.70	267.34	Vashon
LC-57	3/22/2007	286.04	15.58	270.46	Vashon
LC-57	10/19/2007	286.04	18.55	267.49	Vashon
LC-57	4/3/2008	286.04	16.55	269.49	Vashon
LC-57	10/8/2008	286.04	18.81	267.23	Vashon
LC-57	2/3/2009	286.04	17.23	268.81	Vashon
LC-57	8/3/2009	286.04	18.49	267.55	Vashon
LC-57	2/11/2010	286.04	16.70	269.34	Vashon
LC-57	8/10/2010	286.04	17.22	268.82	Vashon
LC-57	2/14/2011	286.04	16.35	269.69	Vashon
LC-57	8/10/2011	286.04	17.20	268.84	Vashon
LC-57	2/22/2012	286.04	16.49	269.55	Vashon
LC-57	8/1/2012	286.04	17.22	268.82	Vashon
LC-57	2/7/2013	286.04	16.79	269.25	Vashon
LC-57	8/7/2013	286.04	17.75	268.29	Vashon
LC- 57	2/18/2014	286.04	15.90	270.14	Vashon

Well ID	Date	Measuring Pt	Depth to SWL	GW Elev	Aquifer
LC- 57	9/5/2014	286.04	17.61	268.43	Vashon
LC-60a	10/7/1996	278.58	29.55	249.03	Vashon
LC-60a	1/24/1997	278.58	23.60	254.98	Vashon
LC-60a	4/23/1997	278.58	25.54	253.04	Vashon
LC-60a	7/16/1997	278.58	28.34	250.24	Vashon
LC-60a	10/16/1997	278.58	28.42	250.16	Vashon
LC-60a	1/30/1998	278.58	25.17	253.41	Vashon
LC-60a	4/2/1998	278.58	26.51	252.07	Vashon
LC-60a	7/7/1998	278.58	28.78	249.80	Vashon
LC-60a	9/22/1998	278.58	30.50	248.08	Vashon
LC-60a	12/1/1998	278.58	23.10	255.48	Vashon
LC-60a	3/1/1999	278.58	25.30	253.28	Vashon
LC-60a	6/1/1999	278.58	26.93	251.65	Vashon
LC-60a	9/1/1999	278.58	30.40	248.18	Vashon
LC-60a	12/1/1999	278.58	25.65	252.93	Vashon
LC-60a	3/1/2000	278.58	25.11	253.47	Vashon
LC-60a	6/1/2000	278.58	27.20	251.38	Vashon
LC-60a	9/1/2000	278.48	30.10	248.38	Vashon
LC-60a	12/1/2000	278.48	30.11	248.37	Vashon
LC-60a	3/1/2001	278.48	29.69	248.79	Vashon
LC-60a	6/1/2001	278.48	29.53	248.95	Vashon
LC-60a	9/1/2001	278.48	32.15	246.33	Vashon
LC-60a	12/1/2001	278.48	27.15	251.33	Vashon
LC-60a	4/1/2002	278.48	25.44	253.04	Vashon
LC-60a	6/1/2002	278.48	27.89	250.59	Vashon
LC-60a	9/1/2002	278.48	29.98	248.50	Vashon
LC-60a	2/3/2003	278.48	26.28	252.20	Vashon
LC-60a	3/3/2003	278.48	26.70	251.78	Vashon
LC-60a	7/1/2003	278.48	28.75	249.73	Vashon
LC-60a	10/4/2004	278.48	30.53	247.95	Vashon
LC-61b	12/1/2001	277.49	23.68	253.81	Vashon
LC-61b	4/1/2002	277.49	24.04	253.45	Vashon
LC-61b	6/1/2002	277.49	25.65	251.84	Vashon
LC-61b	9/1/2002	277.49	27.62	249.87	Vashon
LC-61b	2/3/2003	277.49	32.97	244.52	Vashon
LC-61b	3/3/2003	277.49	25.22	252.27	Vashon
LC-61b	7/1/2003	277.49	27.01	250.48	Vashon
LC-61b	10/4/2004	277.49	28.63	248.86	Vashon
LC-61b	2/11/2005	277.49	27.01	250.48	Vashon
LC-61b	3/27/2006	277.49	23.85	253.64	Vashon
LC-61b	9/25/2006	277.49	27.78	249.71	Vashon
LC-61b	3/23/2007	277.49	22.81	254.68	Vashon
LC-61b	10/5/2007	277.49	26.90	250.59	Vashon
LC-61b	3/25/2008	277.49	24.90	252.59	Vashon
LC-61b	10/8/2008	277.49	28.39	249.10	Vashon
LC-61b	2/6/2009	277.49	24.52	252.97	Vashon
LC-61b	8/6/2009	277.49	26.44	251.05	Vashon
LC-61b	2/9/2010	277.49	23.85	253.64	Vashon
LC-61b	8/13/2010	277.49	25.68	251.81	Vashon
LC-61b	2/15/2011	277.49	23.65	253.84	Vashon
LC-61b	8/9/2011	277.49	25.48	252.01	Vashon
LC-61b	2/29/2012	277.49	24.20	253.29	Vashon
LC-61b	8/1/2012	277.49	25.35	252.14	Vashon
LC-61b	2/12/2013	277.49	24.48	253.01	Vashon

Well ID	Date	Measuring Pt	Depth to SWL	GW Elev	Aquifer
LC-61b	8/8/2013	277.49	26.50	250.99	Vashon
LC- 61b	2/12/2014	277.49	25.40	252.09	Vashon
LC- 61b	9/9/2014	277.49	26.12	251.37	Vashon
LC-62a	10/7/1996	264.83	16.56	248.27	Vashon
LC-62a	1/24/1997	264.83	11.49	253.34	Vashon
LC-62a	4/23/1997	264.83	13.25	251.58	Vashon
LC-62a	7/16/1997	264.83	15.67	249.16	Vashon
LC-62a	10/16/1997	264.83	15.63	249.20	Vashon
LC-62a	1/30/1998	264.83	13.30	251.53	Vashon
LC-62a	4/2/1998	264.83	14.36	250.47	Vashon
LC-62a	7/7/1998	264.83	16.27	248.56	Vashon
LC-62a	9/22/1998	264.83	17.60	247.23	Vashon
LC-62a	12/1/1998	264.83	11.00	253.83	Vashon
LC-62a	3/1/1999	264.83	13.05	251.78	Vashon
LC-62a	6/1/1999	264.83	14.45	250.38	Vashon
LC-62a	9/1/1999	264.83	17.55	247.28	Vashon
LC-62a	12/1/1999	264.83	13.45	251.38	Vashon
LC-62a	3/1/2000	264.83	12.90	251.93	Vashon
LC-62a	6/1/2000	264.83	14.68	250.15	Vashon
LC-62a	9/1/2000	264.76	17.13	247.63	Vashon
LC-62a	12/1/2000	264.76	17.22	247.54	Vashon
LC-62a	3/1/2001	264.76	16.90	247.86	Vashon
LC-62a	6/1/2001	264.76	16.63	248.13	Vashon
LC-62a	9/1/2001	264.76	18.78	245.98	Vashon
LC-62a	12/1/2001	264.76	14.40	250.36	Vashon
LC-62a	4/1/2002	264.76	13.29	251.47	Vashon
LC-62a	6/1/2002	264.76	14.84	249.92	Vashon
LC-62a	9/1/2002	264.76	15.98	248.78	Vashon
LC-62a	2/3/2003	264.76	13.87	250.89	Vashon
LC-62a	3/3/2003	264.76	14.48	250.28	Vashon
LC-62a	7/1/2003	264.76	16.15	248.61	Vashon
LC-62a	10/4/2004	264.76	17.65	247.11	Vashon
LC-64a	10/7/1996	278.10	10.60	267.50	Vashon
LC-64a	1/24/1997	278.10	6.40	271.70	Vashon
LC-64a	4/23/1997	278.10	6.97	271.13	Vashon
LC-64a	7/16/1997	278.10	8.85	269.25	Vashon
LC-64a	1/30/1998	278.10	7.55	270.55	Vashon
LC-64a	4/2/1998	278.10	8.16	269.94	Vashon
LC-64a	7/7/1998	278.10	9.76	268.34	Vashon
LC-64a	9/22/1998	278.10	11.25	266.85	Vashon
LC-64a	12/1/1998	278.10	6.09	272.01	Vashon
LC-64a	3/1/1999	278.10	7.33	270.77	Vashon
LC-64a	6/1/1999	278.10	9.38	268.72	Vashon
LC-64a	9/1/1999	278.10	11.33	266.77	Vashon
LC-64a	12/1/1999	278.10	8.67	269.43	Vashon
LC-64a	3/1/2000	278.10	8.03	270.07	Vashon
LC-64a	6/1/2000	278.10	9.42	268.68	Vashon
LC-64a	9/1/2000	278.15	11.15	267.00	Vashon
LC-64a	12/1/2000	278.15	11.67	266.48	Vashon
LC-64a	3/1/2001	278.15	11.38	266.77	Vashon
LC-64a	6/1/2001	278.15	10.76	267.39	Vashon
LC-64a	9/1/2001	278.15	12.96	265.19	Vashon
LC-64a	12/1/2001	278.15	7.59	270.56	Vashon
LC-64a	4/1/2002	278.15	7.38	270.77	Vashon

Well ID	Date	Measuring Pt	Depth to SWL	GW Elev	Aquifer
LC-64a	6/1/2002	278.15	8.97	269.18	Vashon
LC-64a	9/1/2002	278.15	10.27	267.88	Vashon
LC-64a	2/3/2003	278.15	8.57	269.58	Vashon
LC-64a	3/3/2003	278.15	9.43	268.72	Vashon
LC-64a	7/1/2003	278.15	9.86	268.29	Vashon
LC-64a	10/4/2004	278.15	12.36	265.79	Vashon
LC-64a	8/17/2005	278.15	10.45	267.70	Vashon
LC-64a	3/20/2006	278.15	6.76	271.39	Vashon
LC-64a	9/20/2006	278.15	10.40	267.75	Vashon
LC-64a	3/22/2007	278.15	6.83	271.32	Vashon
LC-64a	9/19/2007	278.15	12.29	265.86	Vashon
LC-64a	10/8/2008	278.15	14.90	263.25	Vashon
LC-64a	2/3/2009	278.15	11.28	266.87	Vashon
LC-64a	8/3/2009	278.15	9.82	268.33	Vashon
LC-64a	2/11/2010	278.15	9.25	268.90	Vashon
LC-64a	8/10/2010	278.15	11.18	266.97	Vashon
LC-64a	2/14/2011	278.15	9.40	268.75	Vashon
LC-64a	8/10/2011	278.15	9.28	268.87	Vashon
LC-64a	2/22/2012	278.15	9.80	268.35	Vashon
LC-64a	8/1/2012	278.15	10.99	267.16	Vashon
LC-64a	2/7/2013	278.15	10.02	268.13	Vashon
LC-64a	8/7/2013	278.15	11.60	266.55	Vashon
LC- 64a	2/18/2014	278.15	8.40	269.75	Vashon
LC- 64a	9/8/2014	278.15	11.29	266.86	Vashon
LC-64b	12/1/1998	277.81	9.05	268.76	Vashon
LC-64b	3/1/1999	277.81	10.62	267.19	Vashon
LC-64b	6/1/1999	277.81	12.32	265.49	Vashon
LC-64b	9/1/1999	277.81	13.95	263.86	Vashon
LC-64b	12/1/1999	277.81	11.33	266.48	Vashon
LC-64b	3/1/2000	277.81	10.72	267.09	Vashon
LC-64b	6/1/2000	277.81	11.95	265.86	Vashon
LC-64b	9/1/2000	277.89	13.34	264.55	Vashon
LC-64b	12/1/2000	277.89	13.60	264.29	Vashon
LC-64b	3/1/2001	277.89	13.57	264.32	Vashon
LC-64b	6/1/2001	277.89	13.20	264.69	Vashon
LC-64b	9/1/2001	277.89	14.18	263.71	Vashon
LC-64b	12/1/2001	277.89	12.01	265.88	Vashon
LC-64b	4/1/2002	277.89	10.31	267.58	Vashon
LC-64b	6/1/2002	277.89	13.09	264.80	Vashon
LC-64b	9/1/2002	277.89	14.35	263.54	Vashon
LC-64b	2/3/2003	277.89	10.92	266.97	Vashon
LC-64b	3/3/2003	277.89	11.86	266.03	Vashon
LC-64b	7/1/2003	277.89	10.97	266.92	Vashon
LC-64b	10/4/2004	277.89	13.72	264.17	Vashon
LC-64b	8/17/2005	277.89	10.57	267.32	Vashon
LC-64b	3/20/2006	277.89	7.55	270.34	Vashon
LC-64b	9/20/2006	277.89	10.50	267.39	Vashon
LC-64b	3/22/2007	277.89	7.47	270.42	Vashon
LC-64b	9/19/2007	277.89	13.94	263.95	Vashon
LC-64b	4/3/2008	277.89	11.04	266.85	Vashon
LC-64b	10/8/2008	277.89	14.58	263.31	Vashon
LC-64b	2/3/2009	277.89	9.95	267.94	Vashon
LC-64b	8/3/2009	277.89	10.06	267.83	Vashon
LC-66a	4/23/1997	282.20	24.56	257.64	Vashon

Well ID	Date	Measuring Pt	Depth to SWL	GW Elev	Aquifer
LC-66a	7/16/1997	282.20	29.86	252.34	Vashon
LC-66a	10/16/1997	282.20	29.97	252.23	Vashon
LC-66a	1/30/1998	282.20	26.10	256.10	Vashon
LC-66a	4/2/1998	282.20	27.41	254.79	Vashon
LC-66a	7/7/1998	282.20	30.28	251.92	Vashon
LC-66a	9/22/1998	282.20	32.46	249.74	Vashon
LC-66a	12/1/1998	282.20	23.77	258.43	Vashon
LC-66a	3/1/1999	282.20	26.20	256.00	Vashon
LC-66a	6/1/1999	282.20	28.03	254.17	Vashon
LC-66a	9/1/1999	282.20	32.44	249.76	Vashon
LC-66a	12/1/1999	282.20	26.47	255.73	Vashon
LC-66a	3/1/2000	282.20	25.97	256.23	Vashon
LC-66a	6/1/2000	282.20	28.36	253.84	Vashon
LC-66a	9/1/2000	282.24	32.04	250.20	Vashon
LC-66a	12/1/2000	282.24	32.02	250.22	Vashon
LC-66a	3/1/2001	282.24	31.47	250.77	Vashon
LC-66a	6/1/2001	282.24	31.35	250.89	Vashon
LC-66a	9/1/2001	282.24	32.21	250.03	Vashon
LC-66b	12/1/1998	282.17	23.59	258.58	Vashon
LC-66b	3/1/1999	282.17	26.01	256.16	Vashon
LC-66b	6/1/1999	282.17	27.92	254.25	Vashon
LC-66b	9/1/1999	282.17	32.40	249.77	Vashon
LC-66b	12/1/1999	282.17	26.33	255.84	Vashon
LC-66b	3/1/2000	282.17	25.81	256.36	Vashon
LC-66b	6/1/2000	282.17	28.24	253.93	Vashon
LC-66b	9/1/2000	282.22	32.02	250.20	Vashon
LC-66b	12/1/2000	282.22	31.98	250.24	Vashon
LC-66b	3/1/2001	282.22	31.45	250.77	Vashon
LC-66b	6/1/2001	282.22	31.30	250.92	Vashon
LC-66b	9/1/2001	282.22	34.05	248.17	Vashon
LC-66b	12/1/2001	282.22	25.68	256.54	Vashon
LC-66b	4/1/2002	282.22	25.93	256.29	Vashon
LC-66b	6/1/2002	282.22	26.62	255.60	Vashon
LC-66b	9/1/2002	282.22	28.02	254.20	Vashon
LC-66b	2/3/2003	282.22	26.01	256.21	Vashon
LC-66b	3/3/2003	282.22	27.46	254.76	Vashon
LC-66b	7/1/2003	282.22	29.95	252.27	Vashon
LC-66b	10/4/2004	282.22	32.13	250.09	Vashon
LC-66b	4/15/2005	282.22	29.26	252.96	Vashon
LC-66b	7/20/2005	282.22	30.52	251.70	Vashon
LC-66b	9/7/2005	282.22	32.45	249.77	Vashon
LC-66b	3/17/2006	282.22	26.07	256.15	Vashon
LC-66b	9/20/2006	282.22	31.13	251.09	Vashon
LC-66b	3/20/2007	282.22	25.47	256.75	Vashon
LC-66b	9/28/2007	282.22	30.31	251.91	Vashon
LC-66b	4/3/2008	282.22	27.68	254.54	Vashon
LC-66b	10/8/2008	282.22	32.57	249.65	Vashon
LC-66b	2/5/2009	282.22	26.94	255.28	Vashon
LC-66b	8/4/2009	282.22	29.65	252.57	Vashon
LC-66b	2/10/2010	282.22	26.10	256.12	Vashon
LC-66b	8/13/2010	282.22	28.72	253.50	Vashon
LC-66b	2/16/2011	282.22	24.30	257.92	Vashon
LC-66b	8/9/2011	282.22	28.55	253.67	Vashon
LC-66b	2/29/2012	282.22	27.04	255.18	Vashon

Well ID	Date	Measuring Pt	Depth to SWL	GW Elev	Aquifer
LC-66b	7/31/2012	282.22	28.43	253.79	Vashon
LC-66b	2/6/2013	282.22	27.19	255.03	Vashon
LC-66b	8/7/2013	282.22	29.90	252.32	Vashon
LC- 66b	2/18/2014	282.22	27.40	254.82	Vashon
LC- 66b	9/8/2014	282.22	29.30	252.92	Vashon
LC-73a	4/23/1997	271.98	14.25	257.73	Vashon
LC-73a	7/16/1997	271.98	21.23	250.75	Vashon
LC-73a	10/16/1997	271.98	21.10	250.88	Vashon
LC-73a	1/30/1998	271.98	17.58	254.40	Vashon
LC-73a	4/2/1998	271.98	19.72	252.26	Vashon
LC-73a	7/7/1998	271.98	22.05	249.93	Vashon
LC-73a	9/22/1998	271.98	23.58	248.40	Vashon
LC-73a	12/1/1998	271.98	14.54	257.44	Vashon
LC-73a	3/1/1999	271.98	17.12	254.86	Vashon
LC-73a	6/1/1999	271.98	19.09	252.89	Vashon
LC-73a	9/1/1999	271.98	23.71	248.27	Vashon
LC-73a	12/1/1999	271.98	17.94	254.04	Vashon
LC-73a	3/1/2000	271.98	16.74	255.24	Vashon
LC-73a	6/1/2000	271.98	19.65	252.33	Vashon
LC-73a	9/1/2000	271.72	22.93	248.79	Vashon
LC-73a	12/1/2000	271.72	22.69	249.03	Vashon
LC-73a	3/1/2001	271.72	22.66	249.06	Vashon
LC-73a	6/1/2001	271.72	22.07	249.65	Vashon
LC-73a	9/1/2001	271.72	24.98	246.74	Vashon
LC-73a	12/1/2001	271.72	17.16	254.56	Vashon
LC-73a	4/1/2002	271.72	17.65	254.07	Vashon
LC-73a	6/1/2002	271.72	18.02	253.70	Vashon
LC-73a	9/1/2002	271.72	20.90	250.82	Vashon
LC-73a	2/3/2003	271.72	17.80	253.92	Vashon
LC-73a	3/3/2003	271.72	19.56	252.16	Vashon
LC-73a	7/1/2003	271.72	21.75	249.97	Vashon
LC-73a	10/4/2004	271.72	23.46	248.26	Vashon
LR-1	10/7/1996	284.28	10.12	274.16	Vashon
LR-1	1/24/1997	284.28	6.99	277.29	Vashon
LR-1	4/23/1997	284.28	7.62	276.66	Vashon
LR-1	7/16/1997	284.28	8.66	275.62	Vashon
LR-1	10/16/1997	284.28	8.61	275.67	Vashon
LR-1	1/30/1998	284.28	6.74	277.54	Vashon
LR-1	4/2/1998	284.28	4.50	279.78	Vashon
LR-1	7/7/1998	284.28	4.80	279.48	Vashon
LR-1	9/22/1998	284.28	4.91	279.37	Vashon
LR-1	12/1/1998	284.28	5.00	279.28	Vashon
LR-1	3/1/1999	284.28	5.05	279.23	Vashon
LR-1	6/1/1999	284.28	10.40	273.88	Vashon
LR-1	9/1/1999	284.28	5.25	279.03	Vashon
LR-1	12/1/1999	284.28	5.25	279.03	Vashon
LR-1	3/1/2000	284.28	5.10	279.18	Vashon
LR-1	6/1/2000	284.28	4.83	279.45	Vashon
LR-1	9/1/2000	284.35	14.00	270.35	Vashon
LR-1	12/1/2000	284.35	15.96	268.39	Vashon
LR-1	3/1/2001	284.35	14.57	269.78	Vashon
LR-1	6/1/2001	284.35	10.14	274.21	Vashon
LR-1	9/1/2001	284.35	11.00	273.35	Vashon
LR-1	12/1/2001	284.10	6.40	277.70	Vashon

Well ID	Date	Measuring Pt	Depth to SWL	GW Elev	Aquifer
LR-1	4/1/2002	284.10	9.01	275.09	Vashon
LR-1	6/1/2002	284.10	9.65	274.45	Vashon
LR-1	9/1/2002	284.10	11.16	272.94	Vashon
LR-1	2/3/2003	284.10	8.95	275.15	Vashon
LR-1	3/3/2003	284.10	10.08	274.02	Vashon
LR-1	7/1/2003	284.10	7.77	276.33	Vashon
LR-2	10/7/1996	280.63	7.54	273.09	Vashon
LR-2	1/24/1997	280.63	2.10	278.53	Vashon
LR-2	4/23/1997	280.63	3.58	277.05	Vashon
LR-2	7/16/1997	280.63	5.63	275.00	Vashon
LR-2	10/16/1997	280.63	6.50	274.13	Vashon
LR-2	4/2/1998	280.63	6.98	273.65	Vashon
LR-2	7/7/1998	280.63	4.35	276.28	Vashon
LR-2	9/22/1998	280.63	4.50	276.13	Vashon
LR-2	12/1/1998	280.63	4.30	276.33	Vashon
LR-2	3/1/1999	280.63	3.95	276.68	Vashon
LR-2	6/1/1999	280.63	6.60	274.03	Vashon
LR-2	9/1/1999	280.63	4.75	275.88	Vashon
LR-2	12/1/1999	280.63	4.65	275.98	Vashon
LR-2	3/1/2000	280.63	4.71	275.92	Vashon
LR-2	6/1/2000	280.63	4.50	276.13	Vashon
LR-2	9/1/2000	280.72	9.50	271.22	Vashon
LR-2	12/1/2000	280.72	9.43	271.29	Vashon
LR-2	3/1/2001	280.72	8.99	271.73	Vashon
LR-2	6/1/2001	280.72	6.70	274.02	Vashon
LR-2	9/1/2001	280.72	7.51	273.21	Vashon
LR-2	12/1/2001	280.54	3.06	277.48	Vashon
LR-2	4/1/2002	280.54	5.22	275.32	Vashon
LR-2	6/1/2002	280.54	6.64	273.90	Vashon
LR-2	9/1/2002	280.54	8.40	272.14	Vashon
LR-2	2/3/2003	280.54	6.26	274.28	Vashon
LR-2	3/3/2003	280.54	6.97	273.57	Vashon
LR-2	7/1/2003	280.54	6.13	274.41	Vashon
LX-01	10/7/1996	271.43	34.40	237.03	Vashon
LX-01	1/24/1997	271.43	26.60	244.83	Vashon
LX-01	4/23/1997	271.43	30.00	241.43	Vashon
LX-01	7/16/1997	271.43	34.06	237.37	Vashon
LX-01	10/16/1997	271.43	34.82	236.61	Vashon
LX-01	1/30/1998	271.43	31.40	240.03	Vashon
LX-01	4/2/1998	271.43	32.92	238.51	Vashon
LX-01	7/7/1998	271.43	34.89	236.54	Vashon
LX-01	9/22/1998	271.43	37.27	234.16	Vashon
LX-01	12/1/1998	271.43	27.95	243.48	Vashon
LX-01	3/1/1999	271.43	30.52	240.91	Vashon
LX-01	9/1/1999	271.43	36.49	234.94	Vashon
LX-01	12/1/1999	271.43	31.55	239.88	Vashon
LX-01	3/1/2000	271.43	30.25	241.18	Vashon
LX-01	6/1/2000	271.43	32.50	238.93	Vashon
LX-01	9/1/2000	270.66	36.10	234.56	Vashon
LX-01	12/1/2000	270.66	35.90	234.76	Vashon
LX-01	3/1/2001	271.43	35.50	235.93	Vashon
LX-01	6/1/2001	271.43	35.10	236.33	Vashon
LX-01	9/1/2001	271.43	63.90	207.53	Vashon
LX-01	12/1/2001	270.66	30.90	239.76	Vashon

Appendix D - Historical Depth to Water Measurements and Sea Level Aquifer Trend Graphs

Historical Depth to Water measurements

Log RAM, Joint Base Lewis-McChord, Washington 98433

Well ID	Date	Measuring Pt	Depth to SWL	GW Elev	Aquifer
LX-01	4/1/2002	270.66	30.90	239.76	Vashon
LX-01	6/1/2002	270.66	31.90	238.76	Vashon
LX-01	9/1/2002	270.66	36.00	234.66	Vashon
LX-01	2/3/2003	270.66	31.80	238.86	Vashon
LX-01	3/3/2003	270.66	33.02	237.64	Vashon
LX-01	7/1/2003	270.66	34.55	236.11	Vashon
LX-01	10/4/2004	270.66	34.80	235.86	Vashon
LX-01	2/24/2005	270.66	33.50	237.16	Vashon
LX-01	9/21/2005	270.66	50.20	220.46	Vashon
LX-01	3/14/2006	270.66	31.95	238.71	Vashon
LX-02	10/7/1996	272.39	45.70	226.69	Vashon
LX-02	1/24/1997	272.39	35.90	236.49	Vashon
LX-02	4/23/1997	272.39	40.70	231.69	Vashon
LX-02	7/16/1997	272.39	43.06	229.33	Vashon
LX-02	10/16/1997	272.39	43.87	228.52	Vashon
LX-02	1/30/1998	272.39	42.89	229.50	Vashon
LX-02	4/2/1998	272.39	43.30	229.09	Vashon
LX-02	7/7/1998	272.39	45.93	226.46	Vashon
LX-02	9/22/1998	272.39	49.89	222.50	Vashon
LX-02	12/1/1998	272.39	37.25	235.14	Vashon
LX-02	3/1/1999	272.39	39.84	232.55	Vashon
LX-02	6/1/1999	272.39	42.26	230.13	Vashon
LX-02	9/1/1999	272.39	49.89	222.50	Vashon
LX-02	12/1/1999	272.39	42.77	229.62	Vashon
LX-02	3/1/2000	272.39	42.60	229.79	Vashon
LX-02	6/1/2000	272.39	43.60	228.79	Vashon
LX-02	9/1/2000	271.18	48.60	222.58	Vashon
LX-02	12/1/2000	271.18	50.26	220.92	Vashon
LX-02	3/1/2001	272.39	49.70	222.69	Vashon
LX-02	6/1/2001	272.39	49.90	222.49	Vashon
LX-02	9/1/2001	272.39	51.60	220.79	Vashon
LX-02	12/1/2001	271.18	43.63	227.55	Vashon
LX-02	4/1/2002	271.18	43.91	227.27	Vashon
LX-02	6/1/2002	271.18	45.30	225.88	Vashon
LX-02	9/1/2002	271.18	48.10	223.08	Vashon
LX-02	2/3/2003	271.18	47.20	223.98	Vashon
LX-02	3/3/2003	271.18	48.21	222.97	Vashon
LX-02	7/1/2003	271.18	49.37	221.81	Vashon
LX-02	10/4/2004	271.18	50.50	220.68	Vashon
LX-02	2/24/2005	271.18	49.10	222.08	Vashon
LX-02	9/21/2005	271.18	26.20	244.98	Vashon
LX-02	3/14/2006	271.18	42.66	228.52	Vashon
LX-02	9/29/2006	271.18	48.13	223.05	Vashon
LX-03	10/7/1996	273.64	45.20	228.44	Vashon
LX-03	1/24/1997	273.64	36.30	237.34	Vashon
LX-03	4/23/1997	273.64	39.10	234.54	Vashon
LX-03	7/16/1997	273.64	45.74	227.90	Vashon
LX-03	10/16/1997	273.64	46.69	226.95	Vashon
LX-03	1/30/1998	273.64	43.93	229.71	Vashon
LX-03	4/2/1998	273.64	44.87	228.77	Vashon
LX-03	7/7/1998	273.64	47.88	225.76	Vashon
LX-03	9/22/1998	273.64	49.95	223.69	Vashon
LX-03	12/1/1998	273.64	38.70	234.94	Vashon
LX-03	3/1/1999	273.64	42.35	231.29	Vashon

Well ID	Date	Measuring Pt	Depth to SWL	GW Elev	Aquifer
LX-03	6/1/1999	273.64	45.65	227.99	Vashon
LX-03	9/1/1999	273.64	49.93	223.71	Vashon
LX-03	12/1/1999	273.64	45.82	227.82	Vashon
LX-03	3/1/2000	273.64	43.92	229.72	Vashon
LX-03	6/1/2000	273.64	45.90	227.74	Vashon
LX-03	9/1/2000	272.96	49.70	223.26	Vashon
LX-03	12/1/2000	272.96	49.50	223.46	Vashon
LX-03	3/1/2001	273.64	48.00	225.64	Vashon
LX-03	6/1/2001	273.64	48.80	224.84	Vashon
LX-03	9/1/2001	273.64	51.70	221.94	Vashon
LX-03	12/1/2001	272.96	44.55	228.41	Vashon
LX-03	4/1/2002	272.96	45.61	227.35	Vashon
LX-03	6/1/2002	272.96	46.00	226.96	Vashon
LX-03	9/1/2002	272.96	49.10	223.86	Vashon
LX-03	2/3/2003	272.96	45.70	227.26	Vashon
LX-03	3/3/2003	272.96	49.17	223.79	Vashon
LX-03	7/1/2003	272.96	48.25	224.71	Vashon
LX-03	10/4/2004	272.96	51.18	221.78	Vashon
LX-03	2/24/2005	272.96	47.60	225.36	Vashon
LX-03	9/21/2005	272.96	49.20	223.76	Vashon
LX-03	3/14/2006	272.96	42.16	230.80	Vashon
LX-03	9/29/2006	272.96	33.27	239.69	Vashon
LX-04	10/7/1996	275.35	34.20	241.15	Vashon
LX-04	1/24/1997	275.35	27.40	247.95	Vashon
LX-04	4/23/1997	275.35	30.20	245.15	Vashon
LX-04	7/16/1997	275.35	34.32	241.03	Vashon
LX-04	10/16/1997	275.35	34.71	240.64	Vashon
LX-04	1/30/1998	275.35	31.87	243.48	Vashon
LX-04	4/2/1998	275.35	56.20	219.15	Vashon
LX-04	7/7/1998	275.35	37.30	238.05	Vashon
LX-04	9/22/1998	275.35	28.27	247.08	Vashon
LX-04	12/1/1998	275.35	29.37	245.98	Vashon
LX-04	3/1/1999	275.35	30.50	244.85	Vashon
LX-04	9/1/1999	275.35	41.38	233.97	Vashon
LX-04	12/1/1999	275.35	35.78	239.57	Vashon
LX-04	3/1/2000	275.35	37.09	238.26	Vashon
LX-04	6/1/2000	275.35	39.40	235.95	Vashon
LX-04	9/1/2000	275.06	44.10	230.96	Vashon
LX-04	12/1/2000	275.06	42.90	232.16	Vashon
LX-04	3/1/2001	275.35	40.90	234.45	Vashon
LX-04	6/1/2001	275.35	42.40	232.95	Vashon
LX-04	9/1/2001	275.35	46.30	229.05	Vashon
LX-04	12/1/2001	275.06	40.00	235.06	Vashon
LX-04	4/1/2002	275.06	41.30	233.76	Vashon
LX-04	6/1/2002	275.06	41.90	233.16	Vashon
LX-04	9/1/2002	275.06	45.70	229.36	Vashon
LX-04	2/3/2003	275.06	41.80	233.26	Vashon
LX-04	10/4/2004	275.06	50.50	224.56	Vashon
LX-04	2/24/2005	275.06	42.00	233.06	Vashon
LX-04	9/21/2005	275.06	43.60	231.46	Vashon
LX-04	3/14/2006	275.06	32.59	242.47	Vashon
LX-04	9/29/2006	275.06	40.45	234.61	Vashon
LX-05	10/7/1996	274.10	32.70	241.40	Vashon
LX-05	1/24/1997	274.10	25.50	248.60	Vashon

Appendix D - Historical Depth to Water Measurements and Sea Level Aquifer Trend Graphs

Historical Depth to Water measurements

Log RAM, Joint Base Lewis-McChord, Washington 98433

Well ID	Date	Measuring Pt	Depth to SWL	GW Elev	Aquifer
LX-05	4/23/1997	274.10	30.90	243.20	Vashon
LX-05	7/16/1997	274.10	44.80	229.30	Vashon
LX-05	10/16/1997	274.10	45.37	228.73	Vashon
LX-05	1/30/1998	274.10	44.65	229.45	Vashon
LX-05	4/2/1998	274.10	47.40	226.70	Vashon
LX-05	7/7/1998	274.10	47.35	226.75	Vashon
LX-05	9/22/1998	274.10	49.12	224.98	Vashon
LX-05	12/1/1998	274.10	18.41	255.69	Vashon
LX-05	3/1/1999	274.10	23.08	251.02	Vashon
LX-05	9/1/1999	274.10	41.70	232.40	Vashon
LX-05	12/1/1999	274.10	41.20	232.90	Vashon
LX-05	3/1/2000	274.10	44.81	229.29	Vashon
LX-05	6/1/2000	274.10	43.90	230.20	Vashon
LX-05	9/1/2000	273.89	47.20	226.69	Vashon
LX-05	12/1/2000	273.89	47.40	226.49	Vashon
LX-05	3/1/2001	274.10	46.10	228.00	Vashon
LX-05	6/1/2001	274.10	47.30	226.80	Vashon
LX-05	9/1/2001	274.10	47.30	226.80	Vashon
LX-05	12/1/2001	273.89	46.90	226.99	Vashon
LX-05	4/1/2002	273.89	47.33	226.56	Vashon
LX-05	6/1/2002	273.89	47.10	226.79	Vashon
LX-05	9/1/2002	273.89	46.80	227.09	Vashon
LX-05	2/3/2003	273.89	46.90	226.99	Vashon
LX-05	7/1/2003	273.89	22.99	250.90	Vashon
LX-05	10/4/2004	273.89	42.80	231.09	Vashon
LX-05	2/24/2005	273.89	43.30	230.59	Vashon
LX-05	9/21/2005	273.89	42.40	231.49	Vashon
LX-05	3/14/2006	273.89	20.32	253.57	Vashon
LX-05	9/29/2006	273.89	25.68	248.21	Vashon
LX-06	10/7/1996	273.43	32.80	240.63	Vashon
LX-06	1/24/1997	273.43	25.00	248.43	Vashon
LX-06	4/23/1997	273.43	27.70	245.73	Vashon
LX-06	7/16/1997	273.43	31.70	241.73	Vashon
LX-06	10/16/1997	273.43	32.23	241.20	Vashon
LX-06	1/30/1998	273.43	29.12	244.31	Vashon
LX-06	4/2/1998	273.43	54.30	219.13	Vashon
LX-06	7/7/1998	273.43	32.68	240.75	Vashon
LX-06	9/22/1998	273.43	34.54	238.89	Vashon
LX-06	12/1/1998	273.43	25.50	247.93	Vashon
LX-06	3/1/1999	273.43	27.72	245.71	Vashon
LX-06	6/1/1999	273.43	30.20	243.23	Vashon
LX-06	9/1/1999	273.43	34.40	239.03	Vashon
LX-06	12/1/1999	273.43	30.22	243.21	Vashon
LX-06	3/1/2000	273.43	30.11	243.32	Vashon
LX-06	6/1/2000	273.43	32.00	241.43	Vashon
LX-06	9/1/2000	272.57	34.80	237.77	Vashon
LX-06	12/1/2000	273.43	42.00	231.43	Vashon
LX-06	12/1/2000	272.57	35.31	237.26	Vashon
LX-06	3/1/2001	273.43	33.50	239.93	Vashon
LX-06	6/1/2001	273.43	33.60	239.83	Vashon
LX-06	9/1/2001	273.43	36.30	237.13	Vashon
LX-06	12/1/2001	272.57	23.89	248.68	Vashon
LX-06	6/1/2002	272.57	21.60	250.97	Vashon
LX-06	9/1/2002	272.57	24.80	247.77	Vashon

Well ID	Date	Measuring Pt	Depth to SWL	GW Elev	Aquifer
LX-06	2/3/2003	272.57	21.50	251.07	Vashon
LX-06	3/3/2003	272.57	24.59	247.98	Vashon
LX-06	7/1/2003	272.57	25.81	246.76	Vashon
LX-06	10/4/2004	272.57	28.50	244.07	Vashon
LX-06	2/24/2005	272.57	26.90	245.67	Vashon
LX-06	9/21/2005	272.57	28.70	243.87	Vashon
LX-06	3/14/2006	272.57	21.70	250.87	Vashon
LX-06	9/29/2006	272.57	26.82	245.75	Vashon
LX-07	10/7/1996	273.84	37.30	236.54	Vashon
LX-07	1/24/1997	273.84	29.60	244.24	Vashon
LX-07	4/23/1997	273.84	32.50	241.34	Vashon
LX-07	7/16/1997	273.84	36.75	237.09	Vashon
LX-07	10/16/1997	273.84	37.69	236.15	Vashon
LX-07	1/30/1998	273.84	35.13	238.71	Vashon
LX-07	4/2/1998	273.84	43.77	230.07	Vashon
LX-07	7/7/1998	273.84	40.52	233.32	Vashon
LX-07	9/22/1998	273.84	41.24	232.60	Vashon
LX-07	12/1/1998	273.84	32.95	240.89	Vashon
LX-07	3/1/1999	273.84	35.55	238.29	Vashon
LX-07	6/1/1999	273.84	38.60	235.24	Vashon
LX-07	9/1/1999	273.84	41.22	232.62	Vashon
LX-07	12/1/1999	273.84	39.34	234.50	Vashon
LX-07	3/1/2000	273.84	39.74	234.10	Vashon
LX-07	6/1/2000	273.84	41.40	232.44	Vashon
LX-07	9/1/2000	273.43	41.90	231.53	Vashon
LX-07	3/1/2001	273.84	41.90	231.94	Vashon
LX-07	6/1/2001	273.84	41.80	232.04	Vashon
LX-07	9/1/2001	273.84	42.30	231.54	Vashon
LX-07	12/1/2001	273.43	39.41	234.02	Vashon
LX-07	4/1/2002	273.43	39.89	233.54	Vashon
LX-07	6/1/2002	273.43	41.10	232.33	Vashon
LX-07	9/1/2002	273.43	41.60	231.83	Vashon
LX-07	2/3/2003	273.43	41.00	232.43	Vashon
LX-07	3/3/2003	273.43	43.02	230.41	Vashon
LX-07	7/1/2003	273.43	41.36	232.07	Vashon
LX-07	10/4/2004	273.43	42.70	230.73	Vashon
LX-07	2/24/2005	273.43	41.40	232.03	Vashon
LX-07	9/21/2005	273.43	41.90	231.53	Vashon
LX-07	3/14/2006	273.43	37.89	235.54	Vashon
LX-07	9/29/2006	273.43	42.50	230.93	Vashon
LX-08	10/7/1996	275.96	40.40	235.56	Vashon
LX-08	1/24/1997	275.96	34.40	241.56	Vashon
LX-08	4/23/1997	275.96	37.90	238.06	Vashon
LX-08	7/16/1997	275.96	43.31	232.65	Vashon
LX-08	10/16/1997	275.96	45.20	230.76	Vashon
LX-08	1/30/1998	275.96	43.15	232.81	Vashon
LX-08	4/2/1998	275.96	49.75	226.21	Vashon
LX-08	7/7/1998	275.96	47.56	228.40	Vashon
LX-08	9/22/1998	275.96	49.17	226.79	Vashon
LX-08	12/1/1998	275.96	42.62	233.34	Vashon
LX-08	3/1/1999	275.96	45.07	230.89	Vashon
LX-08	6/1/1999	275.96	48.72	227.24	Vashon
LX-08	9/1/1999	275.96	53.26	222.70	Vashon
LX-08	12/1/1999	275.96	51.75	224.21	Vashon

Appendix D - Historical Depth to Water Measurements and Sea Level Aquifer Trend Graphs

Historical Depth to Water measurements

Log RAM, Joint Base Lewis-McChord, Washington 98433

Well ID	Date	Measuring Pt	Depth to SWL	GW Elev	Aquifer
LX-08	3/1/2000	275.96	49.09	226.87	Vashon
LX-08	6/1/2000	275.96	49.00	226.96	Vashon
LX-08	9/1/2000	275.31	26.50	248.81	Vashon
LX-08	12/1/2000	275.31	49.20	226.11	Vashon
LX-08	3/1/2001	275.96	48.70	227.26	Vashon
LX-08	6/1/2001	275.96	49.50	226.46	Vashon
LX-08	9/1/2001	275.96	50.60	225.36	Vashon
LX-08	12/1/2001	275.31	50.79	224.52	Vashon
LX-08	4/1/2002	275.31	50.70	224.61	Vashon
LX-08	6/1/2002	275.31	50.70	224.61	Vashon
LX-08	9/1/2002	275.31	50.70	224.61	Vashon
LX-08	2/3/2003	275.31	50.70	224.61	Vashon
LX-08	3/3/2003	275.31	45.58	229.73	Vashon
LX-08	7/1/2003	275.31	47.00	228.31	Vashon
LX-08	2/24/2005	275.31	46.20	229.11	Vashon
LX-08	9/21/2005	275.31	47.10	228.21	Vashon
LX-08	3/14/2006	275.31	36.76	238.55	Vashon
LX-09	10/7/1996	275.74	37.40	238.34	Vashon
LX-09	1/24/1997	275.74	29.90	245.84	Vashon
LX-09	4/23/1997	275.74	32.00	243.74	Vashon
LX-09	7/16/1997	275.74	35.87	239.87	Vashon
LX-09	10/16/1997	275.74	36.35	239.39	Vashon
LX-09	1/30/1998	275.74	33.72	242.02	Vashon
LX-09	4/2/1998	275.74	47.40	228.34	Vashon
LX-09	7/7/1998	275.74	38.10	237.64	Vashon
LX-09	9/22/1998	275.74	40.92	234.82	Vashon
LX-09	12/1/1998	275.74	31.65	244.09	Vashon
LX-09	3/1/1999	275.74	33.95	241.79	Vashon
LX-09	6/1/1999	275.74	36.28	239.46	Vashon
LX-09	9/1/1999	275.74	40.74	235.00	Vashon
LX-09	12/1/1999	275.74	36.90	238.84	Vashon
LX-09	3/1/2000	275.74	36.80	238.94	Vashon
LX-09	6/1/2000	275.74	38.60	237.14	Vashon
LX-09	9/1/2000	274.04	41.90	232.14	Vashon
LX-09	12/1/2000	274.04	41.80	232.24	Vashon
LX-09	3/1/2001	275.04	39.60	235.44	Vashon
LX-09	6/1/2001	275.04	40.40	234.64	Vashon
LX-09	9/1/2001	275.04	43.00	232.04	Vashon
LX-09	12/1/2001	274.04	36.35	237.69	Vashon
LX-09	4/1/2002	274.04	36.52	237.52	Vashon
LX-09	6/1/2002	274.04	37.80	236.24	Vashon
LX-09	9/1/2002	274.04	40.70	233.34	Vashon
LX-09	2/3/2003	274.04	37.90	236.14	Vashon
LX-09	3/3/2003	274.04	37.90	236.14	Vashon
LX-09	7/1/2003	274.04	39.64	234.40	Vashon
LX-09	10/4/2004	274.04	40.05	233.99	Vashon
LX-09	2/24/2005	274.04	40.40	233.64	Vashon
LX-09	9/21/2005	274.04	43.20	230.84	Vashon
LX-09	3/14/2006	274.04	38.24	235.80	Vashon
LX-09	9/29/2006	274.04	43.60	230.44	Vashon
LX-10	10/7/1996	275.44	30.10	245.34	Vashon
LX-10	1/24/1997	275.44	22.40	253.04	Vashon
LX-10	4/23/1997	275.44	25.20	250.24	Vashon
LX-10	7/16/1997	275.44	28.16	247.28	Vashon

Well ID	Date	Measuring Pt	Depth to SWL	GW Elev	Aquifer
LX-10	10/16/1997	275.44	28.39	247.05	Vashon
LX-10	1/30/1998	275.44	24.90	250.54	Vashon
LX-10	4/2/1998	275.44	50.56	224.88	Vashon
LX-10	7/7/1998	275.44	28.93	246.51	Vashon
LX-10	9/22/1998	275.44	31.69	243.75	Vashon
LX-10	12/1/1998	275.44	22.52	252.92	Vashon
LX-10	3/1/1999	275.44	24.91	250.53	Vashon
LX-10	6/1/1999	275.44	27.00	248.44	Vashon
LX-10	9/1/1999	275.44	31.98	243.46	Vashon
LX-10	12/1/1999	275.44	27.30	248.14	Vashon
LX-10	3/1/2000	275.44	29.01	246.43	Vashon
LX-10	6/1/2000	275.44	31.20	244.24	Vashon
LX-10	9/1/2000	274.65	34.10	240.55	Vashon
LX-10	12/1/2000	274.65	35.10	239.55	Vashon
LX-10	3/1/2001	275.44	32.70	242.74	Vashon
LX-10	6/1/2001	275.44	34.80	240.64	Vashon
LX-10	9/1/2001	275.44	38.30	237.14	Vashon
LX-10	12/1/2001	274.65	30.12	244.53	Vashon
LX-10	4/1/2002	274.65	30.80	243.85	Vashon
LX-10	6/1/2002	274.65	33.60	241.05	Vashon
LX-10	9/1/2002	274.65	36.50	238.15	Vashon
LX-10	2/3/2003	274.65	31.90	242.75	Vashon
LX-10	3/3/2003	274.65	32.58	242.07	Vashon
LX-10	7/1/2003	274.65	33.64	241.01	Vashon
LX-10	10/4/2004	274.65	36.90	237.75	Vashon
LX-10	2/24/2005	274.65	34.10	240.55	Vashon
LX-10	9/21/2005	274.65	37.00	237.65	Vashon
LX-10	3/14/2006	274.65	21.90	252.75	Vashon
LX-10	9/29/2006	274.65	28.05	246.60	Vashon
LX-11	10/7/1996	274.51	39.10	235.41	Vashon
LX-11	1/24/1997	274.51	31.40	243.11	Vashon
LX-11	4/23/1997	274.51	35.70	238.81	Vashon
LX-11	7/16/1997	274.51	38.70	235.81	Vashon
LX-11	10/16/1997	274.51	39.08	235.43	Vashon
LX-11	1/30/1998	274.51	36.19	238.32	Vashon
LX-11	4/2/1998	274.51	37.48	237.03	Vashon
LX-11	7/7/1998	274.51	41.12	233.39	Vashon
LX-11	12/1/1998	274.51	35.80	238.71	Vashon
LX-11	3/1/1999	274.51	38.68	235.83	Vashon
LX-11	6/1/1999	274.51	40.96	233.55	Vashon
LX-11	9/1/1999	274.51	44.51	230.00	Vashon
LX-11	12/1/1999	274.51	40.90	233.61	Vashon
LX-11	3/1/2000	274.51	42.09	232.42	Vashon
LX-11	6/1/2000	274.51	44.10	230.41	Vashon
LX-11	9/1/2000	273.50	47.50	226.00	Vashon
LX-11	12/1/2000	273.50	46.70	226.80	Vashon
LX-11	3/1/2001	274.51	43.80	230.71	Vashon
LX-11	6/1/2001	274.51	45.40	229.11	Vashon
LX-11	9/1/2001	274.51	48.70	225.81	Vashon
LX-11	12/1/2001	273.50	43.33	230.17	Vashon
LX-11	4/1/2002	273.50	44.61	228.89	Vashon
LX-11	6/1/2002	273.50	45.40	228.10	Vashon
LX-11	9/1/2002	273.50	48.80	224.70	Vashon
LX-11	2/3/2003	273.50	47.20	226.30	Vashon

Well ID	Date	Measuring Pt	Depth to SWL	GW Elev	Aquifer
LX-11	3/3/2003	273.50	47.27	226.23	Vashon
LX-11	7/1/2003	273.50	48.20	225.30	Vashon
LX-11	10/4/2004	273.50	51.12	222.38	Vashon
LX-11	2/24/2005	273.50	23.00	250.50	Vashon
LX-11	9/21/2005	273.50	25.30	248.20	Vashon
LX-11	3/14/2006	273.50	19.00	254.50	Vashon
LX-11	9/29/2006	273.50	24.25	249.25	Vashon
LX-12	10/7/1996	272.62	27.70	244.92	Vashon
LX-12	1/24/1997	272.62	20.80	251.82	Vashon
LX-12	4/23/1997	272.62	22.90	249.72	Vashon
LX-12	7/16/1997	272.62	26.42	246.20	Vashon
LX-12	10/16/1997	272.62	26.67	245.95	Vashon
LX-12	1/30/1998	272.62	22.82	249.80	Vashon
LX-12	4/2/1998	272.62	24.18	248.44	Vashon
LX-12	7/7/1998	272.62	26.87	245.75	Vashon
LX-12	9/22/1998	272.62	29.18	243.44	Vashon
LX-12	12/1/1998	272.62	20.42	252.20	Vashon
LX-12	3/1/1999	272.62	22.66	249.96	Vashon
LX-12	6/1/1999	272.62	24.66	247.96	Vashon
LX-12	9/1/1999	272.62	28.75	243.87	Vashon
LX-12	12/1/1999	272.62	23.56	249.06	Vashon
LX-12	3/1/2000	272.62	23.31	249.31	Vashon
LX-12	6/1/2000	272.62	25.80	246.82	Vashon
LX-12	9/1/2000	271.57	28.60	242.97	Vashon
LX-12	12/1/2000	271.57	28.60	242.97	Vashon
LX-12	3/1/2001	272.62	28.00	244.62	Vashon
LX-12	6/1/2001	272.62	28.20	244.42	Vashon
LX-12	9/1/2001	272.62	31.00	241.62	Vashon
LX-12	12/1/2001	271.57	24.24	247.33	Vashon
LX-12	4/1/2002	271.57	24.50	247.07	Vashon
LX-12	6/1/2002	271.57	26.30	245.27	Vashon
LX-12	9/1/2002	271.57	28.00	243.57	Vashon
LX-12	2/3/2003	271.57	25.60	245.97	Vashon
LX-12	3/3/2003	271.57	28.26	243.31	Vashon
LX-12	7/1/2003	271.57	30.16	241.41	Vashon
LX-12	10/4/2004	271.57	23.63	247.94	Vashon
LX-12	2/24/2005	271.57	31.10	240.47	Vashon
LX-12	9/21/2005	271.57	33.40	238.17	Vashon
LX-12	3/14/2006	271.57	26.66	244.91	Vashon
LX-12	9/29/2006	271.57	32.55	239.02	Vashon
LX-13	10/7/1996	270.35	46.10	224.25	Vashon
LX-13	1/24/1997	270.35	36.20	234.15	Vashon
LX-13	4/23/1997	270.35	34.60	235.75	Vashon
LX-13	7/16/1997	270.35	30.30	240.05	Vashon
LX-13	10/16/1997	270.35	20.34	250.01	Vashon
LX-13	4/2/1998	270.35	18.28	252.07	Vashon
LX-13	7/7/1998	270.35	56.10	214.25	Vashon
LX-13	9/22/1998	270.35	57.08	213.27	Vashon
LX-13	12/1/1998	270.35	45.12	225.23	Vashon
LX-13	3/1/1999	270.35	46.35	224.00	Vashon
LX-13	6/1/1999	270.35	18.04	252.31	Vashon
LX-13	9/1/1999	270.35	22.35	248.00	Vashon
LX-13	12/1/1999	270.35	16.52	253.83	Vashon
LX-13	6/1/2000	270.35	67.10	203.25	Vashon

Well ID	Date	Measuring Pt	Depth to SWL	GW Elev	Aquifer
LX-13	9/1/2000	270.35	29.59	240.76	Vashon
LX-13	9/1/2000	269.51	64.90	204.61	Vashon
LX-13	12/1/2000	269.51	54.59	214.92	Vashon
LX-13	12/1/2000	270.35	29.10	241.25	Vashon
LX-13	3/1/2001	270.35	63.60	206.75	Vashon
LX-13	6/1/2001	270.35	63.50	206.85	Vashon
LX-13	9/1/2001	270.35	63.10	207.25	Vashon
LX-13	12/1/2001	269.51	41.22	228.29	Vashon
LX-13	6/1/2002	269.51	63.50	206.01	Vashon
LX-13	9/1/2002	269.51	62.40	207.11	Vashon
LX-13	2/3/2003	269.51	58.50	211.01	Vashon
LX-13	3/3/2003	269.51	51.43	218.08	Vashon
LX-13	7/1/2003	269.51	46.74	222.77	Vashon
LX-13	10/4/2004	269.51	57.40	212.11	Vashon
LX-13	2/24/2005	269.51	54.90	214.61	Vashon
LX-13	9/21/2005	269.51	53.80	215.71	Vashon
LX-13	3/14/2006	269.51	48.85	220.66	Vashon
LX-14	10/7/1996	276.52	35.50	241.02	Vashon
LX-14	1/24/1997	276.52	29.80	246.72	Vashon
LX-14	4/23/1997	276.52	32.30	244.22	Vashon
LX-14	7/16/1997	276.52	36.17	240.35	Vashon
LX-14	10/16/1997	276.52	37.16	239.36	Vashon
LX-14	1/30/1998	276.52	36.53	239.99	Vashon
LX-14	4/2/1998	276.52	40.10	236.42	Vashon
LX-14	7/7/1998	276.52	47.42	229.10	Vashon
LX-14	6/1/1999	276.52	48.44	228.08	Vashon
LX-14	9/1/1999	276.52	49.22	227.30	Vashon
LX-14	12/1/1999	276.52	43.74	232.78	Vashon
LX-14	3/1/2000	276.52	43.90	232.62	Vashon
LX-14	6/1/2000	276.52	45.80	230.72	Vashon
LX-14	9/1/2000	275.76	47.50	228.26	Vashon
LX-14	12/1/2000	275.76	46.40	229.36	Vashon
LX-14	3/1/2001	276.52	46.30	230.22	Vashon
LX-14	6/1/2001	276.52	49.00	227.52	Vashon
LX-14	9/1/2001	276.52	50.30	226.22	Vashon
LX-14	12/1/2001	275.76	44.82	230.94	Vashon
LX-14	4/1/2002	275.76	49.49	226.27	Vashon
LX-14	6/1/2002	275.76	48.70	227.06	Vashon
LX-14	9/1/2002	275.76	50.40	225.36	Vashon
LX-14	2/3/2003	275.76	35.90	239.86	Vashon
LX-14	3/3/2003	275.76	39.42	236.34	Vashon
LX-14	7/1/2003	275.76	48.30	227.46	Vashon
LX-14	10/4/2004	275.76	45.10	230.66	Vashon
LX-14	2/24/2005	275.76	20.70	255.06	Vashon
LX-14	9/21/2005	275.76	26.60	249.16	Vashon
LX-14	3/14/2006	275.76	20.70	255.06	Vashon
LX-14	9/29/2006	275.76	25.90	249.86	Vashon
LX-15	10/7/1996	278.33	31.50	246.83	Vashon
LX-15	1/24/1997	278.33	24.70	253.63	Vashon
LX-15	4/23/1997	278.33	26.90	251.43	Vashon
LX-15	7/16/1997	278.33	30.70	247.63	Vashon
LX-15	10/16/1997	278.33	30.98	247.35	Vashon
LX-15	1/30/1998	278.33	27.16	251.17	Vashon
LX-15	4/2/1998	278.33	28.47	249.86	Vashon

Historical Depth to Water measurements

Log RAM, Joint Base Lewis-McChord, Washington 98433

Well ID	Date	Measuring Pt	Depth to SWL	GW Elev	Aquifer
LX-15	7/7/1998	278.33	31.32	247.01	Vashon
LX-15	9/22/1998	278.33	33.68	244.65	Vashon
LX-15	12/1/1998	278.33	25.30	253.03	Vashon
LX-15	3/1/1999	278.33	27.30	251.03	Vashon
LX-15	6/1/1999	278.33	29.52	248.81	Vashon
LX-15	9/1/1999	278.33	33.57	244.76	Vashon
LX-15	12/1/1999	278.33	28.78	249.55	Vashon
LX-15	3/1/2000	278.33	28.72	249.61	Vashon
LX-15	6/1/2000	278.33	31.60	246.73	Vashon
LX-15	9/1/2000	277.48	36.00	241.48	Vashon
LX-15	12/1/2000	277.48	36.00	241.48	Vashon
LX-15	3/1/2001	278.33	35.00	243.33	Vashon
LX-15	6/1/2001	278.33	35.30	243.03	Vashon
LX-15	9/1/2001	278.33	38.30	240.03	Vashon
LX-15	12/1/2001	277.48	31.23	246.25	Vashon
LX-15	4/1/2002	277.48	34.23	243.25	Vashon
LX-15	6/1/2002	277.48	34.40	243.08	Vashon
LX-15	9/1/2002	277.48	40.50	236.98	Vashon
LX-15	2/3/2003	277.48	54.00	223.48	Vashon
LX-15	3/3/2003	277.48	35.60	241.88	Vashon
LX-15	7/1/2003	277.48	41.39	236.09	Vashon
LX-15	10/4/2004	277.48	54.69	222.79	Vashon
LX-15	2/24/2005	277.48	51.00	226.48	Vashon
LX-15	9/21/2005	277.48	49.70	227.78	Vashon
LX-15	9/29/2006	277.48	54.85	222.63	Vashon
LX-16	10/7/1996	290.08	17.60	272.48	Vashon
LX-16	1/24/1997	290.08	12.70	277.38	Vashon
LX-16	4/23/1997	290.08	12.80	277.28	Vashon
LX-16	7/16/1997	290.08	27.89	262.19	Vashon
LX-16	10/16/1997	290.08	27.73	262.35	Vashon
LX-16	1/30/1998	290.08	24.55	265.53	Vashon
LX-16	4/2/1998	290.08	33.62	256.46	Vashon
LX-16	7/7/1998	290.08	27.88	262.20	Vashon
LX-16	9/22/1998	290.08	26.43	263.65	Vashon
LX-16	12/1/1998	290.08	20.63	269.45	Vashon
LX-16	3/1/1999	290.08	22.70	267.38	Vashon
LX-16	6/1/1999	290.08	24.70	265.38	Vashon
LX-16	9/1/1999	290.08	26.28	263.80	Vashon
LX-16	12/1/1999	290.08	20.70	269.38	Vashon
LX-16	3/1/2000	290.08	24.08	266.00	Vashon
LX-16	6/1/2000	290.08	22.60	267.48	Vashon
LX-16	9/1/2000	288.53	24.35	264.18	Vashon
LX-16	12/1/2000	288.53	23.20	265.33	Vashon
LX-16	3/1/2001	290.08	23.40	266.68	Vashon
LX-16	6/1/2001	290.08	25.50	264.58	Vashon
LX-16	9/1/2001	290.08	27.50	262.58	Vashon
LX-16	12/1/2001	288.53	23.32	265.21	Vashon
LX-16	4/1/2002	288.53	25.30	263.23	Vashon
LX-16	6/1/2002	288.53	25.10	263.43	Vashon
LX-16	9/1/2002	288.53	26.00	262.53	Vashon
LX-16	2/3/2003	288.53	23.30	265.23	Vashon
LX-16	3/3/2003	288.53	27.21	261.32	Vashon
LX-16	7/1/2003	288.53	25.61	262.92	Vashon
LX-16	10/4/2004	288.53	29.47	259.06	Vashon

Well ID	Date	Measuring Pt	Depth to SWL	GW Elev	Aquifer
LX-16	4/1/2005	288.53	24.63	263.90	Vashon
LX-16	9/21/2005	288.53	28.10	260.43	Vashon
LX-17	10/7/1996	279.34	28.70	250.64	Vashon
LX-17	1/24/1997	279.34	25.90	253.44	Vashon
LX-17	4/23/1997	279.34	27.00	252.34	Vashon
LX-17	7/16/1997	279.34	28.44	250.90	Vashon
LX-17	10/16/1997	279.34	28.75	250.59	Vashon
LX-17	1/30/1998	279.34	28.37	250.97	Vashon
LX-17	4/2/1998	279.34	30.99	248.35	Vashon
LX-17	12/1/1998	279.34	28.30	251.04	Vashon
LX-17	3/1/1999	279.34	28.48	250.86	Vashon
LX-17	6/1/1999	279.34	28.76	250.58	Vashon
LX-17	9/1/1999	279.34	29.23	250.11	Vashon
LX-17	12/1/1999	279.34	28.96	250.38	Vashon
LX-17	3/1/2000	279.34	28.97	250.37	Vashon
LX-17	6/1/2000	279.34	30.10	249.24	Vashon
LX-17	9/1/2000	278.75	30.23	248.52	Vashon
LX-17	12/1/2000	278.75	30.30	248.45	Vashon
LX-17	3/1/2001	279.34	30.20	249.14	Vashon
LX-17	6/1/2001	279.34	29.80	249.54	Vashon
LX-17	9/1/2001	279.34	30.00	249.34	Vashon
LX-17	12/1/2001	278.75	29.50	249.25	Vashon
LX-17	4/1/2002	278.75	28.90	249.85	Vashon
LX-17	6/1/2002	278.75	29.50	249.25	Vashon
LX-17	9/1/2002	278.75	30.00	248.75	Vashon
LX-17	2/3/2003	278.75	29.60	249.15	Vashon
LX-17	7/1/2003	278.75	25.17	253.58	Vashon
LX-17	10/4/2004	278.75	29.00	249.75	Vashon
LX-17	4/1/2005	278.75	10.32	268.43	Vashon
LX-17	9/21/2005	278.75	12.20	266.55	Vashon
LX-18	10/7/1996	281.61	20.40	261.21	Vashon
LX-18	1/24/1997	281.61	16.30	265.31	Vashon
LX-18	4/23/1997	281.61	17.10	264.51	Vashon
LX-18	7/16/1997	281.61	19.27	262.34	Vashon
LX-18	10/16/1997	281.61	19.71	261.90	Vashon
LX-18	1/30/1998	281.61	16.80	264.81	Vashon
LX-18	4/2/1998	281.61	26.26	255.35	Vashon
LX-18	7/7/1998	281.61	19.82	261.79	Vashon
LX-18	9/22/1998	281.61	21.65	259.96	Vashon
LX-18	12/1/1998	281.61	15.90	265.71	Vashon
LX-18	3/1/1999	281.61	16.93	264.68	Vashon
LX-18	6/1/1999	281.61	18.73	262.88	Vashon
LX-18	9/1/1999	281.61	21.52	260.09	Vashon
LX-18	12/1/1999	281.61	19.50	262.11	Vashon
LX-18	3/1/2000	281.61	19.34	262.27	Vashon
LX-18	6/1/2000	281.61	21.40	260.21	Vashon
LX-18	9/1/2000	280.68	23.40	257.28	Vashon
LX-18	12/1/2000	280.68	23.40	257.28	Vashon
LX-18	3/1/2001	281.61	23.40	258.21	Vashon
LX-18	6/1/2001	281.61	22.10	259.51	Vashon
LX-18	9/1/2001	281.61	23.70	257.91	Vashon
LX-18	12/1/2001	280.68	20.32	260.36	Vashon
LX-18	6/1/2002	280.68	18.70	261.98	Vashon
LX-18	9/1/2002	280.68	20.10	260.58	Vashon

Well ID	Date	Measuring Pt	Depth to SWL	GW Elev	Aquifer
LX-18	2/3/2003	280.68	19.30	261.38	Vashon
LX-18	3/3/2003	280.68	18.23	262.45	Vashon
LX-18	7/1/2003	280.68	18.97	261.71	Vashon
LX-18	4/1/2005	280.68	11.81	268.87	Vashon
LX-18	9/21/2005	280.68	13.60	267.08	Vashon
LX-19	10/7/1996	278.72	28.60	250.12	Vashon
LX-19	1/24/1997	278.72	24.20	254.52	Vashon
LX-19	4/23/1997	278.72	24.90	253.82	Vashon
LX-19	7/16/1997	278.72	19.00	259.72	Vashon
LX-19	10/16/1997	278.72	19.18	259.54	Vashon
LX-19	1/30/1998	278.72	16.96	261.76	Vashon
LX-19	4/2/1998	278.72	42.04	236.68	Vashon
LX-19	7/7/1998	278.72	19.52	259.20	Vashon
LX-19	9/22/1998	278.72	20.97	257.75	Vashon
LX-19	12/1/1998	278.72	15.80	262.92	Vashon
LX-19	3/1/1999	278.72	17.24	261.48	Vashon
LX-19	6/1/1999	278.72	18.77	259.95	Vashon
LX-19	9/1/1999	278.72	20.85	257.87	Vashon
LX-19	12/1/1999	278.72	18.86	259.86	Vashon
LX-19	3/1/2000	278.72	18.15	260.57	Vashon
LX-19	6/1/2000	278.72	18.40	260.32	Vashon
LX-19	9/1/2000	277.56	19.75	257.81	Vashon
LX-19	12/1/2000	277.56	17.20	260.36	Vashon
LX-19	3/1/2001	278.72	16.20	262.52	Vashon
LX-19	6/1/2001	278.72	15.90	262.82	Vashon
LX-19	9/1/2001	278.72	17.00	261.72	Vashon
LX-19	12/1/2001	277.56	13.74	263.82	Vashon
LX-19	4/1/2002	277.56	17.37	260.19	Vashon
LX-19	6/1/2002	277.56	14.60	262.96	Vashon
LX-19	9/1/2002	277.56	15.80	261.76	Vashon
LX-19	2/3/2003	277.56	14.00	263.56	Vashon
LX-19	3/3/2003	277.56	18.92	258.64	Vashon
LX-19	7/1/2003	277.56	17.84	259.72	Vashon
LX-19	10/4/2004	277.56	20.78	256.78	Vashon
LX-19	4/1/2005	277.56	9.61	267.95	Vashon
LX-19	9/21/2005	277.56	11.20	266.36	Vashon
LX-21	10/7/1996	284.33	37.50	246.83	Vashon
LX-21	1/24/1997	284.33	31.60	252.73	Vashon
LX-21	4/23/1997	284.33	33.30	251.03	Vashon
LX-21	7/16/1997	284.33	34.59	249.74	Vashon
LX-21	10/16/1997	284.33	35.36	248.97	Vashon
LX-21	1/30/1998	284.33	31.91	252.42	Vashon
LX-21	4/2/1998	284.33	45.96	238.37	Vashon
LX-21	7/7/1998	284.33	38.44	245.89	Vashon
LX-21	9/22/1998	284.33	41.35	242.98	Vashon
LX-21	12/1/1998	284.33	33.27	251.06	Vashon
LX-21	3/1/1999	284.33	37.01	247.32	Vashon
LX-21	6/1/1999	284.33	37.59	246.74	Vashon
LX-21	9/1/1999	284.33	44.55	239.78	Vashon
LX-21	12/1/1999	284.33	40.80	243.53	Vashon
LX-21	3/1/2000	284.33	40.34	243.99	Vashon
LX-21	6/1/2000	284.33	43.80	240.53	Vashon
LX-21	9/1/2000	280.90	44.91	235.99	Vashon
LX-21	12/1/2000	280.90	44.90	236.00	Vashon

Historical Depth to Water measurements

Log RAM, Joint Base Lewis-McChord, Washington 98433

Well ID	Date	Measuring Pt	Depth to SWL	GW Elev	Aquifer
LX-21	3/1/2001	284.33	43.50	240.83	Vashon
LX-21	6/1/2001	284.33	42.70	241.63	Vashon
LX-21	9/1/2001	284.33	44.10	240.23	Vashon
LX-21	12/1/2001	280.90	40.62	240.28	Vashon
LX-21	4/1/2002	280.90	38.98	241.92	Vashon
LX-21	6/1/2002	280.90	42.00	238.90	Vashon
LX-21	9/1/2002	280.90	44.70	236.20	Vashon
LX-21	2/3/2003	280.90	40.20	240.70	Vashon
LX-21	3/3/2003	280.90	38.44	242.46	Vashon
LX-21	7/1/2003	280.90	14.57	266.33	Vashon
LX-21	10/4/2004	280.90	40.34	240.56	Vashon
LX-21	4/1/2005	280.90	12.87	268.03	Vashon
LX-21	9/21/2005	280.90	12.70	268.20	Vashon
MAMC-1	4/1/2002	270.59	35.00	235.59	Vashon
MAMC-1	6/1/2002	270.59	33.00	237.59	Vashon
MAMC-1	2/3/2003	270.59	34.00	236.59	Vashon
MAMC-1	3/3/2003	270.59	39.00	231.59	Vashon
MAMC-1	7/1/2003	270.59	55.00	215.59	Vashon
MAMC-1	10/4/2004	270.59	48.00	222.59	Vashon
MAMC-7	4/1/2002	272.99	24.50	248.49	Vashon
MAMC-7	6/1/2002	272.99	21.50	251.49	Vashon
MAMC-7	9/1/2002	272.99	20.50	252.49	Vashon
MAMC-7	2/3/2003	272.99	20.50	252.49	Vashon
MAMC-7	3/3/2003	272.99	16.50	256.49	Vashon
MAMC-7	10/4/2004	272.99	28.50	244.49	Vashon
MT-1	4/2/2006	292.56	24.95	267.61	Vashon
MT-1	9/20/2006	292.56	27.33	265.23	Vashon
MT-1	3/20/2007	292.56	25.06	267.50	Vashon
MT-1	9/28/2007	292.56	28.76	263.80	Vashon
MT-1	3/25/2008	292.56	26.80	265.76	Vashon
MT-1	10/8/2008	292.56	29.09	263.47	Vashon
MT-1	2/3/2009	292.56	26.95	265.61	Vashon
MT-1	8/3/2009	292.56	27.21	265.35	Vashon
MT-1	2/11/2010	292.56	26.70	265.86	Vashon
MT-1	6/3/2010	292.56	26.75	265.81	Vashon
MT-1	8/9/2010	292.56	27.54	265.02	Vashon
MT-1	2/14/2011	292.56	26.55	266.01	Vashon
MT-1	8/10/2011	292.56	26.78	265.78	Vashon
MT-1	2/22/2012	292.56	26.47	266.09	Vashon
MT-1	7/31/2012	292.56	27.37	265.19	Vashon
MT-1	2/6/2013	292.555	26.87	265.685	Vashon
MT-1	8/8/2013	292.555	27.85	264.705	Vashon
MT-1	2/14/2014	292.555	26.70	265.86	Vashon
MT-1	9/3/2014	292.555	27.19	265.37	Vashon
MT-2	4/2/2006	281.54	10.83	270.71	Vashon
MT-2	9/20/2006	281.54	13.93	267.61	Vashon
MT-2	3/21/2007	281.54	10.93	270.61	Vashon
MT-2	9/28/2007	281.54	16.15	265.39	Vashon
MT-2	3/25/2008	281.54	13.17	268.37	Vashon
MT-2	10/8/2008	281.54	16.72	264.82	Vashon
MT-2	2/3/2009	281.54	13.43	268.11	Vashon
MT-2	8/3/2009	281.54	13.69	267.85	Vashon
MT-2	2/11/2010	281.54	12.80	268.74	Vashon
MT-2	6/3/2010	281.54	12.81	268.73	Vashon

Appendix D - Historical Depth to Water Measurements and Sea Level Aquifer Trend Graphs

Historical Depth to Water measurements

Log RAM, Joint Base Lewis-McChord, Washington 98433

Well ID	Date	Measuring Pt	Depth to SWL	GW Elev	Aquifer
MT-2	8/9/2010	281.54	14.02	267.52	Vashon
MT-2	2/16/2011	281.54	12.43	269.11	Vashon
MT-2	8/10/2011	281.54	12.87	268.67	Vashon
MT-2	2/22/2012	281.54	12.70	268.84	Vashon
MT-2	7/31/2012	281.54	13.84	267.70	Vashon
MT-2	2/5/2013	281.535	12.98	268.555	Vashon
MT-2	8/7/2013	281.535	14.50	267.035	Vashon
MT-2	2/18/2014	281.535	11.40	270.14	Vashon
MT-2	9/3/2014	281.535	13.88	267.66	Vashon
MT-3	4/2/2006	283.74	12.80	270.94	Vashon
MT-3	9/20/2006	283.74	15.97	267.77	Vashon
MT-3	3/22/2007	283.74	12.90	270.84	Vashon
MT-3	9/28/2007	283.74	16.45	267.29	Vashon
MT-3	4/3/2008	283.74	14.30	269.44	Vashon
MT-3	10/8/2008	283.74	16.93	266.81	Vashon
MT-3	2/3/2009	283.74	14.68	269.06	Vashon
MT-3	8/3/2009	283.74	15.60	268.14	Vashon
MT-3	2/11/2010	283.74	14.15	269.59	Vashon
MT-3	6/3/2010	283.74	14.16	269.58	Vashon
MT-3	8/10/2010	283.74	15.10	268.64	Vashon
MT-3	2/14/2011	283.74	14.00	269.74	Vashon
MT-3	8/10/2011	283.74	14.60	269.14	Vashon
MT-3	2/22/2012	283.74	14.10	269.64	Vashon
MT-3	7/31/2012	283.74	15.00	268.74	Vashon
MT-3	2/7/2013	283.738	14.38	269.358	Vashon
MT-3	8/7/2013	283.738	15.52	268.218	Vashon
MT-3	2/18/2014	283.738	13.20	270.54	Vashon
MT-3	9/3/2014	283.738	15.31	268.43	Vashon
MT-4	4/2/2006	283.52	12.62	270.90	Vashon
MT-4	9/20/2006	283.52	15.97	267.55	Vashon
MT-4	3/22/2007	283.52	12.74	270.78	Vashon
MT-4	9/28/2007	283.52	15.54	267.98	Vashon
MT-4	4/3/2008	283.52	13.79	269.73	Vashon
MT-4	10/8/2008	283.52	16.10	267.42	Vashon
MT-4	2/3/2009	283.52	14.45	269.07	Vashon
MT-4	8/3/2009	283.52	15.73	267.79	Vashon
MT-4	2/11/2010	283.52	13.90	269.62	Vashon
MT-4	6/3/2010	283.52	13.71	269.81	Vashon
MT-4	8/10/2010	283.52	14.51	269.01	Vashon
MT-4	2/14/2011	283.52	13.60	269.92	Vashon
MT-4	8/10/2011	283.52	14.42	269.10	Vashon
MT-4	2/22/2012	283.52	13.70	269.82	Vashon
MT-4	7/31/2012	283.52	14.50	269.02	Vashon
MT-4	2/7/2013	283.518	13.99	269.528	Vashon
MT-4	8/7/2013	283.518	14.97	268.548	Vashon
MT-4	2/18/2014	283.518	13.15	270.37	Vashon
MT-4	9/3/2014	283.518	14.85	268.67	Vashon
MT-5	4/2/2006	279.16	8.45	270.71	Vashon
MT-5	9/20/2006	279.16	11.59	267.57	Vashon
MT-5	3/22/2007	279.16	8.57	270.59	Vashon
MT-5	9/28/2007	279.16	15.65	263.51	Vashon
MT-5	4/3/2008	279.16	11.55	267.61	Vashon
MT-5	2/3/2009	279.16	12.09	267.07	Vashon
MT-5	8/3/2009	279.16	11.70	267.46	Vashon

Appendix D - Historical Depth to Water Measurements and Sea Level Aquifer Trend Graphs

Historical Depth to Water measurements

Log RAM, Joint Base Lewis-McChord, Washington 98433

Well ID	Date	Measuring Pt	Depth to SWL	GW Elev	Aquifer
MT-5	2/11/2010	279.16	11.30	267.86	Vashon
MT-5	8/10/2010	279.16	12.99	266.17	Vashon
MT-5	2/14/2011	279.16	11.00	268.16	Vashon
MT-5	8/10/2011	279.16	10.95	268.21	Vashon
MT-5	2/22/2012	279.16	11.28	267.88	Vashon
MT-5	7/31/2012	279.16	12.59	266.57	Vashon
MT-5	2/7/2013	279.158	11.54	267.618	Vashon
MT-5	8/7/2013	279.158	13.50	265.658	Vashon
MT-5	2/18/2014	279.158	9.45	269.71	Vashon
MT-5	9/5/2014	279.158	12.46	266.70	Vashon
MT-6	4/2/2006	280.64	9.84	270.80	Vashon
MT-6	9/20/2006	280.64	12.75	267.89	Vashon
MT-6	3/22/2007	280.64	9.97	270.67	Vashon
MT-6	9/28/2007	280.64	14.56	266.08	Vashon
MT-6	4/3/2008	280.64	12.02	268.62	Vashon
MT-6	2/3/2009	280.64	11.82	268.82	Vashon
MT-6	2/11/2010	280.64	11.30	269.34	Vashon
MT-6	8/10/2010	280.64	12.86	267.78	Vashon
MT-6	2/14/2011	280.64	11.55	269.09	Vashon
MT-6	8/10/2011	280.64	12.02	268.62	Vashon
MT-6	2/22/2012	280.64	11.69	268.95	Vashon
MT-6	7/31/2012	280.64	12.68	267.96	Vashon
MT-6	2/7/2013	280.638	11.87	268.768	Vashon
MT-6	8/7/2013	280.638	13.03	267.608	Vashon
MT-6	2/18/2014	280.638	10.20	270.44	Vashon
MT-6	9/5/2014	280.638	12.70	267.94	Vashon
NAPL1-E07	8/30/2011	278.59	9.47	269.12	Vashon
NAPL1-L07	8/30/2011	278.46	9.39	269.07	Vashon
NAPL2-F12	8/30/2011	280.22	10.44	269.78	Vashon
NAPL2-G15	8/30/2011	279.91	10.30	269.61	Vashon
NAPL2-L15	8/30/2011	280.34	10.28	270.06	Vashon
RW-1	1/24/1997	289.55	12.50	277.05	Vashon
RW-1	4/23/1997	289.55	12.50	277.05	Vashon
RW-1	7/16/1997	289.55	37.28	252.27	Vashon
RW-1	10/16/1997	289.55	34.82	254.73	Vashon
RW-1	1/30/1998	289.55	30.15	259.40	Vashon
RW-1	4/2/1998	289.55	38.92	250.63	Vashon
RW-1	7/7/1998	289.55	32.57	256.98	Vashon
RW-1	9/22/1998	289.55	27.77	261.78	Vashon
RW-1	12/1/1998	289.55	21.34	268.21	Vashon
RW-1	3/1/1999	289.55	23.45	266.10	Vashon
RW-1	6/1/1999	289.55	25.75	263.80	Vashon
RW-1	9/1/1999	289.55	27.57	261.98	Vashon
RW-1	12/1/1999	289.55	24.42	265.13	Vashon
RW-1	3/1/2000	289.55	23.72	265.83	Vashon
RW-1	6/1/2000	289.55	26.20	263.35	Vashon
RW-1	9/1/2000	289.24	26.75	262.49	Vashon
RW-1	12/1/2000	289.24	38.78	250.46	Vashon
RW-1	3/1/2001	289.55	26.60	262.95	Vashon
RW-1	6/1/2001	289.55	32.60	256.95	Vashon
RW-1	9/1/2001	289.55	33.70	255.85	Vashon
RW-1	12/1/2001	289.23	32.01	257.22	Vashon
RW-1	4/1/2002	289.23	33.00	256.23	Vashon
RW-1	6/1/2002	289.23	33.70	255.53	Vashon

Appendix D - Historical Depth to Water Measurements and Sea Level Aquifer Trend Graphs

Historical Depth to Water measurements

Log RAM, Joint Base Lewis-McChord, Washington 98433

Well ID	Date	Measuring Pt	Depth to SWL	GW Elev	Aquifer
RW-1	9/1/2002	289.23	33.70	255.53	Vashon
RW-1	2/3/2003	289.23	33.70	255.53	Vashon
RW-1	3/3/2003	289.23	35.38	253.85	Vashon
RW-1	7/1/2003	289.23	26.81	262.42	Vashon
RW-1	10/4/2004	289.23	38.50	250.73	Vashon
RW-1	4/1/2005	289.23	25.79	263.44	Vashon
RW-1	9/21/2005	289.23	36.40	252.83	Vashon
SRCMW-02	2/28/2006	234.62	19.25	215.37	Vashon
SRCMW-02	2/4/2009	234.62	20.65	213.97	Vashon
SRCMW-02	8/6/2009	234.62	22.47	212.15	Vashon
SRCMW-02	2/8/2010	234.62	19.95	214.67	Vashon
SRCMW-02	8/17/2010	234.62	21.88	212.74	Vashon
SRCMW-02	2/15/2011	234.62	19.40	215.22	Vashon
SRCMW-02	8/4/2011	234.62	21.32	213.30	Vashon
SRCMW-02	8/1/2012	234.62	20.37	214.25	Vashon
SW-MC-1	2/3/2003	269.59	2.84	266.75	Vashon
SW-MC-1	3/3/2003	269.59	2.76	266.83	Vashon
SW-MC-1	7/1/2003	269.59	2.65	266.94	Vashon
SW-MC-1	10/4/2004	269.59	2.48	267.11	Vashon
SW-MC-1	9/27/2005	269.59	0.83	268.76	Vashon
SW-MC-4	2/3/2003	264.63	2.22	262.41	Vashon
SW-MC-4	3/3/2003	264.63	2.86	261.77	Vashon
SW-MC-4	7/1/2003	264.63	2.87	261.76	Vashon
SW-MC-4	10/4/2004	264.63	2.51	262.12	Vashon
SW-MC-4	4/15/2005	264.63	1.35	263.28	Vashon
SW-MC-4	9/27/2005	264.63	1.79	262.84	Vashon
SW-MC-6	2/3/2003	268.51	2.07	266.44	Vashon
SW-MC-6	3/3/2003	268.51	1.99	266.52	Vashon
SW-MC-6	7/1/2003	268.51	1.70	266.81	Vashon
SW-MC-6	10/4/2004	268.51	1.56	266.95	Vashon
SW-MC-6	7/29/2005	268.51	2.69	265.82	Vashon
SW-MC-6	9/27/2005	268.51	2.40	266.11	Vashon
T-01	4/23/1997	274.40	24.89	249.51	Vashon
T-01	7/16/1997	274.40	28.57	245.83	Vashon
T-01	10/16/1997	274.40	28.60	245.80	Vashon
T-01	1/30/1998	274.40	25.59	248.81	Vashon
T-01	4/2/1998	274.40	26.87	247.53	Vashon
T-01	7/7/1998	274.40	29.16	245.24	Vashon
T-01	9/22/1998	274.40	30.20	244.20	Vashon
T-01	12/1/1998	274.40	24.01	250.39	Vashon
T-01	3/1/1999	274.40	26.10	248.30	Vashon
T-01	6/1/1999	274.40	27.55	246.85	Vashon
T-04	4/23/1997	276.13	25.94	250.19	Vashon
T-04	7/16/1997	276.13	29.27	246.86	Vashon
T-04	10/16/1997	276.13	29.26	246.87	Vashon
T-04	1/30/1998	276.13	26.61	249.52	Vashon
T-04	4/2/1998	276.13	27.45	248.68	Vashon
T-04	7/7/1998	276.13	29.79	246.34	Vashon
T-04	9/22/1998	276.13	30.75	245.38	Vashon
T-04	6/1/1999	276.13	28.13	248.00	Vashon
T-04	9/1/1999	276.13	31.19	244.94	Vashon
T-04	12/1/1999	276.13	27.13	249.00	Vashon
T-04	3/1/2000	276.13	26.65	249.48	Vashon
T-04	6/1/2000	276.13	29.01	247.12	Vashon

Well ID	Date	Measuring Pt	Depth to SWL	GW Elev	Aquifer
T-04	9/1/2000	276.13	31.85	244.28	Vashon
T-04	9/1/2000	276.13	21.94	254.19	Vashon
T-04	12/1/2000	276.13	20.56	255.57	Vashon
T-04	12/1/2000	276.13	31.93	244.20	Vashon
T-04	3/1/2001	276.13	30.47	245.66	Vashon
T-04	6/1/2001	276.13	30.21	245.92	Vashon
T-04	9/1/2001	276.13	32.83	243.30	Vashon
T-04	12/1/2001	276.13	29.80	246.33	Vashon
T-04	4/1/2002	276.13	26.92	249.21	Vashon
T-04	6/1/2002	276.13	30.97	245.16	Vashon
T-04	9/1/2002	276.13	31.15	244.98	Vashon
T-04	2/3/2003	276.13	30.83	245.30	Vashon
T-04	7/1/2003	276.13	29.67	246.46	Vashon
T-04	10/4/2004	276.13	31.31	244.82	Vashon
T-04	2/11/2005	276.13	29.91	246.22	Vashon
T-04	7/15/2005	276.13	30.20	245.93	Vashon
T-04	9/9/2005	276.13	31.77	244.36	Vashon
T-04	3/21/2006	276.13	27.27	248.86	Vashon
T-04	9/22/2006	276.13	31.15	244.98	Vashon
T-04	3/22/2007	276.13	26.35	249.78	Vashon
T-04	10/4/2007	276.13	25.42	250.71	Vashon
T-04	3/25/2008	276.13	28.31	247.82	Vashon
T-04	2/6/2009	276.13	27.98	248.15	Vashon
T-04	8/6/2009	276.13	29.62	246.51	Vashon
T-04	2/9/2010	276.13	27.50	248.63	Vashon
T-04	8/13/2010	276.13	28.95	247.18	Vashon
T-04	2/16/2011	276.13	27.15	248.98	Vashon
T-04	8/9/2011	276.13	28.80	247.33	Vashon
T-04	3/2/2012	276.13	27.66	248.47	Vashon
T-04	8/3/2012	276.13	28.74	247.39	Vashon
T-04	2/12/2013	276.13	28.73	247.4	Vashon
T-04	8/6/2013	276.13	29.70	246.43	Vashon
T-04	2/13/2014	276.13	28.75	247.38	Vashon
T-04	9/4/2014	276.13	29.24	246.89	Vashon
T-05	10/4/2004	272.40	26.68	245.72	Vashon
T-05	2/11/2005	272.40	25.37	247.03	Vashon
T-05	7/15/2005	272.40	25.70	246.70	Vashon
T-05	9/28/2005	272.40	27.53	244.87	Vashon
T-05	3/21/2006	272.44	22.76	249.68	Vashon
T-05	9/22/2006	272.44	26.63	245.81	Vashon
T-05	3/22/2007	272.44	21.90	250.54	Vashon
T-05	3/25/2008	272.44	23.82	248.62	Vashon
T-05	10/8/2008	272.44	27.40	245.04	Vashon
T-05	2/6/2009	272.44	23.47	248.97	Vashon
T-05	8/6/2009	272.44	25.05	247.39	Vashon
T-05	2/9/2010	272.44	23.20	249.24	Vashon
T-05	8/13/2010	272.44	24.37	248.07	Vashon
T-05	2/15/2011	272.44	22.60	249.84	Vashon
T-05	8/9/2011	272.44	24.29	248.15	Vashon
T-05	2/20/2014	272.44	22.50	249.94	Vashon
T-05	9/4/2014	272.44	24.72	247.72	Vashon
T-06	12/1/2001	272.25	25.56	246.69	Vashon
T-06	4/1/2002	272.25	25.68	246.57	Vashon
T-06	6/1/2002	272.25	27.02	245.23	Vashon

Well ID	Date	Measuring Pt	Depth to SWL	GW Elev	Aquifer
T-06	9/1/2002	272.25	28.64	243.61	Vashon
T-06	2/3/2003	272.25	26.35	245.90	Vashon
T-06	3/3/2003	272.25	26.88	245.37	Vashon
T-06	7/1/2003	272.25	28.37	243.88	Vashon
T-06	10/4/2004	272.25	30.02	242.23	Vashon
T-06	2/11/2005	272.25	28.70	243.55	Vashon
T-06	7/15/2005	272.25	28.96	243.29	Vashon
T-06	9/28/2005	272.25	30.89	241.36	Vashon
T-06	3/21/2006	272.25	25.99	246.26	Vashon
T-06	9/22/2006	272.25	29.92	242.33	Vashon
T-06	3/22/2007	272.25	25.19	247.06	Vashon
T-06	10/5/2007	272.25	28.76	243.49	Vashon
T-06	3/25/2008	272.25	26.97	245.28	Vashon
T-06	10/8/2008	272.25	30.68	241.57	Vashon
T-06	2/6/2009	272.25	26.75	245.50	Vashon
T-06	8/6/2009	272.25	28.48	243.77	Vashon
T-06	2/9/2010	272.25	26.20	246.05	Vashon
T-06	8/13/2010	272.25	27.72	244.53	Vashon
T-06	2/15/2011	272.25	25.83	246.42	Vashon
T-06	8/9/2011	272.25	27.50	244.75	Vashon
T-06	8/3/2012	272.25	27.45	244.80	Vashon
T-06	2/12/2013	272.25	26.70	245.55	Vashon
T-06	8/6/2013	272.25	28.50	243.75	Vashon
T-06	2/12/2014	272.25	27.50	244.75	Vashon
T-06	9/4/2014	272.25	28.00	244.25	Vashon
T-08	4/23/1997	263.13	19.42	243.71	Vashon
T-08	7/16/1997	263.13	23.74	239.39	Vashon
T-08	10/16/1997	263.13	23.64	239.49	Vashon
T-08	1/30/1998	263.13	21.32	241.81	Vashon
T-08	4/2/1998	263.13	22.79	240.34	Vashon
T-08	7/7/1998	263.13	24.69	238.44	Vashon
T-08	9/22/1998	263.13	25.80	237.33	Vashon
T-08	12/1/1998	263.13	19.75	243.38	Vashon
T-08	3/1/1999	263.13	21.53	241.60	Vashon
T-08	6/1/1999	263.13	22.76	240.37	Vashon
T-08	9/1/1999	263.13	25.80	237.33	Vashon
T-08	12/1/1999	263.13	22.07	241.06	Vashon
T-08	3/1/2000	263.13	21.61	241.52	Vashon
T-08	6/1/2000	263.13	24.01	239.12	Vashon
T-08	9/1/2000	263.09	25.22	237.87	Vashon
T-08	12/1/2000	263.09	25.15	237.94	Vashon
T-08	3/1/2001	262.78	24.93	237.85	Vashon
T-08	6/1/2001	262.78	24.92	237.86	Vashon
T-08	9/1/2001	262.78	27.13	235.65	Vashon
T-08	12/1/2001	262.78	22.40	240.38	Vashon
T-08	4/1/2002	262.78	21.50	241.28	Vashon
T-08	6/1/2002	262.78	23.50	239.28	Vashon
T-08	9/1/2002	262.78	24.15	238.63	Vashon
T-08	2/3/2003	262.78	21.88	240.90	Vashon
T-08	3/3/2003	262.78	22.80	239.98	Vashon
T-08	7/1/2003	262.78	24.30	238.48	Vashon
T-08	10/4/2004	262.78	25.83	236.95	Vashon
T-08	2/10/2005	262.78	24.57	238.21	Vashon
T-08	7/15/2005	262.78	25.06	237.72	Vashon

Appendix D - Historical Depth to Water Measurements and Sea Level Aquifer Trend Graphs

Historical Depth to Water measurements

Log RAM, Joint Base Lewis-McChord, Washington 98433

Well ID	Date	Measuring Pt	Depth to SWL	GW Elev	Aquifer
T-08	9/9/2005	262.78	26.59	236.19	Vashon
T-08	3/16/2006	262.78	21.55	241.23	Vashon
T-08	9/22/2006	262.78	26.02	236.76	Vashon
T-08	3/22/2007	262.78	20.88	241.90	Vashon
T-08	10/5/2007	262.78	24.27	238.51	Vashon
T-08	3/25/2008	262.78	22.91	239.87	Vashon
T-08	10/8/2008	262.78	26.52	236.26	Vashon
T-08	2/6/2009	262.78	22.49	240.29	Vashon
T-08	8/6/2009	262.78	24.41	238.37	Vashon
T-08	2/9/2010	262.78	21.40	241.38	Vashon
T-08	8/13/2010	262.78	23.38	239.40	Vashon
T-08	2/15/2011	262.78	21.50	241.28	Vashon
T-08	8/9/2011	262.78	23.27	239.51	Vashon
T-10	4/1/2002	270.12	31.51	238.61	Vashon
T-10	6/1/2002	270.12	32.79	237.33	Vashon
T-10	9/1/2002	270.12	34.98	235.14	Vashon
T-10	2/3/2003	270.12	33.02	237.10	Vashon
T-10	3/3/2003	270.12	34.20	235.92	Vashon
T-10	7/1/2003	270.12	34.36	235.76	Vashon
T-10	10/4/2004	270.12	35.90	234.22	Vashon
T-10	2/11/2005	270.12	34.70	235.42	Vashon
T-10	7/15/2005	270.12	34.77	235.35	Vashon
T-10	9/28/2005	270.12	36.76	233.36	Vashon
T-10	3/21/2006	270.12	31.43	238.69	Vashon
T-10	9/22/2006	270.12	35.40	234.72	Vashon
T-10	3/22/2007	270.12	30.62	239.50	Vashon
T-10	10/5/2007	270.12	34.41	235.71	Vashon
T-10	3/25/2008	270.12	32.20	237.92	Vashon
T-10	10/8/2008	270.12	35.98	234.14	Vashon
T-10	2/6/2009	270.12	32.54	237.58	Vashon
T-10	8/6/2009	270.12	34.37	235.75	Vashon
T-11b	4/1/2002	277.20	33.48	243.72	Vashon
T-11b	6/1/2002	277.20	34.62	242.58	Vashon
T-11b	9/1/2002	277.20	36.32	240.88	Vashon
T-11b	2/3/2003	277.20	34.51	242.69	Vashon
T-11b	3/3/2003	277.20	34.49	242.71	Vashon
T-11b	7/1/2003	277.20	35.85	241.35	Vashon
T-11b	10/4/2004	277.20	37.39	239.81	Vashon
T-11b	2/11/2005	277.20	36.13	241.07	Vashon
T-11b	7/15/2005	277.20	36.31	240.89	Vashon
T-11b	9/28/2005	277.20	38.11	239.09	Vashon
T-11b	3/21/2006	277.20	33.68	243.52	Vashon
T-11b	3/22/2007	277.20	33.01	244.19	Vashon
T-11b	10/5/2007	277.20	36.27	240.93	Vashon
T-11b	3/25/2008	277.20	34.49	242.71	Vashon
T-11b	10/8/2008	277.20	37.92	239.28	Vashon
T-11b	2/6/2009	277.20	34.29	242.91	Vashon
T-11b	8/6/2009	277.20	35.93	241.27	Vashon
T-11b	2/11/2010	277.20	33.90	243.30	Vashon
T-11b	8/7/2012	277.20	35.10	242.10	Vashon
T-11b	2/12/2013	277.2	34.70	242.5	Vashon
T-11b	8/6/2013	277.2	36.00	241.2	Vashon
T-11b	2/12/2014	277.2	35.05	242.15	Vashon
T-11b	9/4/2014	277.2	35.55	241.65	Vashon

Historical Depth to Water measurements

Log RAM, Joint Base Lewis-McChord, Washington 98433

Well ID	Date	Measuring Pt	Depth to SWL	GW Elev	Aquifer
T-12b	12/1/1999	273.55	24.39	249.16	Vashon
T-12b	3/1/2000	273.55	23.86	249.69	Vashon
T-12b	6/1/2000	273.55	25.40	248.15	Vashon
T-12b	9/1/2000	273.55	29.04	244.51	Vashon
T-12b	12/1/2000	273.55	28.89	244.66	Vashon
T-12b	3/1/2001	274.53	28.78	245.75	Vashon
T-12b	6/1/2001	274.53	28.35	246.18	Vashon
T-12b	9/1/2001	274.53	30.78	243.75	Vashon
T-12b	12/1/2001	274.53	25.60	248.93	Vashon
T-12b	4/1/2002	274.53	24.29	250.24	Vashon
T-12b	6/1/2002	274.53	25.99	248.54	Vashon
T-12b	9/1/2002	274.53	28.07	246.46	Vashon
T-12b	2/3/2003	274.53	24.65	249.88	Vashon
T-12b	3/3/2003	274.53	25.63	248.90	Vashon
T-12b	7/1/2003	274.53	27.57	246.96	Vashon
T-12b	10/4/2004	274.53	29.45	245.08	Vashon
T-13b	4/23/1997	272.13	31.41	240.72	Vashon
T-13b	7/16/1997	272.13	34.78	237.35	Vashon
T-13b	10/16/1997	272.13	37.75	234.38	Vashon
T-13b	1/30/1998	272.13	32.50	239.63	Vashon
T-13b	4/2/1998	272.13	33.18	238.95	Vashon
T-13b	7/7/1998	272.13	34.78	237.35	Vashon
T-13b	9/22/1998	272.13	35.48	236.65	Vashon
T-13b	12/1/1998	272.13	31.55	240.58	Vashon
T-13b	3/1/1999	272.13	33.70	238.43	Vashon
T-13b	6/1/1999	272.13	35.02	237.11	Vashon
T-13b	9/1/1999	272.13	37.70	234.43	Vashon
T-13b	12/1/1999	272.13	33.83	238.30	Vashon
T-13b	3/1/2000	272.13	32.62	239.51	Vashon
T-13b	6/1/2000	272.13	34.40	237.73	Vashon
T-13b	9/1/2000	272.14	36.49	235.65	Vashon
T-13b	12/1/2000	272.14	36.67	235.47	Vashon
T-13b	3/1/2001	272.14	36.28	235.86	Vashon
T-13b	6/1/2001	272.14	36.31	235.83	Vashon
T-13b	9/1/2001	272.14	31.68	240.46	Vashon
T-13b	12/1/2001	272.14	26.23	245.91	Vashon
T-13b	4/1/2002	272.14	33.20	238.94	Vashon
T-13b	6/1/2002	272.14	27.14	245.00	Vashon
T-13b	9/1/2002	272.14	36.30	235.84	Vashon
T-13b	2/3/2003	272.14	34.81	237.33	Vashon
T-13b	3/3/2003	272.14	35.02	237.12	Vashon
T-13b	7/1/2003	272.14	35.77	236.37	Vashon
T-13b	10/4/2004	272.14	37.43	234.71	Vashon
T-13b	2/10/2005	272.14	36.50	235.64	Vashon
T-13b	7/15/2005	272.14	36.40	235.74	Vashon
T-13b	9/9/2005	272.14	37.93	234.21	Vashon
T-13b	3/21/2006	272.14	33.20	238.94	Vashon
T-13b	9/22/2006	272.14	36.86	235.28	Vashon
T-13b	3/22/2007	272.14	32.30	239.84	Vashon
T-13b	10/4/2007	272.14	35.63	236.51	Vashon
T-13b	3/25/2008	272.14	33.58	238.56	Vashon
T-13b	10/8/2008	272.14	37.28	234.86	Vashon
T-13b	2/6/2009	272.14	34.30	237.84	Vashon
T-13b	8/6/2009	272.14	35.67	236.47	Vashon

Well ID	Date	Measuring Pt	Depth to SWL	GW Elev	Aquifer
T-13b	2/9/2010	272.14	33.70	238.44	Vashon
T-13b	8/13/2010	272.14	34.88	237.26	Vashon
T-13b	2/15/2011	272.14	33.30	238.84	Vashon
T-13b	8/9/2011	272.14	34.52	237.62	Vashon
T-13b	8/3/2012	272.14	34.55	237.59	Vashon
T-13b	2/12/2013	272.14	34.00	238.14	Vashon
T-13b	8/6/2013	272.14	35.50	236.64	Vashon
T-13b	2/12/2014	272.14	34.55	237.59	Vashon
T-13b	9/4/2014	272.14	34.98	237.16	Vashon
Sea level					
88-LS-SS	2/3/2003	220.07	137.74	82.33	Sea Level
88-LS-SS	3/3/2003	220.07	137.52	82.55	Sea Level
88-LS-SS	7/1/2003	220.07	139.66	80.41	Sea Level
88-LS-SS	10/4/2004	220.07	139.38	80.69	Sea Level
88-LS-SS	3/2/2012	220.07	139.28	80.79	Sea Level
88-LS-SS	8/1/2012	220.07	141.16	78.91	Sea Level
88-LS-SS	2/12/2013	220.07	139.60	80.47	Sea Level
LC-100D	4/3/2008	269.00	55.43	213.57	Sea Level
LC-100D	10/8/2008	269.00	73.15	195.85	Sea Level
LC-100D	2/6/2009	269.00	59.04	209.96	Sea Level
LC-100D	8/17/2009	269.00	67.75	201.25	Sea Level
LC-100D	10/4/2011	269.00	78.47	190.53	Sea Level
LC-101D-1	4/3/2008	273.67	105.00	168.67	Sea Level
LC-101D-1	10/8/2008	273.67	109.42	164.25	Sea Level
LC-101D-1	2/6/2009	273.67	103.86	169.81	Sea Level
LC-101D-1	8/17/2009	273.67	109.13	164.54	Sea Level
LC-101D-1	2/9/2010	273.67	109.27	164.40	Sea Level
LC-101D-1	8/13/2010	273.67	130.72	142.95	Sea Level
LC-101D-1	2/17/2011	273.67	125.95	147.72	Sea Level
LC-101D-1	8/8/2011	273.67	127.32	146.35	Sea Level
LC-101D-1	2/27/2012	273.67	124.75	148.92	Sea Level
LC-101D-1	8/2/2012	273.67	126.95	146.72	Sea Level
LC-101D-1	2/5/2013	273.67	124.30	149.37	Sea Level
LC-101D-1	8/6/2013	273.67	128.70	144.97	Sea Level
LC-101D-1	2/12/2014	273.67	125.10	148.57	Sea Level
LC-101D-1	9/3/2014	273.67	125.52	148.15	Sea Level
LC-101D-2	4/3/2008	273.50	104.77	168.73	Sea Level
LC-101D-2	10/8/2008	273.50	109.15	164.35	Sea Level
LC-101D-2	2/6/2009	273.50	103.57	169.93	Sea Level
LC-102D-1	4/3/2008	261.77	122.99	138.78	Sea Level
LC-102D-1	10/8/2008	261.77	126.75	135.02	Sea Level
LC-102D-1	2/4/2009	261.77	122.31	139.46	Sea Level
LC-102D-1	8/6/2009	261.77	127.60	134.17	Sea Level
LC-102D-1	2/8/2010	261.77	127.65	134.12	Sea Level
LC-102D-1	8/16/2010	261.77	140.32	121.45	Sea Level
LC-102D-1	2/15/2011	261.77	135.45	126.32	Sea Level
LC-102D-1	8/4/2011	261.77	136.88	124.89	Sea Level
LC-102D-1	3/2/2012	261.77	135.12	126.65	Sea Level
LC-102D-1	8/1/2012	261.77	137.05	124.72	Sea Level
LC-102D-1	2/4/2013	261.77	134.67	127.1	Sea Level
LC-102D-1	8/5/2013	261.77	138.20	123.57	Sea Level
LC-102D-1	2/11/2014	261.77	135.30	126.47	Sea Level
LC-102D-1	9/2/2014	261.77	136.40	125.37	Sea Level
LC-102D-2	4/3/2008	261.87	133.38	128.49	Sea Level

Appendix D - Historical Depth to Water Measurements and Sea Level Aquifer Trend Graphs

Historical Depth to Water measurements

Log RAM, Joint Base Lewis-McChord, Washington 98433

Well ID	Date	Measuring Pt	Depth to SWL	GW Elev	Aquifer
LC-102D-2	10/8/2008	261.87	127.08	134.79	Sea Level
LC-102D-2	2/4/2009	261.87	122.65	139.22	Sea Level
LC-103D	4/3/2008	270.70	95.82	174.88	Sea Level
LC-103D	10/8/2008	270.70	100.75	169.95	Sea Level
LC-103D	2/6/2009	270.70	94.32	176.38	Sea Level
LC-103D	8/17/2009	270.70	99.87	170.83	Sea Level
LC-103D	12/7/2009	270.70	113.55	157.15	Sea Level
LC-103D	1/21/2010	270.70	122.32	148.38	Sea Level
LC-103D	2/18/2010	270.70	94.95	175.75	Sea Level
LC-103D	3/18/2010	270.70	94.95	175.75	Sea Level
LC-103D	4/2/2010	270.70	98.67	172.03	Sea Level
LC-103D	4/21/2010	270.70	123.02	147.68	Sea Level
LC-103D	5/11/2010	270.70	123.55	147.15	Sea Level
LC-103D	6/3/2010	270.70	124.12	146.58	Sea Level
LC-103D	8/13/2010	270.70	125.85	144.85	Sea Level
LC-103D	2/17/2011	270.70	120.93	149.77	Sea Level
LC-103D	8/8/2011	270.70	122.35	148.35	Sea Level
LC-103D	10/4/2011	270.70	122.85	147.85	Sea Level
LC-103D	2/27/2012	270.70	119.61	151.09	Sea Level
LC-103D	8/2/2012	270.70	121.89	148.81	Sea Level
LC-103D	2/4/2013	270.7	119.23	151.47	Sea Level
LC-103D	8/6/2013	270.7	123.80	146.9	Sea Level
LC-103D	2/14/2014	270.7	119.80	150.90	Sea Level
LC-103D	9/3/2014	270.7	119.98	150.72	Sea Level
LC-126	12/1/1998	271.91	86.50	185.41	Sea Level
LC-126	3/1/1999	271.91	86.50	185.41	Sea Level
LC-126	6/1/1999	271.91	88.61	183.30	Sea Level
LC-126	9/1/1999	271.91	94.08	177.83	Sea Level
LC-126	12/1/1999	271.91	89.14	182.77	Sea Level
LC-126	3/1/2000	271.91	87.12	184.79	Sea Level
LC-126	6/1/2000	271.91	88.98	182.93	Sea Level
LC-126	9/1/2000	271.94	93.57	178.37	Sea Level
LC-126	12/1/2000	271.94	91.70	180.24	Sea Level
LC-126	3/1/2001	271.94	91.97	179.97	Sea Level
LC-126	6/1/2001	271.94	92.68	179.26	Sea Level
LC-126	9/1/2001	271.94	96.01	175.93	Sea Level
LC-126	12/1/2001	271.94	90.11	181.83	Sea Level
LC-126	4/1/2002	271.94	87.71	184.23	Sea Level
LC-126	6/1/2002	271.94	90.91	181.03	Sea Level
LC-126	9/1/2002	271.94	94.76	177.18	Sea Level
LC-126	2/3/2003	271.94	90.39	181.55	Sea Level
LC-126	3/3/2003	271.94	90.10	181.84	Sea Level
LC-126	7/1/2003	271.94	95.17	176.77	Sea Level
LC-126	10/4/2004	271.94	94.38	177.56	Sea Level
LC-126	4/6/2005	271.94	93.85	178.09	Sea Level
LC-126	7/19/2005	271.94	96.07	175.87	Sea Level
LC-126	8/30/2005	271.94	98.02	173.92	Sea Level
LC-126	3/16/2006	271.94	88.47	183.47	Sea Level
LC-126	9/21/2006	271.94	96.17	175.77	Sea Level
LC-126	3/23/2007	271.94	87.76	184.18	Sea Level
LC-126	10/19/2007	271.94	94.73	177.21	Sea Level
LC-126	4/3/2008	271.94	91.17	180.77	Sea Level
LC-126	10/8/2008	271.94	96.10	175.84	Sea Level
LC-126	2/5/2009	271.94	90.40	181.54	Sea Level

Appendix D - Historical Depth to Water Measurements and Sea Level Aquifer Trend Graphs

Historical Depth to Water measurements

Log RAM, Joint Base Lewis-McChord, Washington 98433

Well ID	Date	Measuring Pt	Depth to SWL	GW Elev	Aquifer
LC-126	8/5/2009	271.94	96.22	175.72	Sea Level
LC-126	2/9/2010	271.94	95.65	176.29	Sea Level
LC-126	8/12/2010	271.94	115.55	156.39	Sea Level
LC-126	2/17/2011	271.94	111.75	160.19	Sea Level
LC-126	8/9/2011	271.94	113.55	158.39	Sea Level
LC-126	2/28/2012	271.94	110.57	161.37	Sea Level
LC-126	8/1/2012	271.94	113.30	158.64	Sea Level
LC-126	2/7/2013	271.94	109.85	162.09	Sea Level
LC-126	8/8/2013	271.94	114.00	157.94	Sea Level
LC-126	2/19/2014	271.94	110.35	161.59	Sea Level
LC-126	9/10/2014	271.94	20.02		Sea Level
LC-166D	10/7/1996	244.57	31.54	213.03	Sea Level
LC-166D	1/24/1997	244.57	27.26	217.31	Sea Level
LC-166D	4/23/1997	244.57	28.12	216.45	Sea Level
LC-166D	10/16/1997	244.57	30.40	214.17	Sea Level
LC-166D	1/30/1998	244.57	29.07	215.50	Sea Level
LC-166D	4/2/1998	244.57	29.44	215.13	Sea Level
LC-166D	7/7/1998	244.57	30.92	213.65	Sea Level
LC-166D	9/22/1998	244.57	33.70	210.87	Sea Level
LC-166D	9/1/1999	244.57	33.29	211.28	Sea Level
LC-166D	12/1/1999	244.57	31.35	213.22	Sea Level
LC-166D	3/1/2000	244.57	29.17	215.40	Sea Level
LC-166D	6/1/2000	244.57	30.10	214.47	Sea Level
LC-166D	9/1/2000	243.94	32.94	211.00	Sea Level
LC-166D	12/1/2000	243.94	34.24	209.70	Sea Level
LC-166D	3/1/2001	243.94	34.90	209.04	Sea Level
LC-166D	6/1/2001	243.94	32.24	211.70	Sea Level
LC-166D	9/1/2001	243.94	36.41	207.53	Sea Level
LC-166D	12/1/2001	243.94	31.11	212.83	Sea Level
LC-166D	4/1/2002	243.94	29.93	214.01	Sea Level
LC-166D	6/1/2002	243.94	31.42	212.52	Sea Level
LC-166D	9/1/2002	243.94	33.38	210.56	Sea Level
LC-166D	2/3/2003	243.94	33.55	210.39	Sea Level
LC-166D	3/3/2003	243.94	33.35	210.59	Sea Level
LC-166D	7/1/2003	243.94	33.16	210.78	Sea Level
LC-166D	10/4/2004	243.94	34.96	208.98	Sea Level
LC-166D	7/29/2005	243.94	34.37	209.57	Sea Level
LC-166D	3/17/2006	243.94	29.47	214.47	Sea Level
LC-166D	9/21/2006	243.94	33.83	210.11	Sea Level
LC-166D	3/20/2007	243.94	29.41	214.53	Sea Level
LC-166D	9/27/2007	243.94	33.35	210.59	Sea Level
LC-166D	4/3/2008	243.94	30.89	213.05	Sea Level
LC-166D	10/8/2008	243.94	34.70	209.24	Sea Level
LC-166D	2/6/2009	243.94	32.15	211.79	Sea Level
LC-166D	8/17/2009	243.94	33.83	210.11	Sea Level
LC-166D	2/8/2010	243.94	32.90	211.04	Sea Level
LC-166D	8/10/2010	243.94	34.57	209.37	Sea Level
LC-166D	2/15/2011	243.94	32.55	211.39	Sea Level
LC-166D	8/4/2011	243.94	33.78	210.16	Sea Level
LC-166D	3/1/2012	243.94	32.98	210.96	Sea Level
LC-166D	8/1/2012	243.94	33.65	210.29	Sea Level
LC-166D	2/5/2013	243.94	32.47	211.47	Sea Level
LC-166D	8/6/2013	243.94	34.47	209.47	Sea Level
LC-166D	2/11/2014	243.94	34.45	209.49	Sea Level

Well ID	Date	Measuring Pt	Depth to SWL	GW Elev	Aquifer
LC-166D	9/9/2014	243.94	34.75	209.19	Sea Level
LC-21c	3/1/2000	282.00	13.82	268.18	Sea Level
LC-21c	6/1/2000	282.00	15.39	266.61	Sea Level
LC-21c	9/1/2000	282.06	17.45	264.61	Sea Level
LC-21c	12/1/2000	282.06	17.51	264.55	Sea Level
LC-21c	3/1/2001	282.06	17.06	265.00	Sea Level
LC-21c	6/1/2001	282.06	16.88	265.18	Sea Level
LC-21c	9/1/2001	282.06	18.15	263.91	Sea Level
LC-21c	12/1/2001	282.06	12.65	269.41	Sea Level
LC-21c	4/1/2002	282.06	13.38	268.68	Sea Level
LC-21c	6/1/2002	282.06	12.98	269.08	Sea Level
LC-21c	9/1/2002	282.06	17.34	264.72	Sea Level
LC-21c	2/3/2003	282.06	12.40	269.66	Sea Level
LC-21c	3/3/2003	282.06	15.32	266.74	Sea Level
LC-21c	7/1/2003	282.06	15.78	266.28	Sea Level
LC-21c	10/4/2004	282.06	18.17	263.89	Sea Level
LC-21c	3/16/2006	282.06	12.61	269.45	Sea Level
LC-21c	9/20/2006	282.06	16.82	265.24	Sea Level
LC-21c	3/21/2007	282.06	12.14	269.92	Sea Level
LC-21c	9/28/2007	282.06	16.85	265.21	Sea Level
LC-21c	3/25/2008	282.06	14.37	267.69	Sea Level
LC-21c	10/8/2008	282.06	17.57	264.49	Sea Level
LC-21c	2/3/2009	282.06	14.45	267.61	Sea Level
LC-21c	8/3/2009	282.06	16.21	265.85	Sea Level
LC-21c	2/11/2010	282.06	14.05	268.01	Sea Level
LC-21c	8/10/2010	282.06	15.53	266.53	Sea Level
LC-21c	2/14/2011	282.06	13.58	268.48	Sea Level
LC-21c	8/10/2011	282.06	14.67	267.39	Sea Level
LC-21c	2/22/2012	282.06	14.16	267.90	Sea Level
LC-21c	7/31/2012	282.06	15.20	266.86	Sea Level
LC-21c	2/6/2013	282.06	14.30	267.76	Sea Level
LC-21c	8/8/2013	282.06	16.10	265.96	Sea Level
LC- 21c	2/14/2014	282.06	14.75	267.31	Sea Level
LC- 21c	9/8/2014	282.06	15.55	266.51	Sea Level
LC-26D	10/7/1996	277.28	9.32	267.96	Sea Level
LC-26D	1/24/1997	277.28	7.55	269.73	Sea Level
LC-26D	4/23/1997	277.28	3.70	273.58	Sea Level
LC-26D	10/16/1997	277.28	8.70	268.58	Sea Level
LC-26D	1/30/1998	277.28	6.62	270.66	Sea Level
LC-26D	4/2/1998	277.28	6.89	270.39	Sea Level
LC-26D	7/7/1998	277.28	8.95	268.33	Sea Level
LC-26D	9/22/1998	277.28	10.50	266.78	Sea Level
LC-26D	12/1/1998	277.28	4.95	272.33	Sea Level
LC-26D	3/1/1999	277.28	5.20	272.08	Sea Level
LC-26D	6/1/1999	277.28	8.71	268.57	Sea Level
LC-26D	9/1/1999	277.28	10.88	266.40	Sea Level
LC-26D	12/1/1999	277.28	7.97	269.31	Sea Level
LC-26D	3/1/2000	277.28	6.86	270.42	Sea Level
LC-26D	6/1/2000	277.28	8.34	268.94	Sea Level
LC-26D	9/1/2000	277.14	10.25	266.89	Sea Level
LC-26D	12/1/2000	277.14	10.55	266.59	Sea Level
LC-26D	3/1/2001	277.14	9.93	267.21	Sea Level
LC-26D	6/1/2001	277.14	9.77	267.37	Sea Level
LC-26D	9/1/2001	277.14	11.00	266.14	Sea Level

Appendix D - Historical Depth to Water Measurements and Sea Level Aquifer Trend Graphs

Historical Depth to Water measurements

Log RAM, Joint Base Lewis-McChord, Washington 98433

Well ID	Date	Measuring Pt	Depth to SWL	GW Elev	Aquifer
LC-26D	12/1/2001	277.14	8.10	269.04	Sea Level
LC-26D	4/1/2002	277.14	6.16	270.98	Sea Level
LC-26D	6/1/2002	277.14	8.06	269.08	Sea Level
LC-26D	9/1/2002	277.14	10.76	266.38	Sea Level
LC-26D	2/3/2003	277.14	8.06	269.08	Sea Level
LC-26D	3/3/2003	277.14	8.39	268.75	Sea Level
LC-26D	7/1/2003	277.14	8.84	268.30	Sea Level
LC-26D	10/4/2004	277.14	10.94	266.20	Sea Level
LC-26D	3/16/2006	277.14	5.67	271.47	Sea Level
LC-26D	9/20/2006	277.14	9.93	267.21	Sea Level
LC-26D	3/22/2007	277.14	5.45	271.69	Sea Level
LC-26D	3/25/2008	277.14	7.60	269.54	Sea Level
LC-26D	10/8/2008	277.14	10.80	266.34	Sea Level
LC-26D	2/3/2009	277.14	7.70	269.44	Sea Level
LC-26D	8/6/2009	277.14	9.77	267.37	Sea Level
LC-26D	2/11/2010	277.14	7.20	269.94	Sea Level
LC-26D	8/9/2010	277.14	8.63	268.51	Sea Level
LC-26D	2/14/2011	277.14	6.80	270.34	Sea Level
LC-26D	8/8/2011	277.14	7.85	269.29	Sea Level
LC-26D	2/22/2012	277.14	7.51	269.63	Sea Level
LC-26D	7/31/2012	277.14	8.33	268.81	Sea Level
LC-26D	2/7/2013	277.14	7.43	269.71	Sea Level
LC-26D	8/7/2013	277.14	9.20	267.94	Sea Level
LC- 26D	2/14/2014	277.14	8.10	269.04	Sea Level
LC- 26D	9/5/2014	277.14	8.74	268.40	Sea Level
LC-35D	10/7/1996	289.27	28.82	260.45	Sea Level
LC-35D	1/24/1997	289.27	23.16	266.11	Sea Level
LC-35D	4/23/1997	289.27	24.10	265.17	Sea Level
LC-35D	1/30/1998	289.27	25.12	264.15	Sea Level
LC-35D	4/2/1998	289.27	25.87	263.40	Sea Level
LC-35D	7/7/1998	289.27	28.29	260.98	Sea Level
LC-35D	9/22/1998	289.27	29.51	259.76	Sea Level
LC-35D	12/1/1998	289.27	22.89	266.38	Sea Level
LC-35D	3/1/1999	289.27	24.12	265.15	Sea Level
LC-35D	6/1/1999	289.27	27.24	262.03	Sea Level
LC-35D	9/1/1999	289.27	29.86	259.41	Sea Level
LC-35D	12/1/1999	289.27	25.77	263.50	Sea Level
LC-35D	3/1/2000	289.27	24.95	264.32	Sea Level
LC-35D	6/1/2000	289.27	26.97	262.30	Sea Level
LC-35D	9/1/2000	289.14	29.21	259.93	Sea Level
LC-35D	12/1/2000	289.14	28.84	260.30	Sea Level
LC-35D	3/1/2001	289.14	29.30	259.84	Sea Level
LC-35D	6/1/2001	289.14	29.38	259.76	Sea Level
LC-35D	9/1/2001	289.14	30.81	258.33	Sea Level
LC-35D	12/1/2001	289.14	25.40	263.74	Sea Level
LC-35D	4/1/2002	289.14	25.20	263.94	Sea Level
LC-35D	6/1/2002	289.14	27.10	262.04	Sea Level
LC-35D	9/1/2002	289.14	29.80	259.34	Sea Level
LC-35D	2/3/2003	289.14	26.35	262.79	Sea Level
LC-35D	3/3/2003	289.14	27.02	262.12	Sea Level
LC-35D	7/1/2003	289.14	28.25	260.89	Sea Level
LC-35D	10/4/2004	289.14	28.27	260.87	Sea Level
LC-35D	3/16/2006	289.14	24.81	264.33	Sea Level
LC-35D	9/26/2006	289.14	29.54	259.60	Sea Level

Well ID	Date	Measuring Pt	Depth to SWL	GW Elev	Aquifer
LC-35D	3/23/2007	289.14	23.99	265.15	Sea Level
LC-35D	9/28/2007	289.14	27.88	261.26	Sea Level
LC-35D	10/8/2008	289.14	29.25	259.89	Sea Level
LC-35D	2/5/2009	289.14	26.85	262.29	Sea Level
LC-35D	8/6/2009	289.14	28.30	260.84	Sea Level
LC-35D	2/10/2010	289.14	25.40	263.74	Sea Level
LC-35D	8/10/2010	289.14	26.97	262.17	Sea Level
LC-35D	2/16/2011	289.14	24.85	264.29	Sea Level
LC-35D	8/8/2011	289.14	26.35	262.79	Sea Level
LC-35D	2/29/2012	289.14	25.25	263.89	Sea Level
LC-35D	8/2/2012	289.14	26.70	262.44	Sea Level
LC-35D	2/6/2013	289.14	25.53	263.61	Sea Level
LC- 35D	2/18/2014	289.14	25.15	263.99	Sea Level
LC- 35D	9/8/2014	289.14	27.17	261.97	Sea Level
LC-40D	10/7/1996	279.74	109.48	170.26	Sea Level
LC-40D	1/24/1997	279.74	96.85	182.89	Sea Level
LC-40D	4/23/1997	279.74	91.78	187.96	Sea Level
LC-40D	10/16/1997	279.74	101.93	177.81	Sea Level
LC-40D	1/30/1998	279.74	94.62	185.12	Sea Level
LC-40D	4/2/1998	279.74	94.28	185.46	Sea Level
LC-40D	7/7/1998	279.74	97.75	181.99	Sea Level
LC-40D	9/22/1998	279.74	113.80	165.94	Sea Level
LC-40D	12/1/1998	279.74	93.01	186.73	Sea Level
LC-40D	3/1/1999	279.74	92.60	187.14	Sea Level
LC-40D	6/1/1999	279.74	95.19	184.55	Sea Level
LC-40D	9/1/1999	279.74	100.64	179.10	Sea Level
LC-40D	12/1/1999	279.74	95.60	184.14	Sea Level
LC-40D	3/1/2000	279.74	93.64	186.10	Sea Level
LC-40D	6/1/2000	279.74	95.42	184.32	Sea Level
LC-40D	9/1/2000	279.56	100.11	179.45	Sea Level
LC-40D	12/1/2000	279.56	98.25	181.31	Sea Level
LC-40D	3/1/2001	279.56	98.48	181.08	Sea Level
LC-40D	6/1/2001	279.56	99.26	180.30	Sea Level
LC-40D	9/1/2001	279.56	101.09	178.47	Sea Level
LC-40D	12/1/2001	279.56	96.01	183.55	Sea Level
LC-40D	4/1/2002	279.56	94.17	185.39	Sea Level
LC-40D	6/1/2002	279.56	96.05	183.51	Sea Level
LC-40D	9/1/2002	279.56	97.02	182.54	Sea Level
LC-40D	2/3/2003	279.56	96.88	182.68	Sea Level
LC-40D	3/3/2003	279.56	96.57	182.99	Sea Level
LC-40D	7/1/2003	279.56	101.78	177.78	Sea Level
LC-40D	10/4/2004	279.56	100.97	178.59	Sea Level
LC-40D	4/14/2005	279.56	100.21	179.35	Sea Level
LC-40D	7/20/2005	279.56	102.85	176.71	Sea Level
LC-40D	3/16/2006	279.56	94.98	184.58	Sea Level
LC-40D	9/20/2006	279.56	102.75	176.81	Sea Level
LC-40D	3/23/2007	279.56	94.20	185.36	Sea Level
LC-40D	10/19/2007	279.56	101.41	178.15	Sea Level
LC-40D	10/8/2008	279.56	102.80	176.76	Sea Level
LC-40D	2/5/2009	279.56	97.05	182.51	Sea Level
LC-40D	8/6/2009	279.56	103.03	176.53	Sea Level
LC-40D	2/10/2010	279.56	100.00	179.56	Sea Level
LC-40D	8/11/2010	279.56	122.05	157.51	Sea Level
LC-40D	2/16/2011	279.56	118.10	161.46	Sea Level

Appendix D - Historical Depth to Water Measurements and Sea Level Aquifer Trend Graphs

Historical Depth to Water measurements

Log RAM, Joint Base Lewis-McChord, Washington 98433

Well ID	Date	Measuring Pt	Depth to SWL	GW Elev	Aquifer
LC-40D	8/9/2011	279.56	119.95	159.61	Sea Level
LC-40D	2/28/2012	279.56	117.27	162.29	Sea Level
LC-40D	7/31/2012	279.56	119.50	160.06	Sea Level
LC-40D	2/6/2013	279.56	116.98	162.58	Sea Level
LC-40D	8/7/2013	279.56	121.60	157.96	Sea Level
LC- 40D	2/18/2014	279.56	117.50	162.06	Sea Level
LC- 40D	9/10/2014	279.56	117.88	161.68	Sea Level
LC-41D	10/7/1996	282.56	53.02	229.54	Sea Level
LC-41D	1/24/1997	282.56	40.82	241.74	Sea Level
LC-41D	4/23/1997	282.56	40.81	241.75	Sea Level
LC-41D	10/16/1997	282.56	50.63	231.93	Sea Level
LC-41D	4/2/1998	282.56	44.64	237.92	Sea Level
LC-41D	7/7/1998	282.56	48.60	233.96	Sea Level
LC-41D	12/1/1998	282.56	49.64	232.92	Sea Level
LC-41D	3/1/1999	282.56	41.23	241.33	Sea Level
LC-41D	6/1/1999	282.56	44.46	238.10	Sea Level
LC-41D	9/1/1999	282.56	49.86	232.70	Sea Level
LC-41D	12/1/1999	282.56	43.77	238.79	Sea Level
LC-41D	3/1/2000	282.56	42.69	239.87	Sea Level
LC-41D	6/1/2000	282.56	45.03	237.53	Sea Level
LC-41D	9/1/2000	282.69	47.32	235.37	Sea Level
LC-41D	12/1/2000	282.69	46.98	235.71	Sea Level
LC-41D	3/1/2001	282.67	42.40	240.27	Sea Level
LC-41D	6/1/2001	282.67	41.85	240.82	Sea Level
LC-41D	9/1/2001	282.67	44.91	237.76	Sea Level
LC-41D	12/1/2001	282.67	39.44	243.23	Sea Level
LC-41D	4/1/2002	282.67	33.10	249.57	Sea Level
LC-41D	6/1/2002	282.67	38.92	243.75	Sea Level
LC-41D	9/1/2002	282.67	42.01	240.66	Sea Level
LC-41D	2/3/2003	282.67	33.08	249.59	Sea Level
LC-41D	3/3/2003	282.67	33.56	249.11	Sea Level
LC-41D	7/1/2003	282.67	37.43	245.24	Sea Level
LC-41D	10/4/2004	282.67	39.29	243.38	Sea Level
LC-41D	3/17/2006	282.67	30.59	252.08	Sea Level
LC-41D	9/21/2006	282.67	43.02	239.65	Sea Level
LC-41D	9/28/2007	282.67	36.62	246.05	Sea Level
LC-41D	2/5/2009	282.67	32.30	250.37	Sea Level
LC-41D	8/6/2009	282.67	41.04	241.63	Sea Level
LC-41D	8/10/2010	282.67	35.60	247.07	Sea Level
LC-41D	2/16/2011	282.67	32.50	250.17	Sea Level
LC-41D	8/10/2011	282.67	35.28	247.39	Sea Level
LC-41D	2/29/2012	282.67	33.45	249.22	Sea Level
LC-41D	7/31/2012	282.67	38.62	244.05	Sea Level
LC-41D	2/6/2013	282.67	38.43	244.24	Sea Level
LC-41D	8/8/2013	282.67	38.60	244.07	Sea Level
LC- 41D	2/13/2014	282.67	26.40	256.27	Sea Level
LC- 41D	9/11/2014	282.67	36.45	246.22	Sea Level
LC-41e	3/17/2006	282.71	44.38	238.33	Sea Level
LC-41e	9/21/2006	282.71	65.21	217.50	Sea Level
LC-41e	9/28/2007	282.71	50.55	232.16	Sea Level
LC-41e	3/25/2008	282.71	46.00	236.71	Sea Level
LC-41e	10/8/2008	282.71	51.97	230.74	Sea Level
LC-41e	2/5/2009	282.71	45.85	236.86	Sea Level
LC-41e	8/6/2009	282.71	61.60	221.11	Sea Level

Appendix D - Historical Depth to Water Measurements and Sea Level Aquifer Trend Graphs

Historical Depth to Water measurements

Log RAM, Joint Base Lewis-McChord, Washington 98433

Well ID	Date	Measuring Pt	Depth to SWL	GW Elev	Aquifer
LC-47D	12/1/1998	281.16	20.54	260.62	Sea Level
LC-47D	3/1/1999	281.16	22.30	258.86	Sea Level
LC-47D	6/1/1999	281.16	25.49	255.67	Sea Level
LC-47D	9/1/1999	281.16	30.32	250.84	Sea Level
LC-47D	12/1/1999	281.16	23.65	257.51	Sea Level
LC-47D	3/1/2000	281.16	22.69	258.47	Sea Level
LC-47D	6/1/2000	281.16	25.55	255.61	Sea Level
LC-47D	9/1/2000	281.08	29.95	251.13	Sea Level
LC-47D	12/1/2000	281.08	28.32	252.76	Sea Level
LC-47D	3/1/2001	280.56	29.21	251.35	Sea Level
LC-47D	6/1/2001	280.56	29.40	251.16	Sea Level
LC-47D	9/1/2001	280.56	32.15	248.41	Sea Level
LC-47D	12/1/2001	280.56	27.01	253.55	Sea Level
LC-47D	4/1/2002	280.56	22.98	257.58	Sea Level
LC-47D	6/1/2002	280.56	25.35	255.21	Sea Level
LC-47D	9/1/2002	280.56	30.02	250.54	Sea Level
LC-47D	2/3/2003	280.56	25.01	255.55	Sea Level
LC-47D	3/3/2003	280.56	25.25	255.31	Sea Level
LC-47D	7/1/2003	280.56	28.36	252.20	Sea Level
LC-47D	10/4/2004	280.56	30.35	250.21	Sea Level
LC-47D	4/6/2005	280.56	28.46	252.10	Sea Level
LC-47D	7/21/2005	280.56	29.32	251.24	Sea Level
LC-47D	8/29/2005	280.56	41.83	238.73	Sea Level
LC-47D	3/16/2006	280.56	23.47	257.09	Sea Level
LC-47D	9/20/2006	280.56	30.28	250.28	Sea Level
LC-47D	3/20/2007	280.56	22.75	257.81	Sea Level
LC-47D	9/28/2007	280.56	28.02	252.54	Sea Level
LC-47D	3/25/2008	280.56	24.97	255.59	Sea Level
LC-47D	10/8/2008	280.56	30.32	250.24	Sea Level
LC-47D	2/5/2009	280.56	24.80	255.76	Sea Level
LC-47D	8/6/2009	280.56	28.95	251.61	Sea Level
LC-47D	2/10/2010	280.56	24.75	255.81	Sea Level
LC-47D	8/10/2010	280.56	26.58	253.98	Sea Level
LC-47D	2/16/2011	280.56	23.80	256.76	Sea Level
LC-47D	8/8/2011	280.56	26.36	254.20	Sea Level
LC-47D	2/23/2012	280.56	24.77	255.79	Sea Level
LC-47D	7/31/2012	280.56	26.32	254.24	Sea Level
LC-47D	2/8/2013	280.56	24.88	255.68	Sea Level
LC-47D	8/8/2013	280.56	28.20	252.36	Sea Level
LC- 47D	2/13/2014	280.56	25.90	254.66	Sea Level
LC- 47D	9/8/2014	280.56	27.23	253.33	Sea Level
LC-50D	12/1/1998	272.80	4.55	268.25	Sea Level
LC-50D	3/1/1999	272.80	5.37	267.43	Sea Level
LC-50D	6/1/1999	272.80	8.08	264.72	Sea Level
LC-50D	9/1/1999	272.80	10.77	262.03	Sea Level
LC-50D	12/1/1999	272.80	7.20	265.60	Sea Level
LC-50D	3/1/2000	272.80	5.95	266.85	Sea Level
LC-50D	6/1/2000	272.80	7.62	265.18	Sea Level
LC-50D	9/1/2000	272.92	9.86	263.06	Sea Level
LC-50D	12/1/2000	272.92	9.73	263.19	Sea Level
LC-50D	3/1/2001	272.92	9.39	263.53	Sea Level
LC-50D	6/1/2001	272.92	9.27	263.65	Sea Level
LC-50D	9/1/2001	272.92	10.71	262.21	Sea Level
LC-50D	12/1/2001	272.92	9.13	263.79	Sea Level

Appendix D - Historical Depth to Water Measurements and Sea Level Aquifer Trend Graphs

Historical Depth to Water measurements

Log RAM, Joint Base Lewis-McChord, Washington 98433

Well ID	Date	Measuring Pt	Depth to SWL	GW Elev	Aquifer
LC-50D	4/1/2002	272.92	5.38	267.54	Sea Level
LC-50D	6/1/2002	272.92	7.30	265.62	Sea Level
LC-50D	9/1/2002	272.92	9.98	262.94	Sea Level
LC-50D	3/3/2003	272.92	7.54	265.38	Sea Level
LC-50D	7/1/2003	272.92	8.45	264.47	Sea Level
LC-50D	10/4/2004	272.92	10.52	262.40	Sea Level
LC-50D	3/16/2006	272.92	4.88	268.04	Sea Level
LC-50D	9/25/2006	272.92	10.47	262.45	Sea Level
LC-50D	3/21/2007	272.92	4.47	268.45	Sea Level
LC-50D	9/28/2007	272.92	9.27	263.65	Sea Level
LC-50D	3/25/2008	272.92	6.26	266.66	Sea Level
LC-50D	10/8/2008	272.92	10.10	262.82	Sea Level
LC-50D	2/3/2009	272.92	6.28	266.64	Sea Level
LC-50D	8/3/2009	272.92	9.00	263.92	Sea Level
LC-50D	2/11/2010	272.92	6.00	266.92	Sea Level
LC-50D	8/10/2010	272.92	7.56	265.36	Sea Level
LC-50D	2/16/2011	272.92	5.43	267.49	Sea Level
LC-50D	8/10/2011	272.92	6.85	266.07	Sea Level
LC-50D	2/22/2012	272.92	6.17	266.75	Sea Level
LC-50D	8/3/2012	272.92	7.80	265.12	Sea Level
LC-50D	2/6/2013	272.92	6.15	266.77	Sea Level
LC-50D	8/8/2013	272.92	8.50	264.42	Sea Level
LC- 50D	2/14/2014	272.92	6.95	265.97	Sea Level
LC- 50D	9/8/2014	272.92	7.85	265.07	Sea Level
LC-55D	12/1/1998	291.12	22.94	268.18	Sea Level
LC-55D	3/1/1999	291.12	23.80	267.32	Sea Level
LC-55D	6/1/1999	291.12	27.34	263.78	Sea Level
LC-55D	9/1/1999	291.12	30.62	260.50	Sea Level
LC-55D	12/1/1999	291.12	26.69	264.43	Sea Level
LC-55D	3/1/2000	291.12	25.10	266.02	Sea Level
LC-55D	6/1/2000	291.12	27.22	263.90	Sea Level
LC-55D	9/1/2000	291.39	30.12	261.27	Sea Level
LC-55D	12/1/2000	291.39	29.75	261.64	Sea Level
LC-55D	3/1/2001	291.39	28.76	262.63	Sea Level
LC-55D	6/1/2001	291.39	28.88	262.51	Sea Level
LC-55D	9/1/2001	291.39	31.46	259.93	Sea Level
LC-55D	12/1/2001	291.39	26.08	265.31	Sea Level
LC-55D	4/1/2002	291.39	24.23	267.16	Sea Level
LC-55D	6/1/2002	291.39	25.93	265.46	Sea Level
LC-55D	9/1/2002	291.39	27.29	264.10	Sea Level
LC-55D	2/3/2003	291.39	25.70	265.69	Sea Level
LC-55D	3/3/2003	291.39	26.71	264.68	Sea Level
LC-55D	7/1/2003	291.39	28.56	262.83	Sea Level
LC-55D	10/4/2004	291.39	30.83	260.56	Sea Level
LC-66D	10/7/1996	283.89	87.62	196.27	Sea Level
LC-66D	1/24/1997	283.89	77.17	206.72	Sea Level
LC-66D	4/23/1997	283.89	71.50	212.39	Sea Level
LC-66D	10/16/1997	283.89	85.78	198.11	Sea Level
LC-66D	1/30/1998	283.89	75.85	208.04	Sea Level
LC-66D	4/2/1998	283.89	75.72	208.17	Sea Level
LC-66D	7/7/1998	283.89	79.23	204.66	Sea Level
LC-66D	9/22/1998	283.89	90.10	193.79	Sea Level
LC-66D	12/1/1998	283.89	73.38	210.51	Sea Level
LC-66D	3/1/1999	283.89	73.71	210.18	Sea Level

Well ID	Date	Measuring Pt	Depth to SWL	GW Elev	Aquifer
LC-66D	6/1/1999	283.89	77.17	206.72	Sea Level
LC-66D	9/1/1999	283.89	82.62	201.27	Sea Level
LC-66D	12/1/1999	283.89	76.23	207.66	Sea Level
LC-66D	3/1/2000	283.89	74.71	209.18	Sea Level
LC-66D	6/1/2000	283.89	76.99	206.90	Sea Level
LC-66D	9/1/2000	283.73	81.55	202.18	Sea Level
LC-66D	12/1/2000	283.73	80.07	203.66	Sea Level
LC-66D	3/1/2001	283.73	77.15	206.58	Sea Level
LC-66D	6/1/2001	283.73	77.61	206.12	Sea Level
LC-66D	9/1/2001	283.73	80.01	203.72	Sea Level
LC-66D	4/1/2002	283.73	73.32	210.41	Sea Level
LC-66D	9/1/2002	283.73	82.40	201.33	Sea Level
LC-66D	2/3/2003	283.73	74.80	208.93	Sea Level
LC-66D	3/3/2003	283.73	76.45	207.28	Sea Level
LC-66D	7/1/2003	283.73	81.12	202.61	Sea Level
LC-66D	10/4/2004	283.73	81.87	201.86	Sea Level
LC-66D	4/15/2005	283.73	81.31	202.42	Sea Level
LC-66D	7/20/2005	283.73	82.65	201.08	Sea Level
LC-66D	3/16/2006	283.73	75.65	208.08	Sea Level
LC-66D	9/20/2006	283.73	83.85	199.88	Sea Level
LC-66D	3/22/2007	283.73	75.11	208.62	Sea Level
LC-66D	9/28/2007	283.73	82.23	201.50	Sea Level
LC-66D	3/25/2008	283.73	78.14	205.59	Sea Level
LC-66D	10/8/2008	283.73	83.34	200.39	Sea Level
LC-66D	2/5/2009	283.73	77.33	206.40	Sea Level
LC-66D	8/4/2009	283.73	84.40	199.33	Sea Level
LC-66D	2/10/2010	283.73	80.50	203.23	Sea Level
LC-66D	8/13/2010	283.73	93.05	190.68	Sea Level
LC-66D	2/16/2011	283.73	89.00	194.73	Sea Level
LC-66D	8/9/2011	283.73	91.80	191.93	Sea Level
LC-66D	2/28/2012	283.73	89.42	194.31	Sea Level
LC-66D	7/31/2012	283.73	91.70	192.03	Sea Level
LC-66D	2/6/2013	283.73	89.44	194.29	Sea Level
LC-66D	8/7/2013	283.73	94.45	189.28	Sea Level
LC- 66D	2/18/2014	283.73	90.15	193.58	Sea Level
LC- 66D	9/8/2014	283.73	91.49	192.24	Sea Level
LC-67D	10/7/1996	264.93	84.77	180.16	Sea Level
LC-67D	1/24/1997	264.93	71.32	193.61	Sea Level
LC-67D	4/23/1997	264.93	66.25	198.68	Sea Level
LC-67D	10/16/1997	264.93	77.44	187.49	Sea Level
LC-67D	1/30/1998	264.93	69.50	195.43	Sea Level
LC-67D	4/2/1998	264.93	69.36	195.57	Sea Level
LC-67D	7/7/1998	264.93	72.74	192.19	Sea Level
LC-67D	9/22/1998	264.93	87.05	177.88	Sea Level
LC-67D	12/1/1998	264.93	67.44	197.49	Sea Level
LC-67D	3/1/1999	264.93	67.40	197.53	Sea Level
LC-67D	6/1/1999	264.93	70.43	194.50	Sea Level
LC-67D	9/1/1999	264.93	76.00	188.93	Sea Level
LC-67D	12/1/1999	264.93	70.20	194.73	Sea Level
LC-67D	3/1/2000	264.93	68.45	196.48	Sea Level
LC-67D	6/1/2000	264.93	70.49	194.44	Sea Level
LC-67D	9/1/2000	264.58	75.26	189.32	Sea Level
LC-67D	12/1/2000	264.58	73.61	190.97	Sea Level
LC-67D	3/1/2001	264.58	73.57	191.01	Sea Level

Well ID	Date	Measuring Pt	Depth to SWL	GW Elev	Aquifer
LC-67D	6/1/2001	264.58	74.30	190.28	Sea Level
LC-67D	9/1/2001	264.58	76.50	188.08	Sea Level
LC-67D	12/1/2001	264.58	71.02	193.56	Sea Level
LC-67D	4/1/2002	264.58	68.89	195.69	Sea Level
LC-67D	6/1/2002	264.58	70.94	193.64	Sea Level
LC-67D	9/1/2002	264.58	73.32	191.26	Sea Level
LC-67D	2/3/2003	264.58	71.49	193.09	Sea Level
LC-67D	3/3/2003	264.58	71.38	193.20	Sea Level
LC-67D	7/1/2003	264.58	76.63	187.95	Sea Level
LC-67D	10/4/2004	264.58	76.48	188.10	Sea Level
LC-67D	4/15/2005	264.58	75.86	188.72	Sea Level
LC-67D	7/29/2005	264.58	78.54	186.04	Sea Level
LC-67D	9/7/2005	264.58	80.21	184.37	Sea Level
LC-67D	3/16/2006	264.58	70.12	194.46	Sea Level
LC-67D	9/2/2006	264.58	78.50	186.08	Sea Level
LC-67D	3/21/2007	264.58	69.47	195.11	Sea Level
LC-67D	9/27/2007	264.58	77.29	187.29	Sea Level
LC-67D	3/25/2008	264.58	73.15	191.43	Sea Level
LC-67D	10/8/2008	264.58	78.22	186.36	Sea Level
LC-67D	2/5/2009	264.58	72.58	192.00	Sea Level
LC-67D	8/4/2009	264.58	78.95	185.63	Sea Level
LC-67D	2/10/2010	264.58	75.95	188.63	Sea Level
LC-67D	8/10/2010	264.58	94.38	170.20	Sea Level
LC-67D	2/16/2011	264.58	90.45	174.13	Sea Level
LC-67D	8/8/2011	264.58	92.60	171.98	Sea Level
LC-67D	2/23/2012	264.58	89.53	175.05	Sea Level
LC-67D	7/31/2012	264.58	92.23	172.35	Sea Level
LC-67D	2/6/2013	264.58	90.00	174.58	Sea Level
LC-67D	8/7/2013	264.58	95.10	169.48	Sea Level
LC- 67D	2/13/2014	264.58	91.15	173.43	Sea Level
LC- 67D	9/9/2014	264.58	91.16	173.42	Sea Level
LC-68D	12/1/1998	281.75	22.12	259.63	Sea Level
LC-68D	3/1/1999	281.75	24.35	257.40	Sea Level
LC-68D	6/1/1999	281.75	27.64	254.11	Sea Level
LC-68D	9/1/1999	281.75	31.80	249.95	Sea Level
LC-68D	12/1/1999	281.75	25.20	256.55	Sea Level
LC-68D	3/1/2000	281.75	23.71	258.04	Sea Level
LC-68D	6/1/2000	281.75	27.51	254.24	Sea Level
LC-68D	9/1/2000	281.68	33.91	247.77	Sea Level
LC-68D	12/1/2000	281.68	33.86	247.82	Sea Level
LC-68D	3/1/2001	281.68	33.80	247.88	Sea Level
LC-68D	7/29/2005	281.68	32.07	249.61	Sea Level
LC-68D	3/16/2006	281.68	25.22	256.46	Sea Level
LC-68D	9/25/2006	281.68	33.65	248.03	Sea Level
LC-68D	3/20/2007	281.68	24.52	257.16	Sea Level
LC-68D	9/28/2007	281.68	29.34	252.34	Sea Level
LC-68D	3/25/2008	281.68	26.30	255.38	Sea Level
LC-68D	10/8/2008	281.68	28.18	253.50	Sea Level
LC-68D	2/5/2009	281.68	26.75	254.93	Sea Level
LC-68D	8/5/2009	281.68	31.35	250.33	Sea Level
LC-68D	2/10/2010	281.68	26.85	254.83	Sea Level
LC-68D	8/10/2010	281.68	27.65	254.03	Sea Level
LC-68D	2/16/2011	281.68	25.10	256.58	Sea Level
LC-68D	8/10/2011	281.68	27.75	253.93	Sea Level

Appendix D - Historical Depth to Water Measurements and Sea Level Aquifer Trend Graphs

Historical Depth to Water measurements

Log RAM, Joint Base Lewis-McChord, Washington 98433

Well ID	Date	Measuring Pt	Depth to SWL	GW Elev	Aquifer
LC-68D	2/29/2012	281.68	26.15	255.53	Sea Level
LC-68D	7/31/2012	281.68	27.95	253.73	Sea Level
LC-68D	2/7/2013	281.68	26.35	255.33	Sea Level
LC-68D	8/8/2013	281.68	29.95	251.73	Sea Level
LC- 68D	2/13/2014	281.68	27.40	254.28	Sea Level
LC- 68D	9/10/2014	281.68	28.54	253.14	Sea Level
LC-69D	12/1/1998	283.37	24.25	259.12	Sea Level
LC-69D	3/1/1999	283.37	26.30	257.07	Sea Level
LC-69D	6/1/1999	283.37	28.52	254.85	Sea Level
LC-69D	9/1/1999	283.37	34.49	248.88	Sea Level
LC-69D	12/1/1999	283.37	27.03	256.34	Sea Level
LC-69D	3/1/2000	283.37	26.01	257.36	Sea Level
LC-69D	6/1/2000	283.37	29.00	254.37	Sea Level
LC-69D	9/1/2000	283.38	34.29	249.09	Sea Level
LC-69D	12/1/2000	283.38	33.76	249.62	Sea Level
LC-69D	3/1/2001	283.38	33.52	249.86	Sea Level
LC-69D	6/1/2001	283.38	33.41	249.97	Sea Level
LC-69D	9/1/2001	283.38	35.40	247.98	Sea Level
LC-69D	12/1/2001	283.38	30.01	253.37	Sea Level
LC-69D	4/1/2002	283.38	26.34	257.04	Sea Level
LC-69D	6/1/2002	283.38	27.98	255.40	Sea Level
LC-69D	9/1/2002	283.38	33.75	249.63	Sea Level
LC-69D	2/3/2003	283.38	27.44	255.94	Sea Level
LC-69D	3/3/2003	283.38	28.43	254.95	Sea Level
LC-69D	7/1/2003	283.38	31.91	251.47	Sea Level
LC-69D	10/4/2004	283.38	34.15	249.23	Sea Level
LC-69D	4/6/2005	283.38	32.47	250.91	Sea Level
LC-69D	7/21/2005	283.38	33.42	249.96	Sea Level
LC-69D	9/26/2005	283.38	34.29	249.09	Sea Level
LC-69D	3/16/2006	283.38	27.23	256.15	Sea Level
LC-69D	9/21/2006	283.38	34.10	249.28	Sea Level
LC-69D	3/22/2007	283.38	26.46	256.92	Sea Level
LC-69D	9/28/2007	283.38	31.67	251.71	Sea Level
LC-69D	3/25/2008	283.38	28.81	254.57	Sea Level
LC-69D	10/8/2008	283.38	34.72	248.66	Sea Level
LC-69D	2/5/2009	283.38	28.68	254.70	Sea Level
LC-69D	8/4/2009	283.38	32.07	251.31	Sea Level
LC-69D	2/10/2010	283.38	28.25	255.13	Sea Level
LC-69D	8/10/2010	283.38	30.20	253.18	Sea Level
LC-69D	2/16/2011	283.38	27.68	255.70	Sea Level
LC-69D	8/10/2011	283.38	30.35	253.03	Sea Level
LC-69D	2/23/2012	283.38	28.90	254.48	Sea Level
LC-69D	7/31/2012	283.38	30.20	253.18	Sea Level
LC-69D	2/6/2013	283.38	28.92	254.46	Sea Level
LC-69D	8/8/2013	283.38	32.20	251.18	Sea Level
LC- 69D	2/13/2014	283.38	30.50	252.88	Sea Level
LC- 69D	9/10/2014	283.38	31.01	252.37	Sea Level
LC-70D	6/1/1999	281.60	54.52	227.08	Sea Level
LC-70D	9/1/1999	281.60	52.59	229.01	Sea Level
LC-70D	12/1/1999	281.60	45.40	236.20	Sea Level
LC-70D	3/1/2000	281.60	43.90	237.70	Sea Level
LC-70D	6/1/2000	281.60	46.89	234.71	Sea Level
LC-70D	9/1/2000	281.56	52.02	229.54	Sea Level
LC-70D	12/1/2000	281.56	49.95	231.61	Sea Level

Well ID	Date	Measuring Pt	Depth to SWL	GW Elev	Aquifer
LC-70D	3/1/2001	281.56	49.82	231.74	Sea Level
LC-70D	6/1/2001	281.56	50.71	230.85	Sea Level
LC-70D	9/1/2001	281.56	51.10	230.46	Sea Level
LC-70D	12/1/2001	281.56	46.01	235.55	Sea Level
LC-70D	4/1/2002	281.56	43.72	237.84	Sea Level
LC-70D	6/1/2002	281.56	45.12	236.44	Sea Level
LC-70D	9/1/2002	281.56	67.32	214.24	Sea Level
LC-70D	2/3/2003	281.56	46.00	235.56	Sea Level
LC-70D	3/3/2003	281.56	45.95	235.61	Sea Level
LC-70D	7/1/2003	281.56	51.28	230.28	Sea Level
LC-70D	10/4/2004	281.56	52.24	229.32	Sea Level
LC-70D	3/16/2006	281.56	44.25	237.31	Sea Level
LC-70D	9/21/2006	281.56	66.07	215.49	Sea Level
LC-70D	3/22/2007	281.56	44.10	237.46	Sea Level
LC-70D	3/25/2008	281.56	46.48	235.08	Sea Level
LC-70D	2/11/2009	281.56	46.25	235.31	Sea Level
LC-70D	8/6/2009	281.56	62.48	219.08	Sea Level
LC-70D	2/10/2010	281.56	57.55	224.01	Sea Level
LC-70D	8/10/2010	281.56	54.35	227.21	Sea Level
LC-70D	2/16/2011	281.56	49.90	231.66	Sea Level
LC-70D	8/10/2011	281.56	53.50	228.06	Sea Level
LC-70D	2/29/2012	281.56	50.70	230.86	Sea Level
LC-70D	7/31/2012	281.56	53.13	228.43	Sea Level
LC-70D	2/7/2013	281.56	51.81	229.75	Sea Level
LC-70D	8/8/2013	281.56	58.00	223.56	Sea Level
LC- 70D	2/13/2014	281.56	52.15	229.41	Sea Level
LC- 70D	9/10/2014	281.56	54.50	227.06	Sea Level
LC-71D	10/7/1996	271.78	104.76	167.02	Sea Level
LC-71D	1/24/1997	271.78	91.07	180.71	Sea Level
LC-71D	4/23/1997	271.78	85.91	185.87	Sea Level
LC-71D	10/16/1997	271.78	97.65	174.13	Sea Level
LC-71D	1/30/1998	271.78	89.34	182.44	Sea Level
LC-71D	4/2/1998	271.78	88.42	183.36	Sea Level
LC-71D	7/7/1998	271.78	92.45	179.33	Sea Level
LC-71D	9/22/1998	271.78	108.23	163.55	Sea Level
LC-71D	12/1/1998	271.78	87.33	184.45	Sea Level
LC-71D	3/1/1999	271.78	86.58	185.20	Sea Level
LC-71D	6/1/1999	271.78	89.84	181.94	Sea Level
LC-71D	9/1/1999	271.78	95.95	175.83	Sea Level
LC-71D	12/1/1999	271.78	90.08	181.70	Sea Level
LC-71D	3/1/2000	271.78	87.81	183.97	Sea Level
LC-71D	6/1/2000	271.78	89.75	182.03	Sea Level
LC-71D	9/1/2000	271.65	94.67	176.98	Sea Level
LC-71D	12/1/2000	271.65	92.20	179.45	Sea Level
LC-71D	3/1/2001	271.65	92.90	178.75	Sea Level
LC-71D	6/1/2001	271.65	93.77	177.88	Sea Level
LC-71D	9/1/2001	271.65	95.99	175.66	Sea Level
LC-71D	12/1/2001	271.65	90.48	181.17	Sea Level
LC-71D	4/1/2002	271.65	88.35	183.30	Sea Level
LC-71D	6/1/2002	271.65	90.17	181.48	Sea Level
LC-71D	9/1/2002	271.65	96.29	175.36	Sea Level
LC-71D	2/3/2003	271.65	91.13	180.52	Sea Level
LC-71D	3/3/2003	271.65	90.66	180.99	Sea Level
LC-71D	7/1/2003	271.65	96.42	175.23	Sea Level

Well ID	Date	Measuring Pt	Depth to SWL	GW Elev	Aquifer
LC-71D	10/4/2004	271.65	95.53	176.12	Sea Level
LC-71D	2/10/2005	271.65	94.02	177.63	Sea Level
LC-71D	7/19/2005	271.65	97.07	174.58	Sea Level
LC-71D	8/29/2005	271.65	104.41	167.24	Sea Level
LC-71D	3/16/2006	271.65	89.29	182.36	Sea Level
LC-71D	9/21/2006	271.65	97.80	173.85	Sea Level
LC-71D	3/23/2007	271.65	88.45	183.20	Sea Level
LC-71D	10/19/2007	271.65	95.57	176.08	Sea Level
LC-71D	3/25/2008	271.65	91.60	180.05	Sea Level
LC-71D	2/5/2009	271.65	90.59	181.06	Sea Level
LC-71D	8/6/2009	271.65	98.15	173.50	Sea Level
LC-72D	10/7/1996	266.33	101.72	164.61	Sea Level
LC-72D	1/24/1997	266.33	86.44	179.89	Sea Level
LC-72D	4/23/1997	266.33	81.30	185.03	Sea Level
LC-72D	10/16/1997	266.33	91.42	174.91	Sea Level
LC-72D	1/30/1998	266.33	84.26	182.07	Sea Level
LC-72D	4/2/1998	266.33	83.73	182.60	Sea Level
LC-72D	7/7/1998	266.33	87.18	179.15	Sea Level
LC-72D	9/22/1998	266.33	103.78	162.55	Sea Level
LC-72D	12/1/1998	266.33	82.61	183.72	Sea Level
LC-72D	3/1/1999	266.33	82.15	184.18	Sea Level
LC-72D	6/1/1999	266.33	85.02	181.31	Sea Level
LC-72D	9/1/1999	266.33	90.35	175.98	Sea Level
LC-72D	12/1/1999	266.33	85.03	181.30	Sea Level
LC-72D	3/1/2000	266.33	83.05	183.28	Sea Level
LC-72D	6/1/2000	266.33	84.80	181.53	Sea Level
LC-72D	9/1/2000	266.23	89.47	176.76	Sea Level
LC-72D	12/1/2000	266.23	87.57	178.66	Sea Level
LC-72D	3/1/2001	266.23	87.97	178.26	Sea Level
LC-72D	6/1/2001	266.23	88.90	177.33	Sea Level
LC-72D	9/1/2001	266.23	91.87	174.36	Sea Level
LC-72D	12/1/2001	266.23	85.96	180.27	Sea Level
LC-72D	4/1/2002	266.23	83.60	182.63	Sea Level
LC-72D	6/1/2002	266.23	85.78	180.45	Sea Level
LC-72D	9/1/2002	266.23	87.80	178.43	Sea Level
LC-72D	2/3/2003	266.23	86.49	179.74	Sea Level
LC-72D	3/3/2003	266.23	86.05	180.18	Sea Level
LC-72D	7/1/2003	266.23	91.35	174.88	Sea Level
LC-72D	10/4/2004	266.23	90.50	175.73	Sea Level
LC-72D	4/15/2005	266.23	89.50	176.73	Sea Level
LC-72D	7/29/2005	266.23	93.88	172.35	Sea Level
LC-72D	8/30/2005	266.23	94.04	172.19	Sea Level
LC-72D	3/16/2006	266.23	84.50	181.73	Sea Level
LC-72D	9/21/2006	266.23	92.07	174.16	Sea Level
LC-72D	3/21/2007	266.23	83.70	182.53	Sea Level
LC-72D	9/27/2007	266.23	91.63	174.60	Sea Level
LC-72D	3/25/2008	266.23	87.17	179.06	Sea Level
LC-72D	10/8/2008	266.23	91.98	174.25	Sea Level
LC-72D	2/5/2009	266.23	86.40	179.83	Sea Level
LC-72D	8/6/2009	266.23	91.77	174.46	Sea Level
LC-72D	2/9/2010	266.23	91.35	174.88	Sea Level
LC-72D	8/13/2010	266.23	113.45	152.78	Sea Level
LC-72D	2/17/2011	266.23	108.75	157.48	Sea Level
LC-72D	8/8/2011	266.23	110.55	155.68	Sea Level

Well ID	Date	Measuring Pt	Depth to SWL	GW Elev	Aquifer
LC-72D	3/2/2012	266.23	107.80	158.43	Sea Level
LC-72D	7/31/2012	266.23	109.94	156.29	Sea Level
LC-72D	2/5/2013	266.23	107.41	158.82	Sea Level
LC-72D	8/6/2013	266.23	112.05	154.18	Sea Level
LC- 72D	2/13/2014	266.23	108.40	157.83	Sea Level
LC- 72D	9/9/2014	266.23	108.20	158.03	Sea Level
LC-73D	10/7/1996	271.43	104.48	166.95	Sea Level
LC-73D	1/24/1997	271.43	92.16	179.27	Sea Level
LC-73D	4/23/1997	271.43	87.19	184.24	Sea Level
LC-73D	10/16/1997	271.43	96.29	175.14	Sea Level
LC-73D	1/30/1998	271.43	90.07	181.36	Sea Level
LC-73D	4/2/1998	271.43	89.58	181.85	Sea Level
LC-73D	7/7/1998	271.43	90.00	181.43	Sea Level
LC-73D	9/22/1998	271.43	110.18	161.25	Sea Level
LC-73D	12/1/1998	271.43	88.47	182.96	Sea Level
LC-73D	3/1/1999	271.43	87.90	183.53	Sea Level
LC-73D	6/1/1999	271.43	91.40	180.03	Sea Level
LC-73D	9/1/1999	271.43	96.90	174.53	Sea Level
LC-73D	12/1/1999	271.43	91.05	180.38	Sea Level
LC-73D	3/1/2000	271.43	89.05	182.38	Sea Level
LC-73D	6/1/2000	271.43	90.77	180.66	Sea Level
LC-73D	9/1/2000	271.28	95.44	175.84	Sea Level
LC-73D	12/1/2000	271.28	93.54	177.74	Sea Level
LC-73D	3/1/2001	271.28	94.02	177.26	Sea Level
LC-73D	6/1/2001	271.28	94.83	176.45	Sea Level
LC-73D	9/1/2001	271.28	96.92	174.36	Sea Level
LC-73D	12/1/2001	271.28	90.31	180.97	Sea Level
LC-73D	4/1/2002	271.28	89.58	181.70	Sea Level
LC-73D	6/1/2002	271.28	89.95	181.33	Sea Level
LC-73D	9/1/2002	271.28	90.97	180.31	Sea Level
LC-73D	2/3/2003	271.28	92.47	178.81	Sea Level
LC-73D	3/3/2003	271.28	92.04	179.24	Sea Level
LC-73D	7/1/2003	271.28	97.31	173.97	Sea Level
LC-73D	10/4/2004	271.28	96.41	174.87	Sea Level
LC-73D	4/15/2005	271.28	95.42	175.86	Sea Level
LC-73D	7/29/2005	271.28	100.32	170.96	Sea Level
LC-73D	9/8/2005	271.28	99.69	171.59	Sea Level
LC-73D	3/16/2006	271.28	90.37	180.91	Sea Level
LC-73D	9/21/2006	271.28	98.02	173.26	Sea Level
LC-73D	3/21/2007	271.28	89.66	181.62	Sea Level
LC-73D	9/27/2007	271.28	97.68	173.60	Sea Level
LC-73D	3/25/2008	271.28	93.20	178.08	Sea Level
LC-73D	10/8/2008	271.28	97.98	173.30	Sea Level
LC-73D	2/5/2009	271.28	92.38	178.90	Sea Level
LC-73D	8/6/2009	271.28	97.65	173.63	Sea Level
LC-73D	2/9/2010	271.28	97.35	173.93	Sea Level
LC-73D	8/13/2010	271.28	120.37	150.91	Sea Level
LC-73D	2/17/2011	271.28	115.62	155.66	Sea Level
LC-73D	8/8/2011	271.28	117.25	154.03	Sea Level
LC-73D	10/4/2011	271.28	117.80	153.48	Sea Level
LC-73D	3/2/2012	271.28	114.62	156.66	Sea Level
LC-73D	7/31/2012	271.28	116.64	154.64	Sea Level
LC-73D	2/7/2013	271.28	114.26	157.02	Sea Level
LC-73D	8/6/2013	271.28	118.80	152.48	Sea Level

Well ID	Date	Measuring Pt	Depth to SWL	GW Elev	Aquifer
LC- 73D	2/13/2014	271.28	115.10	156.18	Sea Level
LC- 73D	9/9/2014	271.28	114.87	156.41	Sea Level
LC-74D	10/7/1996	276.99	118.61	158.38	Sea Level
LC-74D	1/24/1997	276.99	97.16	179.83	Sea Level
LC-74D	4/23/1997	276.99	95.03	181.96	Sea Level
LC-74D	10/16/1997	276.99	101.25	175.74	Sea Level
LC-74D	1/30/1998	276.99	98.25	178.74	Sea Level
LC-74D	4/2/1998	276.99	97.60	179.39	Sea Level
LC-74D	7/7/1998	276.99	99.94	177.05	Sea Level
LC-74D	9/22/1998	276.99	120.79	156.20	Sea Level
LC-74D	12/1/1998	276.99	96.60	180.39	Sea Level
LC-74D	3/1/1999	276.99	96.52	180.47	Sea Level
LC-74D	6/1/1999	276.99	98.62	178.37	Sea Level
LC-74D	9/1/1999	276.99	104.25	172.74	Sea Level
LC-74D	12/1/1999	276.99	99.35	177.64	Sea Level
LC-74D	3/1/2000	276.99	97.33	179.66	Sea Level
LC-74D	6/1/2000	276.99	99.03	177.96	Sea Level
LC-74D	9/1/2000	276.50	103.76	172.74	Sea Level
LC-74D	12/1/2000	276.50	101.85	174.65	Sea Level
LC-74D	3/1/2001	276.50	102.52	173.98	Sea Level
LC-74D	6/1/2001	276.50	103.32	173.18	Sea Level
LC-74D	9/1/2001	276.50	105.62	170.88	Sea Level
LC-74D	12/1/2001	276.50	99.52	176.98	Sea Level
LC-74D	4/1/2002	276.50	98.00	178.50	Sea Level
LC-74D	6/1/2002	276.50	99.61	176.89	Sea Level
LC-74D	9/1/2002	276.50	101.57	174.93	Sea Level
LC-74D	2/3/2003	276.50	100.92	175.58	Sea Level
LC-74D	3/3/2003	276.50	100.48	176.02	Sea Level
LC-74D	7/1/2003	276.50	106.00	170.50	Sea Level
LC-74D	10/4/2004	276.50	104.66	171.84	Sea Level
LC-74D	4/15/2005	276.50	103.79	172.71	Sea Level
LC-74D	7/29/2005	276.50	111.57	164.93	Sea Level
LC-74D	9/8/2005	276.50	107.87	168.63	Sea Level
LC-74D	3/16/2006	276.50	98.65	177.85	Sea Level
LC-74D	9/21/2006	276.50	106.49	170.01	Sea Level
LC-74D	3/21/2007	276.50	98.01	178.49	Sea Level
LC-74D	10/17/2007	276.50	105.21	171.29	Sea Level
LC-74D	3/25/2008	276.50	102.37	174.13	Sea Level
LC-74D	10/8/2008	276.50	106.96	169.54	Sea Level
LC-74D	2/6/2009	276.50	100.62	175.88	Sea Level
LC-74D	8/17/2009	276.50	109.57	166.93	Sea Level
LC-74D	10/13/2009	276.50	106.00	170.50	Sea Level
LC-74D	11/16/2009	276.50	108.75	167.75	Sea Level
LC-74D	12/7/2009	276.50	119.66	156.84	Sea Level
LC-74D	12/18/2009	276.50	116.83	159.67	Sea Level
LC-74D	1/21/2010	276.50	128.41	148.09	Sea Level
LC-74D	2/18/2010	276.50	101.27	175.23	Sea Level
LC-74D	3/18/2010	276.50	101.27	175.23	Sea Level
LC-74D	4/2/2010	276.50	104.86	171.64	Sea Level
LC-74D	4/21/2010	276.50	129.31	147.19	Sea Level
LC-74D	5/11/2010	276.50	129.78	146.72	Sea Level
LC-74D	6/3/2010	276.50	130.32	146.18	Sea Level
LC-74D	8/13/2010	276.50	132.20	144.30	Sea Level
LC-74D	2/17/2011	276.50	127.25	149.25	Sea Level

Well ID	Date	Measuring Pt	Depth to SWL	GW Elev	Aquifer
LC-74D	8/8/2011	276.50	128.60	147.90	Sea Level
LC-74D	10/4/2011	276.50	129.15	147.35	Sea Level
LC-74D	2/27/2012	276.50	125.90	150.60	Sea Level
LC-74D	8/2/2012	276.50	128.07	148.43	Sea Level
LC-74D	2/5/2013	276.5	125.38	151.12	Sea Level
LC-74D	8/6/2013	276.5	130.48	146.02	Sea Level
LC- 74D	2/13/2014	276.50	126.40	150.10	Sea Level
LC- 74D	9/3/2014	276.50	126.60	149.90	Sea Level
LC-75D	9/1/2000	281.18	48.45	232.73	Sea Level
LC-75D	12/1/2000	281.18	43.87	237.31	Sea Level
LC-75D	3/1/2001	281.18	44.63	236.55	Sea Level
LC-75D	6/1/2001	281.18	48.54	232.64	Sea Level
LC-75D	9/1/2001	281.18	49.82	231.36	Sea Level
LC-75D	12/1/2001	281.18	44.30	236.88	Sea Level
LC-75D	4/1/2002	281.18	37.26	243.92	Sea Level
LC-75D	6/1/2002	281.18	41.52	239.66	Sea Level
LC-75D	9/1/2002	281.18	48.23	232.95	Sea Level
LC-75D	2/3/2003	281.18	40.84	240.34	Sea Level
LC-75D	3/3/2003	281.18	42.04	239.14	Sea Level
LC-75D	7/1/2003	281.18	46.74	234.44	Sea Level
LC-75D	10/4/2004	281.18	46.54	234.64	Sea Level
LC-75D	4/15/2005	281.18	43.53	237.65	Sea Level
LC-75D	7/29/2005	281.18	48.57	232.61	Sea Level
LC-75D	9/9/2005	281.18	49.02	232.16	Sea Level
LC-75D	3/16/2006	281.18	39.21	241.97	Sea Level
LC-75D	9/20/2006	281.18	46.46	234.72	Sea Level
LC-75D	3/21/2007	281.18	35.18	246.00	Sea Level
LC-75D	9/28/2007	281.18	44.28	236.90	Sea Level
LC-75D	3/25/2008	281.18	39.86	241.32	Sea Level
LC-75D	10/8/2008	281.18	47.36	233.82	Sea Level
LC-75D	2/5/2009	281.18	42.40	238.78	Sea Level
LC-75D	8/4/2009	281.18	48.75	232.43	Sea Level
LC-75D	2/10/2010	281.18	42.15	239.03	Sea Level
LC-75D	8/10/2010	281.18	43.67	237.51	Sea Level
LC-75D	2/16/2011	281.18	40.80	240.38	Sea Level
LC-75D	8/8/2011	281.18	43.70	237.48	Sea Level
LC-75D	2/29/2012	281.18	41.50	239.68	Sea Level
LC-75D	8/2/2012	281.18	46.69	234.49	Sea Level
LC-75D	2/6/2013	281.18	41.65	239.53	Sea Level
LC-75D	8/7/2013	281.18	50.00	231.18	Sea Level
LC- 75D	2/13/2014	281.18	43.25	237.93	Sea Level
LC- 75D	9/9/2014	281.18	43.46	237.72	Sea Level
LC-76D	9/1/2000	282.06	113.68	168.38	Sea Level
LC-76D	12/1/2000	282.06	111.82	170.24	Sea Level
LC-76D	3/1/2001	282.06	112.42	169.64	Sea Level
LC-76D	6/1/2001	282.06	113.19	168.87	Sea Level
LC-76D	9/1/2001	282.06	115.92	166.14	Sea Level
LC-76D	12/1/2001	282.06	110.12	171.94	Sea Level
LC-76D	4/1/2002	282.06	108.12	173.94	Sea Level
LC-76D	6/1/2002	282.06	109.90	172.16	Sea Level
LC-76D	9/1/2002	282.06	115.88	166.18	Sea Level
LC-76D	2/3/2003	282.06	111.02	171.04	Sea Level
LC-76D	3/3/2003	282.06	110.60	171.46	Sea Level
LC-76D	7/1/2003	282.06	115.60	166.46	Sea Level

Well ID	Date	Measuring Pt	Depth to SWL	GW Elev	Aquifer
LC-76D	10/4/2004	282.06	114.65	167.41	Sea Level
LC-76D	3/16/2006	282.06	108.78	173.28	Sea Level
LC-76D	9/26/2006	282.06	116.33	165.73	Sea Level
LC-76D	3/21/2007	282.06	108.23	173.83	Sea Level
LC-76D	10/18/2007	282.06	115.23	166.83	Sea Level
LC-76D	3/25/2008	282.06	111.70	170.36	Sea Level
LC-76D	10/8/2008	282.06	116.30	165.76	Sea Level
LC-76D	2/6/2009	282.06	110.47	171.59	Sea Level
LC-76D	8/4/2009	282.06	115.78	166.28	Sea Level
LC-76D	2/9/2010	282.06	115.95	166.11	Sea Level
LC-76D	8/13/2010	282.06	138.28	143.78	Sea Level
LC-76D	2/17/2011	282.06	133.46	148.60	Sea Level
LC-76D	8/8/2011	282.06	134.82	147.24	Sea Level
LC-76D	2/27/2012	282.06	132.28	149.78	Sea Level
LC-76D	8/1/2012	282.06	134.48	147.58	Sea Level
LC-76D	2/5/2013	282.06	131.82	150.24	Sea Level
LC-76D	8/6/2013	282.06	136.20	145.86	Sea Level
LC- 76D	2/12/2014	282.06	132.60	149.46	Sea Level
LC- 76D	9/10/2014	282.06	132.32	149.74	Sea Level
LC-77D	9/1/2000	278.15	95.07	183.08	Sea Level
LC-77D	12/1/2000	278.15	93.25	184.90	Sea Level
LC-77D	3/1/2001	278.15	93.44	184.71	Sea Level
LC-77D	6/1/2001	278.15	94.23	183.92	Sea Level
LC-77D	9/1/2001	278.15	96.49	181.66	Sea Level
LC-77D	12/1/2001	278.15	91.08	187.07	Sea Level
LC-77D	4/1/2002	278.15	89.19	188.96	Sea Level
LC-77D	6/1/2002	278.15	90.95	187.20	Sea Level
LC-77D	9/1/2002	278.15	96.77	181.38	Sea Level
LC-77D	2/3/2003	278.15	92.09	186.06	Sea Level
LC-77D	3/3/2003	278.15	91.54	186.61	Sea Level
LC-77D	7/1/2003	278.15	96.34	181.81	Sea Level
LC-77D	10/4/2004	278.15	95.99	182.16	Sea Level
LC-77D	4/14/2005	278.15	94.86	183.29	Sea Level
LC-77D	7/21/2005	278.15	97.40	180.75	Sea Level
LC-77D	9/6/2005	278.15	99.00	179.15	Sea Level
LC-77D	3/16/2006	278.15	90.04	188.11	Sea Level
LC-77D	9/25/2006	278.15	97.35	180.80	Sea Level
LC-77D	3/22/2007	278.15	89.45	188.70	Sea Level
LC-77D	9/28/2007	278.15	96.75	181.40	Sea Level
LC-77D	3/25/2008	278.15	92.52	185.63	Sea Level
LC-77D	10/8/2008	278.15	97.28	180.87	Sea Level
LC-77D	2/6/2009	278.15	91.67	186.48	Sea Level
LC-77D	8/5/2009	278.15	97.69	180.46	Sea Level
LC-77D	2/9/2010	278.15	97.05	181.10	Sea Level
LC-77D	8/12/2010	278.15	114.50	163.65	Sea Level
LC-77D	2/17/2011	278.15	110.70	167.45	Sea Level
LC-77D	8/9/2011	278.15	112.72	165.43	Sea Level
LC-77D	2/28/2012	278.15	109.87	168.28	Sea Level
LC-77D	8/1/2012	278.15	106.54	171.61	Sea Level
LC-77D	2/7/2013	278.15	103.17	174.98	Sea Level
LC-77D	8/8/2013	278.15	107.30	170.85	Sea Level
LC- 77D	2/19/2014	278.15	103.60	174.55	Sea Level
LC- 77D	9/11/2014	278.15	104.20	173.95	Sea Level
LC-79D	2/3/2003	275.74	73.02	202.72	Sea Level

Well ID	Date	Measuring Pt	Depth to SWL	GW Elev	Aquifer
LC-79D	3/3/2003	275.74	71.92	203.82	Sea Level
LC-79D	7/1/2003	275.74	76.76	198.98	Sea Level
LC-79D	10/4/2004	275.74	76.58	199.16	Sea Level
LC-79D	4/14/2005	275.74	74.45	201.29	Sea Level
LC-79D	7/21/2005	275.74	76.73	199.01	Sea Level
LC-79D	3/16/2006	275.74	68.50	207.24	Sea Level
LC-79D	9/25/2006	275.74	77.30	198.44	Sea Level
LC-79D	3/22/2007	275.74	68.25	207.49	Sea Level
LC-79D	10/19/2007	275.74	74.80	200.94	Sea Level
LC-79D	3/25/2008	275.74	70.40	205.34	Sea Level
LC-79D	10/8/2008	275.74	75.90	199.84	Sea Level
LC-79D	2/11/2009	275.74	69.75	205.99	Sea Level
LC-79D	8/5/2009	275.74	76.80	198.94	Sea Level
LC-79D	2/9/2010	275.74	77.30	198.44	Sea Level
LC-79D	2/17/2011	275.74	82.80	192.94	Sea Level
LC-79D	8/9/2011	275.74	85.54	190.20	Sea Level
LC-79D	3/1/2012	275.74	82.30	193.44	Sea Level
LC-79D	8/2/2012	275.74	84.96	190.78	Sea Level
LC-79D	2/7/2013	275.74	82.03	193.71	Sea Level
LC-79D	8/9/2013	275.74	86.80	188.94	Sea Level
LC- 79D	2/18/2014	275.74	82.50	193.24	Sea Level
LC- 79D	9/10/2014	275.74	83.38	192.36	Sea Level
LC-79D-2	2/3/2003	275.74	71.81	203.93	Sea Level
LC-79D-2	3/3/2003	275.74	71.04	204.70	Sea Level
LC-79D-2	7/1/2003	275.74	75.99	199.75	Sea Level
LC-79D-2	10/4/2004	275.74	76.19	199.55	Sea Level
LC-79D-3	2/3/2003	275.74	70.84	204.90	Sea Level
LC-79D-3	3/3/2003	275.74	69.99	205.75	Sea Level
LC-79D-3	7/1/2003	275.74	76.13	199.61	Sea Level
LC-79D-3	10/4/2004	275.74	76.16	199.58	Sea Level
LC-79D-4	2/3/2003	275.74	70.77	204.97	Sea Level
LC-79D-4	3/3/2003	275.74	69.99	205.75	Sea Level
LC-79D-4	7/1/2003	275.74	76.15	199.59	Sea Level
LC-79D-4	10/4/2004	275.74	75.79	199.95	Sea Level
LC-80D	2/3/2003	264.72	90.71	174.01	Sea Level
LC-80D	7/1/2003	264.72	93.24	171.48	Sea Level
LC-80D	10/4/2004	264.72	92.58	172.14	Sea Level
LC-80D	4/12/2005	264.72	91.70	173.02	Sea Level
LC-80D	7/29/2005	264.72	94.93	169.79	Sea Level
LC-80D	10/4/2005	264.72	95.71	169.01	Sea Level
LC-80D	3/16/2006	264.72	86.50	178.22	Sea Level
LC-80D	9/25/2006	264.72	94.45	170.27	Sea Level
LC-80D	10/5/2007	264.72	93.40	171.32	Sea Level
LC-80D	10/8/2008	264.72	93.95	170.77	Sea Level
LC-80D	2/6/2009	264.72	87.88	176.84	Sea Level
LC-80D	8/6/2009	264.72	94.10	170.62	Sea Level
LC-80D	2/9/2010	264.72	94.30	170.42	Sea Level
LC-80D	2/15/2011	264.72	111.22	153.50	Sea Level
LC-80D	8/9/2011	264.72	112.90	151.82	Sea Level
LC-80D	3/1/2012	264.72	110.08	154.64	Sea Level
LC-80D	8/3/2012	264.72	112.59	152.13	Sea Level
LC-80D	2/7/2013	264.72	109.70	155.02	Sea Level
LC-80D	8/6/2013	264.72	114.18	150.54	Sea Level
LC- 80D	2/12/2014	264.72	110.35	154.37	Sea Level

Well ID	Date	Measuring Pt	Depth to SWL	GW Elev	Aquifer
LC- 80D	9/9/2014	264.72	110.23	154.49	Sea Level
LC-80D-2	2/3/2003	264.72	90.74	173.98	Sea Level
LC-80D-2	7/1/2003	264.72	93.27	171.45	Sea Level
LC-80D-2	10/4/2004	264.72	92.54	172.18	Sea Level
LC-80D-3	2/3/2003	264.72	90.76	173.96	Sea Level
LC-80D-3	3/3/2003	264.72	90.28	174.44	Sea Level
LC-80D-3	7/1/2003	264.72	93.28	171.44	Sea Level
LC-80D-3	10/4/2004	264.72	92.50	172.22	Sea Level
LC-80D-4	2/3/2003	264.72	90.82	173.90	Sea Level
LC-80D-4	7/1/2003	264.72	93.32	171.40	Sea Level
LC-81D	2/3/2003	270.15	104.60	165.55	Sea Level
LC-81D	3/3/2003	270.15	104.10	166.05	Sea Level
LC-81D	7/1/2003	270.15	108.83	161.32	Sea Level
LC-81D	10/4/2004	270.15	108.04	162.11	Sea Level
LC-81D	4/15/2005	270.15	107.12	163.03	Sea Level
LC-81D	7/29/2005	270.15	109.95	160.20	Sea Level
LC-81D	10/18/2005	270.15	110.88	159.27	Sea Level
LC-81D	3/16/2006	270.15	102.28	167.87	Sea Level
LC-81D	9/26/2006	270.15	109.80	160.35	Sea Level
LC-81D	3/20/2007	270.15	101.90	168.25	Sea Level
LC-81D	10/19/2007	270.15	108.90	161.25	Sea Level
LC-81D	4/3/2008	270.15	105.10	165.05	Sea Level
LC-81D	10/8/2008	270.15	109.40	160.75	Sea Level
LC-81D	2/6/2009	270.15	104.25	165.90	Sea Level
LC-81D	8/6/2009	270.15	109.60	160.55	Sea Level
LC-81D	2/8/2010	270.15	111.20	158.95	Sea Level
LC-81D	2/16/2011	270.15	124.55	145.60	Sea Level
LC-81D	8/9/2011	270.15	125.92	144.23	Sea Level
LC-81D	3/1/2012	270.15	123.56	146.59	Sea Level
LC-81D	8/2/2012	270.15	125.79	144.36	Sea Level
LC-81D	2/5/2013	270.15	123.27	146.88	Sea Level
LC-81D	8/6/2013	270.15	127.30	142.85	Sea Level
LC- 81D	2/11/2014	270.15	124.90	145.25	Sea Level
LC- 81D	9/9/2014	270.15	123.75	146.40	Sea Level
LC-81D-2	2/3/2003	270.15	104.62	165.53	Sea Level
LC-81D-2	3/3/2003	270.15	104.07	166.08	Sea Level
LC-81D-2	7/1/2003	270.15	108.83	161.32	Sea Level
LC-81D-2	10/4/2004	270.15	108.02	162.13	Sea Level
LC-81D-3	2/3/2003	270.15	104.15	166.00	Sea Level
LC-81D-3	3/3/2003	270.15	103.65	166.50	Sea Level
LC-81D-3	7/1/2003	270.15	108.40	161.75	Sea Level
LC-81D-3	10/4/2004	270.15	107.55	162.60	Sea Level
LC-81D-4	2/3/2003	270.15	103.25	166.90	Sea Level
LC-81D-4	3/3/2003	270.15	102.64	167.51	Sea Level
LC-81D-4	7/1/2003	270.15	107.48	162.67	Sea Level
LC-81D-4	10/4/2004	270.15	106.65	163.50	Sea Level
LC-82D	2/3/2003	276.87	104.24	172.63	Sea Level
LC-82D	3/3/2003	276.87	103.80	173.07	Sea Level
LC-82D	7/1/2003	276.87	109.08	167.79	Sea Level
LC-82D	10/4/2004	276.87	108.72	168.15	Sea Level
LC-82D	4/15/2005	276.87	106.70	170.17	Sea Level
LC-82D	7/29/2005	276.87	113.87	163.00	Sea Level
LC-82D	10/21/2005	276.87	109.92	166.95	Sea Level
LC-82D	3/17/2006	276.87	102.83	174.04	Sea Level

Well ID	Date	Measuring Pt	Depth to SWL	GW Elev	Aquifer
LC-82D	9/25/2006	276.87	109.75	167.12	Sea Level
LC-82D	3/20/2007	276.87	102.85	174.02	Sea Level
LC-82D	10/19/2007	276.87	108.65	168.22	Sea Level
LC-82D	10/8/2008	276.87	110.00	166.87	Sea Level
LC-82D	2/6/2009	276.87	103.60	173.27	Sea Level
LC-82D	8/7/2009	276.87	109.20	167.67	Sea Level
LC-82D	2/9/2010	276.87	109.20	167.67	Sea Level
LC-82D	2/17/2011	276.87	127.15	149.72	Sea Level
LC-82D	8/9/2011	276.87	128.58	148.29	Sea Level
LC-82D	3/1/2012	276.87	118.20	158.67	Sea Level
LC-82D	8/2/2012	276.87	128.09	148.78	Sea Level
LC-82D	2/5/2013	276.87	125.45	151.42	Sea Level
LC-82D	8/6/2013	276.87	130.00	146.87	Sea Level
LC- 82D	2/12/2014	276.87	126.45	150.42	Sea Level
LC- 82D	9/9/2014	276.87	126.13	150.74	Sea Level
LC-82D-2	2/3/2003	276.87	105.35	171.52	Sea Level
LC-82D-2	3/3/2003	276.87	104.83	172.04	Sea Level
LC-82D-2	7/1/2003	276.87	109.96	166.91	Sea Level
LC-82D-2	10/4/2004	276.87	108.72	168.15	Sea Level
LC-82D-3	2/3/2003	276.87	105.09	171.78	Sea Level
LC-82D-3	3/3/2003	276.87	104.62	172.25	Sea Level
LC-82D-3	7/1/2003	276.87	109.83	167.04	Sea Level
LC-82D-3	10/4/2004	276.87	107.92	168.95	Sea Level
LC-82D-4	2/3/2003	276.87	105.05	171.82	Sea Level
LC-82D-4	3/3/2003	276.87	104.62	172.25	Sea Level
LC-82D-4	7/1/2003	276.87	109.82	167.05	Sea Level
LC-82D-4	10/4/2004	276.87	108.82	168.05	Sea Level
LC-83D	2/3/2003	268.91	94.23	174.68	Sea Level
LC-83D	3/3/2003	268.91	93.78	175.13	Sea Level
LC-83D	7/1/2003	268.91	99.13	169.78	Sea Level
LC-83D	10/4/2004	268.91	98.42	170.49	Sea Level
LC-83D	4/15/2005	268.91	97.50	171.41	Sea Level
LC-83D	7/29/2005	268.91	101.30	167.61	Sea Level
LC-83D	10/4/2005	268.91	101.54	167.37	Sea Level
LC-83D	3/16/2006	268.91	92.46	176.45	Sea Level
LC-83D	9/25/2006	268.91	100.30	168.61	Sea Level
LC-83D	3/21/2007	268.91	91.90	177.01	Sea Level
LC-83D	10/18/2007	268.91	99.02	169.89	Sea Level
LC-83D	4/3/2008	268.91	95.30	173.61	Sea Level
LC-83D	10/8/2008	268.91	99.70	169.21	Sea Level
LC-83D	2/6/2009	268.91	94.25	174.66	Sea Level
LC-83D	8/17/2009	268.91	99.20	169.71	Sea Level
LC-83D	2/18/2010	268.91	94.55	174.36	Sea Level
LC-83D	4/21/2010	268.91	122.55	146.36	Sea Level
LC-83D	5/11/2010	268.91	123.20	145.71	Sea Level
LC-83D	2/17/2011	268.91	124.40	144.51	Sea Level
LC-83D	8/9/2011	268.91	121.87	147.04	Sea Level
LC-83D	2/28/2012	268.91	119.05	149.86	Sea Level
LC-83D	8/2/2012	268.91	121.44	147.47	Sea Level
LC-83D	2/5/2013	268.91	118.62	150.29	Sea Level
LC-83D	8/6/2013	268.91	123.20	145.71	Sea Level
LC- 83D	2/12/2014	268.91	119.50	149.41	Sea Level
LC- 83D	9/9/2014	268.91	118.83	150.08	Sea Level
LC-83D-2	2/3/2003	268.91	94.64	174.27	Sea Level

Appendix D - Historical Depth to Water Measurements and Sea Level Aquifer Trend Graphs

Historical Depth to Water measurements

Log RAM, Joint Base Lewis-McChord, Washington 98433

Well ID	Date	Measuring Pt	Depth to SWL	GW Elev	Aquifer
LC-83D-2	3/3/2003	268.91	94.20	174.71	Sea Level
LC-83D-2	7/1/2003	268.91	99.42	169.49	Sea Level
LC-83D-2	10/4/2004	268.91	98.41	170.50	Sea Level
LC-83D-3	2/3/2003	268.91	94.58	174.33	Sea Level
LC-83D-3	3/3/2003	268.91	94.15	174.76	Sea Level
LC-83D-3	7/1/2003	268.91	99.39	169.52	Sea Level
LC-83D-3	10/4/2004	268.91	98.18	170.73	Sea Level
LC-83D-4	2/3/2003	268.91	94.31	174.60	Sea Level
LC-83D-4	3/3/2003	268.91	93.83	175.08	Sea Level
LC-83D-4	7/1/2003	268.91	99.08	169.83	Sea Level
LC-83D-4	10/4/2004	268.91	98.00	170.91	Sea Level
LC-84D-1	10/4/2004	269.39	108.00	161.39	Sea Level
LC-84D-1	11/1/2004	269.39	105.43	163.96	Sea Level
LC-84D-1	2/23/2005	269.39	103.39	166.00	Sea Level
LC-84D-1	6/21/2005	269.39	105.20	164.19	Sea Level
LC-84D-1	9/29/2005	269.39	109.31	160.08	Sea Level
LC-84D-1	12/28/2005	269.39	104.33	165.06	Sea Level
LC-84D-1	3/16/2006	269.39	100.01	169.38	Sea Level
LC-84D-1	9/26/2006	269.39	106.41	162.98	Sea Level
LC-84D-1	3/19/2007	269.39	98.59	170.80	Sea Level
LC-84D-1	10/19/2007	269.39	105.33	164.06	Sea Level
LC-84D-1	4/3/2008	269.39	101.99	167.40	Sea Level
LC-84D-1	10/8/2008	269.39	106.46	162.93	Sea Level
LC-84D-1	2/6/2009	269.39	100.82	168.57	Sea Level
LC-84D-1	8/7/2009	269.39	106.00	163.39	Sea Level
LC-84D-1	2/9/2010	269.39	106.05	163.34	Sea Level
LC-84D-1	8/13/2010	269.39	126.38	143.01	Sea Level
LC-84D-1	2/17/2011	269.39	121.65	147.74	Sea Level
LC-84D-1	8/4/2011	269.39	123.12	146.27	Sea Level
LC-84D-1	3/1/2012	269.39	120.72	148.67	Sea Level
LC-84D-1	8/2/2012	269.39	122.70	146.69	Sea Level
LC-84D-1	2/5/2013	269.39	120.17	149.22	Sea Level
LC-84D-1	8/6/2013	269.39	124.45	144.94	Sea Level
LC-84D-2	10/4/2004	269.29	107.50	161.79	Sea Level
LC-84D-2	11/1/2004	269.29	104.85	164.44	Sea Level
LC-84D-2	2/23/2005	269.29	103.42	165.87	Sea Level
LC-84D-2	6/21/2005	269.29	104.60	164.69	Sea Level
LC-84D-2	9/29/2005	269.29	108.75	160.54	Sea Level
LC-84D-2	12/28/2005	269.29	110.89	158.40	Sea Level
LC-84D-2	3/16/2006	269.29	99.43	169.86	Sea Level
LC-84D-2	9/26/2006	269.29	106.37	162.92	Sea Level
LC-84D-2	3/29/2007	269.29	98.29	171.00	Sea Level
LC-84D-2	10/19/2007	269.29	105.10	164.19	Sea Level
LC-84D-2	4/3/2008	269.29	101.73	167.56	Sea Level
LC-84D-2	10/8/2008	269.29	106.24	163.05	Sea Level
LC-84D-2	2/6/2009	269.29	100.55	168.74	Sea Level
LC-85D-1	10/4/2004	285.15	114.91	170.24	Sea Level
LC-85D-1	11/1/2004	285.15	112.24	172.91	Sea Level
LC-85D-1	2/23/2005	285.15	110.53	174.62	Sea Level
LC-85D-1	6/23/2005	285.15	113.10	172.05	Sea Level
LC-85D-1	10/25/2005	285.15	113.47	171.68	Sea Level
LC-85D-1	12/28/2005	285.15	110.89	174.26	Sea Level
LC-85D-1	3/16/2006	285.15	106.31	178.84	Sea Level
LC-85D-1	9/25/2006	285.15	114.35	170.80	Sea Level

Well ID	Date	Measuring Pt	Depth to SWL	GW Elev	Aquifer
LC-85D-1	3/20/2007	285.15	105.72	179.43	Sea Level
LC-85D-1	9/21/2007	285.15	115.50	169.65	Sea Level
LC-85D-1	4/3/2008	285.15	109.99	175.16	Sea Level
LC-85D-1	10/8/2008	285.15	114.68	170.47	Sea Level
LC-85D-1	2/6/2009	285.15	108.25	176.90	Sea Level
LC-85D-1	8/12/2009	285.15	113.55	171.60	Sea Level
LC-85D-1	2/9/2010	285.15	113.48	171.67	Sea Level
LC-85D-1	8/13/2010	285.15	136.52	148.63	Sea Level
LC-85D-1	2/17/2011	285.15	131.35	153.80	Sea Level
LC-85D-1	8/4/2011	285.15	133.60	151.55	Sea Level
LC-85D-1	3/1/2012	285.15	130.30	154.85	Sea Level
LC-85D-1	8/2/2012	285.15	132.30	152.85	Sea Level
LC-85D-1	2/5/2013	285.15	130.08	155.07	Sea Level
LC-85D-1	8/6/2013	285.15	134.60	150.55	Sea Level
LC-85D-2	10/4/2004	284.79	116.65	168.14	Sea Level
LC-85D-2	11/1/2004	284.79	112.87	171.92	Sea Level
LC-85D-2	2/23/2005	284.79	111.29	173.50	Sea Level
LC-85D-2	6/23/2005	284.79	113.61	171.18	Sea Level
LC-85D-2	10/25/2005	284.79	114.19	170.60	Sea Level
LC-85D-2	12/28/2005	284.79	111.68	173.11	Sea Level
LC-85D-2	3/16/2006	284.79	107.03	177.76	Sea Level
LC-85D-2	9/25/2006	284.79	114.97	169.82	Sea Level
LC-85D-2	3/20/2007	284.79	106.47	178.32	Sea Level
LC-85D-2	9/21/2007	284.79	116.13	168.66	Sea Level
LC-85D-2	4/3/2008	284.79	110.45	174.34	Sea Level
LC-85D-2	10/8/2008	284.79	115.32	169.47	Sea Level
LC-85D-2	2/6/2009	284.79	108.87	175.92	Sea Level
LC-86D-1	10/4/2004	261.31	103.65	157.66	Sea Level
LC-86D-1	11/1/2004	261.31	103.17	158.14	Sea Level
LC-86D-1	2/17/2005	261.31	101.53	159.78	Sea Level
LC-86D-1	6/17/2005	261.31	101.40	159.91	Sea Level
LC-86D-1	9/13/2005	261.31	105.90	155.41	Sea Level
LC-86D-1	12/21/2005	261.31	102.25	159.06	Sea Level
LC-86D-1	3/16/2006	261.31	97.58	163.73	Sea Level
LC-86D-1	9/22/2006	261.31	104.78	156.53	Sea Level
LC-86D-1	3/20/2007	261.31	97.15	164.16	Sea Level
LC-86D-1	9/27/2007	261.31	104.47	156.84	Sea Level
LC-86D-1	4/3/2008	261.31	100.39	160.92	Sea Level
LC-86D-1	10/8/2008	261.31	104.66	156.65	Sea Level
LC-86D-1	2/6/2009	261.31	99.32	161.99	Sea Level
LC-86D-1	8/6/2009	261.31	104.71	156.60	Sea Level
LC-86D-1	2/8/2010	261.31	106.10	155.21	Sea Level
LC-86D-1	8/16/2010	261.31	123.56	137.75	Sea Level
LC-86D-1	2/16/2011	261.31	118.45	142.86	Sea Level
LC-86D-1	8/9/2011	261.31	119.95	141.36	Sea Level
LC-86D-1	3/1/2012	261.31	117.60	143.71	Sea Level
LC-86D-1	8/2/2012	261.31	119.57	141.74	Sea Level
LC-86D-1	2/4/2013	261.31	117.08	144.23	Sea Level
LC-86D-1	8/6/2013	261.31	121.22	140.09	Sea Level
LC-86D-2	10/4/2004	261.08	111.36	149.72	Sea Level
LC-86D-2	11/1/2004	261.08	110.27	150.81	Sea Level
LC-86D-2	2/17/2005	261.08	108.77	152.31	Sea Level
LC-86D-2	6/17/2005	261.08	108.72	152.36	Sea Level
LC-86D-2	9/13/2005	261.08	112.89	148.19	Sea Level

Well ID	Date	Measuring Pt	Depth to SWL	GW Elev	Aquifer
LC-86D-2	12/21/2005	261.08	109.41	151.67	Sea Level
LC-86D-2	3/16/2006	261.08	105.04	156.04	Sea Level
LC-86D-2	9/22/2006	261.08	111.83	149.25	Sea Level
LC-86D-2	3/20/2007	261.08	104.60	156.48	Sea Level
LC-86D-2	9/27/2007	261.08	111.60	149.48	Sea Level
LC-86D-2	4/3/2008	261.08	107.55	153.53	Sea Level
LC-86D-2	10/8/2008	261.08	111.70	149.38	Sea Level
LC-86D-2	2/6/2009	261.08	106.66	154.42	Sea Level
LC-87D-1	10/4/2004	274.54	110.20	164.34	Sea Level
LC-87D-1	11/1/2004	274.54	108.16	166.38	Sea Level
LC-87D-1	3/17/2005	274.54	106.79	167.75	Sea Level
LC-87D-1	6/17/2005	274.54	106.35	168.19	Sea Level
LC-87D-1	9/22/2005	274.54	111.55	162.99	Sea Level
LC-87D-1	12/28/2005	274.54	106.79	167.75	Sea Level
LC-87D-1	3/16/2006	274.54	102.45	172.09	Sea Level
LC-87D-1	9/22/2006	274.54	109.99	164.55	Sea Level
LC-87D-1	3/20/2007	274.54	101.90	172.64	Sea Level
LC-87D-1	9/27/2007	274.54	109.67	164.87	Sea Level
LC-87D-1	4/3/2008	274.54	105.20	169.34	Sea Level
LC-87D-1	10/8/2008	274.54	109.95	164.59	Sea Level
LC-87D-1	2/6/2009	274.54	104.20	170.34	Sea Level
LC-87D-1	8/6/2009	274.54	109.72	164.82	Sea Level
LC-87D-1	2/8/2010	274.54	111.40	163.14	Sea Level
LC-87D-1	8/16/2010	274.54	131.64	142.90	Sea Level
LC-87D-1	2/16/2011	274.54	126.15	148.39	Sea Level
LC-87D-1	8/9/2011	274.54	127.65	146.89	Sea Level
LC-87D-1	3/1/2012	274.54	125.17	149.37	Sea Level
LC-87D-1	8/2/2012	274.54	127.41	147.13	Sea Level
LC-87D-1	2/4/2013	274.54	124.66	149.88	Sea Level
LC-87D-1	8/6/2013	274.54	128.95	145.59	Sea Level
LC-87D-2	10/4/2004	274.79	109.65	165.14	Sea Level
LC-87D-2	11/1/2004	274.79	107.37	167.42	Sea Level
LC-87D-2	3/17/2005	274.79	106.25	168.54	Sea Level
LC-87D-2	6/17/2005	274.79	106.78	168.01	Sea Level
LC-87D-2	9/22/2005	274.79	111.07	163.72	Sea Level
LC-87D-2	12/28/2005	274.79	106.29	168.50	Sea Level
LC-87D-2	3/16/2006	274.79	101.87	172.92	Sea Level
LC-87D-2	9/22/2006	274.79	109.44	165.35	Sea Level
LC-87D-2	3/20/2007	274.79	101.38	173.41	Sea Level
LC-87D-2	9/27/2007	274.79	109.17	165.62	Sea Level
LC-87D-2	4/3/2008	274.79	104.77	170.02	Sea Level
LC-87D-2	10/8/2008	274.79	109.95	164.84	Sea Level
LC-87D-2	2/6/2009	274.79	103.38	171.41	Sea Level
LC-88D-1	10/1/2004	258.47	149.37	109.10	Sea Level
LC-88D-1	10/4/2004	258.47	153.34	105.13	Sea Level
LC-88D-1	11/1/2004	258.47	149.37	109.10	Sea Level
LC-88D-1	2/24/2005	258.47	151.06	107.41	Sea Level
LC-88D-1	6/20/2005	258.47	152.07	106.40	Sea Level
LC-88D-1	9/13/2005	258.47	154.57	103.90	Sea Level
LC-88D-1	12/20/2005	258.47	152.29	106.18	Sea Level
LC-88D-1	3/16/2006	258.47	149.05	109.42	Sea Level
LC-88D-1	9/22/2006	258.47	153.83	104.64	Sea Level
LC-88D-1	3/20/2007	258.47	148.81	109.66	Sea Level
LC-88D-1	9/27/2007	258.47	153.38	105.09	Sea Level

Well ID	Date	Measuring Pt	Depth to SWL	GW Elev	Aquifer
LC-88D-1	4/3/2008	258.47	150.07	108.40	Sea Level
LC-88D-1	10/8/2008	258.47	153.37	105.10	Sea Level
LC-88D-1	2/4/2009	258.47	149.58	108.89	Sea Level
LC-88D-1	8/6/2009	258.47	154.94	103.53	Sea Level
LC-88D-1	2/8/2010	258.47	153.00	105.47	Sea Level
LC-88D-1	8/17/2010	258.47	160.55	97.92	Sea Level
LC-88D-1	2/15/2011	258.47	156.12	102.35	Sea Level
LC-88D-1	8/4/2011	258.47	157.95	100.52	Sea Level
LC-88D-1	3/2/2012	258.47	156.16	102.31	Sea Level
LC-88D-1	8/1/2012	258.47	158.14	100.33	Sea Level
LC-88D-1	2/4/2013	258.47	155.95	102.52	Sea Level
LC-88D-1	8/5/2013	258.47	159.10	99.37	Sea Level
LC-88D-2	10/4/2004	257.97	156.16	101.81	Sea Level
LC-88D-2	11/1/2004	257.97	151.56	106.41	Sea Level
LC-88D-2	2/24/2005	257.97	153.25	104.72	Sea Level
LC-88D-2	6/20/2005	257.97	154.45	103.52	Sea Level
LC-88D-2	9/12/2005	257.97	157.00	100.97	Sea Level
LC-88D-2	12/20/2005	257.97	154.33	103.64	Sea Level
LC-88D-2	3/16/2006	257.97	151.60	106.37	Sea Level
LC-88D-2	9/22/2006	257.97	156.16	101.81	Sea Level
LC-88D-2	3/20/2007	257.97	151.42	106.55	Sea Level
LC-88D-2	9/27/2007	257.97	155.88	102.09	Sea Level
LC-88D-2	4/3/2008	257.97	152.68	105.29	Sea Level
LC-88D-2	10/8/2008	257.97	155.48	102.49	Sea Level
LC-88D-2	2/4/2009	257.97	152.25	105.72	Sea Level
LC-89D-1	10/4/2004	260.71	135.40	125.31	Sea Level
LC-89D-1	11/1/2004	260.71	133.99	126.72	Sea Level
LC-89D-1	2/23/2005	260.71	132.54	128.17	Sea Level
LC-89D-1	6/21/2005	260.71	133.30	127.41	Sea Level
LC-89D-1	9/13/2005	260.71	136.02	124.69	Sea Level
LC-89D-1	12/27/2005	260.71	132.81	127.90	Sea Level
LC-89D-1	3/16/2006	260.71	129.91	130.80	Sea Level
LC-89D-1	9/26/2006	260.71	135.07	125.64	Sea Level
LC-89D-1	3/20/2007	260.71	129.47	131.24	Sea Level
LC-89D-1	9/21/2007	260.71	135.22	125.49	Sea Level
LC-89D-1	4/3/2008	260.71	131.28	129.43	Sea Level
LC-89D-1	10/8/2008	260.71	134.70	126.01	Sea Level
LC-89D-1	2/4/2009	260.71	130.93	129.78	Sea Level
LC-89D-1	8/7/2009	260.71	135.58	125.13	Sea Level
LC-89D-1	2/9/2010	260.71	134.40	126.31	Sea Level
LC-89D-1	8/13/2010	260.71	144.03	116.68	Sea Level
LC-89D-1	2/17/2011	260.71	140.10	120.61	Sea Level
LC-89D-1	8/4/2011	260.71	141.61	119.10	Sea Level
LC-89D-1	3/1/2012	260.71	139.85	120.86	Sea Level
LC-89D-1	8/1/2012	260.71	141.55	119.16	Sea Level
LC-89D-1	2/4/2013	260.71	139.45	121.26	Sea Level
LC-89D-1	8/6/2013	260.71	142.75	117.96	Sea Level
LC-89D-1	2/11/2014	260.71	140.00	120.71	Sea Level
LC-89D-2	10/4/2004	260.55	138.35	122.20	Sea Level
LC-89D-2	11/1/2004	260.55	136.97	123.58	Sea Level
LC-89D-2	2/23/2005	260.55	133.53	127.02	Sea Level
LC-89D-2	6/21/2005	260.55	136.17	124.38	Sea Level
LC-89D-2	9/13/2005	260.55	139.14	121.41	Sea Level
LC-89D-2	12/27/2005	260.55	136.60	123.95	Sea Level

Well ID	Date	Measuring Pt	Depth to SWL	GW Elev	Aquifer
LC-89D-2	3/16/2006	260.55	134.50	126.05	Sea Level
LC-89D-2	9/26/2006	260.55	138.55	122.00	Sea Level
LC-89D-2	3/20/2007	260.55	133.10	127.45	Sea Level
LC-89D-2	9/21/2007	260.55	139.39	121.16	Sea Level
LC-89D-2	4/3/2008	260.55	134.67	125.88	Sea Level
LC-89D-2	10/8/2008	260.55	138.25	122.30	Sea Level
LC-89D-2	2/4/2009	260.55	134.36	126.19	Sea Level
LC-90D-1	10/4/2004	261.15	110.00	151.15	Sea Level
LC-90D-1	11/1/2004	261.15	107.94	153.21	Sea Level
LC-90D-1	3/17/2005	261.15	106.76	154.39	Sea Level
LC-90D-1	6/20/2005	261.15	106.56	154.59	Sea Level
LC-90D-1	9/29/2005	261.15	111.23	149.92	Sea Level
LC-90D-1	12/27/2005	261.15	106.71	154.44	Sea Level
LC-90D-1	3/16/2006	261.15	102.60	158.55	Sea Level
LC-90D-1	9/26/2006	261.15	109.35	151.80	Sea Level
LC-90D-1	3/19/2007	261.15	102.15	159.00	Sea Level
LC-90D-1	9/21/2007	261.15	110.05	151.10	Sea Level
LC-90D-1	4/3/2008	261.15	105.15	156.00	Sea Level
LC-90D-1	10/8/2008	261.15	109.25	151.90	Sea Level
LC-90D-1	2/4/2009	261.15	104.42	156.73	Sea Level
LC-90D-1	8/7/2009	261.15	109.22	151.93	Sea Level
LC-90D-1	2/9/2010	261.15	108.95	152.20	Sea Level
LC-90D-1	8/13/2010	261.15	125.90	135.25	Sea Level
LC-90D-1	2/17/2011	261.15	121.36	139.79	Sea Level
LC-90D-1	8/4/2011	261.15	122.65	138.50	Sea Level
LC-90D-1	3/1/2012	261.15	120.72	140.43	Sea Level
LC-90D-1	8/2/2012	261.15	122.60	138.55	Sea Level
LC-90D-1	2/5/2013	261.15	120.11	141.04	Sea Level
LC-90D-1	8/6/2013	261.15	124.22	136.93	Sea Level
LC-90D-1	2/12/2014	261.15	120.80	140.35	Sea Level
LC-90D-1	9/10/2014	261.15	121.13	140.02	Sea Level
LC-90D-2	10/4/2004	260.85	109.95	150.90	Sea Level
LC-90D-2	11/1/2004	260.85	107.84	153.01	Sea Level
LC-90D-2	3/17/2005	260.85	106.64	154.21	Sea Level
LC-90D-2	6/20/2005	260.85	106.51	154.34	Sea Level
LC-90D-2	9/29/2005	260.85	111.15	149.70	Sea Level
LC-90D-2	12/27/2005	260.85	106.69	154.16	Sea Level
LC-90D-2	3/16/2006	260.85	102.52	158.33	Sea Level
LC-90D-2	9/26/2006	260.85	109.32	151.53	Sea Level
LC-90D-2	3/19/2007	260.85	102.15	158.70	Sea Level
LC-90D-2	9/21/2007	260.85	110.03	150.82	Sea Level
LC-90D-2	10/8/2008	260.85	109.23	151.62	Sea Level
LC-90D-2	2/4/2009	260.85	104.42	156.43	Sea Level
LC-91D-1	11/1/2004	256.01	135.56	120.45	Sea Level
LC-91D-1	2/17/2005	256.01	137.46	118.55	Sea Level
LC-91D-1	6/16/2005	256.01	137.70	118.31	Sea Level
LC-91D-1	9/12/2005	256.01	141.23	114.78	Sea Level
LC-91D-1	12/20/2005	256.01	138.20	117.81	Sea Level
LC-91D-1	3/16/2006	256.01	135.98	120.03	Sea Level
LC-91D-1	9/22/2006	256.01	140.11	115.90	Sea Level
LC-91D-1	3/20/2007	256.01	134.77	121.24	Sea Level
LC-91D-1	9/27/2007	256.01	139.79	116.22	Sea Level
LC-91D-1	4/3/2008	256.01	136.43	119.58	Sea Level
LC-91D-1	10/8/2008	256.01	139.62	116.39	Sea Level

Appendix D - Historical Depth to Water Measurements and Sea Level Aquifer Trend Graphs

Historical Depth to Water measurements

Log RAM, Joint Base Lewis-McChord, Washington 98433

Well ID	Date	Measuring Pt	Depth to SWL	GW Elev	Aquifer
LC-91D-1	2/4/2009	256.01	135.80	120.21	Sea Level
LC-91D-1	8/6/2009	256.01	141.16	114.85	Sea Level
LC-91D-1	2/8/2010	256.01	140.00	116.01	Sea Level
LC-91D-1	8/16/2010	256.01	149.70	106.31	Sea Level
LC-91D-1	2/15/2011	256.01	144.68	111.33	Sea Level
LC-91D-1	8/4/2011	256.01	146.35	109.66	Sea Level
LC-91D-1	3/2/2012	256.01	144.62	111.39	Sea Level
LC-91D-1	8/1/2012	256.01	147.56	108.45	Sea Level
LC-91D-1	2/4/2013	256.01	144.38	111.63	Sea Level
LC-91D-1	8/5/2013	256.01	147.60	108.41	Sea Level
LC-91D-2	10/4/2004	256.18	140.10	116.08	Sea Level
LC-91D-2	11/1/2004	256.18	135.76	120.42	Sea Level
LC-91D-2	2/17/2005	256.18	137.59	118.59	Sea Level
LC-91D-2	6/16/2005	256.18	137.89	118.29	Sea Level
LC-91D-2	9/12/2005	256.18	141.24	114.94	Sea Level
LC-91D-2	12/20/2005	256.18	138.35	117.83	Sea Level
LC-91D-2	3/16/2006	256.62	135.18	121.44	Sea Level
LC-91D-2	9/22/2006	256.62	140.19	116.43	Sea Level
LC-91D-2	3/20/2007	256.62	134.75	121.87	Sea Level
LC-91D-2	9/27/2007	256.62	139.81	116.81	Sea Level
LC-91D-2	4/3/2008	256.62	136.44	120.18	Sea Level
LC-91D-2	10/8/2008	256.62	139.62	117.00	Sea Level
LC-91D-2	2/4/2009	256.62	135.85	120.77	Sea Level
LC-92D-1	10/4/2004	256.01	139.80	116.21	Sea Level
LC-92D-1	3/16/2006	253.07	166.34	86.73	Sea Level
LC-92D-1	9/22/2006	253.07	170.37	82.70	Sea Level
LC-92D-1	3/20/2007	253.07	166.30	86.77	Sea Level
LC-92D-1	9/27/2007	253.07	169.90	83.17	Sea Level
LC-92D-1	4/3/2008	253.07	166.88	86.19	Sea Level
LC-92D-1	10/8/2008	253.07	169.50	83.57	Sea Level
LC-92D-1	2/4/2009	253.07	166.62	86.45	Sea Level
LC-92D-1	8/6/2009	253.07	172.58	80.49	Sea Level
LC-92D-1	2/8/2010	253.07	169.00	84.07	Sea Level
LC-92D-1	8/17/2010	253.07	173.55	79.52	Sea Level
LC-92D-1	2/15/2011	253.07	169.14	83.93	Sea Level
LC-92D-1	8/4/2011	253.07	171.25	81.82	Sea Level
LC-92D-1	3/2/2012	253.07	169.48	83.59	Sea Level
LC-92D-1	8/1/2012	253.07	171.35	81.72	Sea Level
LC-92D-1	2/4/2013	253.07	169.28	83.79	Sea Level
LC-92D-1	8/5/2013	253.07	172.25	80.82	Sea Level
LC-92D-2	3/16/2006	252.91	165.60	87.31	Sea Level
LC-92D-2	9/22/2006	252.91	169.54	83.37	Sea Level
LC-92D-2	3/20/2007	252.91	165.58	87.33	Sea Level
LC-92D-2	9/27/2007	252.91	169.18	83.73	Sea Level
LC-92D-2	4/3/2008	252.91	166.17	86.74	Sea Level
LC-92D-2	10/8/2008	252.91	168.58	84.33	Sea Level
LC-92D-2	2/4/2009	252.91	165.88	87.03	Sea Level
LC-93D-1	3/16/2006	240.32	160.19	80.13	Sea Level
LC-93D-1	9/22/2006	240.32	163.92	76.40	Sea Level
LC-93D-1	3/20/2007	240.32	160.17	80.15	Sea Level
LC-93D-1	9/27/2007	240.32	163.78	76.54	Sea Level
LC-93D-1	4/3/2008	240.32	160.60	79.72	Sea Level
LC-93D-1	10/8/2008	240.32	162.90	77.42	Sea Level
LC-93D-1	2/4/2009	240.32	160.30	80.02	Sea Level

Appendix D - Historical Depth to Water Measurements and Sea Level Aquifer Trend Graphs

Historical Depth to Water measurements

Log RAM, Joint Base Lewis-McChord, Washington 98433

Well ID	Date	Measuring Pt	Depth to SWL	GW Elev	Aquifer
LC-93D-1	8/6/2009	240.32	167.55	72.77	Sea Level
LC-93D-1	2/8/2010	240.32	162.30	78.02	Sea Level
LC-93D-1	8/17/2010	240.32	167.35	72.97	Sea Level
LC-93D-1	2/15/2011	240.32	161.80	78.52	Sea Level
LC-93D-1	8/4/2011	240.32	164.05	76.27	Sea Level
LC-93D-1	3/2/2012	240.32	162.16	78.16	Sea Level
LC-93D-1	8/1/2012	240.32	164.32	76.00	Sea Level
LC-93D-1	2/4/2013	240.32	161.92	78.4	Sea Level
LC-93D-1	8/5/2013	240.32	165.40	74.92	Sea Level
LC- 93D-1	2/11/2014	240.32	162.00	78.32	Sea Level
LC- 93D-1	9/2/2014	240.32	164.64	75.68	Sea Level
LC-93D-2	3/16/2006	240.99	161.37	79.62	Sea Level
LC-93D-2	9/22/2006	240.99	165.05	75.94	Sea Level
LC-93D-2	3/20/2007	240.99	161.27	79.72	Sea Level
LC-93D-2	9/27/2007	240.99	164.97	76.02	Sea Level
LC-93D-2	4/3/2008	240.99	161.67	79.32	Sea Level
LC-93D-2	10/8/2008	240.99	164.10	76.89	Sea Level
LC-93D-2	2/4/2009	240.99	161.42	79.57	Sea Level
LC-94D-1	3/16/2006	228.47	137.02	91.45	Sea Level
LC-94D-1	9/22/2006	228.47	141.33	87.14	Sea Level
LC-94D-1	3/20/2007	228.47	137.11	91.36	Sea Level
LC-94D-1	9/27/2007	228.47	140.89	87.58	Sea Level
LC-94D-1	4/3/2008	228.47	137.97	90.50	Sea Level
LC-94D-1	10/8/2008	228.47	140.37	88.10	Sea Level
LC-94D-1	2/4/2009	228.47	137.54	90.93	Sea Level
LC-94D-1	8/6/2009	228.47	143.12	85.35	Sea Level
LC-94D-1	2/8/2010	228.47	140.20	88.27	Sea Level
LC-94D-1	8/17/2010	228.47	146.20	82.27	Sea Level
LC-94D-1	2/15/2011	228.47	141.05	87.42	Sea Level
LC-94D-1	8/4/2011	228.47	143.09	85.38	Sea Level
LC-94D-1	3/2/2012	228.47	141.30	87.17	Sea Level
LC-94D-1	8/1/2012	228.47	143.23	85.24	Sea Level
LC-94D-1	2/4/2013	228.47	141.14	87.33	Sea Level
LC-94D-1	8/5/2013	228.47	144.10	84.37	Sea Level
LC-94D-1	2/11/2014	228.47	141.40	87.07	Sea Level
LC-94D-1	9/9/2014	228.47	143.34	85.13	Sea Level
LC-94D-2	3/16/2006	228.78	137.24	91.54	Sea Level
LC-94D-2	9/22/2006	228.78	141.12	87.66	Sea Level
LC-94D-2	3/20/2007	228.78	136.96	91.82	Sea Level
LC-94D-2	9/27/2007	228.78	140.72	88.06	Sea Level
LC-94D-2	4/3/2008	228.78	137.79	90.99	Sea Level
LC-94D-2	10/8/2008	228.78	139.22	89.56	Sea Level
LC-94D-2	2/4/2009	228.78	137.40	91.38	Sea Level
LC-95D-1	3/16/2006	230.07	144.96	85.11	Sea Level
LC-95D-1	9/22/2006	230.07	148.83	81.24	Sea Level
LC-95D-1	3/20/2007	230.07	144.82	85.25	Sea Level
LC-95D-1	9/27/2007	230.07	148.45	81.62	Sea Level
LC-95D-1	4/3/2008	230.07	145.56	84.51	Sea Level
LC-95D-1	10/8/2008	230.07	147.80	82.27	Sea Level
LC-95D-1	2/4/2009	230.07	145.15	84.92	Sea Level
LC-95D-1	8/6/2009	230.07	150.90	79.17	Sea Level
LC-95D-1	2/8/2010	230.07	147.30	82.77	Sea Level
LC-95D-1	8/17/2010	230.07	152.95	77.12	Sea Level
LC-95D-1	2/15/2011	230.07	147.52	82.55	Sea Level

Well ID	Date	Measuring Pt	Depth to SWL	GW Elev	Aquifer
LC-95D-1	8/4/2011	230.07	146.62	83.45	Sea Level
LC-95D-1	3/2/2012	230.07	147.81	82.26	Sea Level
LC-95D-1	8/1/2012	230.07	149.79	80.28	Sea Level
LC-95D-1	2/4/2013	230.07	147.55	82.52	Sea Level
LC-95D-1	8/5/2013	230.07	150.70	79.37	Sea Level
LC-95D-1	2/11/2014	230.07	147.90	82.17	Sea Level
LC-95D-1	9/2/2014	230.07	149.85	80.22	Sea Level
LC-95D-2	3/16/2006	231.73	146.68	85.05	Sea Level
LC-95D-2	9/22/2006	231.73	148.46	83.27	Sea Level
LC-95D-2	3/20/2007	231.73	144.48	87.25	Sea Level
LC-95D-2	9/27/2007	231.73	148.01	83.72	Sea Level
LC-95D-2	4/3/2008	231.73	145.21	86.52	Sea Level
LC-95D-2	10/8/2008	231.73	147.22	84.51	Sea Level
LC-95D-2	2/4/2009	231.73	144.75	86.98	Sea Level
LC-96D	4/3/2008	274.64	100.51	174.13	Sea Level
LC-96D	10/8/2008	274.64	105.10	169.54	Sea Level
LC-96D	2/6/2009	274.64	98.73	175.91	Sea Level
LC-96D	12/7/2009	274.64	117.75	156.89	Sea Level
LC-96D	12/18/2009	274.64	114.71	159.93	Sea Level
LC-96D	2/18/2010	274.64	99.30	175.34	Sea Level
LC-96D	3/18/2010	274.64	99.30	175.34	Sea Level
LC-96D	4/21/2010	274.64	127.17	147.47	Sea Level
LC-96D	5/11/2010	274.64	127.69	146.95	Sea Level
LC-96D	6/3/2010	274.64	128.34	146.30	Sea Level
LC-96D	8/13/2010	274.64	130.22	144.42	Sea Level
LC-96D	2/17/2011	274.64	125.20	149.44	Sea Level
LC-96D	8/8/2011	274.64	126.55	148.09	Sea Level
LC-96D	2/27/2012	274.64	123.90	150.74	Sea Level
LC-96D	8/2/2012	274.64	125.98	148.66	Sea Level
LC-96D	2/5/2013	274.64	123.37	151.27	Sea Level
LC-96D	8/6/2013	274.64	128.50	146.14	Sea Level
LC-96D	2/13/2014	274.64	124.35	150.29	Sea Level
LC-96D	9/4/2014	274.64	124.46	150.18	Sea Level
LC-97D	4/3/2008	271.85	94.92	176.93	Sea Level
LC-97D	10/8/2008	271.85	99.33	172.52	Sea Level
LC-97D	2/6/2009	271.85	93.69	178.16	Sea Level
LC-97D	8/17/2009	271.85	99.18	172.67	Sea Level
LC-97D	10/13/2009	271.85	98.67	173.18	Sea Level
LC-97D	11/16/2009	271.85	101.99	169.86	Sea Level
LC-97D	12/7/2009	271.85	108.32	163.53	Sea Level
LC-97D	1/21/2010	271.85	119.10	152.75	Sea Level
LC-97D	2/9/2010	271.85	99.42	172.43	Sea Level
LC-97D	4/21/2010	271.85	119.72	152.13	Sea Level
LC-97D	5/11/2010	271.85	120.60	151.25	Sea Level
LC-97D	6/3/2010	271.85	121.16	150.69	Sea Level
LC-97D	8/13/2010	271.85	122.78	149.07	Sea Level
LC-97D	2/17/2011	271.85	119.15	152.70	Sea Level
LC-97D	8/10/2011	271.85	120.07	151.78	Sea Level
LC-97D	2/27/2012	271.85	117.20	154.65	Sea Level
LC-97D	8/2/2012	271.85	119.50	152.35	Sea Level
LC-97D	2/5/2013	271.85	116.38	155.47	Sea Level
LC-97D	8/6/2013	271.85	120.80	151.05	Sea Level
LC-97D	2/13/2014	271.85	117.35	154.50	Sea Level
LC-97D	9/10/2014	271.85	118.88	152.97	Sea Level

Appendix D - Historical Depth to Water Measurements and Sea Level Aquifer Trend Graphs

Historical Depth to Water measurements

Log RAM, Joint Base Lewis-McChord, Washington 98433

Well ID	Date	Measuring Pt	Depth to SWL	GW Elev	Aquifer
LC-98D-1	4/3/2008	277.84	105.18	172.66	Sea Level
LC-98D-1	10/8/2008	277.84	109.42	168.42	Sea Level
LC-98D-1	2/6/2009	277.84	103.66	174.18	Sea Level
LC-98D-1	8/17/2009	277.84	109.00	168.84	Sea Level
LC-98D-1	11/16/2009	277.84	111.63	166.21	Sea Level
LC-98D-1	12/7/2009	277.84	118.78	159.06	Sea Level
LC-98D-1	2/18/2010	277.84	104.35	173.49	Sea Level
LC-98D-1	3/18/2010	277.84	104.35	173.49	Sea Level
LC-98D-1	4/2/2010	277.84	108.00	169.84	Sea Level
LC-98D-1	4/23/2010	277.84	130.91	146.93	Sea Level
LC-98D-1	5/11/2010	277.84	130.92	146.92	Sea Level
LC-98D-1	6/3/2010	277.84	131.48	146.36	Sea Level
LC-98D-1	8/13/2010	277.84	133.25	144.59	Sea Level
LC-98D-1	2/17/2011	277.84	128.40	149.44	Sea Level
LC-98D-1	8/8/2011	277.84	129.80	148.04	Sea Level
LC-98D-1	3/2/2012	277.84	125.39	152.45	Sea Level
LC-98D-1	8/2/2012	277.84	129.34	148.50	Sea Level
LC-98D-1	2/5/2013	277.84	126.83	151.01	Sea Level
LC-98D-1	8/6/2013	277.84	131.25	146.59	Sea Level
LC-98D-1	2/12/2014	277.84	127.50	150.34	Sea Level
LC-98D-1	9/3/2014	277.84	127.76	150.08	Sea Level
LC-98D-2	4/3/2008	277.97	105.99	171.98	Sea Level
LC-98D-2	10/8/2008	277.97	110.30	167.67	Sea Level
LC-98D-2	2/6/2009	277.97	104.55	173.42	Sea Level
LC-98D-2	12/18/2009	277.97	121.86	156.11	Sea Level
LC-99D	4/3/2008	270.73	96.50	174.23	Sea Level
LC-99D	10/8/2008	270.73	100.37	170.36	Sea Level
LC-99D	2/6/2009	270.73	94.88	175.85	Sea Level
LC-99D	8/17/2009	270.73	100.35	170.38	Sea Level
LC-99D	10/13/2009	270.73	99.54	171.19	Sea Level
LC-99D	11/16/2009	270.73	102.93	167.80	Sea Level
LC-99D	12/7/2009	270.73	114.92	155.81	Sea Level
LC-99D	12/18/2009	270.73	110.70	160.03	Sea Level
LC-99D	1/21/2010	270.73	124.40	146.33	Sea Level
LC-99D	2/18/2010	270.73	95.50	175.23	Sea Level
LC-99D	3/18/2010	270.73	99.50	171.23	Sea Level
LC-99D	4/2/2010	270.73	99.23	171.50	Sea Level
LC-99D	4/21/2010	270.73	125.21	145.52	Sea Level
LC-99D	5/11/2010	270.73	125.71	145.02	Sea Level
LC-99D	6/3/2010	270.73	126.26	144.47	Sea Level
LC-99D	8/13/2010	270.73	128.00	142.73	Sea Level
LC-99D	2/17/2011	270.73	123.15	147.58	Sea Level
LC-99D	8/8/2011	270.73	124.60	146.13	Sea Level
LC-99D	10/4/2011	270.73	125.13	145.60	Sea Level
LC-99D	2/27/2012	270.73	121.90	148.83	Sea Level
LC-99D	8/2/2012	270.73	124.21	146.52	Sea Level
LC-99D	2/5/2013	270.73	121.44	149.29	Sea Level
LC-99D	8/6/2013	270.73	126.45	144.28	Sea Level
LC-99D	2/13/2014	270.73	122.50	148.23	Sea Level
LC-99D	9/3/2014	270.73	122.70	148.03	Sea Level
LF4-MW-02c	2/3/2003	229.14	115.98	113.16	Sea Level
LF4-MW-02c	3/3/2003	229.14	115.67	113.47	Sea Level
LF4-MW-02c	7/1/2003	229.14	118.40	110.74	Sea Level
LF4-MW-02c	10/4/2004	229.14	118.22	110.92	Sea Level

Well ID	Date	Measuring Pt	Depth to SWL	GW Elev	Aquifer
LF4-MW-02c	4/20/2005	229.14	117.05	112.09	Sea Level
LF4-MW-02c	7/26/2005	229.14	119.30	109.84	Sea Level
LF4-MW-02c	3/16/2006	229.14	114.77	114.37	Sea Level
LF4-MW-02c	9/26/2006	229.14	119.25	109.89	Sea Level
LF4-MW-02c	3/20/2007	229.14	114.55	114.59	Sea Level
LF4-MW-02c	10/8/2008	229.14	118.82	110.32	Sea Level
LF4-MW-02c	2/4/2009	229.14	115.40	113.74	Sea Level
LF4-MW-02c	8/6/2009	229.14	120.42	108.72	Sea Level
LF4-MW-02c	2/8/2010	229.14	119.25	109.89	Sea Level
LF4-MW-02c	8/16/2010	229.14	126.00	103.14	Sea Level
LF4-MW-02c	2/15/2011	229.14	121.95	107.19	Sea Level
LF4-MW-02c	8/4/2011	229.14	123.50	105.64	Sea Level
LF4-MW-02c	3/1/2012	229.14	121.88	107.26	Sea Level
LF4-MW-02c	8/3/2012	229.14	123.64	105.50	Sea Level
LF4-MW-02c	2/4/2013	229.14	121.73	107.41	Sea Level
LF4-MW-02c	8/5/2013	229.14	124.55	104.59	Sea Level
LF4-MW-02c	2/11/2014	229.14	122.10	107.04	Sea Level
LF4-MW-02c	9/9/2014	229.14	123.50	105.64	Sea Level
LF4-MW-04	4/20/2005	247.94	147.65	100.29	Sea Level
LF4-MW-04	7/26/2005	247.94	149.84	98.10	Sea Level
LF4-MW-04	3/16/2006	247.94	145.82	102.12	Sea Level
LF4-MW-04	9/26/2006	247.94	149.96	97.98	Sea Level
LF4-MW-04	3/20/2007	247.94	145.61	102.33	Sea Level
LF4-MW-04	9/27/2007	247.94	149.57	98.37	Sea Level
LF4-MW-04	4/3/2008	247.94	146.52	101.42	Sea Level
LF4-MW-04	10/8/2008	247.94	149.28	98.66	Sea Level
LF4-MW-04	2/4/2009	247.94	146.25	101.69	Sea Level
LF4-MW-04	8/6/2009	247.94	151.30	96.64	Sea Level
LF4-MW-04	2/8/2010	247.94	149.33	98.61	Sea Level
LF4-MW-04	8/16/2010	247.94	156.00	91.94	Sea Level
LF4-MW-04	2/15/2011	247.94	150.90	97.04	Sea Level
LF4-MW-04	8/3/2011	247.94	152.70	95.24	Sea Level
LF4-MW-04	3/2/2012	247.94	151.10	96.84	Sea Level
LF4-MW-04	8/3/2012	247.94	152.75	95.19	Sea Level
LF4-MW-04	2/4/2013	247.94	150.80	97.14	Sea Level
LF4-MW-04	8/5/2013	247.94	153.85	94.09	Sea Level
LF4-MW-04	2/11/2014	247.94	151.20	96.74	Sea Level
LF4-MW-04	9/9/2014	247.94	152.93	95.01	Sea Level
LF4-MW-09b	2/3/2003	232.83	142.07	90.76	Sea Level
LF4-MW-09b	3/3/2003	232.83	141.82	91.01	Sea Level
LF4-MW-09b	7/1/2003	232.83	144.11	88.72	Sea Level
LF4-MW-09b	10/4/2004	232.83	143.94	88.89	Sea Level
LF4-MW-09b	4/20/2005	242.16	142.72	99.44	Sea Level
LF4-MW-09b	7/26/2005	242.16	144.85	97.31	Sea Level
LF4-MW-09b	3/16/2006	233.83	142.81	91.02	Sea Level
LF4-MW-09b	3/20/2007	223.83	141.07	82.76	Sea Level
LF4-MW-09b	9/27/2007	223.83	144.61	79.22	Sea Level
LF4-MW-09b	4/3/2008	223.83	141.71	82.12	Sea Level
LF4-MW-09b	10/8/2008	223.83	144.25	79.58	Sea Level
LF4-MW-09b	2/4/2009	223.83	141.45	82.38	Sea Level
LF4-MW-09b	8/6/2009	223.83	146.45	77.38	Sea Level
LF4-MW-09b	2/8/2010	223.83	144.05	79.78	Sea Level
LF4-MW-09b	8/16/2010	223.83	148.46	75.37	Sea Level
LF4-MW-09b	2/15/2011	223.83	144.46	79.37	Sea Level

Well ID	Date	Measuring Pt	Depth to SWL	GW Elev	Aquifer
LF4-MW-09b	8/3/2011	223.83	146.42	77.41	Sea Level
LF4-MW-09b	3/2/2012	223.83	144.70	79.13	Sea Level
LF4-MW-09b	8/3/2012	223.83	146.29	77.54	Sea Level
LF4-MW-09b	2/4/2013	223.83	144.60	79.23	Sea Level
LF4-MW-09b	8/5/2013	223.83	147.40	76.43	Sea Level
LF4-MW-09b	2/11/2014	223.83	144.95	78.88	Sea Level
LF4-MW-09b	9/9/2014	223.83	146.80	77.03	Sea Level
LF4-MW-12b	2/3/2003	238.28	143.77	94.51	Sea Level
LF4-MW-12b	3/3/2003	238.28	143.48	94.80	Sea Level
LF4-MW-12b	7/1/2003	238.28	145.69	92.59	Sea Level
LF4-MW-12b	10/4/2004	238.28	145.69	92.59	Sea Level
LF4-MW-12b	4/20/2005	238.28	144.44	93.84	Sea Level
LF4-MW-12b	7/26/2005	238.28	146.47	91.81	Sea Level
LF4-MW-12b	3/16/2006	238.28	143.67	94.61	Sea Level
LF4-MW-12b	9/26/2006	238.28	147.49	90.79	Sea Level
LF4-MW-12b	9/27/2007	238.28	146.25	92.03	Sea Level
LF4-MW-12b	4/3/2008	238.28	143.40	94.88	Sea Level
LF4-MW-12b	10/8/2008	238.28	145.92	92.36	Sea Level
LF4-MW-12b	2/4/2009	238.28	143.20	95.08	Sea Level
LF4-MW-12b	8/6/2009	238.28	147.95	90.33	Sea Level
LF4-MW-12b	2/8/2010	238.28	145.87	92.41	Sea Level
LF4-MW-12b	8/16/2010	238.28	150.14	88.14	Sea Level
LF4-MW-12b	2/15/2011	238.28	146.30	91.98	Sea Level
LF4-MW-12b	8/3/2011	238.28	148.05	90.23	Sea Level
LF4-MW-12b	3/2/2012	238.28	146.46	91.82	Sea Level
LF4-MW-12b	8/3/2012	238.28	148.78	89.50	Sea Level
LF4-MW-12b	2/4/2013	238.28	146.42	91.86	Sea Level
LF4-MW-12b	8/5/2013	238.28	149.05	89.23	Sea Level
LF4-MW-12b	2/11/2014	238.28	146.75	91.53	Sea Level
LF4-MW-12b	9/9/2014	238.28	148.52	89.76	Sea Level
LF4-MW-14	4/20/2005	236.53	145.23	91.30	Sea Level
LF4-MW-14	7/26/2005	236.53	147.35	89.18	Sea Level
LF4-MW-14	3/16/2006	236.53	141.21	95.32	Sea Level
LF4-MW-14	9/26/2006	236.53	145.03	91.50	Sea Level
LF4-MW-14	3/20/2007	236.53	143.55	92.98	Sea Level
LF4-MW-14	9/27/2007	236.53	147.09	89.44	Sea Level
LF4-MW-14	4/3/2008	236.53	144.17	92.36	Sea Level
LF4-MW-14	10/8/2008	236.53	146.72	89.81	Sea Level
LF4-MW-14	2/4/2009	236.53	143.95	92.58	Sea Level
LF4-MW-14	8/6/2009	236.53	148.87	87.66	Sea Level
LF4-MW-14	2/8/2010	236.53	146.58	89.95	Sea Level
LF4-MW-14	8/16/2010	236.53	150.93	85.60	Sea Level
LF4-MW-14	2/15/2011	236.53	147.00	89.53	Sea Level
LF4-MW-14	8/3/2011	236.53	148.85	87.68	Sea Level
LF4-MW-14	3/2/2012	236.53	147.25	89.28	Sea Level
LF4-MW-14	8/3/2012	236.53	147.96	88.57	Sea Level
LF4-MW-14	2/4/2013	236.53	147.09	89.44	Sea Level
LF4-MW-14	8/5/2013	236.53	149.90	86.63	Sea Level
LF4-MW-14	2/11/2014	236.53	147.40	89.13	Sea Level
LF4-MW-14	9/9/2014	236.53	149.26	87.27	Sea Level
LF4-MW-16b	2/3/2003	234.54	147.75	86.79	Sea Level
LF4-MW-16b	3/3/2003	234.54	147.54	87.00	Sea Level
LF4-MW-16b	7/1/2003	234.54	149.73	84.81	Sea Level
LF4-MW-16b	10/4/2004	234.54	149.50	85.04	Sea Level

Well ID	Date	Measuring Pt	Depth to SWL	GW Elev	Aquifer
MAMC-3	4/1/2002	263.68	72.70	190.98	Sea Level
MAMC-3	6/1/2002	263.68	72.70	190.98	Sea Level
MAMC-3	9/1/2002	263.68	68.70	194.98	Sea Level
MAMC-3	2/3/2003	263.68	66.70	196.98	Sea Level
MAMC-3	3/3/2003	263.68	62.70	200.98	Sea Level
MAMC-3	7/1/2003	263.68	89.70	173.98	Sea Level
MAMC-3	10/4/2004	263.68	67.70	195.98	Sea Level
MAMC-4	4/1/2002	261.62	35.00	226.62	Sea Level
MAMC-4	6/1/2002	261.62	40.00	221.62	Sea Level
MAMC-4	9/1/2002	261.62	70.00	191.62	Sea Level
MAMC-4	2/3/2003	261.62	40.00	221.62	Sea Level
MAMC-4	3/3/2003	261.62	40.00	221.62	Sea Level
MAMC-4	10/4/2004	261.62	40.00	221.62	Sea Level
SLAP-1	10/8/2008	270.68	101.17	169.51	Sea Level
SLAP-1	2/6/2009	270.68	95.55	175.13	Sea Level
SLAP-1	6/16/2009	270.68	96.91	173.77	Sea Level
SLAP-1	8/17/2009	270.68	99.38	171.30	Sea Level
SLAP-1	10/13/2009	270.68	96.97	173.71	Sea Level
SLAP-1	12/7/2009	270.68	120.82	149.86	Sea Level
SLAP-1	12/11/2009	270.68	130.58	140.10	Sea Level
SLAP-1	12/18/2009	270.68	109.83	160.85	Sea Level
SLAP-1	1/8/2010	270.68	129.35	141.33	Sea Level
SLAP-1	1/21/2010	270.68	131.60	139.08	Sea Level
SLAP-1	4/21/2010	270.68	138.15	132.53	Sea Level
SLAP-1	5/11/2010	270.68	137.49	133.19	Sea Level
SLAP-1	6/3/2010	270.68	138.89	131.79	Sea Level
SLAP-1	8/13/2010	270.68	139.47	131.21	Sea Level
SLAP-1	8/20/2010	270.68	139.22	131.46	Sea Level
SLAP-1	10/22/2010	270.68	137.03	133.65	Sea Level
SLAP-1	11/24/2010	270.68	133.40	137.28	Sea Level
SLAP-1	12/13/2010	270.68	138.10	132.58	Sea Level
SLAP-1	1/19/2011	270.68	137.21	133.47	Sea Level
SLAP-1	2/25/2011	270.68	137.07	133.61	Sea Level
SLAP-1	3/28/2011	270.68	135.90	134.78	Sea Level
SLAP-1	4/26/2011	270.68	136.23	134.45	Sea Level
SLAP-1	5/25/2011	270.68	136.30	134.38	Sea Level
SLAP-1	7/27/2011	270.68	139.80	130.88	Sea Level
SLAP-1	8/24/2011	270.68	141.21	129.47	Sea Level
SLAP-1	9/26/2011	270.68	142.16	128.52	Sea Level
SLAP-1	10/27/2011	270.68	141.60	129.08	Sea Level
SLAP-1	11/21/2011	270.68	141.85	128.83	Sea Level
SLAP-1	12/22/2011	270.68	142.50	128.18	Sea Level
SLAP-1	1/25/2012	270.68	138.15	132.53	Sea Level
SLAP-1	2/27/2012	270.68	141.65	129.03	Sea Level
SLAP-1	4/25/2012	270.68	143.60	127.08	Sea Level
SLAP-1	5/31/2012	270.68	146.80	123.88	Sea Level
SLAP-1	6/28/2012	270.68	146.23	124.45	Sea Level
SLAP-1	7/25/2012	270.68	152.17	118.51	Sea Level
SLAP-1	8/22/2012	270.68	151.76	118.92	Sea Level
SLAP-1	9/12/2012	270.68	150.35	120.33	Sea Level
SLAP-1	10/18/2012	270.68	151.85	118.83	Sea Level
SLAP-1	11/28/2012	270.68	150.70	119.98	Sea Level
SLAP-1	12/28/2012	270.68	150.22	120.46	Sea Level
SLAP-1	1/24/2013	270.68	150.25	120.43	Sea Level

Appendix D - Historical Depth to Water Measurements and Sea Level Aquifer Trend Graphs

Historical Depth to Water measurements

Log RAM, Joint Base Lewis-McChord, Washington 98433

Well ID	Date	Measuring Pt	Depth to SWL	GW Elev	Aquifer
SLAP-1	2/25/2013	270.68	151.89	118.79	Sea Level
SLAP-1	3/26/2013	270.68	150.39	120.29	Sea Level
SLAP-1	4/24/2013	270.68	151.48	119.20	Sea Level
SLAP-1	5/14/2013	270.68	152.22	118.46	Sea Level
SLAP-1	6/19/2013	270.68	151.58	119.10	Sea Level
SLAP-1	8/29/2013	270.68	152.90	117.78	Sea Level
SLAP-1	1/30/2014	270.68	143.10	127.58	Sea Level
SLAP-2	10/8/2008	269.21	99.63	169.58	Sea Level
SLAP-2	2/6/2009	269.21	94.07	175.14	Sea Level
SLAP-2	6/6/2009	269.21	95.32	173.89	Sea Level
SLAP-2	8/17/2009	269.21	98.10	171.11	Sea Level
SLAP-2	10/13/2009	269.21	95.65	173.56	Sea Level
SLAP-2	12/7/2009	269.21	111.97	157.24	Sea Level
SLAP-2	12/11/2009	269.21	122.53	146.68	Sea Level
SLAP-2	12/18/2009	269.21	108.48	160.73	Sea Level
SLAP-2	1/8/2010	269.21	122.77	146.44	Sea Level
SLAP-2	1/21/2010	269.21	125.27	143.94	Sea Level
SLAP-2	4/21/2010	269.21	125.09	144.12	Sea Level
SLAP-2	5/11/2010	269.21	125.56	143.65	Sea Level
SLAP-2	6/3/2010	269.21	126.19	143.02	Sea Level
SLAP-2	8/13/2010	269.21	127.95	141.26	Sea Level
SLAP-2	8/20/2010	269.21	128.35	140.86	Sea Level
SLAP-2	10/22/2010	269.21	124.82	144.39	Sea Level
SLAP-2	11/24/2010	269.21	120.72	148.49	Sea Level
SLAP-2	12/13/2010	269.21	124.96	144.25	Sea Level
SLAP-2	1/19/2011	269.21	123.71	145.50	Sea Level
SLAP-2	2/25/2011	269.21	123.47	145.74	Sea Level
SLAP-2	3/28/2011	269.21	122.50	146.71	Sea Level
SLAP-2	4/26/2011	269.21	122.28	146.93	Sea Level
SLAP-2	5/25/2011	269.21	122.07	147.14	Sea Level
SLAP-2	7/27/2011	269.21	124.95	144.26	Sea Level
SLAP-2	8/24/2011	269.21	126.05	143.16	Sea Level
SLAP-2	9/26/2011	269.21	126.69	142.52	Sea Level
SLAP-2	10/27/2011	269.21	125.80	143.41	Sea Level
SLAP-2	11/21/2011	269.21	125.55	143.66	Sea Level
SLAP-2	12/22/2011	269.21	125.49	143.72	Sea Level
SLAP-2	1/25/2012	269.21	121.12	148.09	Sea Level
SLAP-2	2/27/2012	269.21	123.76	145.45	Sea Level
SLAP-2	4/25/2012	269.21	123.40	145.81	Sea Level
SLAP-2	5/31/2012	269.21	123.90	145.31	Sea Level
SLAP-2	6/28/2012	269.21	124.50	144.71	Sea Level
SLAP-2	7/25/2012	269.21	125.40	143.81	Sea Level
SLAP-2	8/22/2012	269.21	126.91	142.30	Sea Level
SLAP-2	9/12/2012	269.21	126.72	142.49	Sea Level
SLAP-2	10/18/2012	269.21	126.14	143.07	Sea Level
SLAP-2	11/28/2012	269.21	123.56	145.65	Sea Level
SLAP-2	12/28/2012	269.21	122.23	146.98	Sea Level
SLAP-2	1/24/2013	269.21	122.07	147.14	Sea Level
SLAP-2	2/25/2013	269.21	123.32	145.89	Sea Level
SLAP-2	3/26/2013	269.21	122.14	147.07	Sea Level
SLAP-2	4/24/2013	269.21	122.31	146.90	Sea Level
SLAP-2	5/14/2013	269.21	124.49	144.72	Sea Level
SLAP-2	6/19/2013	269.21	124.50	144.71	Sea Level
SLAP-2	8/29/2013	269.21	127.45	141.76	Sea Level

Appendix D - Historical Depth to Water Measurements and Sea Level Aquifer Trend Graphs

Historical Depth to Water measurements

Log RAM, Joint Base Lewis-McChord, Washington 98433

Well ID	Date	Measuring Pt	Depth to SWL	GW Elev	Aquifer
SLAP-2	1/30/2014	269.21	123.10	146.11	Sea Level
SLAP-3	10/8/2008	269.74	99.40	170.34	Sea Level
SLAP-3	2/6/2009	269.74	93.80	175.94	Sea Level
SLAP-3	6/16/2009	269.74	94.95	174.79	Sea Level
SLAP-3	8/17/2009	269.74	97.60	172.14	Sea Level
SLAP-3	10/13/2009	269.74	95.11	174.63	Sea Level
SLAP-3	12/7/2009	269.74	114.96	154.78	Sea Level
SLAP-3	12/11/2009	269.74	123.21	146.53	Sea Level
SLAP-3	12/18/2009	269.74	107.97	161.77	Sea Level
SLAP-3	1/8/2010	269.74	125.42	144.32	Sea Level
SLAP-3	1/21/2010	269.74	127.90	141.84	Sea Level
SLAP-3	4/21/2010	269.74	127.73	142.01	Sea Level
SLAP-3	5/11/2010	269.74	127.56	142.18	Sea Level
SLAP-3	6/3/2010	269.74	128.16	141.58	Sea Level
SLAP-3	8/13/2010	269.74	129.60	140.14	Sea Level
SLAP-3	8/20/2010	269.74	128.94	140.80	Sea Level
SLAP-3	10/22/2010	269.74	129.28	140.46	Sea Level
SLAP-3	11/24/2010	269.74	126.30	143.44	Sea Level
SLAP-3	12/13/2010	269.74	128.12	141.62	Sea Level
SLAP-3	1/19/2011	269.74	128.15	141.59	Sea Level
SLAP-3	2/25/2011	269.74	128.92	140.82	Sea Level
SLAP-3	3/28/2011	269.74	127.90	141.84	Sea Level
SLAP-3	4/26/2011	269.74	127.92	141.82	Sea Level
SLAP-3	5/25/2011	269.74	128.09	141.65	Sea Level
SLAP-3	7/27/2011	269.74	129.16	140.58	Sea Level
SLAP-3	8/24/2011	269.74	133.70	136.04	Sea Level
SLAP-3	9/26/2011	269.74	130.40	139.34	Sea Level
SLAP-3	10/27/2011	269.74	128.90	140.84	Sea Level
SLAP-3	11/21/2011	269.74	128.75	140.99	Sea Level
SLAP-3	12/22/2011	269.74	128.32	141.42	Sea Level
SLAP-3	1/25/2012	269.74	122.70	147.04	Sea Level
SLAP-3	2/27/2012	269.74	125.13	144.61	Sea Level
SLAP-3	4/25/2012	269.74	125.00	144.74	Sea Level
SLAP-3	5/31/2012	269.74	125.50	144.24	Sea Level
SLAP-3	6/28/2012	269.74	126.10	143.64	Sea Level
SLAP-3	7/25/2012	269.74	127.37	142.37	Sea Level
SLAP-3	8/22/2012	269.74	129.08	140.66	Sea Level
SLAP-3	9/12/2012	269.74	128.74	141.00	Sea Level
SLAP-3	10/18/2012	269.74	128.80	140.94	Sea Level
SLAP-3	11/28/2012	269.74	126.70	143.04	Sea Level
SLAP-3	12/28/2012	269.74	125.46	144.28	Sea Level
SLAP-3	1/24/2013	269.74	124.42	145.32	Sea Level
SLAP-3	2/25/2013	269.74	123.32	146.42	Sea Level
SLAP-3	3/26/2013	269.74	125.73	144.01	Sea Level
SLAP-3	4/24/2013	269.74	126.36	143.38	Sea Level
SLAP-3	5/14/2013	269.74	127.10	142.64	Sea Level
SLAP-3	6/19/2013	269.74	128.15	141.59	Sea Level
SLAP-3	8/29/2013	269.74	130.75	138.99	Sea Level
SLAP-3	8/29/2013	269.74	126.80	142.94	Sea Level
SLAP-3	1/30/2014	269.74	126.80	142.94	Sea Level
SLAP-4	10/8/2008	271.21	100.89	170.32	Sea Level
SLAP-4	2/6/2009	271.21	95.37	175.84	Sea Level
SLAP-4	6/16/2009	271.21	96.71	174.50	Sea Level
SLAP-4	8/17/2009	271.21	99.20	172.01	Sea Level

Appendix D - Historical Depth to Water Measurements and Sea Level Aquifer Trend Graphs

Historical Depth to Water measurements

Log RAM, Joint Base Lewis-McChord, Washington 98433

Well ID	Date	Measuring Pt	Depth to SWL	GW Elev	Aquifer
SLAP-4	10/13/2009	271.21	96.73	174.48	Sea Level
SLAP-4	12/7/2009	271.21	114.80	156.41	Sea Level
SLAP-4	12/11/2009	271.21	122.31	148.90	Sea Level
SLAP-4	12/18/2009	271.21	109.52	161.69	Sea Level
SLAP-4	1/8/2010	271.21	121.63	149.58	Sea Level
SLAP-4	1/21/2010	271.21	124.05	147.16	Sea Level
SLAP-4	4/21/2010	271.21	124.89	146.32	Sea Level
SLAP-4	5/11/2010	271.21	125.39	145.82	Sea Level
SLAP-4	6/3/2010	271.21	125.95	145.26	Sea Level
SLAP-4	8/13/2010	271.21	127.70	143.51	Sea Level
SLAP-4	8/20/2010	271.21	126.81	144.40	Sea Level
SLAP-4	10/22/2010	271.21	124.62	146.59	Sea Level
SLAP-4	11/24/2010	271.21	120.58	150.63	Sea Level
SLAP-4	12/13/2010	271.21	124.68	146.53	Sea Level
SLAP-4	1/19/2011	271.21	123.44	147.77	Sea Level
SLAP-4	2/25/2011	271.21	123.05	148.16	Sea Level
SLAP-4	3/28/2011	271.21	122.00	149.21	Sea Level
SLAP-4	4/26/2011	271.21	121.66	149.55	Sea Level
SLAP-4	5/25/2011	271.21	121.33	149.88	Sea Level
SLAP-4	7/27/2011	271.21	123.97	147.24	Sea Level
SLAP-4	8/24/2011	271.21	124.99	146.22	Sea Level
SLAP-4	9/26/2011	271.21	125.51	145.70	Sea Level
SLAP-4	10/27/2011	271.21	124.60	146.61	Sea Level
SLAP-4	11/21/2011	271.21	124.30	146.91	Sea Level
SLAP-4	12/22/2011	271.21	124.03	147.18	Sea Level
SLAP-4	1/25/2012	271.21	118.66	152.55	Sea Level
SLAP-4	2/27/2012	271.21	127.84	143.37	Sea Level
SLAP-4	4/25/2012	271.21	121.75	149.46	Sea Level
SLAP-4	5/31/2012	271.21	122.00	149.21	Sea Level
SLAP-4	6/28/2012	271.21	122.48	148.73	Sea Level
SLAP-4	7/25/2012	271.21	123.69	147.52	Sea Level
SLAP-4	8/22/2012	271.21	125.36	145.85	Sea Level
SLAP-4	9/12/2012	271.21	125.16	146.05	Sea Level
SLAP-4	10/18/2012	271.21	124.63	146.58	Sea Level
SLAP-4	11/28/2012	271.21	121.95	149.26	Sea Level
SLAP-4	12/28/2012	271.21	120.73	150.48	Sea Level
SLAP-4	1/24/2013	271.21	120.63	150.58	Sea Level
SLAP-4	2/25/2013	271.21	122.18	149.03	Sea Level
SLAP-4	3/26/2013	271.21	121.17	150.04	Sea Level
SLAP-4	4/24/2013	271.21	121.73	149.48	Sea Level
SLAP-4	5/14/2013	271.21	123.32	147.89	Sea Level
SLAP-4	6/19/2013	271.21	123.90	147.31	Sea Level
SLAP-4	8/29/2013	271.21	127.10	144.11	Sea Level
SLAP-4	1/30/2014	271.21	122.50	148.71	Sea Level
SLAP-5	10/8/2008	274.60	105.51	169.09	Sea Level
SLAP-5	2/6/2009	274.60	98.88	175.72	Sea Level
SLAP-5	6/16/2009	274.60	101.46	173.14	Sea Level
SLAP-5	8/17/2009	274.60	103.90	170.70	Sea Level
SLAP-5	10/13/2009	274.60	101.52	173.08	Sea Level
SLAP-5	12/7/2009	274.60	119.78	154.82	Sea Level
SLAP-5	12/11/2009	274.60	127.20	147.40	Sea Level
SLAP-5	12/18/2009	274.60	114.37	160.23	Sea Level
SLAP-5	1/8/2010	274.60	126.38	148.22	Sea Level
SLAP-5	1/21/2010	274.60	128.80	145.80	Sea Level

Well ID	Date	Measuring Pt	Depth to SWL	GW Elev	Aquifer
SLAP-5	4/21/2010	274.60	130.43	144.17	Sea Level
SLAP-5	5/11/2010	274.60	130.53	144.07	Sea Level
SLAP-5	6/3/2010	274.60	131.16	143.44	Sea Level
SLAP-5	8/13/2010	274.60	132.20	142.40	Sea Level
SLAP-5	8/20/2010	274.60	131.56	143.04	Sea Level
SLAP-5	10/22/2010	274.60	129.50	145.10	Sea Level
SLAP-5	11/24/2010	274.60	125.52	149.08	Sea Level
SLAP-5	12/13/2010	274.60	129.64	144.96	Sea Level
SLAP-5	1/19/2011	274.60	128.34	146.26	Sea Level
SLAP-5	2/25/2011	274.60	128.00	146.60	Sea Level
SLAP-5	3/28/2011	274.60	127.00	147.60	Sea Level
SLAP-5	4/26/2011	274.60	126.62	147.98	Sea Level
SLAP-5	5/25/2011	274.60	126.37	148.23	Sea Level
SLAP-5	7/27/2011	274.60	128.95	145.65	Sea Level
SLAP-5	8/24/2011	274.60	130.05	144.55	Sea Level
SLAP-5	9/26/2011	274.60	130.60	144.00	Sea Level
SLAP-5	10/27/2011	274.60	129.70	144.90	Sea Level
SLAP-5	11/21/2011	274.60	129.40	145.20	Sea Level
SLAP-5	12/22/2011	274.60	129.29	145.31	Sea Level
SLAP-5	1/25/2012	274.60	120.83	153.77	Sea Level
SLAP-5	2/27/2012	274.60	127.20	147.40	Sea Level
SLAP-5	4/25/2012	274.60	127.30	147.30	Sea Level
SLAP-5	5/31/2012	274.60	127.60	147.00	Sea Level
SLAP-5	6/28/2012	274.60	127.99	146.61	Sea Level
SLAP-5	7/25/2012	274.60	129.40	145.20	Sea Level
SLAP-5	8/22/2012	274.60	130.89	143.71	Sea Level
SLAP-5	9/12/2012	274.60	130.55	144.05	Sea Level
SLAP-5	10/18/2012	274.60	130.33	144.27	Sea Level
SLAP-5	11/28/2012	274.60	128.04	146.56	Sea Level
SLAP-5	12/28/2012	274.60	126.67	147.93	Sea Level
SLAP-5	1/24/2013	274.60	127.41	147.19	Sea Level
SLAP-5	2/25/2013	274.60	122.18	152.42	Sea Level
SLAP-5	3/26/2013	274.60	127.15	147.45	Sea Level
SLAP-5	4/24/2013	274.60	128.10	146.50	Sea Level
SLAP-5	5/14/2013	274.60	129.61	144.99	Sea Level
SLAP-5	6/19/2013	274.60	129.91	144.69	Sea Level
SLAP-5	8/29/2013	274.60	132.37	142.23	Sea Level
SLAP-5	1/30/2014	274.60	128.60	146.00	Sea Level
SLAP-6	10/8/2008	277.99	108.87	169.12	Sea Level
SLAP-6	2/6/2009	277.99	101.20	176.79	Sea Level
SLAP-6	6/16/2009	277.99	102.66	175.33	Sea Level
SLAP-6	8/17/2009	277.99	105.78	172.21	Sea Level
SLAP-6	10/13/2009	277.99	103.37	174.62	Sea Level
SLAP-6	12/7/2009	277.99	121.86	156.13	Sea Level
SLAP-6	12/11/2009	277.99	128.92	149.07	Sea Level
SLAP-6	12/18/2009	277.99	116.26	161.73	Sea Level
SLAP-6	1/8/2010	277.99	128.05	149.94	Sea Level
SLAP-6	1/21/2010	277.99	130.40	147.59	Sea Level
SLAP-6	4/21/2010	277.99	131.15	146.84	Sea Level
SLAP-6	5/11/2010	277.99	131.77	146.22	Sea Level
SLAP-6	6/3/2010	277.99	132.39	145.60	Sea Level
SLAP-6	8/13/2010	277.99	134.57	143.42	Sea Level
SLAP-6	8/20/2010	277.99	133.53	144.46	Sea Level
SLAP-6	10/22/2010	277.99	131.40	146.59	Sea Level

Well ID	Date	Measuring Pt	Depth to SWL	GW Elev	Aquifer
SLAP-6	11/24/2010	277.99	127.50	150.49	Sea Level
SLAP-6	12/13/2010	277.99	131.65	146.34	Sea Level
SLAP-6	1/19/2011	277.99	130.40	147.59	Sea Level
SLAP-6	2/25/2011	277.99	130.15	147.84	Sea Level
SLAP-6	3/28/2011	277.99	129.03	148.96	Sea Level
SLAP-6	4/26/2011	277.99	128.62	149.37	Sea Level
SLAP-6	5/25/2011	277.99	128.37	149.62	Sea Level
SLAP-6	7/27/2011	277.99	130.97	147.02	Sea Level
SLAP-6	8/24/2011	277.99	132.09	145.90	Sea Level
SLAP-6	9/26/2011	277.99	132.67	145.32	Sea Level
SLAP-6	10/27/2011	277.99	131.80	146.19	Sea Level
SLAP-6	11/21/2011	277.99	131.50	146.49	Sea Level
SLAP-6	12/22/2011	277.99	131.35	146.64	Sea Level
SLAP-6	1/25/2012	277.99	125.87	152.12	Sea Level
SLAP-6	2/27/2012	277.99	128.94	149.05	Sea Level
SLAP-6	4/25/2012	277.99	129.50	148.49	Sea Level
SLAP-6	5/31/2012	277.99	129.40	148.59	Sea Level
SLAP-6	6/28/2012	277.99	129.89	148.10	Sea Level
SLAP-6	7/25/2012	277.99	129.40	148.59	Sea Level
SLAP-6	8/22/2012	277.99	133.20	144.79	Sea Level
SLAP-6	9/12/2012	277.99	132.49	145.50	Sea Level
SLAP-6	10/18/2012	277.99	132.08	145.91	Sea Level
SLAP-6	11/28/2012	277.99	129.48	148.51	Sea Level
SLAP-6	12/28/2012	277.99	128.18	149.81	Sea Level
SLAP-6	1/24/2013	277.99	127.89	150.10	Sea Level
SLAP-6	2/25/2013	277.99	129.35	148.64	Sea Level
SLAP-6	3/26/2013	277.99	128.66	149.33	Sea Level
SLAP-6	4/24/2013	277.99	129.14	148.85	Sea Level
SLAP-6	5/14/2013	277.99	130.57	147.42	Sea Level
SLAP-6	6/19/2013	277.99	130.64	147.35	Sea Level
SLAP-6	8/29/2013	277.99	134.52	143.47	Sea Level
SLAP-6	1/30/2014	277.99	129.70	148.29	Sea Level
SRCMW-01b	2/3/2003	224.19	132.22	91.97	Sea Level
SRCMW-01b	3/3/2003	224.19	132.08	92.11	Sea Level
SRCMW-01b	7/1/2003	224.19	134.64	89.55	Sea Level
SRCMW-01b	10/4/2004	224.19	134.19	90.00	Sea Level
SRCMW-01b	4/12/2005	224.19	133.15	91.04	Sea Level
SRCMW-01b	7/29/2005	224.19	136.05	88.14	Sea Level
SRCMW-01b	3/16/2006	224.19	131.40	92.79	Sea Level
SRCMW-01b	9/22/2006	224.19	135.35	88.84	Sea Level
SRCMW-01b	3/23/2007	224.19	131.23	92.96	Sea Level
SRCMW-01b	9/27/2007	224.19	134.90	89.29	Sea Level
SRCMW-01b	4/3/2008	224.19	131.99	92.20	Sea Level
SRCMW-01b	10/8/2008	224.19	134.45	89.74	Sea Level
SRCMW-01b	2/4/2009	224.19	131.70	92.49	Sea Level
SRCMW-01b	8/6/2009	224.19	137.09	87.10	Sea Level
SRCMW-01b	2/8/2010	224.19	134.20	89.99	Sea Level
SRCMW-01b	8/17/2010	224.19	139.07	85.12	Sea Level
SRCMW-01b	2/15/2011	224.19	134.96	89.23	Sea Level
SRCMW-01b	8/9/2011	224.19	136.97	87.22	Sea Level
SRCMW-01b	3/2/2012	224.19	135.20	88.99	Sea Level
SRCMW-01b	8/1/2012	224.19	136.92	87.27	Sea Level
SRCMW-01b	2/4/2013	224.19	135.05	89.14	Sea Level
SRCMW-01b	8/5/2013	224.19	137.85	86.34	Sea Level

Appendix D - Historical Depth to Water Measurements and Sea Level Aquifer Trend Graphs

Historical Depth to Water measurements

Log RAM, Joint Base Lewis-McChord, Washington 98433

Well ID	Date	Measuring Pt	Depth to SWL	GW Elev	Aquifer
SRCMW-01b	2/19/2014	224.19	135.10	89.09	Sea Level
SRCMW-01b	9/9/2014	224.19	137.23	86.96	Sea Level
WELL-13	4/1/2002	274.24	95.68	178.56	Sea Level
WELL-13	6/1/2002	274.24	96.00	178.24	Sea Level
WELL-13	9/1/2002	274.24	97.00	177.24	Sea Level
WELL-13	2/3/2003	274.24	98.00	176.24	Sea Level
WELL-13	3/3/2003	274.24	96.00	178.24	Sea Level
WELL-13	7/1/2003	274.24	97.00	177.24	Sea Level
WELL-13	10/4/2004	274.24	98.00	176.24	Sea Level

Notes:

Measuring Pt = Elevation of top of casing in feet above mean sea level (ft/amsl)

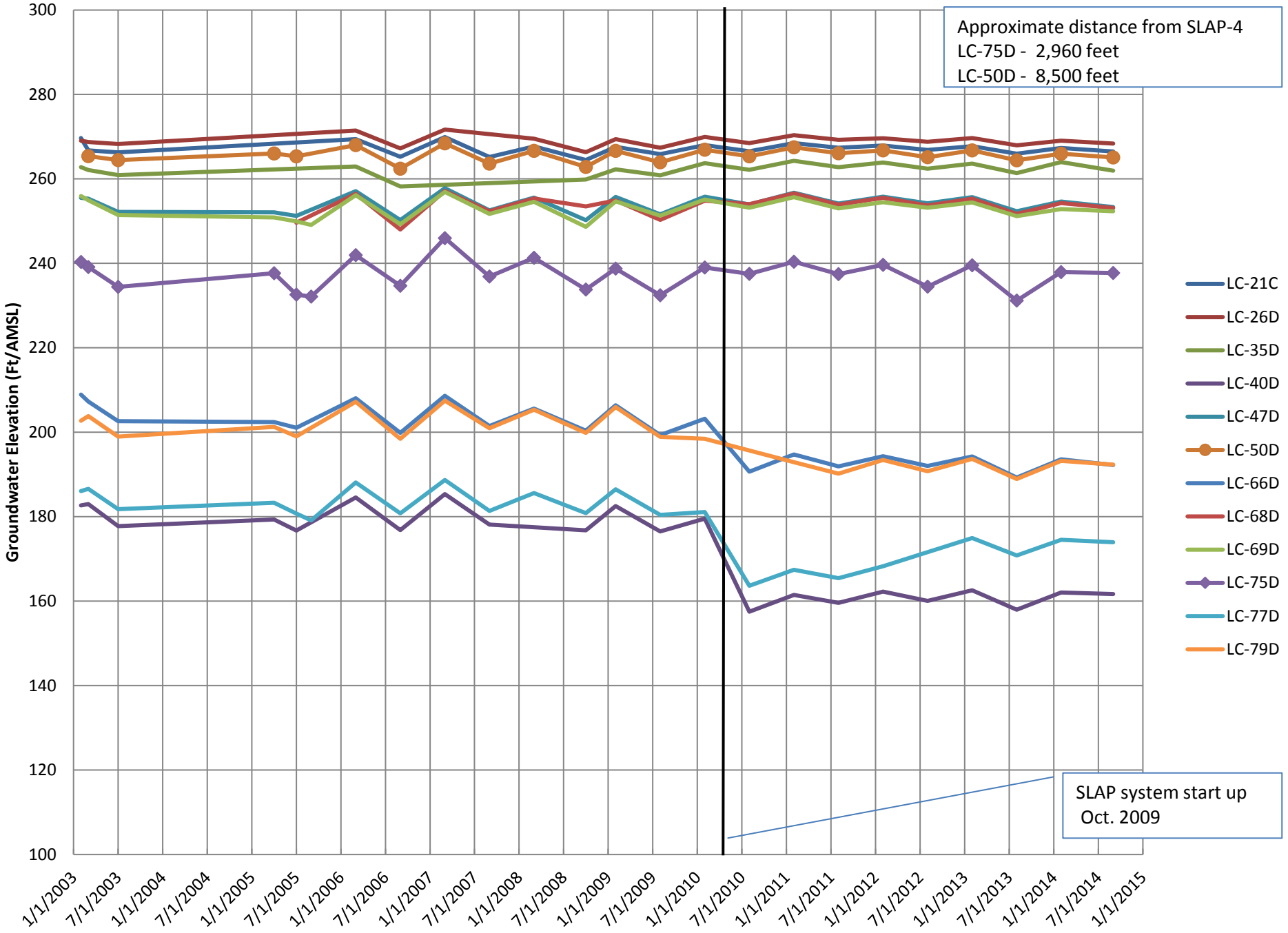
SWL = Static water level in feet

GW Elev = Groundwater elevation ft/amsl

Appendix D - Historical Depth to Water Measurements and Sea Level Aquifer Trend Graphs

Sea Level Aquifer Monitoring Wells Upgradient of System

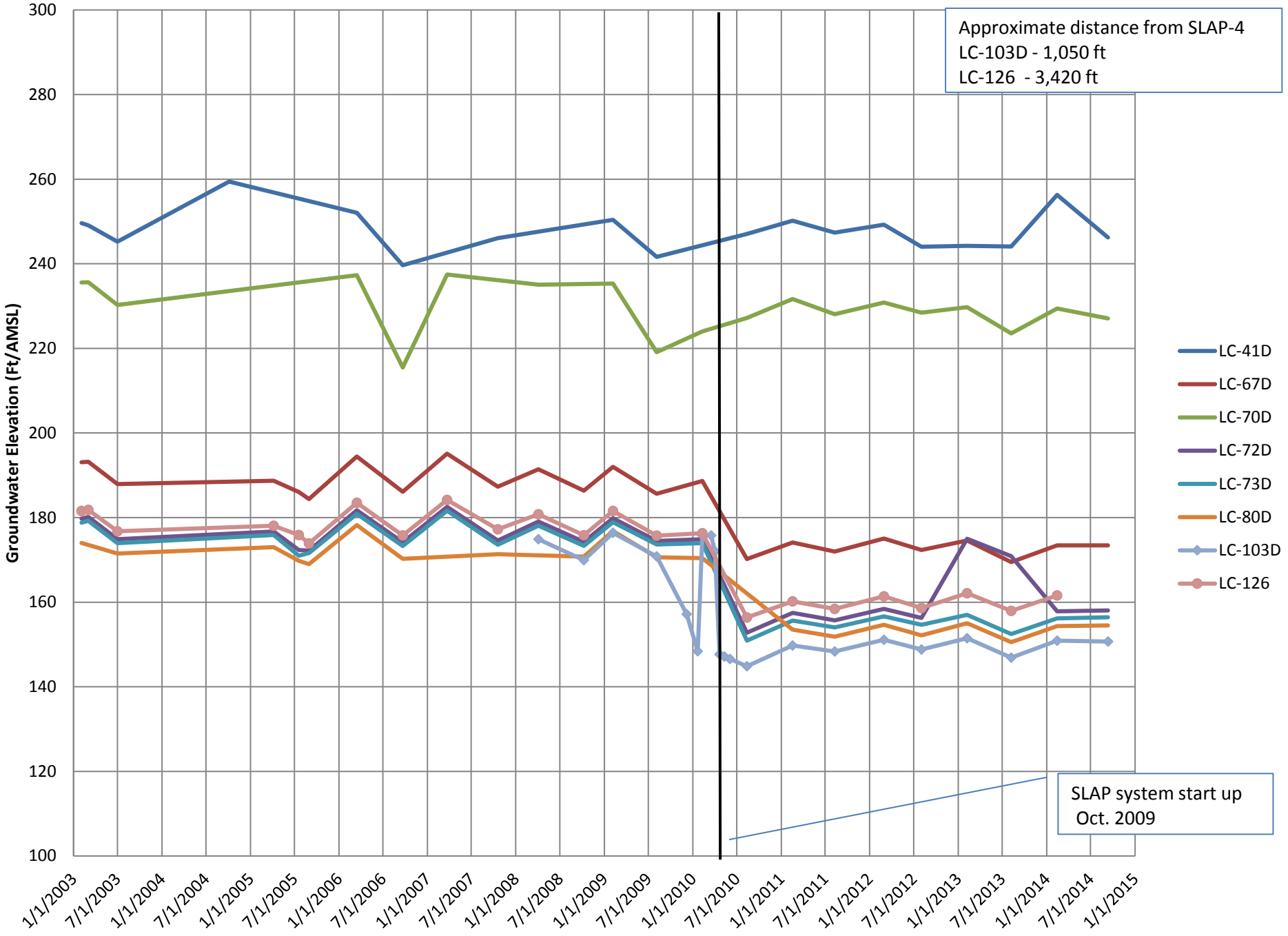
Log RAM, Joint Base Lewis-McChord, Washington 98433



Appendix D - Historical Depth to Water Measurements and Sea Level Aquifer Trend Graphs

Sea level Aquifer Monitoring Wells Upgradient of System

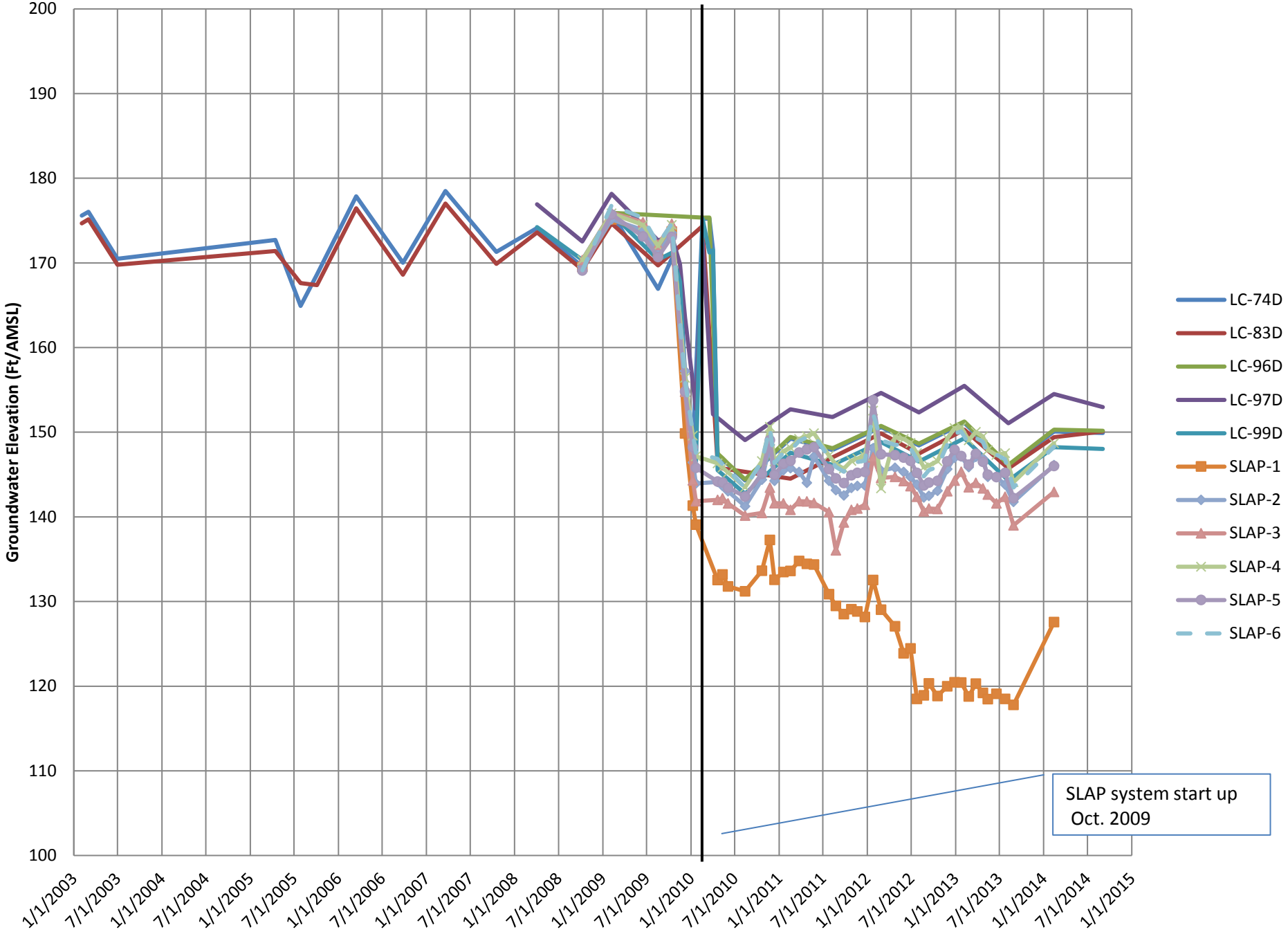
Log RAM, Joint Base Lewis - McChord, Washington 98433



Appendix D - Historical Depth to Water Measurements and Sea Level Aquifer Trend Graphs

Sea Level Aquifer Pump and Treat System Wells and Adjacent Monitoring Wells

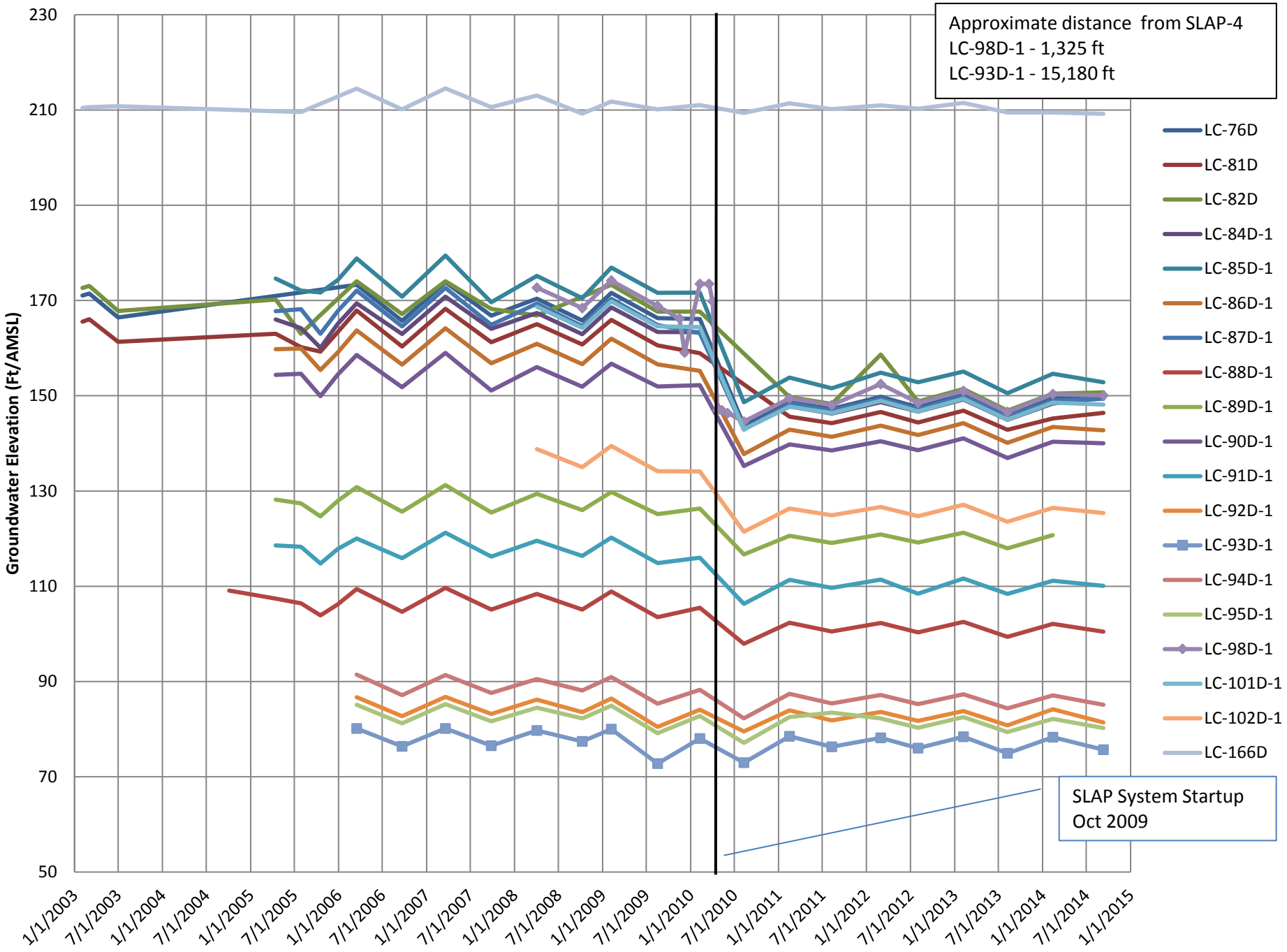
Log RAM, Joint Base Lewis - McChord, Washington 98433



Appendix D - Historical Depth to Water Measurements and Sea Level Aquifer Trend Graphs

Sea Level Aquifer Monitoring Wells Downgradient of System

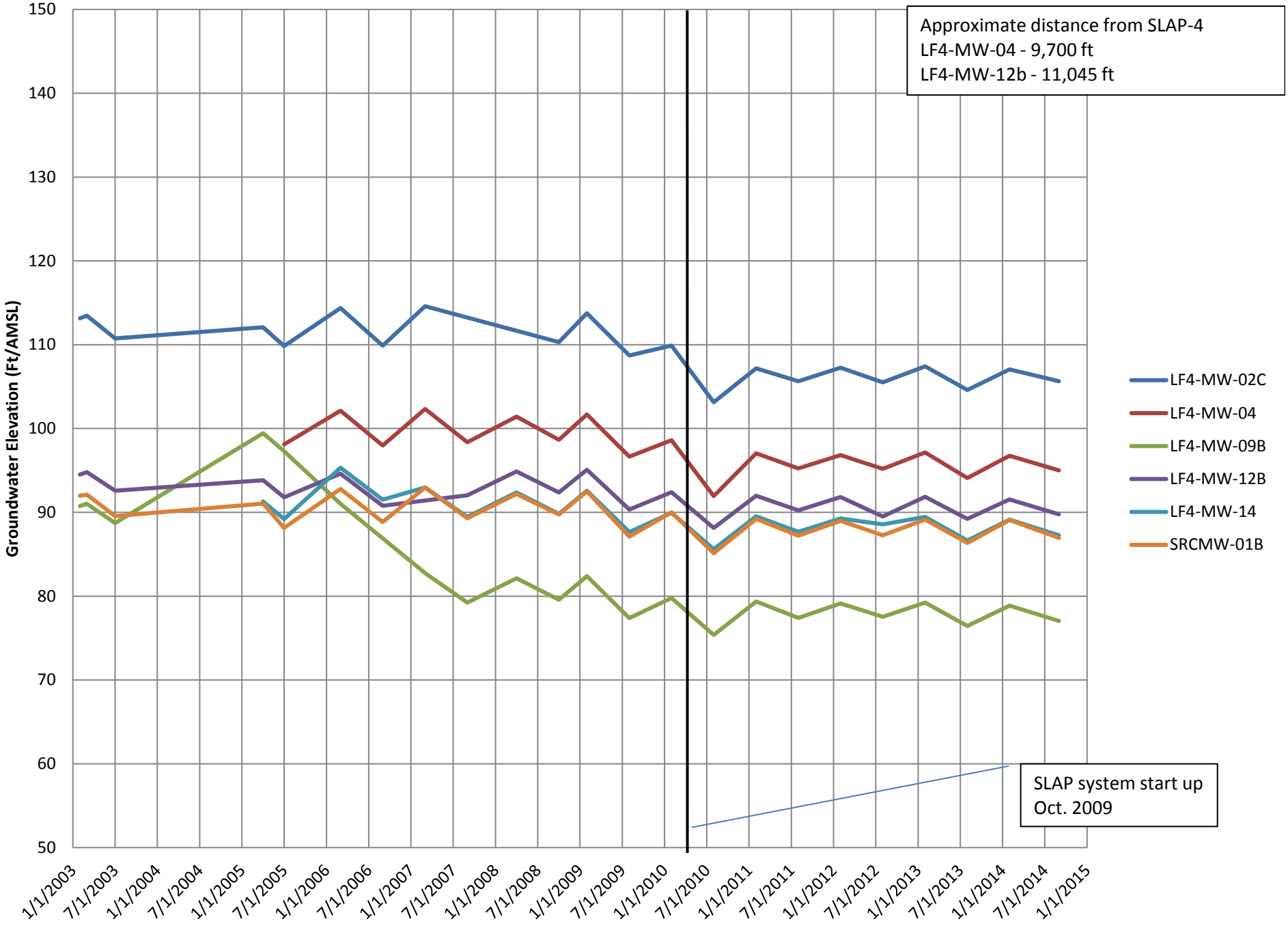
Log RAM, Joint Base Lewis-McChord, Washington 98433



Appendix D - Historical Depth to Water Measurements and Sea Level Aquifer Trend Graphs

Landfill 4 Sea Level Aquifer Monitoring Wells Downgradient of System

Log RAM, Joint Base Lewis-McChord, Washington 98433



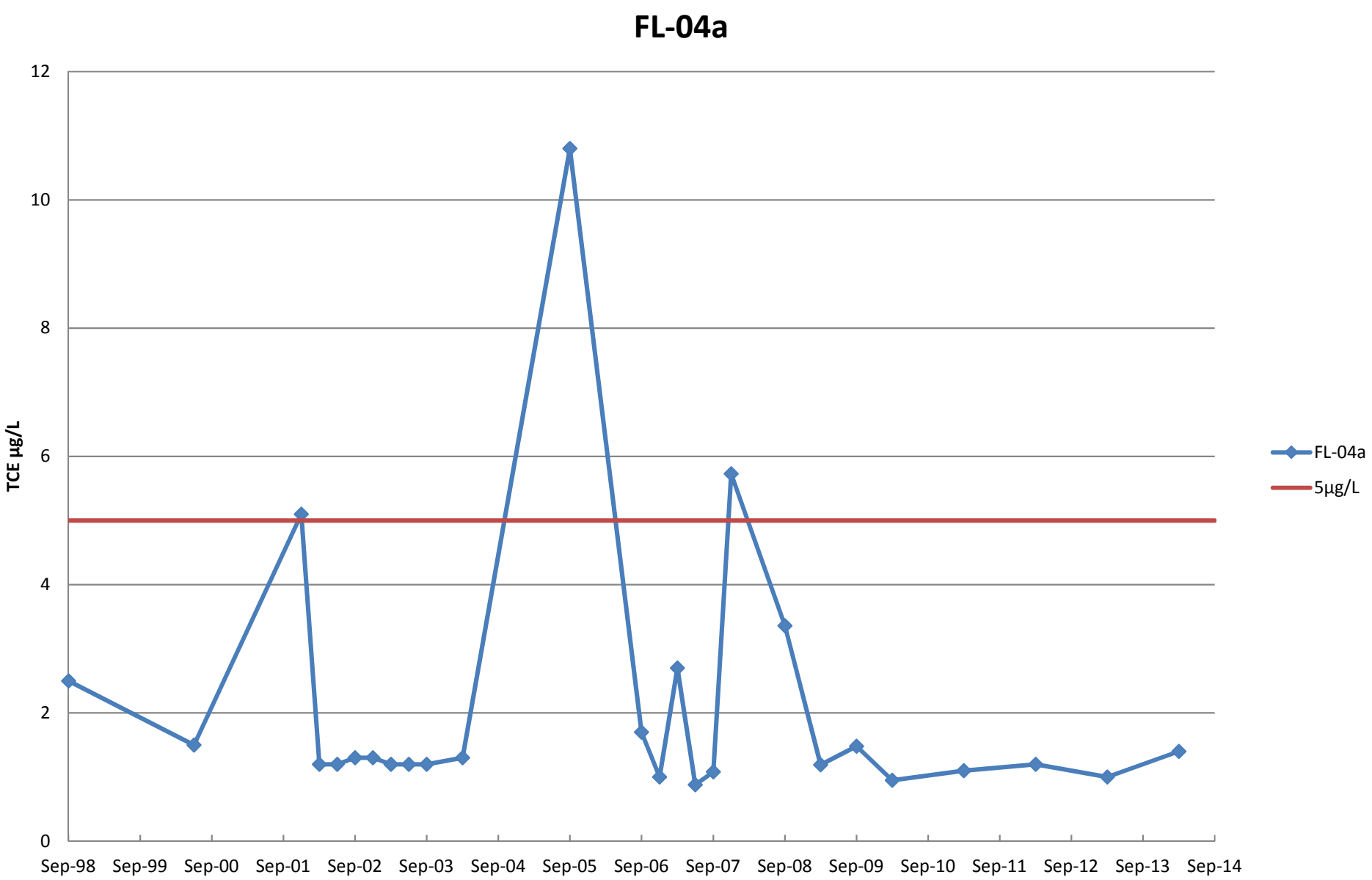
APPENDIX E

HISTORICAL ANALYTICAL RESULTS AND TCE LINEAR GRAPHS

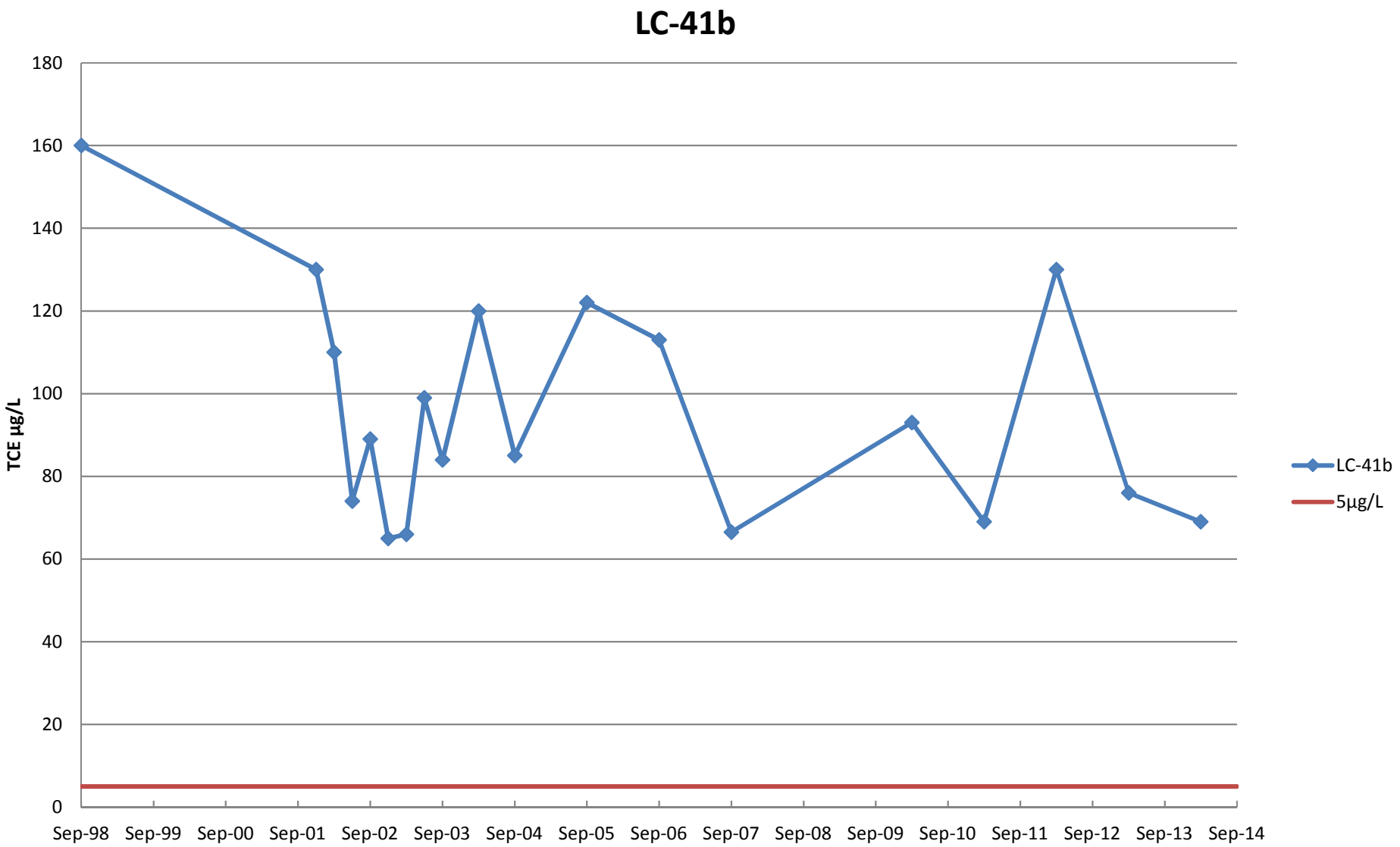
Appendix E - Historical Analytical Results and TCE Linear Graphs

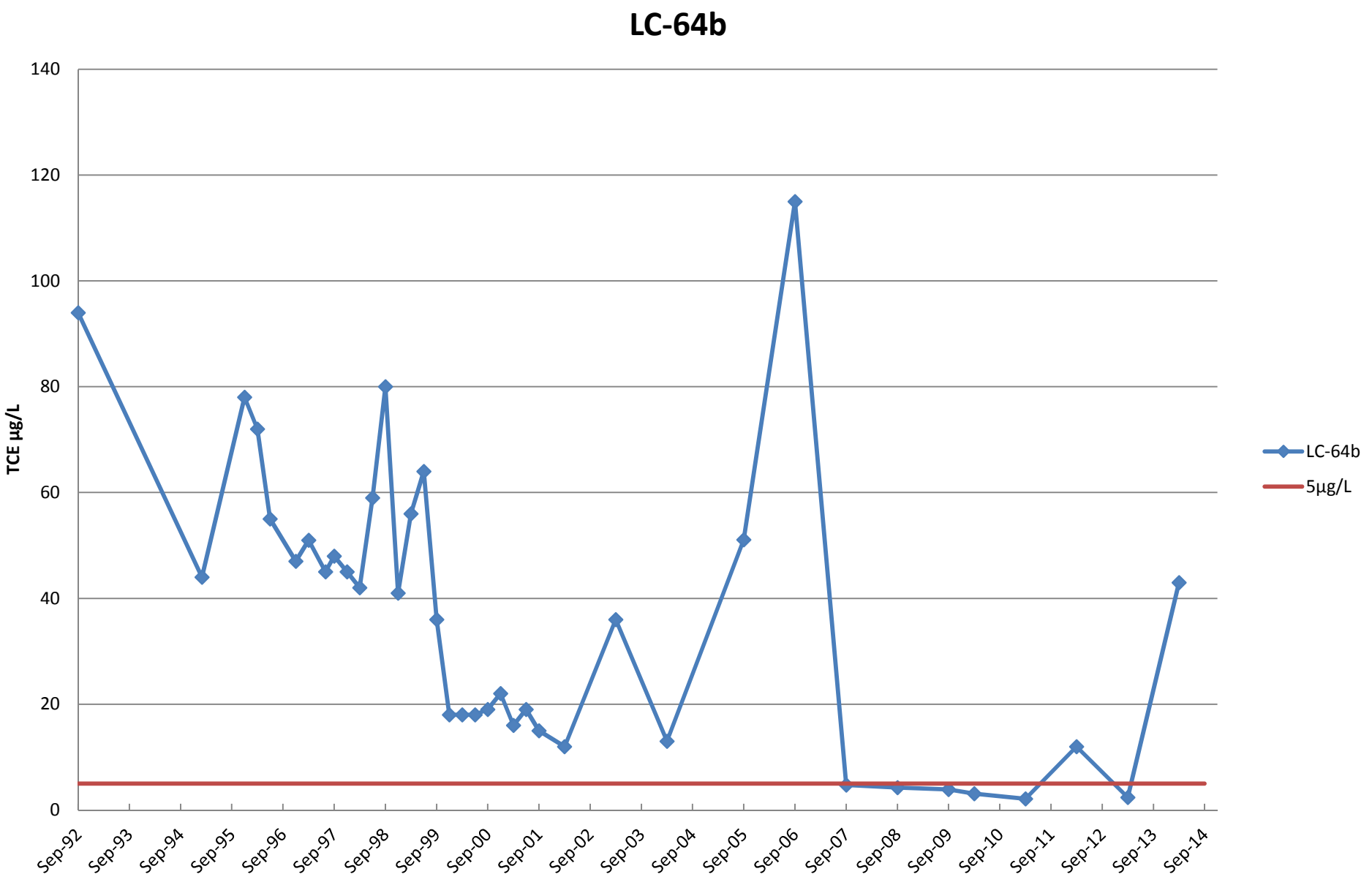
Lower Vashon Aquifer TCE Linear Graphs

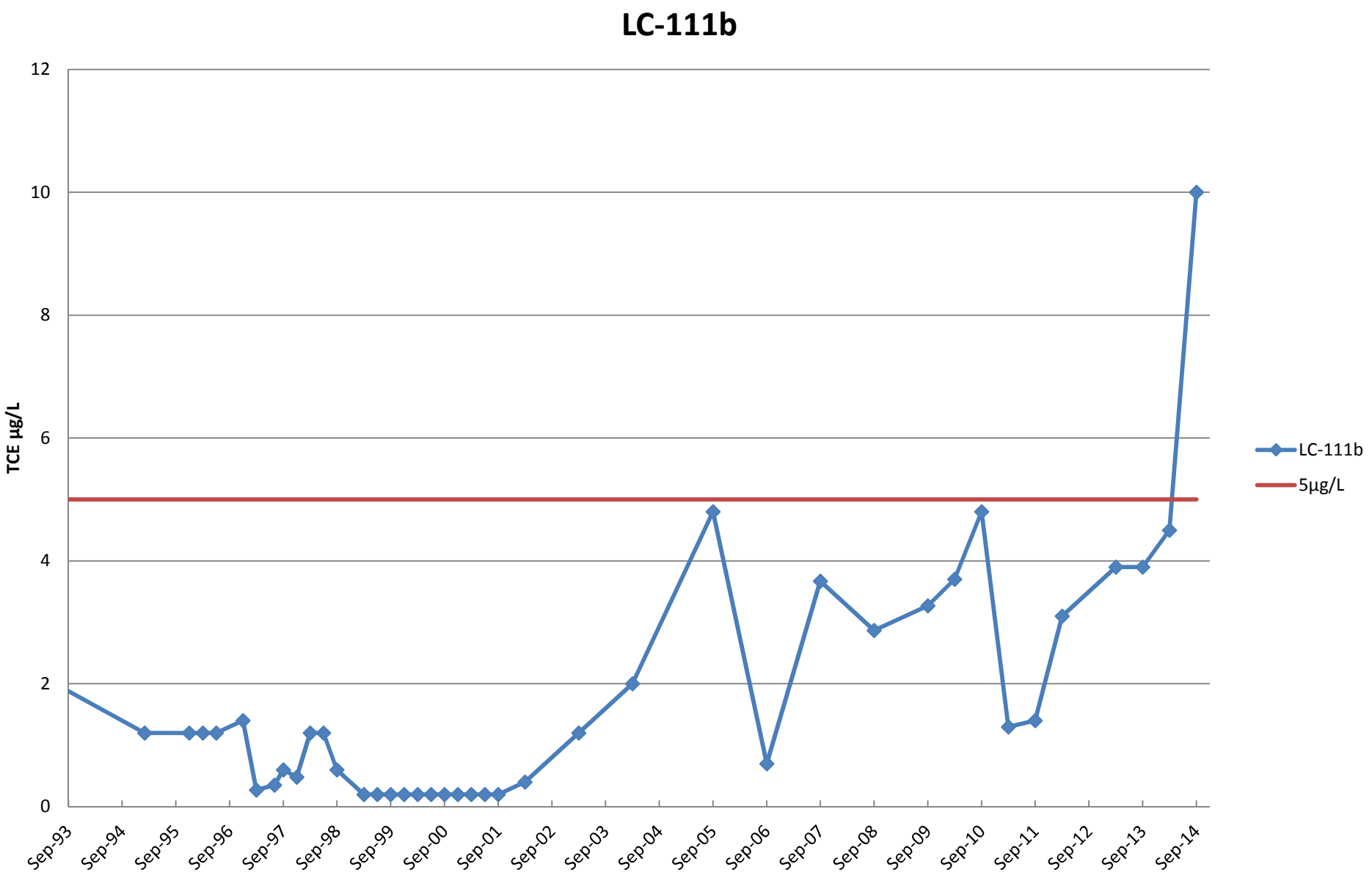
Log RAM - Joint Base Lewis McChord, Washington 98433

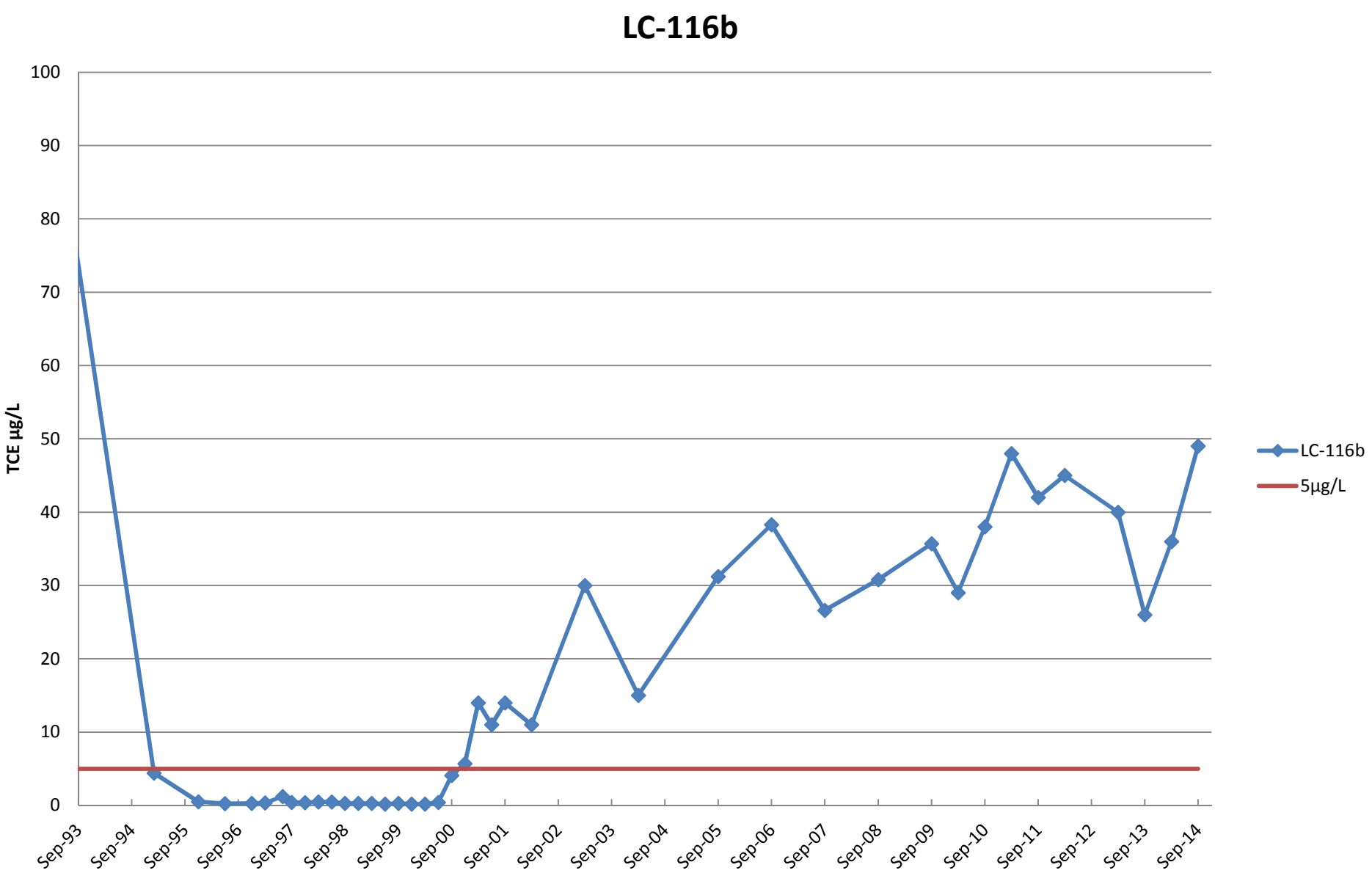


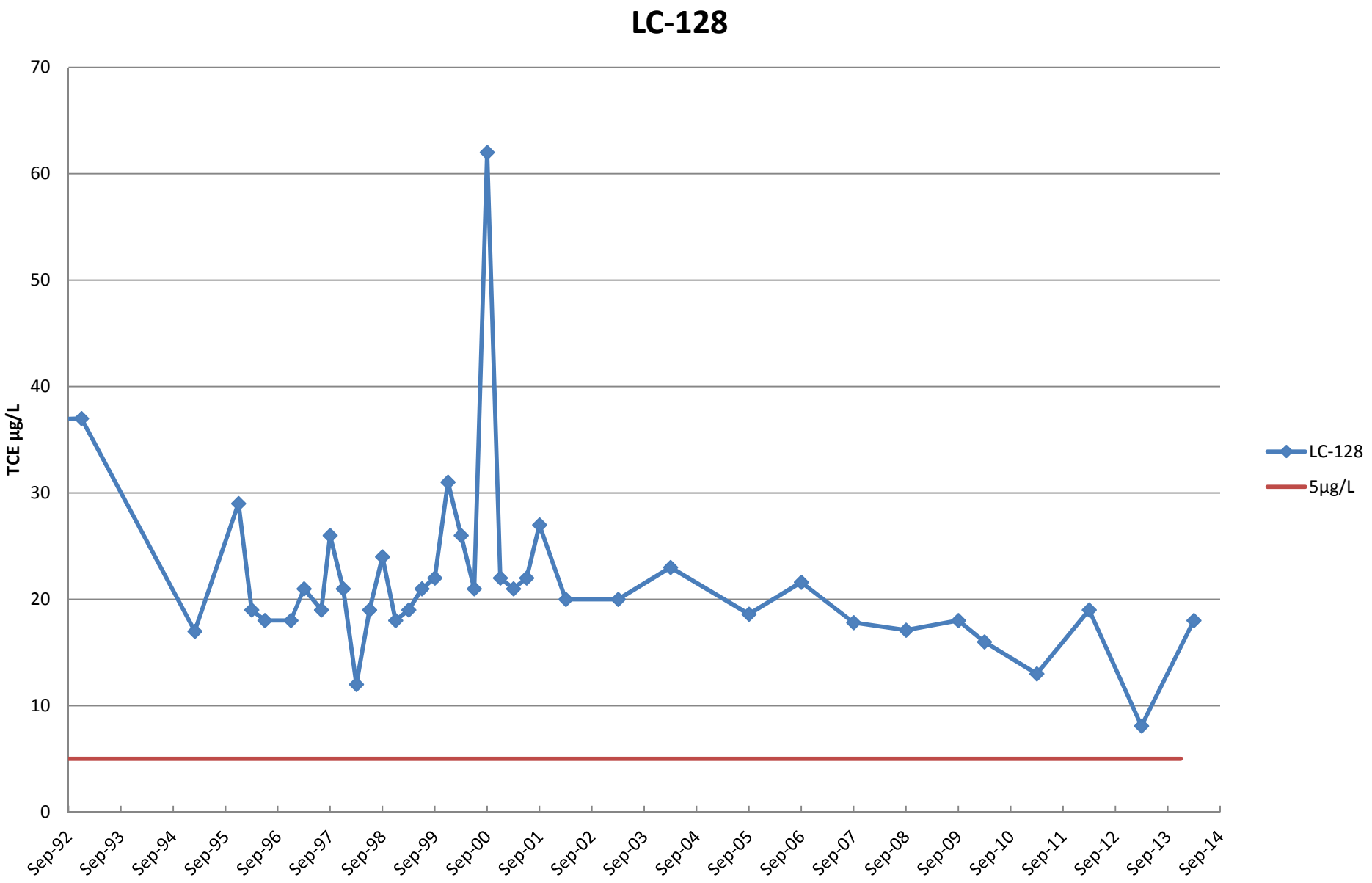
Appendix E - Historical Analytical Results and TCE Linear Graphs
Lower Vashon Aquifer TCE Linear Graphs
Log RAM - Joint Base Lewis McChord, Washington 98433

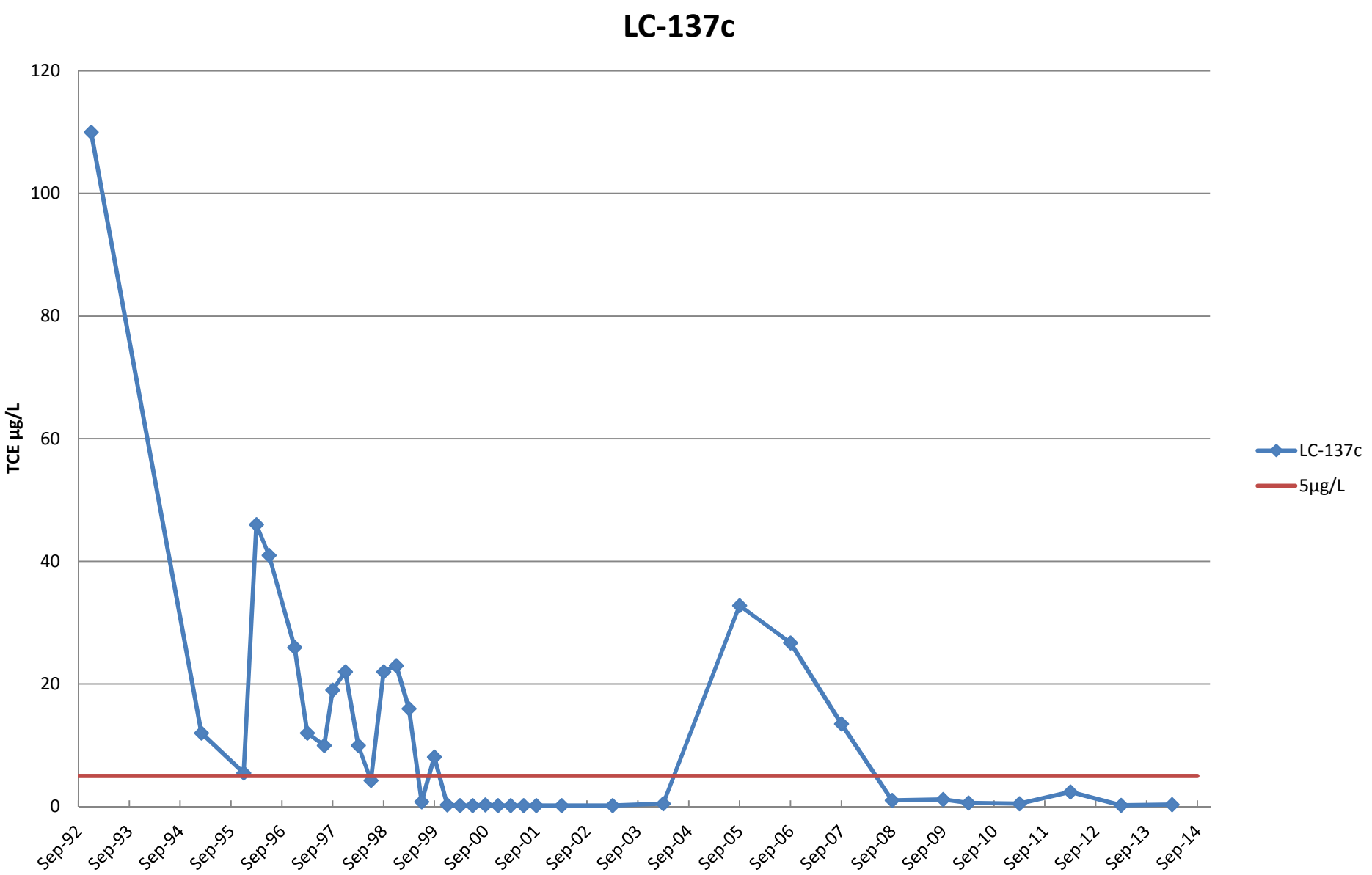


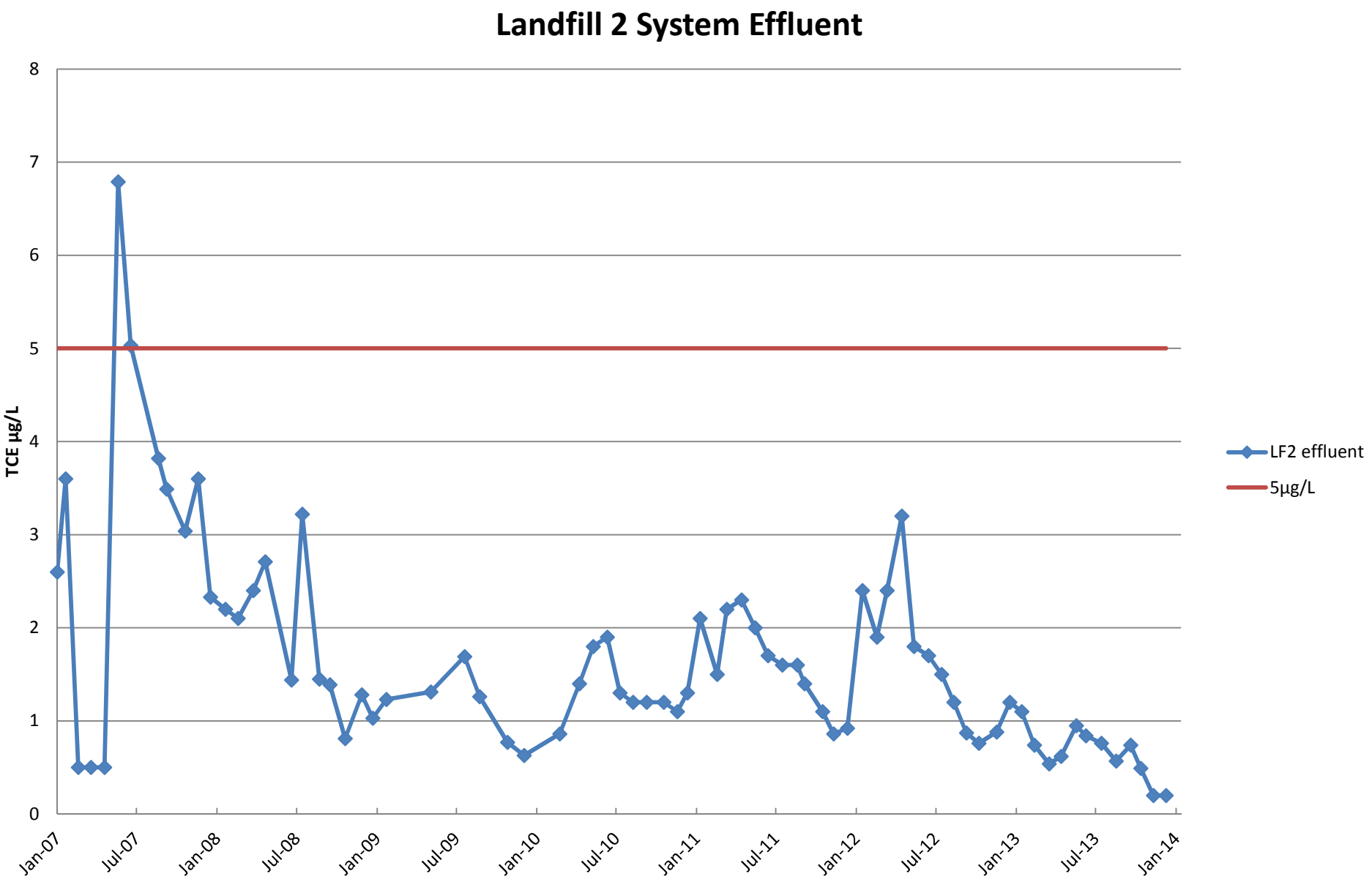

LC-64b
TCE µg/L
140
120
100
80
60
40
20
0
Sep-92
Sep-93
Sep-94
Sep-95
Sep-96
Sep-97
Sep-98
Sep-99
Sep-00
Sep-01
Sep-02
Sep-03
Sep-04
Sep-05
Sep-06
Sep-07
Sep-08
Sep-09
Sep-10
Sep-11
Sep-12
Sep-13
Sep-14
LC-64b
5µg/L

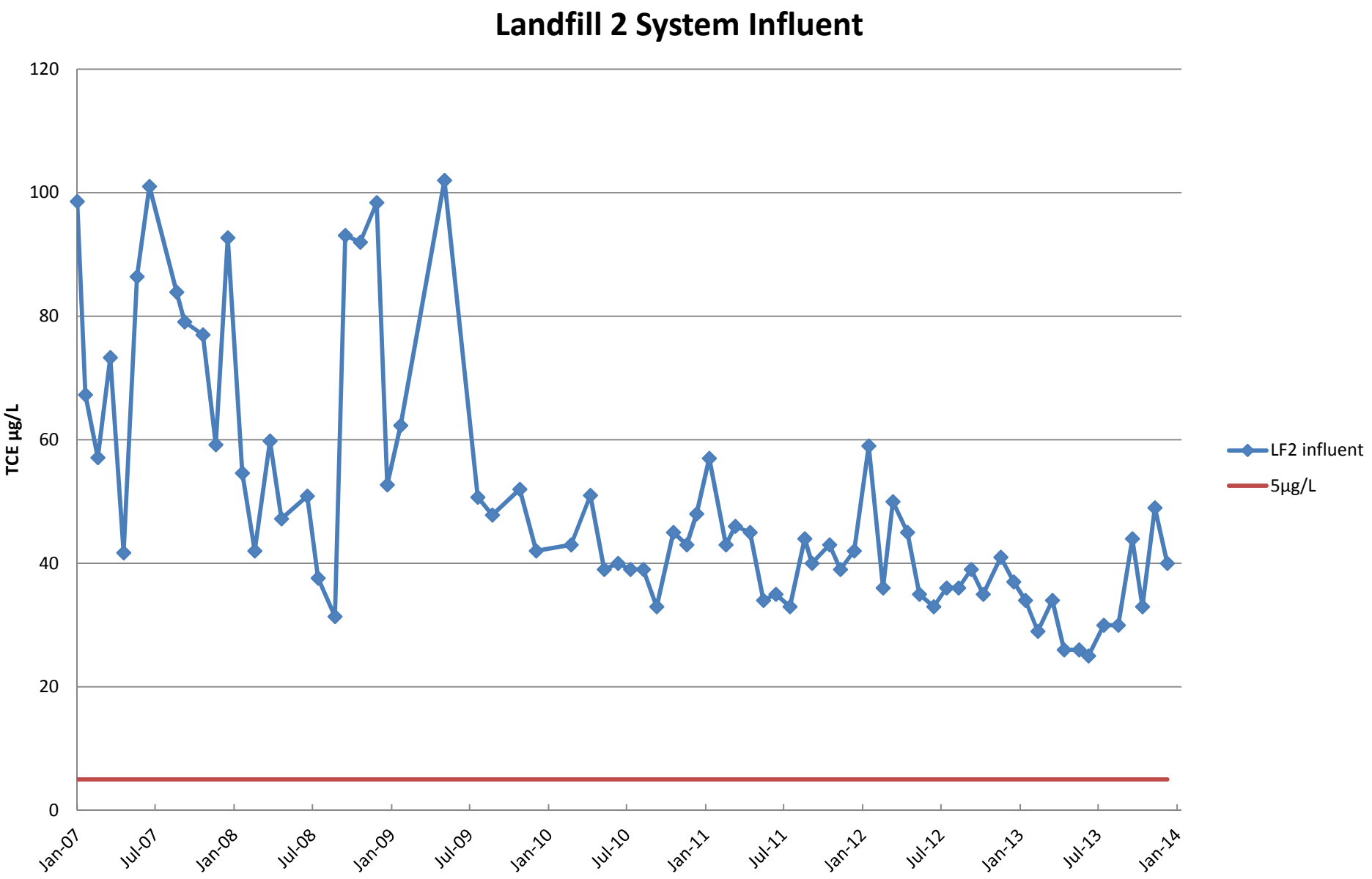

LC-111b
TCE µg/L
12
10
8
6
4
2
0
Sep-93
Sep-94
Sep-95
Sep-96
Sep-97
Sep-98
Sep-99
Sep-00
Sep-01
Sep-02
Sep-03
Sep-04
Sep-05
Sep-06
Sep-07
Sep-08
Sep-09
Sep-10
Sep-11
Sep-12
Sep-13
Sep-14
LC-111b
5µg/L

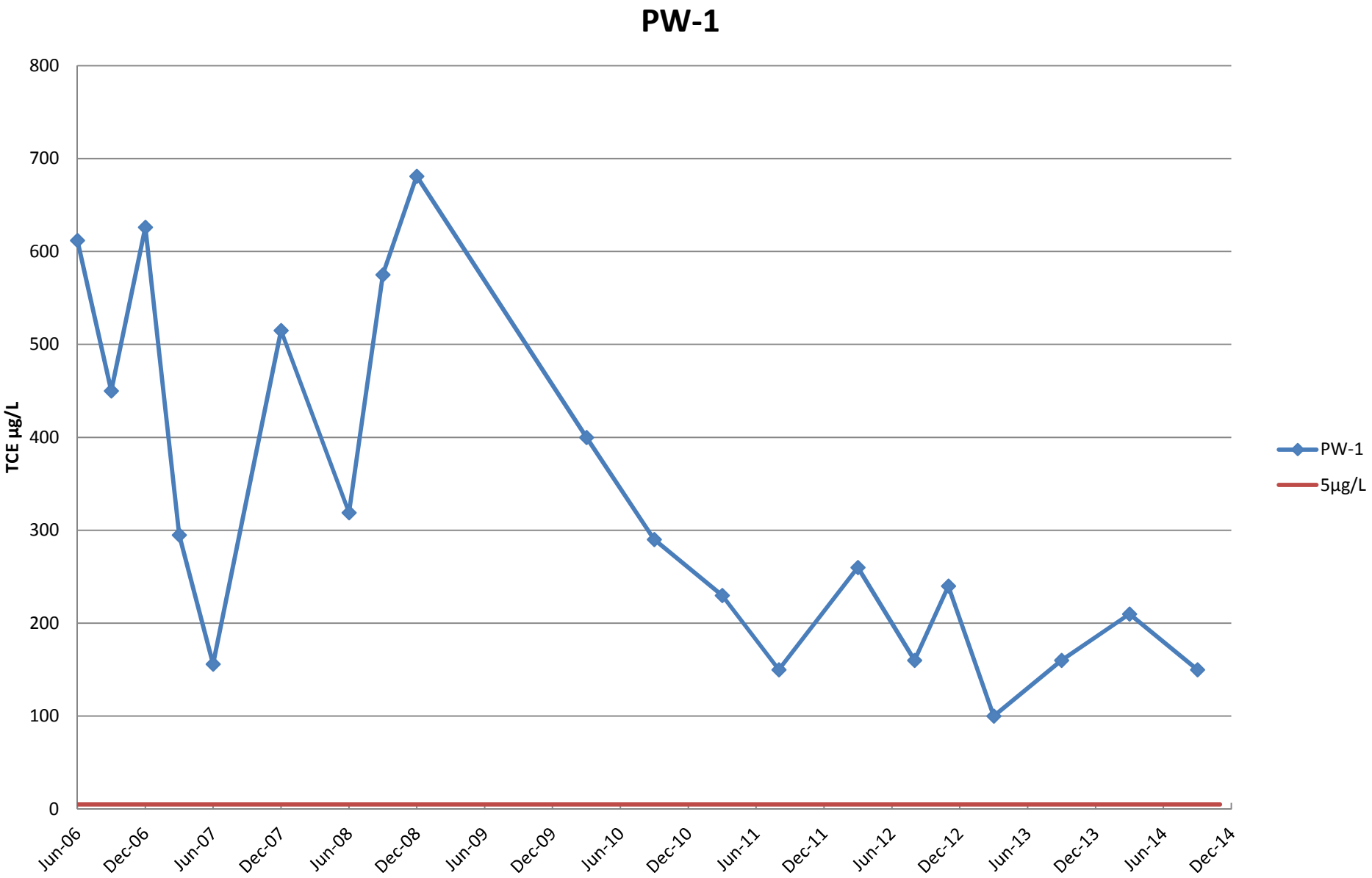

LC-116b
TCE µg/L
100
90
80
70
60
50
40
30
20
10
0
Sep-93
Sep-94
Sep-95
Sep-96
Sep-97
Sep-98
Sep-99
Sep-00
Sep-01
Sep-02
Sep-03
Sep-04
Sep-05
Sep-06
Sep-07
Sep-08
Sep-09
Sep-10
Sep-11
Sep-12
Sep-13
Sep-14
LC-116b
5µg/L

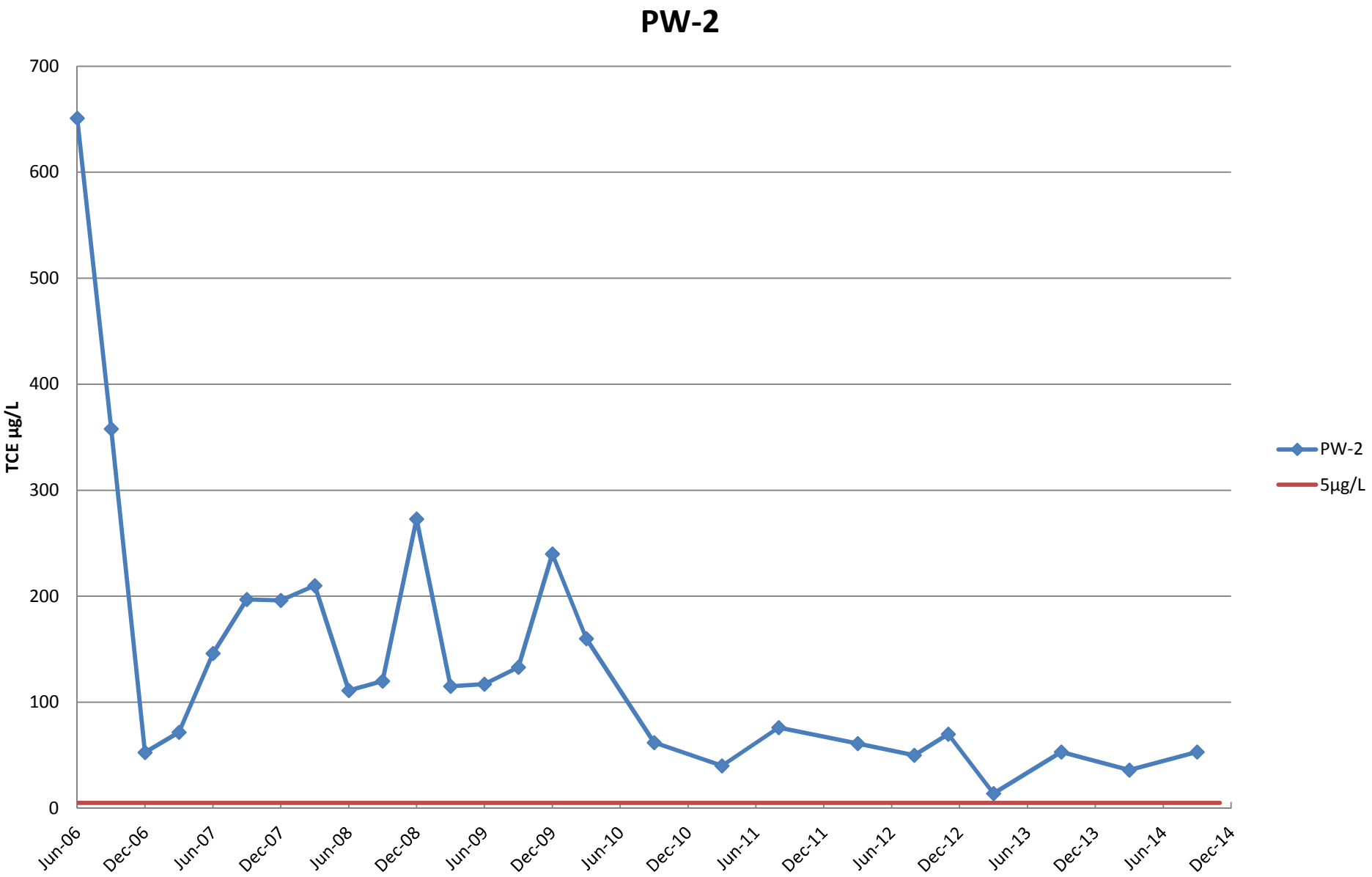

LC-128
TCE µg/L
70
60
50
40
30
20
10
0
Sep-92
Sep-93
Sep-94
Sep-95
Sep-96
Sep-97
Sep-98
Sep-99
Sep-00
Sep-01
Sep-02
Sep-03
Sep-04
Sep-05
Sep-06
Sep-07
Sep-08
Sep-09
Sep-10
Sep-11
Sep-12
Sep-13
Sep-14
LC-128
5µg/L

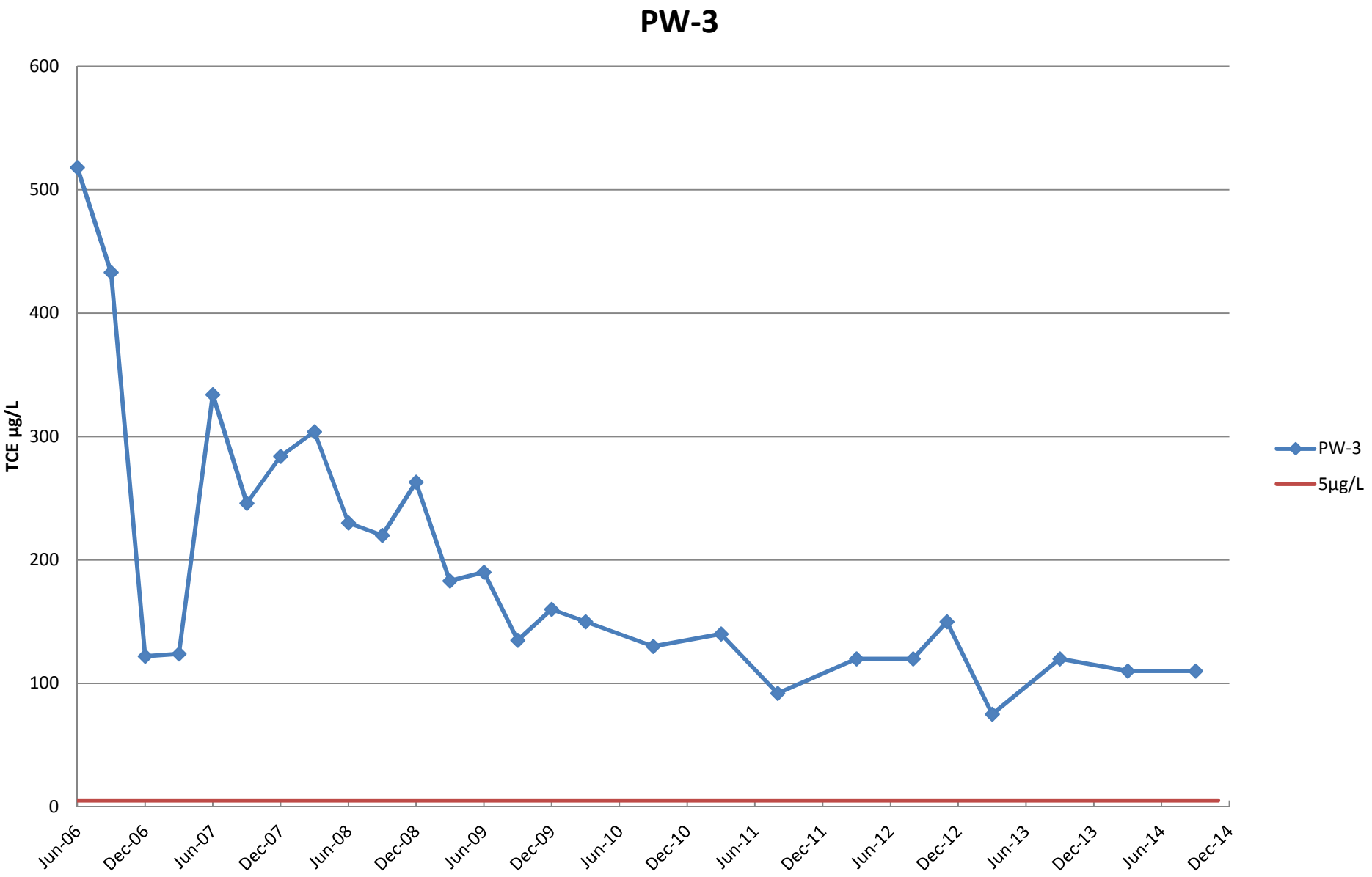

LC-137c
TCE µg/L
120
100
80
60
40
20
0
Sep-92
Sep-93
Sep-94
Sep-95
Sep-96
Sep-97
Sep-98
Sep-99
Sep-00
Sep-01
Sep-02
Sep-03
Sep-04
Sep-05
Sep-06
Sep-07
Sep-08
Sep-09
Sep-10
Sep-11
Sep-12
Sep-13
Sep-14
LC-137c
5µg/L

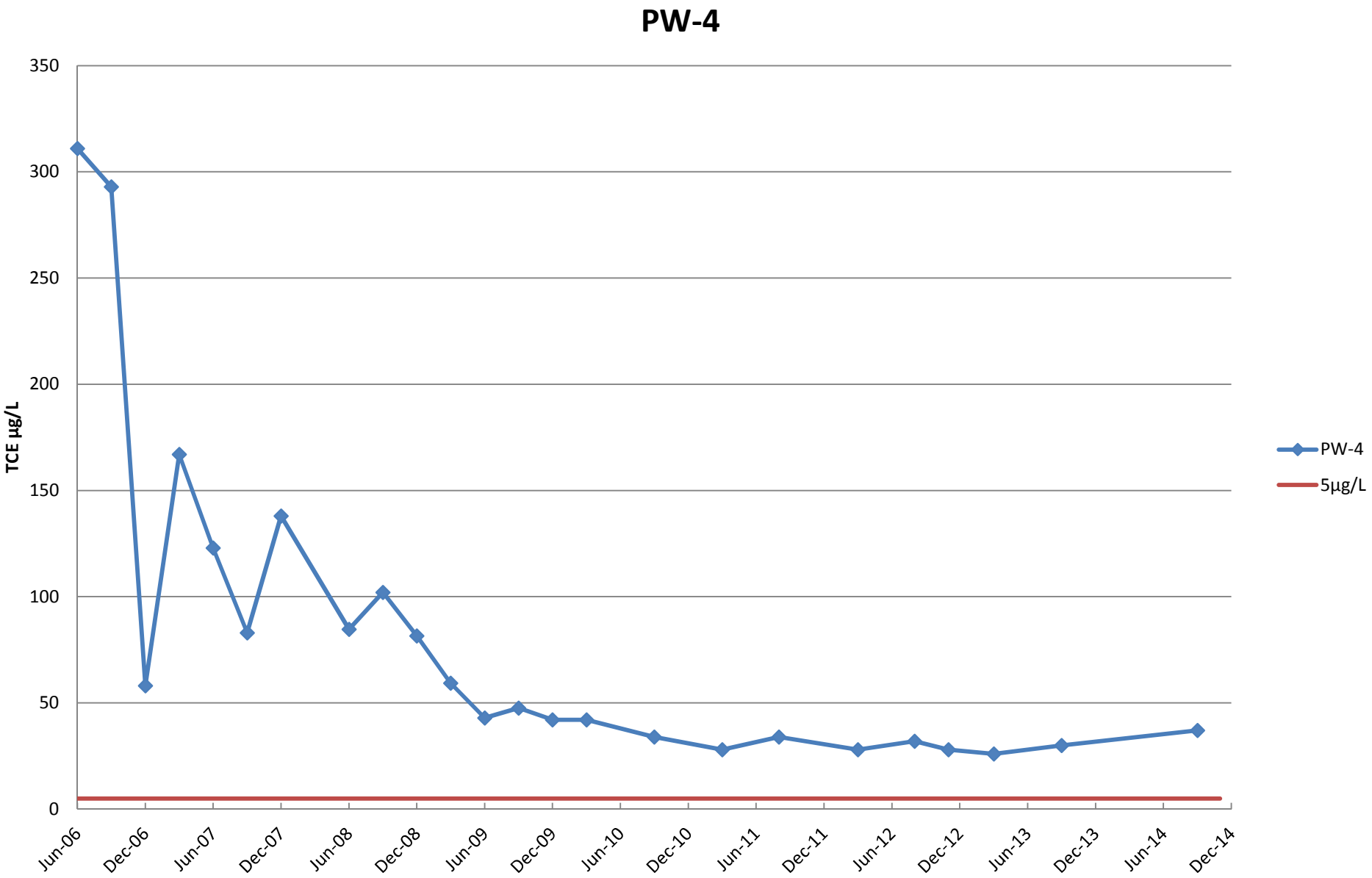

Landfill 2 System Effluent
TCE µg/L
8
7
6
5
4
3
2
1
0
Jan-07
Jul-07
Jan-08
Jul-08
Jan-09
Jul-09
Jan-10
Jul-10
Jan-11
Jul-11
Jan-12
Jul-12
Jan-13
Jul-13
Jan-14
LF2 effluent
5µg/L

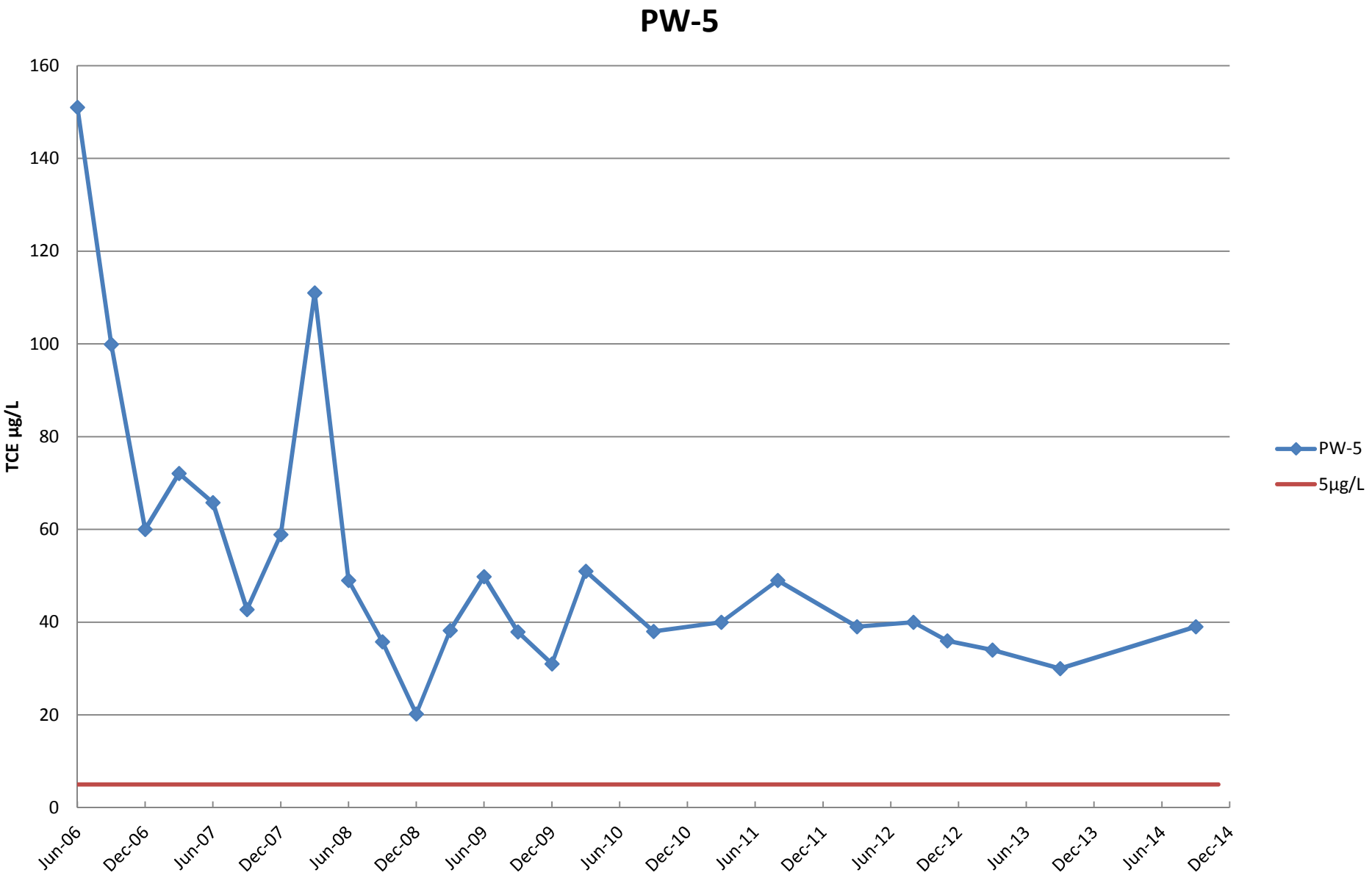

Landfill 2 System Influent
TCE µg/L
120
100
80
60
40
20
0
Jan-07
Jul-07
Jan-08
Jul-08
Jan-09
Jul-09
Jan-10
Jul-10
Jan-11
Jul-11
Jan-12
Jul-12
Jan-13
Jul-13
Jan-14
LF2 influent
5µg/L

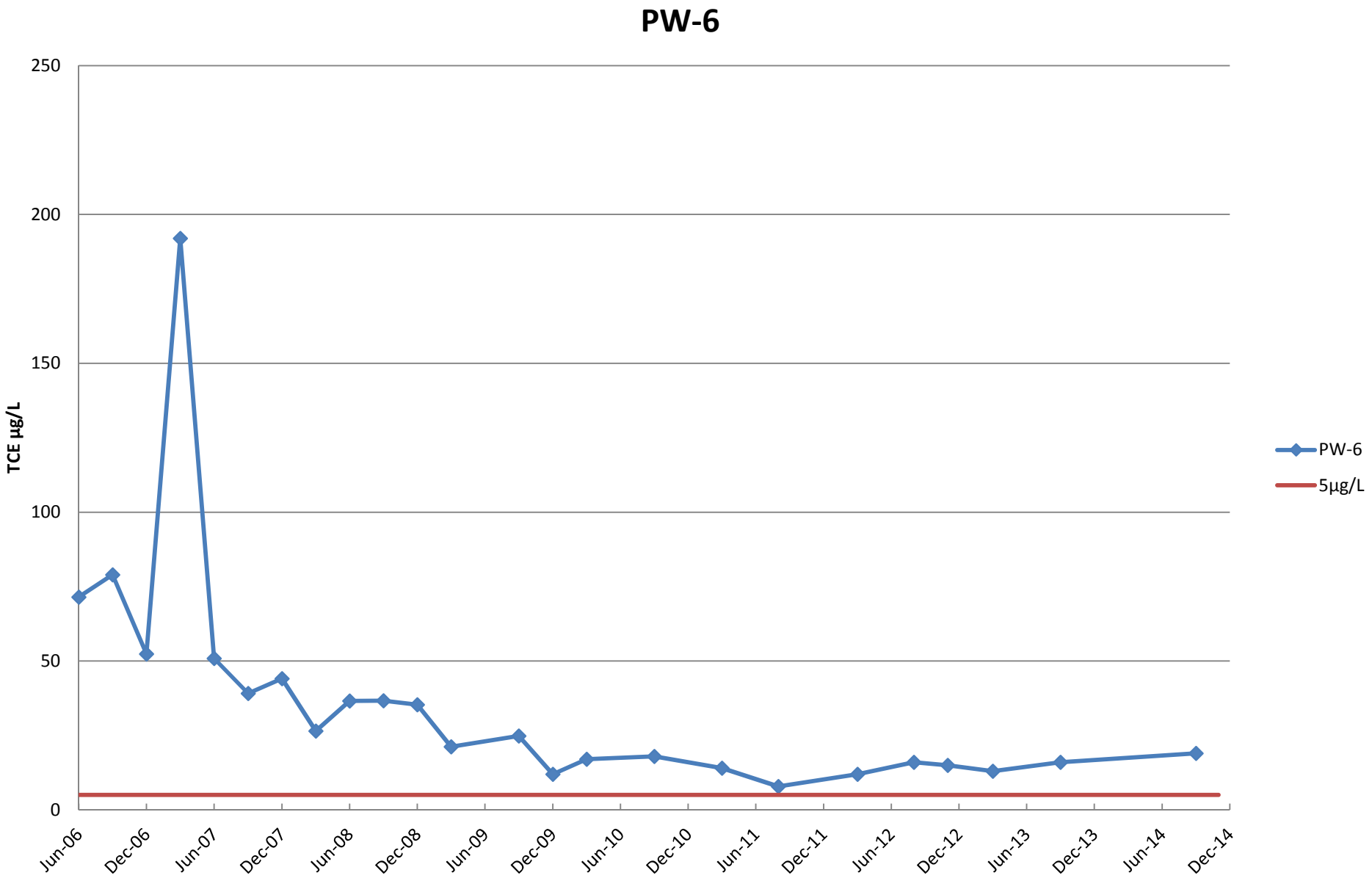

PW-1
TCE µg/L
800
700
600
500
400
300
200
100
0
Jun-06
Dec-06
Jun-07
Dec-07
Jun-08
Dec-08
Jun-09
Dec-09
Jun-10
Dec-10
Jun-11
Dec-11
Jun-12
Dec-12
Jun-13
Dec-13
Jun-14
Dec-14
PW-1
5µg/L

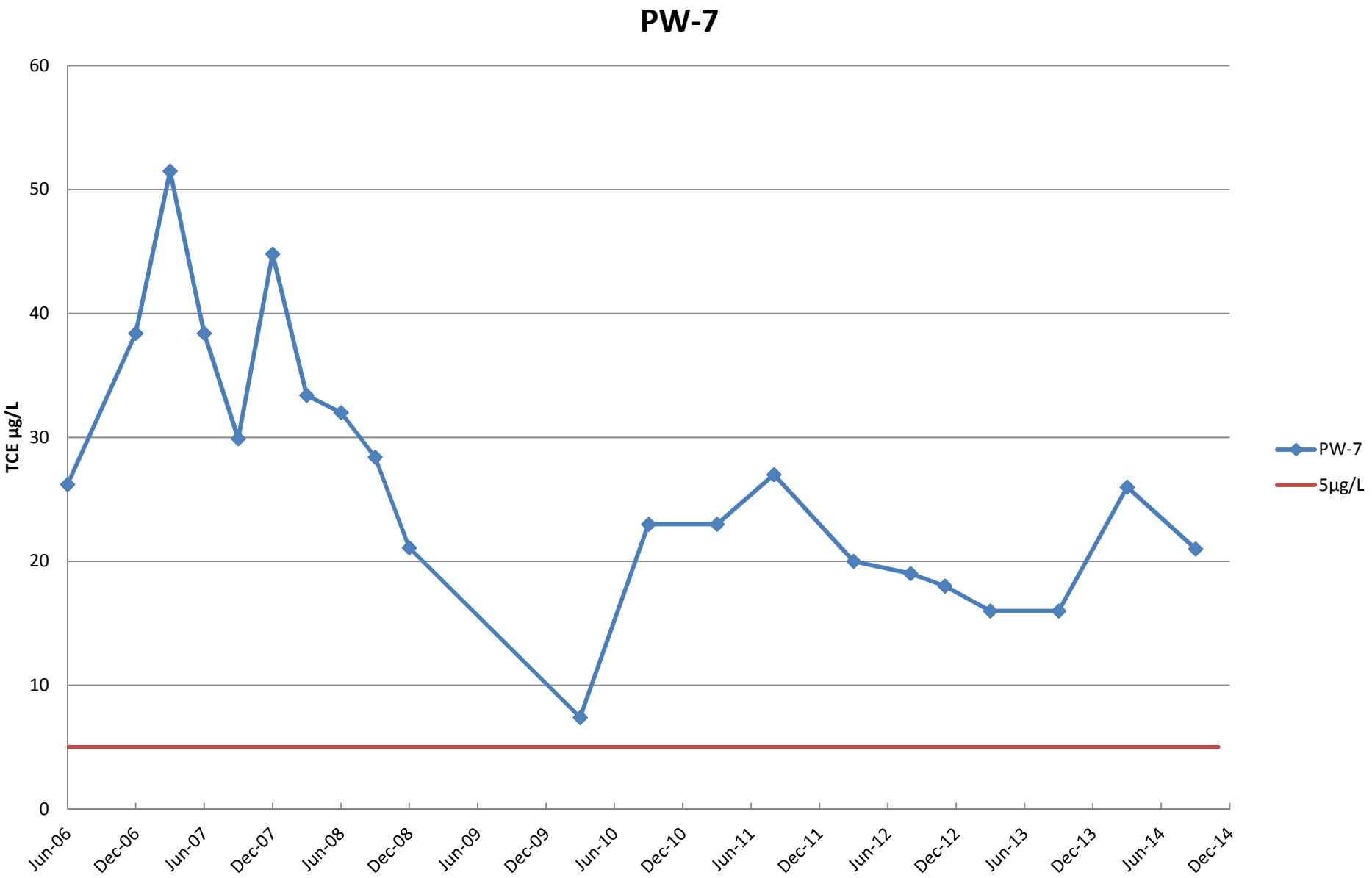

PW-2
TCE µg/L
700
600
500
400
300
200
100
0
Jun-06
Dec-06
Jun-07
Dec-07
Jun-08
Dec-08
Jun-09
Dec-09
Jun-10
Dec-10
Jun-11
Dec-11
Jun-12
Dec-12
Jun-13
Dec-13
Jun-14
Dec-14
PW-2
5µg/L

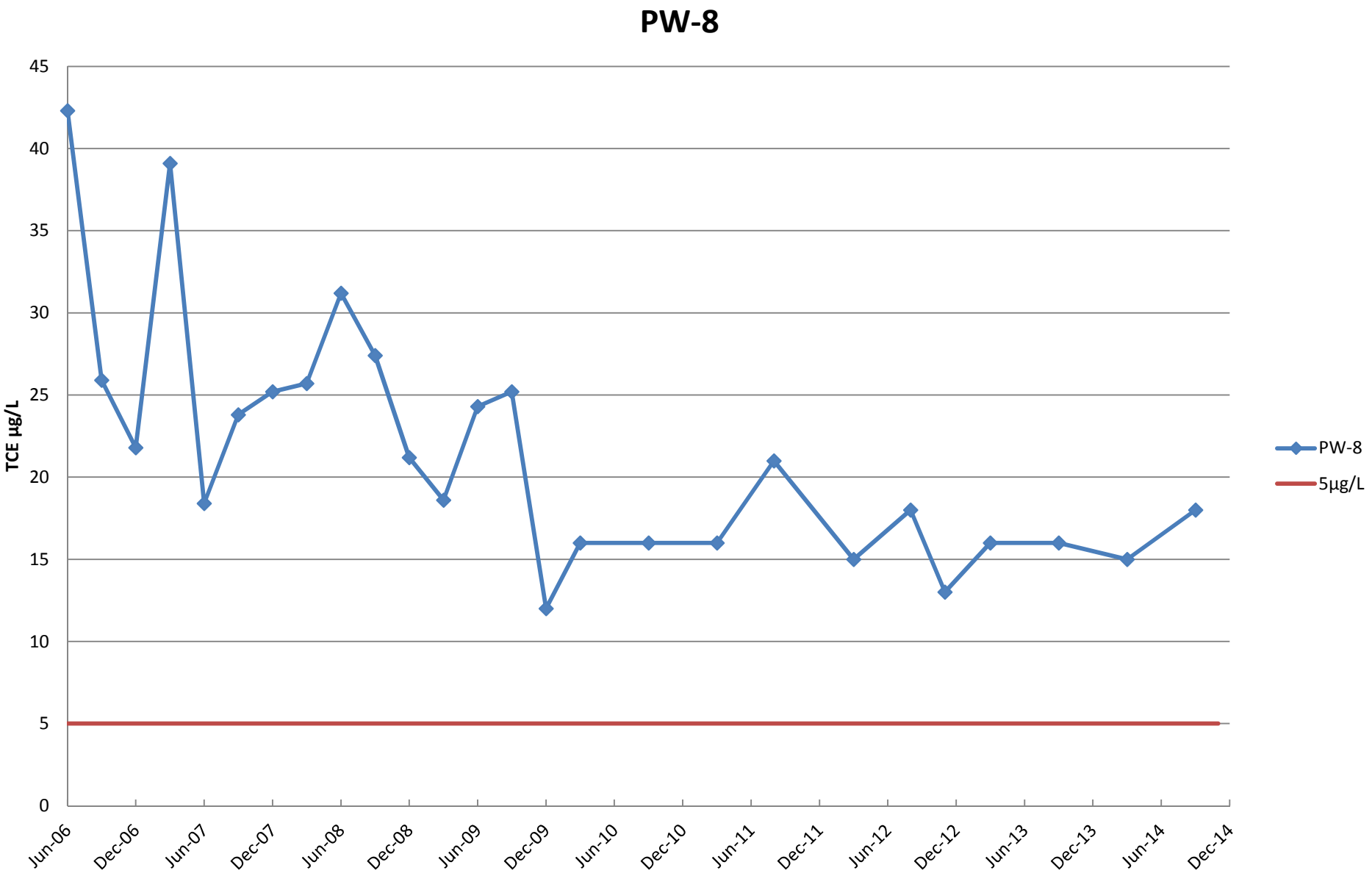

PW-3
600
500
400
300
200
100
0
TCE µg/L
Jun-06
Dec-06
Jun-07
Dec-07
Jun-08
Dec-08
Jun-09
Dec-09
Jun-10
Dec-10
Jun-11
Dec-11
Jun-12
Dec-12
Jun-13
Dec-13
Jun-14
Dec-14
PW-3
5µg/L

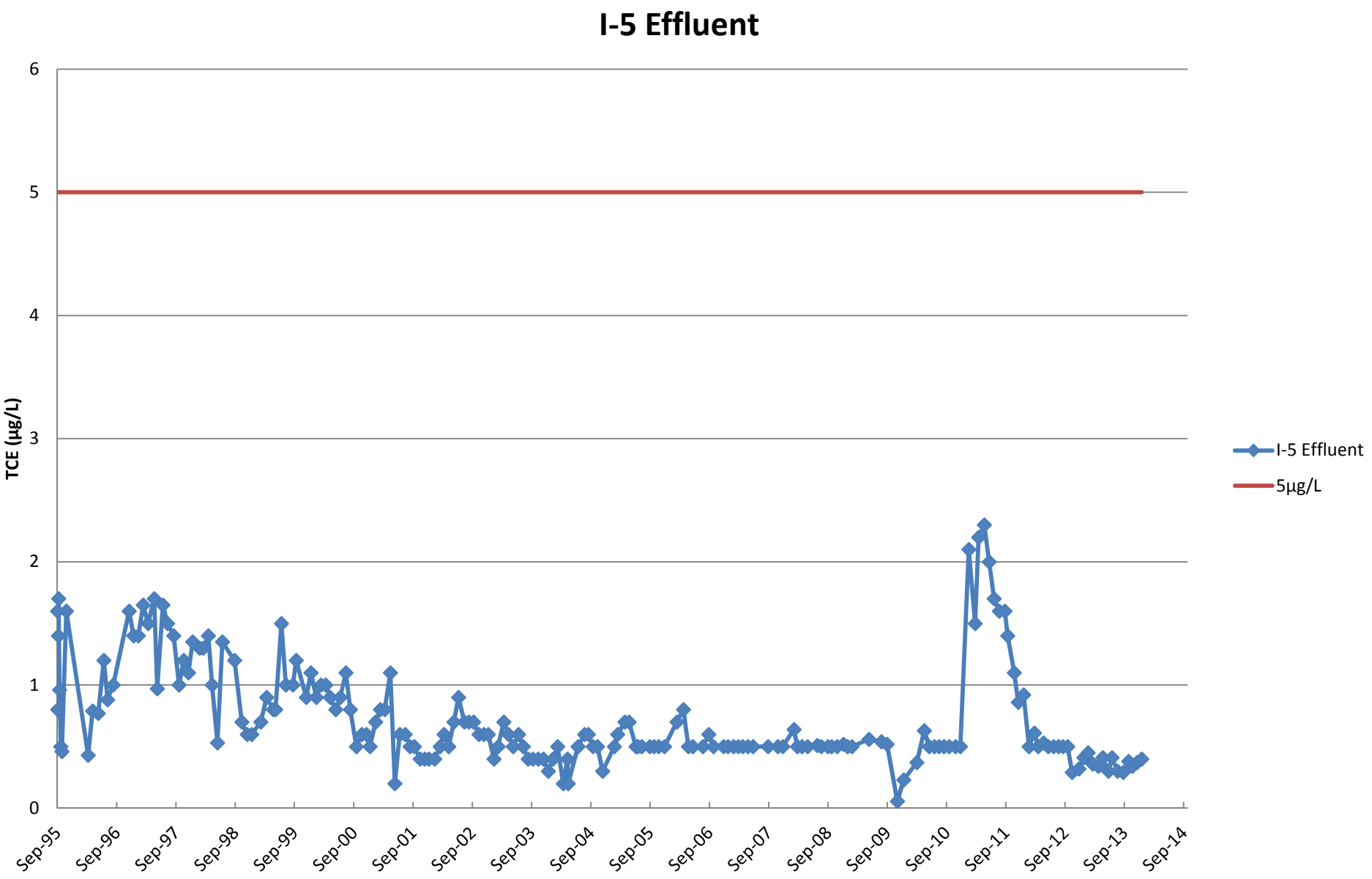

PW-4
TCE µg/L
350
300
250
200
150
100
50
0
Jun-06
Dec-06
Jun-07
Dec-07
Jun-08
Dec-08
Jun-09
Dec-09
Jun-10
Dec-10
Jun-11
Dec-11
Jun-12
Dec-12
Jun-13
Dec-13
Jun-14
Dec-14
PW-4
5µg/L

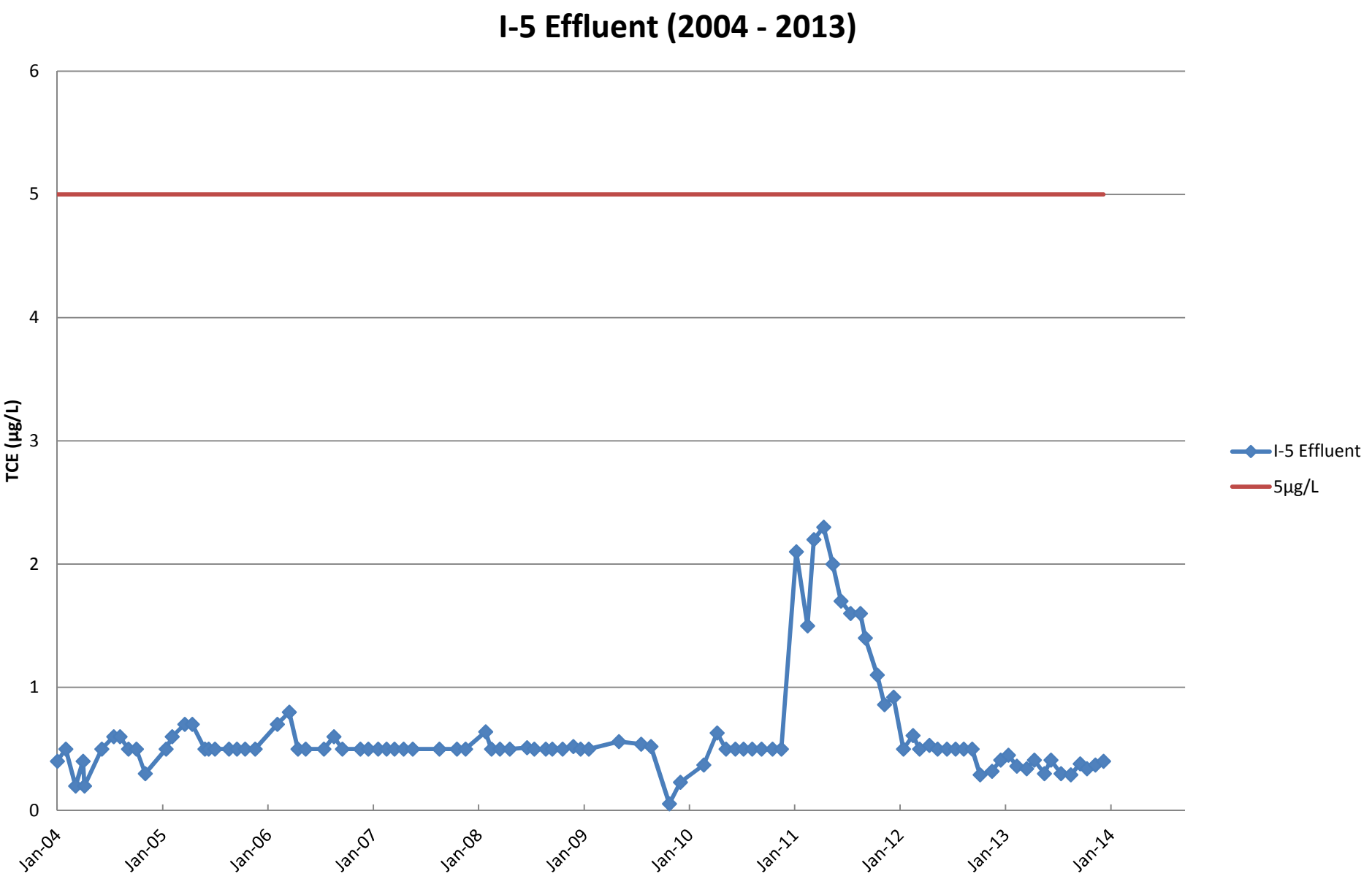

PW-5
TCE µg/L
160
140
120
100
80
60
40
20
0
Jun-06
Dec-06
Jun-07
Dec-07
Jun-08
Dec-08
Jun-09
Dec-09
Jun-10
Dec-10
Jun-11
Dec-11
Jun-12
Dec-12
Jun-13
Dec-13
Jun-14
Dec-14
PW-5
5µg/L

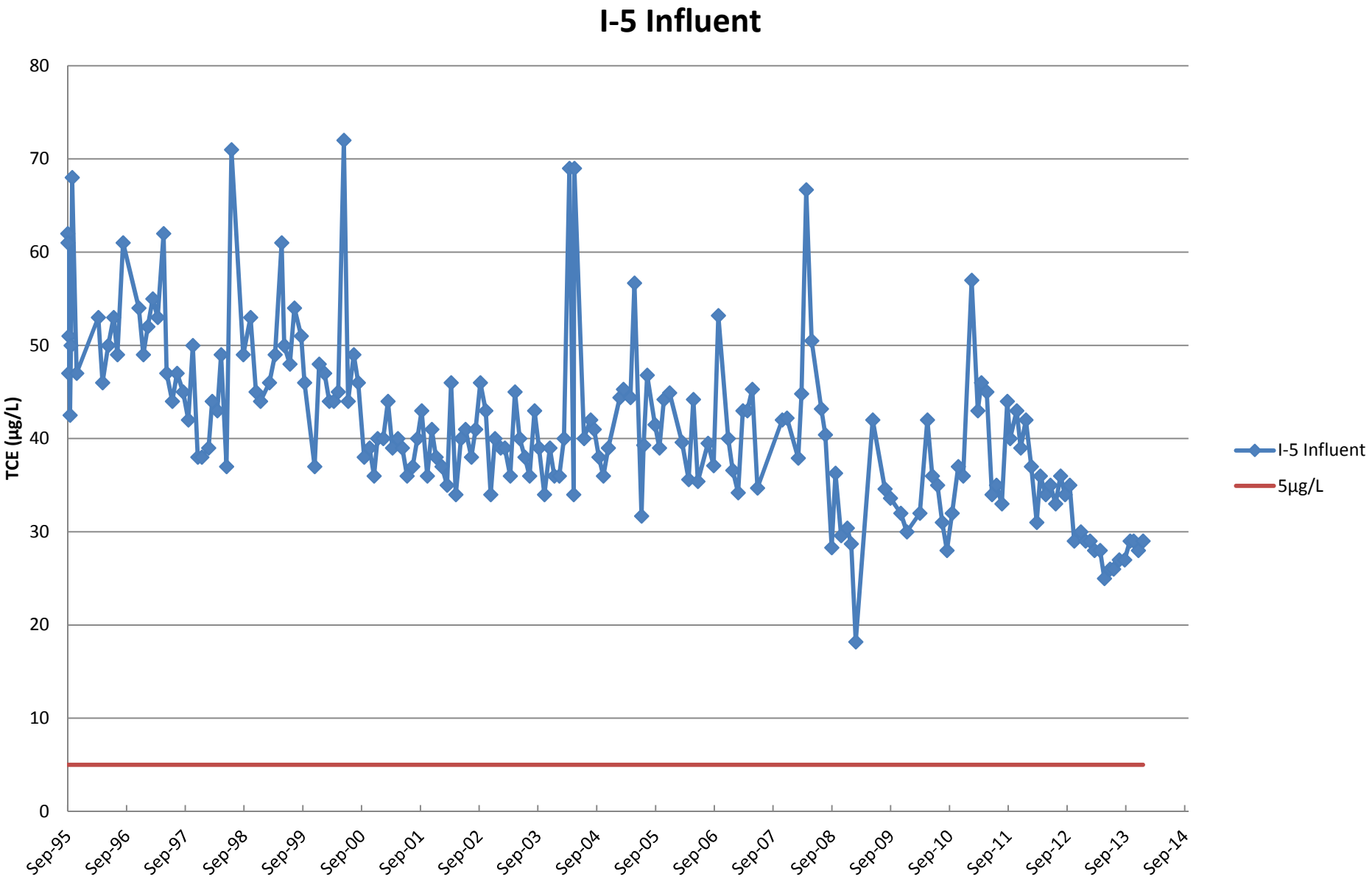

PW-6
250
200
150
100
50
0
TCE µg/L
Jun-06
Dec-06
Jun-07
Dec-07
Jun-08
Dec-08
Jun-09
Dec-09
Jun-10
Dec-10
Jun-11
Dec-11
Jun-12
Dec-12
Jun-13
Dec-13
Jun-14
Dec-14
PW-6
5µg/L

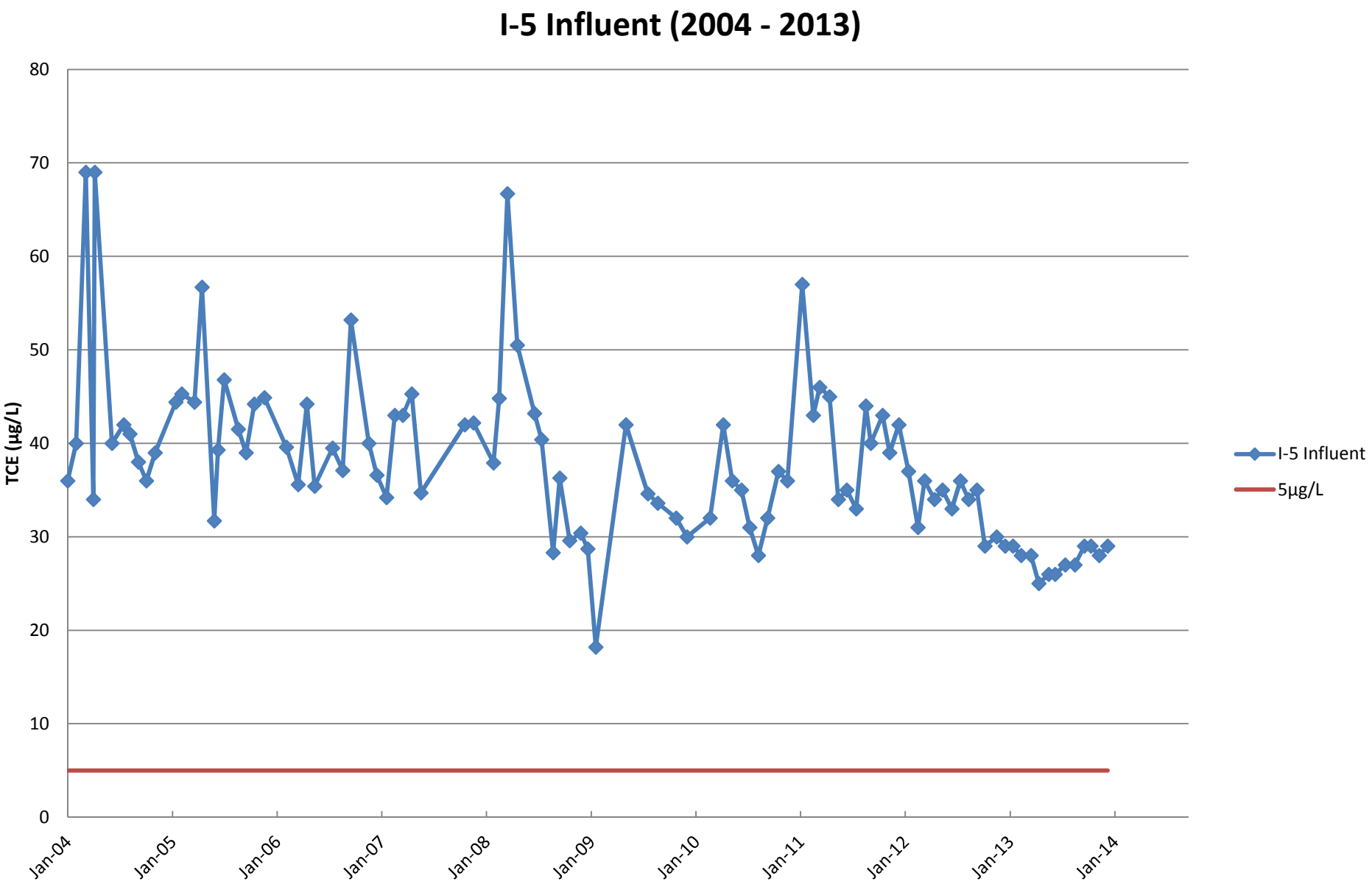

PW-7
TCE µg/L
60
50
40
30
20
10
0
Jun-06
Dec-06
Jun-07
Dec-07
Jun-08
Dec-08
Jun-09
Dec-09
Jun-10
Dec-10
Jun-11
Dec-11
Jun-12
Dec-12
Jun-13
Dec-13
Jun-14
Dec-14
PW-7
5µg/L

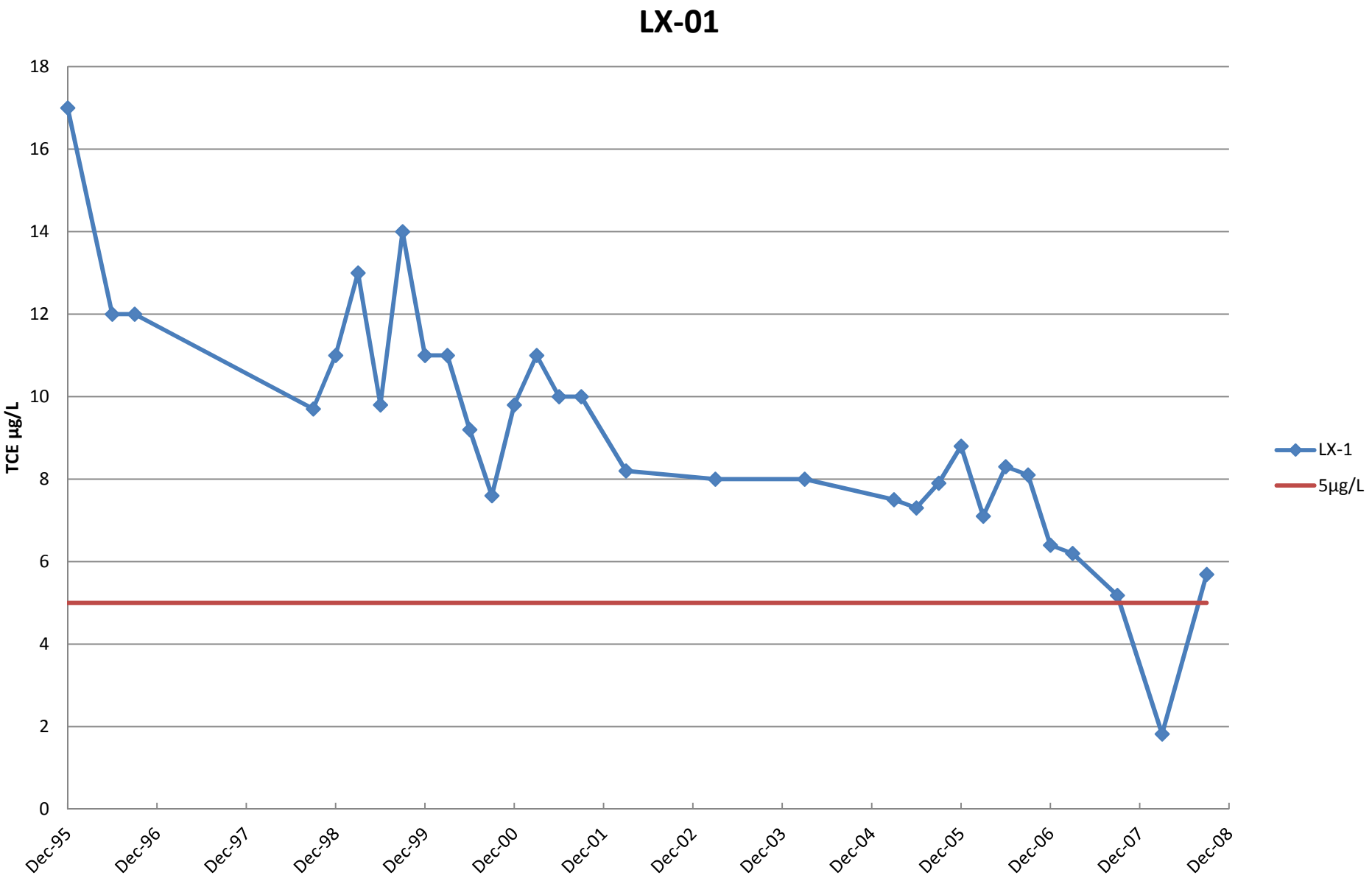

PW-8
TCE µg/L
45
40
35
30
25
20
15
10
5
0
Jun-06
Dec-06
Jun-07
Dec-07
Jun-08
Dec-08
Jun-09
Dec-09
Jun-10
Dec-10
Jun-11
Dec-11
Jun-12
Dec-12
Jun-13
Dec-13
Jun-14
Dec-14
PW-8
5µg/L

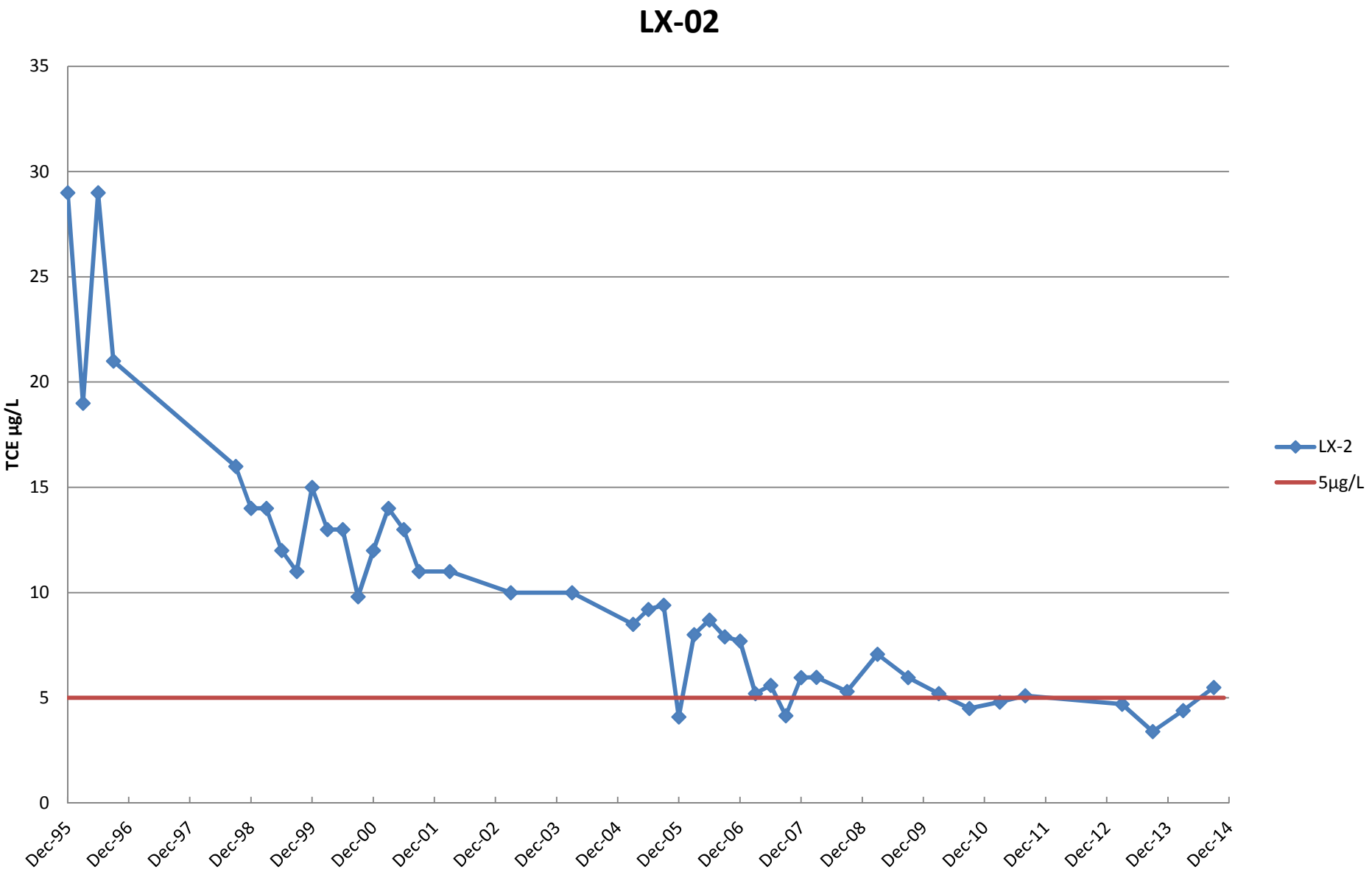

I-5 Effluent
TCE (µg/L)
6
5
4
3
2
1
0
Sep-95
Sep-96
Sep-97
Sep-98
Sep-99
Sep-00
Sep-01
Sep-02
Sep-03
Sep-04
Sep-05
Sep-06
Sep-07
Sep-08
Sep-09
Sep-10
Sep-11
Sep-12
Sep-13
Sep-14
I-5 Effluent
5µg/L

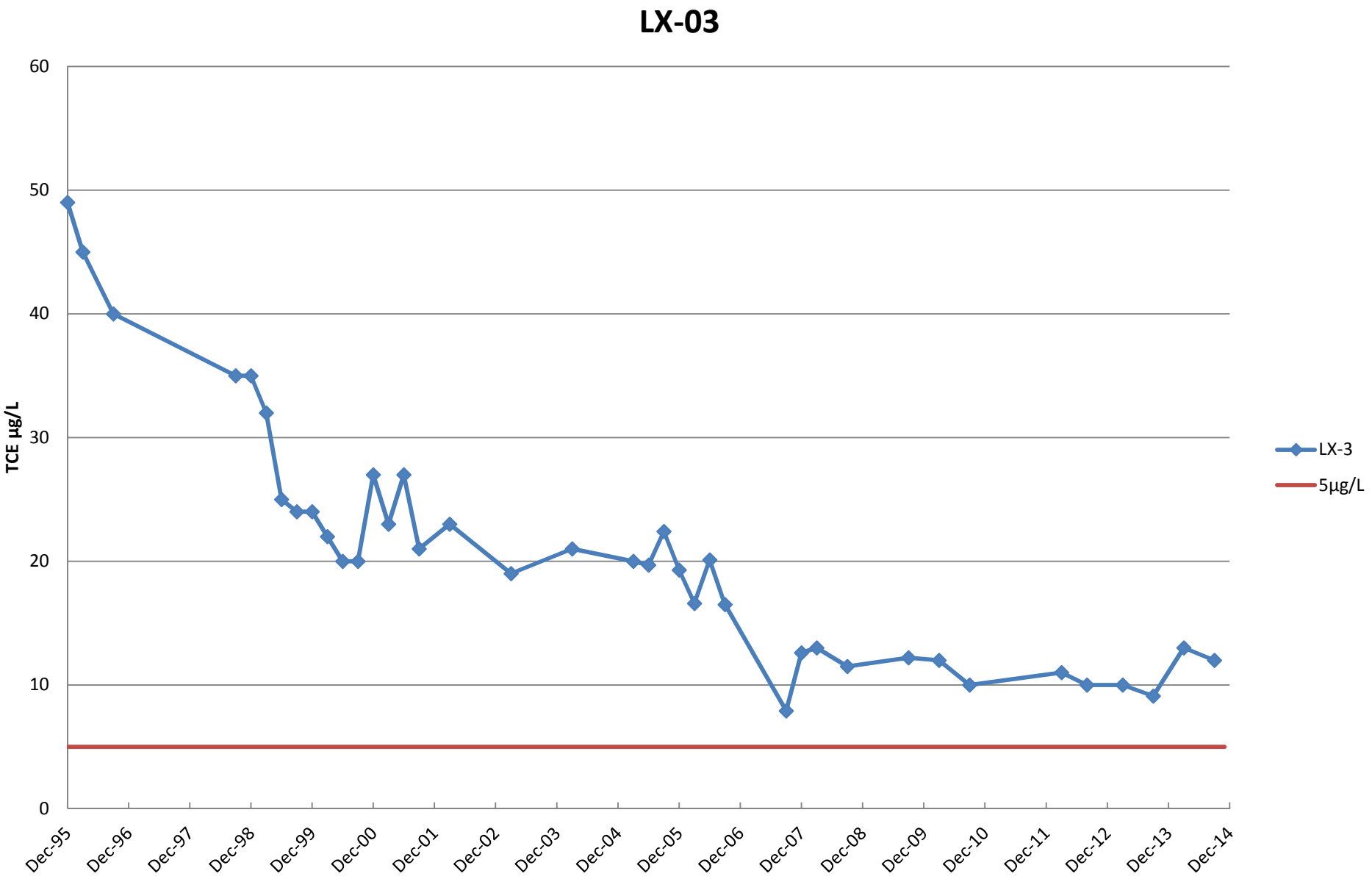

I-5 Effluent (2004 - 2013)
TCE (µg/L)
6
5
4
3
2
1
0
Jan-04
Jan-05
Jan-06
Jan-07
Jan-08
Jan-09
Jan-10
Jan-11
Jan-12
Jan-13
Jan-14
I-5 Effluent
5µg/L

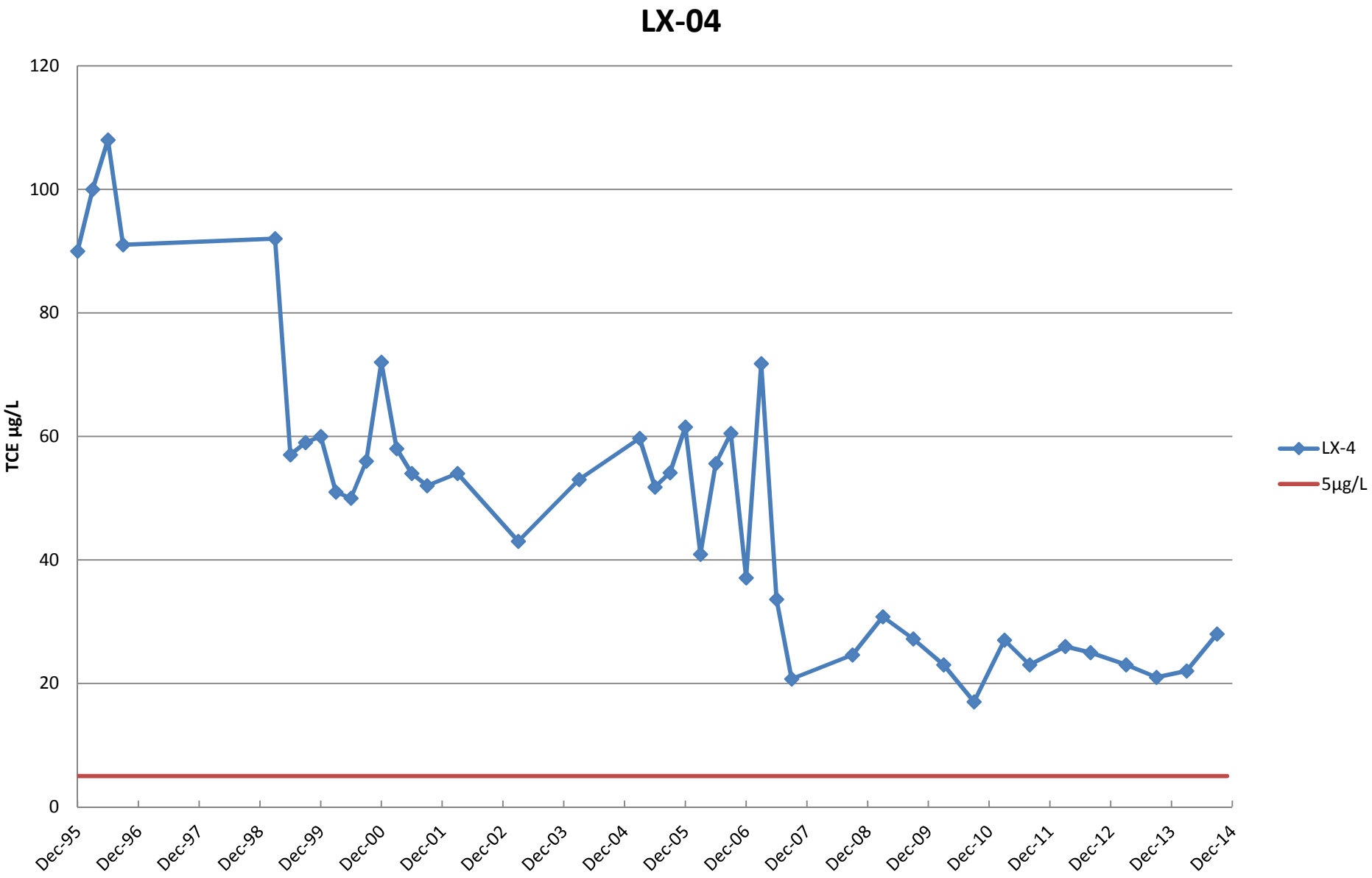

I-5 Influent
TCE (µg/L)
80
70
60
50
40
30
20
10
0
Sep-95
Sep-96
Sep-97
Sep-98
Sep-99
Sep-00
Sep-01
Sep-02
Sep-03
Sep-04
Sep-05
Sep-06
Sep-07
Sep-08
Sep-09
Sep-10
Sep-11
Sep-12
Sep-13
Sep-14
I-5 Influent
5µg/L

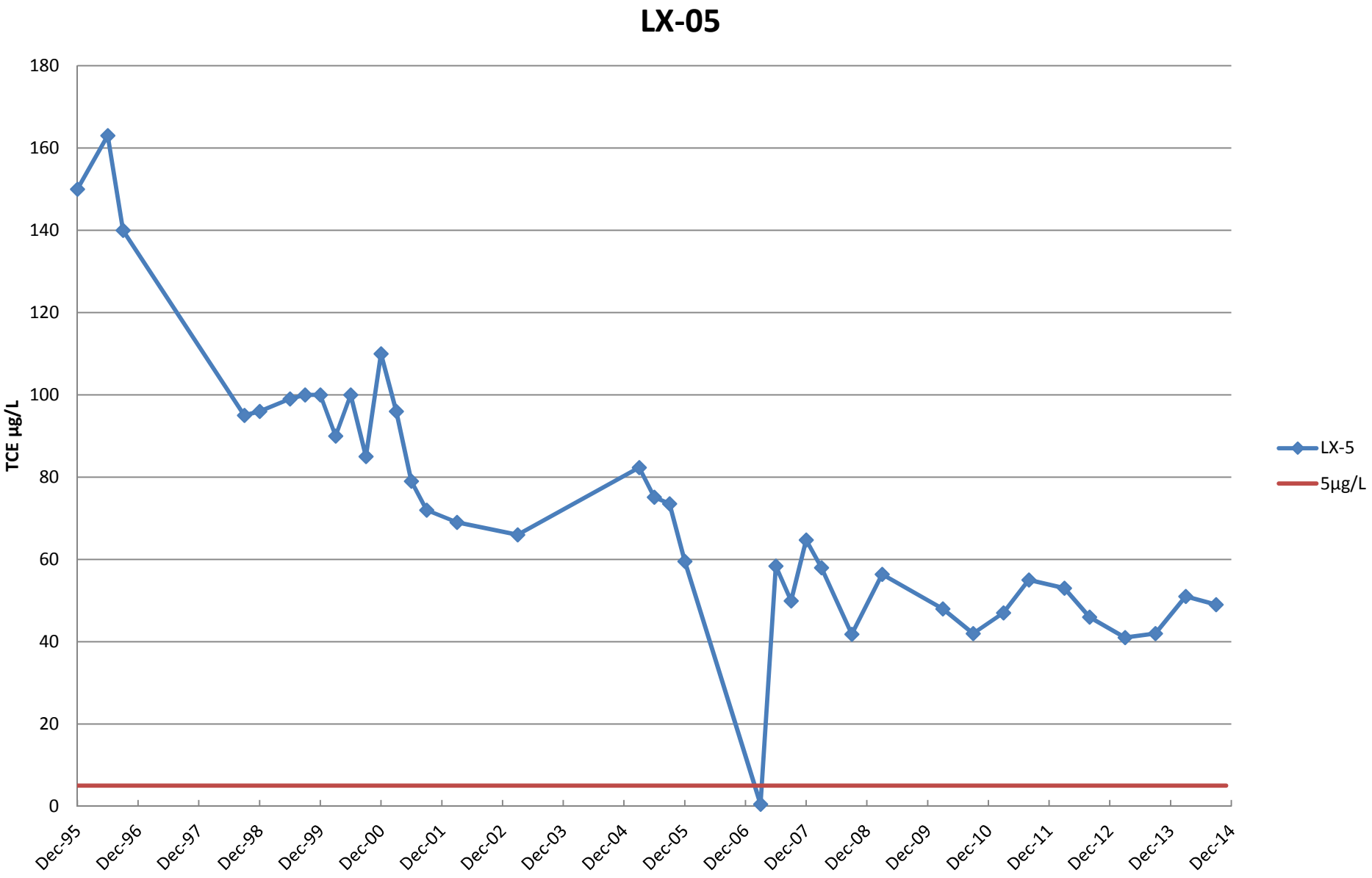

I-5 Influent (2004 - 2013)
TCE (µg/L)
80
70
60
50
40
30
20
10
0
Jan-04
Jan-05
Jan-06
Jan-07
Jan-08
Jan-09
Jan-10
Jan-11
Jan-12
Jan-13
Jan-14
I-5 Influent
5µg/L

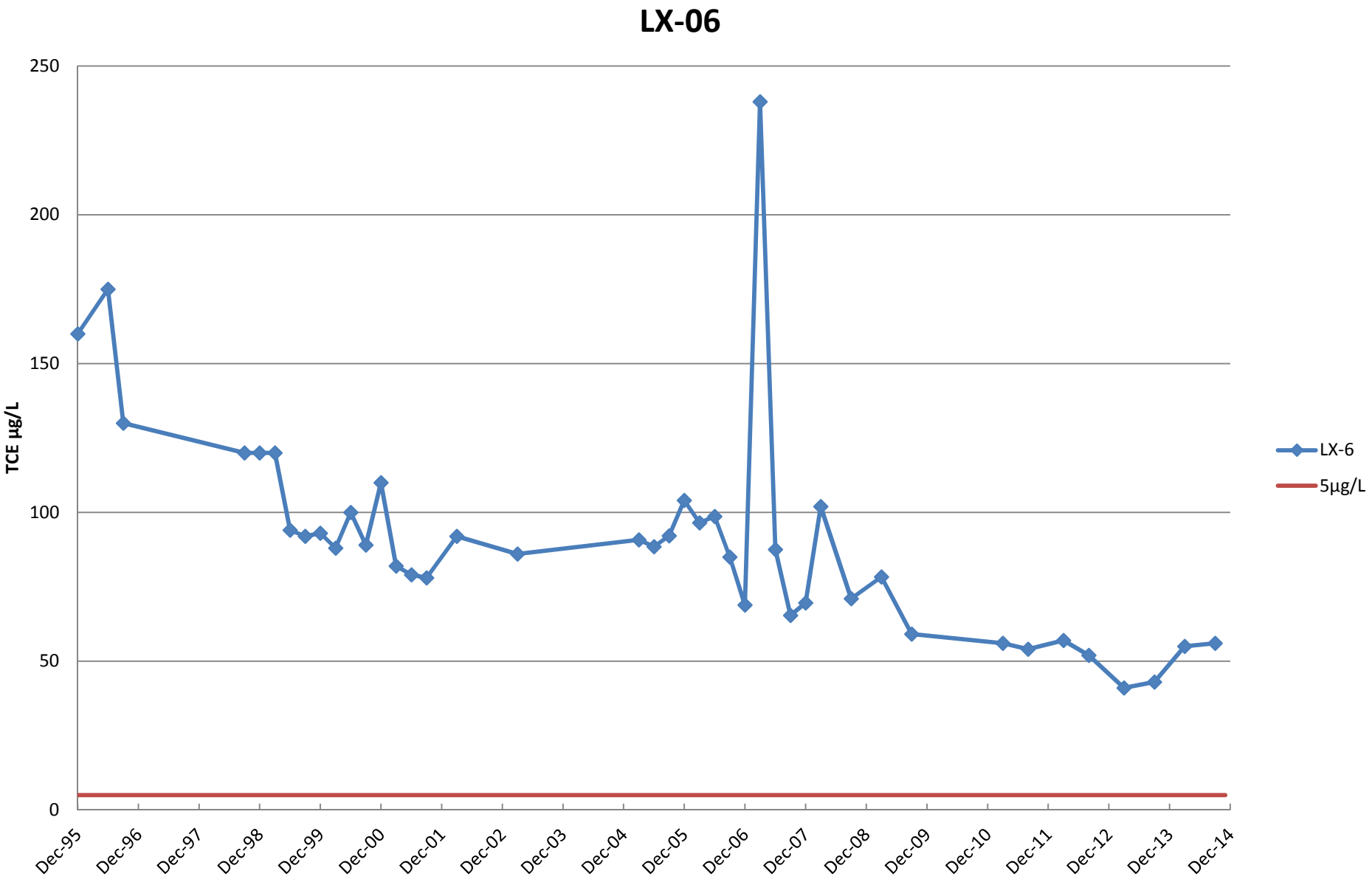

LX-01
TCE µg/L
18
16
14
12
10
8
6
4
2
0
Dec-95
Dec-96
Dec-97
Dec-98
Dec-99
Dec-00
Dec-01
Dec-02
Dec-03
Dec-04
Dec-05
Dec-06
Dec-07
Dec-08
LX-1
5µg/L

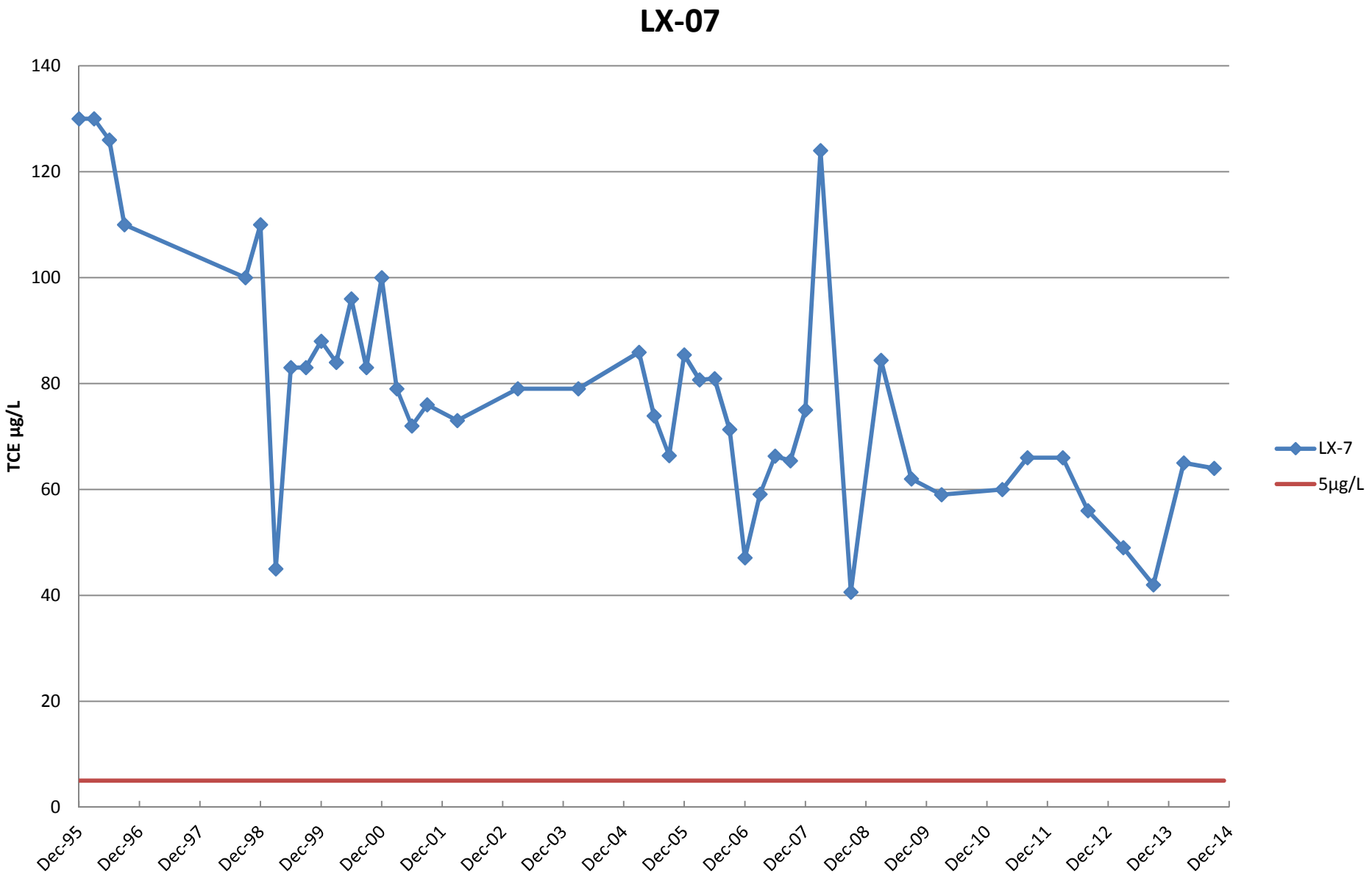

LX-02
TCE µg/L
35
30
25
20
15
10
5
0
Dec-95
Dec-96
Dec-97
Dec-98
Dec-99
Dec-00
Dec-01
Dec-02
Dec-03
Dec-04
Dec-05
Dec-06
Dec-07
Dec-08
Dec-09
Dec-10
Dec-11
Dec-12
Dec-13
Dec-14
LX-2
5µg/L

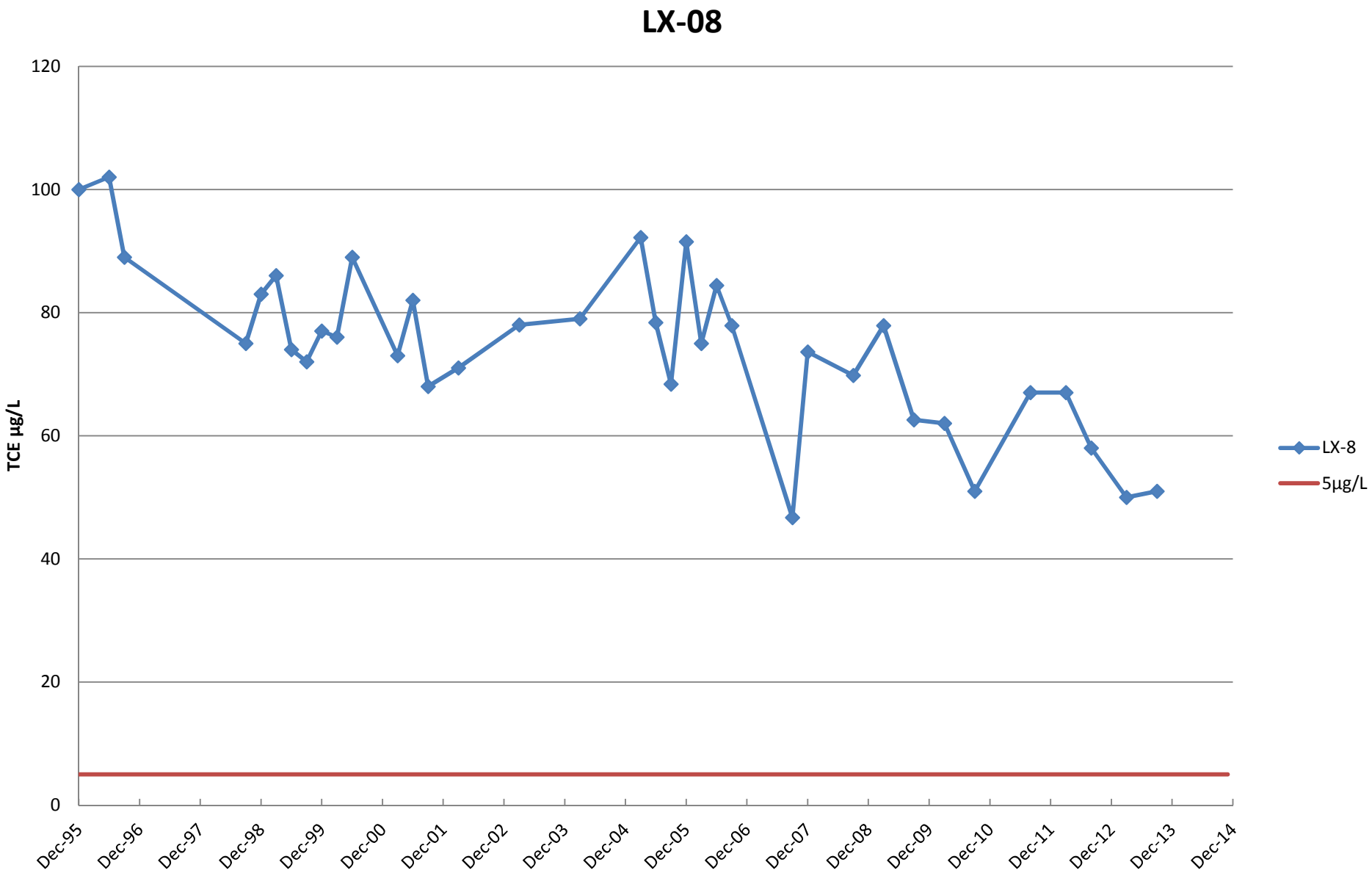

LX-03
TCE µg/L
60
50
40
30
20
10
0
Dec-95
Dec-96
Dec-97
Dec-98
Dec-99
Dec-00
Dec-01
Dec-02
Dec-03
Dec-04
Dec-05
Dec-06
Dec-07
Dec-08
Dec-09
Dec-10
Dec-11
Dec-12
Dec-13
Dec-14
LX-3
5µg/L

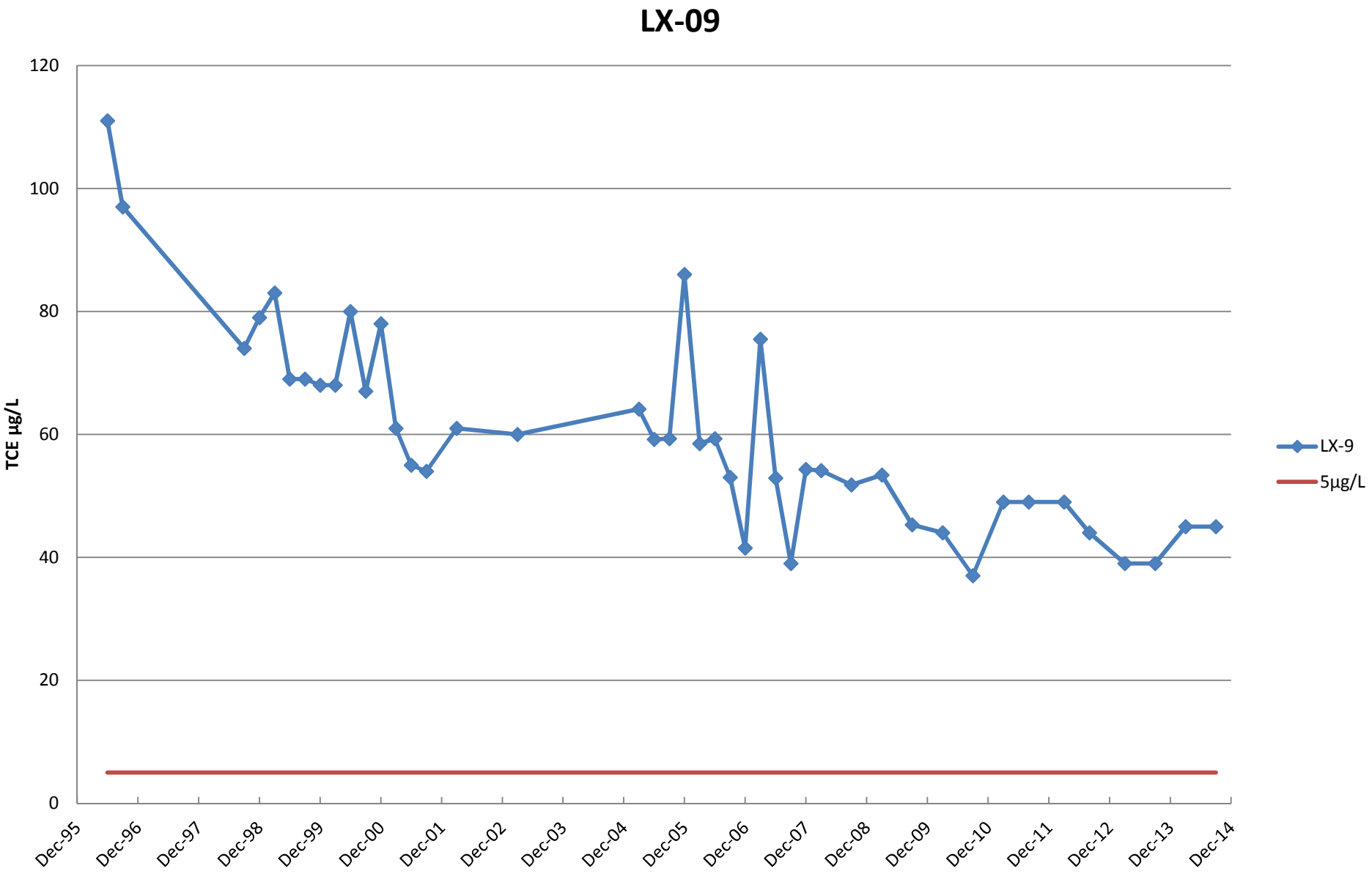

LX-04
TCE µg/L
120
100
80
60
40
20
0
Dec-95
Dec-96
Dec-97
Dec-98
Dec-99
Dec-00
Dec-01
Dec-02
Dec-03
Dec-04
Dec-05
Dec-06
Dec-07
Dec-08
Dec-09
Dec-10
Dec-11
Dec-12
Dec-13
Dec-14
LX-4
5µg/L

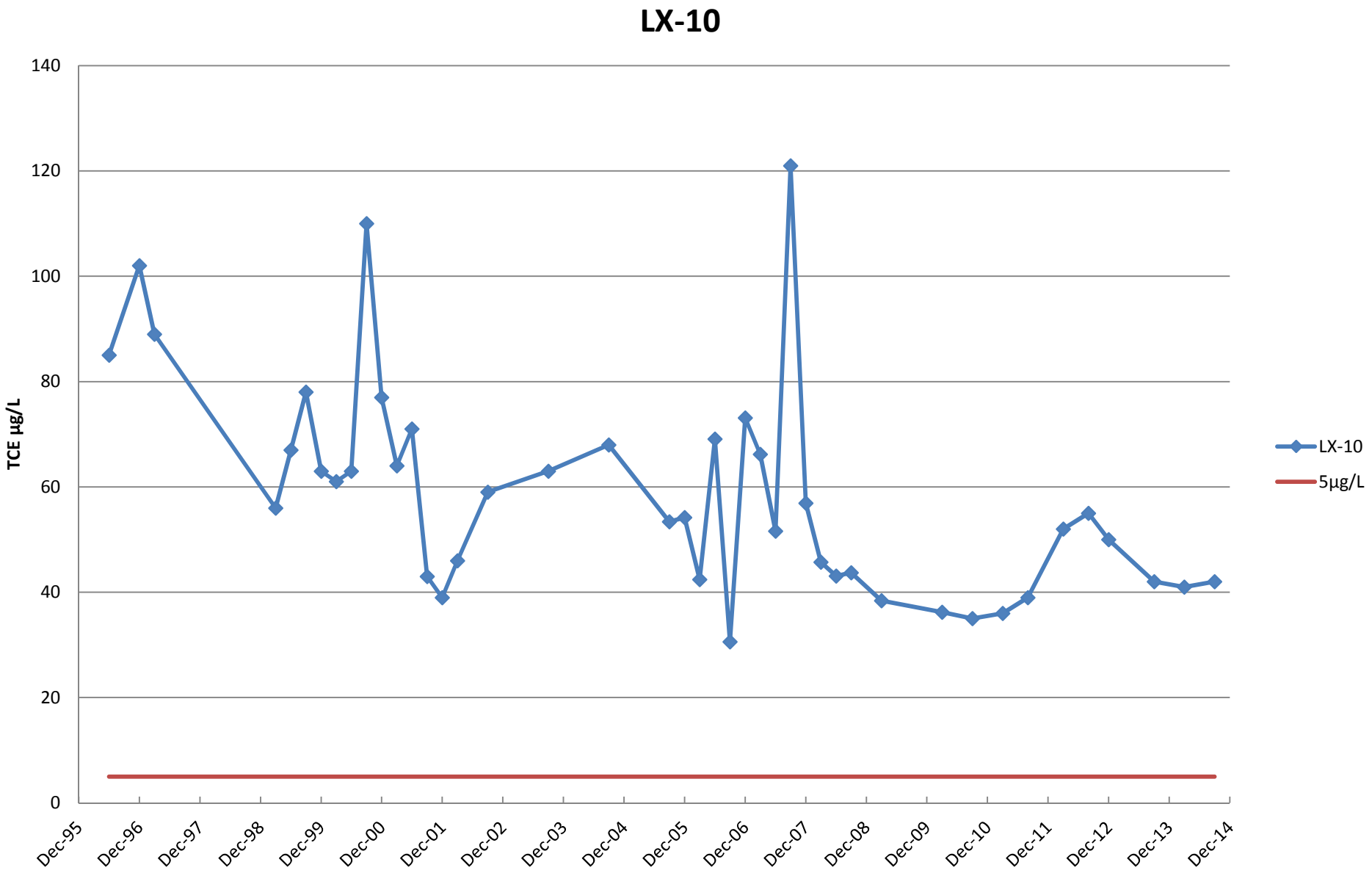

LX-05
TCE µg/L
180
160
140
120
100
80
60
40
20
0
Dec-95
Dec-96
Dec-97
Dec-98
Dec-99
Dec-00
Dec-01
Dec-02
Dec-03
Dec-04
Dec-05
Dec-06
Dec-07
Dec-08
Dec-09
Dec-10
Dec-11
Dec-12
Dec-13
Dec-14
LX-5
5µg/L

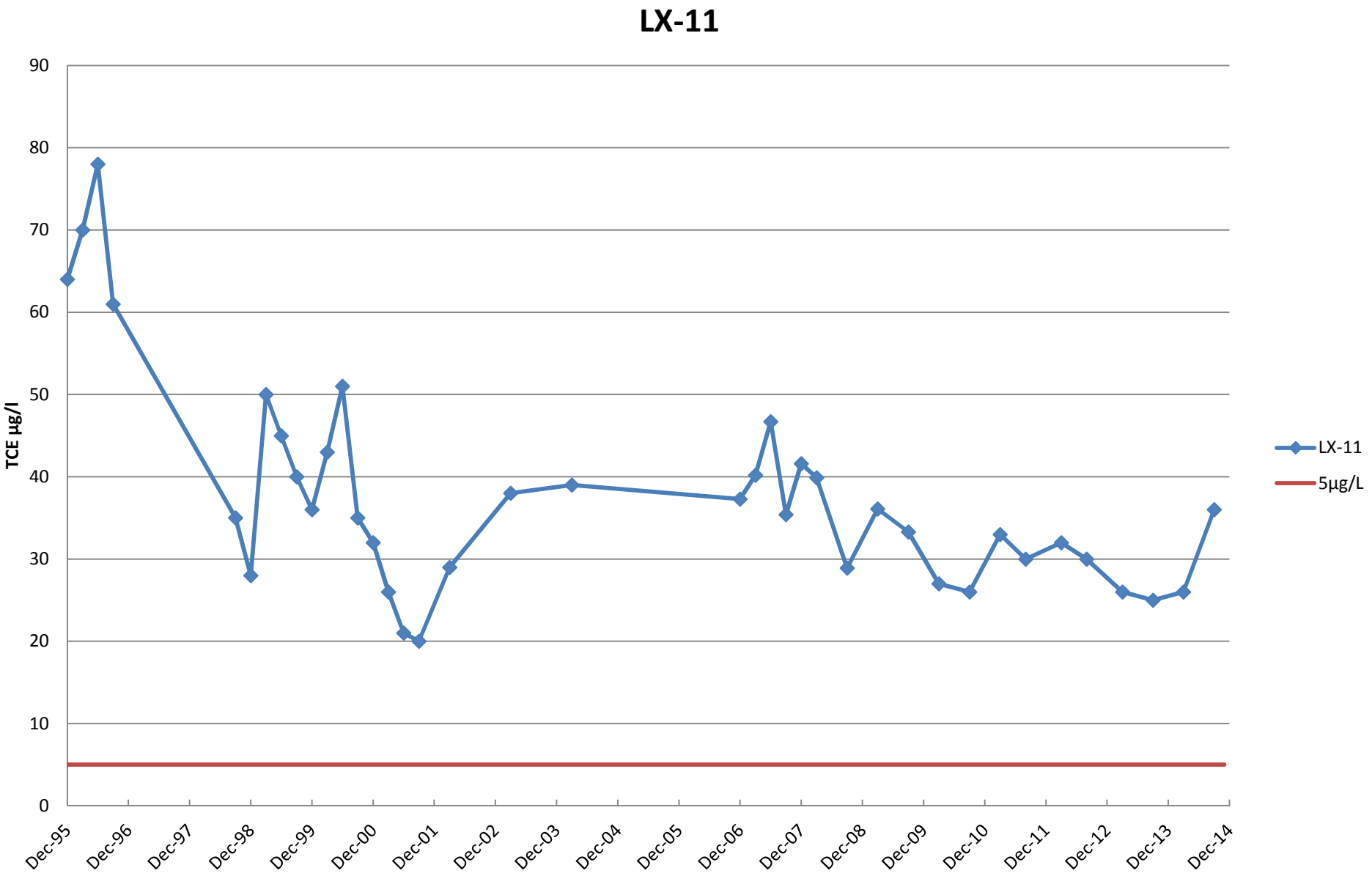

LX-06
TCE µg/L
250
200
150
100
50
0
Dec-95
Dec-96
Dec-97
Dec-98
Dec-99
Dec-00
Dec-01
Dec-02
Dec-03
Dec-04
Dec-05
Dec-06
Dec-07
Dec-08
Dec-09
Dec-10
Dec-11
Dec-12
Dec-13
Dec-14
LX-6
5µg/L

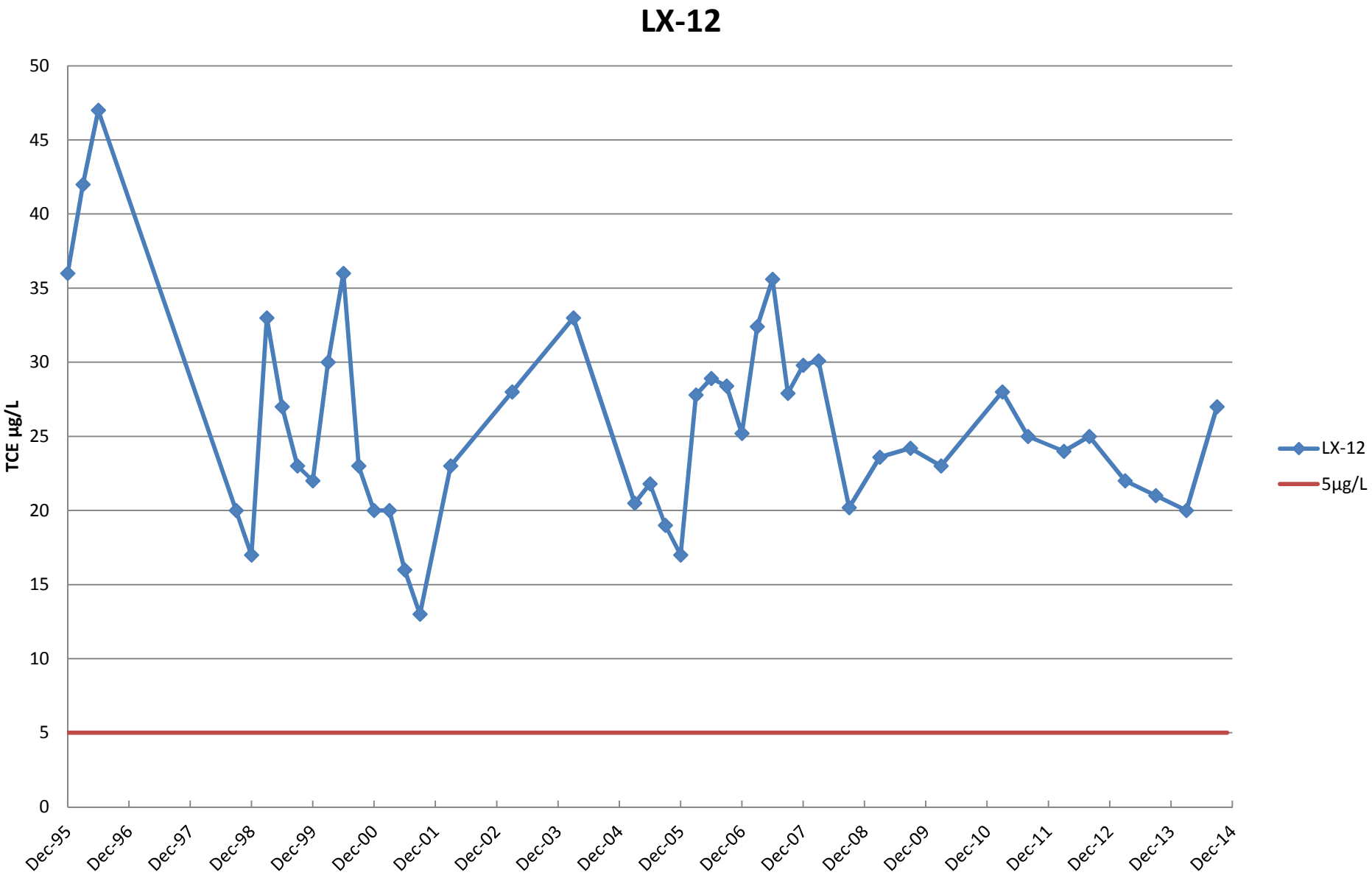

LX-07
TCE µg/L
140
120
100
80
60
40
20
0
Dec-95
Dec-96
Dec-97
Dec-98
Dec-99
Dec-00
Dec-01
Dec-02
Dec-03
Dec-04
Dec-05
Dec-06
Dec-07
Dec-08
Dec-09
Dec-10
Dec-11
Dec-12
Dec-13
Dec-14
LX-7
5µg/L

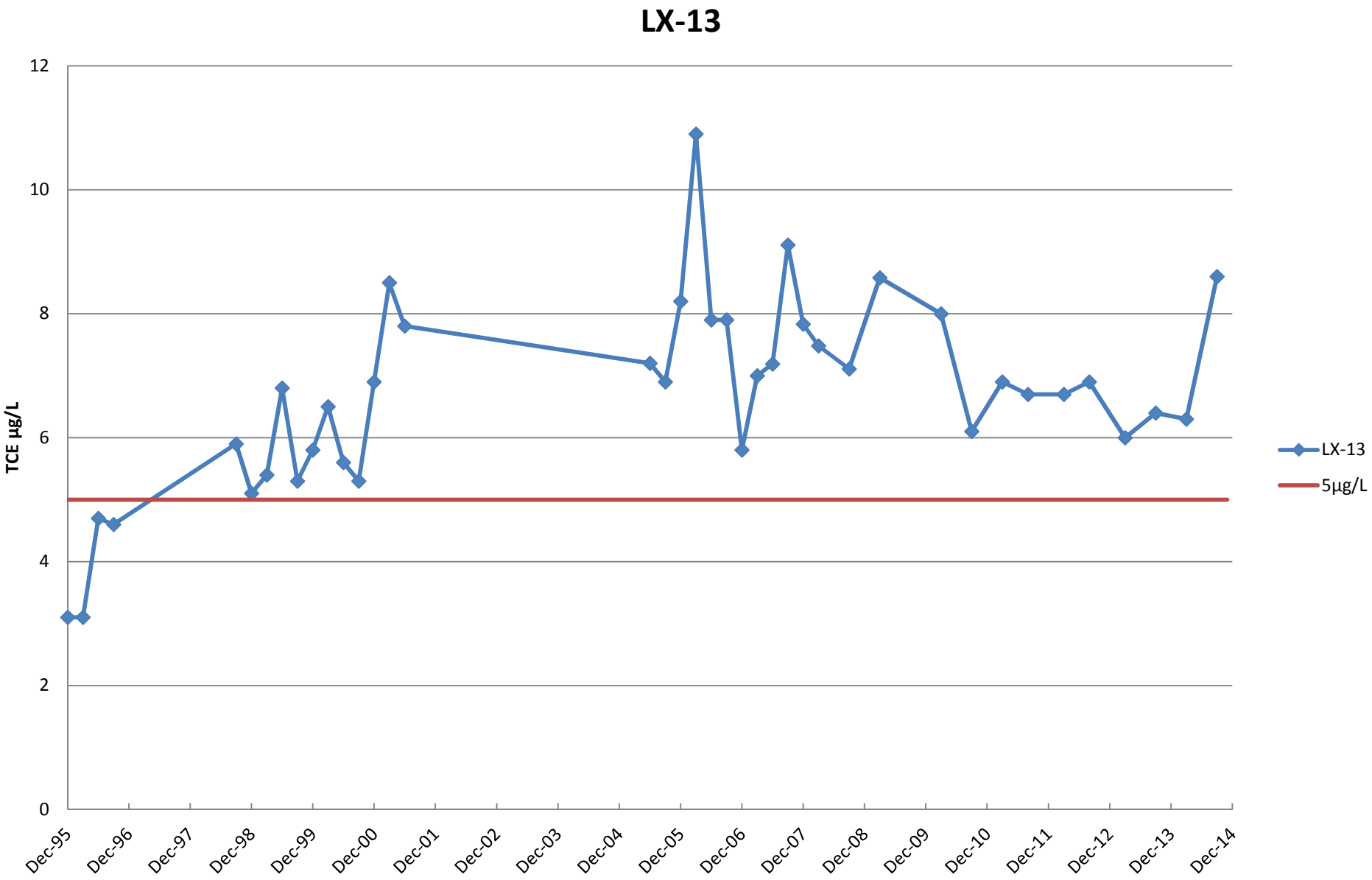

LX-08
TCE µg/L
120
100
80
60
40
20
0
Dec-95
Dec-96
Dec-97
Dec-98
Dec-99
Dec-00
Dec-01
Dec-02
Dec-03
Dec-04
Dec-05
Dec-06
Dec-07
Dec-08
Dec-09
Dec-10
Dec-11
Dec-12
Dec-13
Dec-14
LX-8
5µg/L

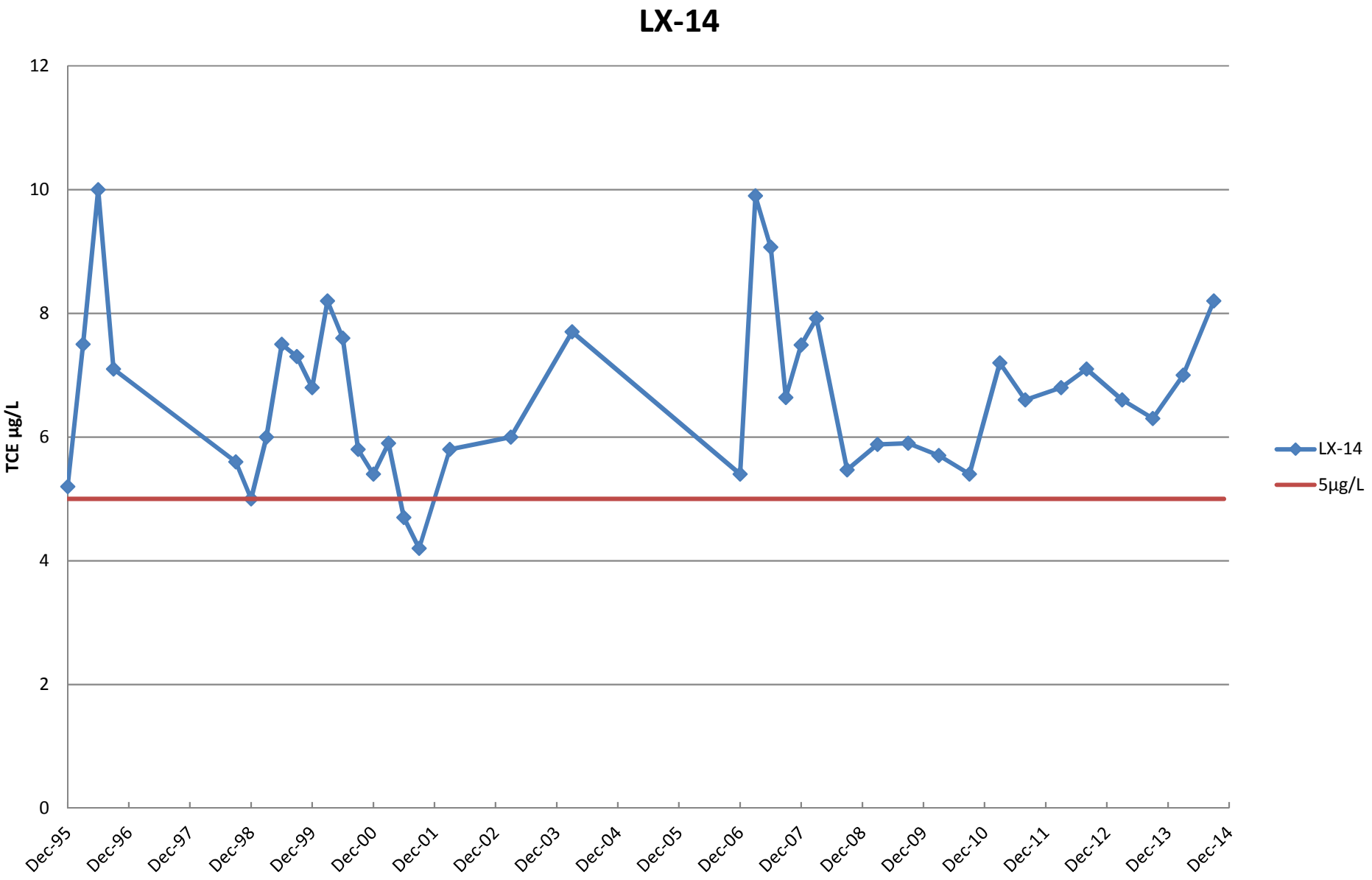

LX-09
TCE µg/L
120
100
80
60
40
20
0
Dec-95
Dec-96
Dec-97
Dec-98
Dec-99
Dec-00
Dec-01
Dec-02
Dec-03
Dec-04
Dec-05
Dec-06
Dec-07
Dec-08
Dec-09
Dec-10
Dec-11
Dec-12
Dec-13
Dec-14
LX-9
5µg/L

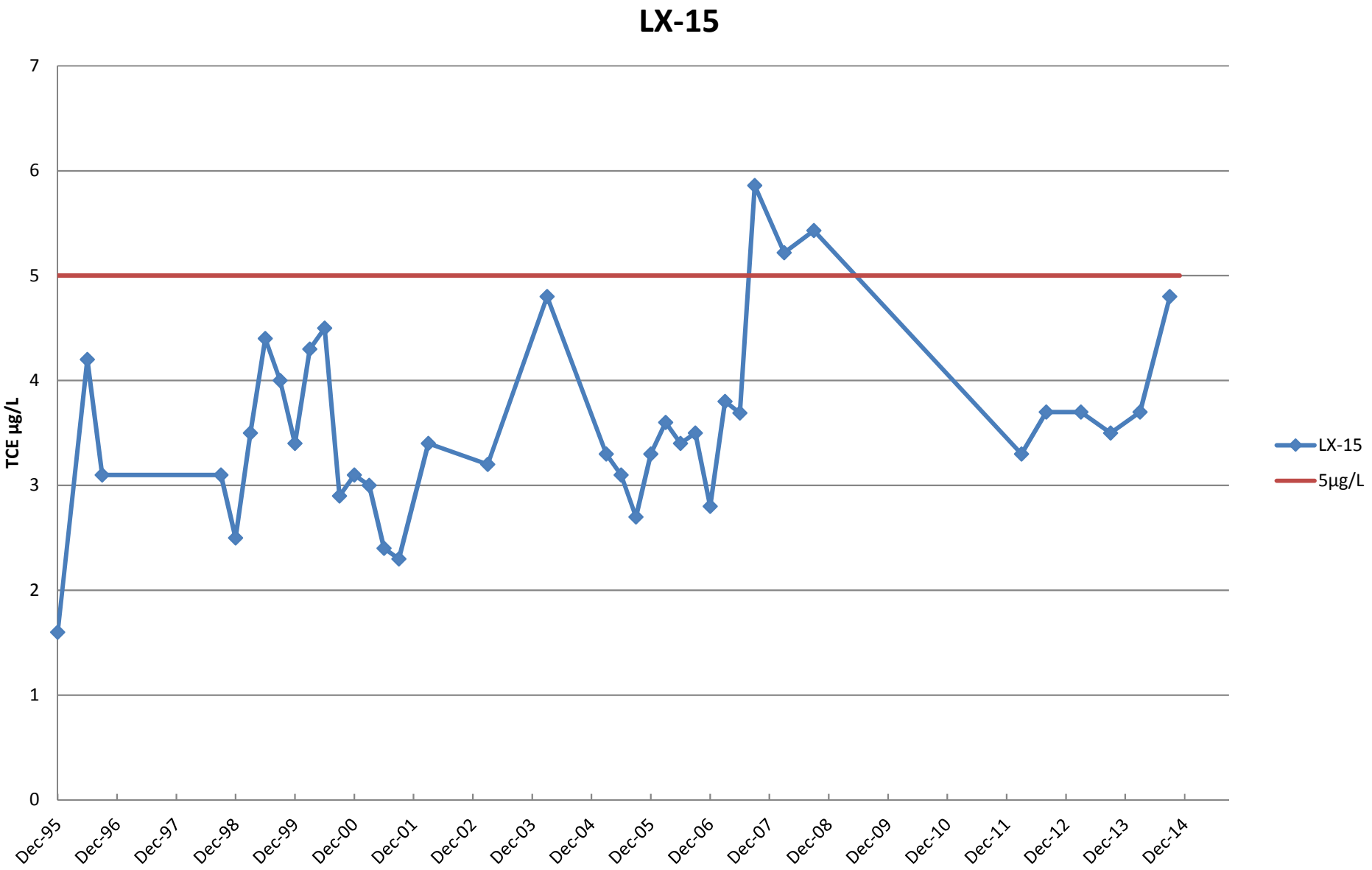

LX-10
TCE µg/L
140
120
100
80
60
40
20
0
Dec-95
Dec-96
Dec-97
Dec-98
Dec-99
Dec-00
Dec-01
Dec-02
Dec-03
Dec-04
Dec-05
Dec-06
Dec-07
Dec-08
Dec-09
Dec-10
Dec-11
Dec-12
Dec-13
Dec-14
LX-10
5µg/L


LX-11
TCE µg/l
90
80
70
60
50
40
30
20
10
0
Dec-95
Dec-96
Dec-97
Dec-98
Dec-99
Dec-00
Dec-01
Dec-02
Dec-03
Dec-04
Dec-05
Dec-06
Dec-07
Dec-08
Dec-09
Dec-10
Dec-11
Dec-12
Dec-13
Dec-14
LX-11
5µg/L

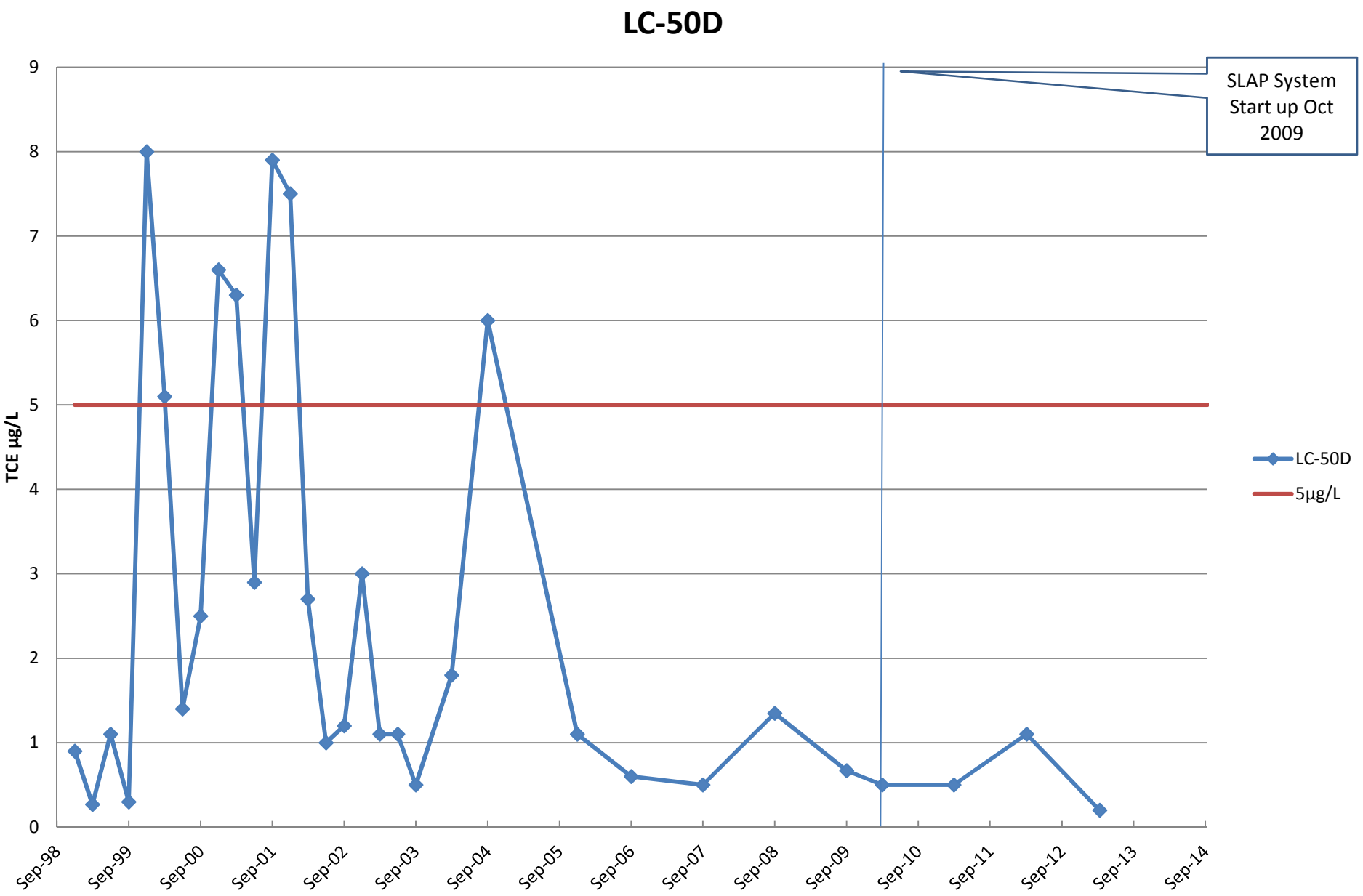

LX-12
TCE µg/L
50
45
40
35
30
25
20
15
10
5
0
Dec-95
Dec-96
Dec-97
Dec-98
Dec-99
Dec-00
Dec-01
Dec-02
Dec-03
Dec-04
Dec-05
Dec-06
Dec-07
Dec-08
Dec-09
Dec-10
Dec-11
Dec-12
Dec-13
Dec-14
LX-12
5µg/L

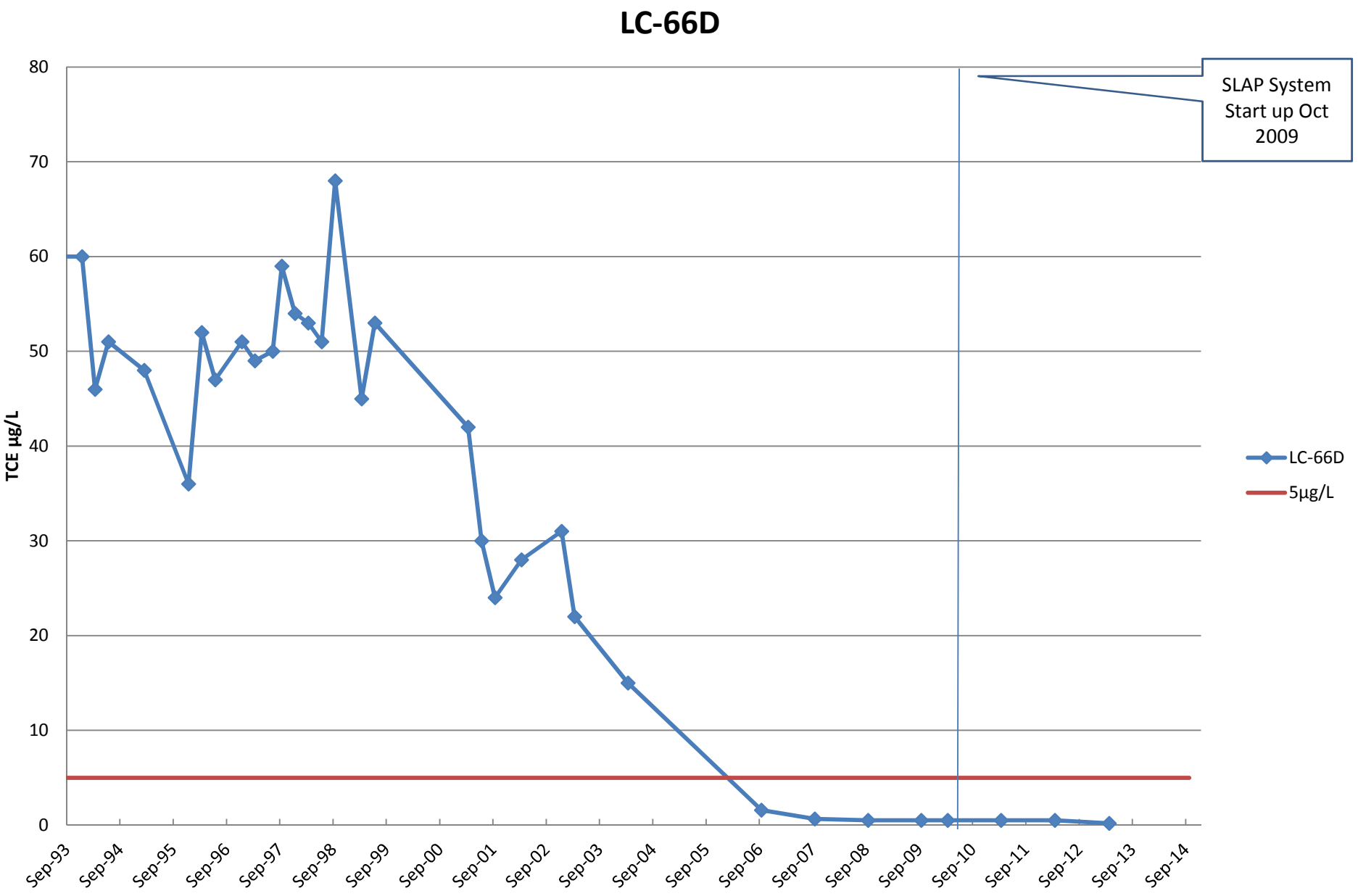

LX-13
TCE µg/L
12
10
8
6
4
2
0
Dec-95
Dec-96
Dec-97
Dec-98
Dec-99
Dec-00
Dec-01
Dec-02
Dec-03
Dec-04
Dec-05
Dec-06
Dec-07
Dec-08
Dec-09
Dec-10
Dec-11
Dec-12
Dec-13
Dec-14
LX-13
5µg/L

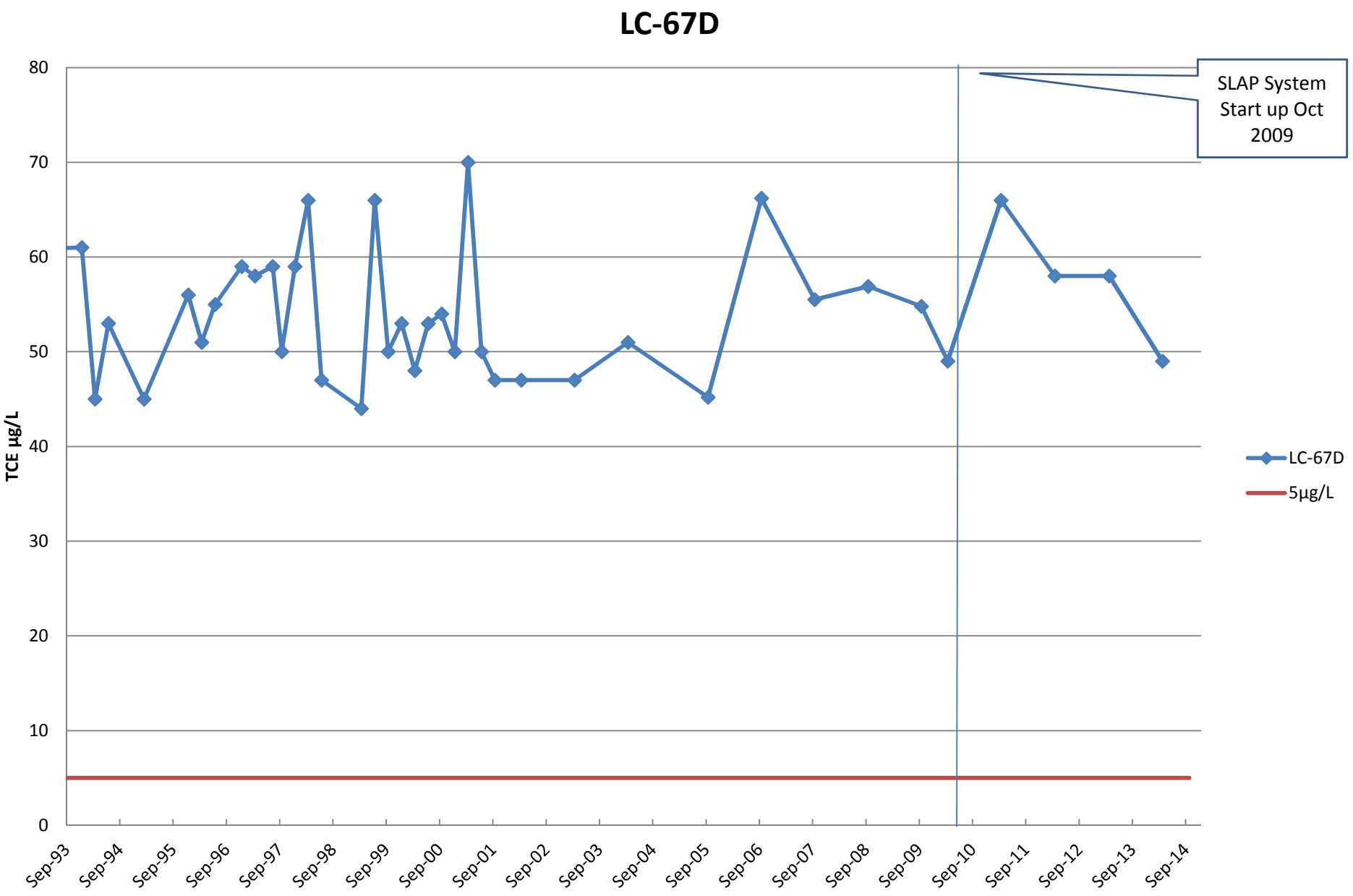

LX-14
TCE µg/L
12
10
8
6
4
2
0
Dec-95
Dec-96
Dec-97
Dec-98
Dec-99
Dec-00
Dec-01
Dec-02
Dec-03
Dec-04
Dec-05
Dec-06
Dec-07
Dec-08
Dec-09
Dec-10
Dec-11
Dec-12
Dec-13
Dec-14
LX-14
5µg/L

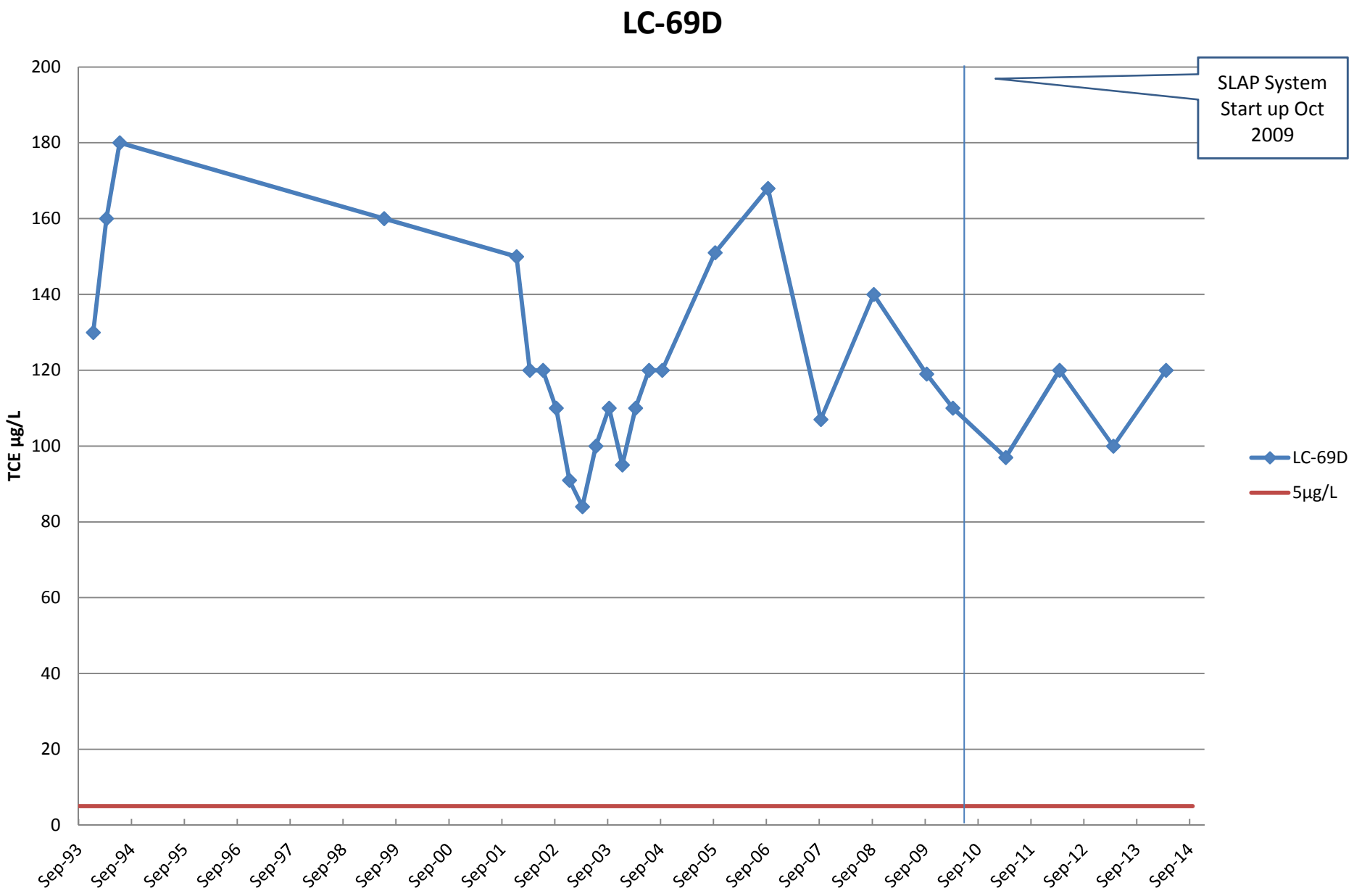

LX-15
TCE µg/L
0
1
2
3
4
5
6
7
Dec-95
Dec-96
Dec-97
Dec-98
Dec-99
Dec-00
Dec-01
Dec-02
Dec-03
Dec-04
Dec-05
Dec-06
Dec-07
Dec-08
Dec-09
Dec-10
Dec-11
Dec-12
Dec-13
Dec-14
LX-15
5µg/L

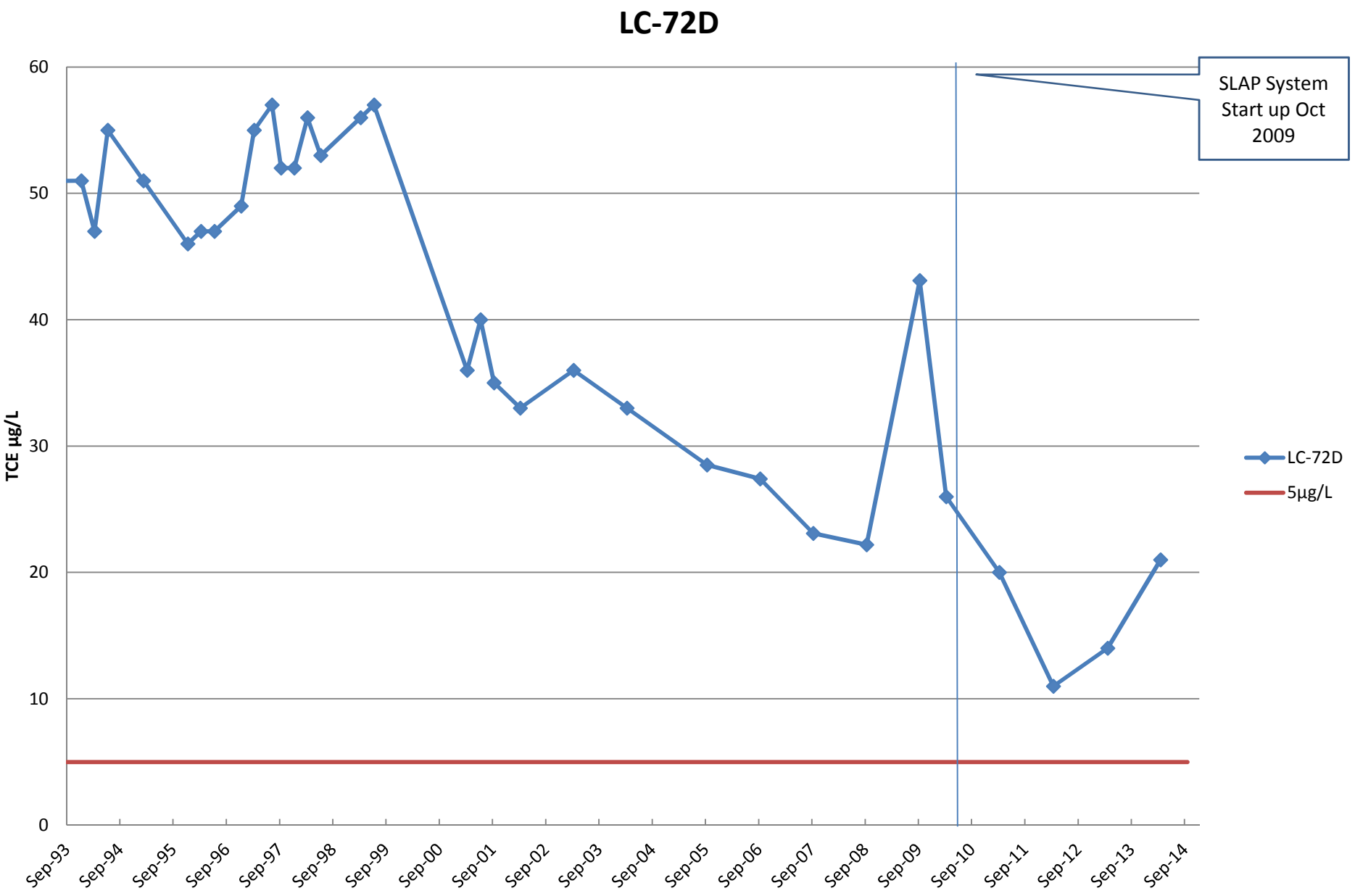
Appendix E - Historical Analytical Results and TCE Linear Graphs
Sea Level Aquifer TCE Linear Graphs
Log RAM - Joint Base Lewis-McChord, Washington 98433

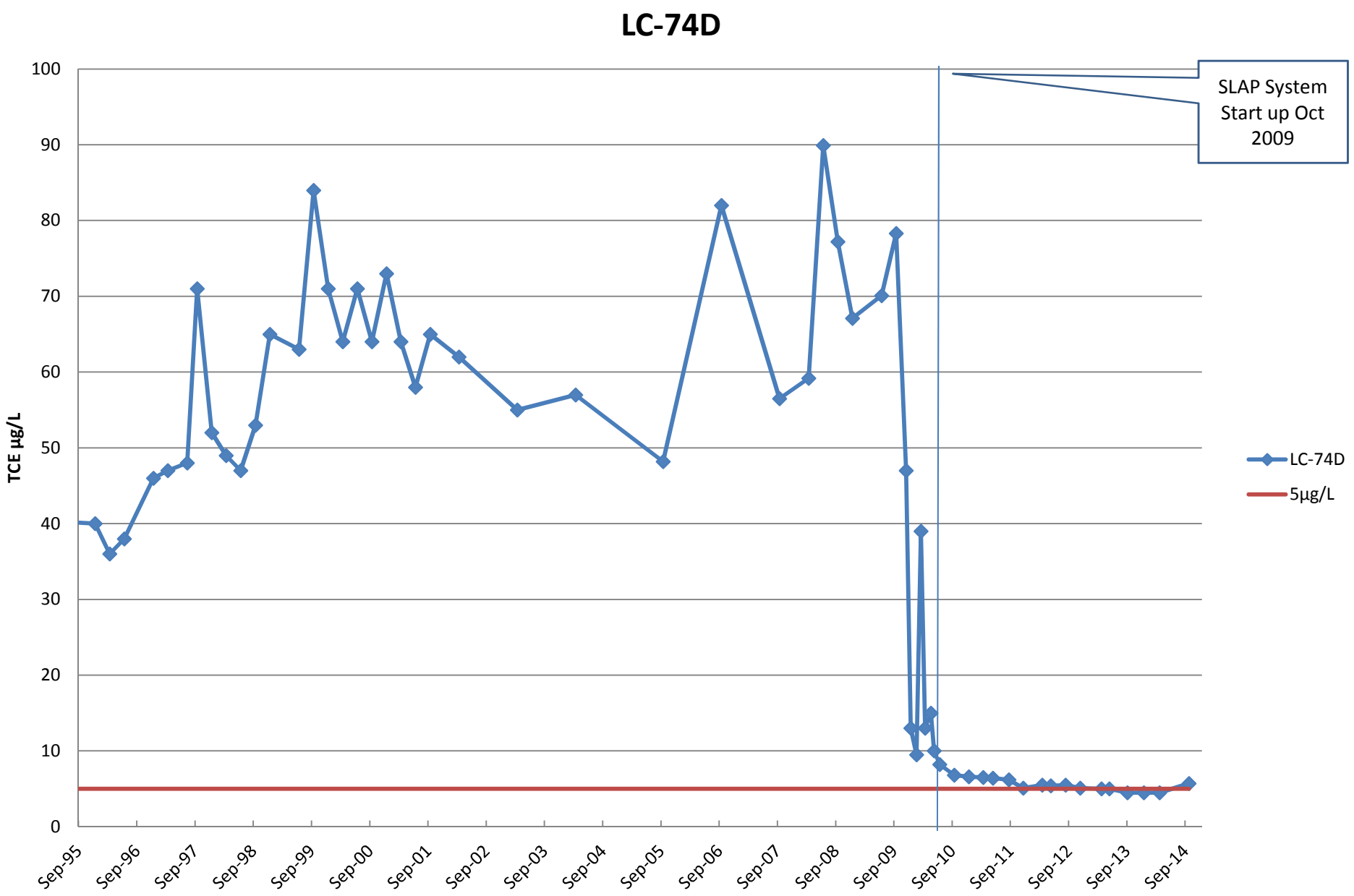


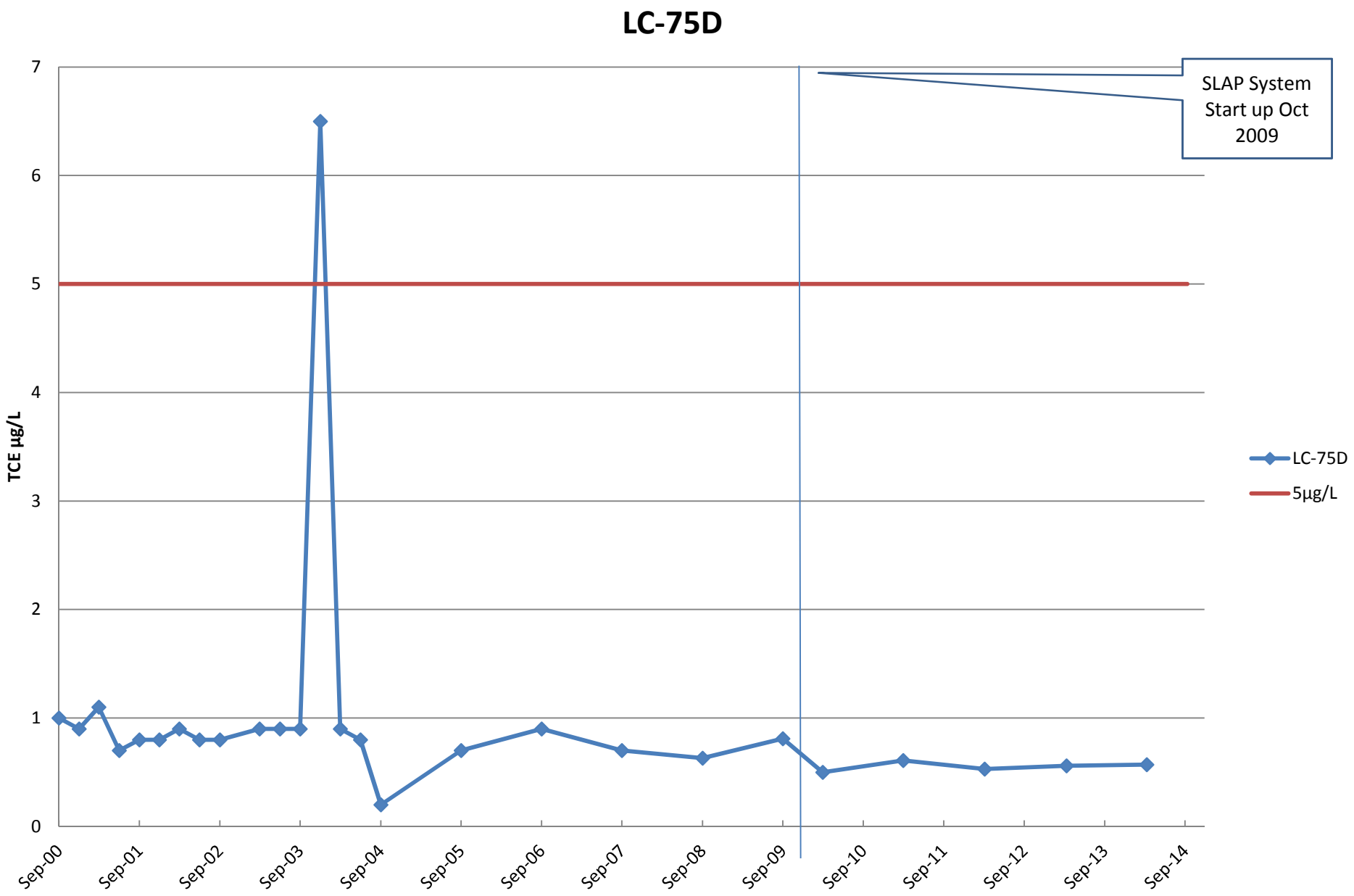

LC-66D
TCE µg/L
80
70
60
50
40
30
20
10
0
Sep-93
Sep-94
Sep-95
Sep-96
Sep-97
Sep-98
Sep-99
Sep-00
Sep-01
Sep-02
Sep-03
Sep-04
Sep-05
Sep-06
Sep-07
Sep-08
Sep-09
Sep-10
Sep-11
Sep-12
Sep-13
Sep-14
SLAP System Start up Oct 2009
LC-66D
5µg/L

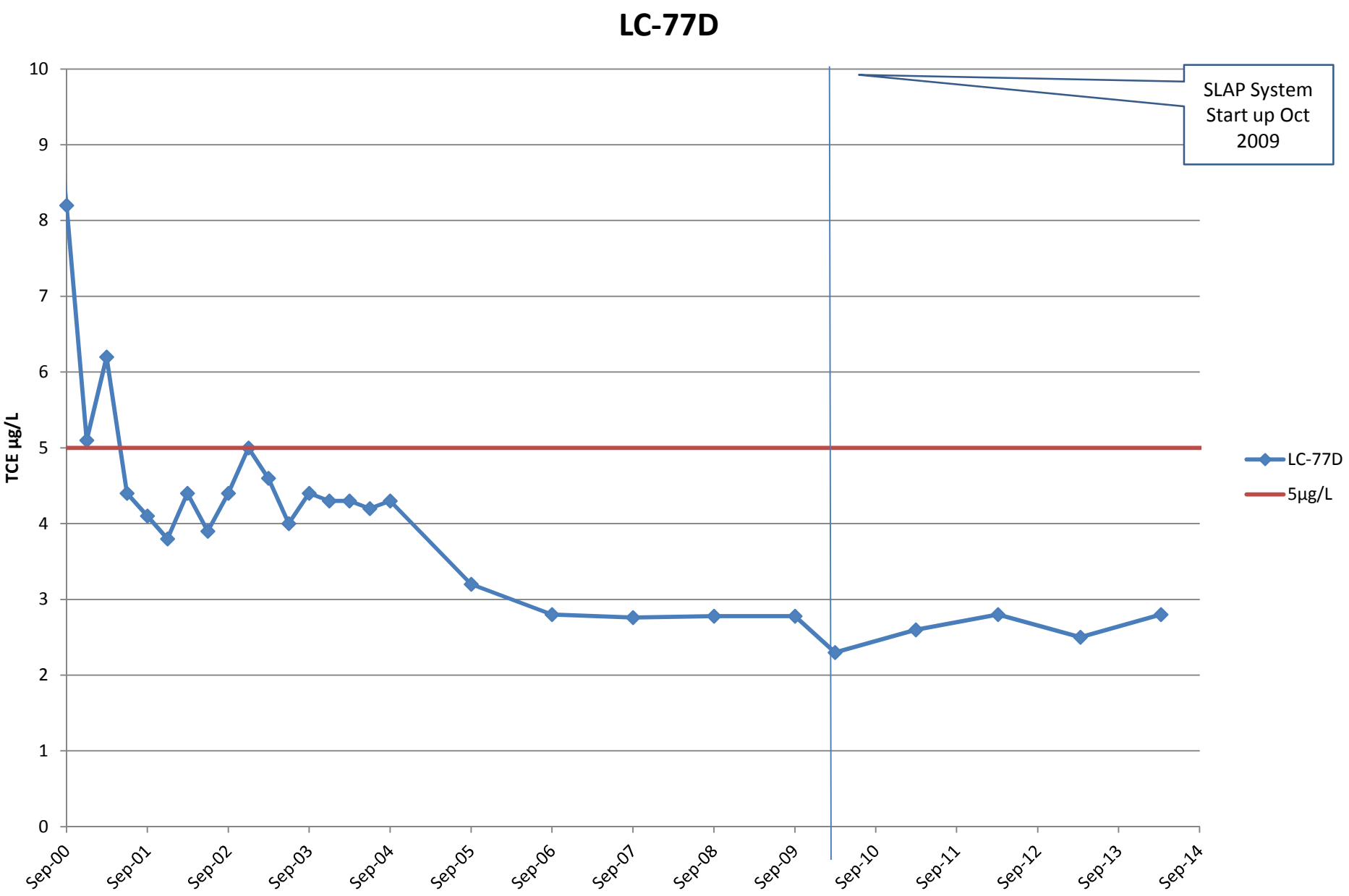

LC-67D
TCE µg/L
80
70
60
50
40
30
20
10
0
Sep-93
Sep-94
Sep-95
Sep-96
Sep-97
Sep-98
Sep-99
Sep-00
Sep-01
Sep-02
Sep-03
Sep-04
Sep-05
Sep-06
Sep-07
Sep-08
Sep-09
Sep-10
Sep-11
Sep-12
Sep-13
Sep-14
SLAP System Start up Oct 2009
LC-67D
5µg/L

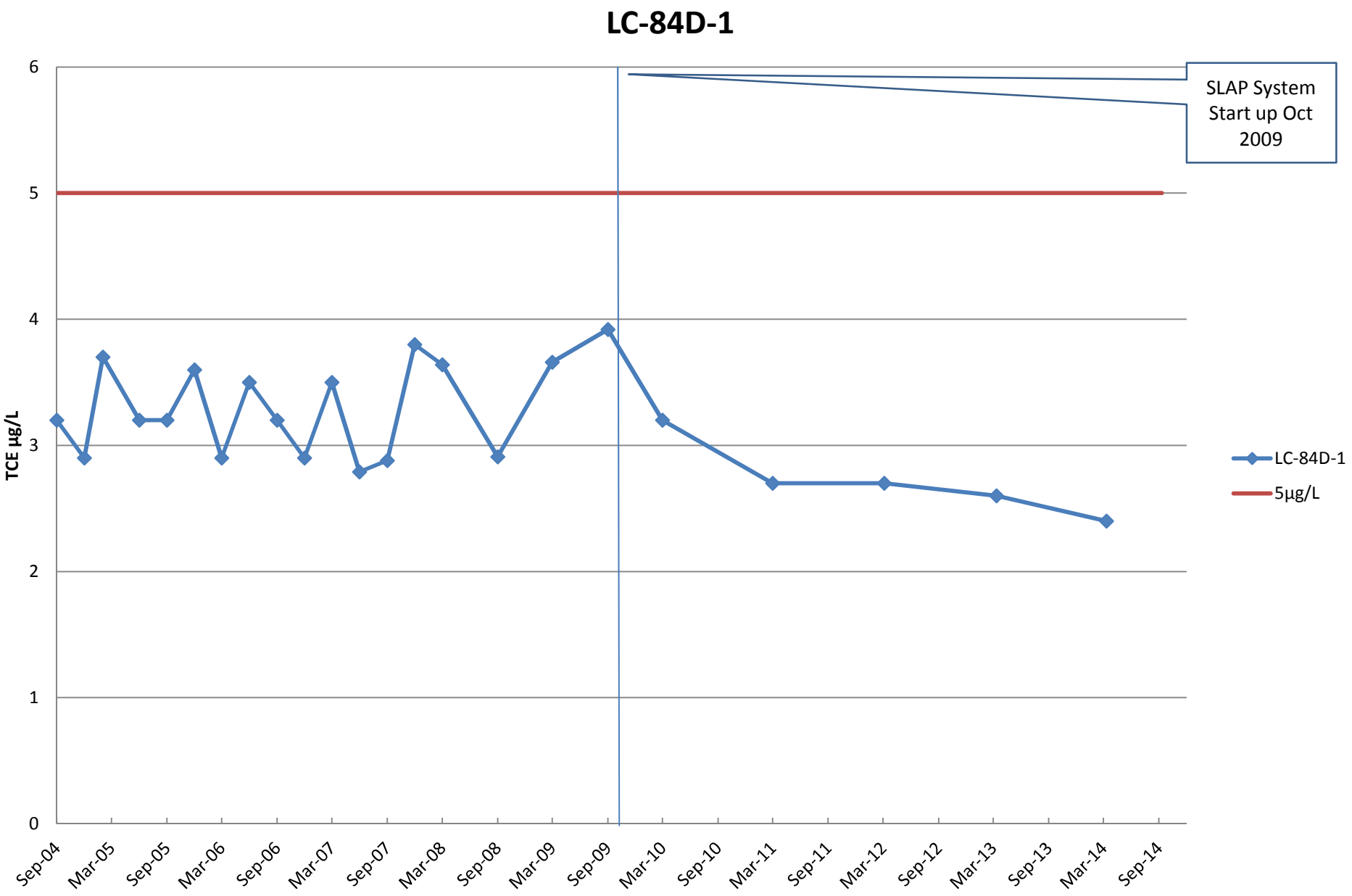

LC-69D
TCE µg/L
200
180
160
140
120
100
80
60
40
20
0
Sep-93
Sep-94
Sep-95
Sep-96
Sep-97
Sep-98
Sep-99
Sep-00
Sep-01
Sep-02
Sep-03
Sep-04
Sep-05
Sep-06
Sep-07
Sep-08
Sep-09
Sep-10
Sep-11
Sep-12
Sep-13
Sep-14
SLAP System Start up Oct 2009
LC-69D
5µg/L

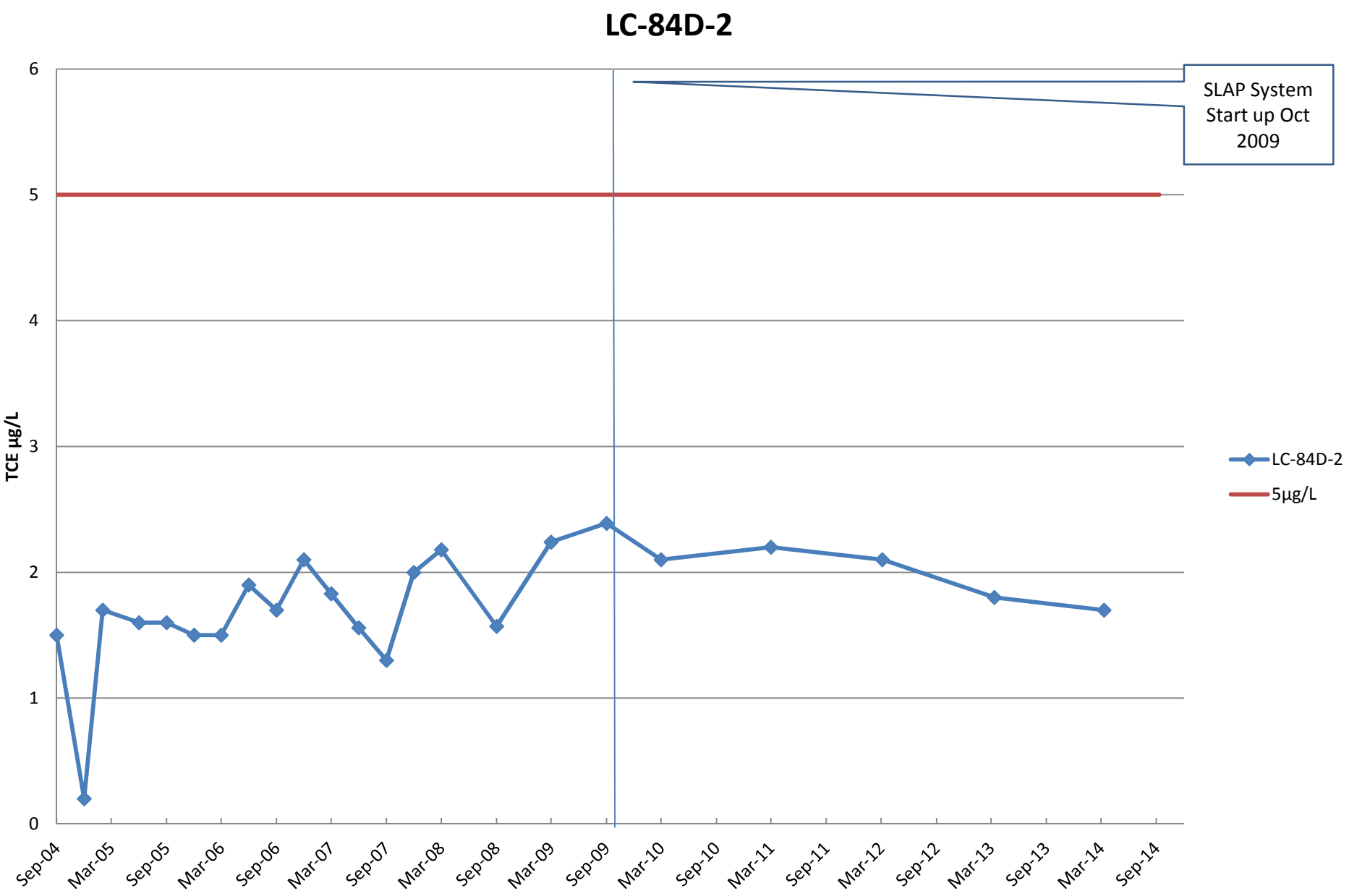

LC-72D
TCE µg/L
60
50
40
30
20
10
0
Sep-93
Sep-94
Sep-95
Sep-96
Sep-97
Sep-98
Sep-99
Sep-00
Sep-01
Sep-02
Sep-03
Sep-04
Sep-05
Sep-06
Sep-07
Sep-08
Sep-09
Sep-10
Sep-11
Sep-12
Sep-13
Sep-14
SLAP System Start up Oct 2009
LC-72D
5µg/L

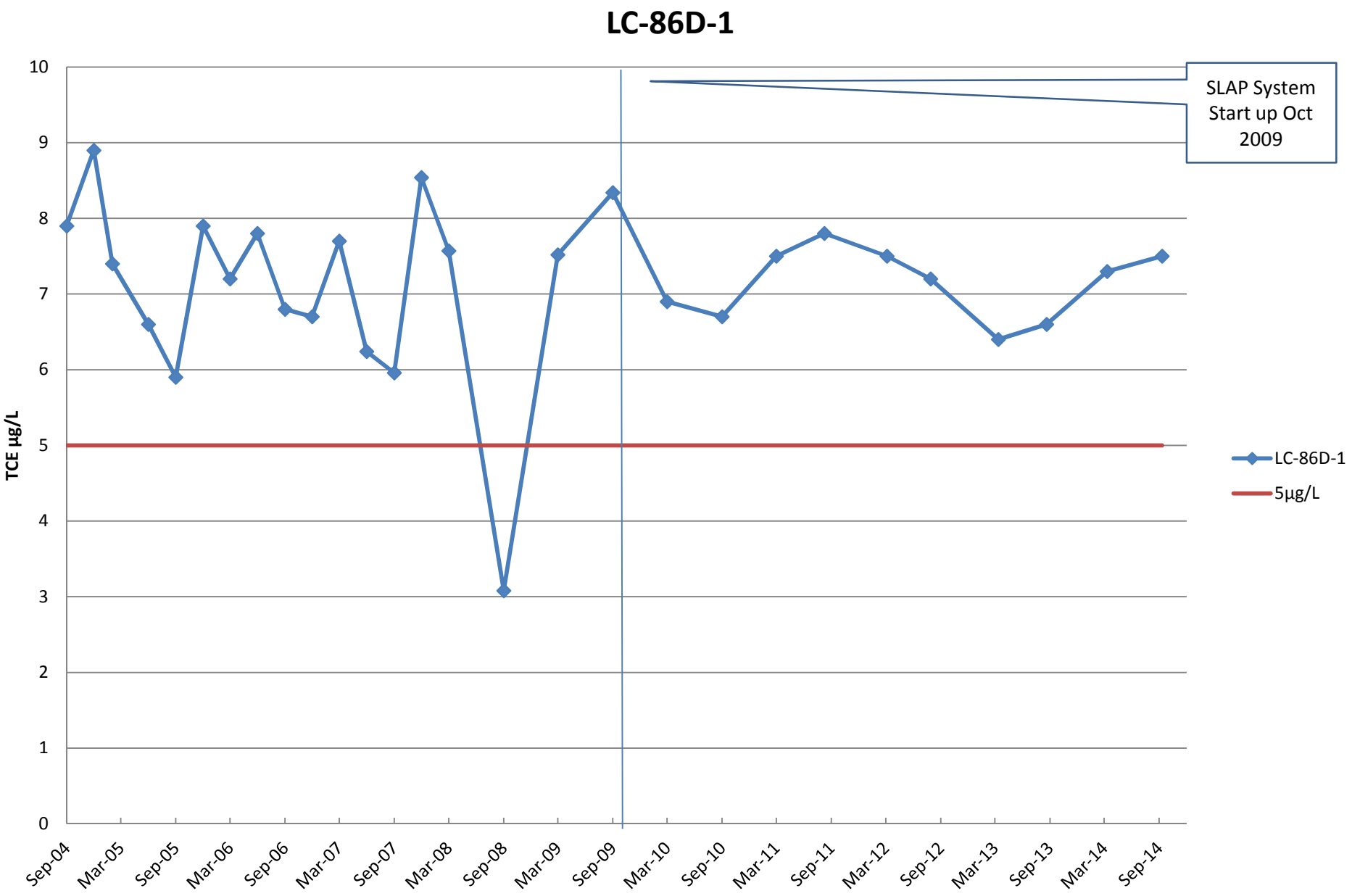

LC-74D
TCE µg/L
100
90
80
70
60
50
40
30
20
10
0
Sep-95
Sep-96
Sep-97
Sep-98
Sep-99
Sep-00
Sep-01
Sep-02
Sep-03
Sep-04
Sep-05
Sep-06
Sep-07
Sep-08
Sep-09
Sep-10
Sep-11
Sep-12
Sep-13
Sep-14
SLAP System Start up Oct 2009
LC-74D
5µg/L

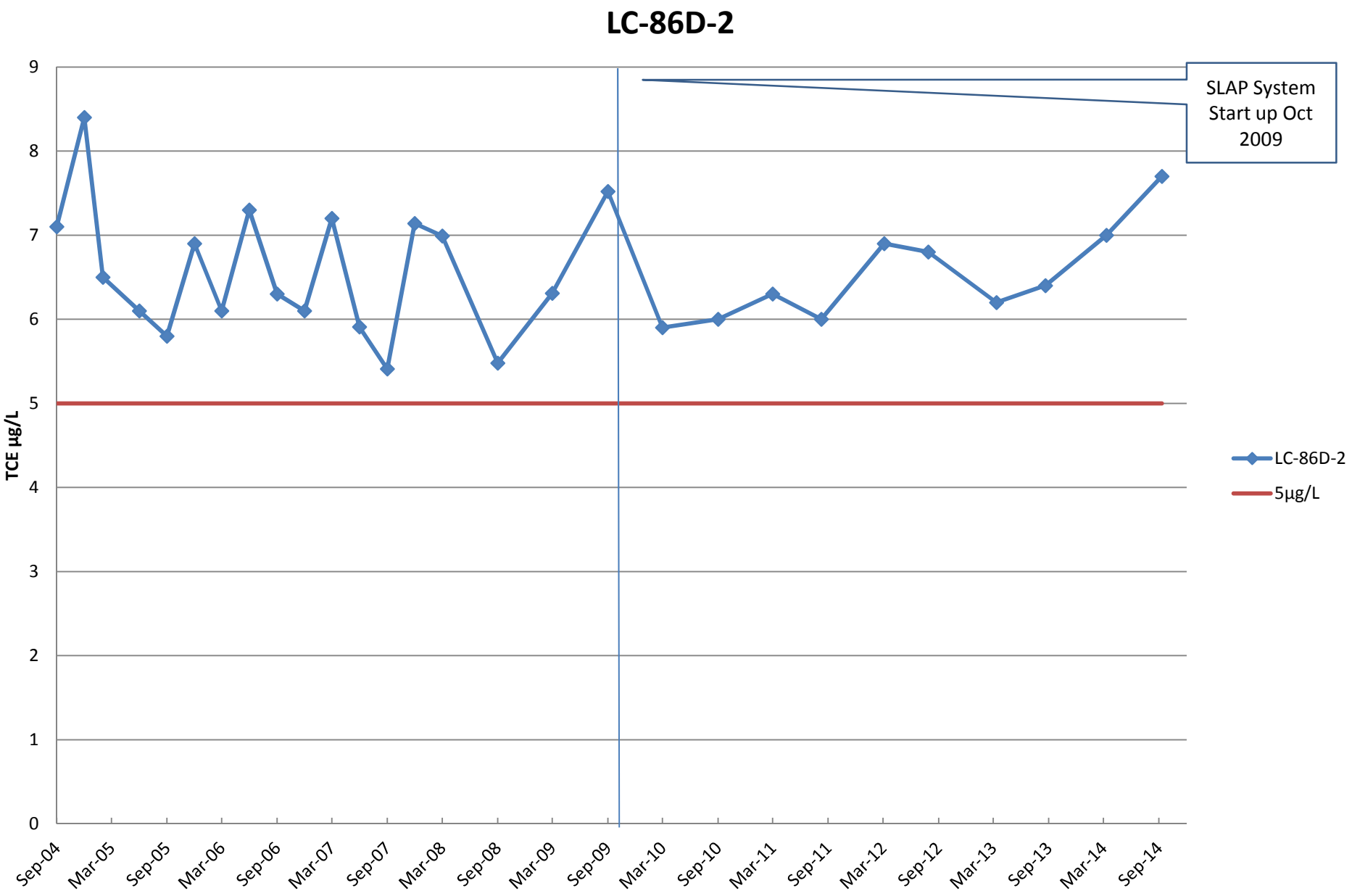

LC-75D
TCE µg/L
0
1
2
3
4
5
6
7
Sep-00
Sep-01
Sep-02
Sep-03
Sep-04
Sep-05
Sep-06
Sep-07
Sep-08
Sep-09
Sep-10
Sep-11
Sep-12
Sep-13
Sep-14
SLAP System Start up Oct 2009
LC-75D
5µg/L

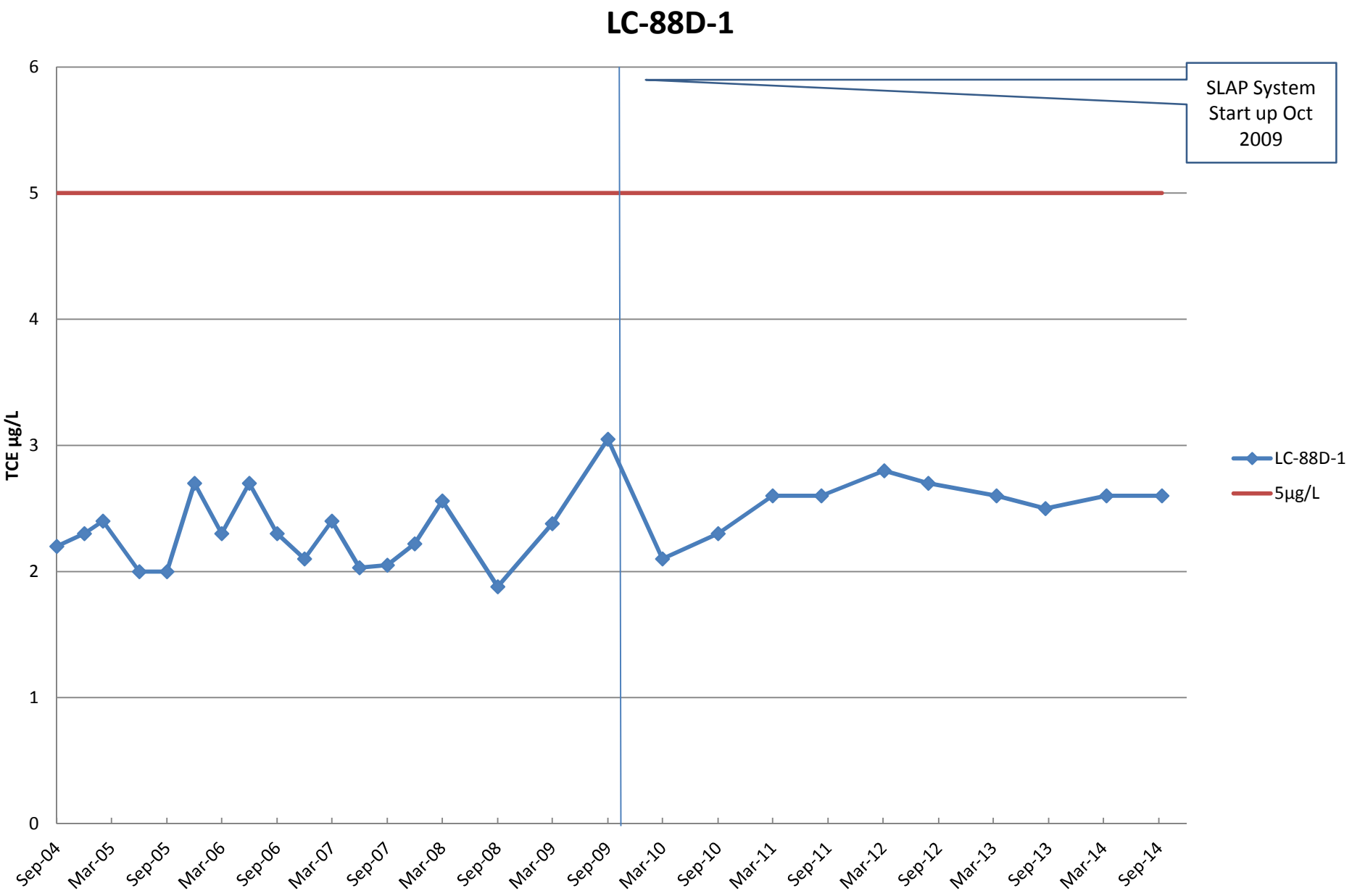

LC-77D
TCE µg/L
10
9
8
7
6
5
4
3
2
1
0
Sep-00
Sep-01
Sep-02
Sep-03
Sep-04
Sep-05
Sep-06
Sep-07
Sep-08
Sep-09
Sep-10
Sep-11
Sep-12
Sep-13
Sep-14
SLAP System Start up Oct 2009
LC-77D
5µg/L

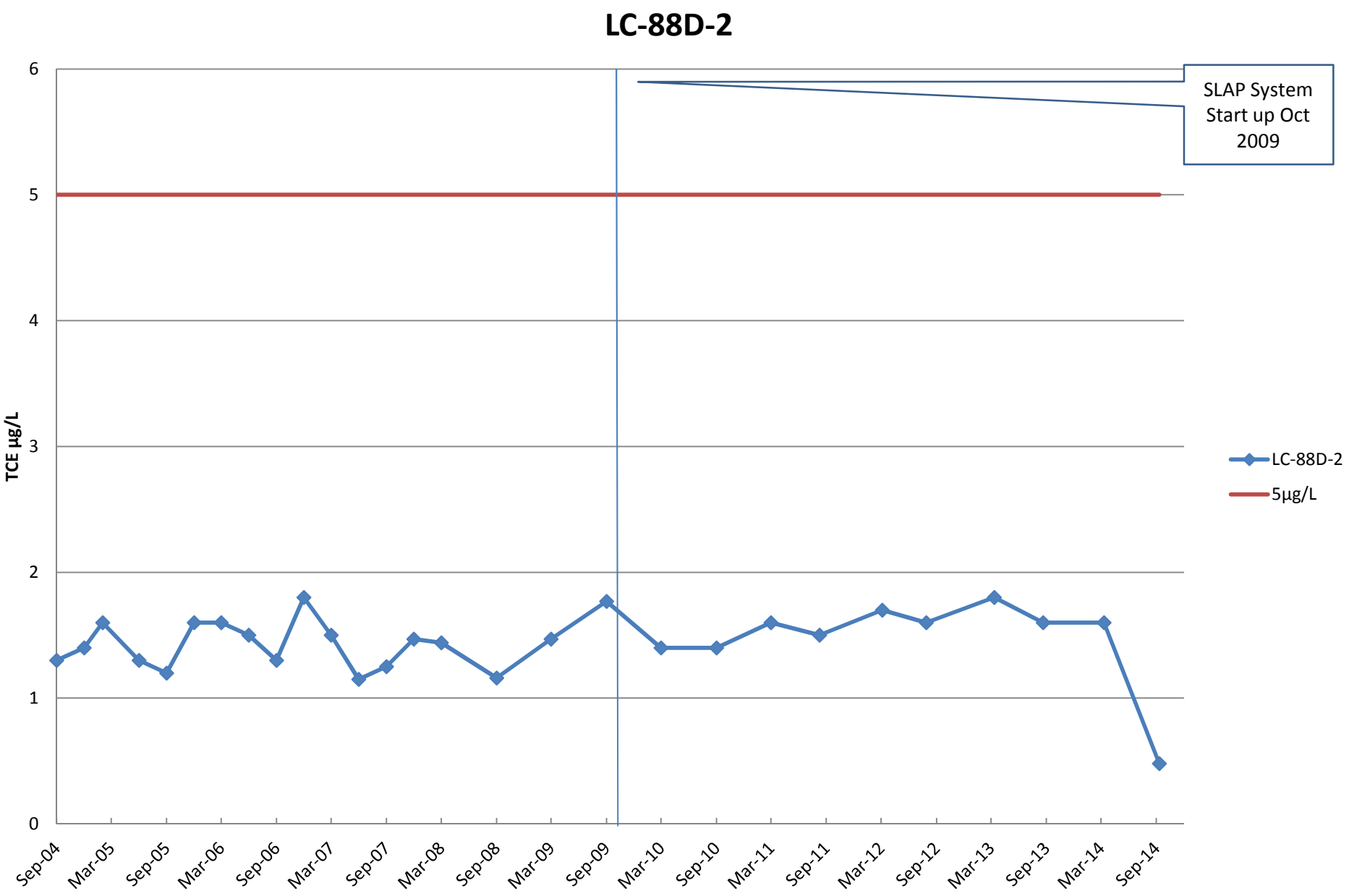

LC-84D-1
TCE µg/L
0
1
2
3
4
5
6
Sep-04
Mar-05
Sep-05
Mar-06
Sep-06
Mar-07
Sep-07
Mar-08
Sep-08
Mar-09
Sep-09
Mar-10
Sep-10
Mar-11
Sep-11
Mar-12
Sep-12
Mar-13
Sep-13
Mar-14
Sep-14
SLAP System Start up Oct 2009
LC-84D-1
5µg/L

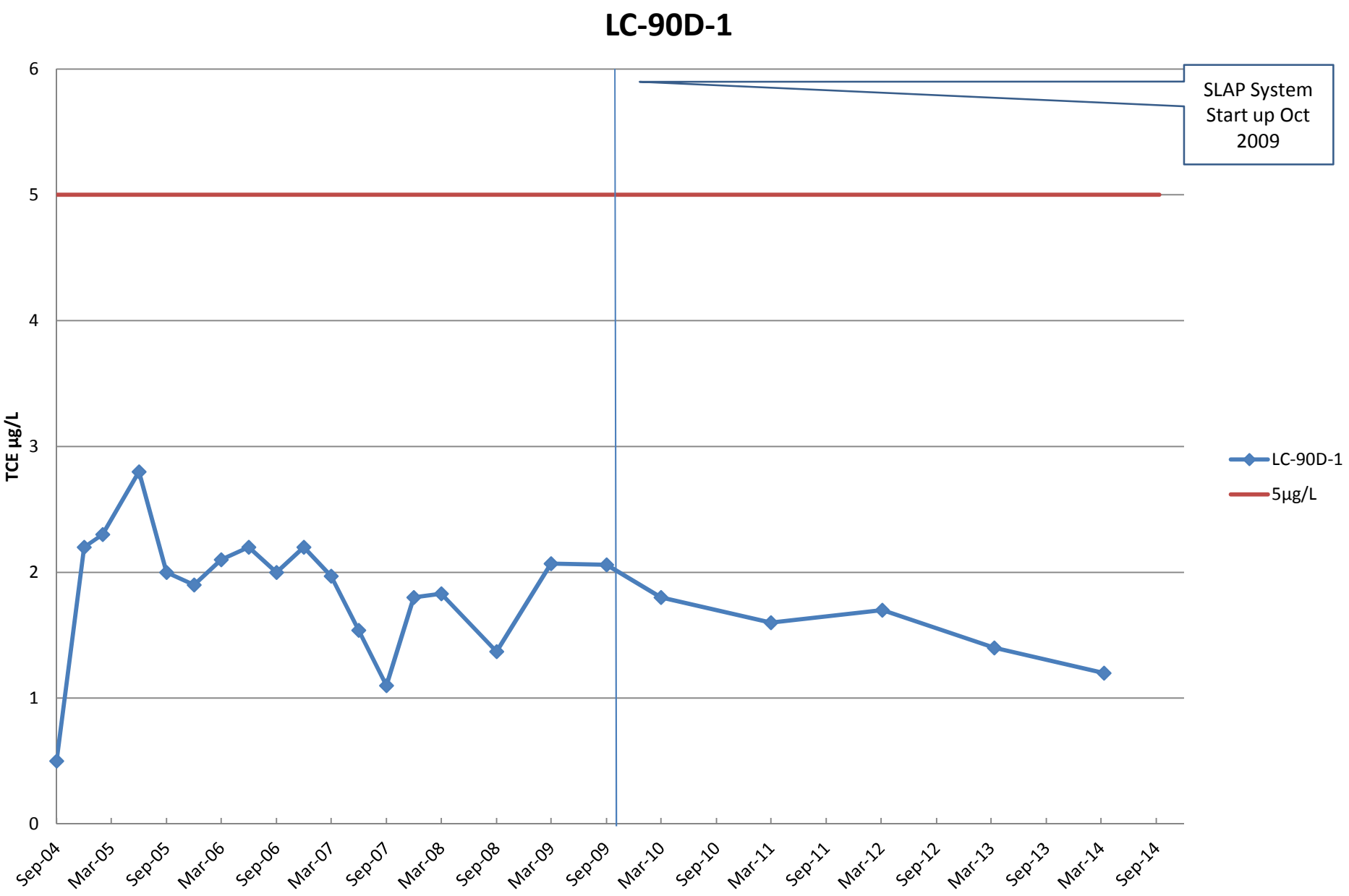

LC-84D-2
TCE µg/L
0
1
2
3
4
5
6
Sep-04
Mar-05
Sep-05
Mar-06
Sep-06
Mar-07
Sep-07
Mar-08
Sep-08
Mar-09
Sep-09
Mar-10
Sep-10
Mar-11
Sep-11
Mar-12
Sep-12
Mar-13
Sep-13
Mar-14
Sep-14
SLAP System Start up Oct 2009
LC-84D-2
5µg/L

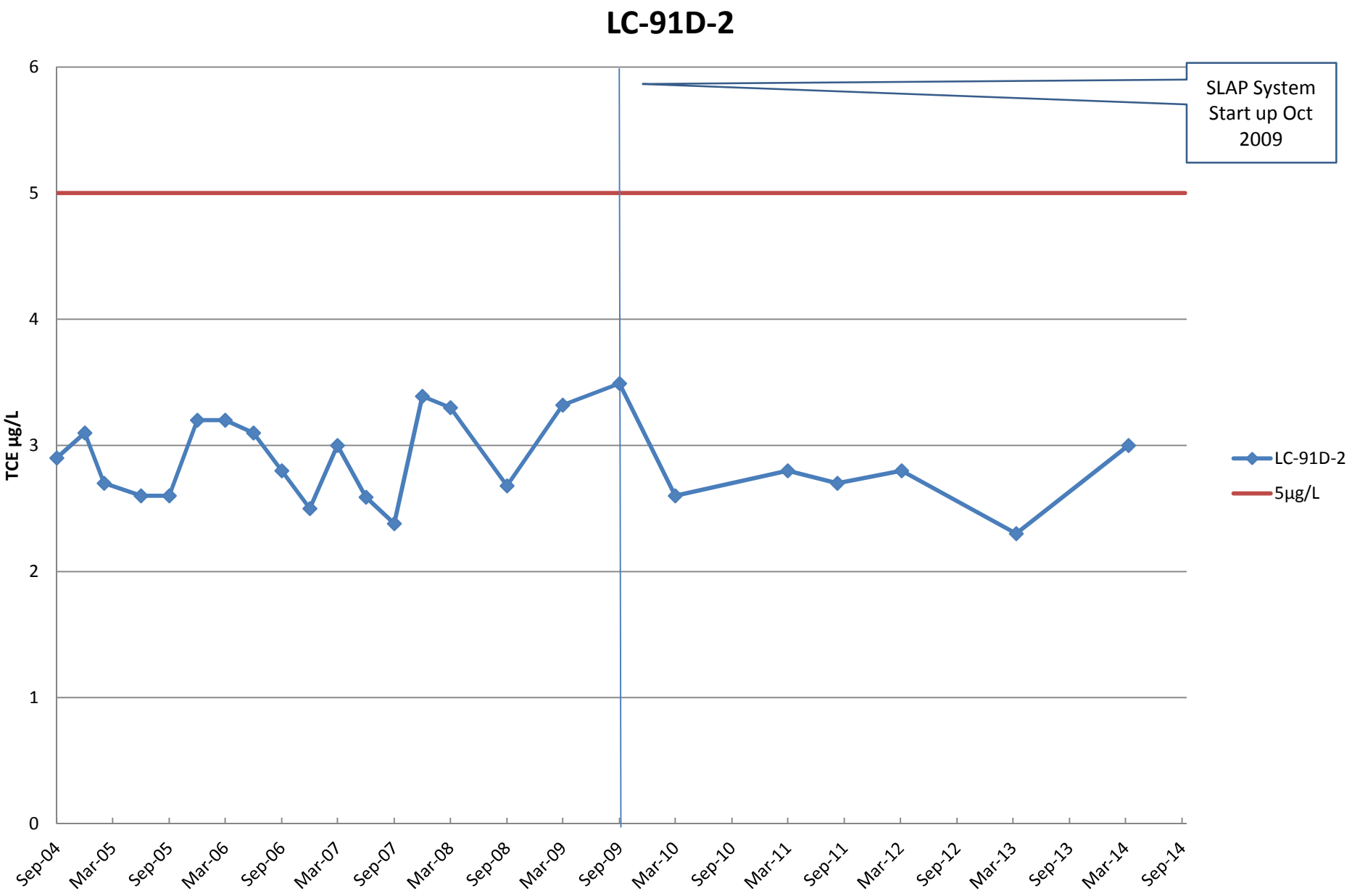

LC-86D-1
TCE µg/L
0
1
2
3
4
5
6
7
8
9
10
Sep-04
Mar-05
Sep-05
Mar-06
Sep-06
Mar-07
Sep-07
Mar-08
Sep-08
Mar-09
Sep-09
Mar-10
Sep-10
Mar-11
Sep-11
Mar-12
Sep-12
Mar-13
Sep-13
Mar-14
Sep-14
SLAP System Start up Oct 2009
LC-86D-1
5µg/L

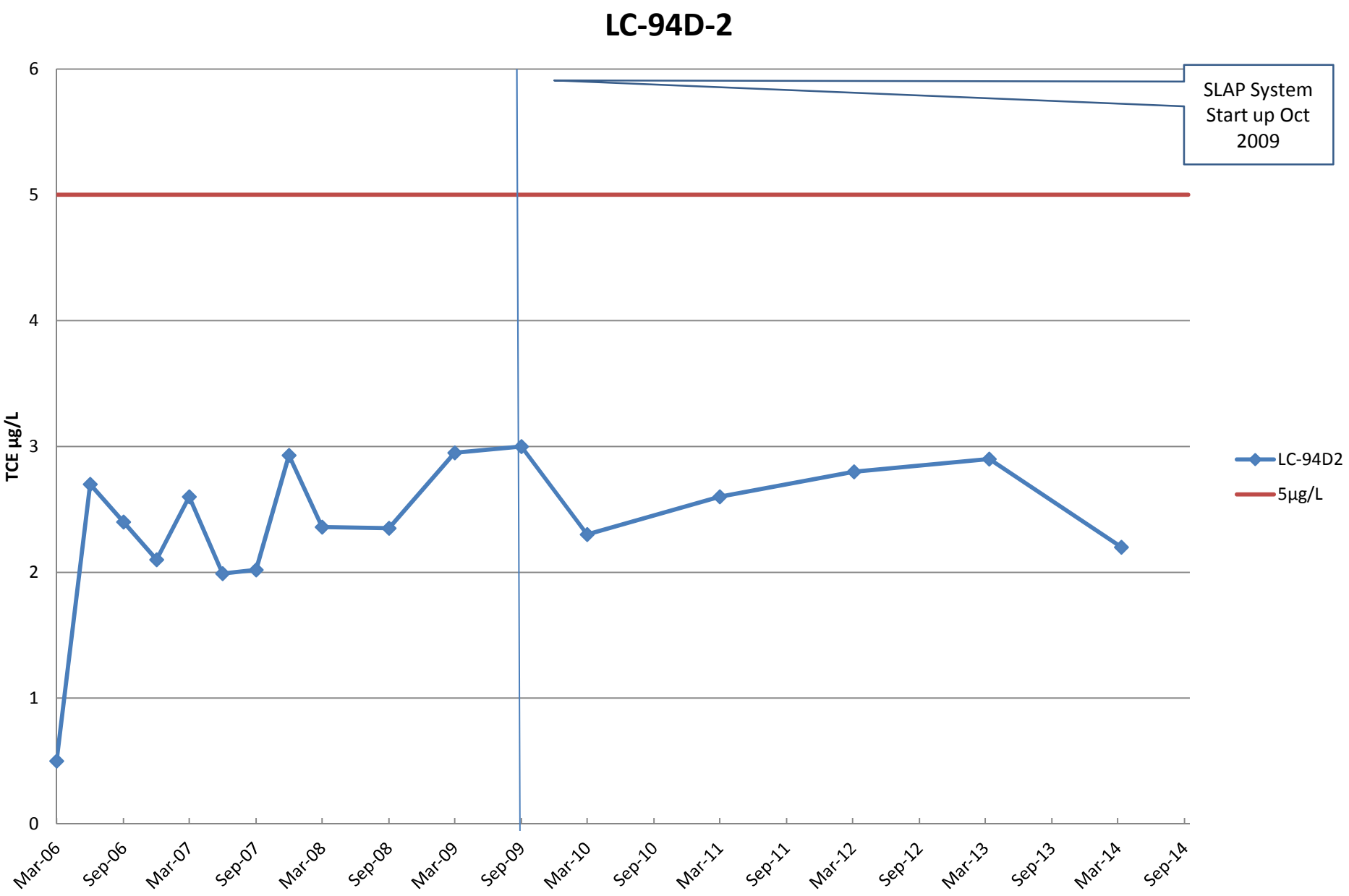

LC-86D-2
TCE µg/L
0
1
2
3
4
5
6
7
8
9
Sep-04
Mar-05
Sep-05
Mar-06
Sep-06
Mar-07
Sep-07
Mar-08
Sep-08
Mar-09
Sep-09
Mar-10
Sep-10
Mar-11
Sep-11
Mar-12
Sep-12
Mar-13
Sep-13
Mar-14
Sep-14
SLAP System Start up Oct 2009
LC-86D-2
5µg/L

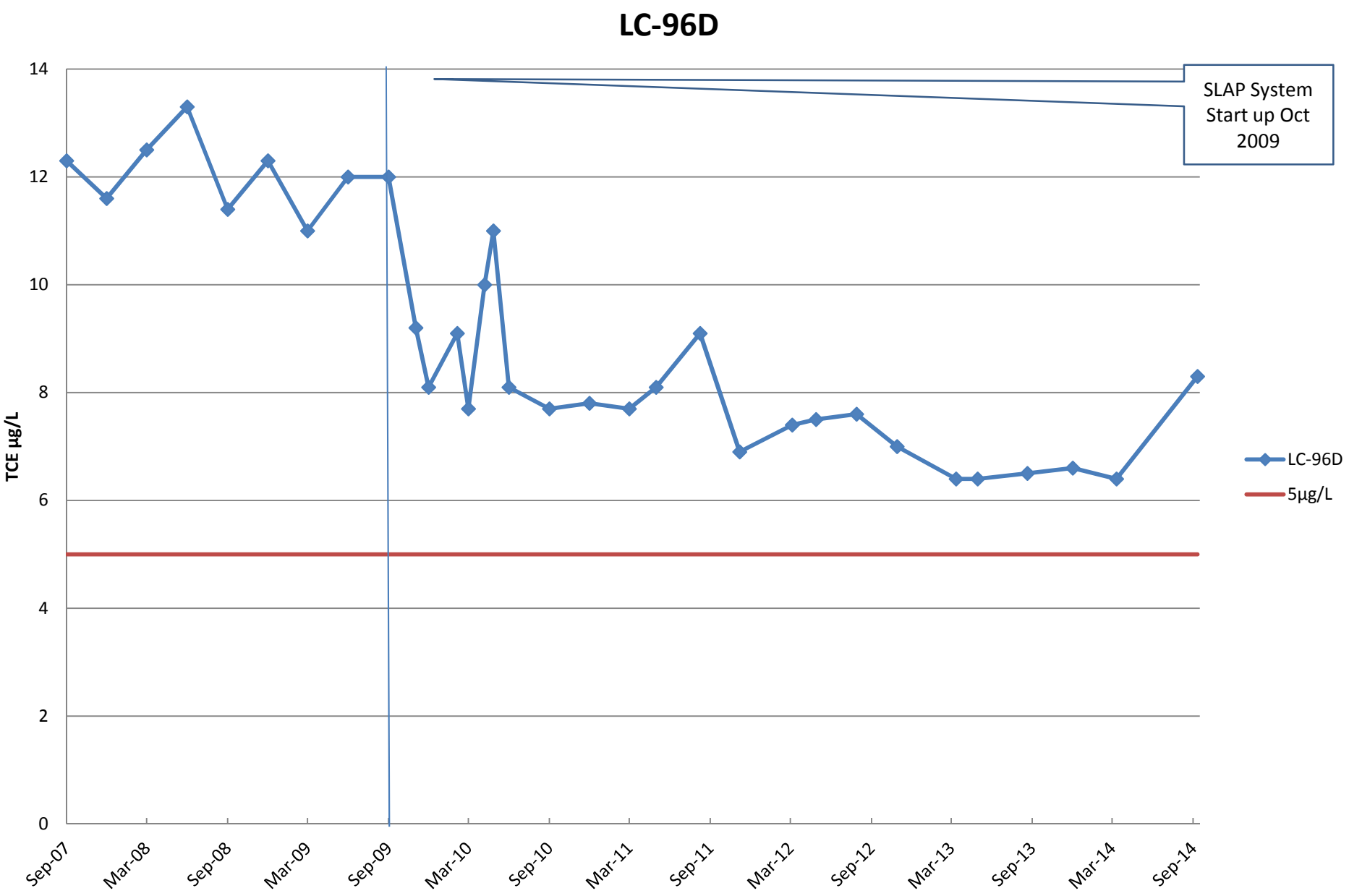

LC-88D-1
SLAP System Start up Oct 2009
TCE µg/L
0
1
2
3
4
5
6
Sep-04
Mar-05
Sep-05
Mar-06
Sep-06
Mar-07
Sep-07
Mar-08
Sep-08
Mar-09
Sep-09
Mar-10
Sep-10
Mar-11
Sep-11
Mar-12
Sep-12
Mar-13
Sep-13
Mar-14
Sep-14
LC-88D-1
5µg/L

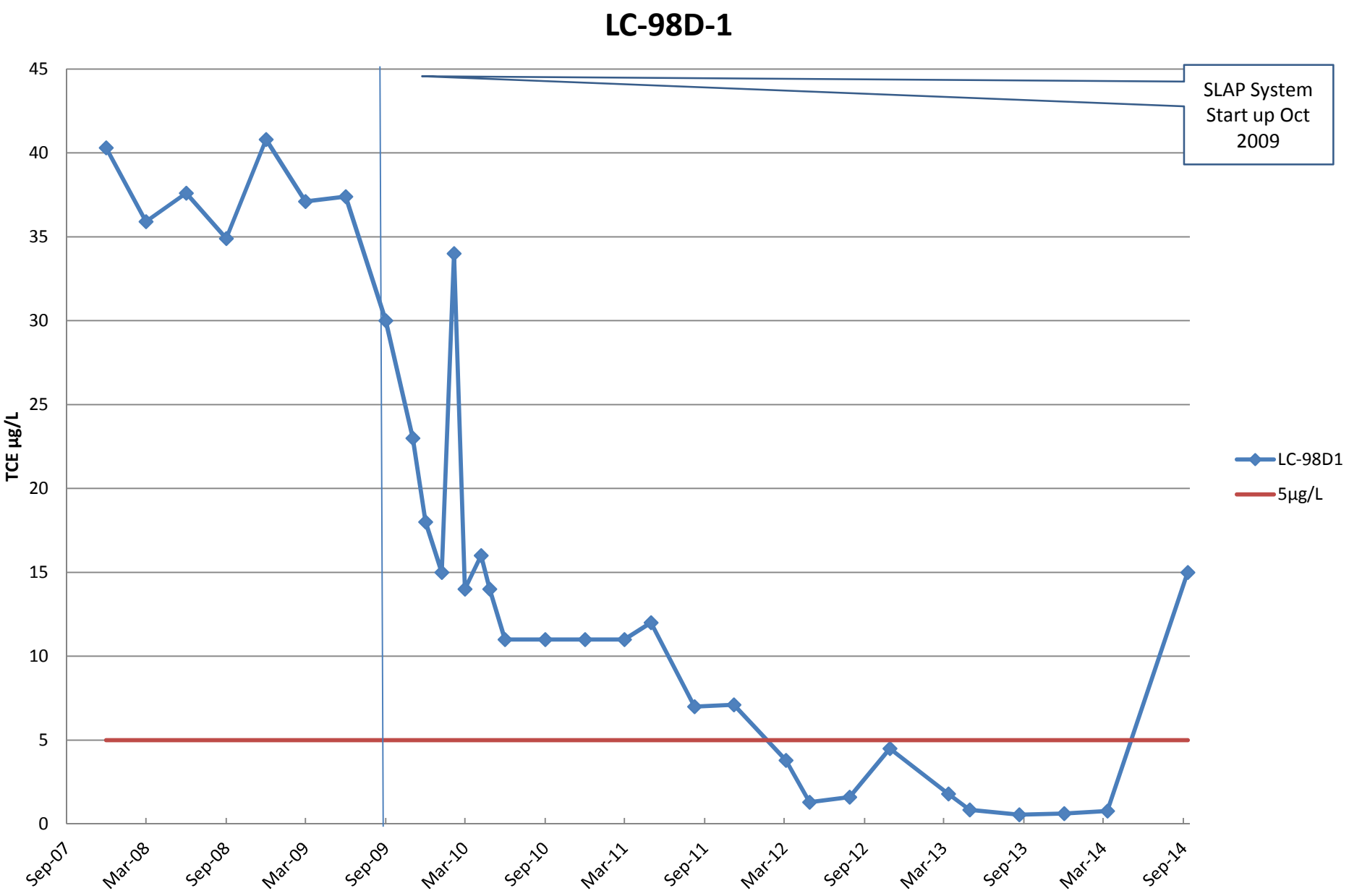

LC-88D-2
TCE µg/L
0
1
2
3
4
5
6
SLAP System Start up Oct 2009
LC-88D-2
5µg/L
Sep-04
Mar-05
Sep-05
Mar-06
Sep-06
Mar-07
Sep-07
Mar-08
Sep-08
Mar-09
Sep-09
Mar-10
Sep-10
Mar-11
Sep-11
Mar-12
Sep-12
Mar-13
Sep-13
Mar-14
Sep-14

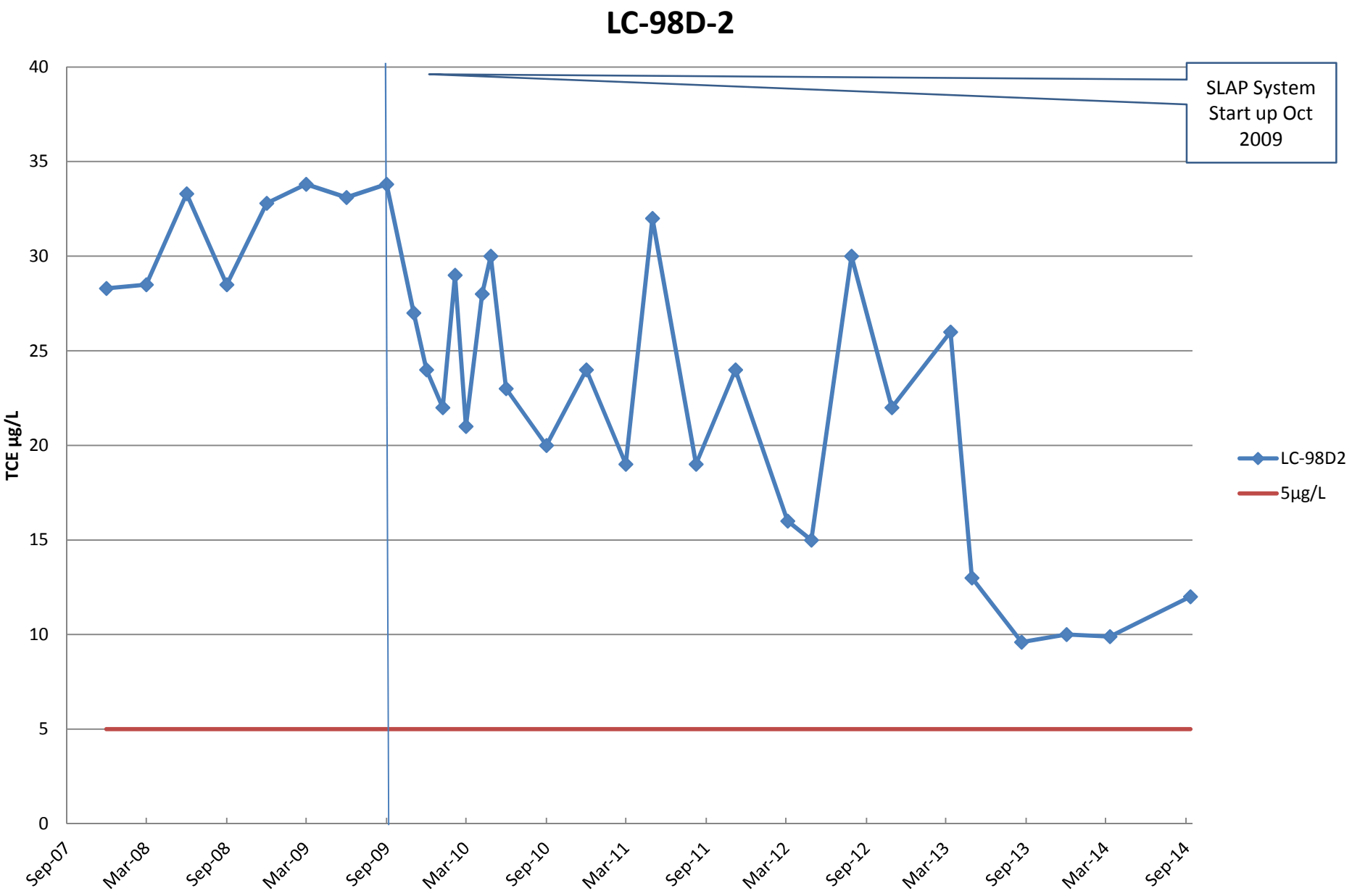

LC-90D-1
TCE µg/L
0
1
2
3
4
5
6
Sep-04
Mar-05
Sep-05
Mar-06
Sep-06
Mar-07
Sep-07
Mar-08
Sep-08
Mar-09
Sep-09
Mar-10
Sep-10
Mar-11
Sep-11
Mar-12
Sep-12
Mar-13
Sep-13
Mar-14
Sep-14
SLAP System Start up Oct 2009
LC-90D-1
5µg/L

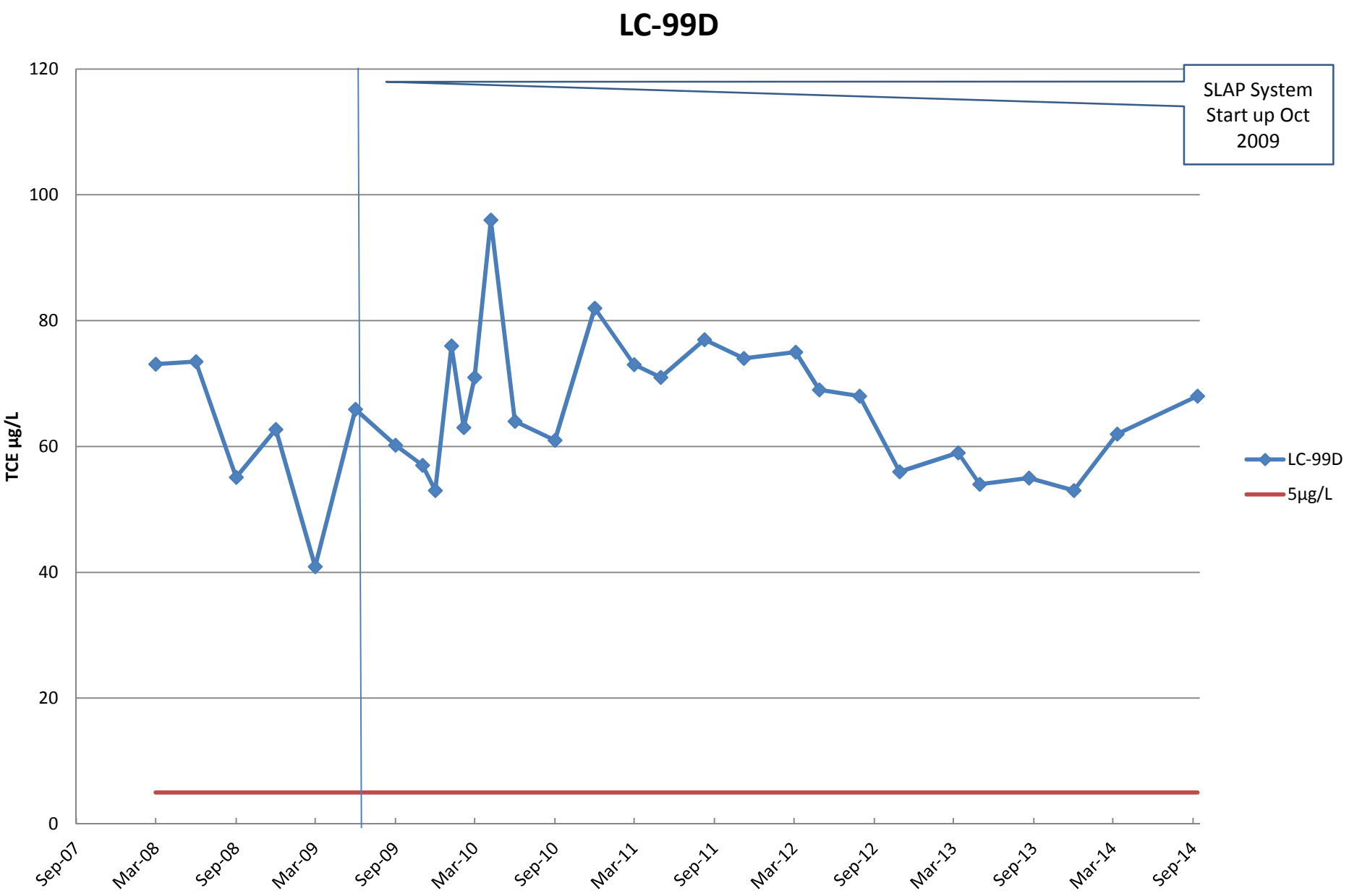

LC-91D-2
TCE µg/L
0
1
2
3
4
5
6
Sep-04
Mar-05
Sep-05
Mar-06
Sep-06
Mar-07
Sep-07
Mar-08
Sep-08
Mar-09
Sep-09
Mar-10
Sep-10
Mar-11
Sep-11
Mar-12
Sep-12
Mar-13
Sep-13
Mar-14
Sep-14
SLAP System Start up Oct 2009
LC-91D-2
5µg/L

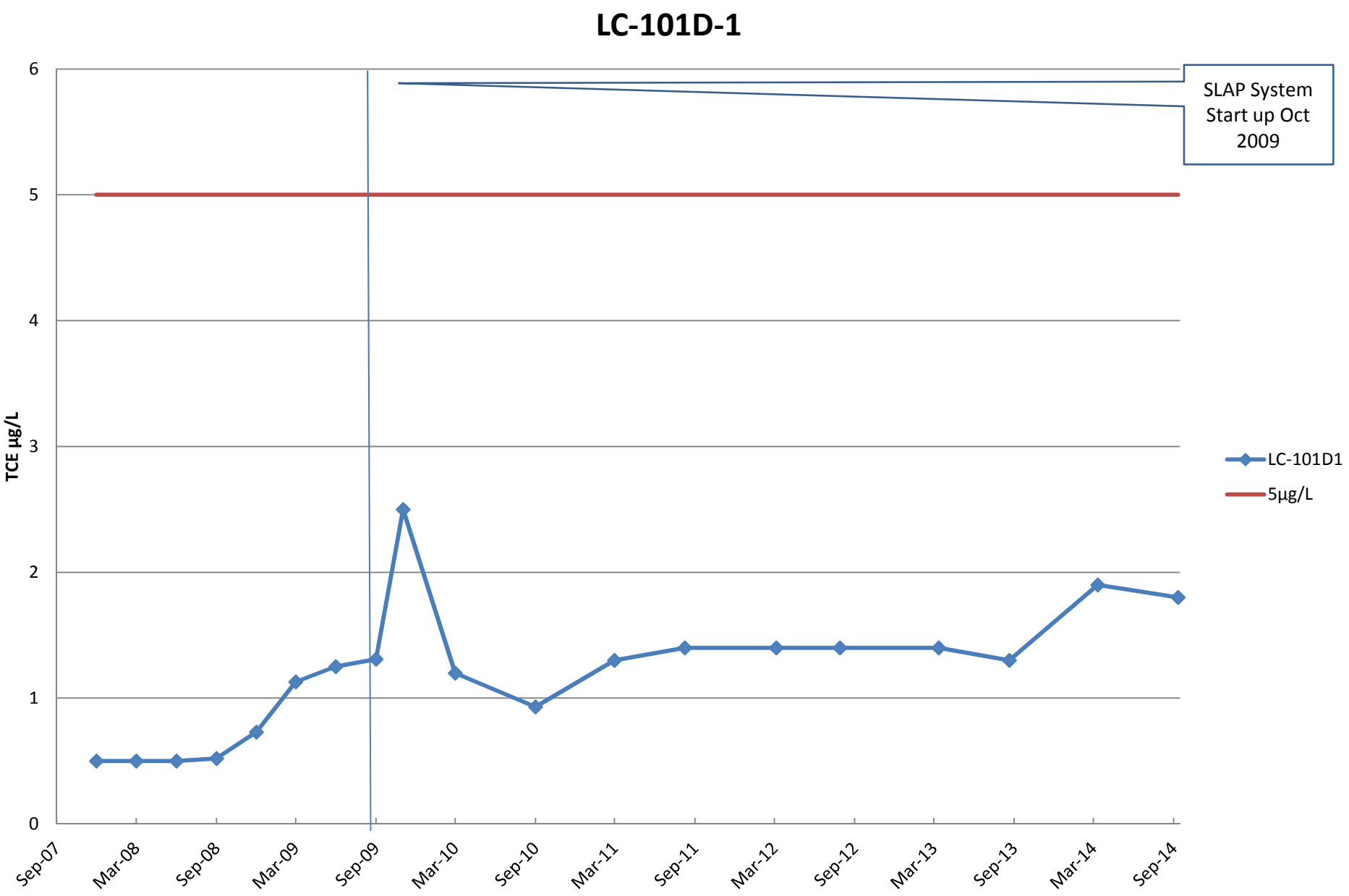

LC-94D-2
TCE µg/L
0
1
2
3
4
5
6
Mar-06
Sep-06
Mar-07
Sep-07
Mar-08
Sep-08
Mar-09
Sep-09
Mar-10
Sep-10
Mar-11
Sep-11
Mar-12
Sep-12
Mar-13
Sep-13
Mar-14
Sep-14
SLAP System Start up Oct 2009
LC-94D2
5µg/L

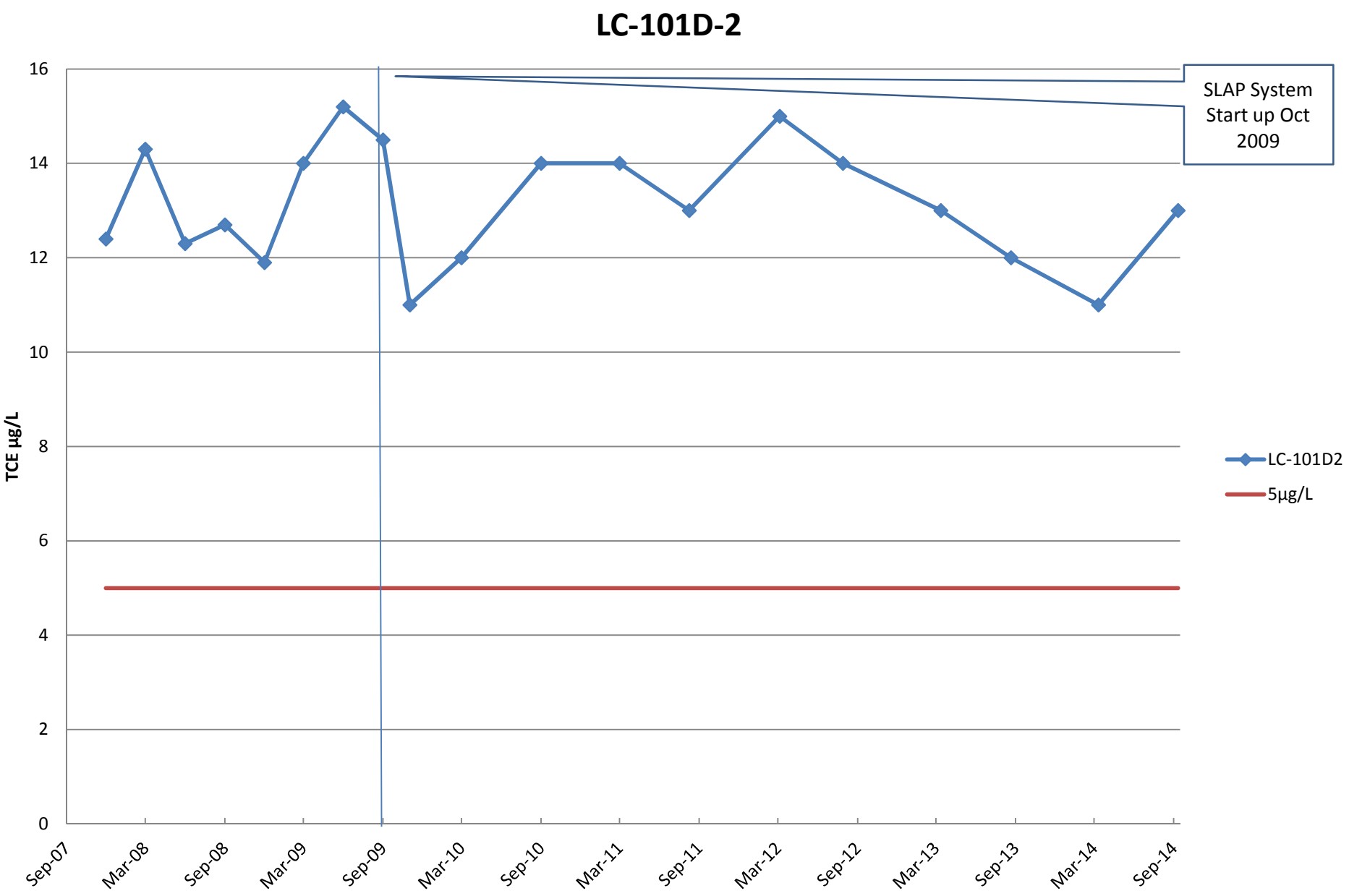

LC-96D
TCE µg/L
14
12
10
8
6
4
2
0
Sep-07
Mar-08
Sep-08
Mar-09
Sep-09
Mar-10
Sep-10
Mar-11
Sep-11
Mar-12
Sep-12
Mar-13
Sep-13
Mar-14
Sep-14
SLAP System Start up Oct 2009
LC-96D
5µg/L

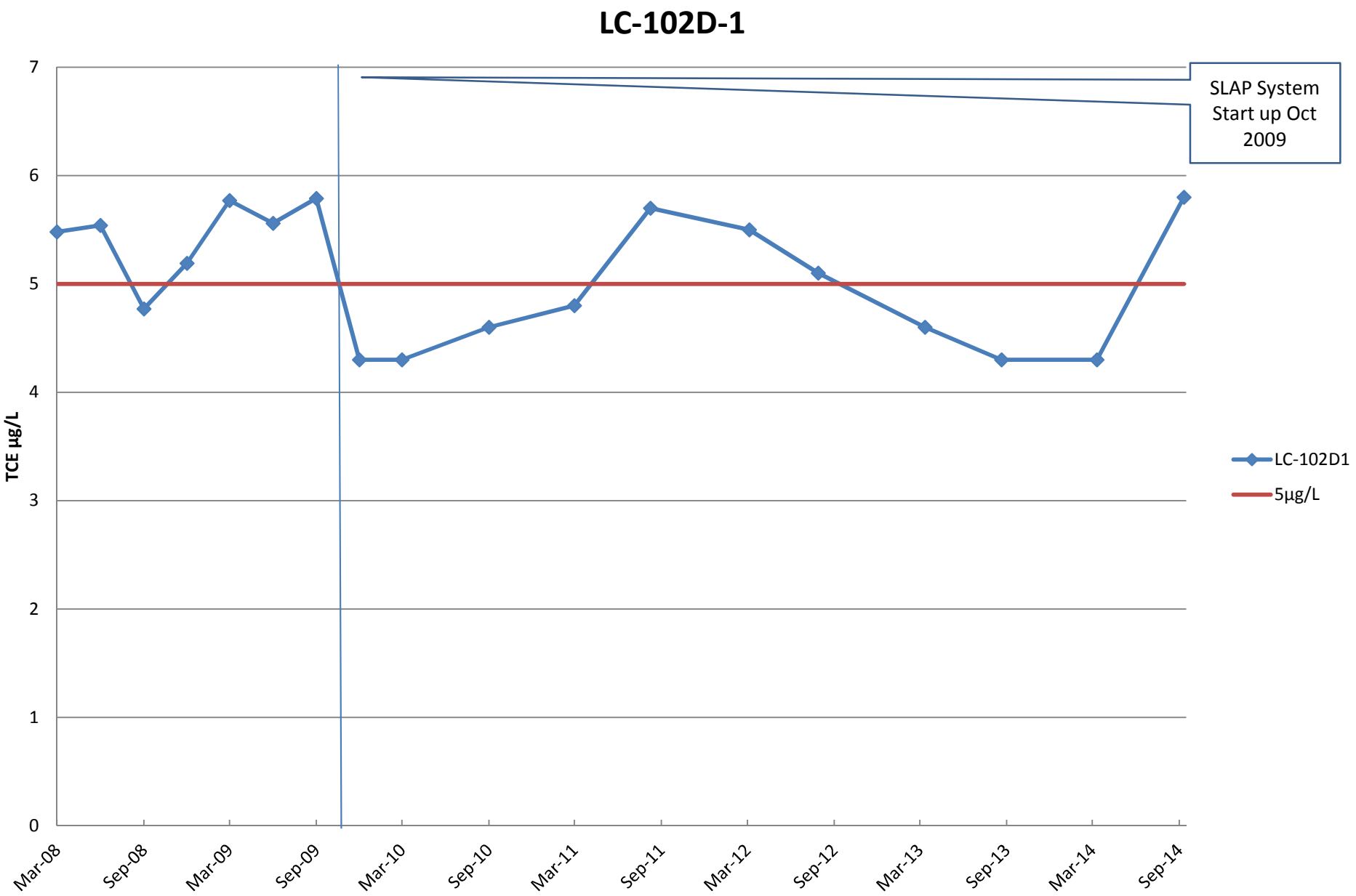

LC-98D-1
TCE µg/L
45
40
35
30
25
20
15
10
5
0
Sep-07
Mar-08
Sep-08
Mar-09
Sep-09
Mar-10
Sep-10
Mar-11
Sep-11
Mar-12
Sep-12
Mar-13
Sep-13
Mar-14
Sep-14
SLAP System Start up Oct 2009
LC-98D1
5µg/L

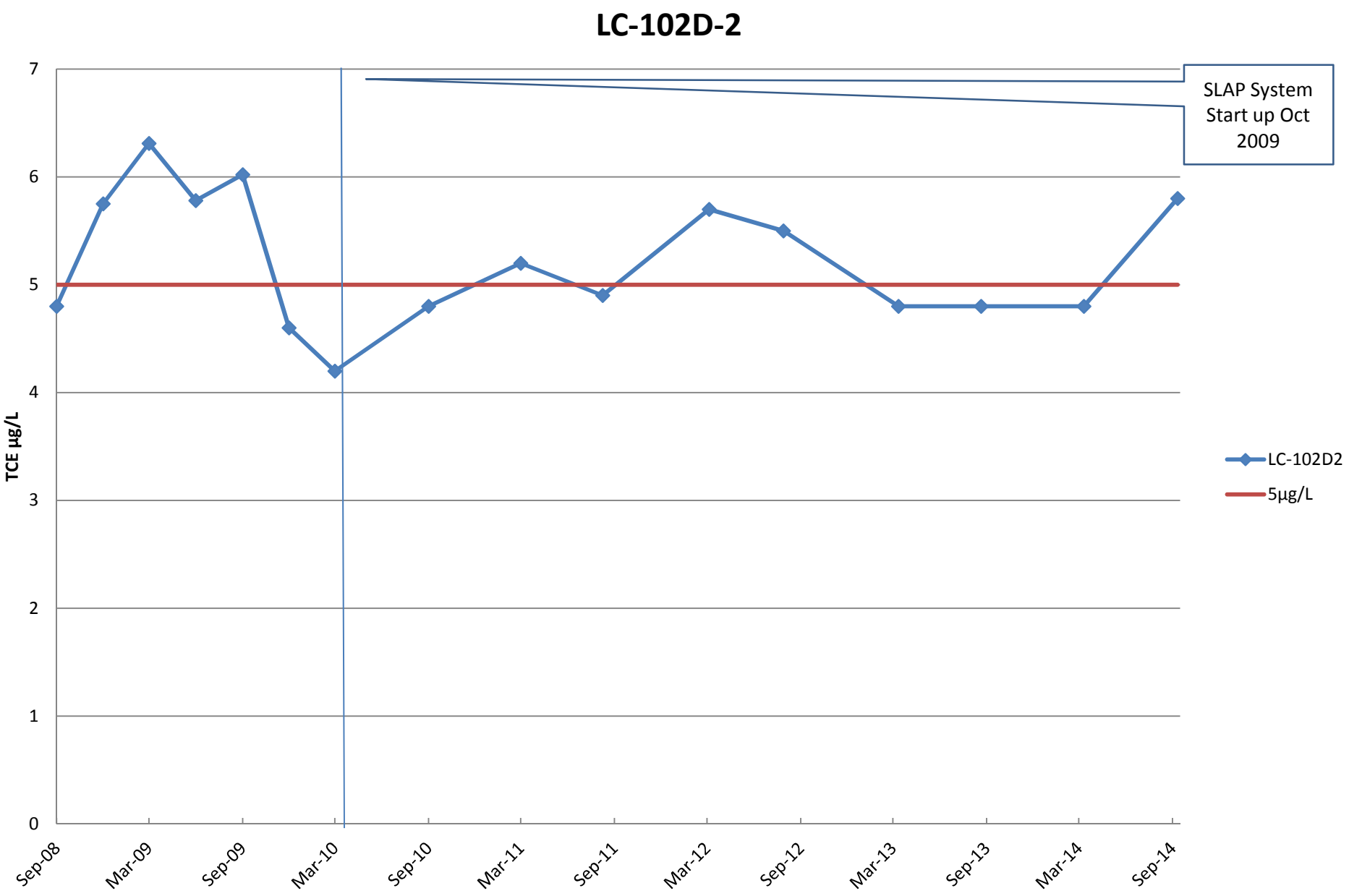

LC-98D-2
TCE µg/L
40
35
30
25
20
15
10
5
0
Sep-07
Mar-08
Sep-08
Mar-09
Sep-09
Mar-10
Sep-10
Mar-11
Sep-11
Mar-12
Sep-12
Mar-13
Sep-13
Mar-14
Sep-14
SLAP System Start up Oct 2009
LC-98D2
5µg/L

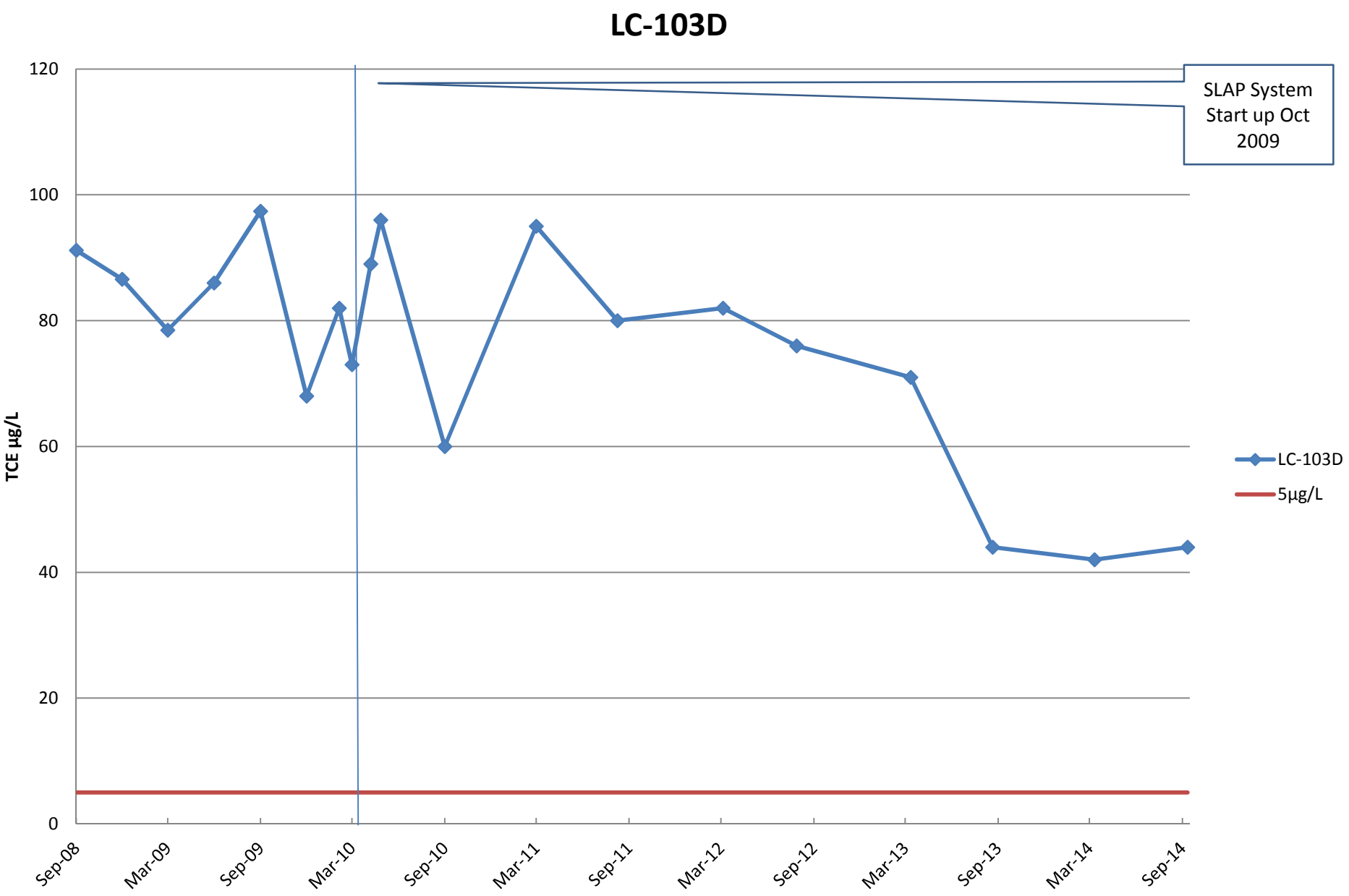

LC-99D
120
100
80
60
40
20
0
TCE µg/L
SLAP System Start up Oct 2009
LC-99D
5µg/L
Sep-07
Mar-08
Sep-08
Mar-09
Sep-09
Mar-10
Sep-10
Mar-11
Sep-11
Mar-12
Sep-12
Mar-13
Sep-13
Mar-14
Sep-14

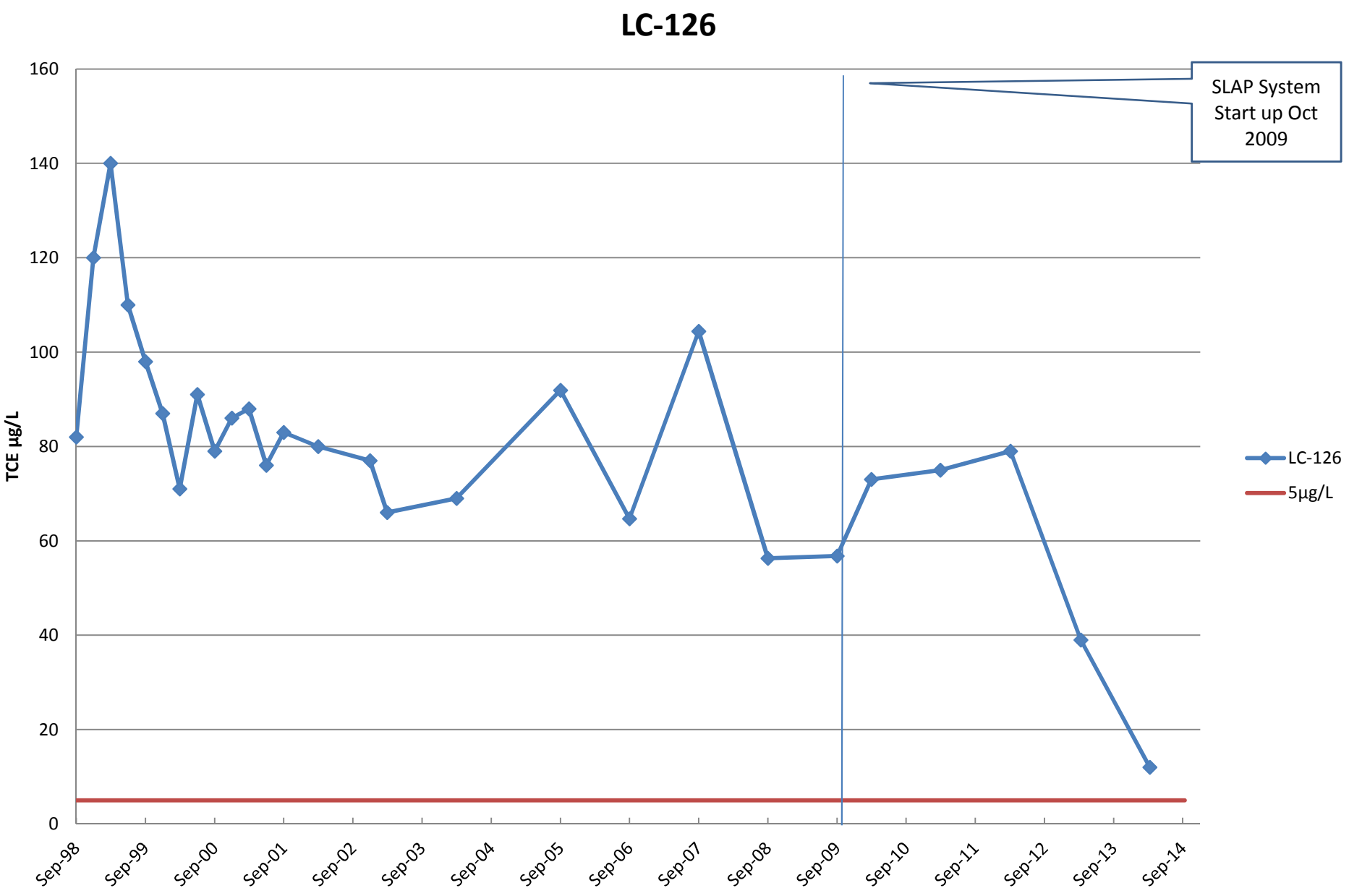

LC-101D-1
TCE µg/L
0
1
2
3
4
5
6
Sep-07
Mar-08
Sep-08
Mar-09
Sep-09
Mar-10
Sep-10
Mar-11
Sep-11
Mar-12
Sep-12
Mar-13
Sep-13
Mar-14
Sep-14
SLAP System Start up Oct 2009
LC-101D1
5µg/L

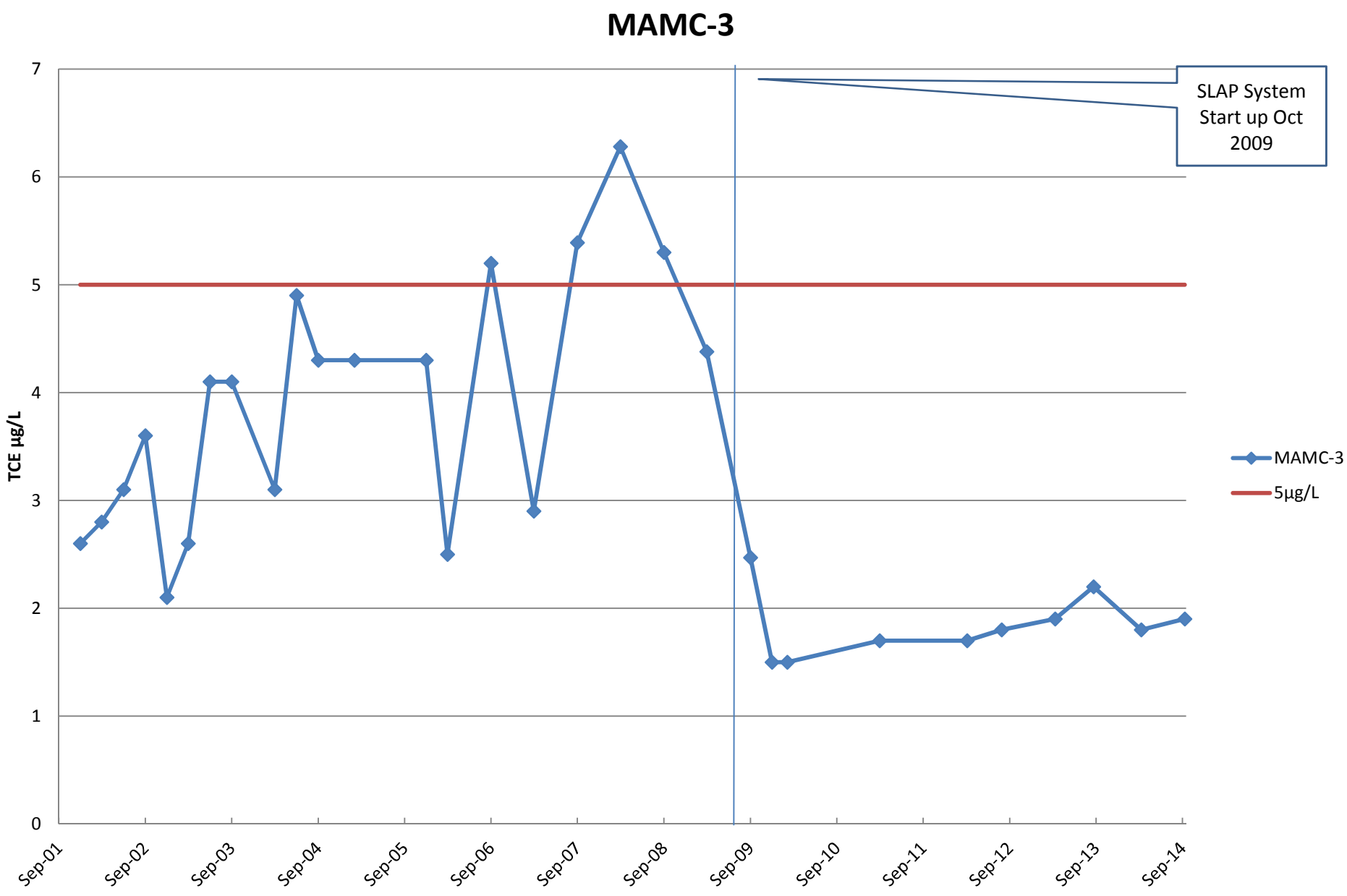

LC-101D-2
TCE µg/L
16
14
12
10
8
6
4
2
0
Sep-07
Mar-08
Sep-08
Mar-09
Sep-09
Mar-10
Sep-10
Mar-11
Sep-11
Mar-12
Sep-12
Mar-13
Sep-13
Mar-14
Sep-14
SLAP System Start up Oct 2009
LC-101D2
5µg/L

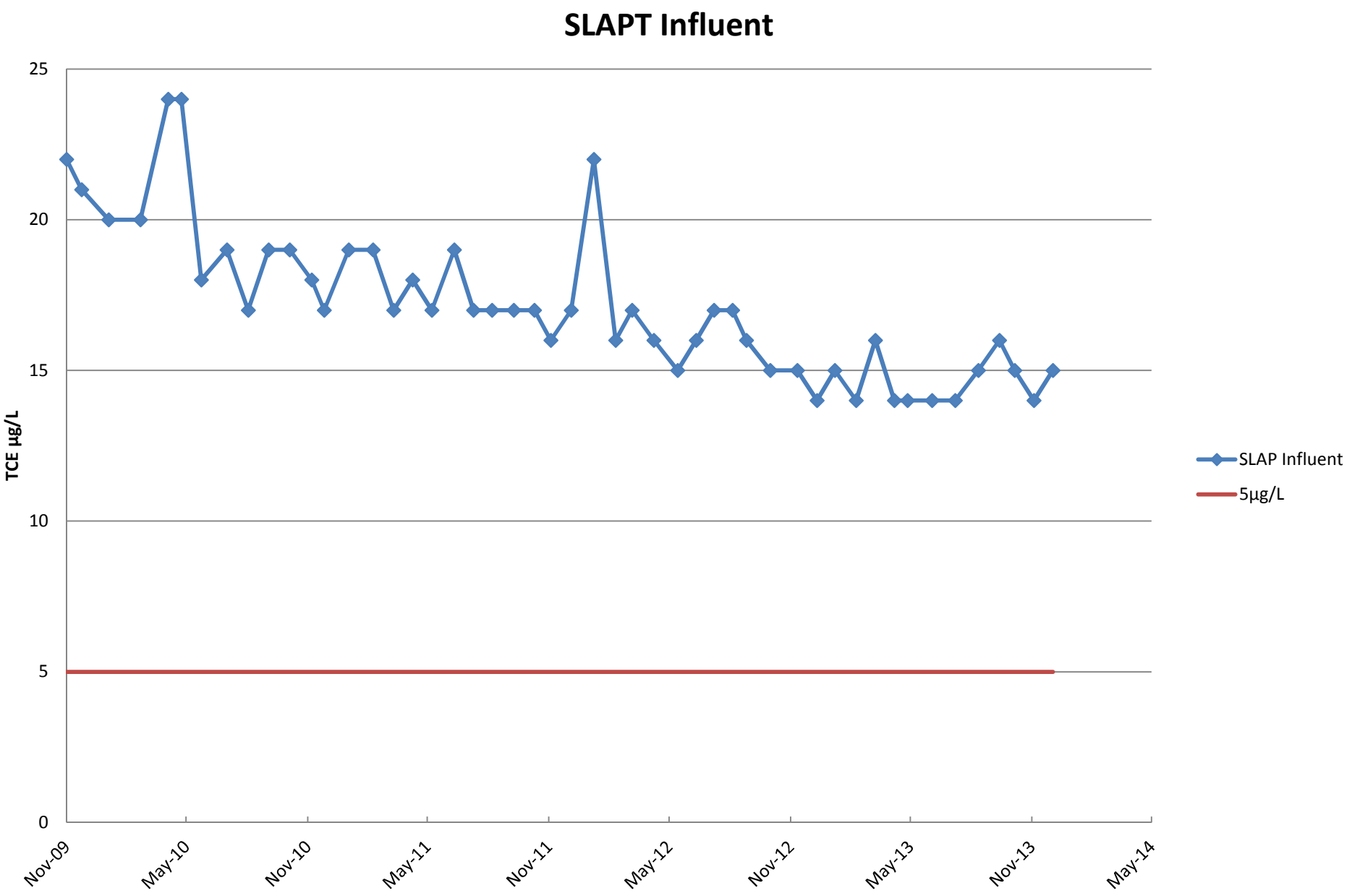

LC-102D-1
TCE µg/L
0
1
2
3
4
5
6
7
Mar-08
Sep-08
Mar-09
Sep-09
Mar-10
Sep-10
Mar-11
Sep-11
Mar-12
Sep-12
Mar-13
Sep-13
Mar-14
Sep-14
SLAP System Start up Oct 2009
LC-102D1
5µg/L

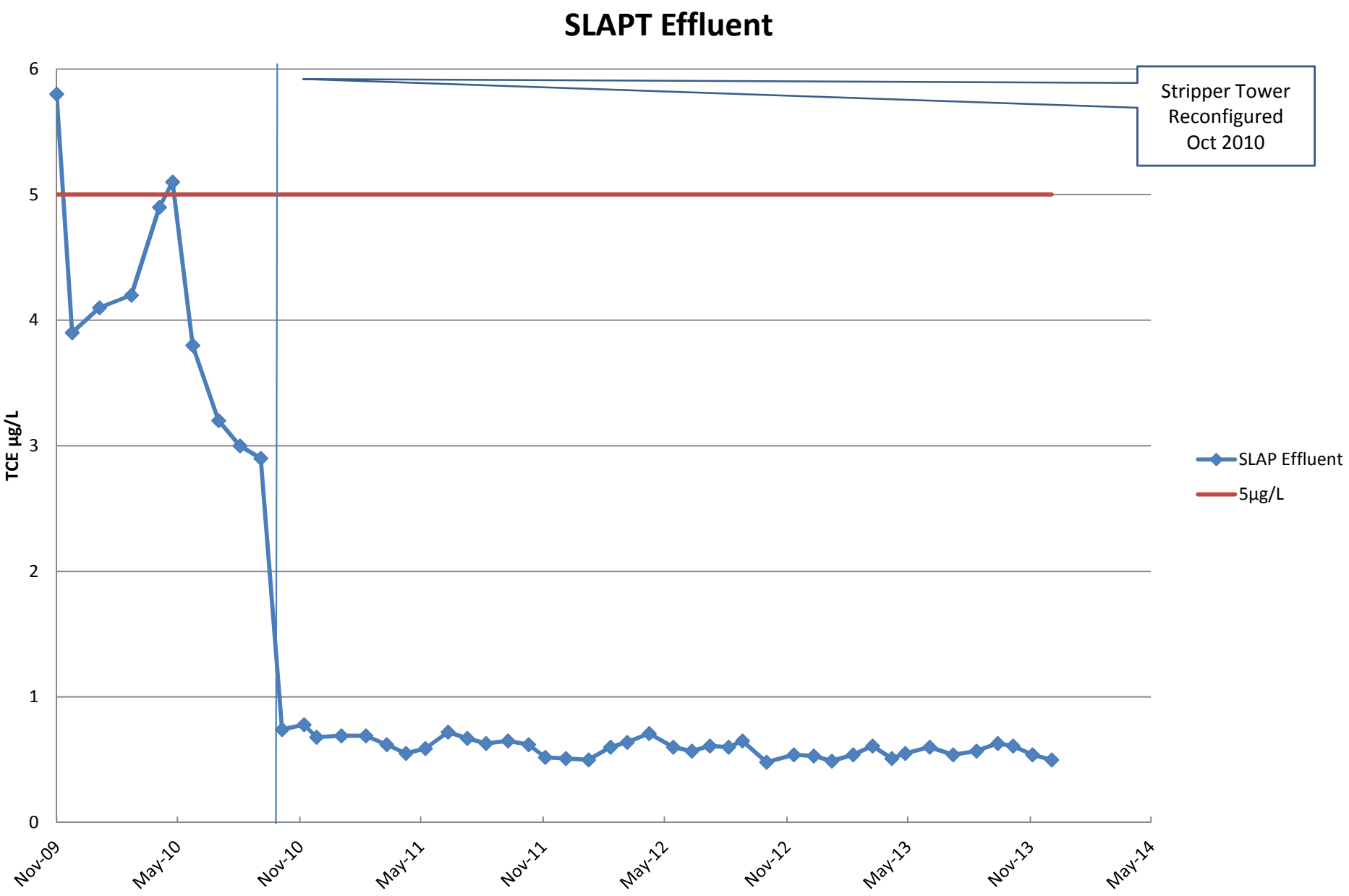

LC-102D-2
TCE µg/L
0
1
2
3
4
5
6
7
Sep-08
Mar-09
Sep-09
Mar-10
Sep-10
Mar-11
Sep-11
Mar-12
Sep-12
Mar-13
Sep-13
Mar-14
Sep-14
SLAP System Start up Oct 2009
LC-102D2
5µg/L

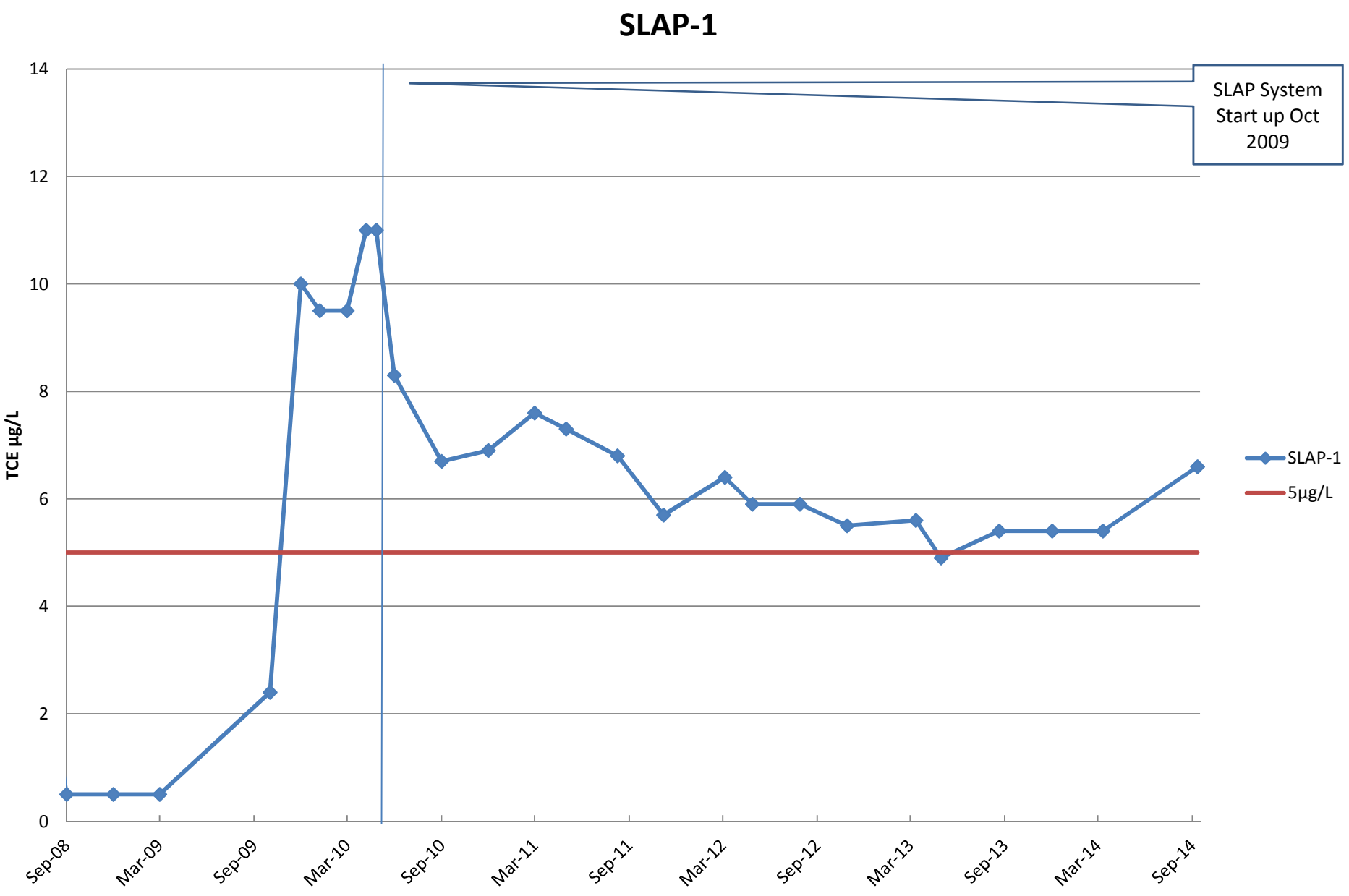

LC-103D
TCE µg/L
120
100
80
60
40
20
0
Sep-08
Mar-09
Sep-09
Mar-10
Sep-10
Mar-11
Sep-11
Mar-12
Sep-12
Mar-13
Sep-13
Mar-14
Sep-14
SLAP System Start up Oct 2009
LC-103D
5µg/L

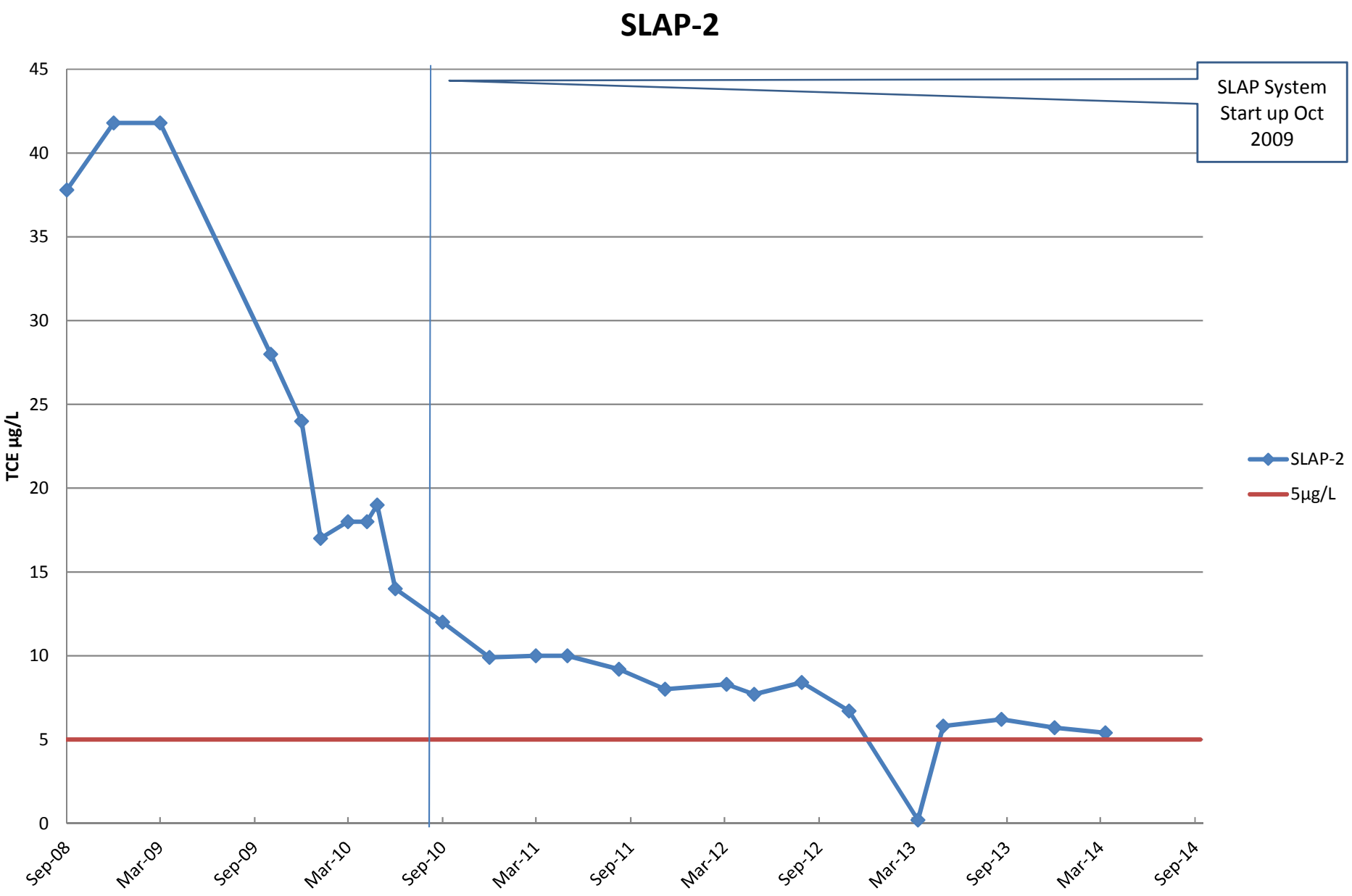

LC-126
TCE µg/L
160
140
120
100
80
60
40
20
0
Sep-98
Sep-99
Sep-00
Sep-01
Sep-02
Sep-03
Sep-04
Sep-05
Sep-06
Sep-07
Sep-08
Sep-09
Sep-10
Sep-11
Sep-12
Sep-13
Sep-14
SLAP System Start up Oct 2009
LC-126
5µg/L


MAMC-3
TCE µg/L
0
1
2
3
4
5
6
7
Sep-01
Sep-02
Sep-03
Sep-04
Sep-05
Sep-06
Sep-07
Sep-08
Sep-09
Sep-10
Sep-11
Sep-12
Sep-13
Sep-14
SLAP System Start up Oct 2009
MAMC-3
5µg/L

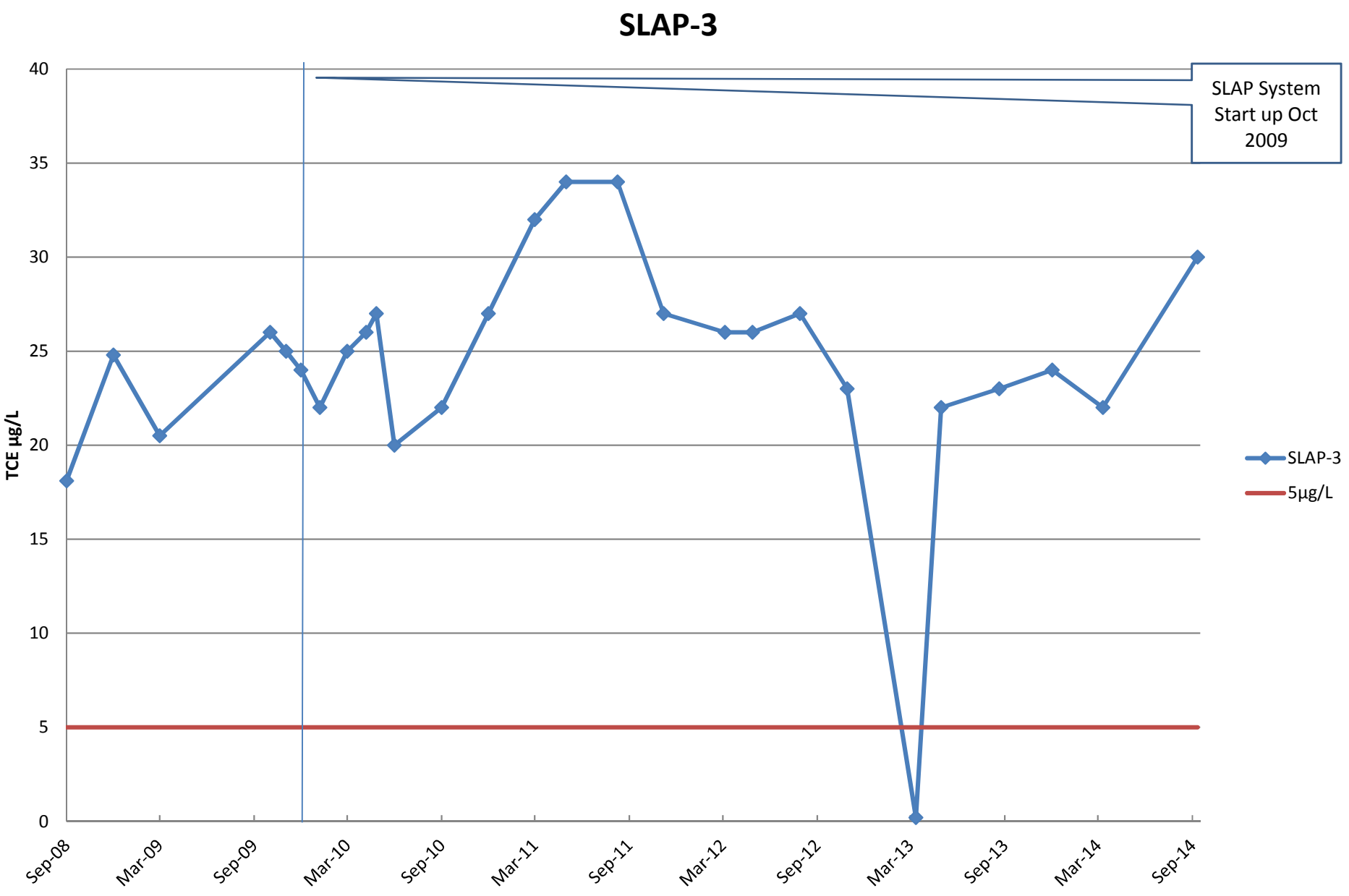

SLAPT Influent
TCE µg/L
25
20
15
10
5
0
Nov-09
May-10
Nov-10
May-11
Nov-11
May-12
Nov-12
May-13
Nov-13
May-14
SLAP Influent
5µg/L

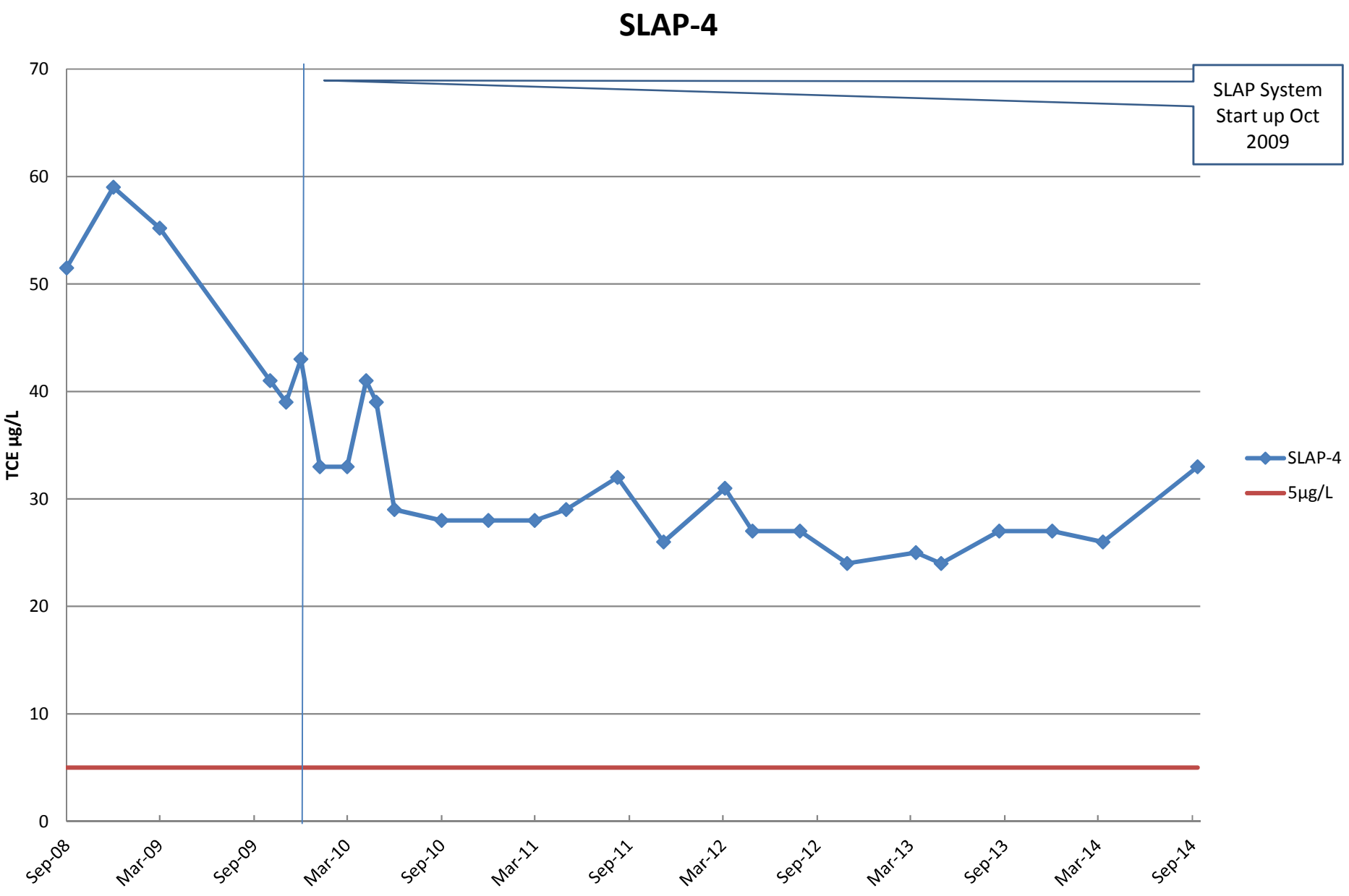

SLAPT Effluent
TCE µg/L
0
1
2
3
4
5
6
Nov-09
May-10
Nov-10
May-11
Nov-11
May-12
Nov-12
May-13
Nov-13
May-14
Stripper Tower Reconfigured Oct 2010
SLAP Effluent
5µg/L

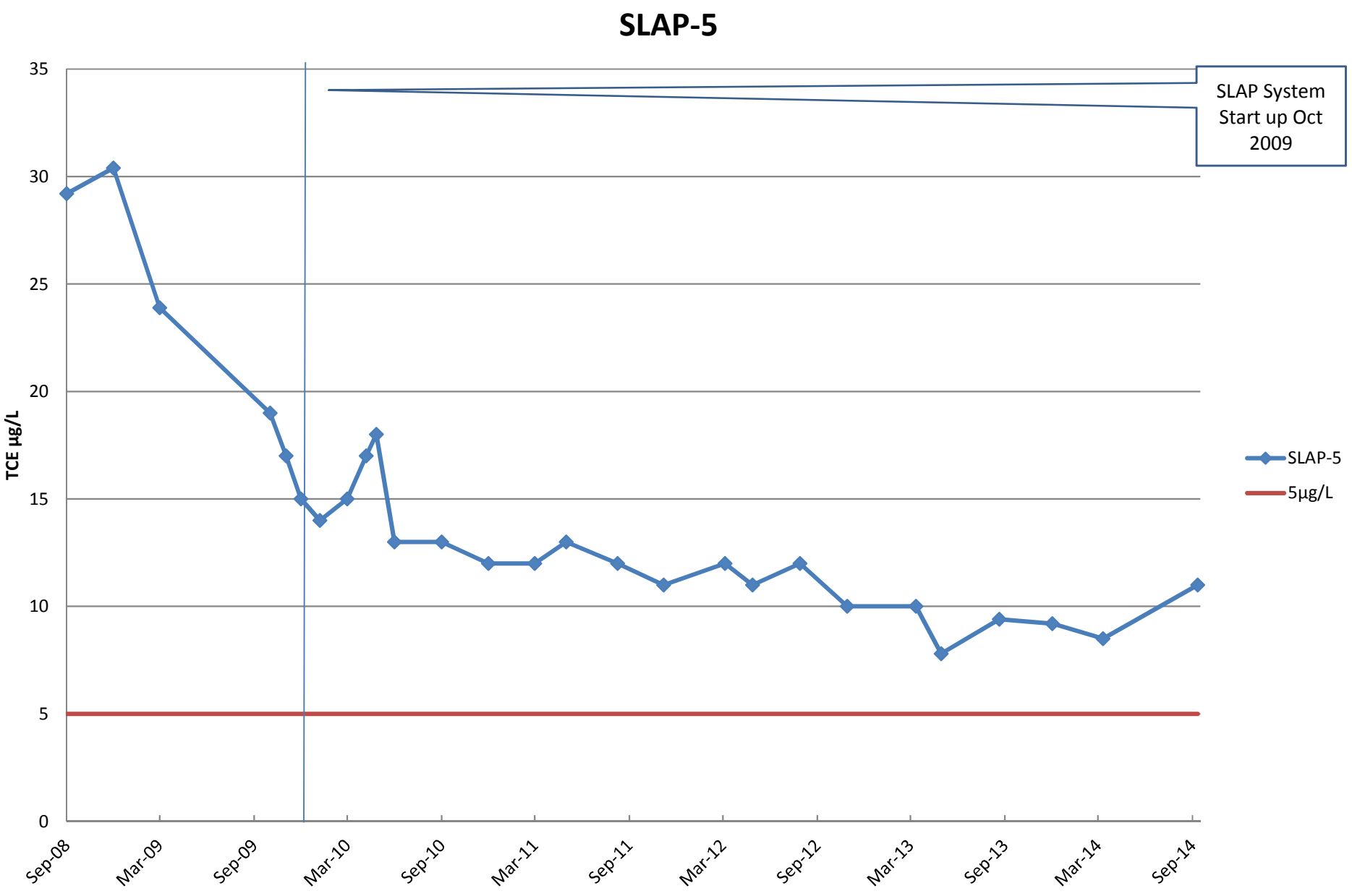

SLAP-1
TCE µg/L
14
12
10
8
6
4
2
0
Sep-08
Mar-09
Sep-09
Mar-10
Sep-10
Mar-11
Sep-11
Mar-12
Sep-12
Mar-13
Sep-13
Mar-14
Sep-14
SLAP System Start up Oct 2009
SLAP-1
5µg/L

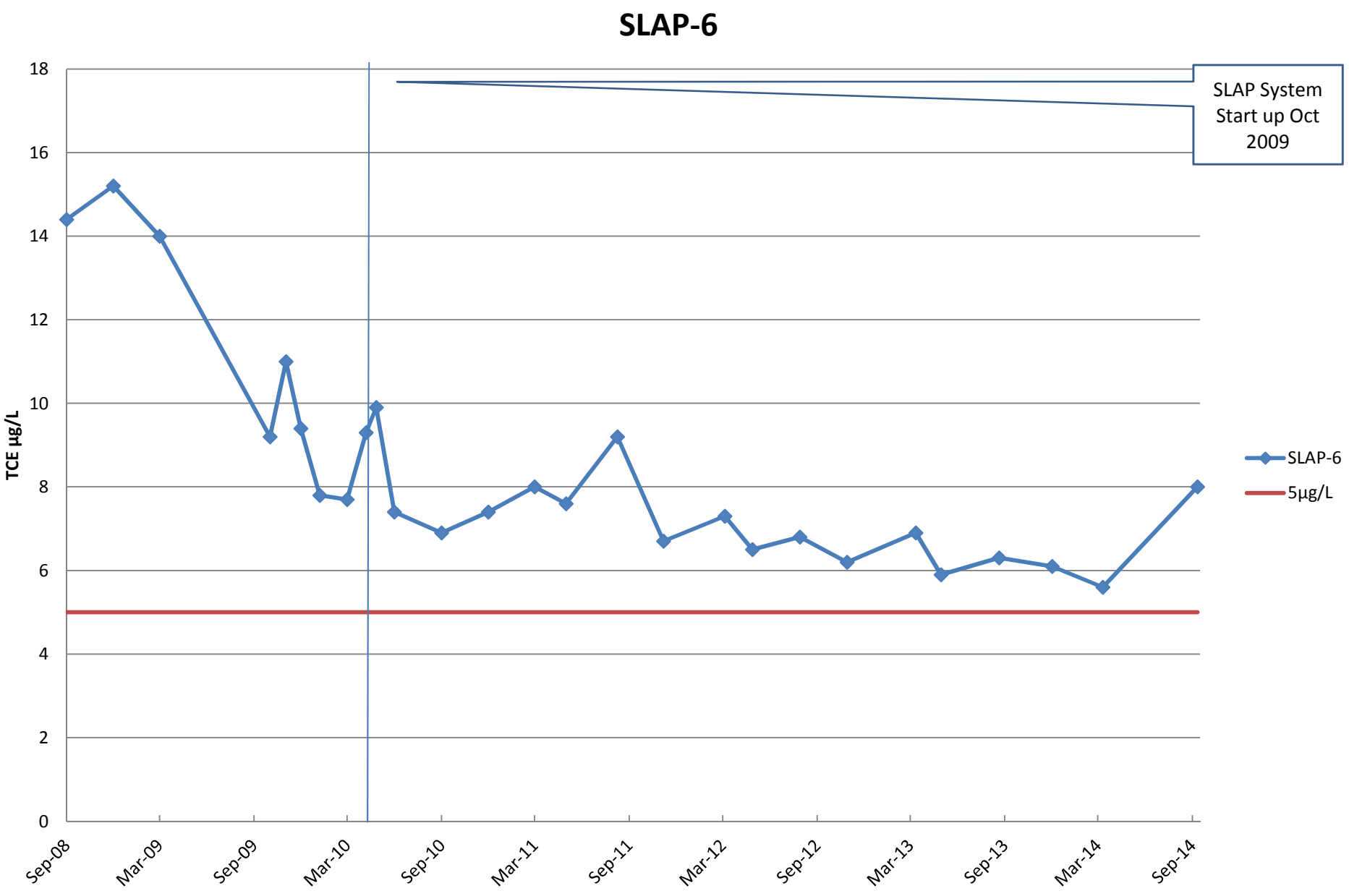

SLAP-2
TCE µg/L
45
40
35
30
25
20
15
10
5
0
Sep-08
Mar-09
Sep-09
Mar-10
Sep-10
Mar-11
Sep-11
Mar-12
Sep-12
Mar-13
Sep-13
Mar-14
Sep-14
SLAP System Start up Oct 2009
SLAP-2
5µg/L

Appendix E - Historical Analytical Results and TCE Linear Graphs
Sea Level Aquifer TCE Linear Graphs
Log RAM - Joint Base Lewis-McChord, Washington 98433




SLAP-4
70
60
50
40
30
20
10
0
TCE µg/L
Sep-08
Mar-09
Sep-09
Mar-10
Sep-10
Mar-11
Sep-11
Mar-12
Sep-12
Mar-13
Sep-13
Mar-14
Sep-14
SLAP System Start up Oct 2009
SLAP-4
5µg/L

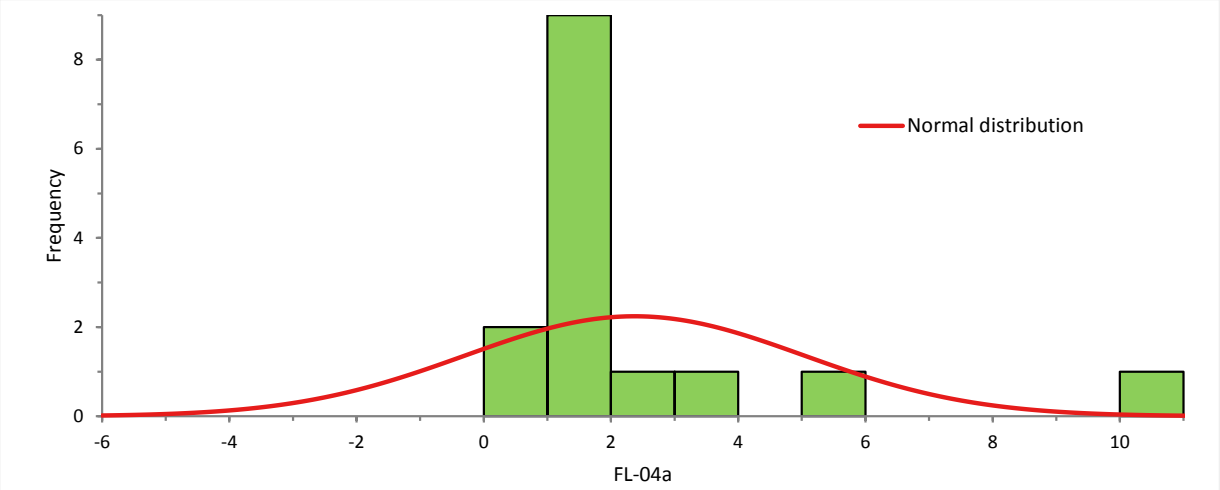

SLAP-5
TCE µg/L
35
30
25
20
15
10
5
0
Sep-08
Mar-09
Sep-09
Mar-10
Sep-10
Mar-11
Sep-11
Mar-12
Sep-12
Mar-13
Sep-13
Mar-14
Sep-14
SLAP System Start up Oct 2009
SLAP-5
5µg/L

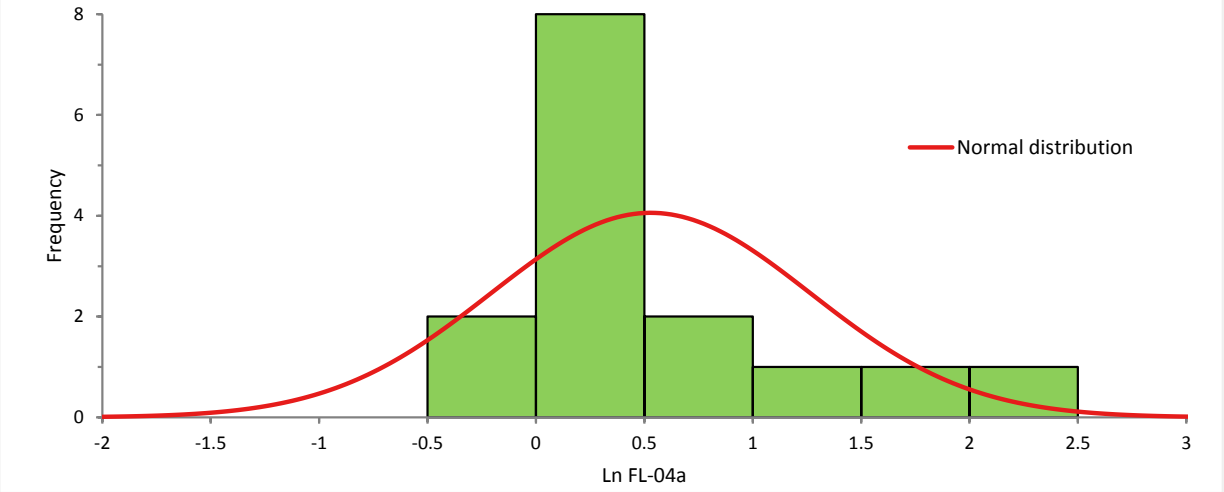

SLAP-6
TCE µg/L
18
16
14
12
10
8
6
4
2
0
Sep-08
Mar-09
Sep-09
Mar-10
Sep-10
Mar-11
Sep-11
Mar-12
Sep-12
Mar-13
Sep-13
Mar-14
Sep-14
SLAP System Start up Oct 2009
SLAP-6
5µg/L

APPENDIX F

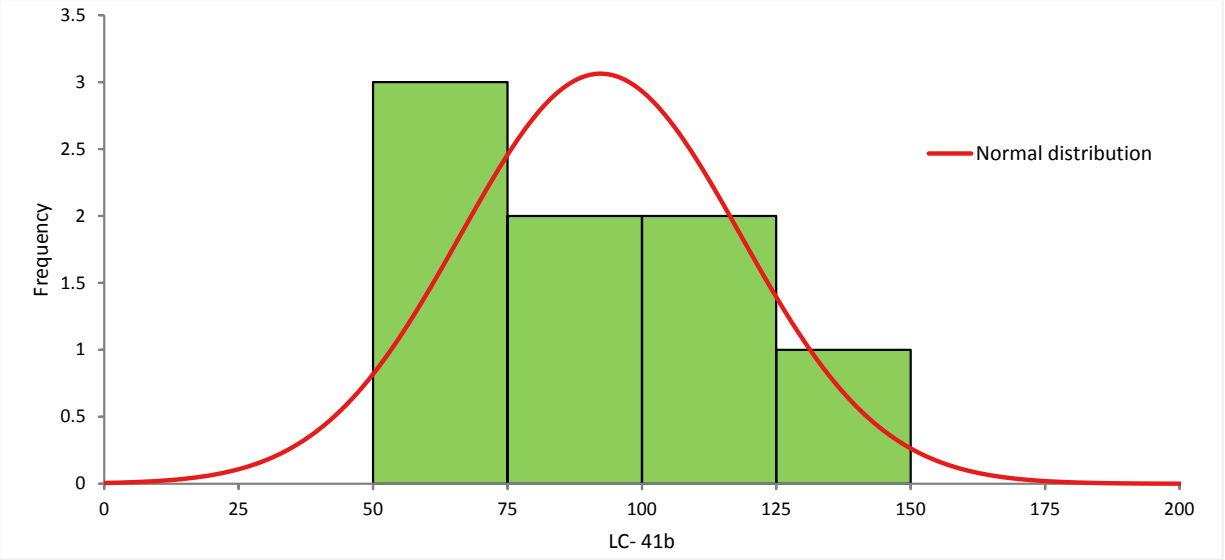
LOG RAM STATISTICS 2005 - 2014

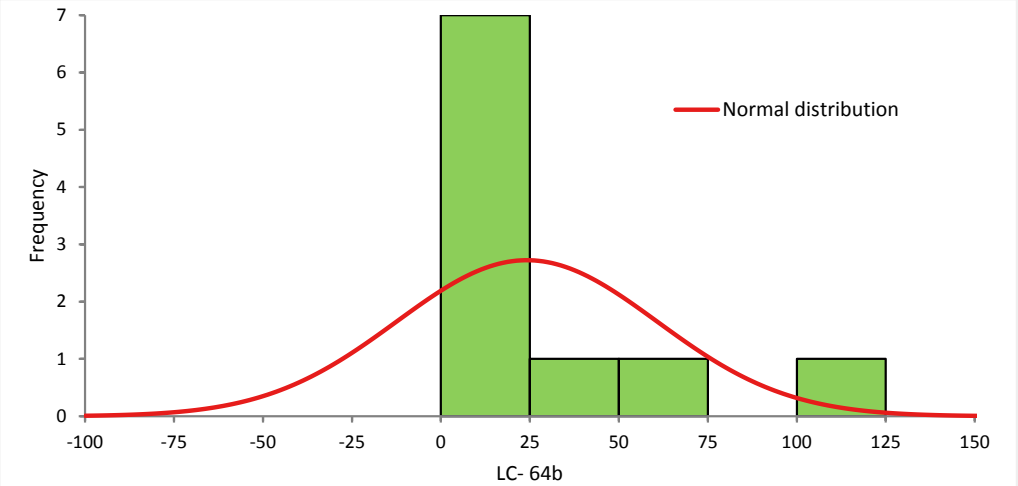
Appendix F - Log RAM Statistics 2005 - 2014
Lower Vashon Aquifer Descriptive Statisics Histograms
Log RAM - Joint Base Lewis - McChord, Washington 98433



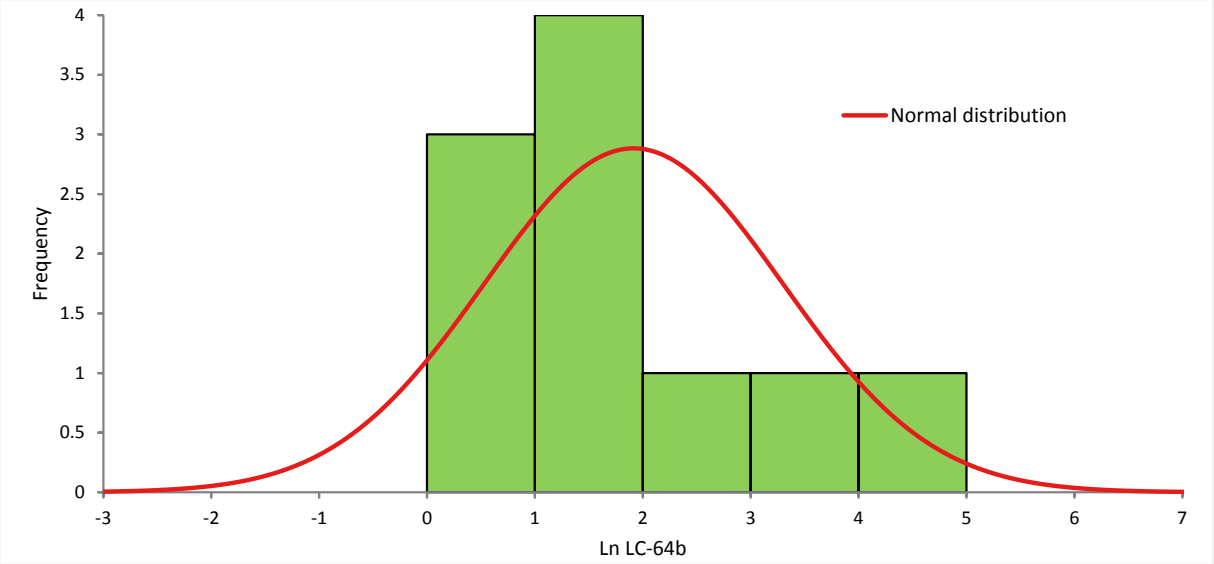


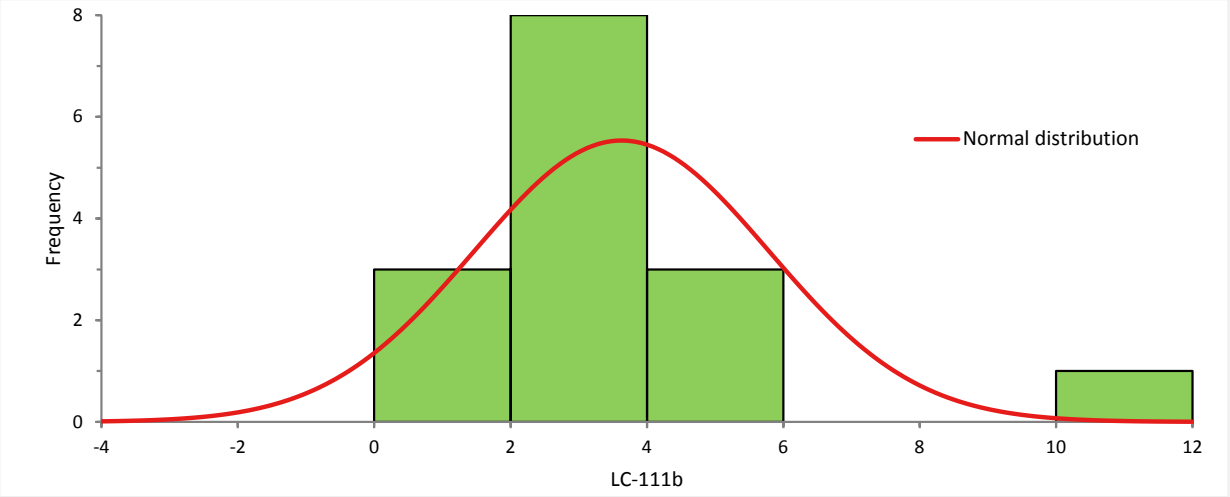
Appendix F - Log RAM Statistics 2005 - 2014
Lower Vashon Aquifer Descriptive Statisics Histograms
Log RAM - Joint Base Lewis - McChord, Washington 98433



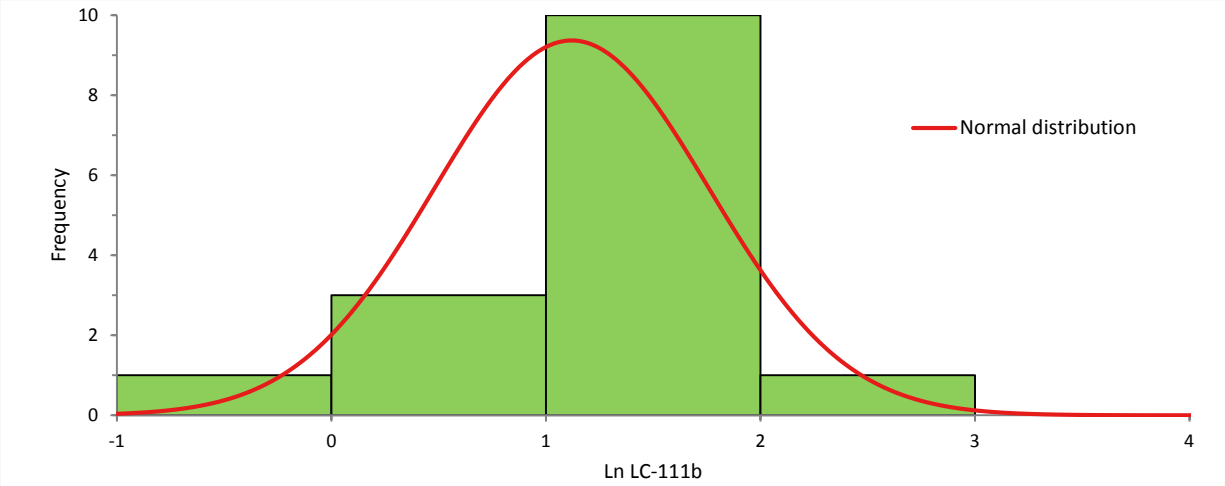


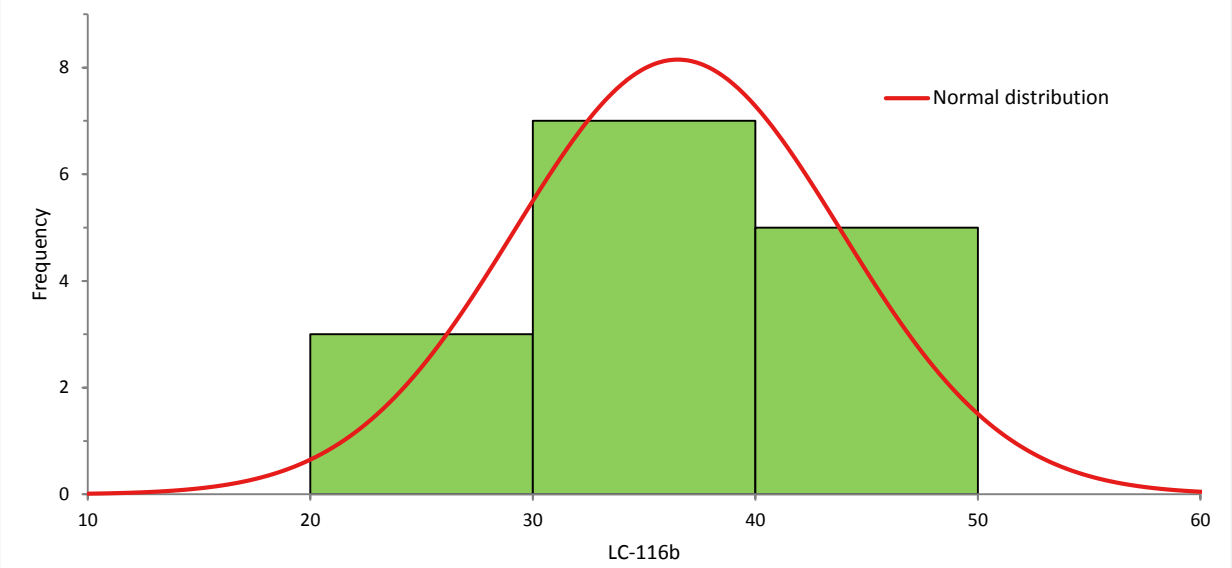
Appendix F - Log RAM Statistics 2005 - 2014
Lower Vashon Aquifer Descriptive Statisics Histograms
Log RAM - Joint Base Lewis - McChord, Washington 98433



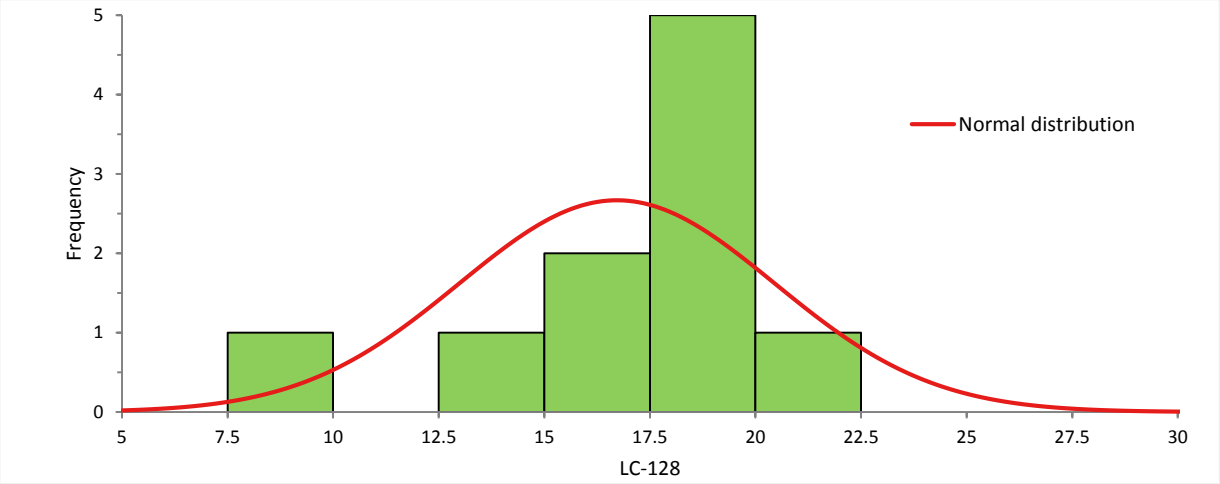


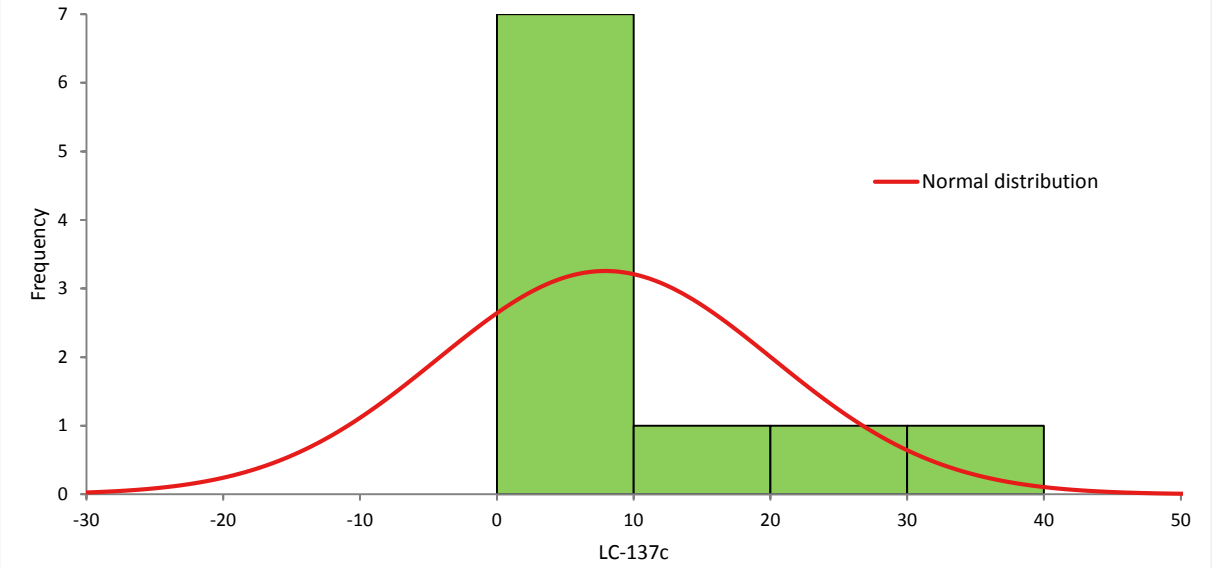
Appendix F - Log RAM Statistics 2005 - 2014
Lower Vashon Aquifer Descriptive Statisics Histograms
Log RAM - Joint Base Lewis - McChord, Washington 98433



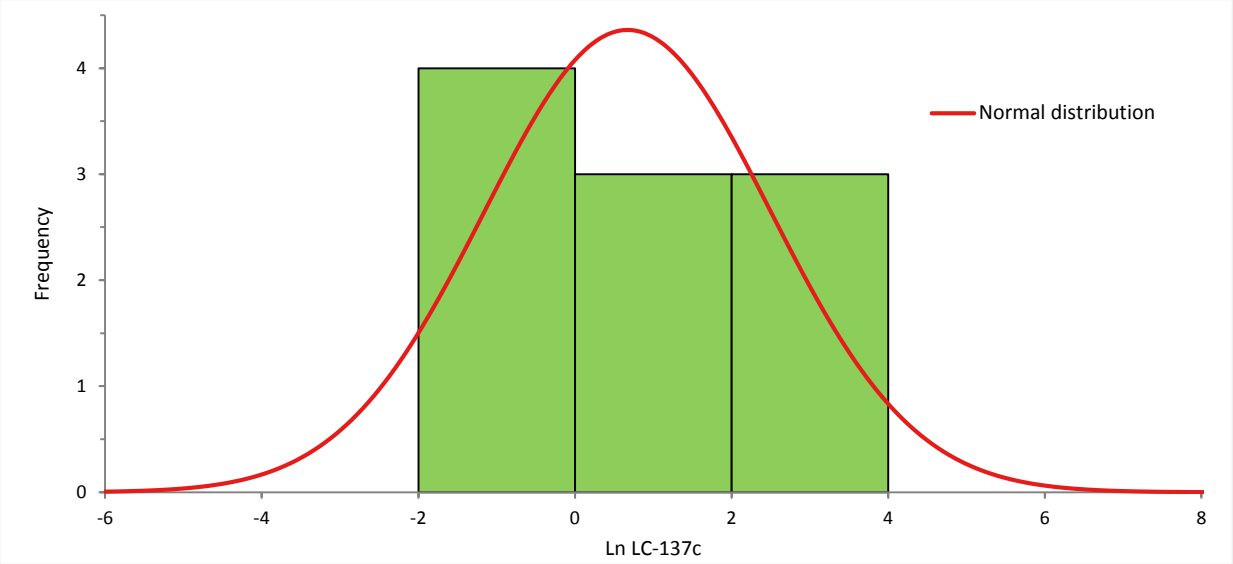


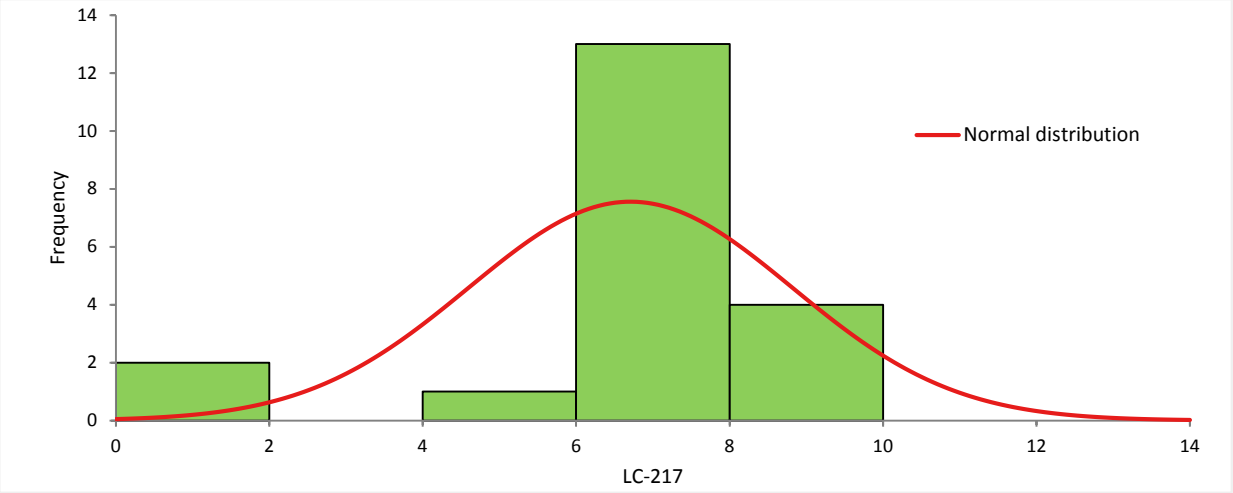
Appendix F - Log RAM Statistics 2005 - 2014
Lower Vashon Aquifer Descriptive Statisics Histograms
Log RAM - Joint Base Lewis - McChord, Washington 98433





Appendix F - Log RAM Statistics 2005 - 2014
Lower Vashon Aquifer Descriptive Statisics Histograms
Log RAM - Joint Base Lewis - McChord, Washington 98433





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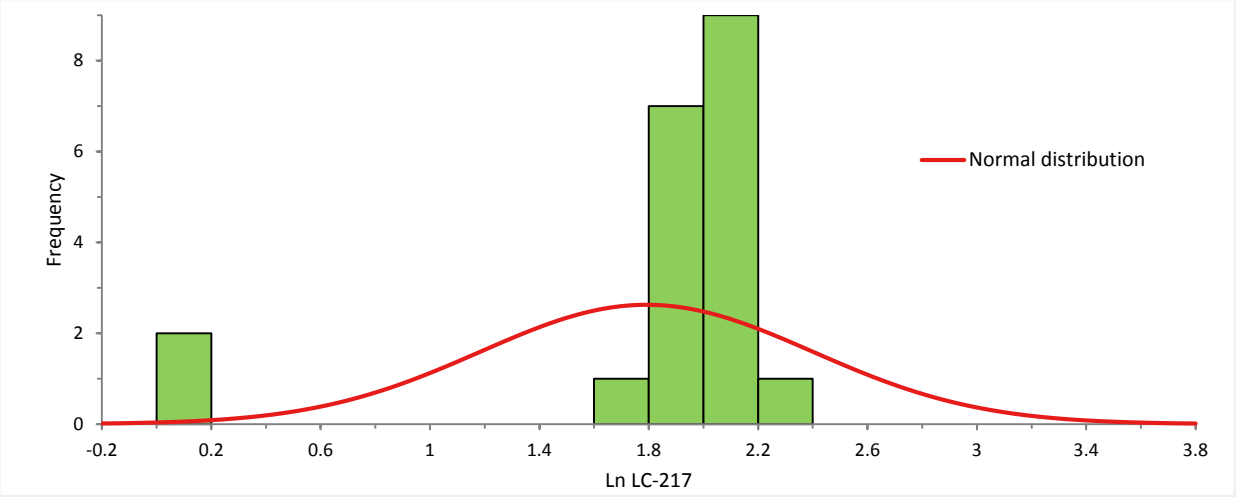

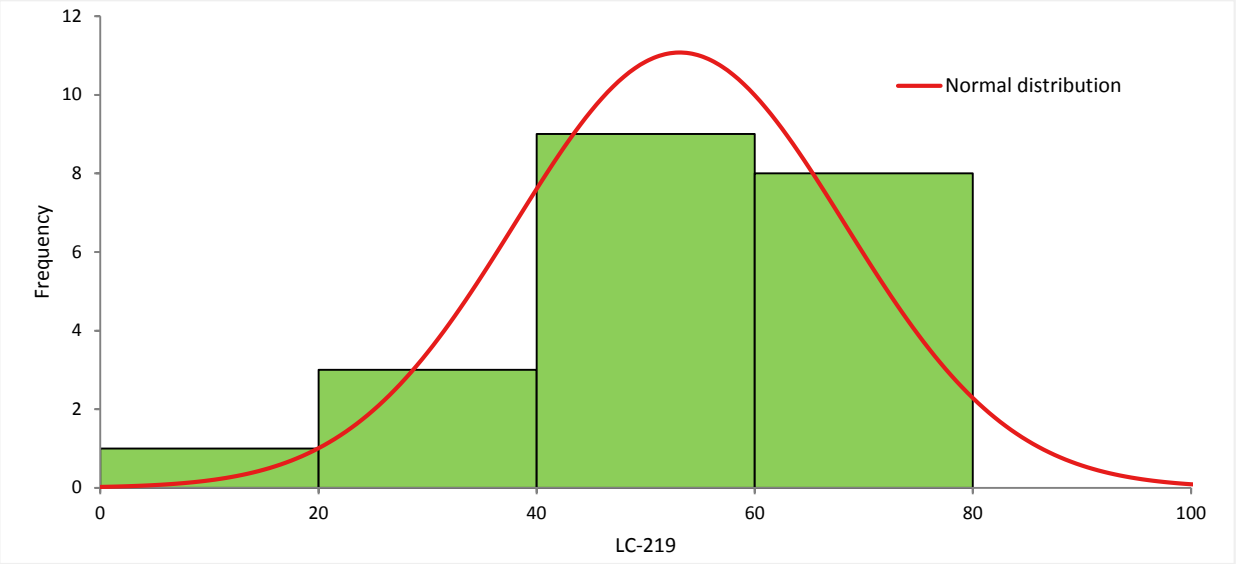

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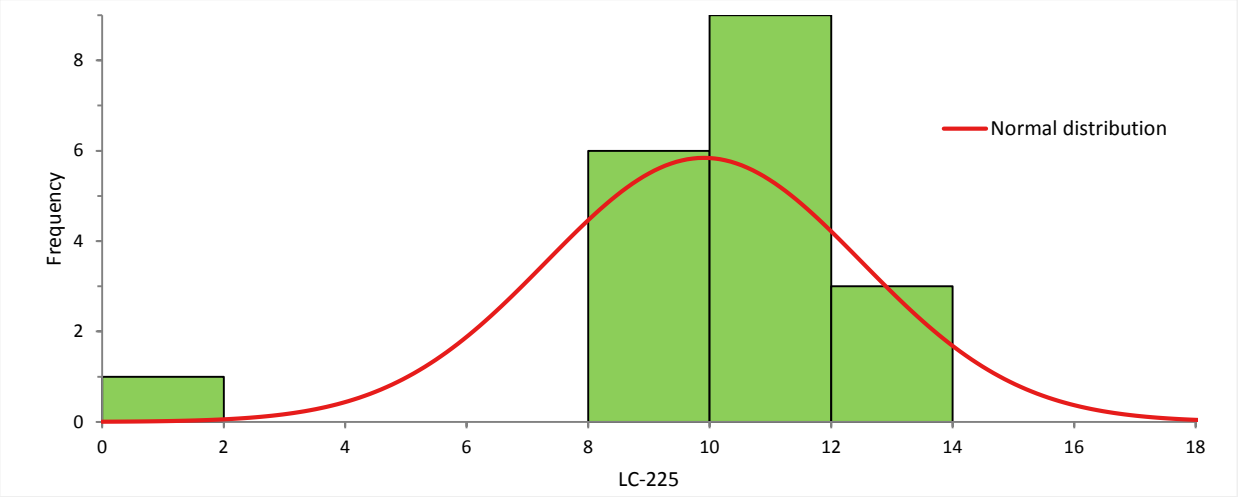

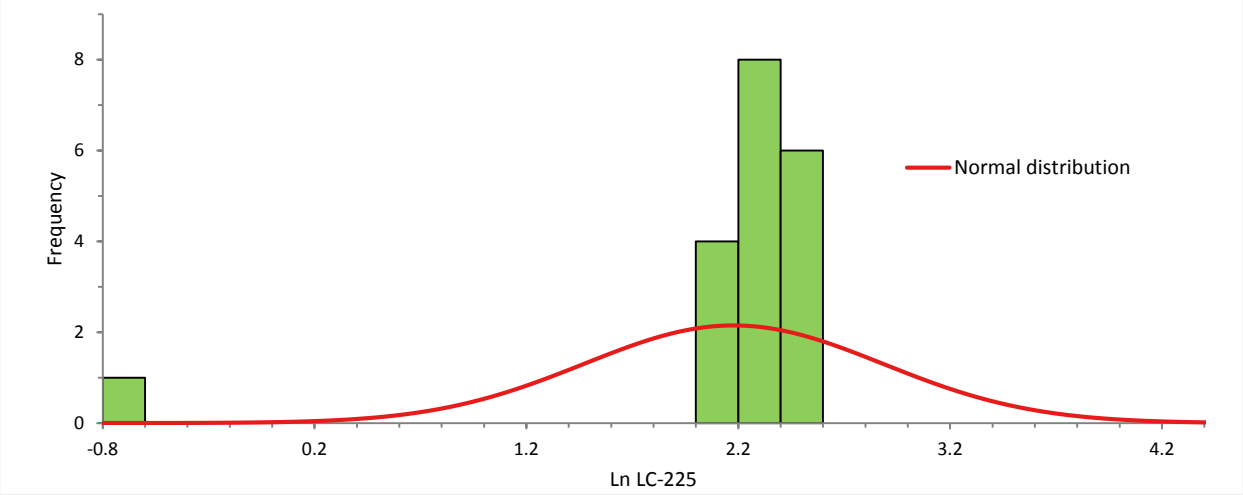

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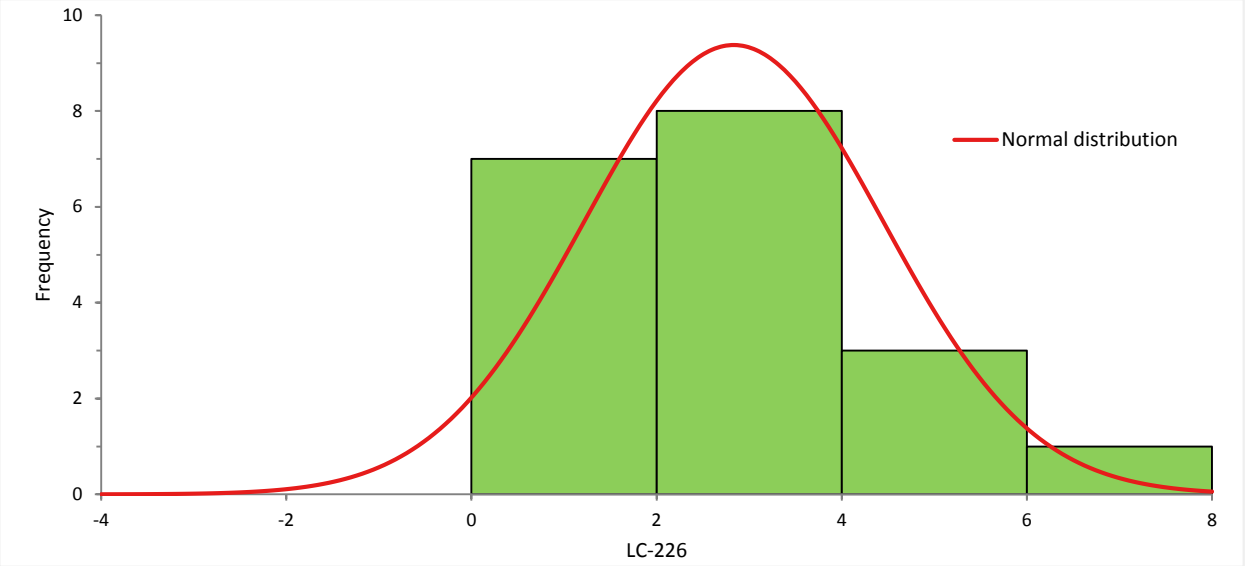

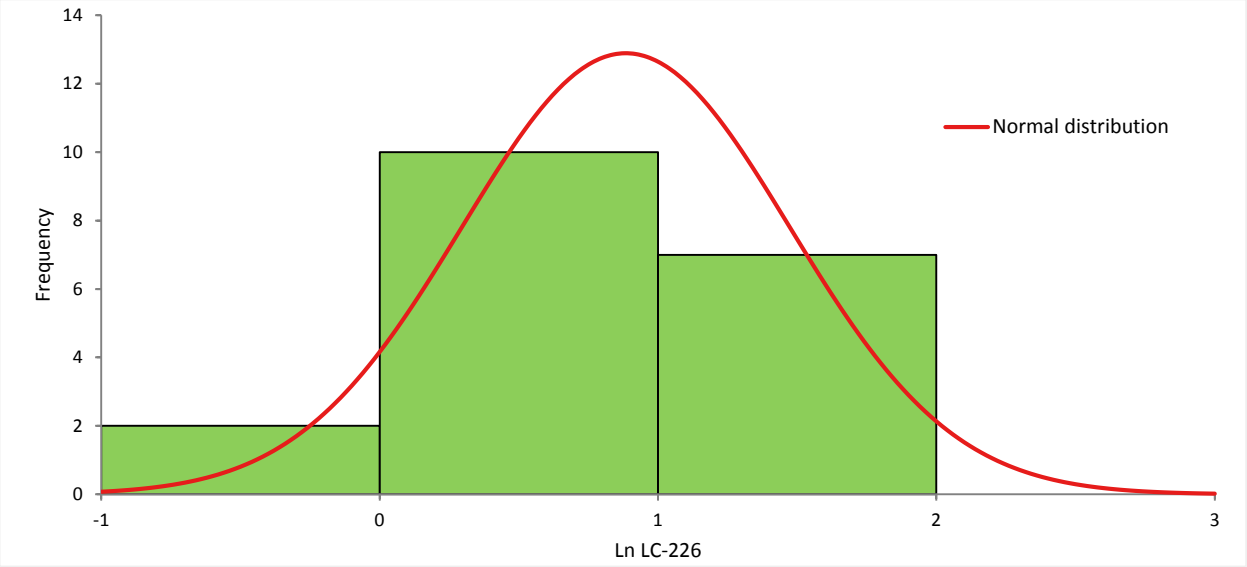

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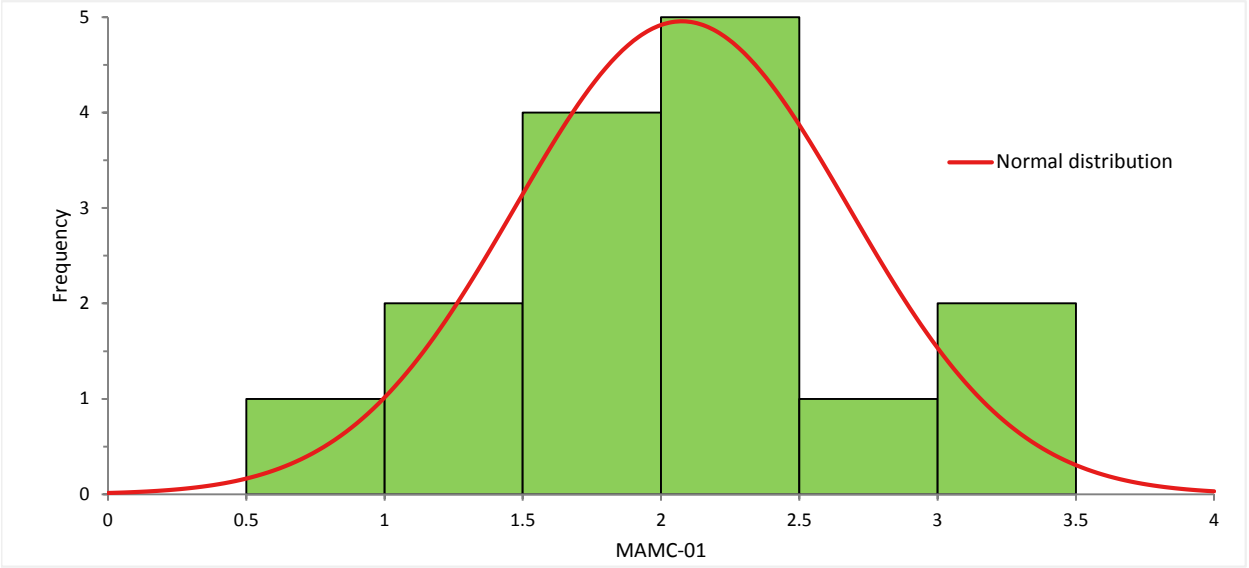

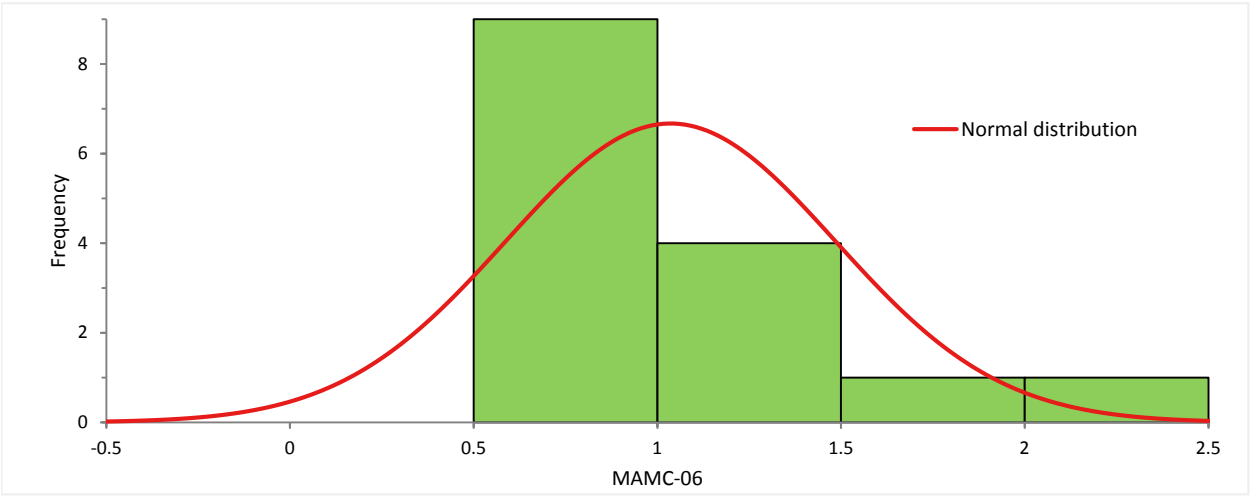

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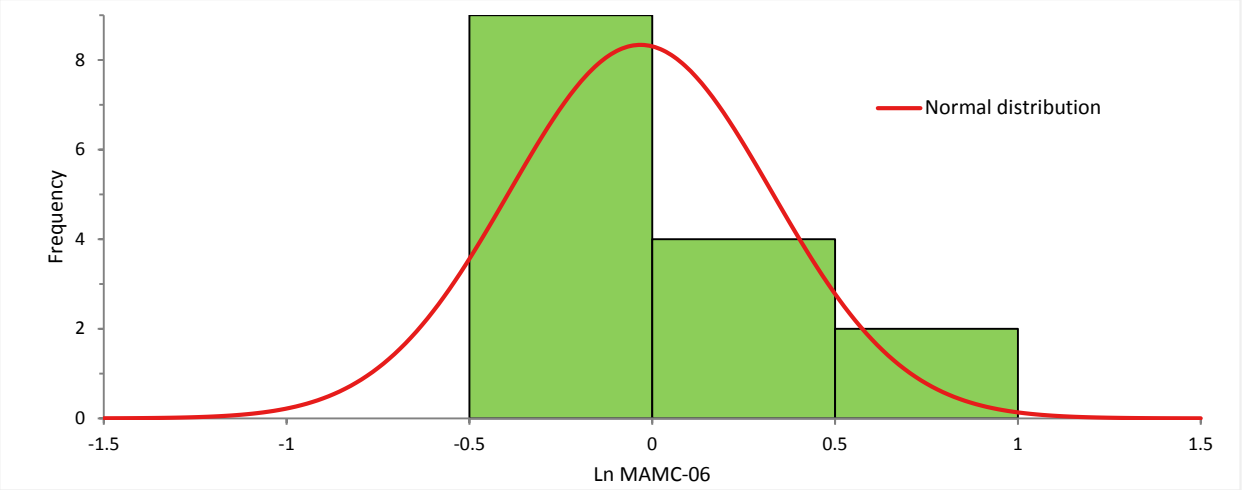

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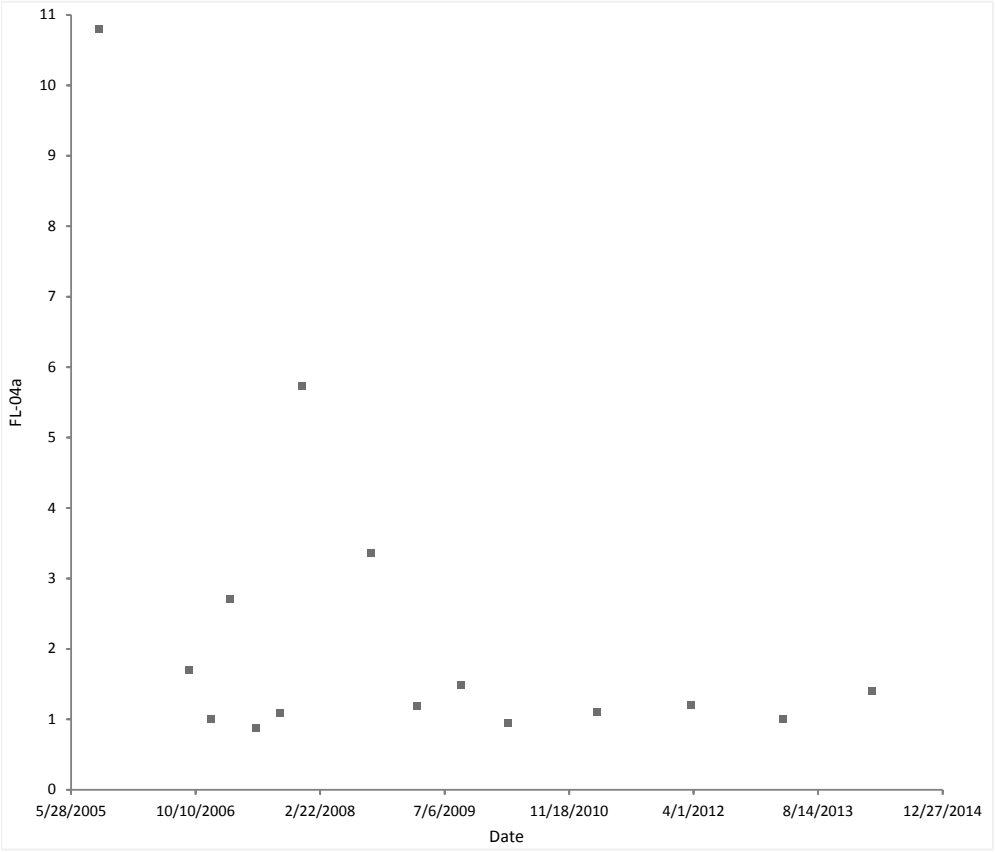

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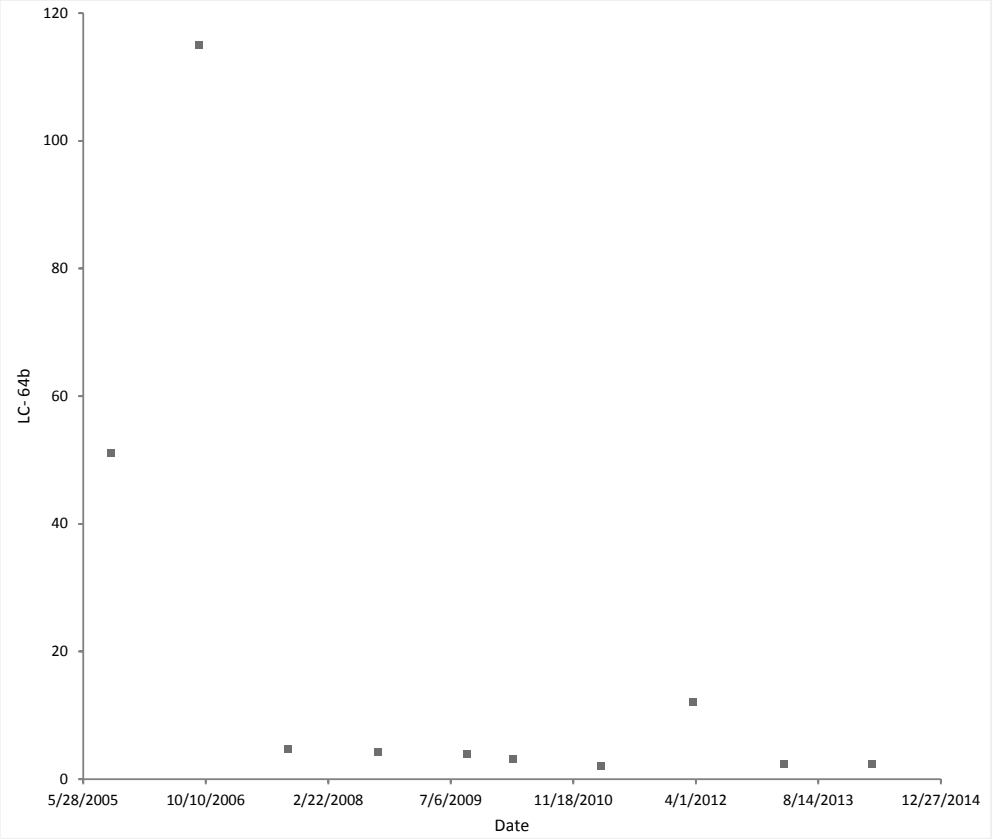

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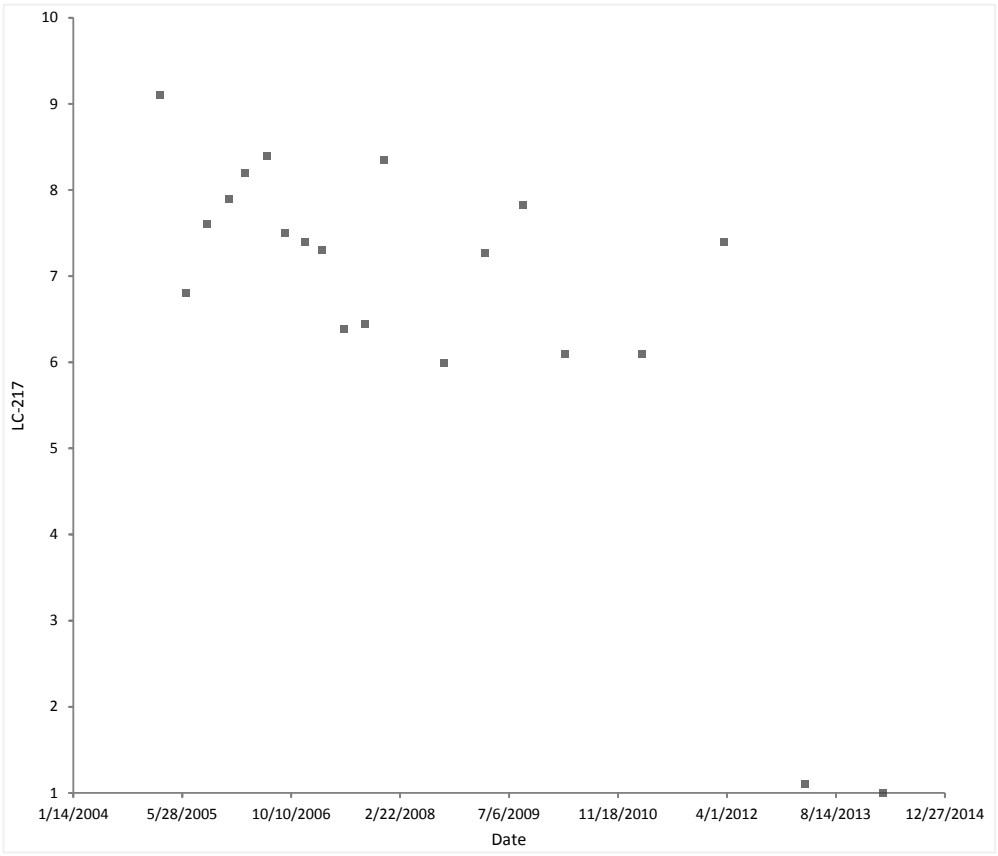

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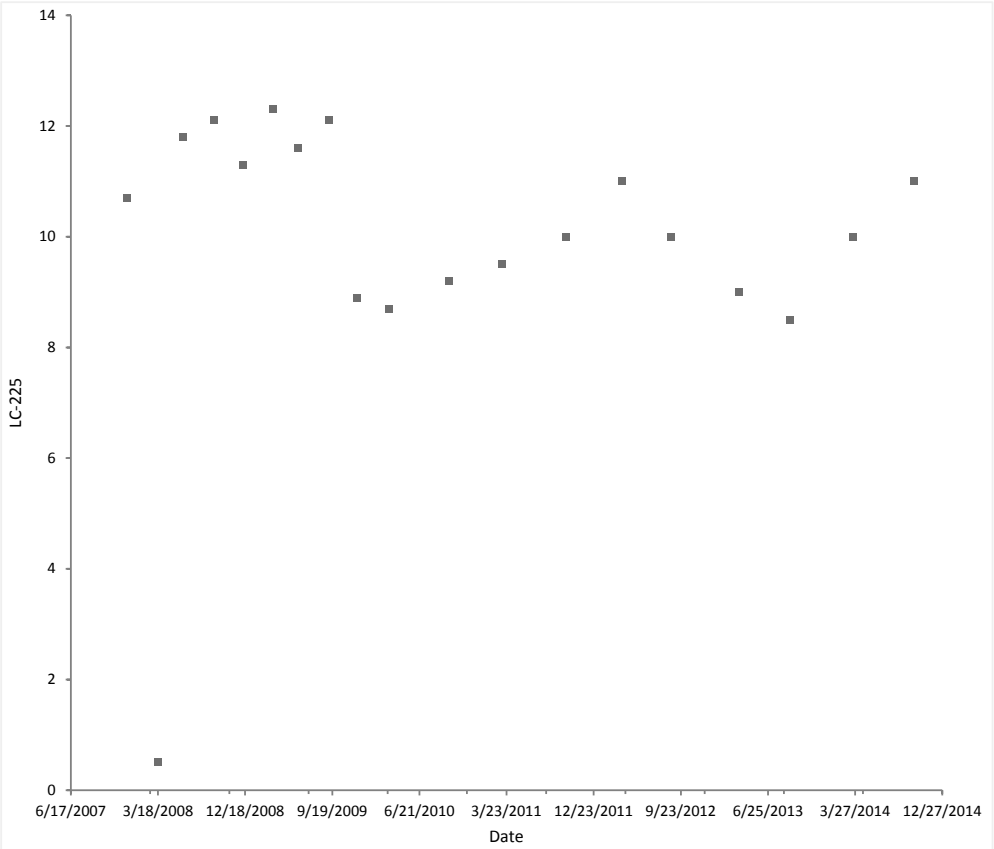

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Lower Vashon Aquifer Linear Regression Graphs
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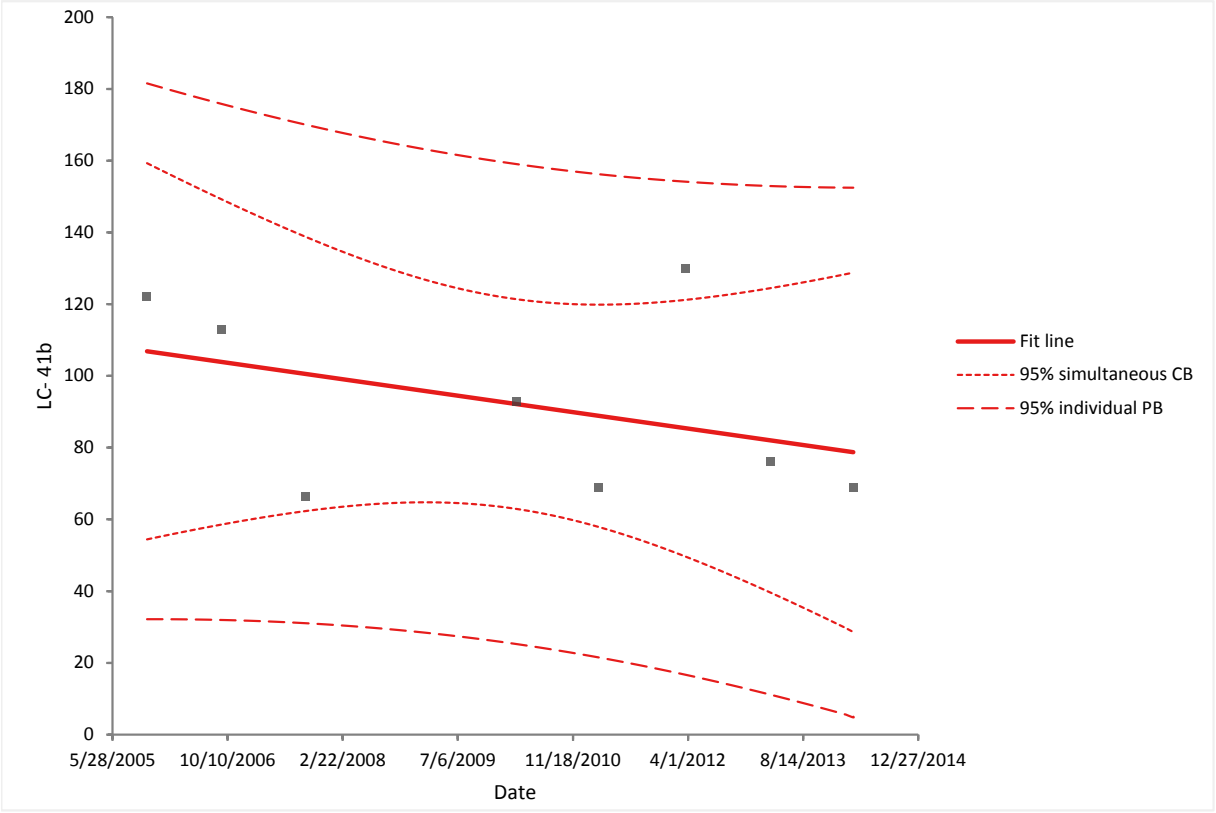

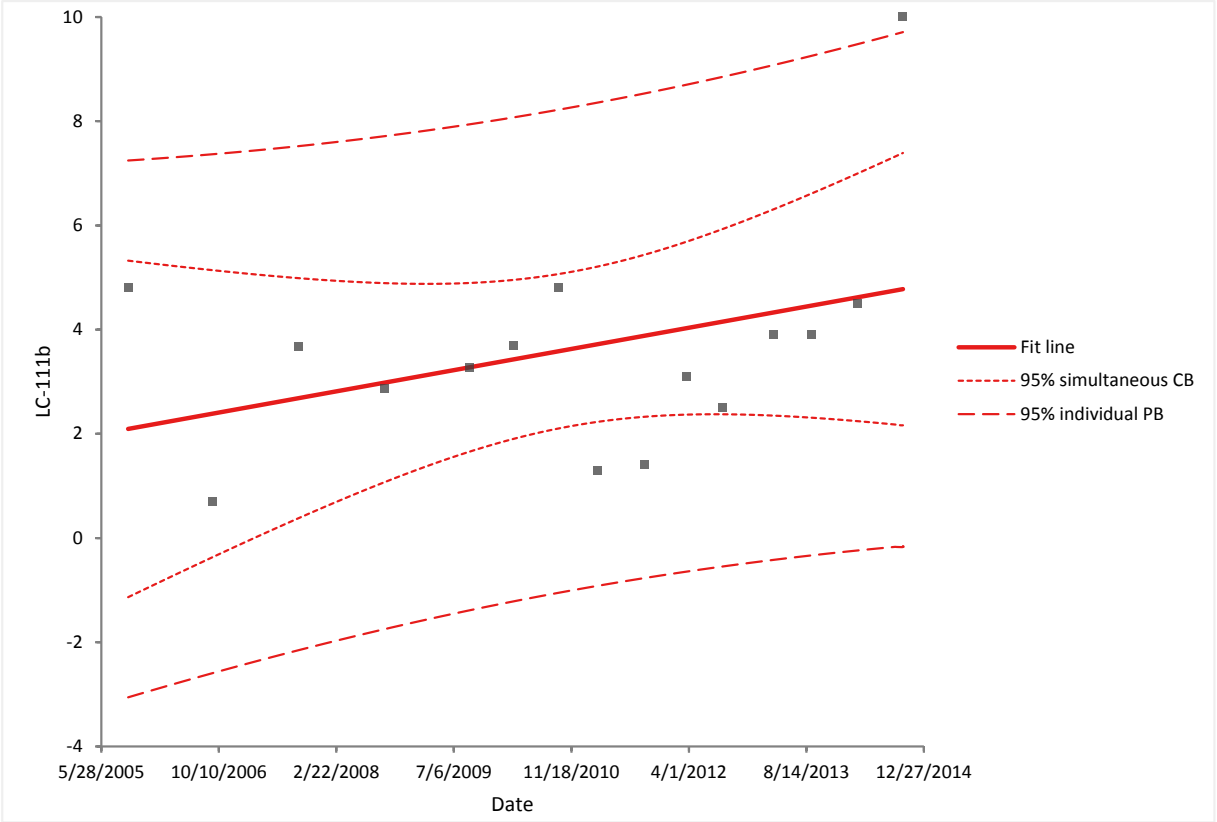

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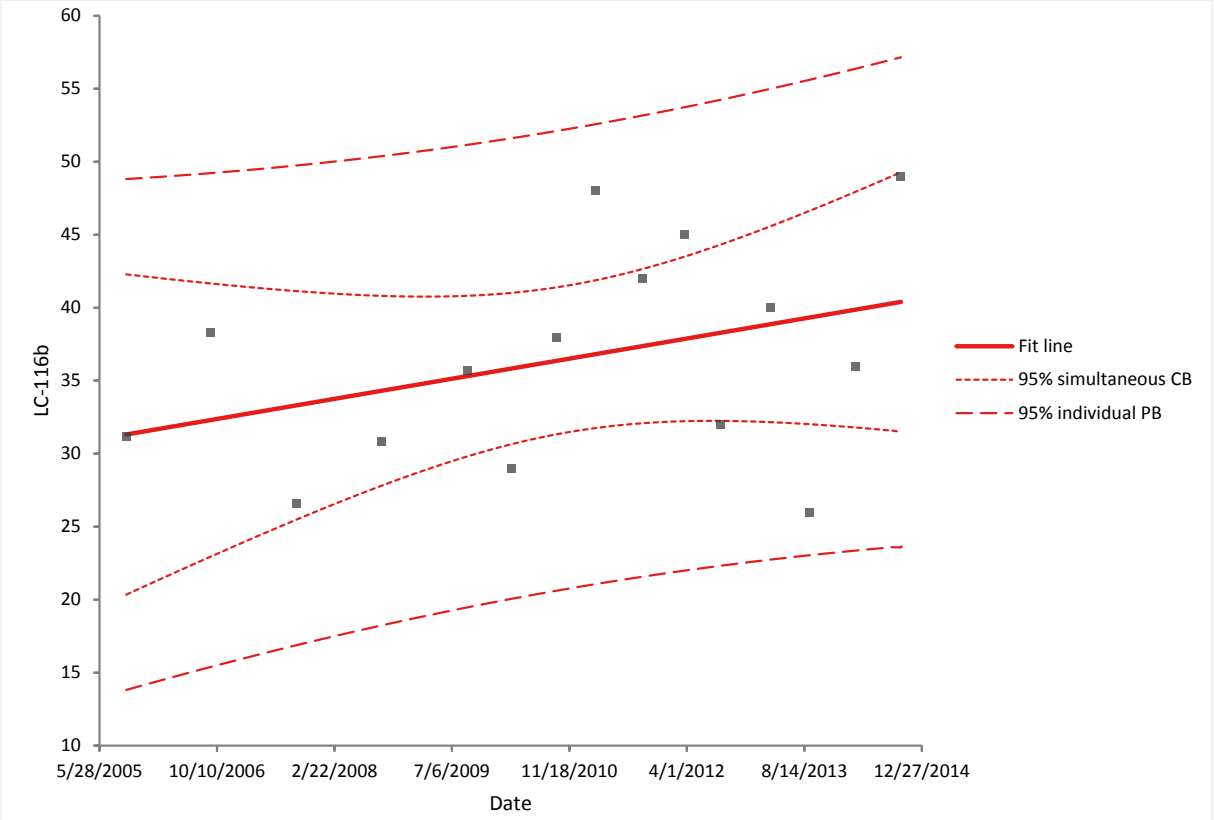

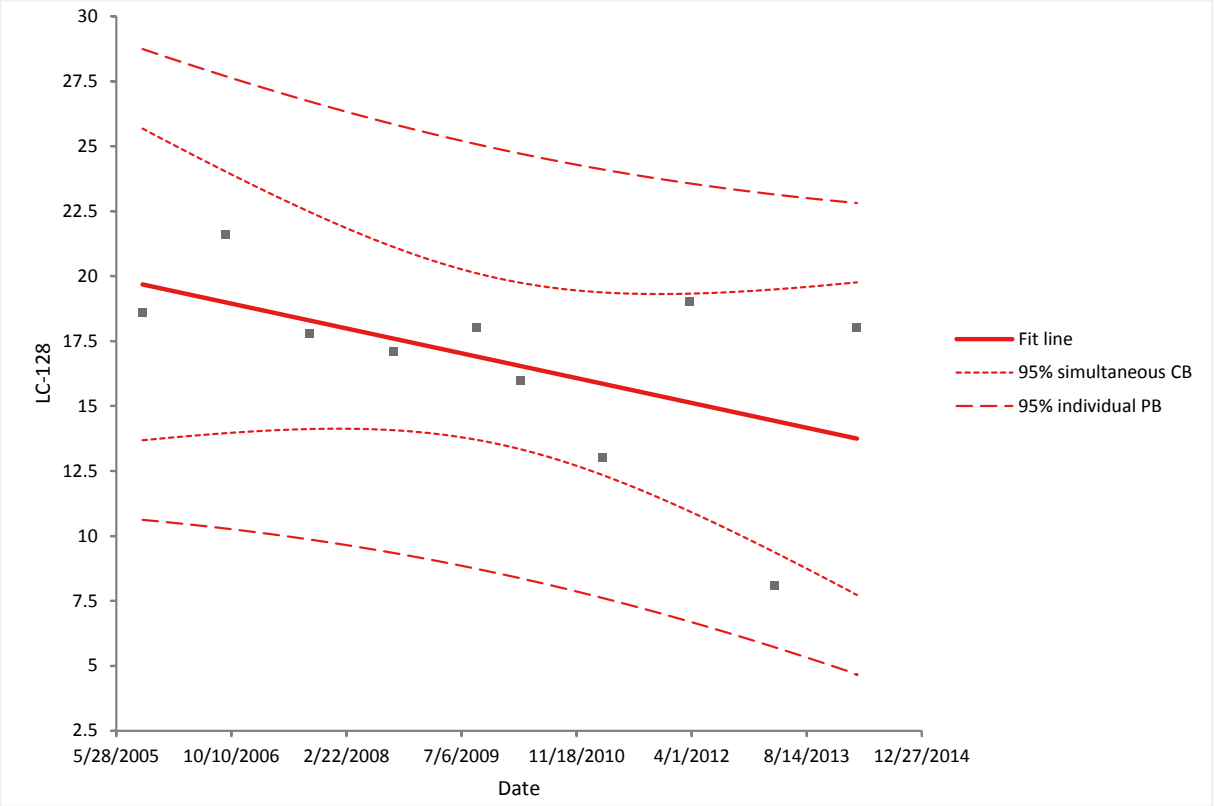

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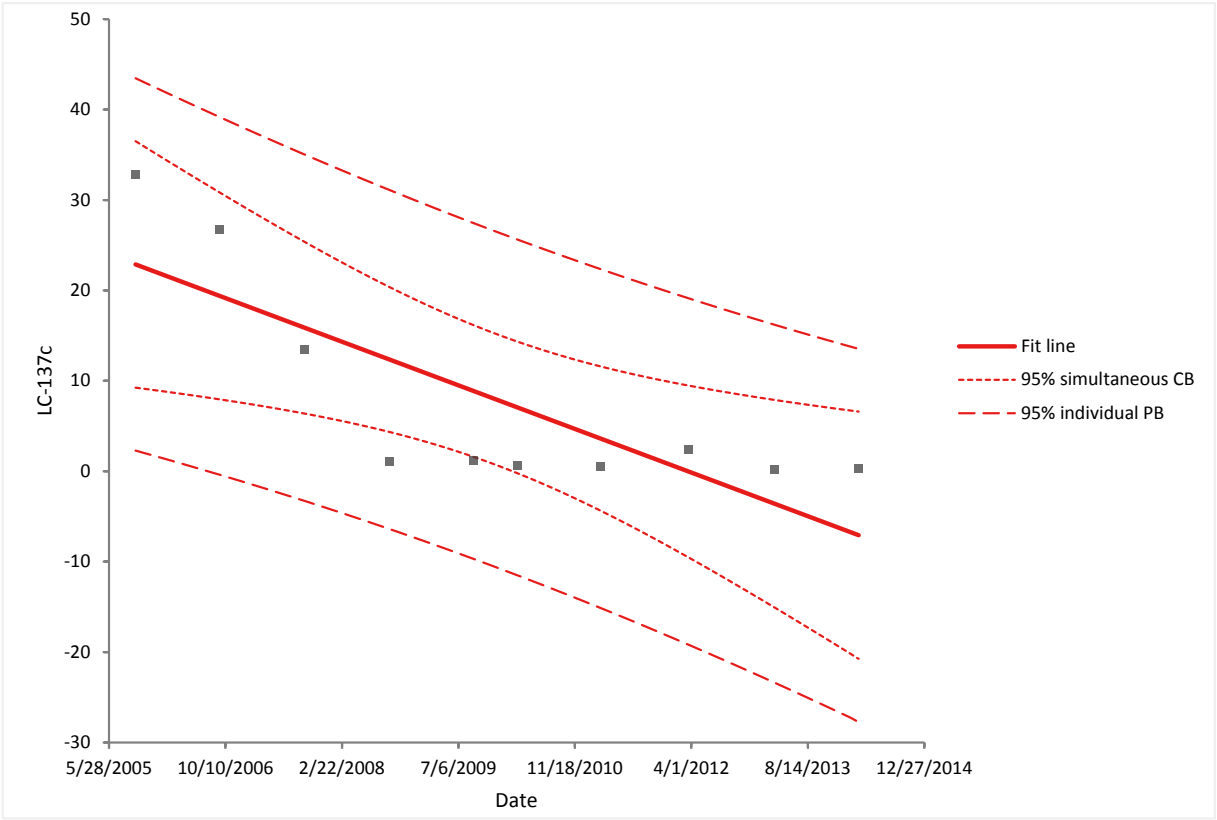

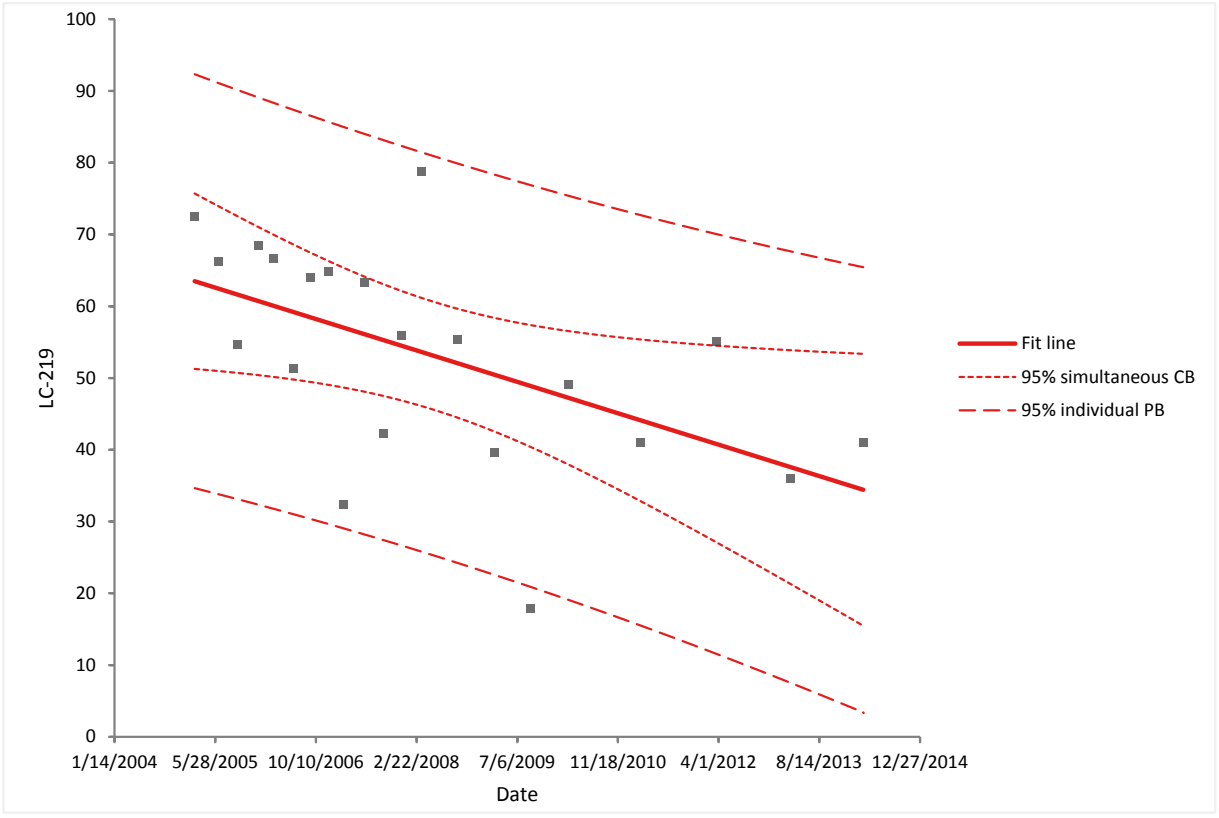

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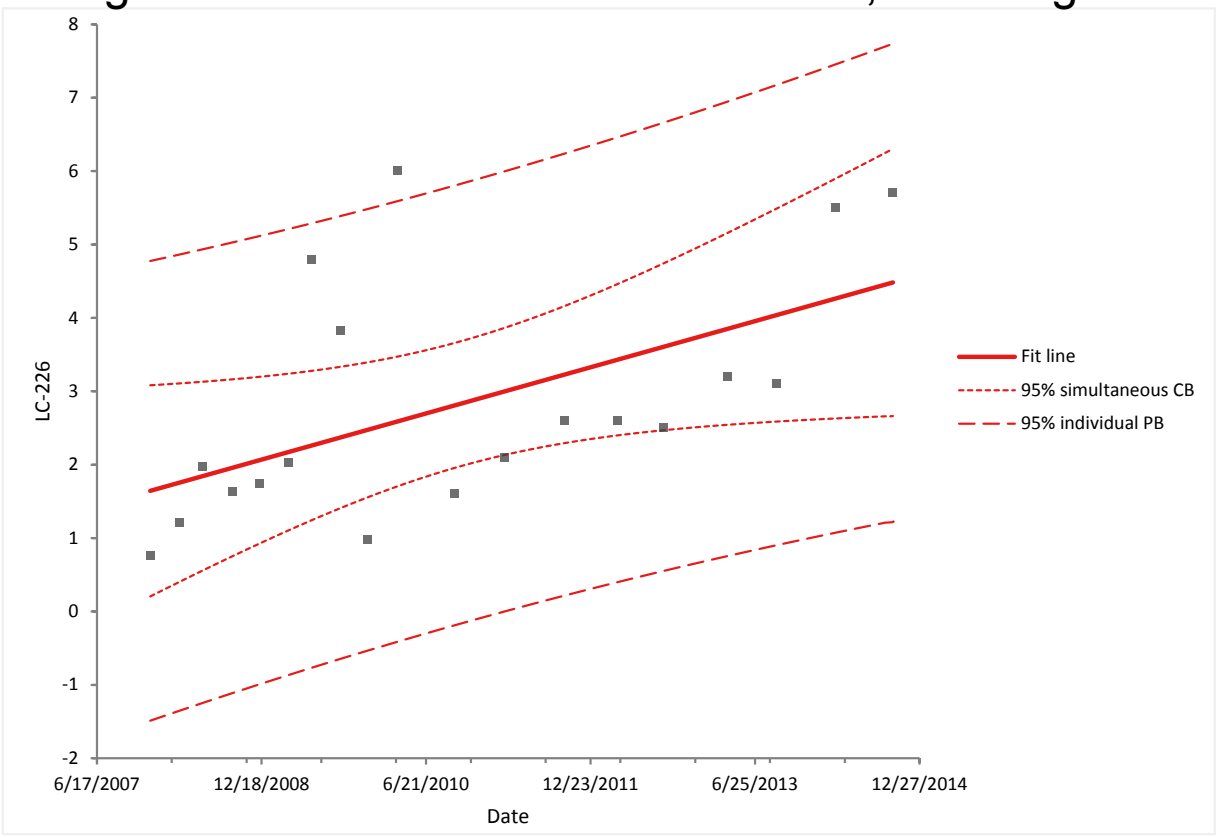

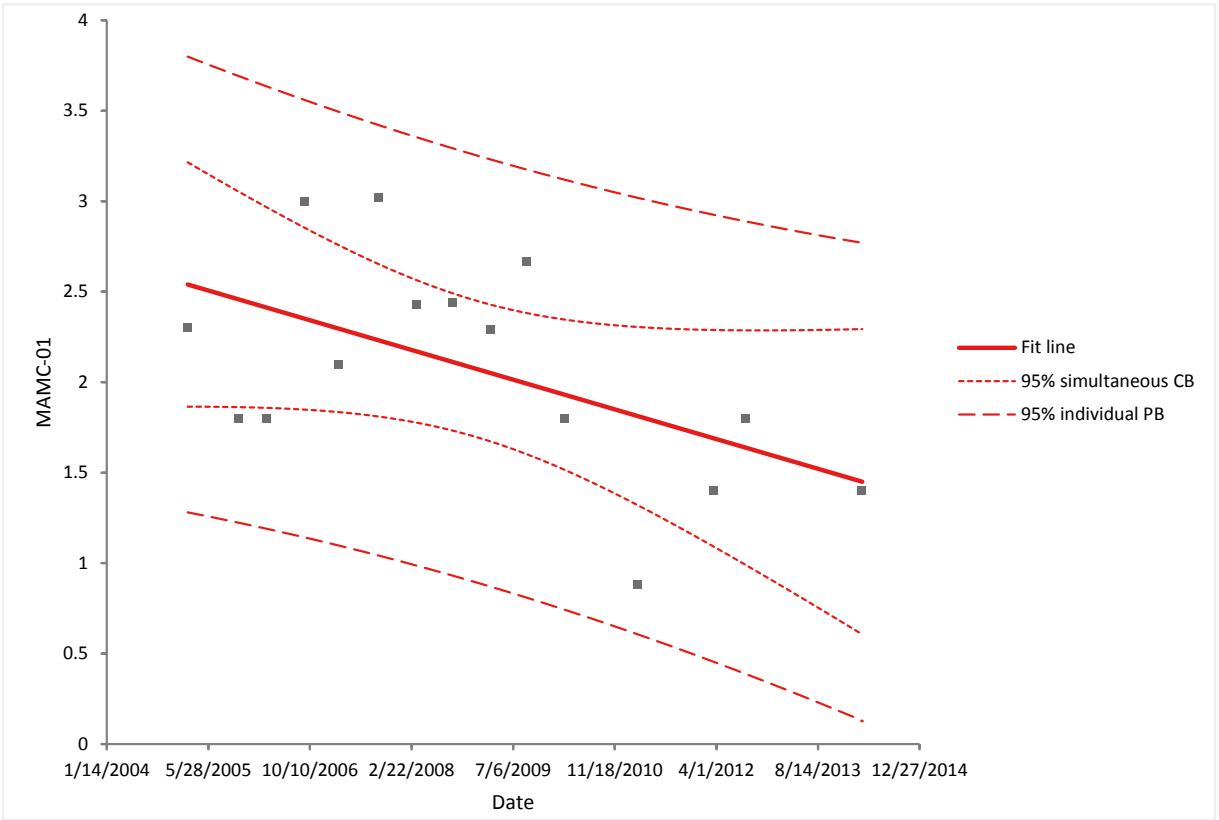

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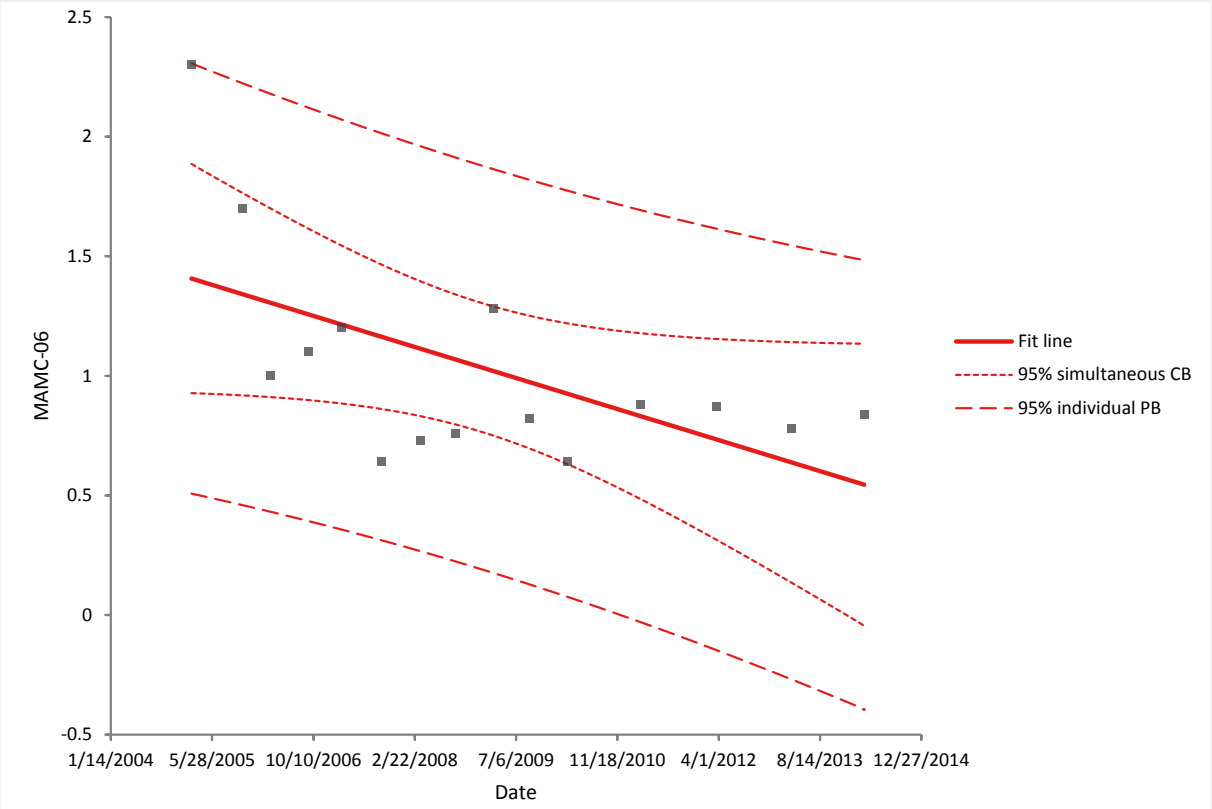

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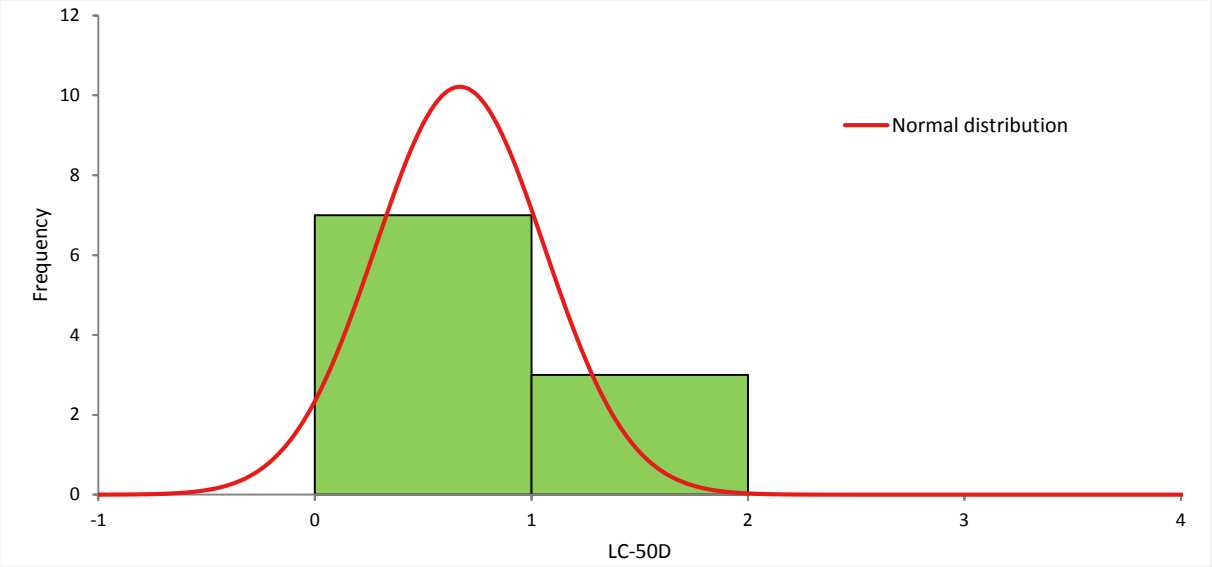

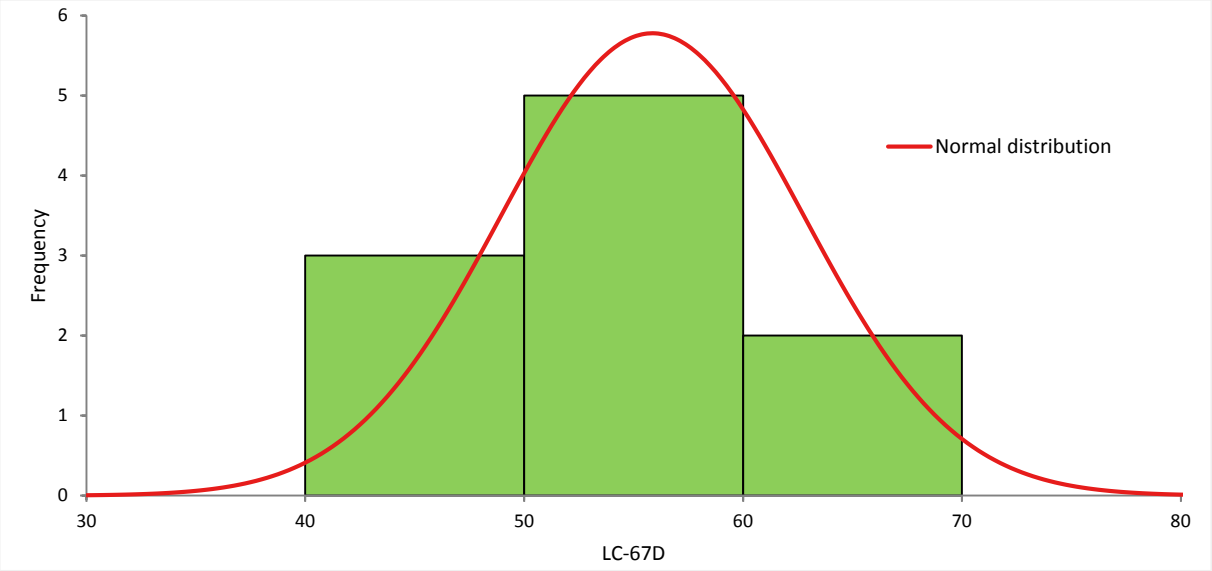

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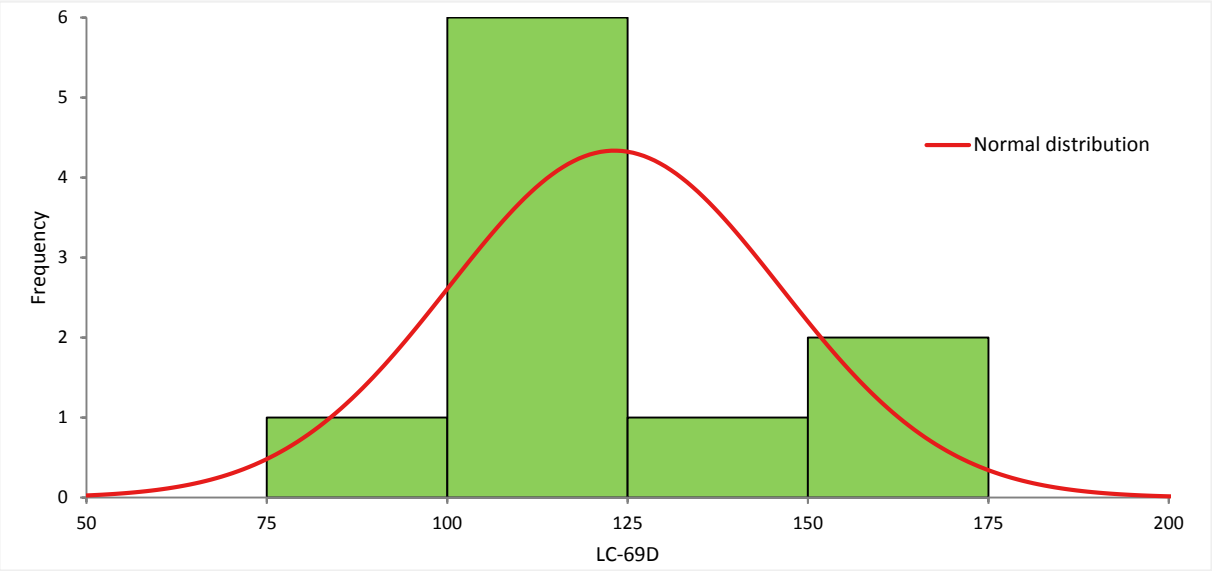

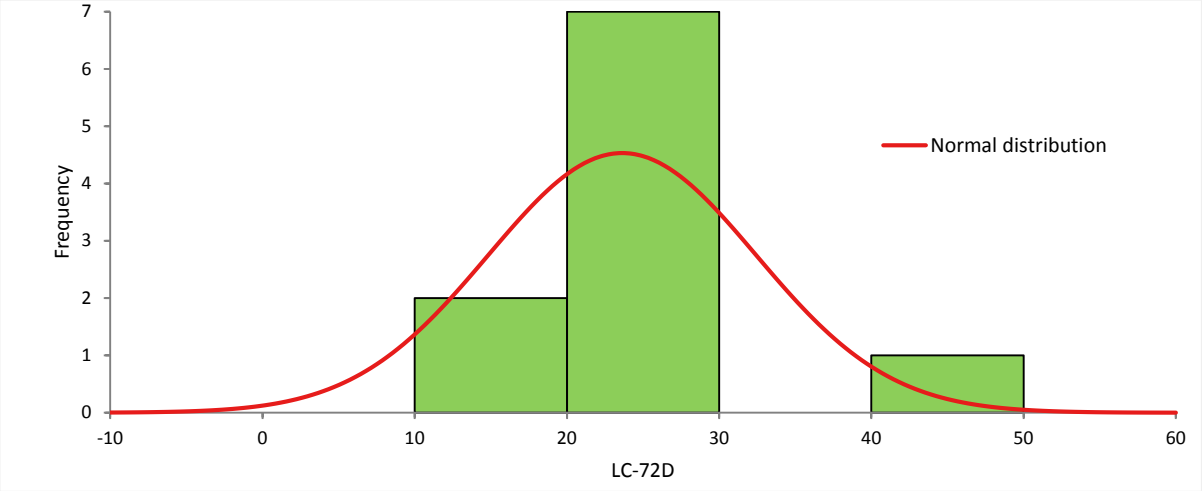

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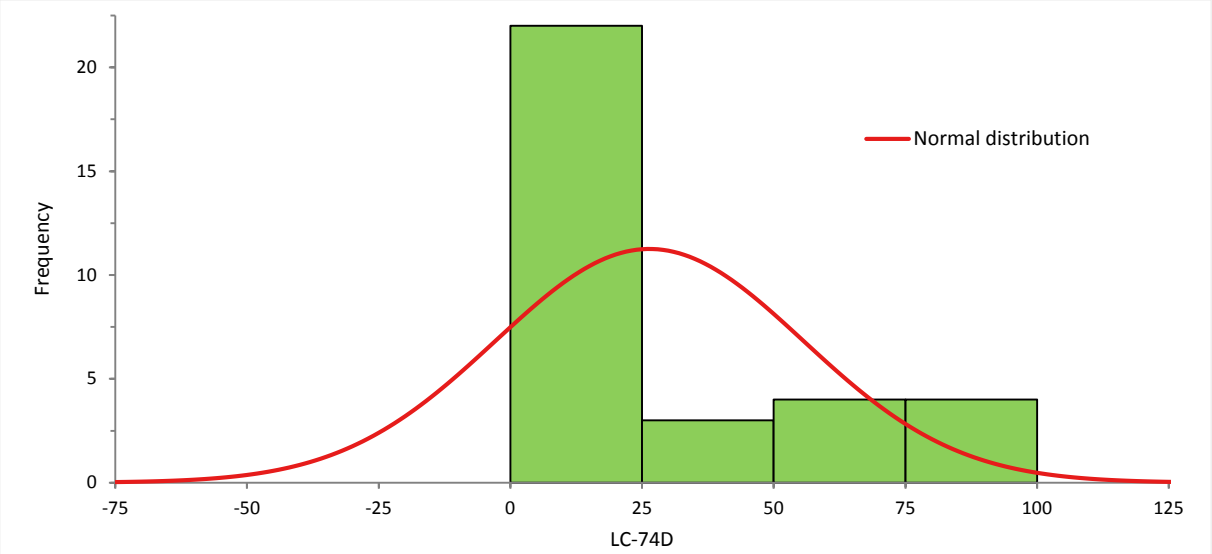

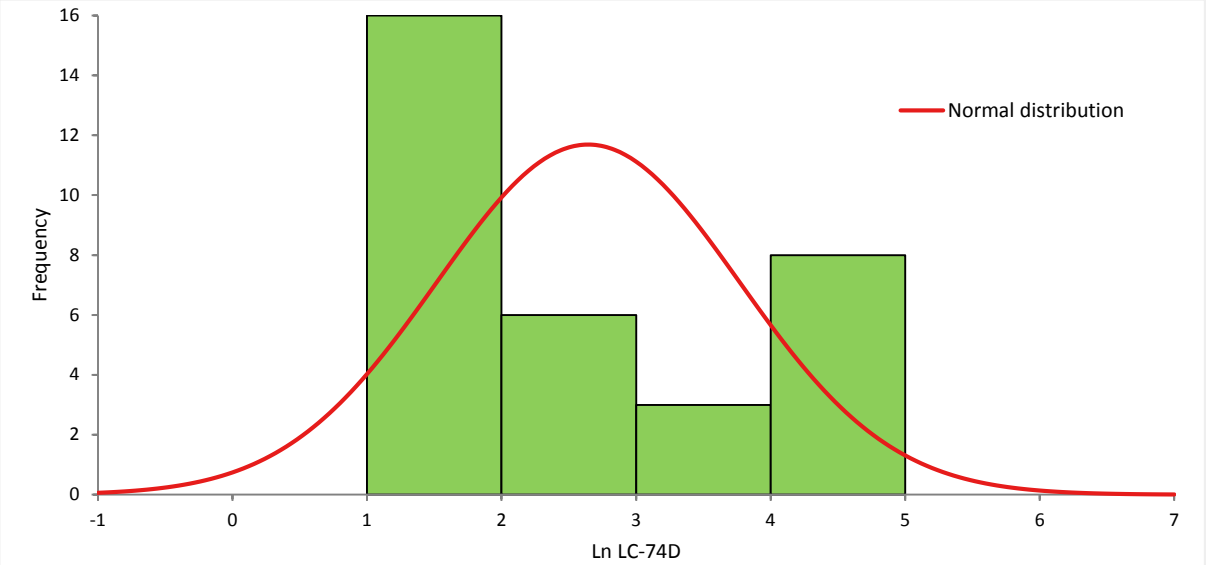

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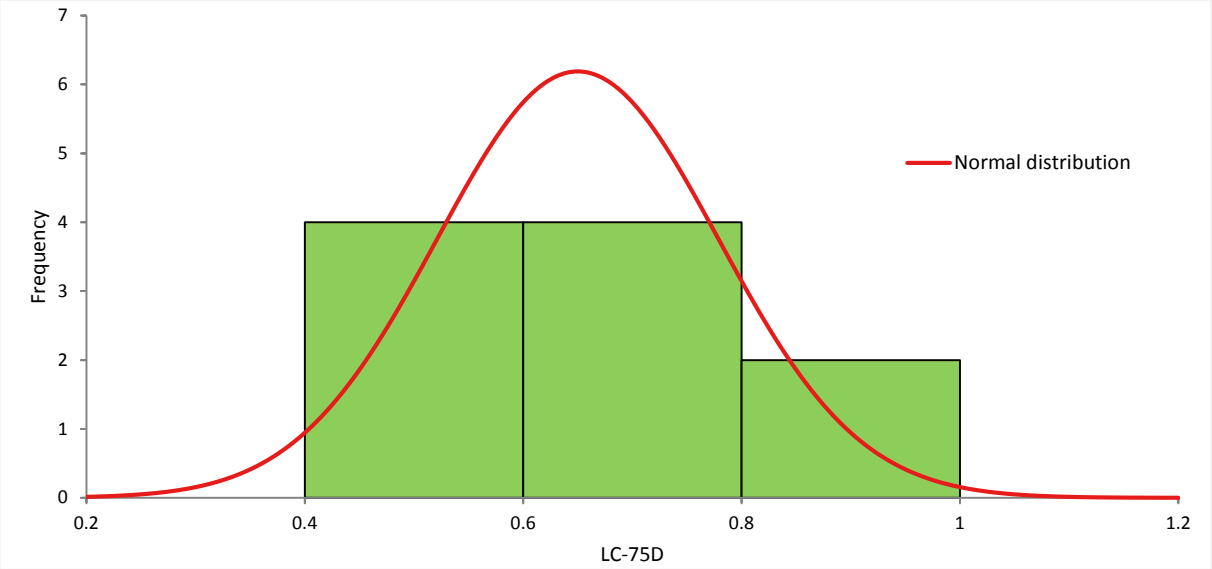

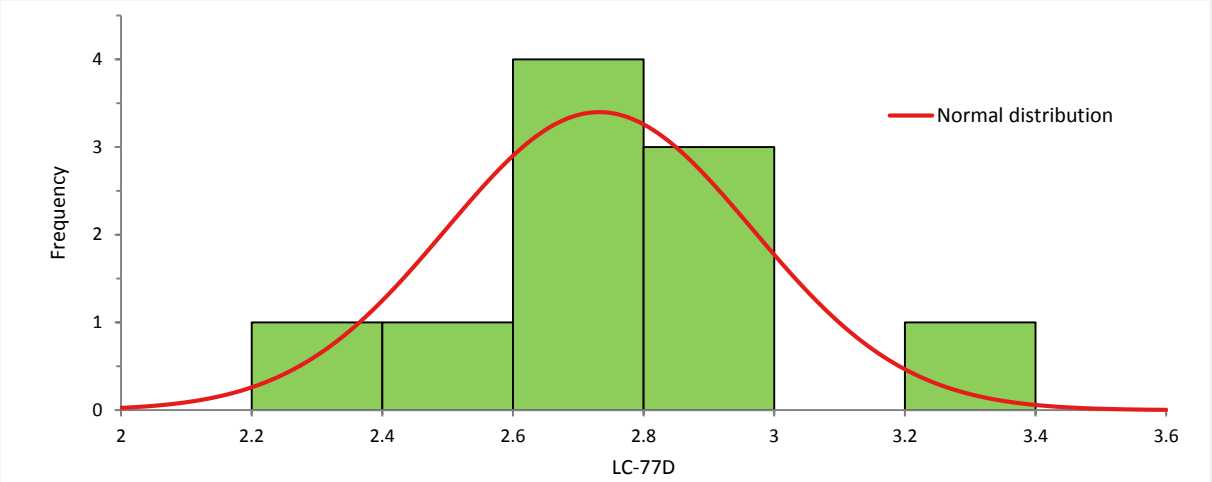

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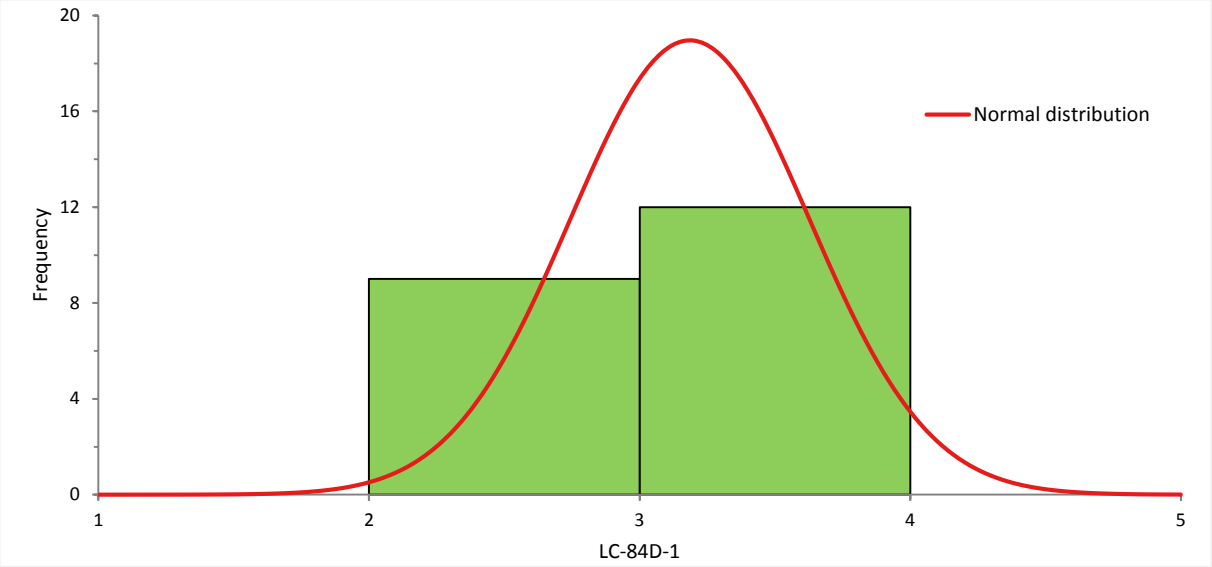

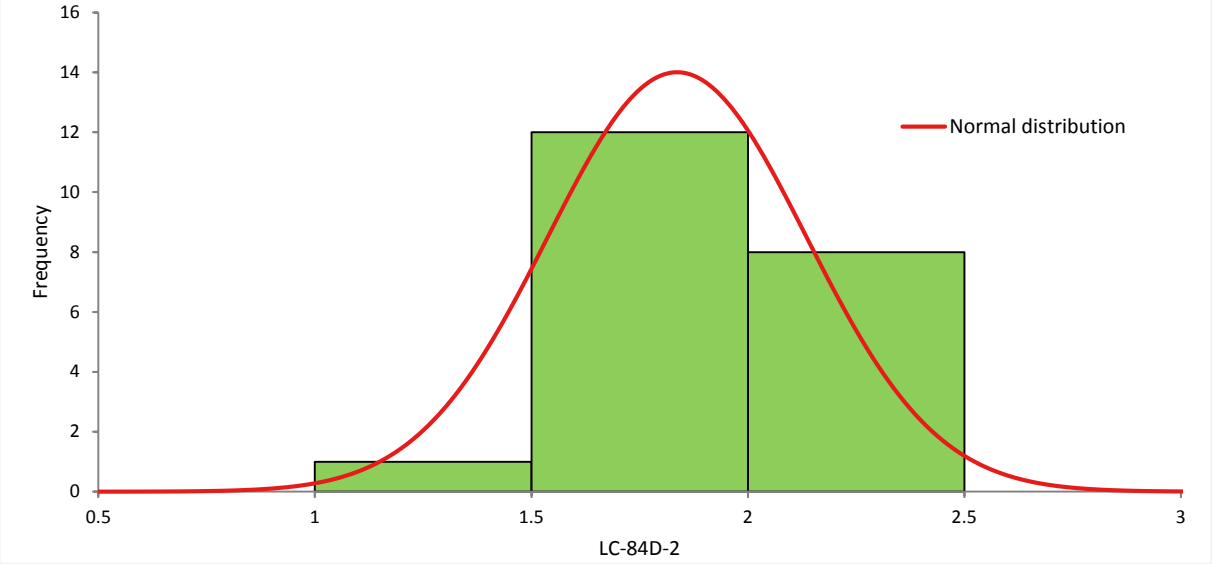

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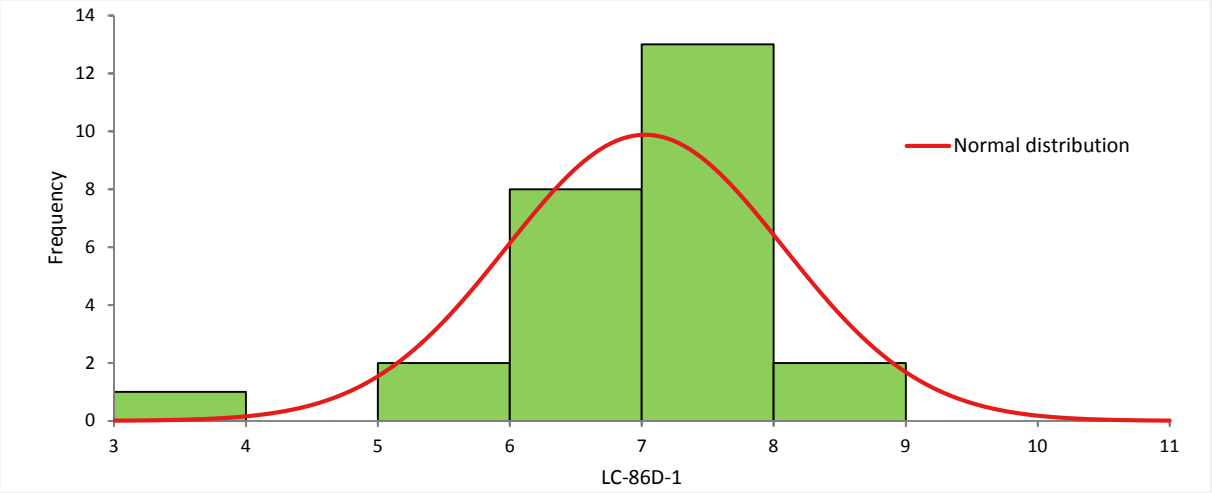

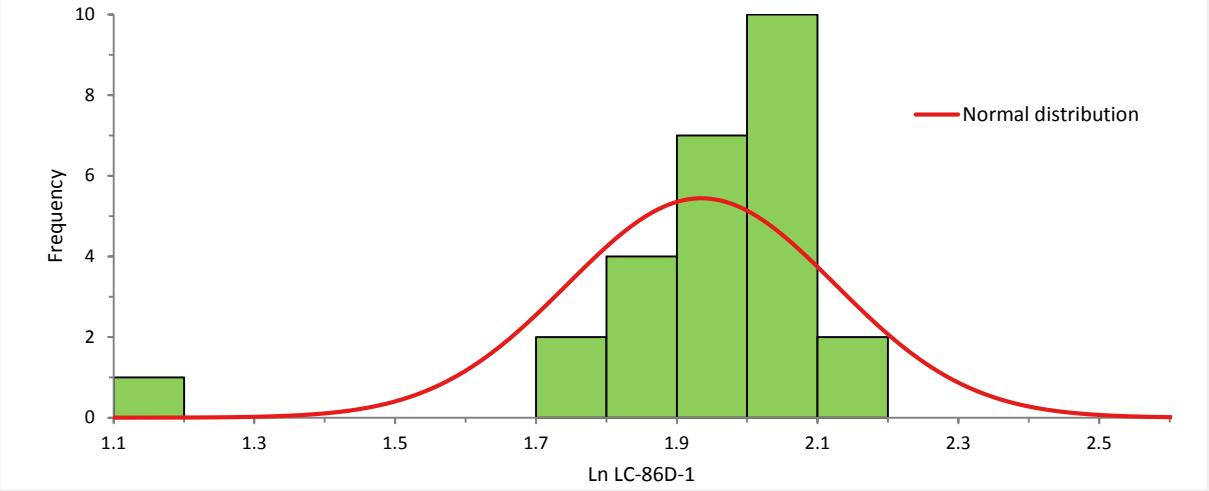

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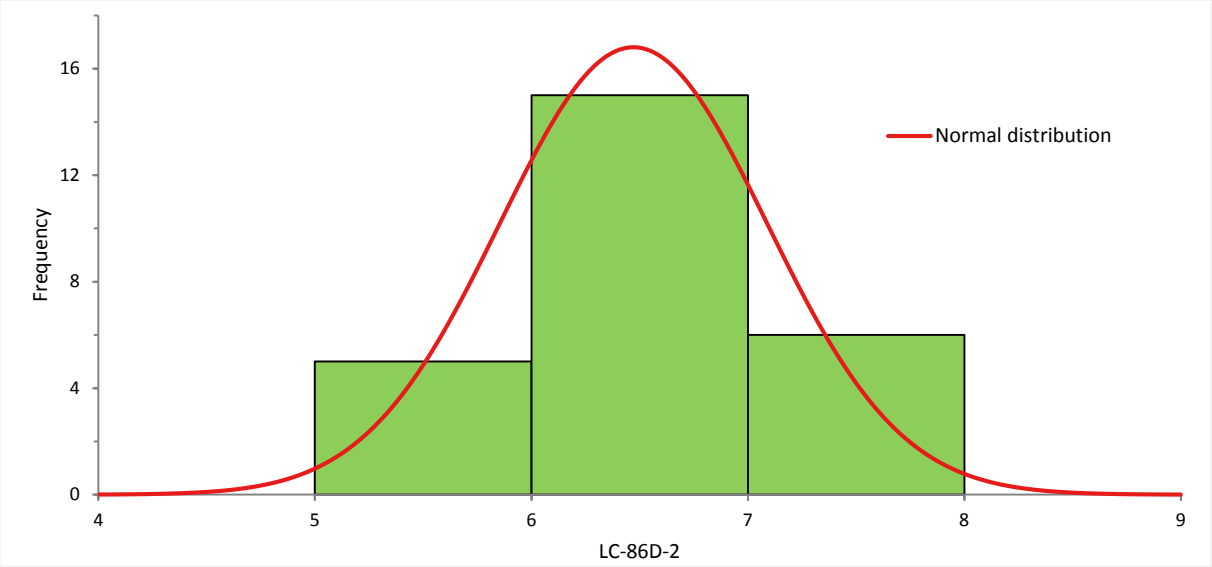

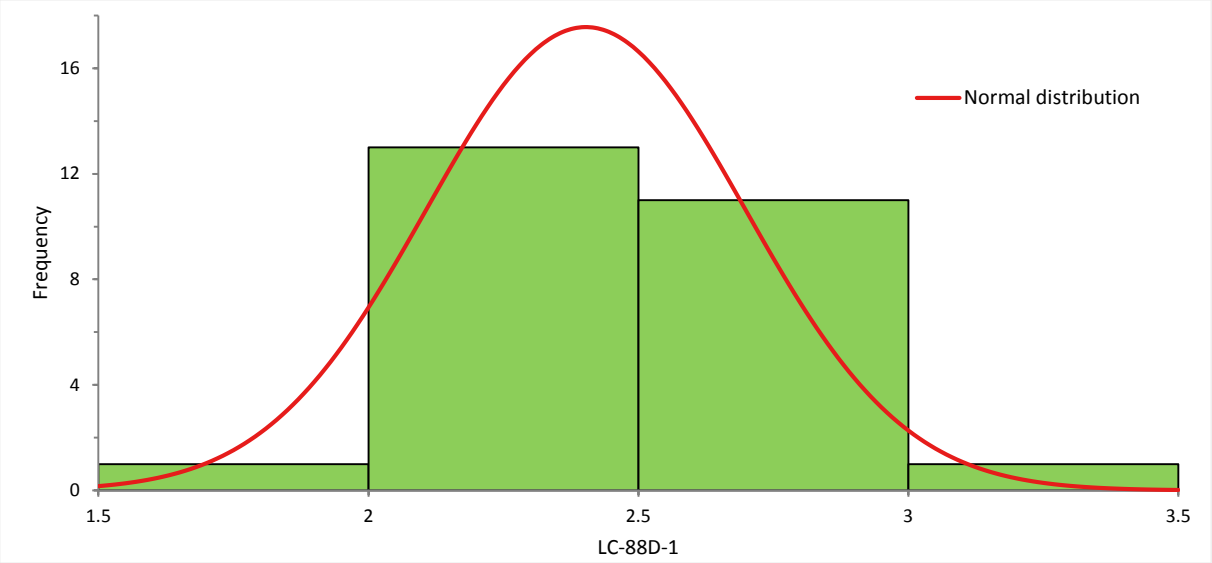

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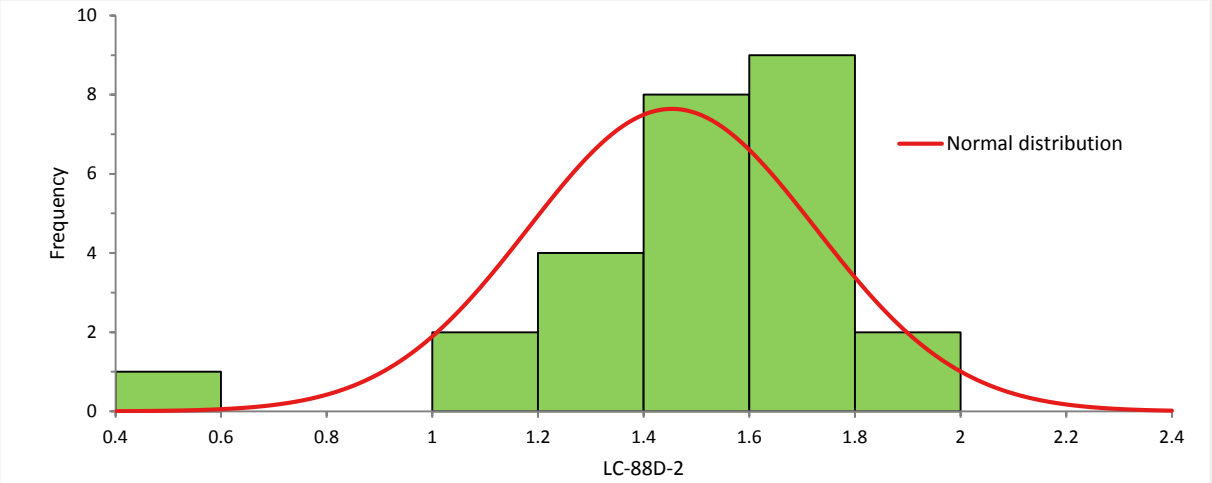

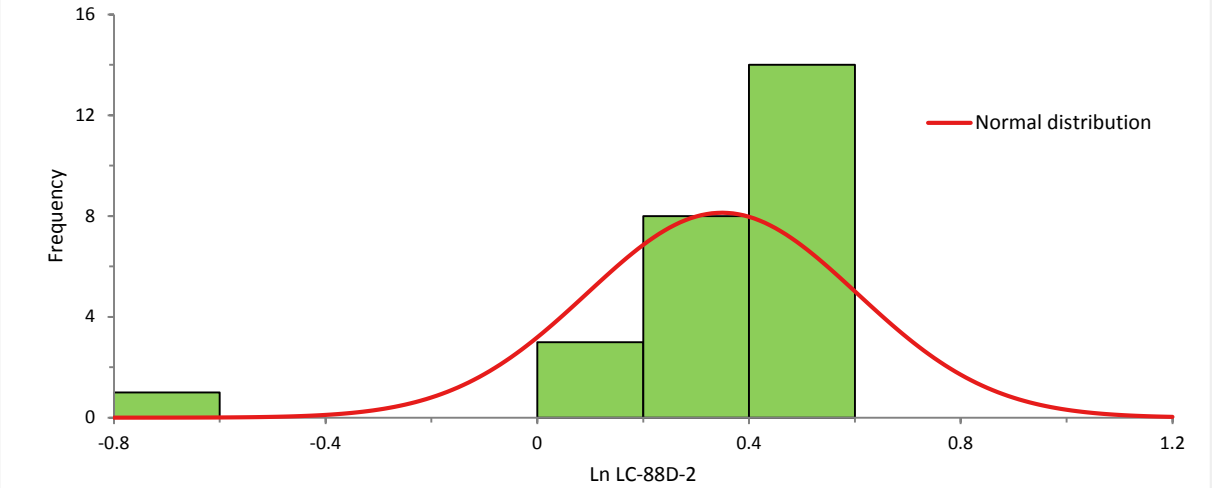

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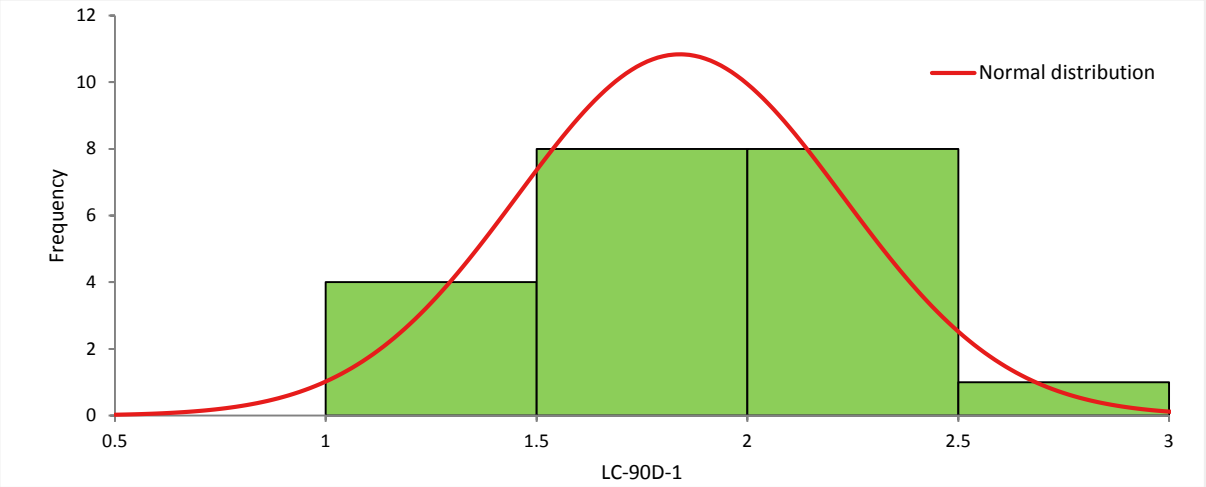

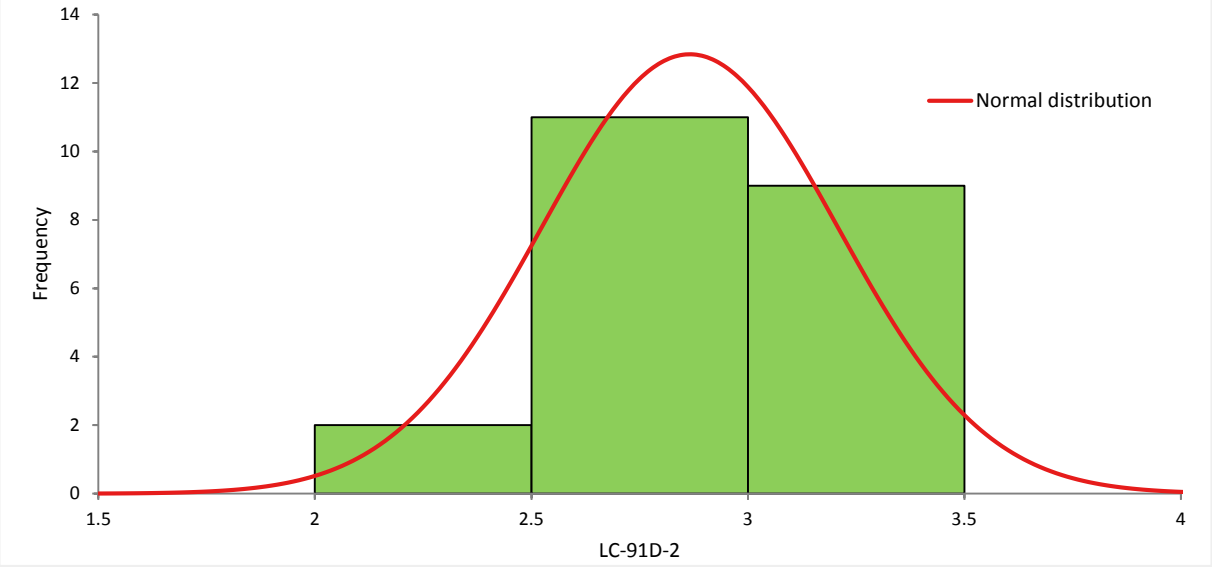

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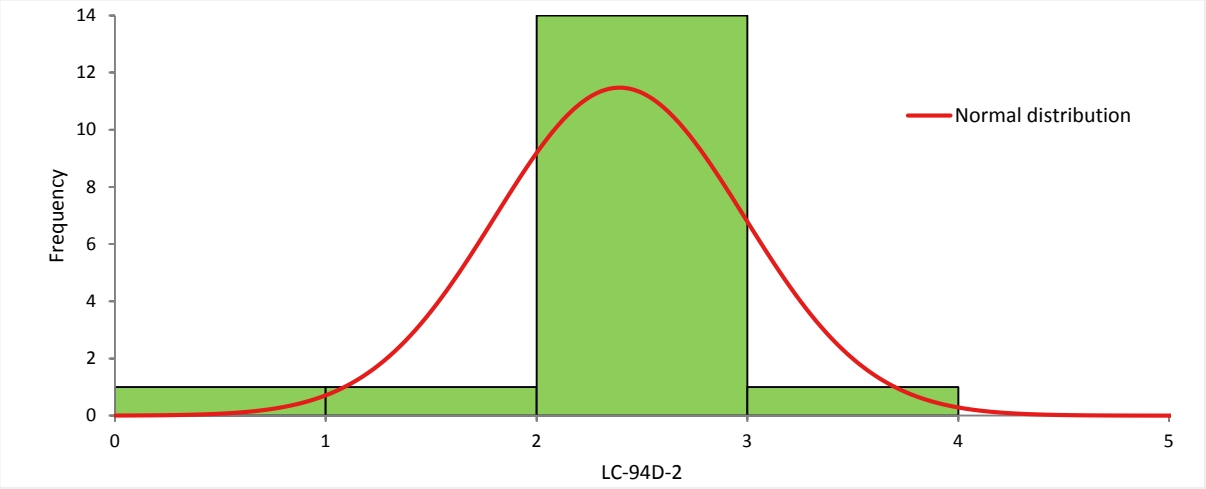

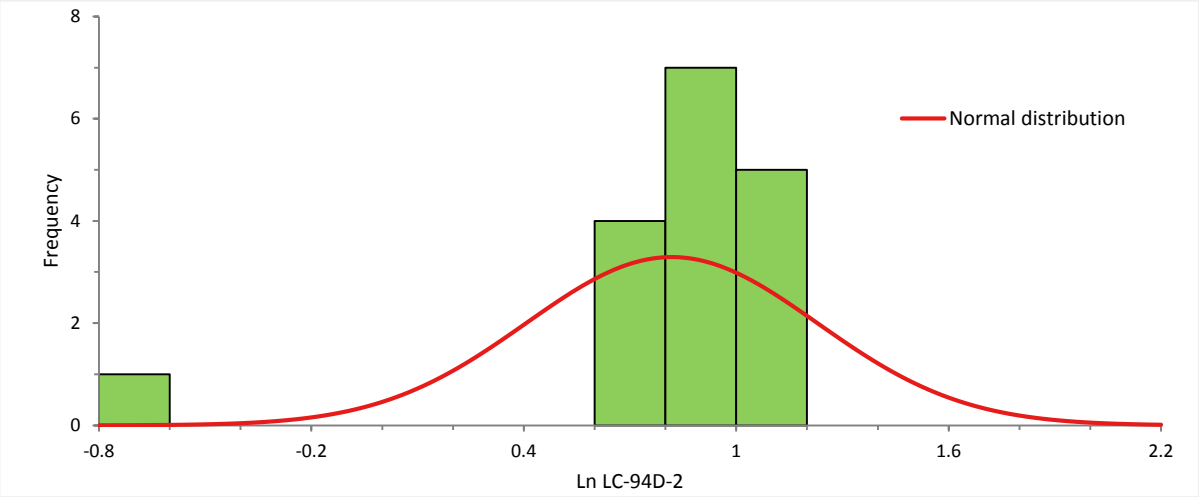

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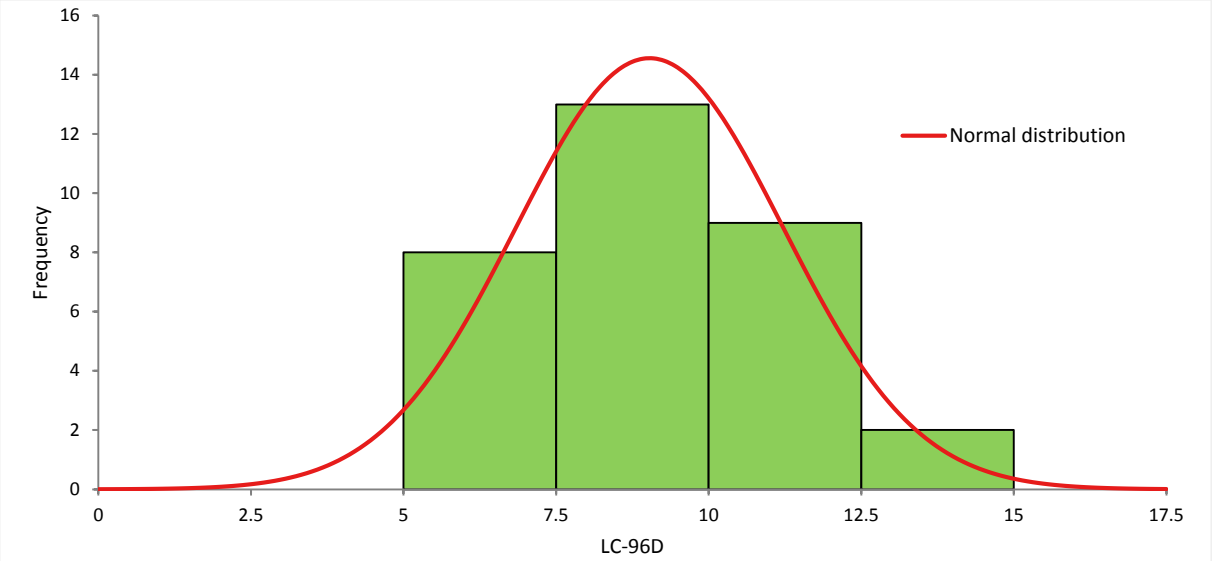

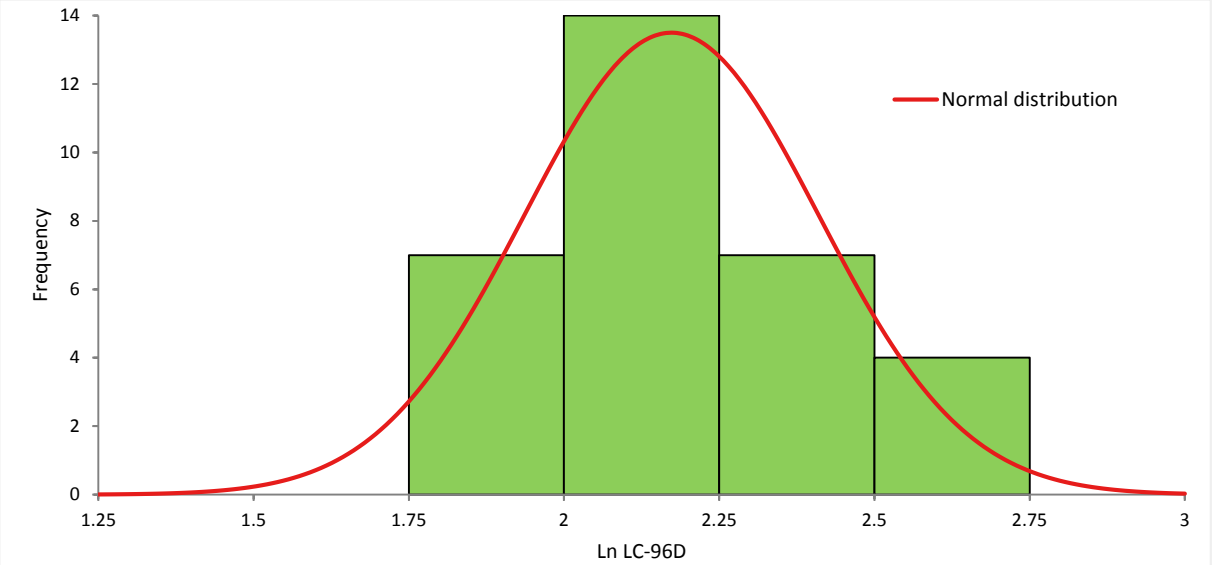

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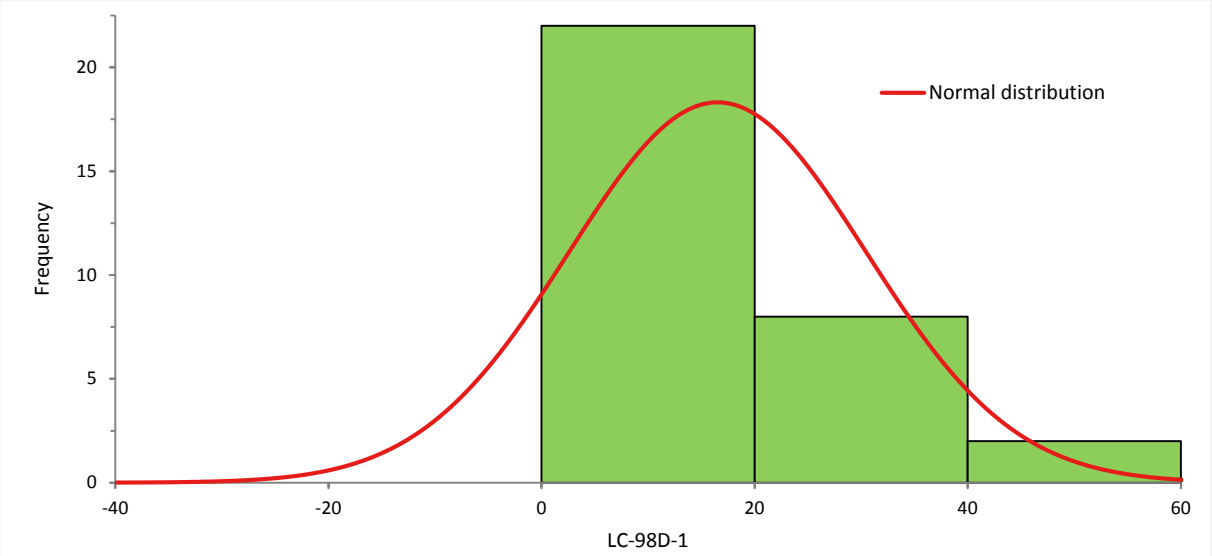

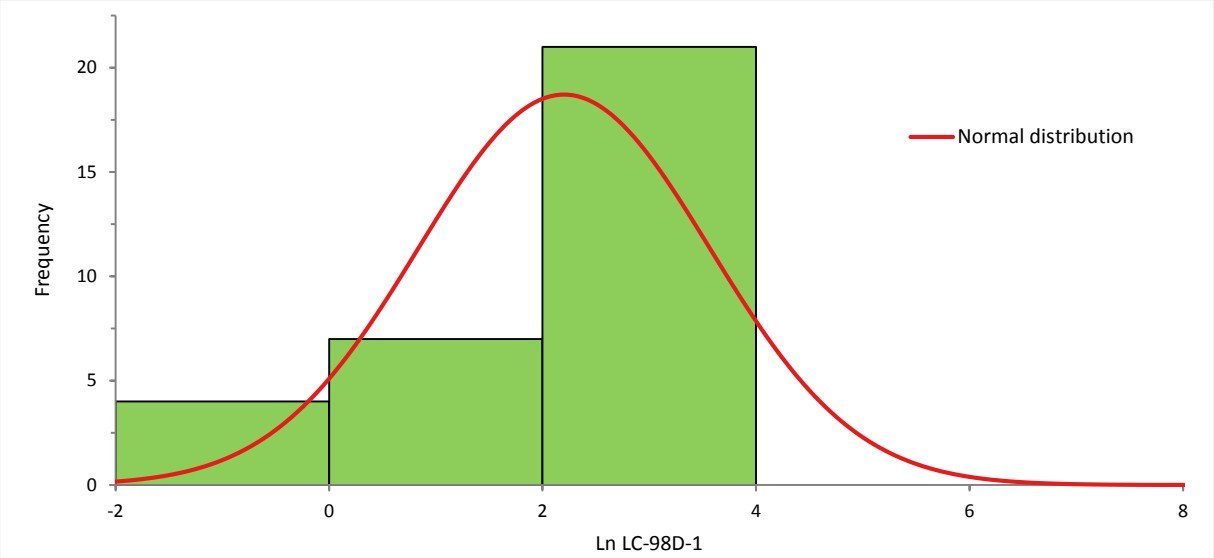

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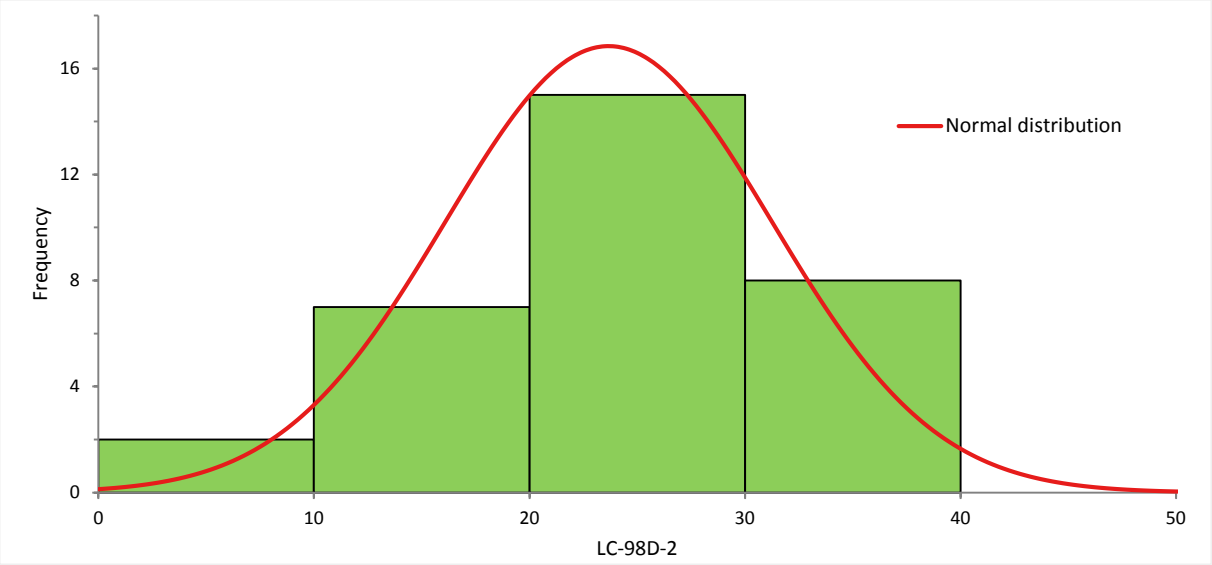

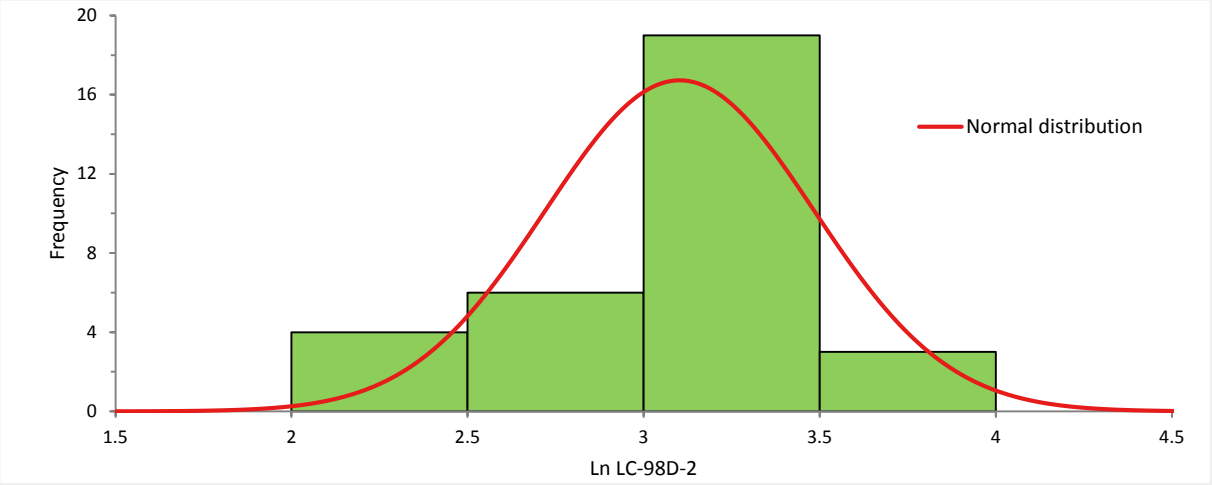

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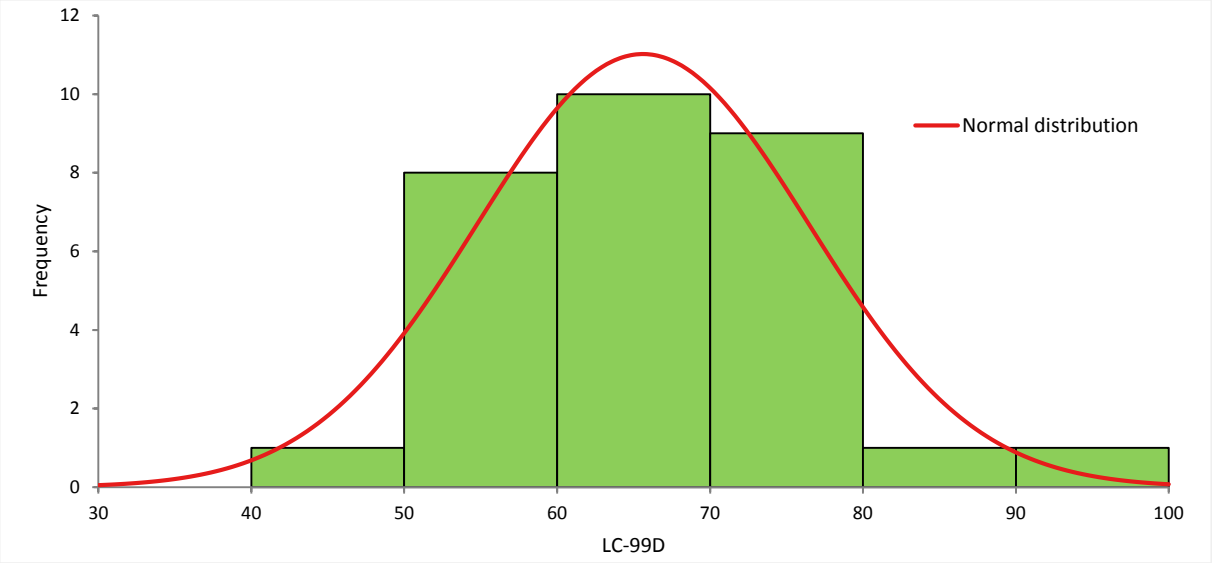

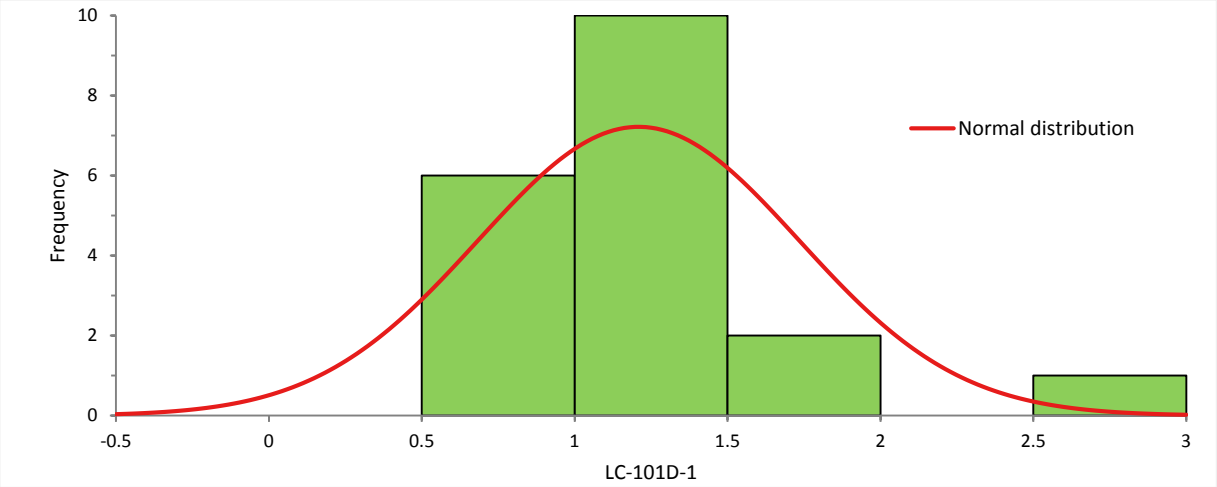

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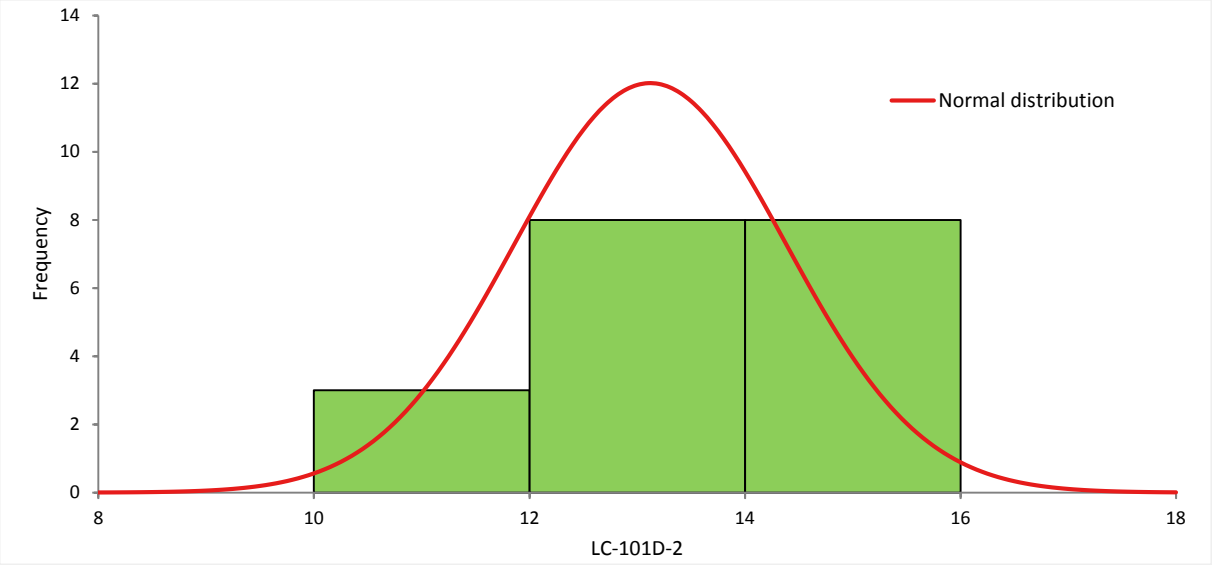

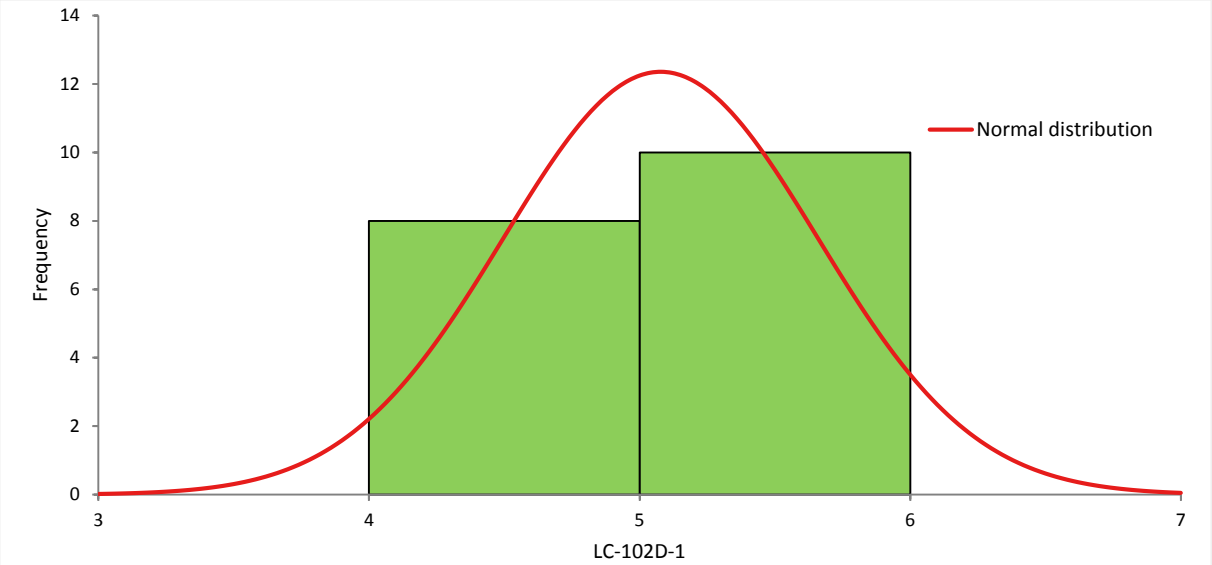

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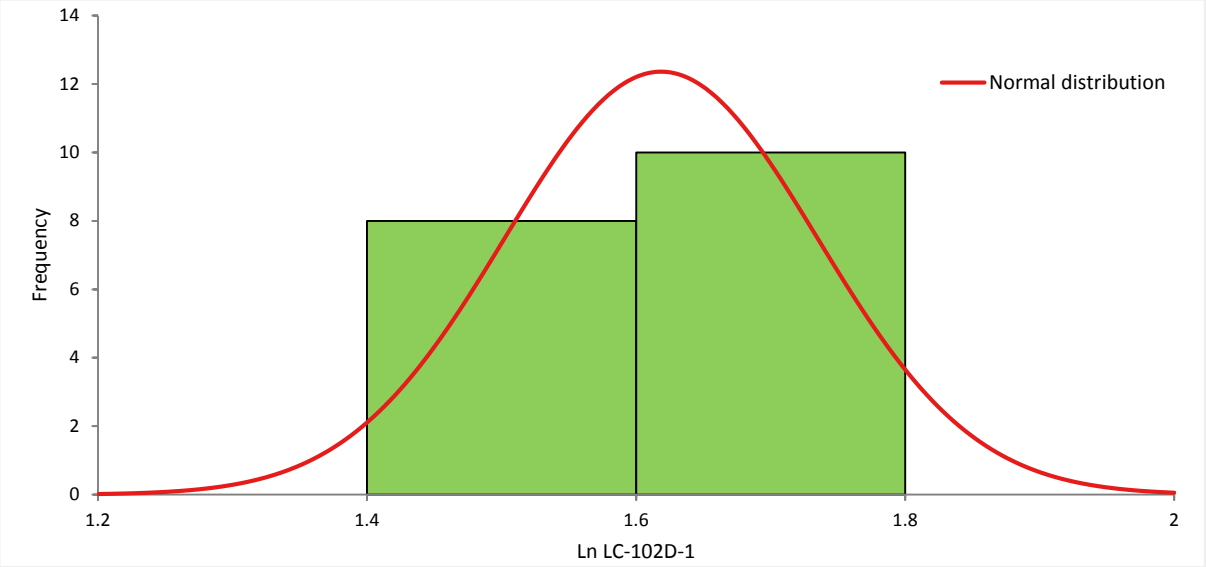

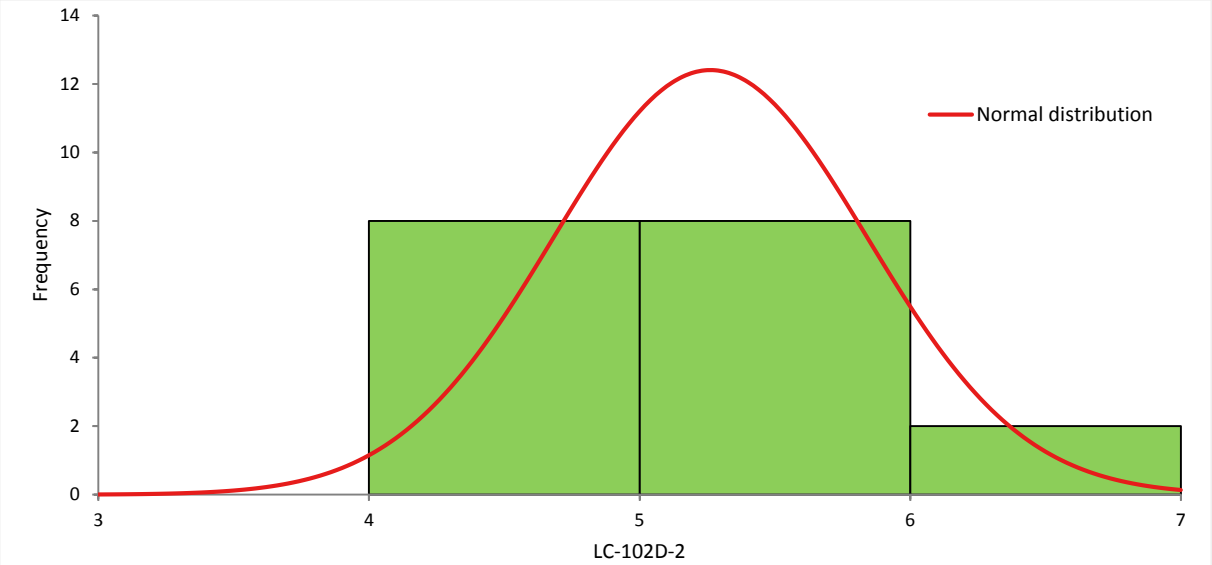

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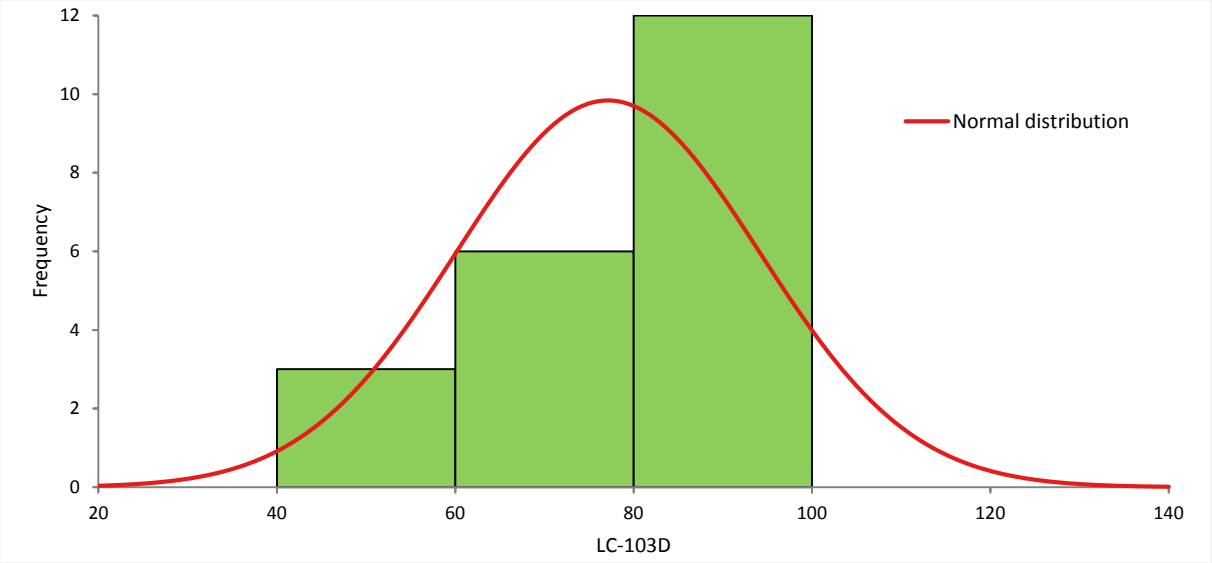

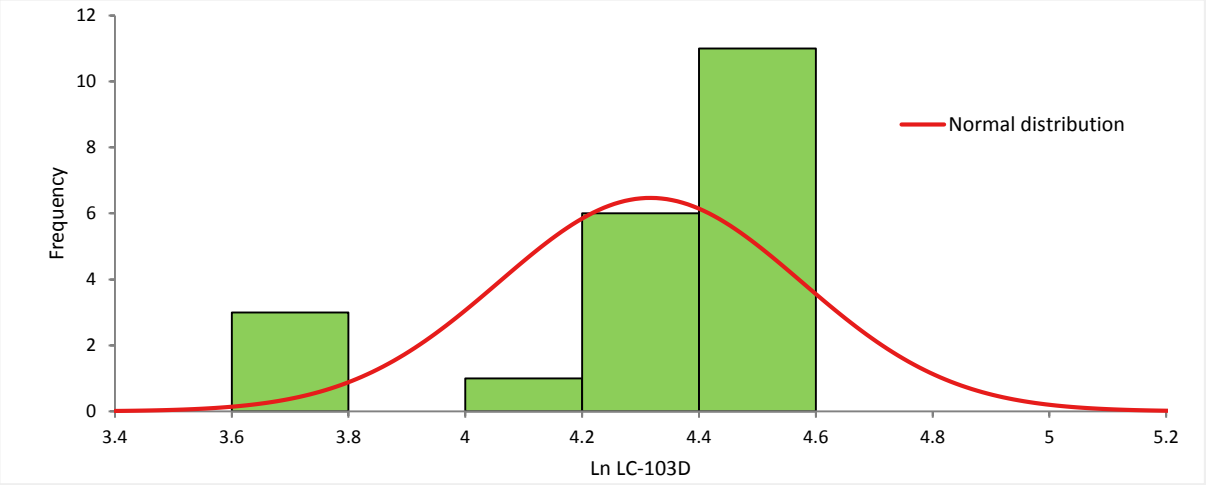

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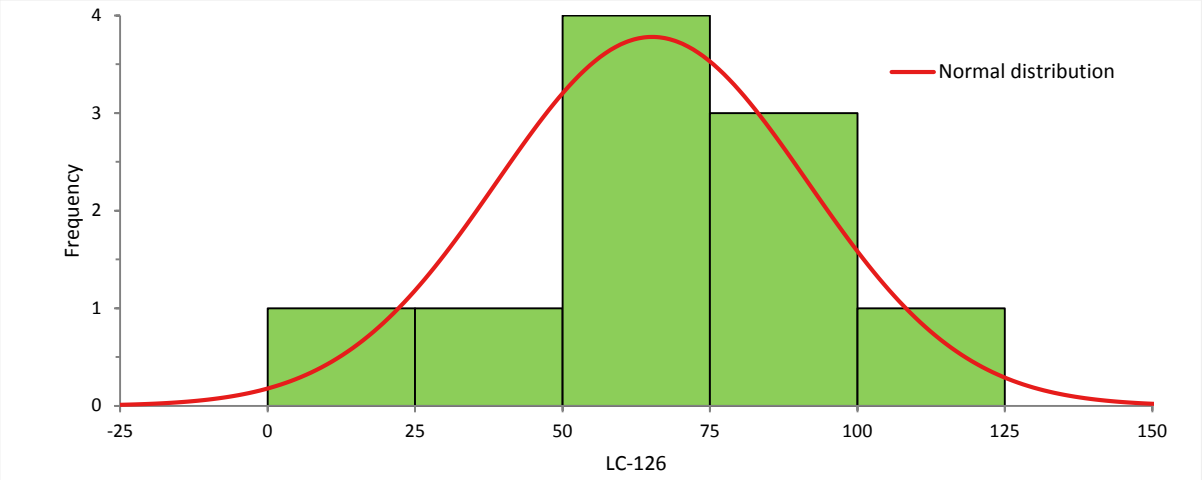

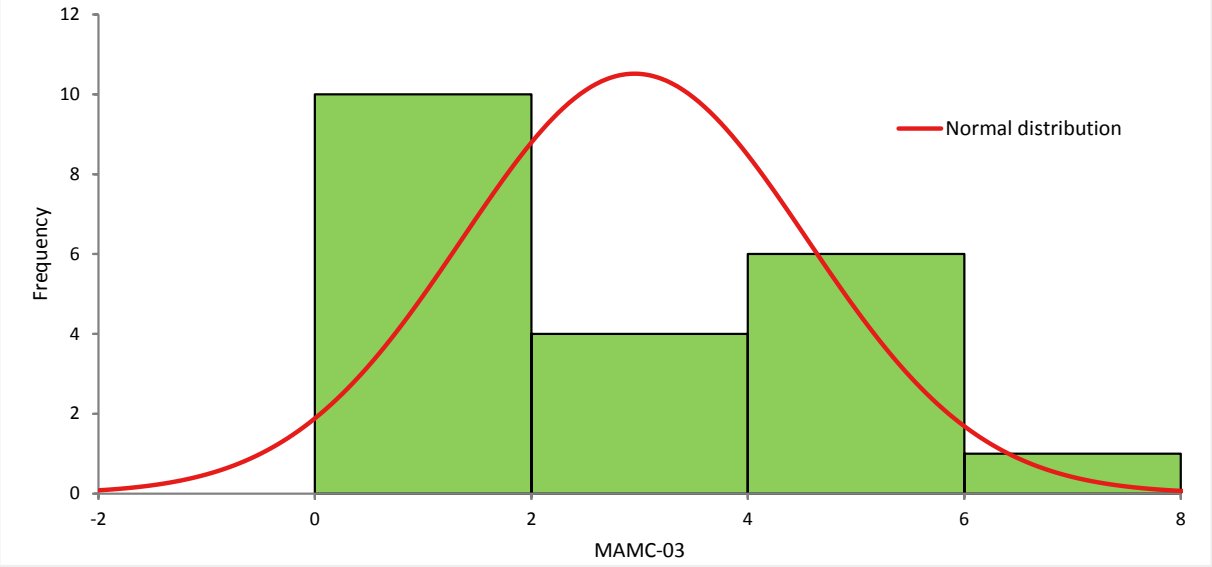

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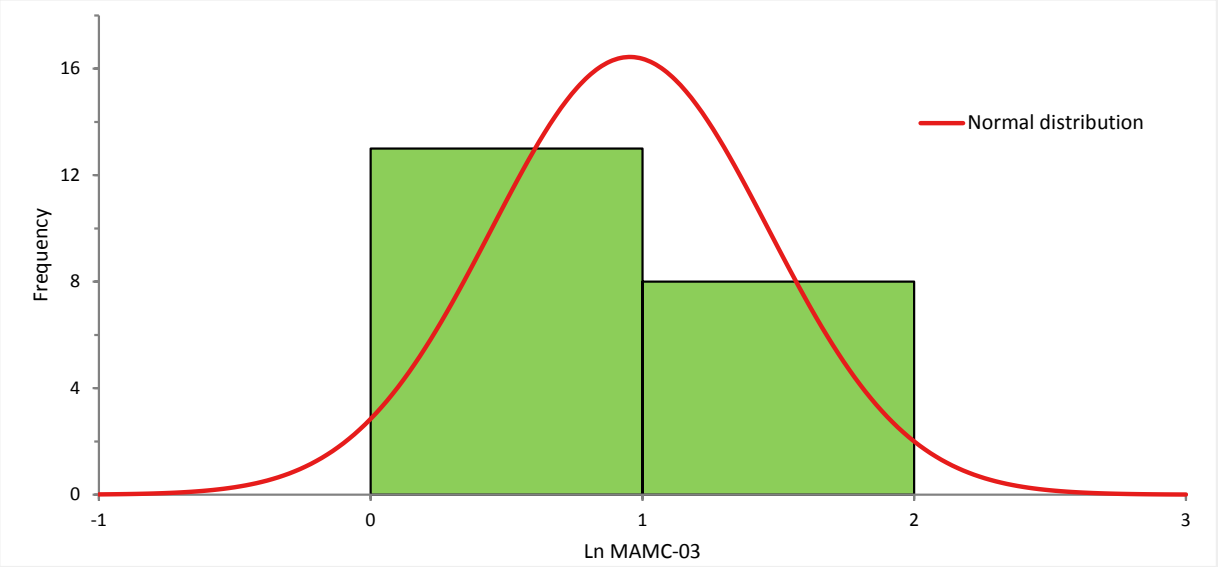

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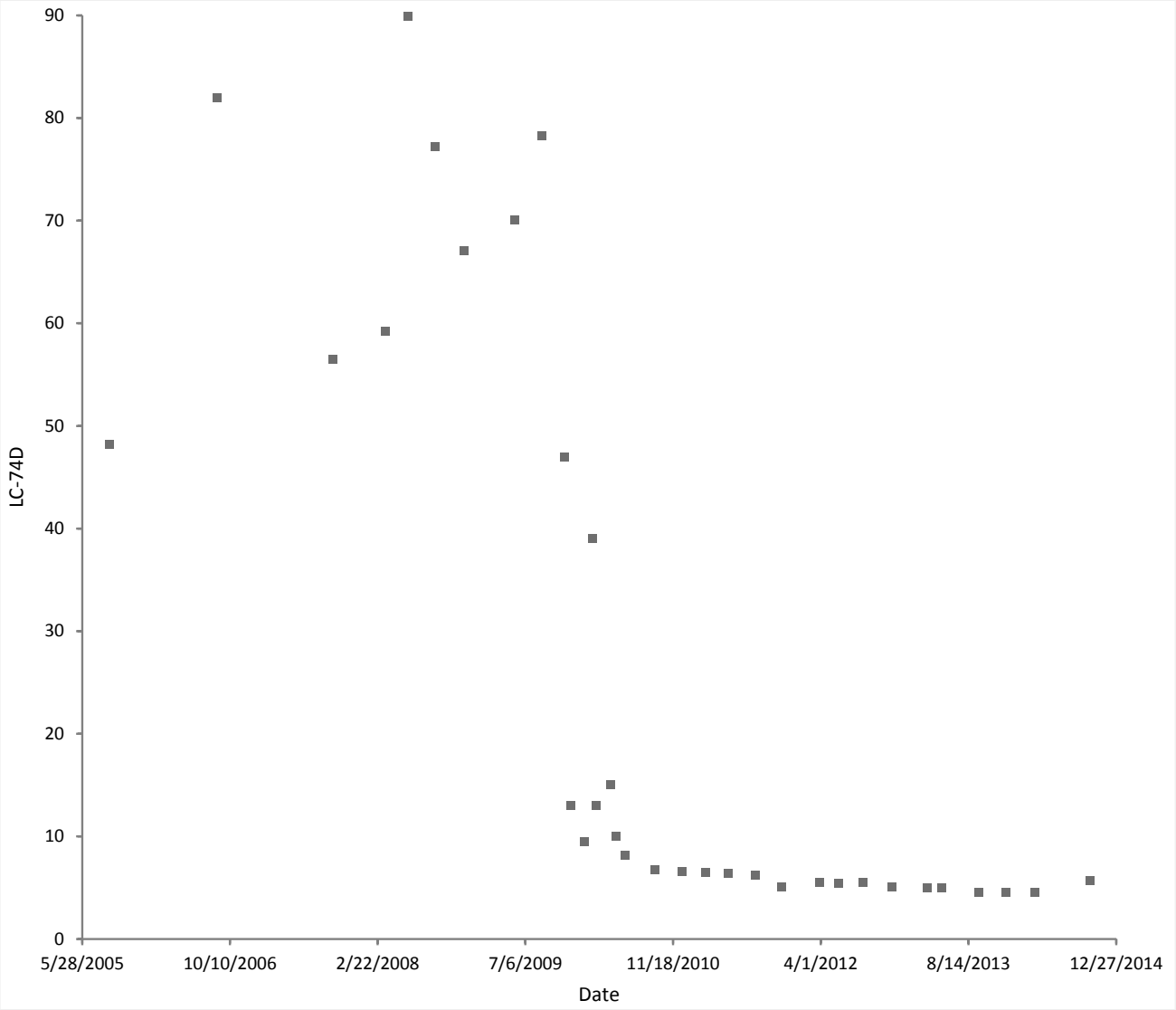

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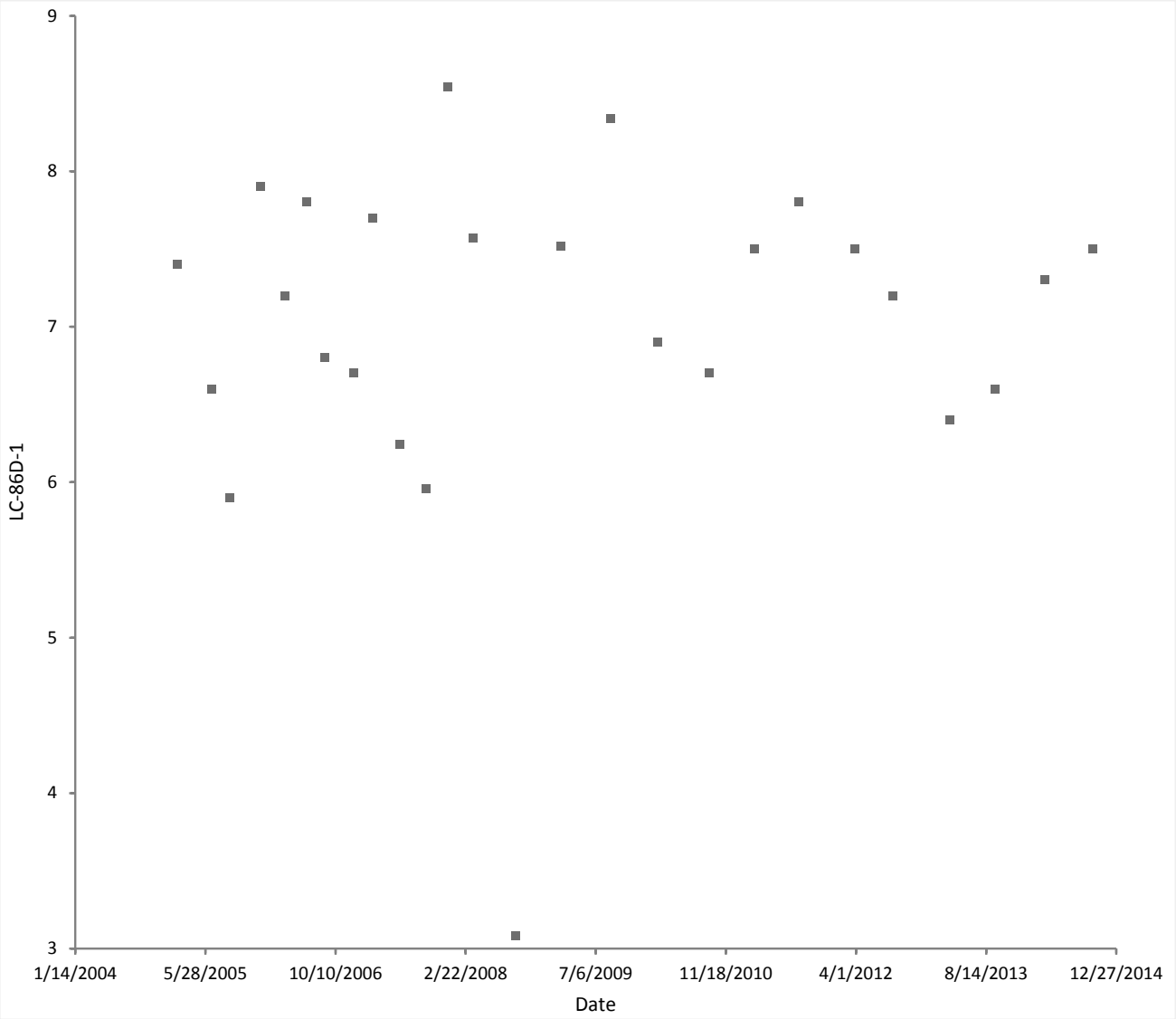

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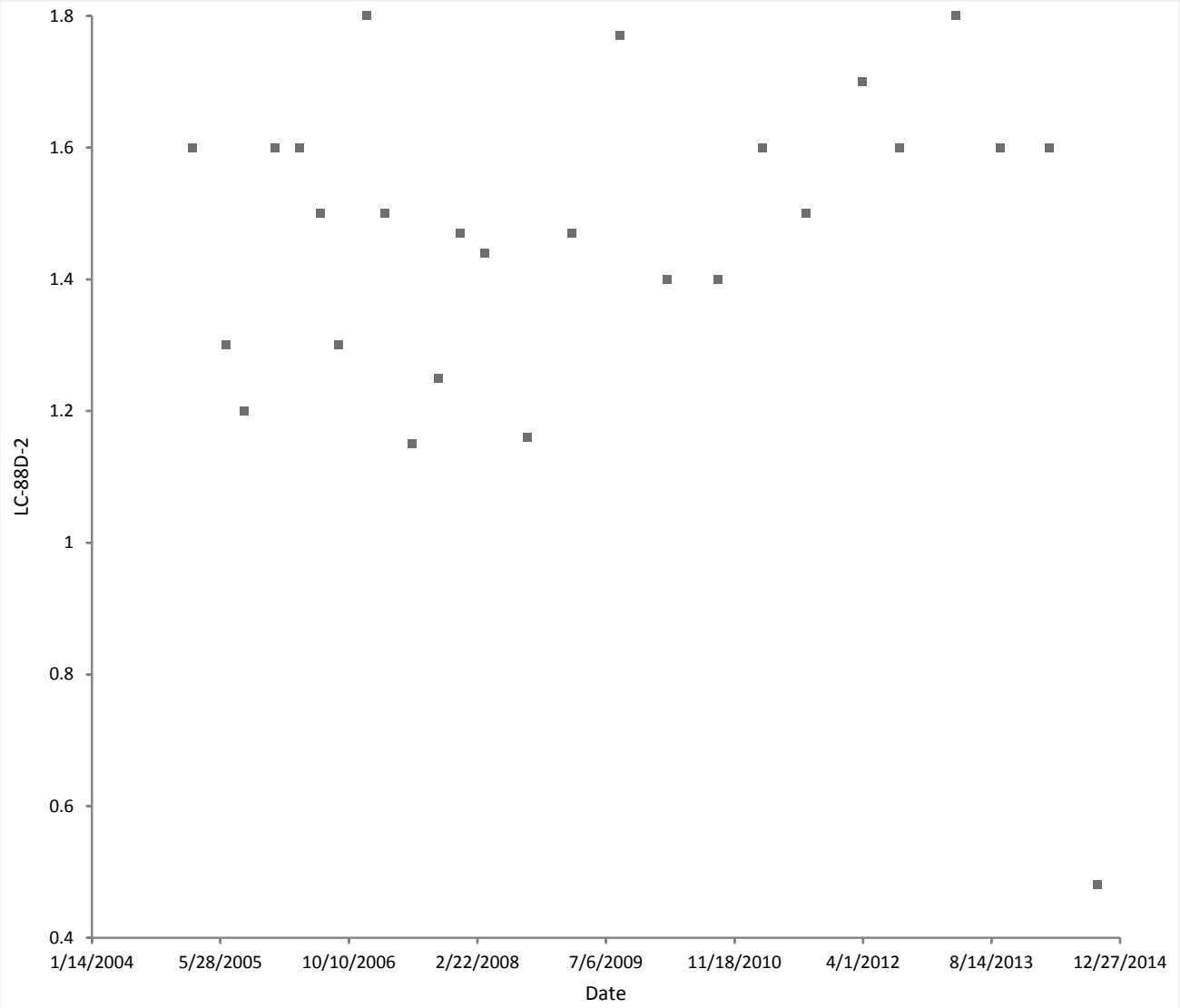

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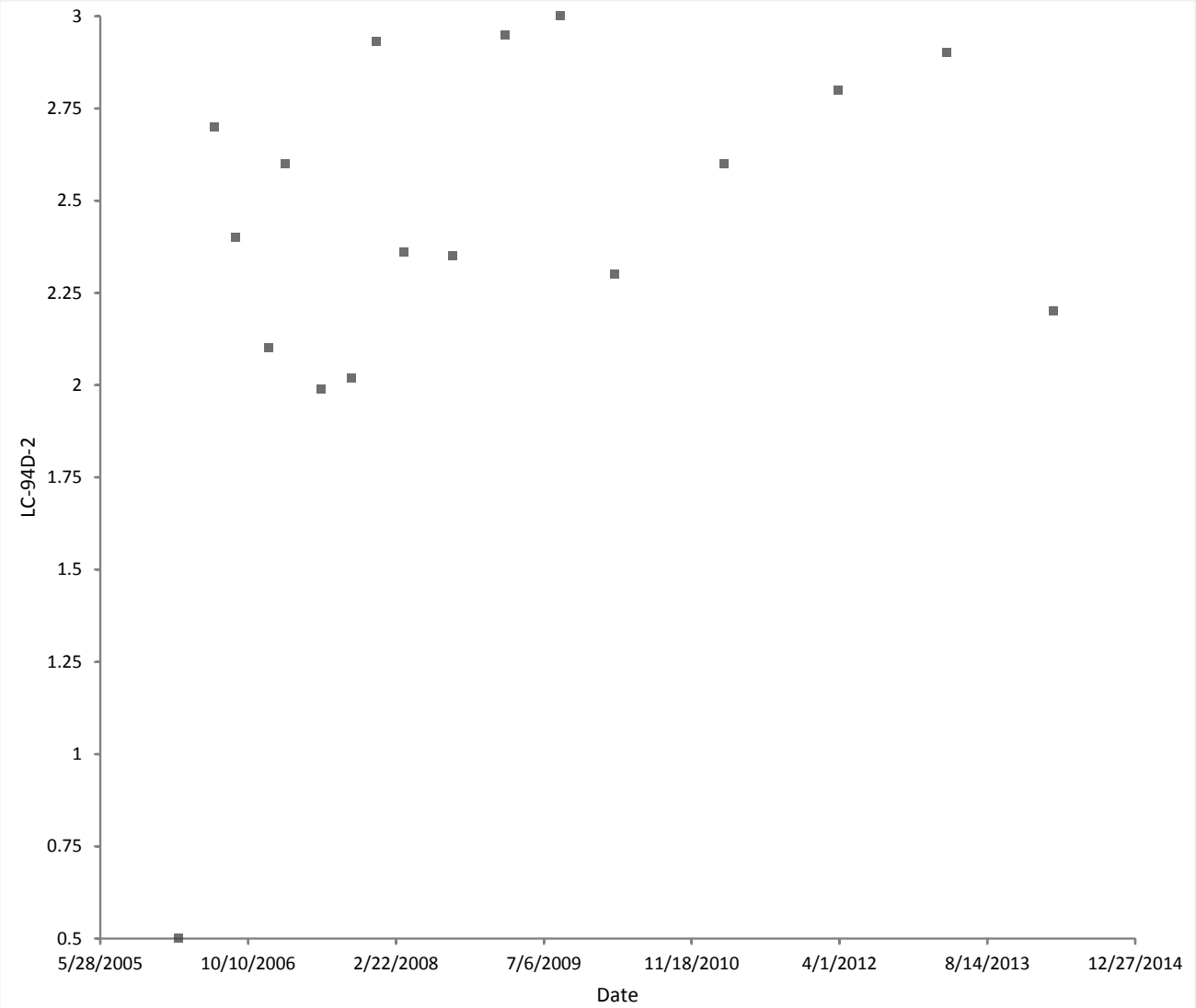

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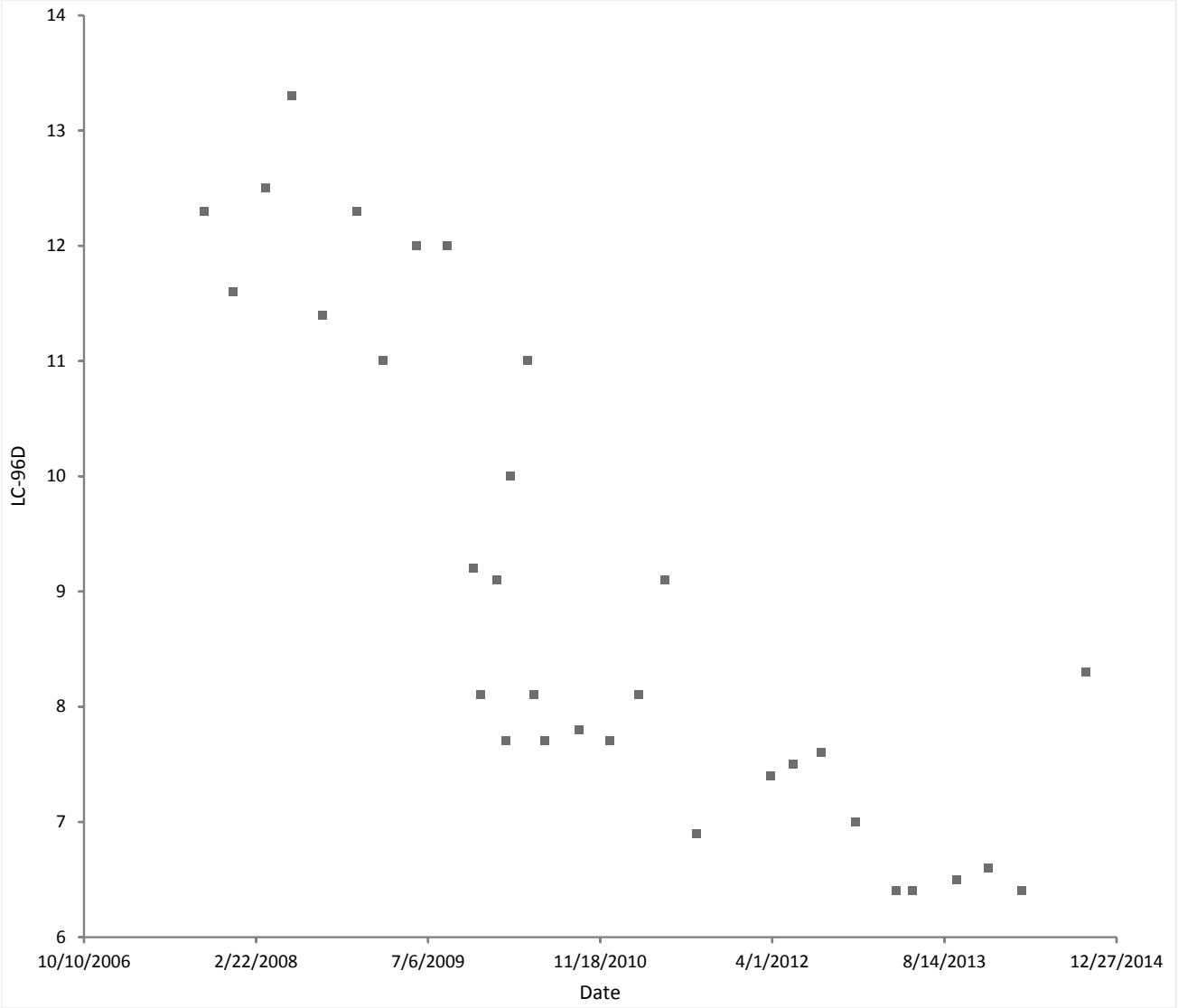

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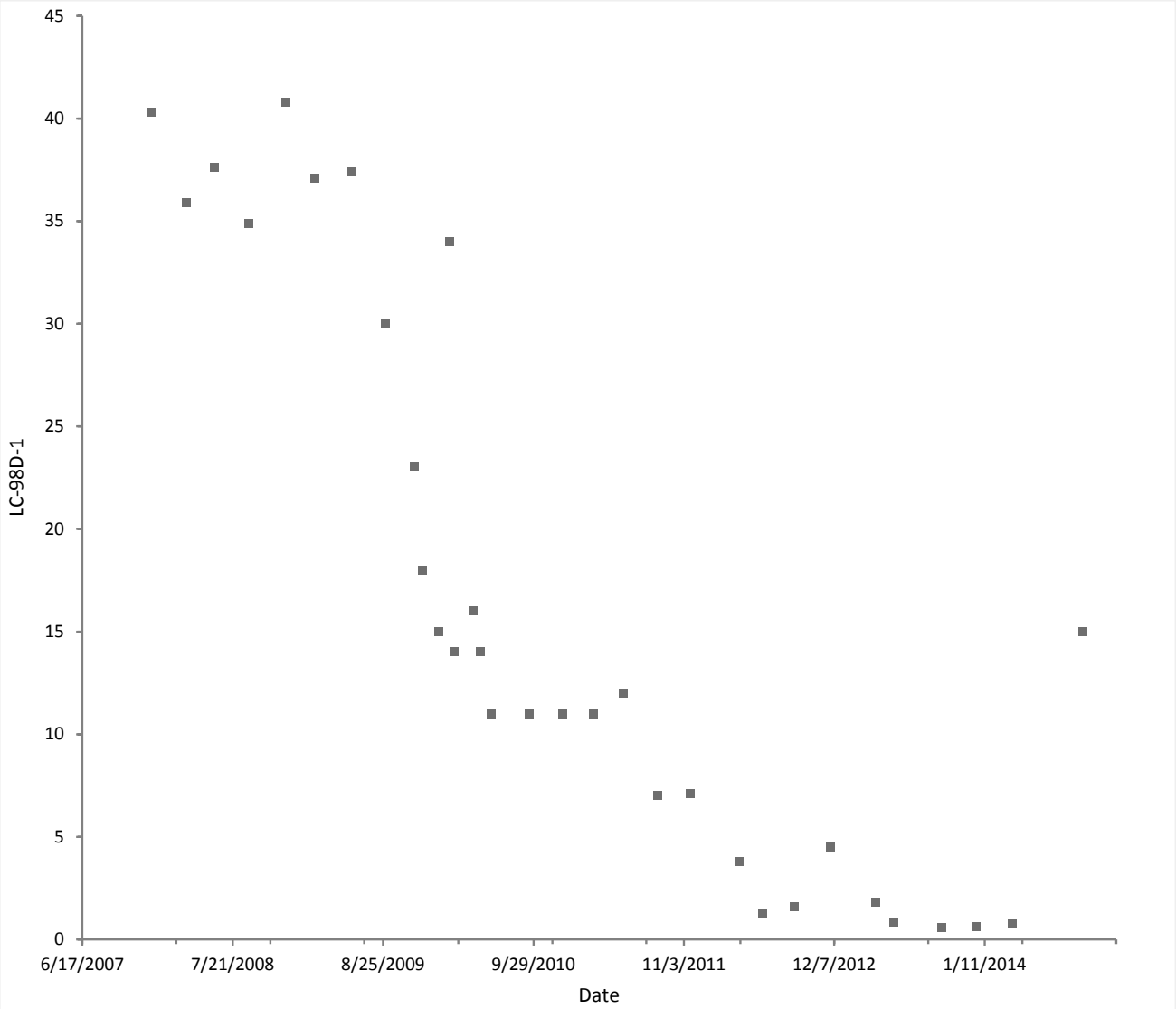

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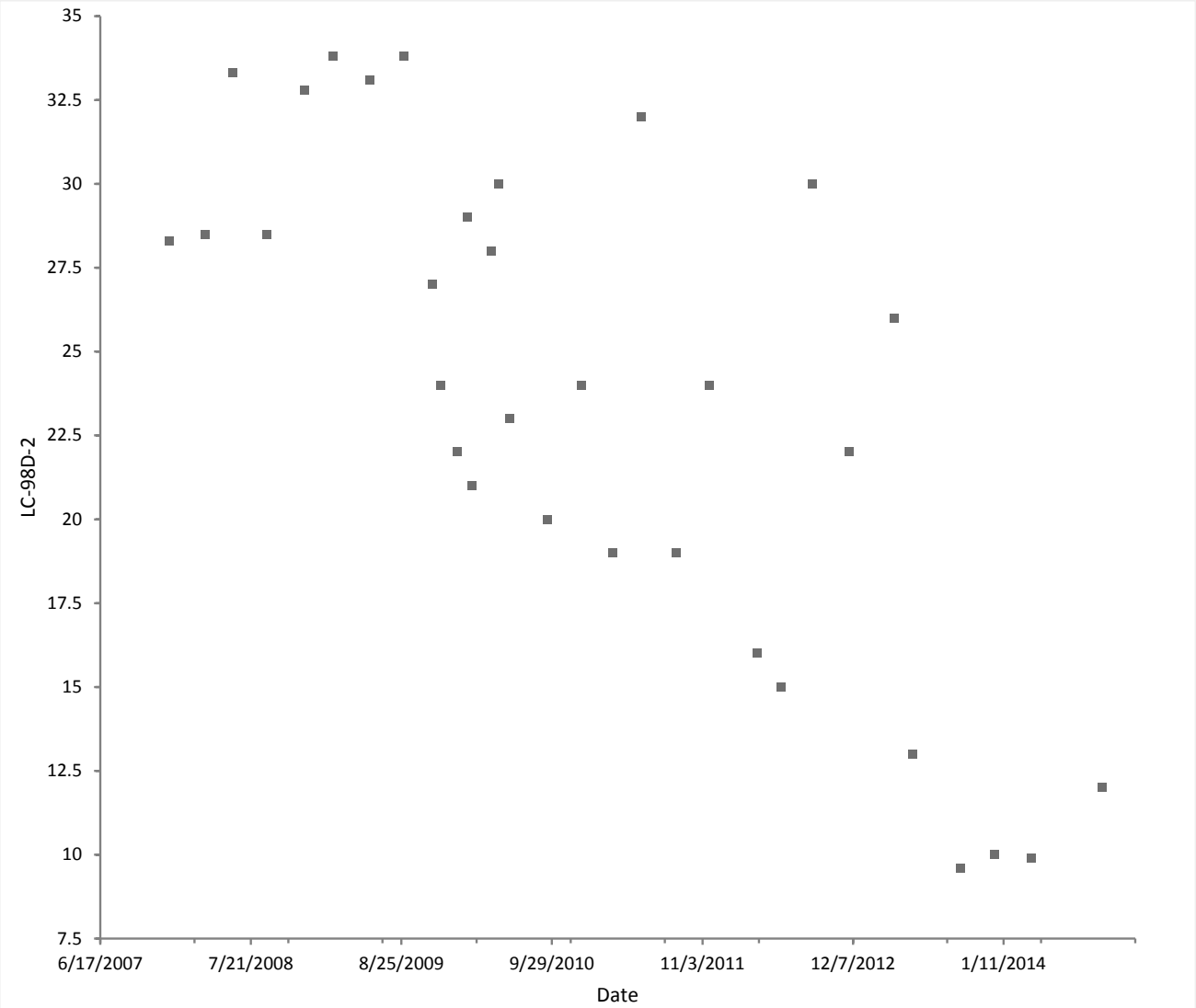

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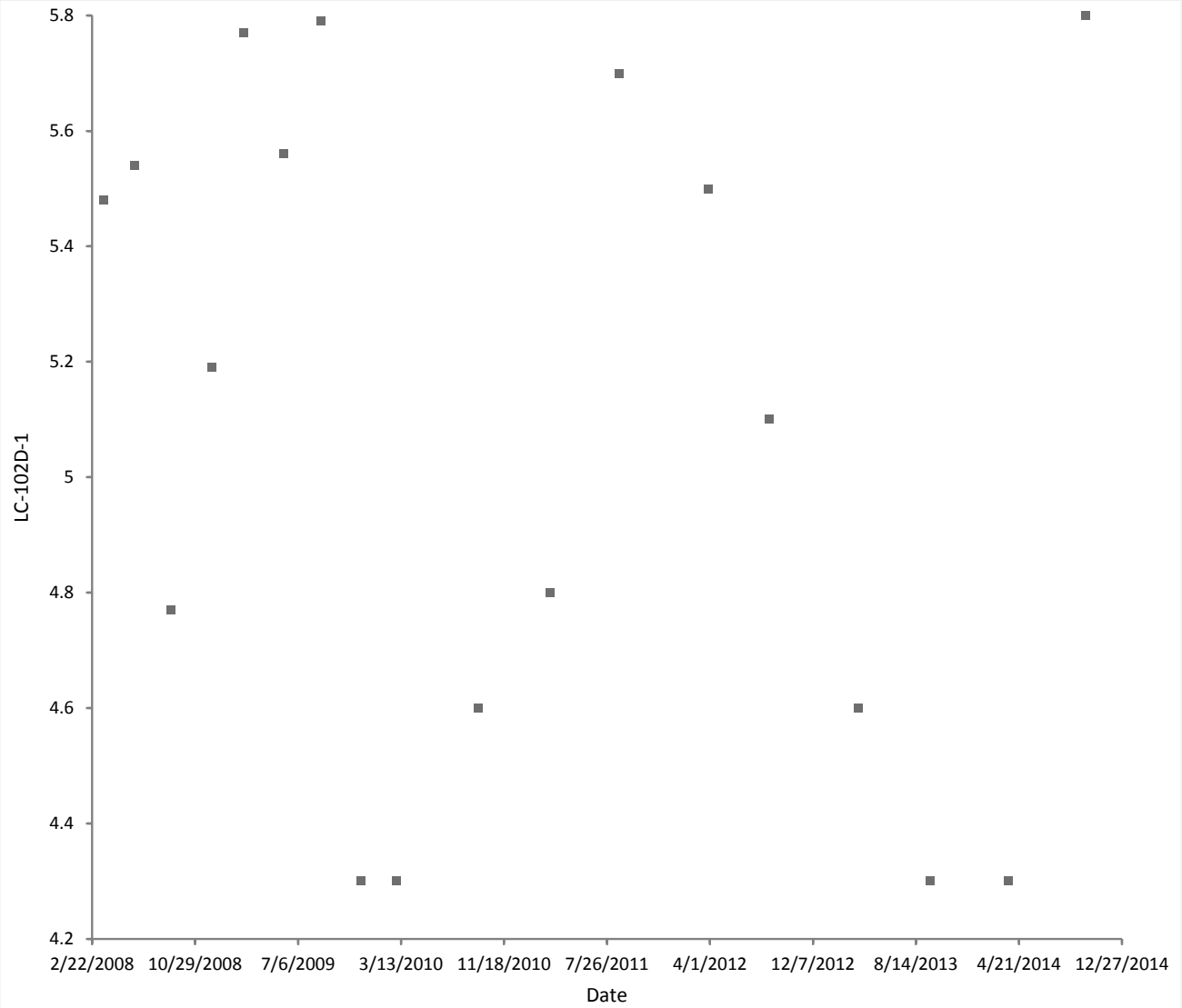

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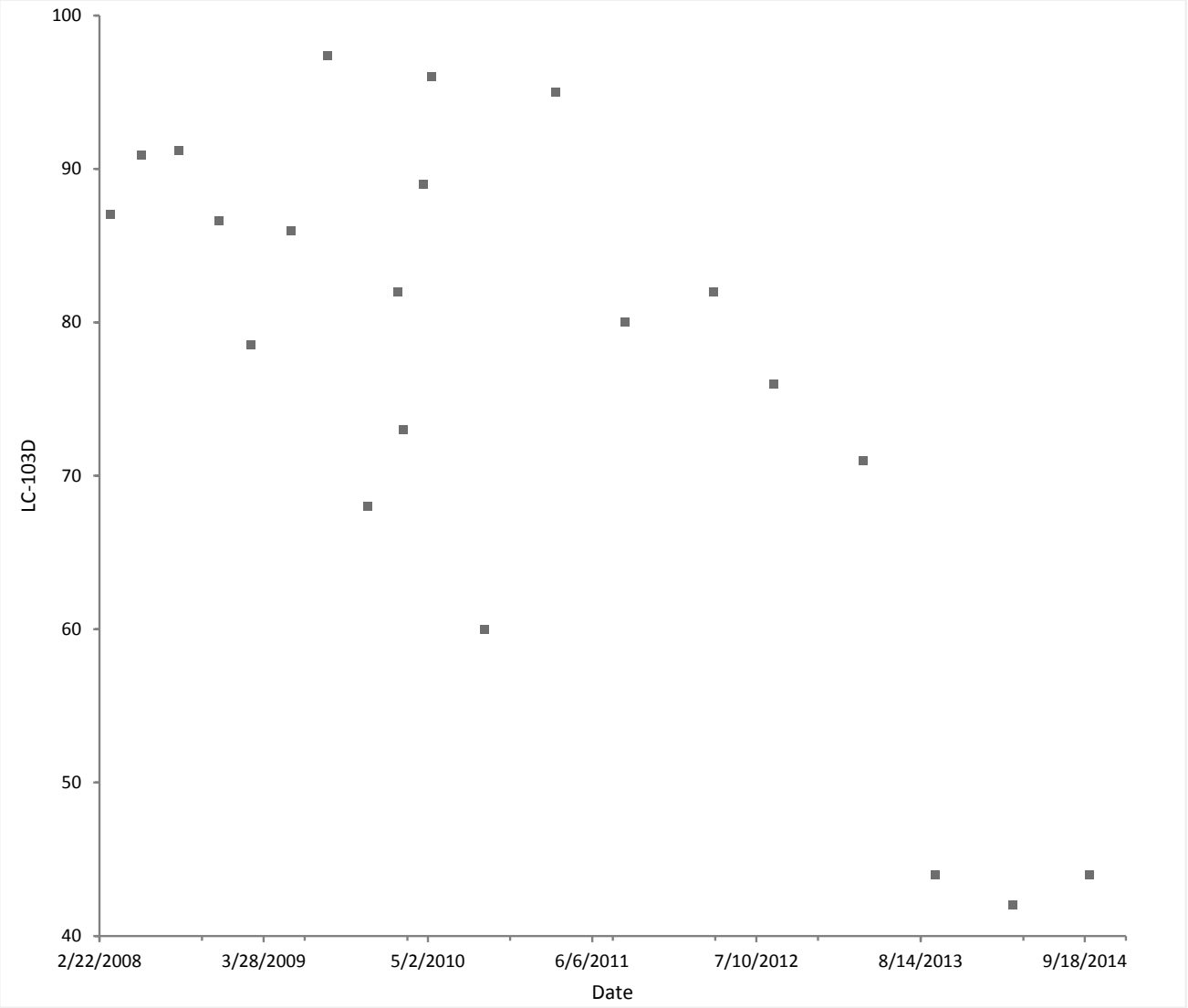

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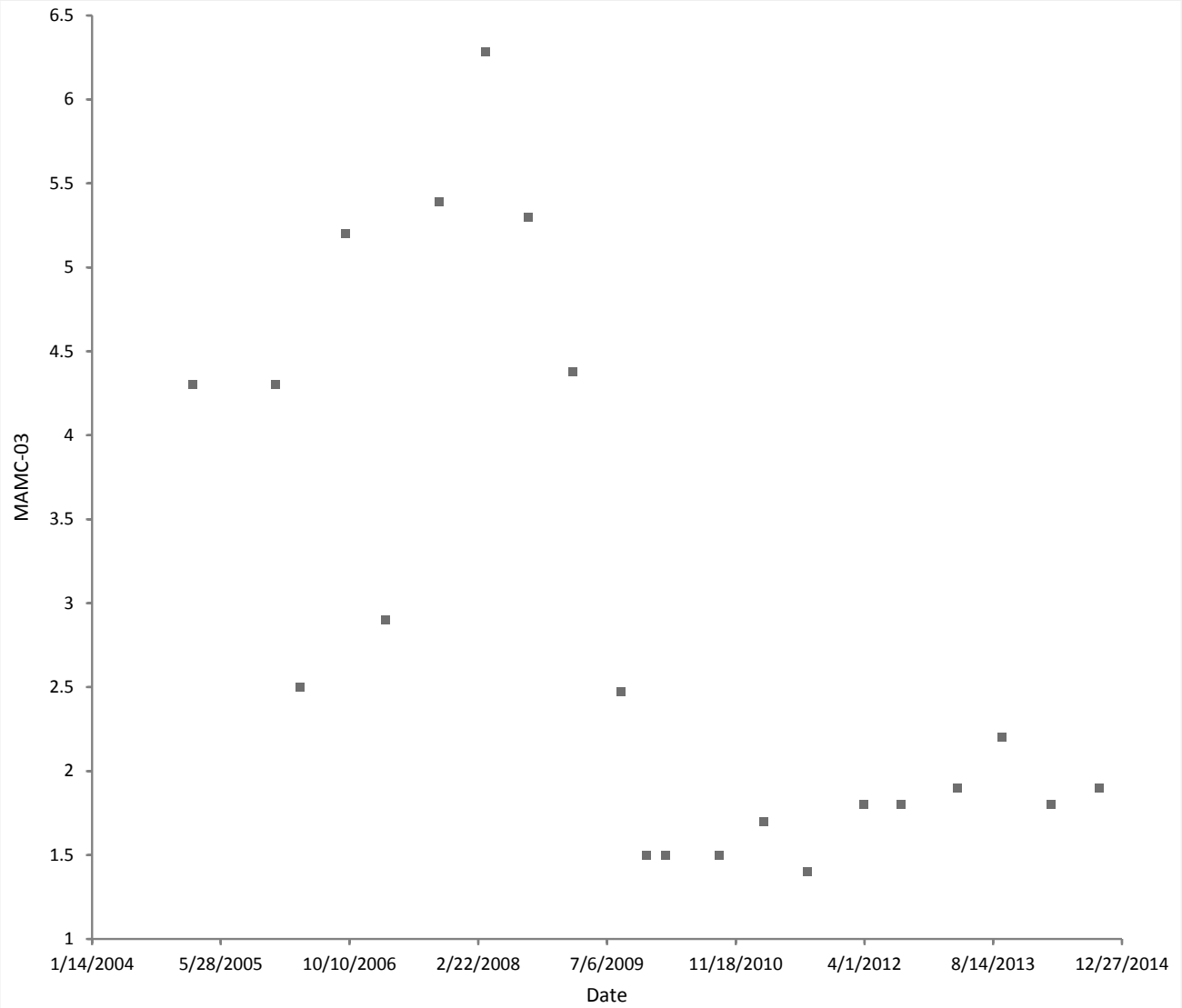

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Sea Level Aquifer Linear Regression Graphs
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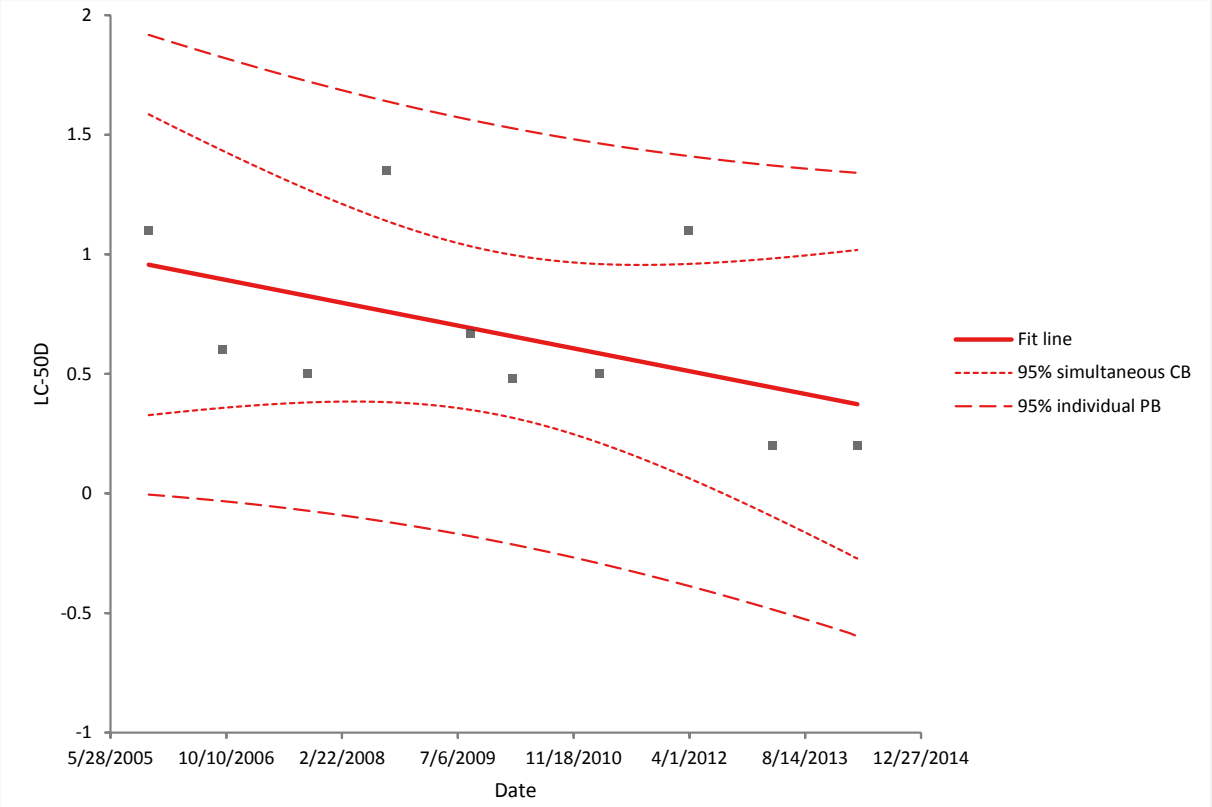

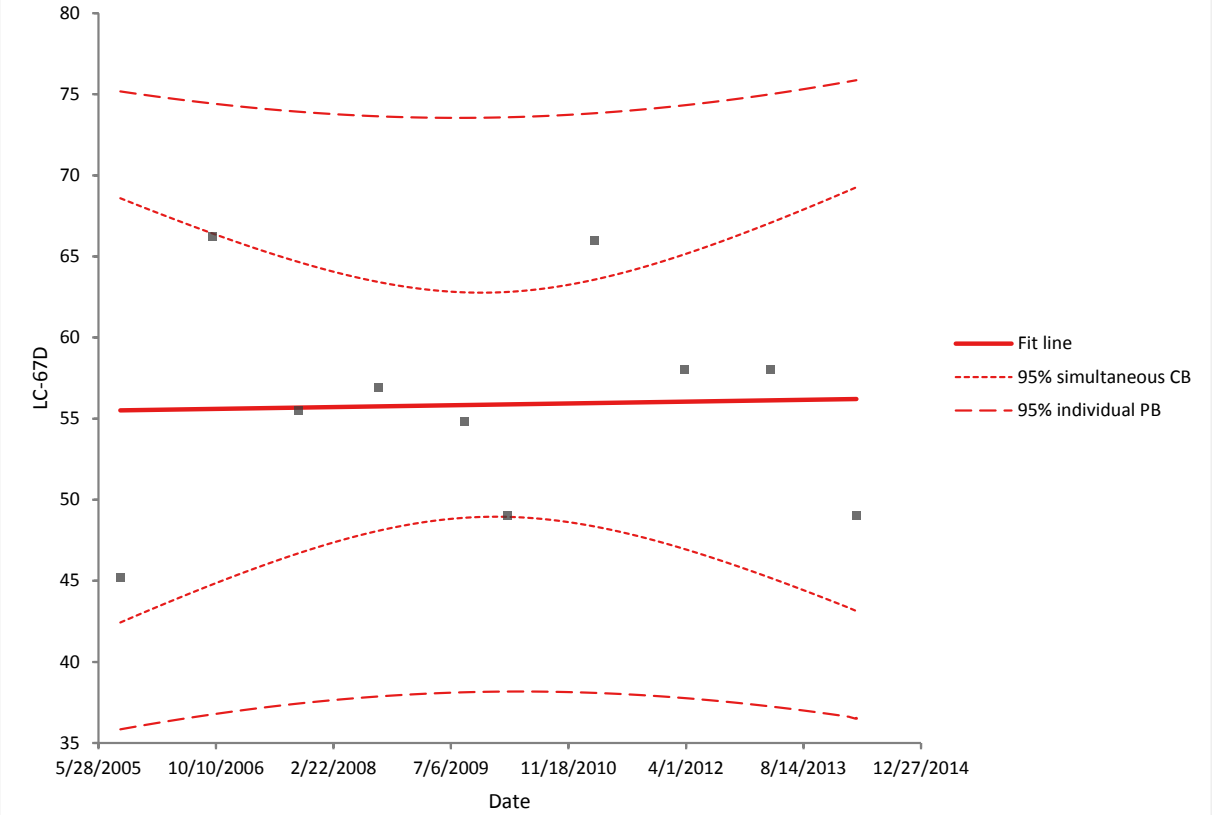

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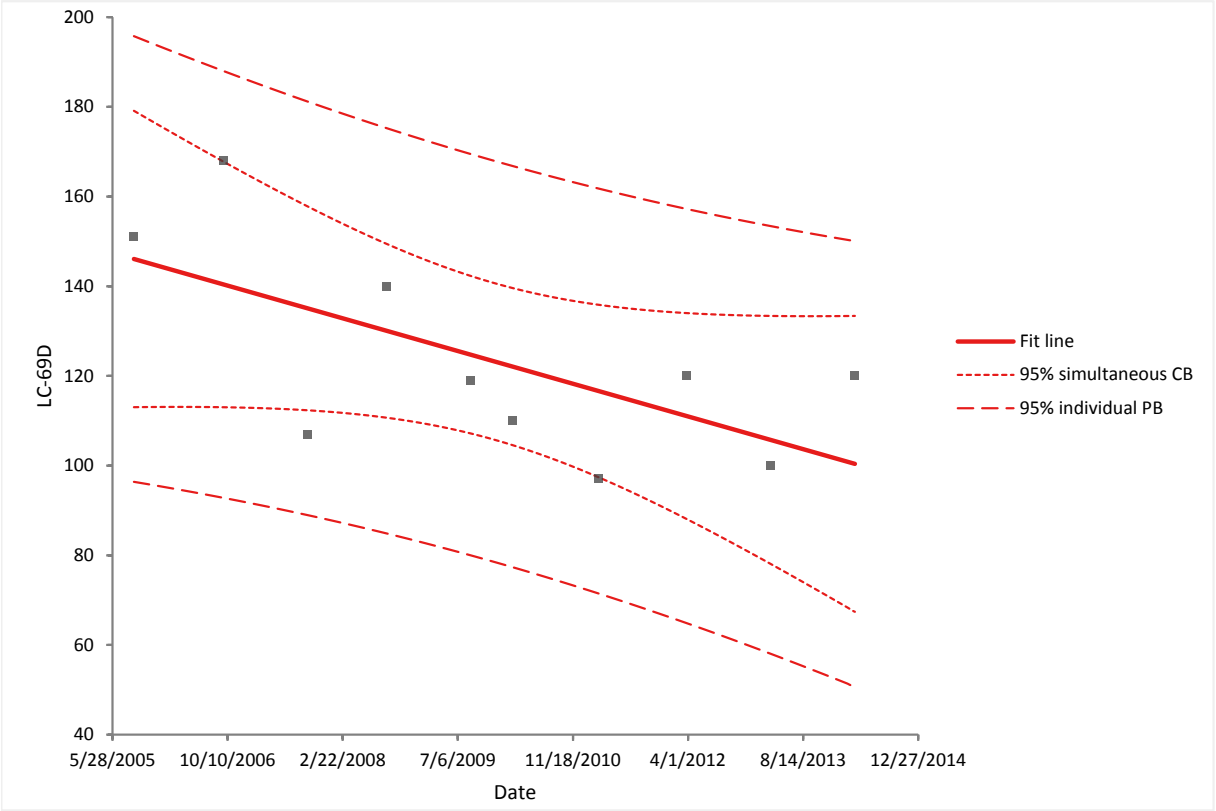

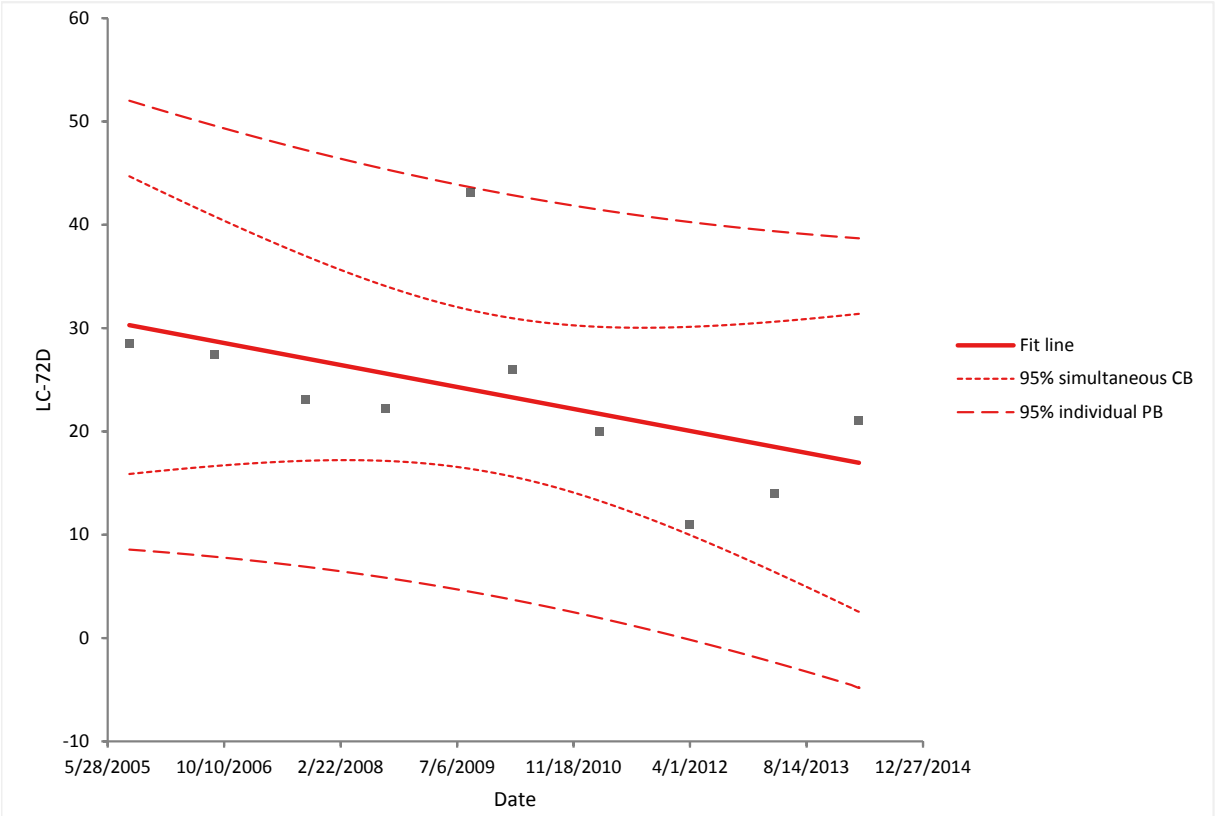

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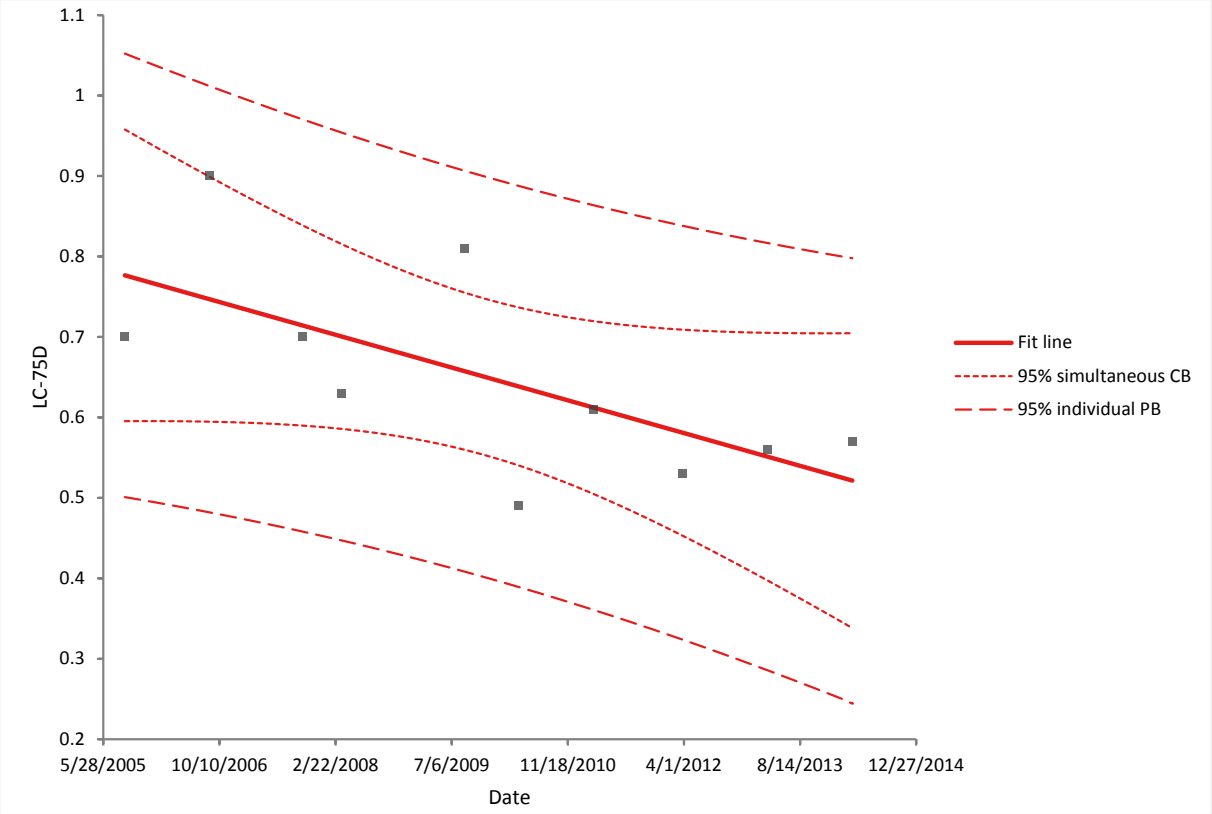

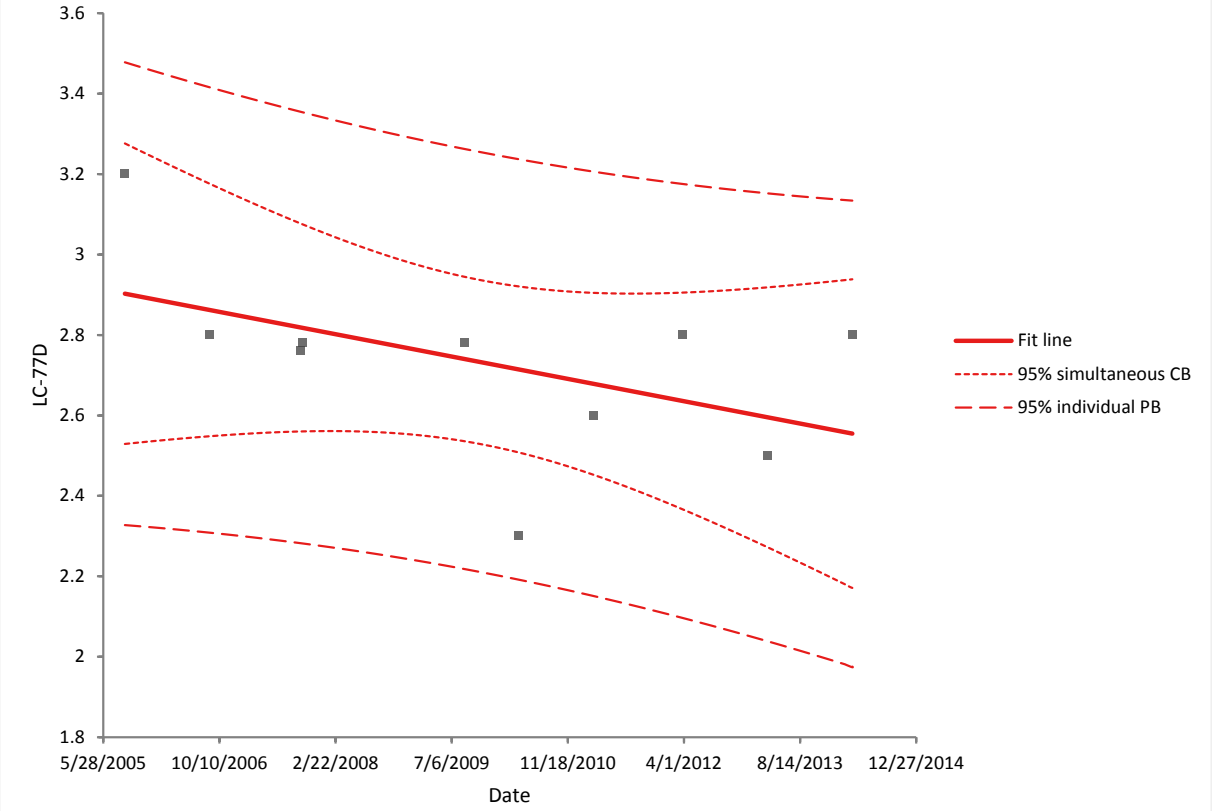

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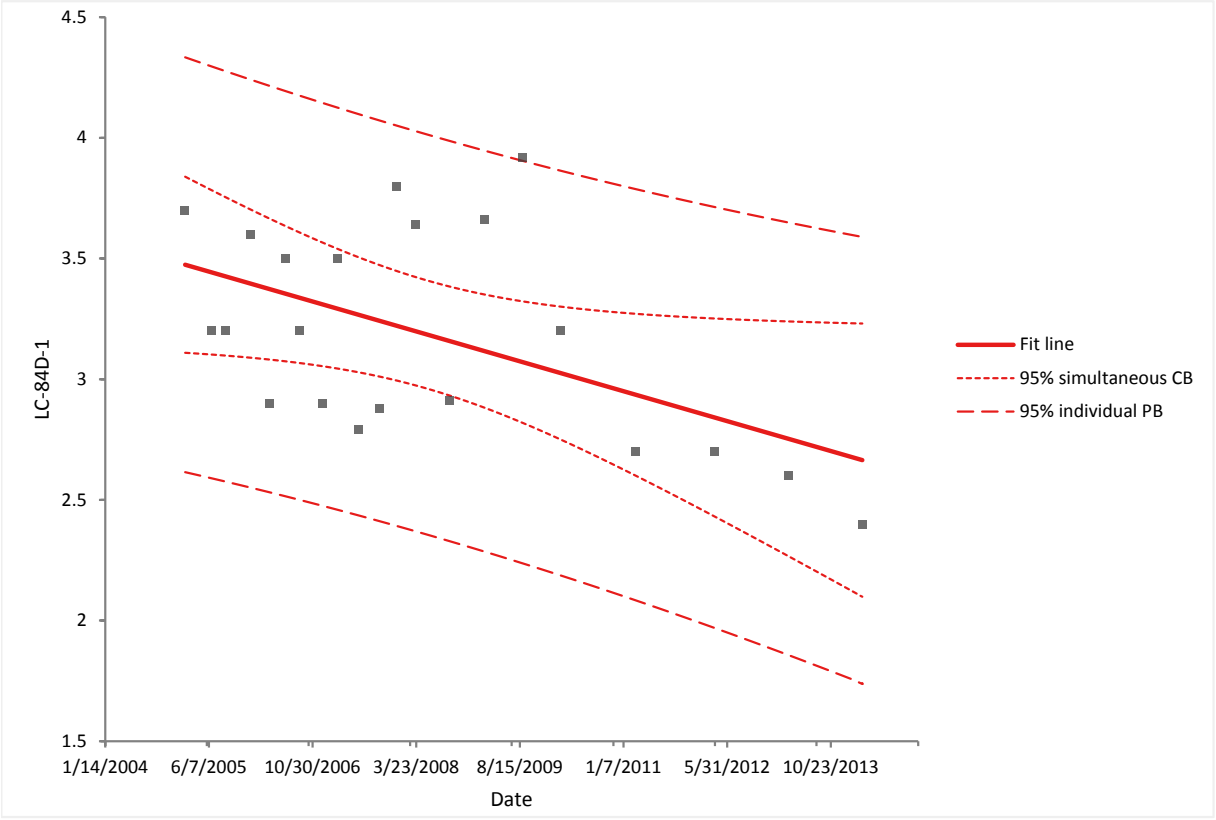

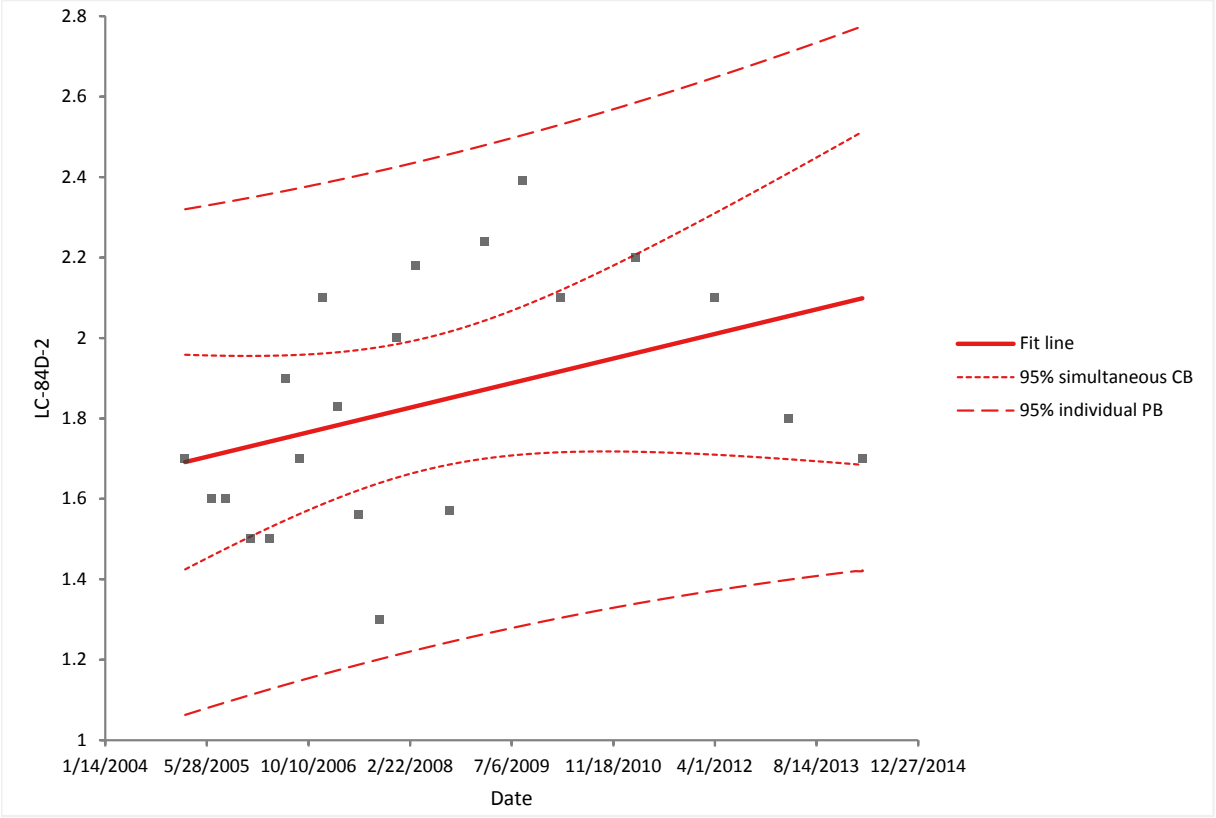

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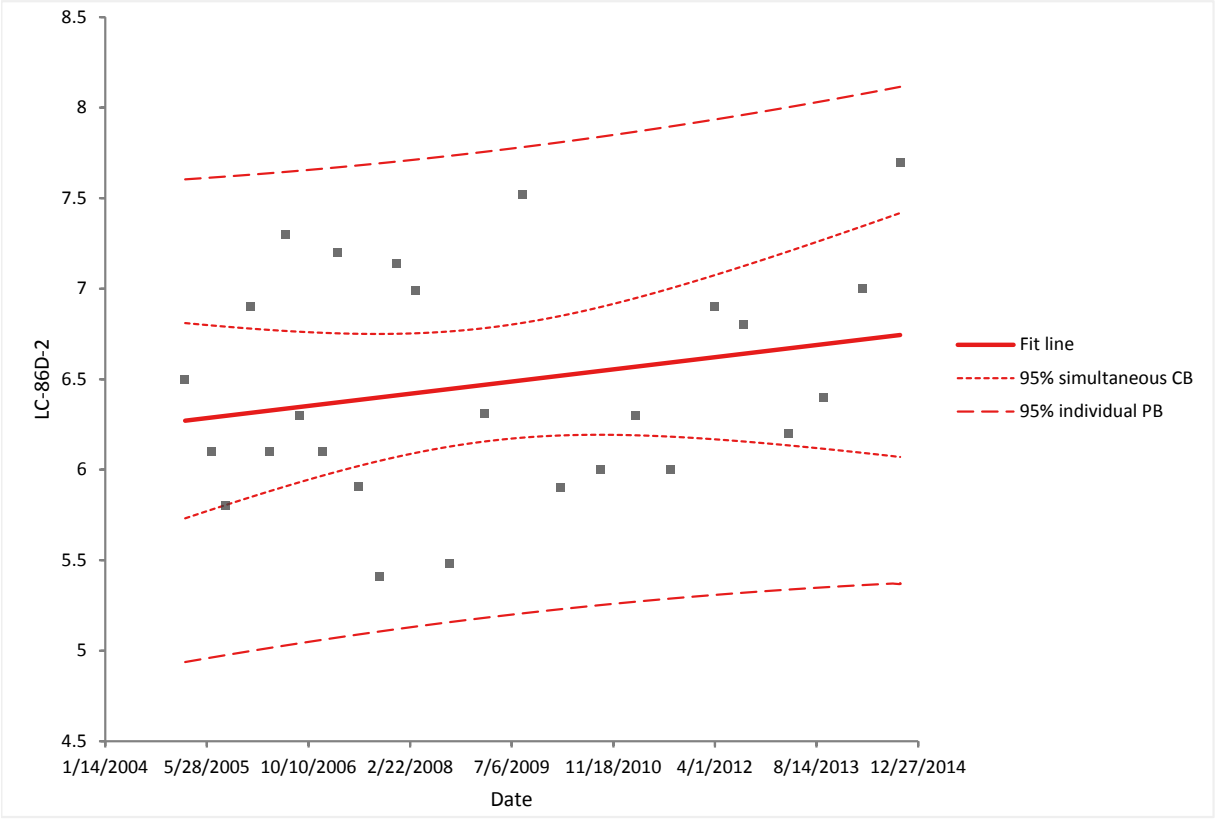

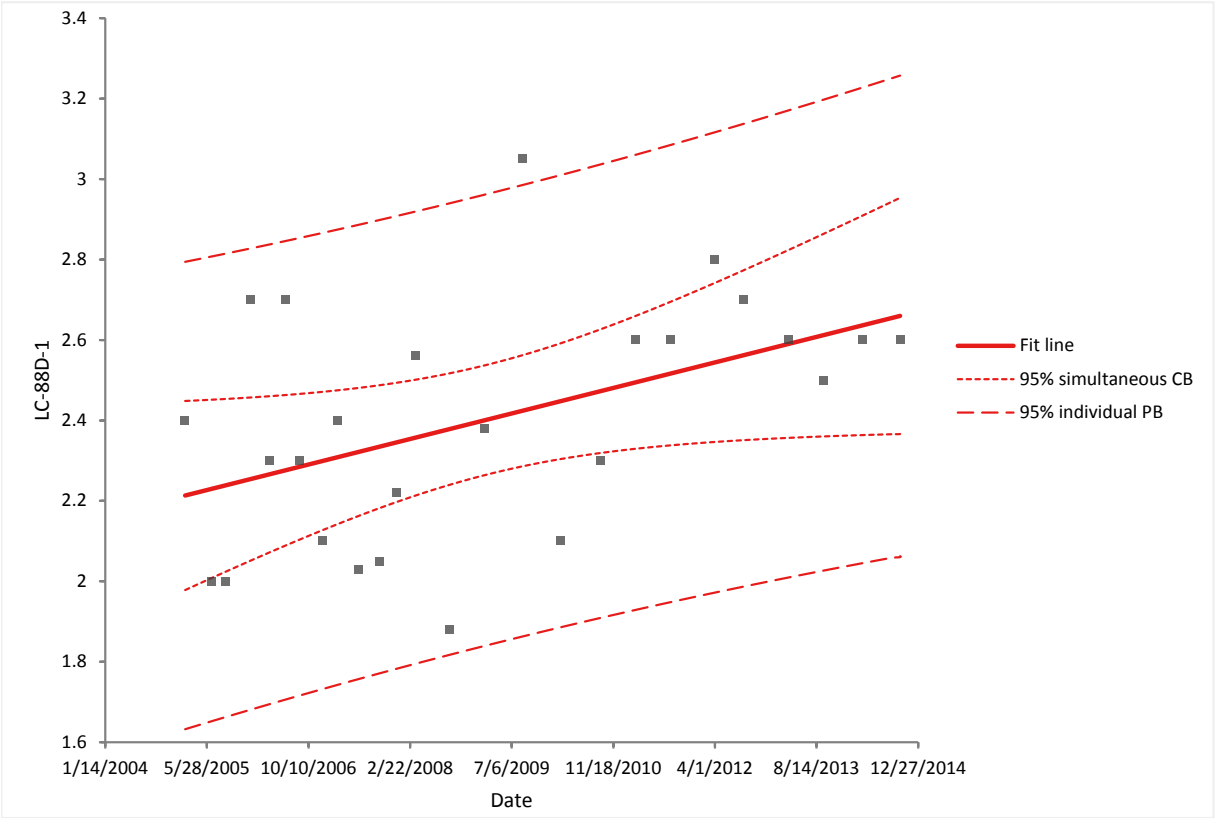

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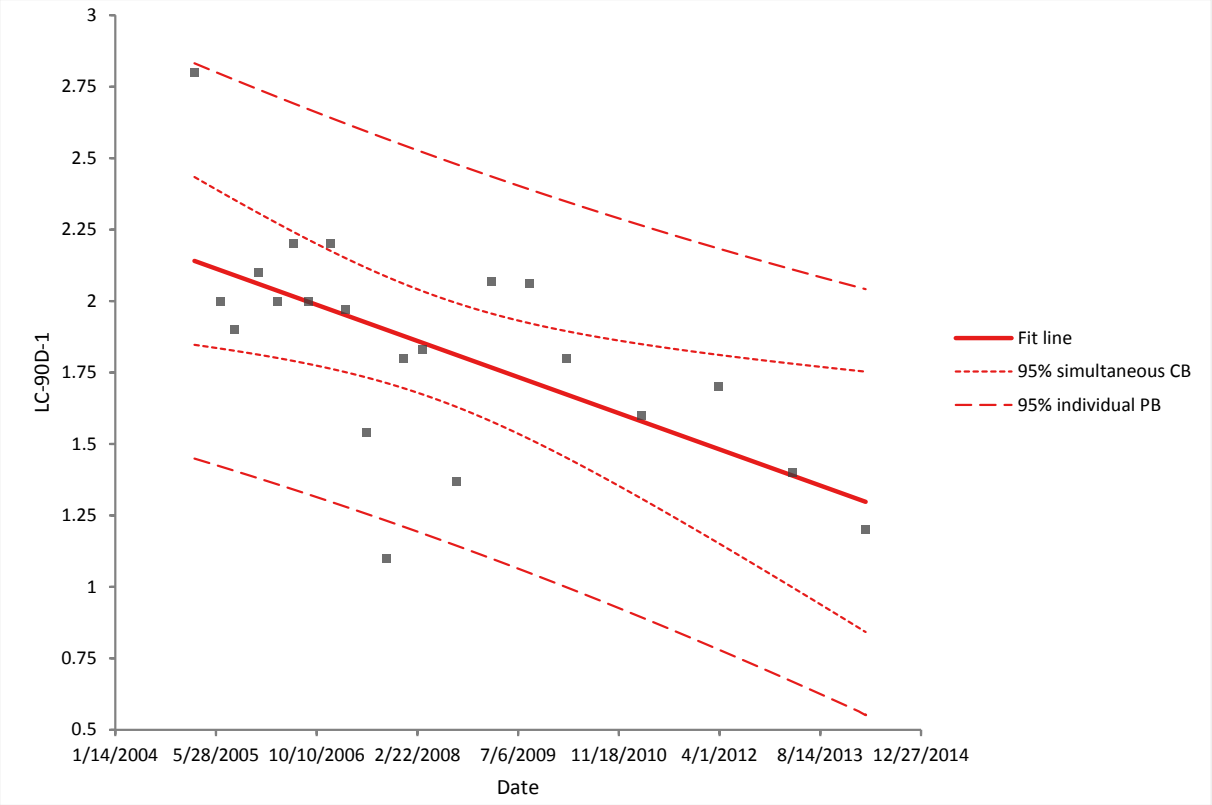

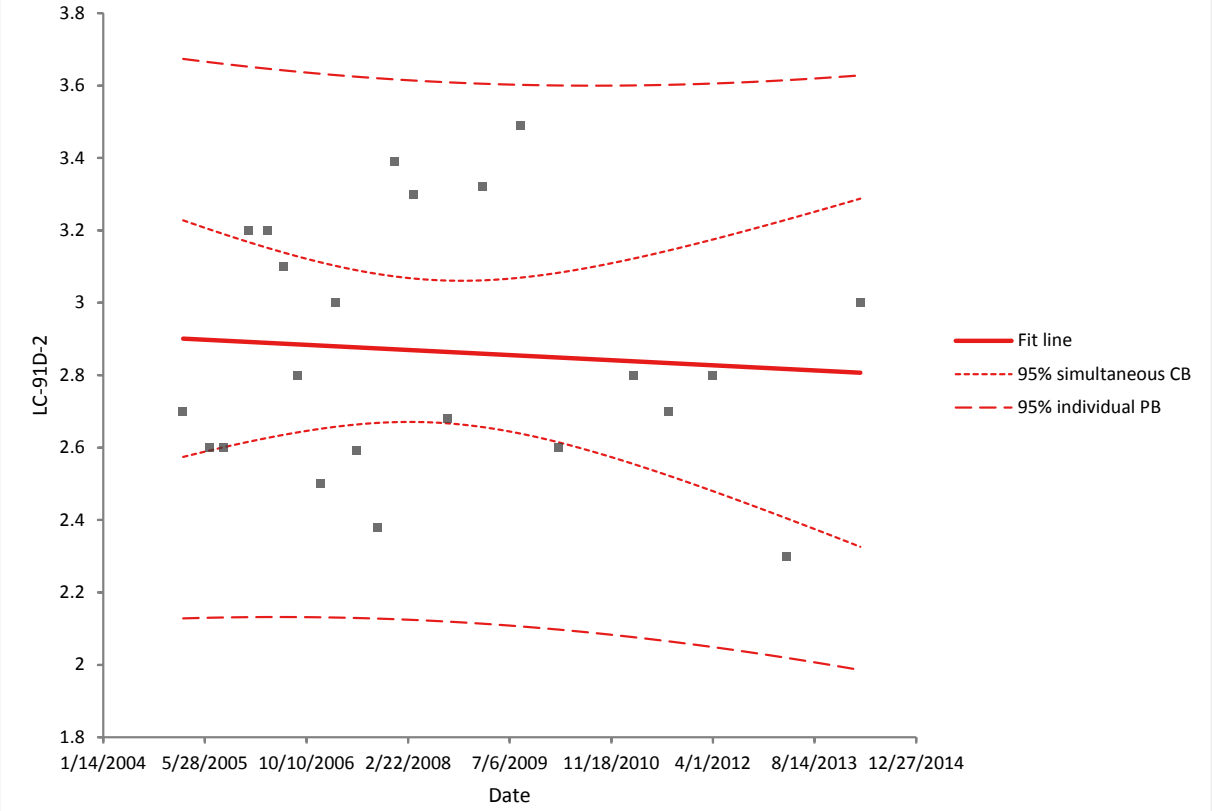

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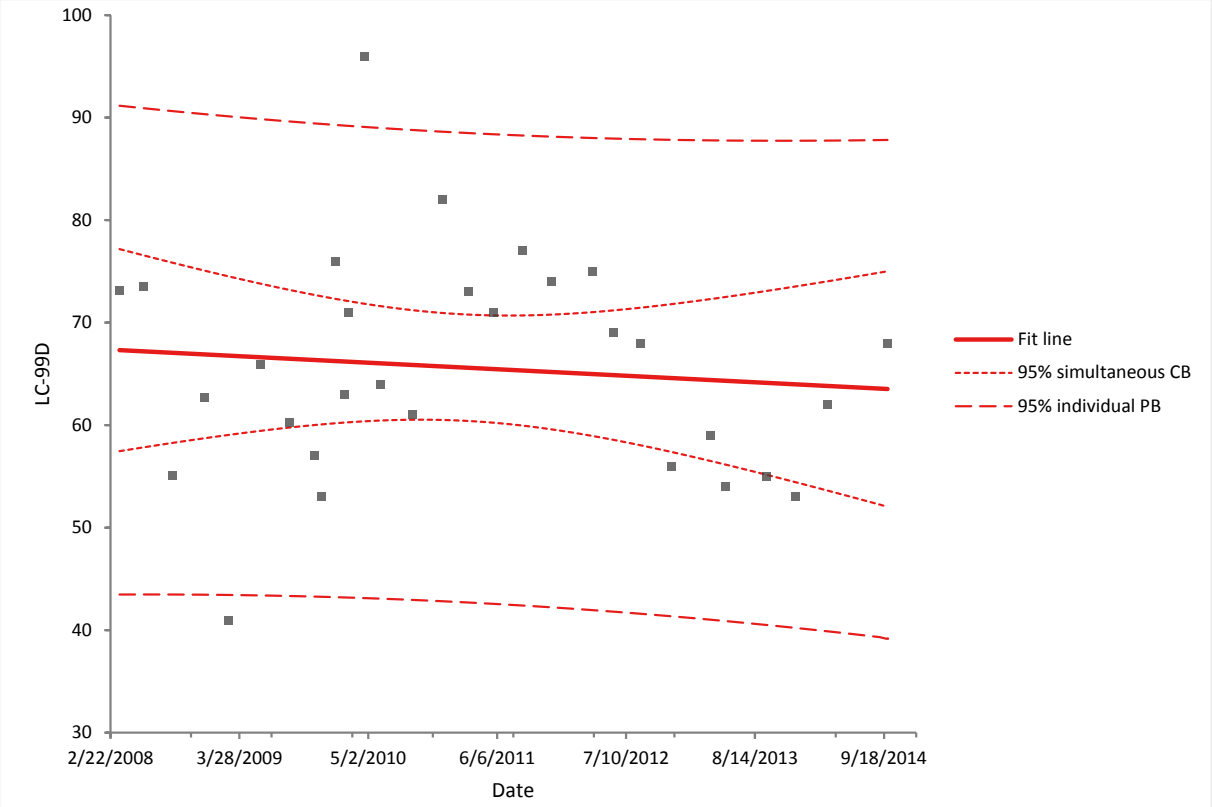

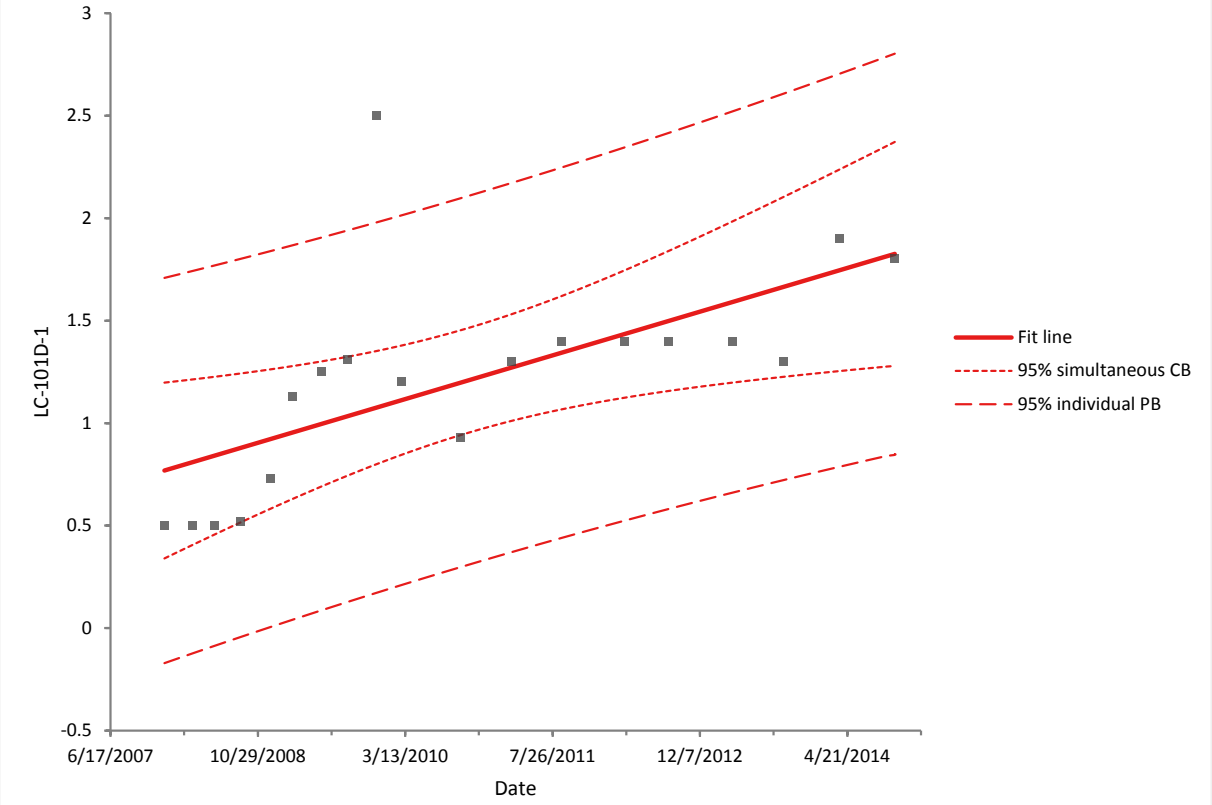

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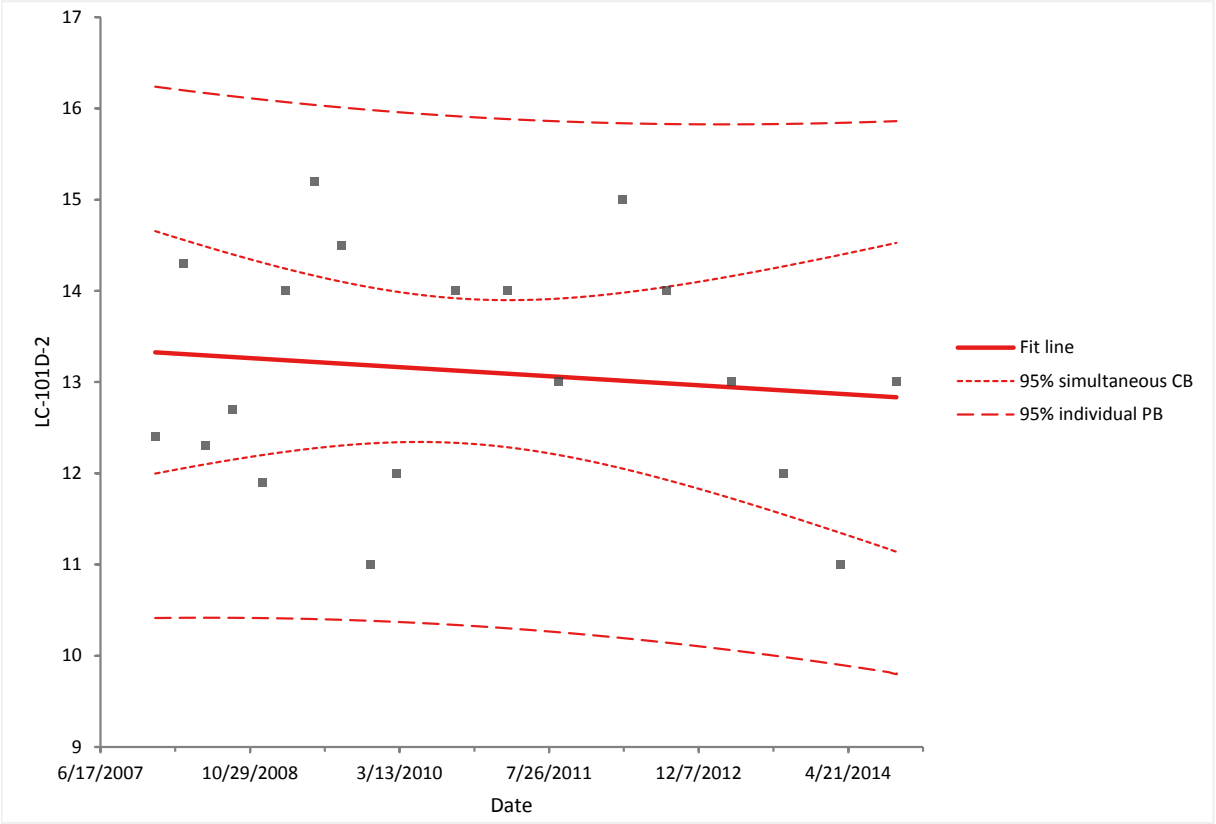

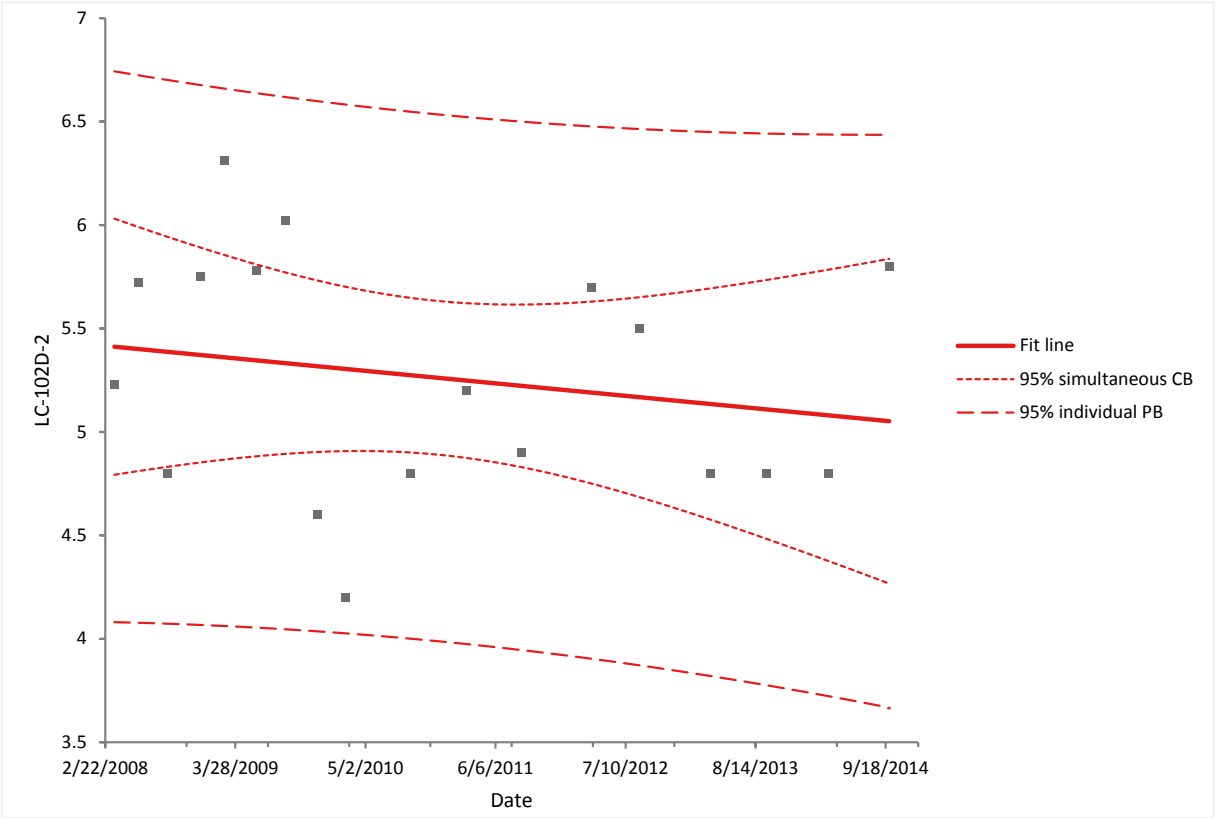

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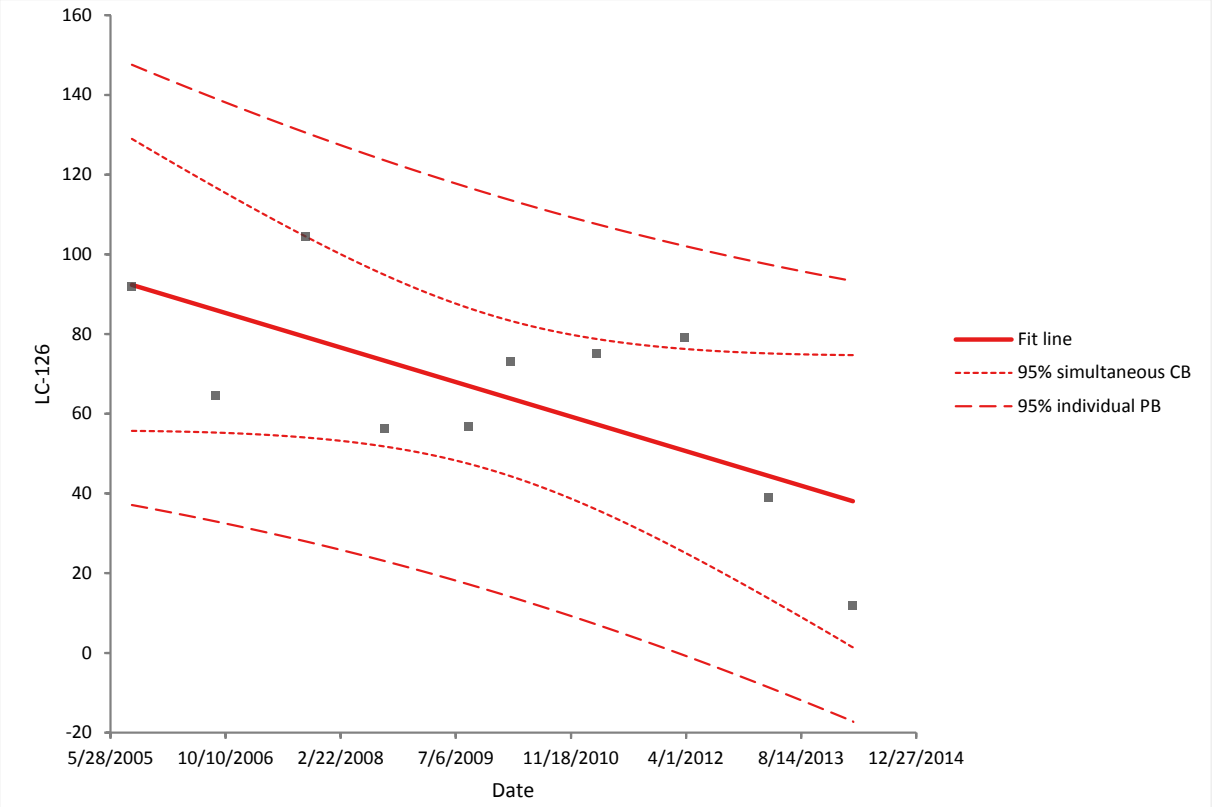

Appendix F - Log RAM Statistics 2005 - 2014
Upper Vashon Aquifer Descriptive Statistics Histograms
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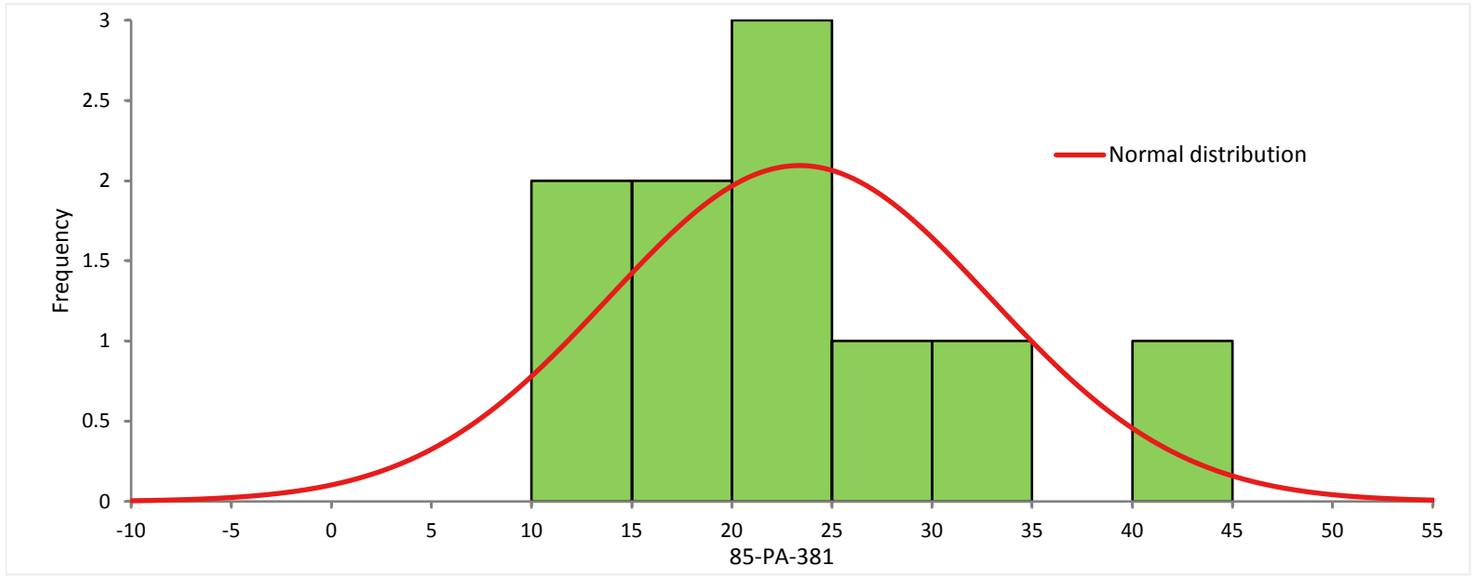

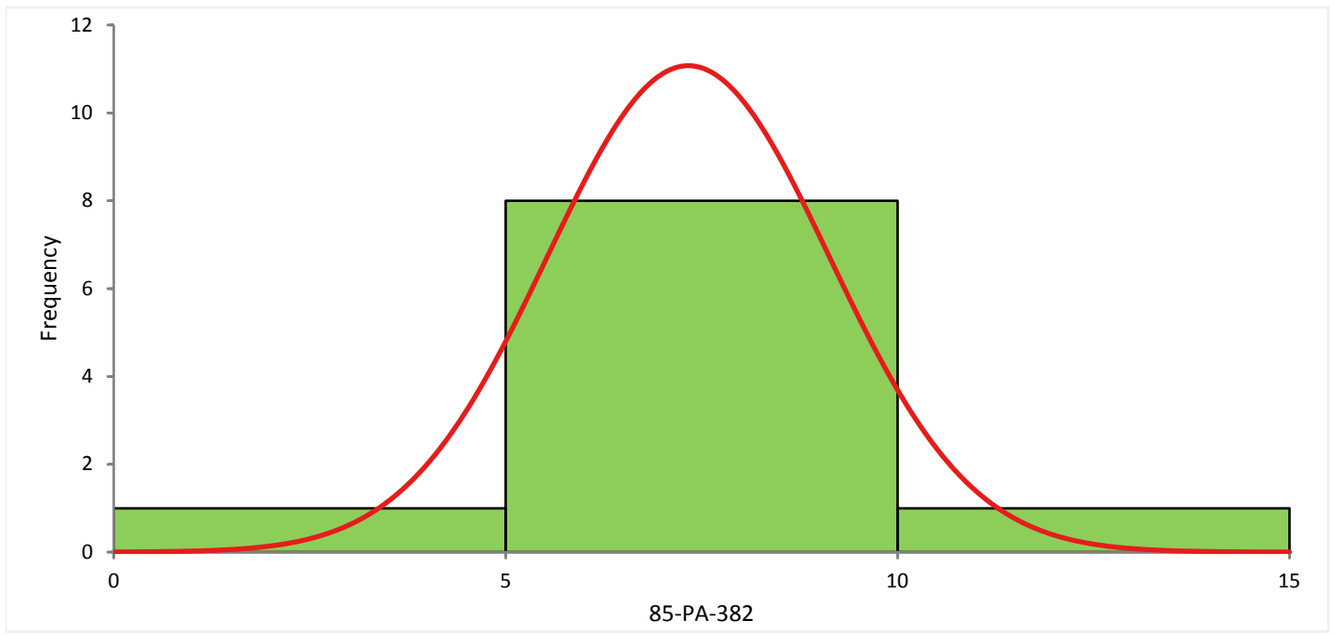

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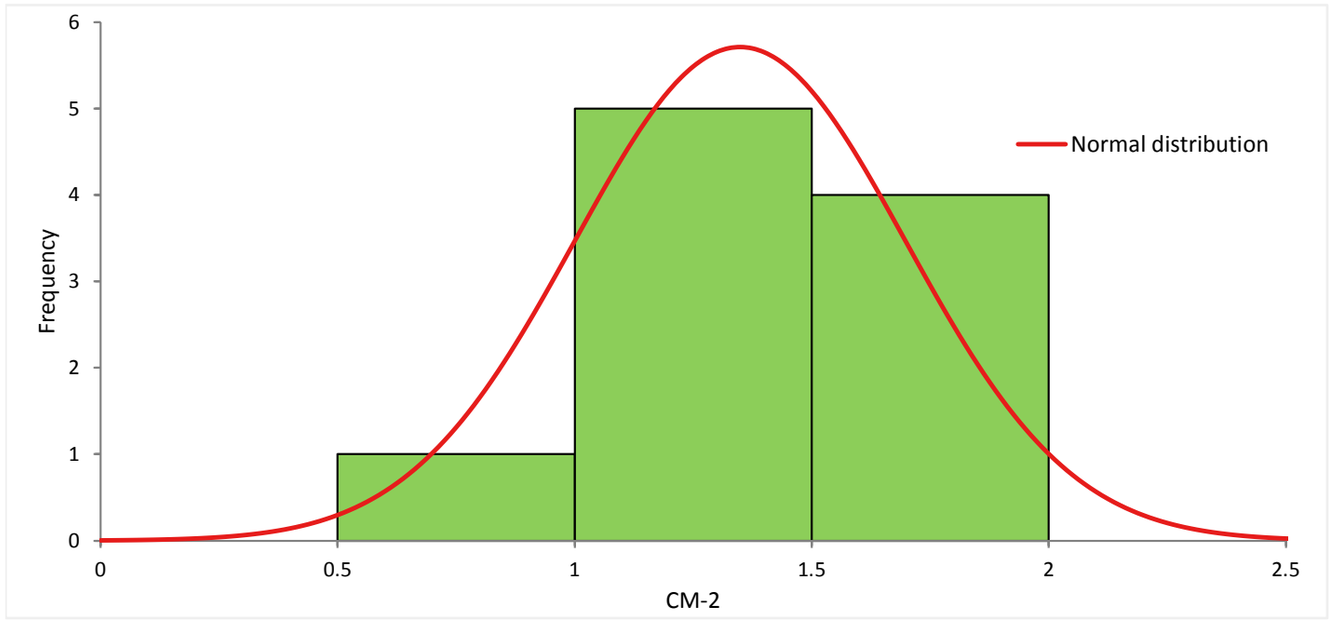

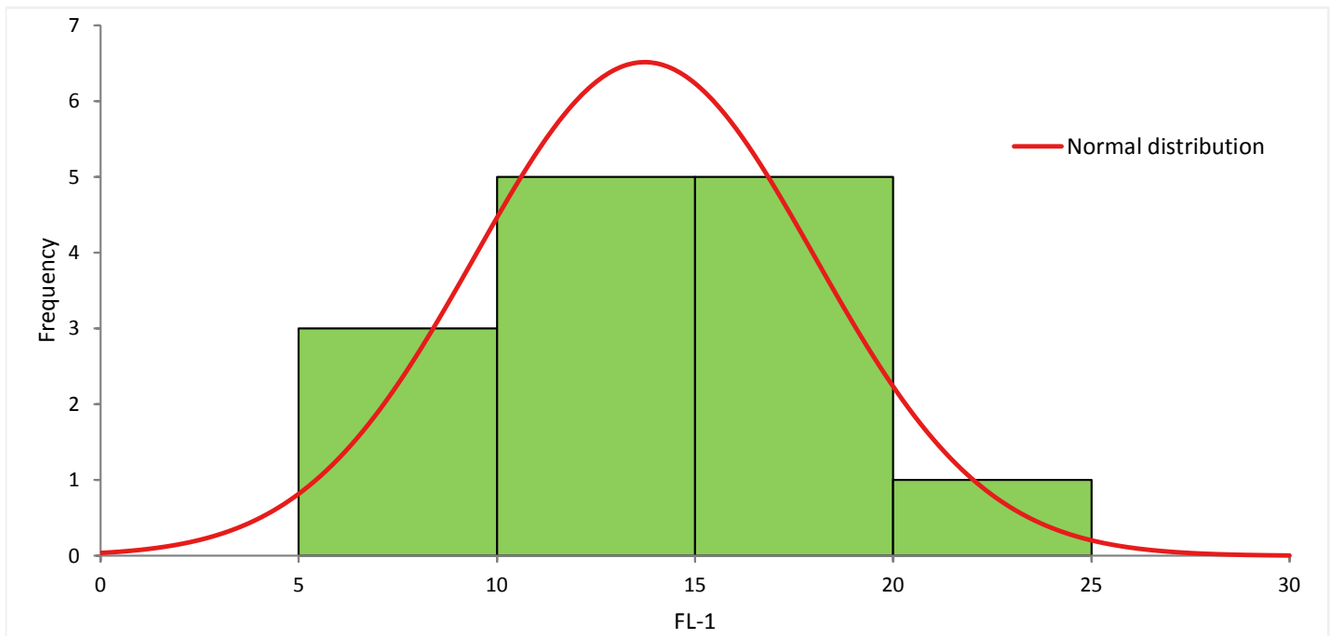

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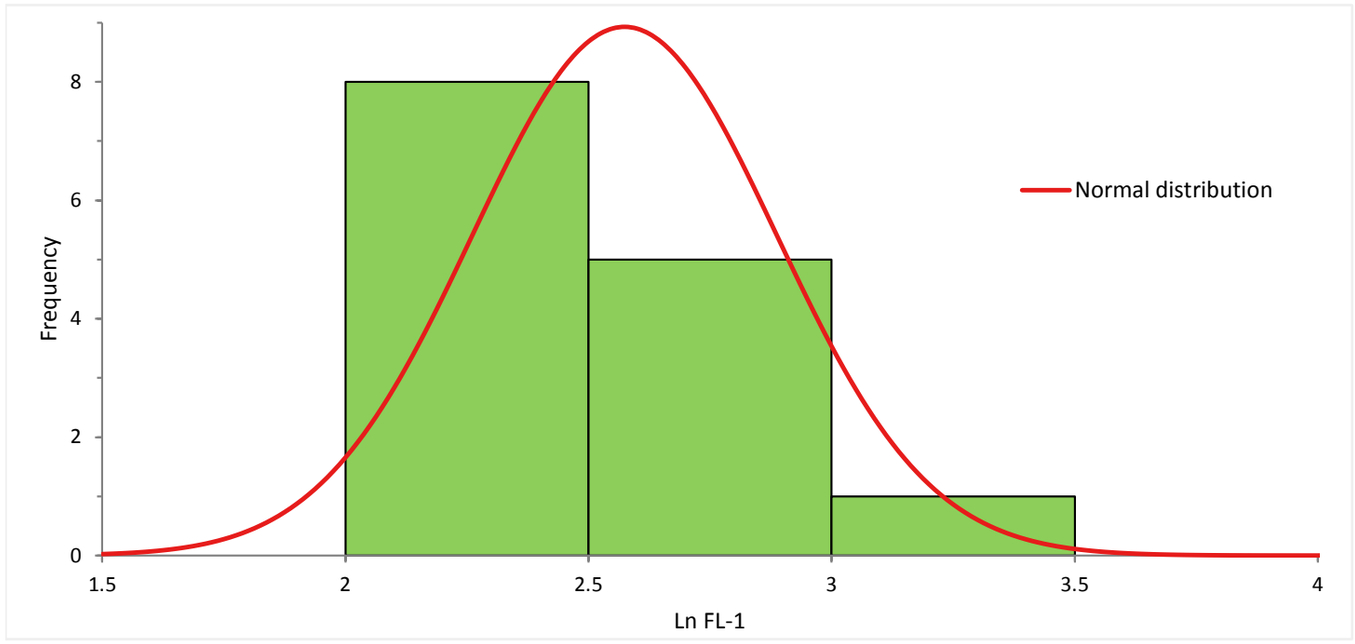

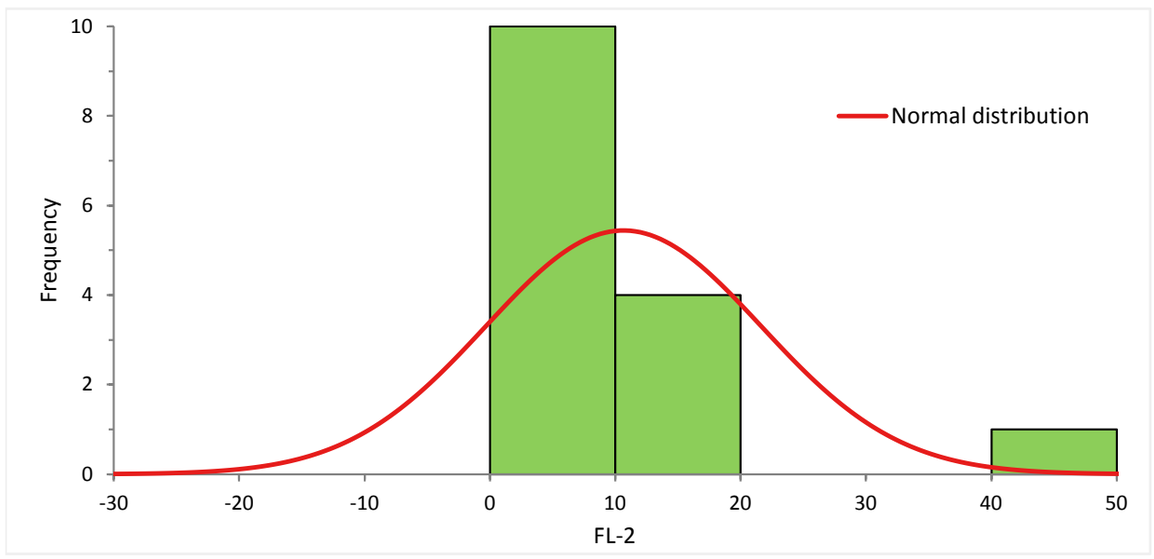

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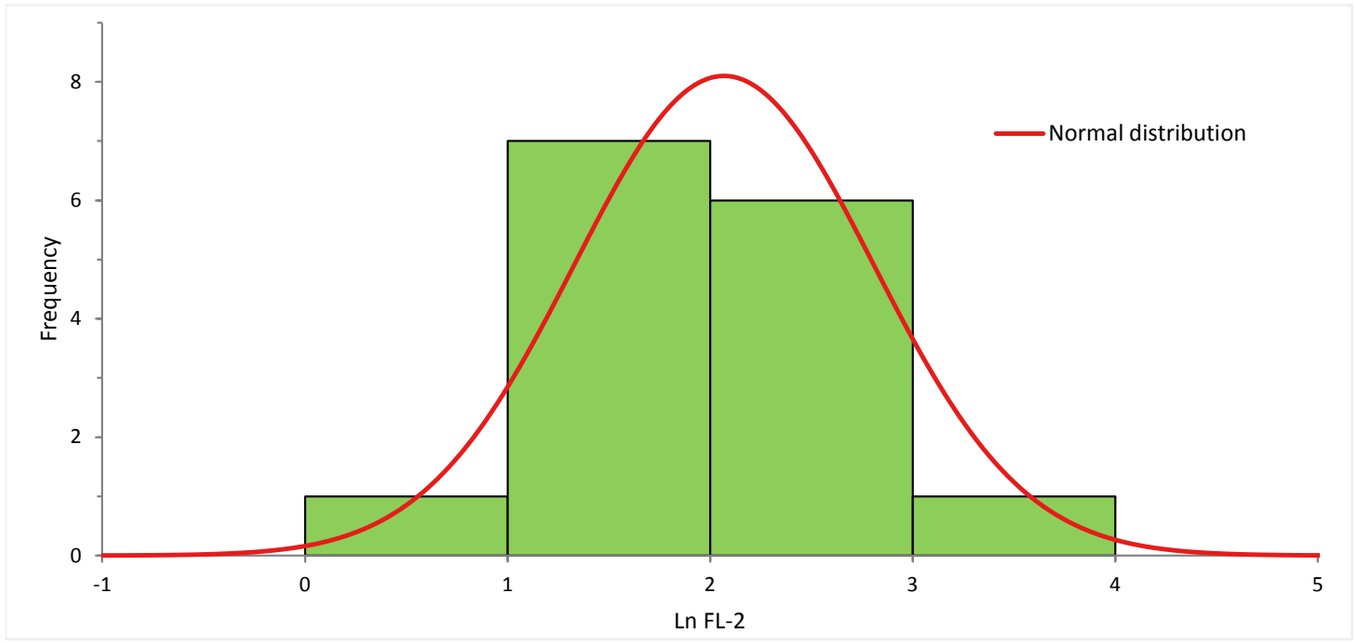

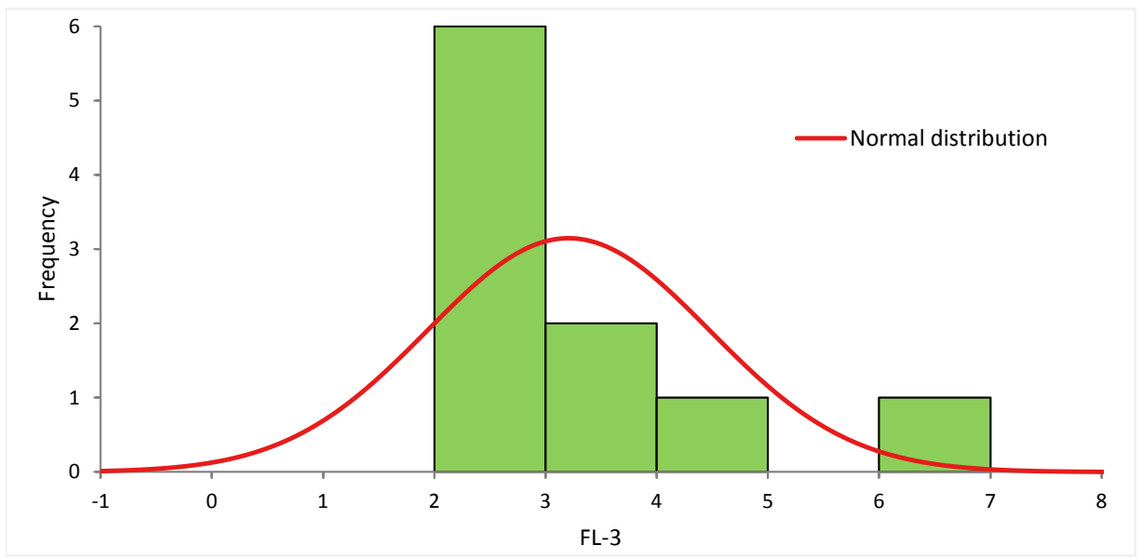

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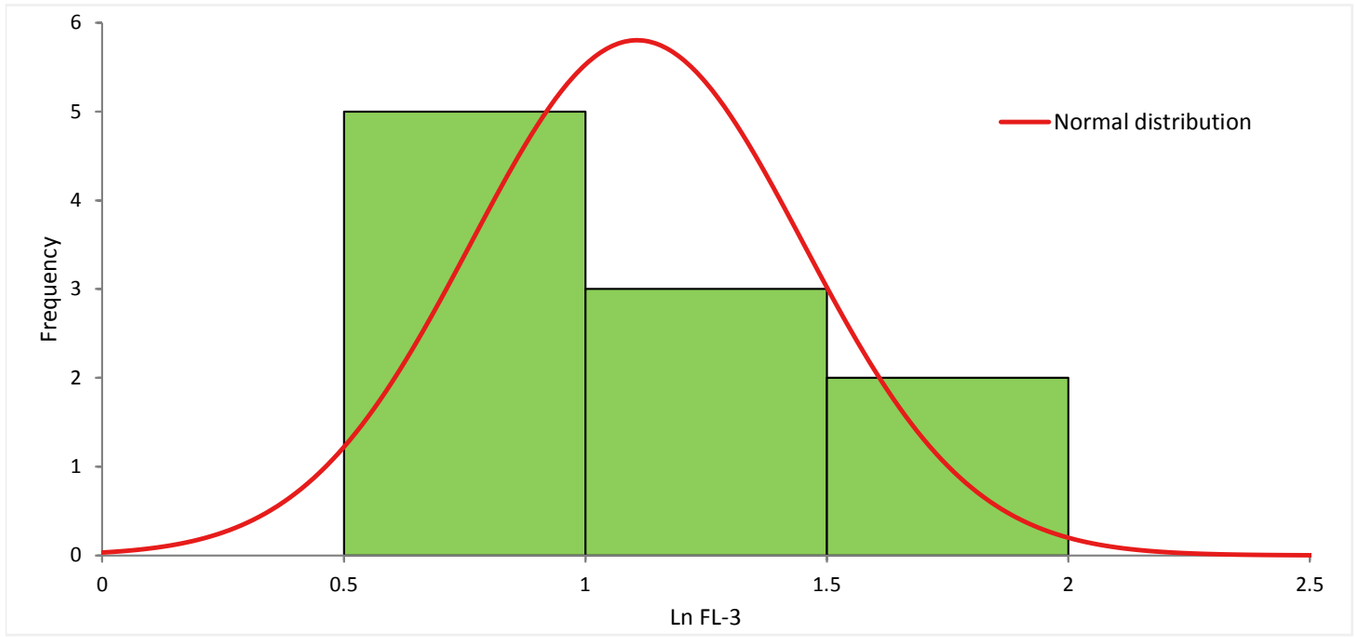

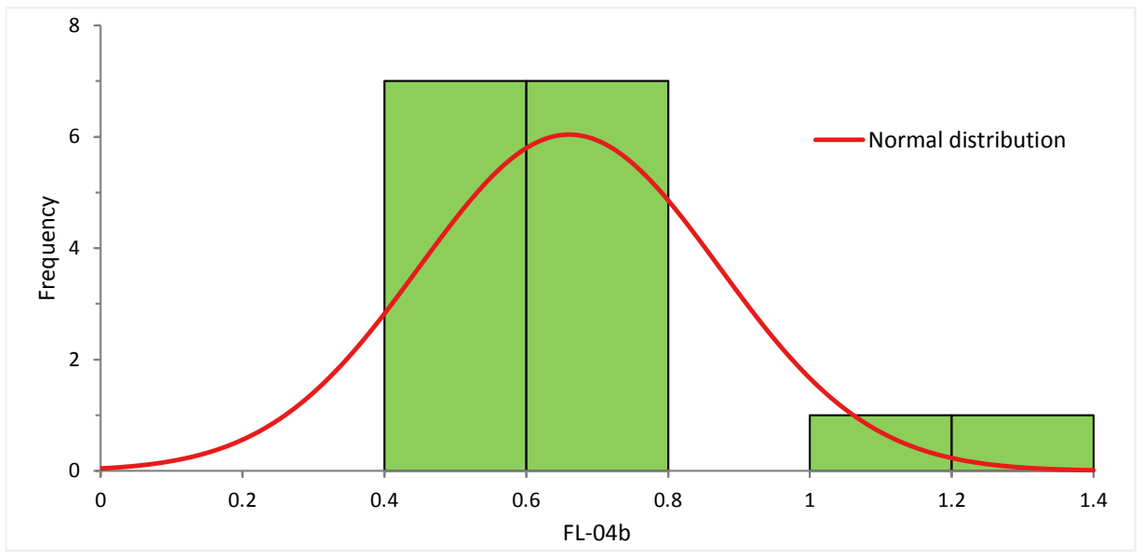

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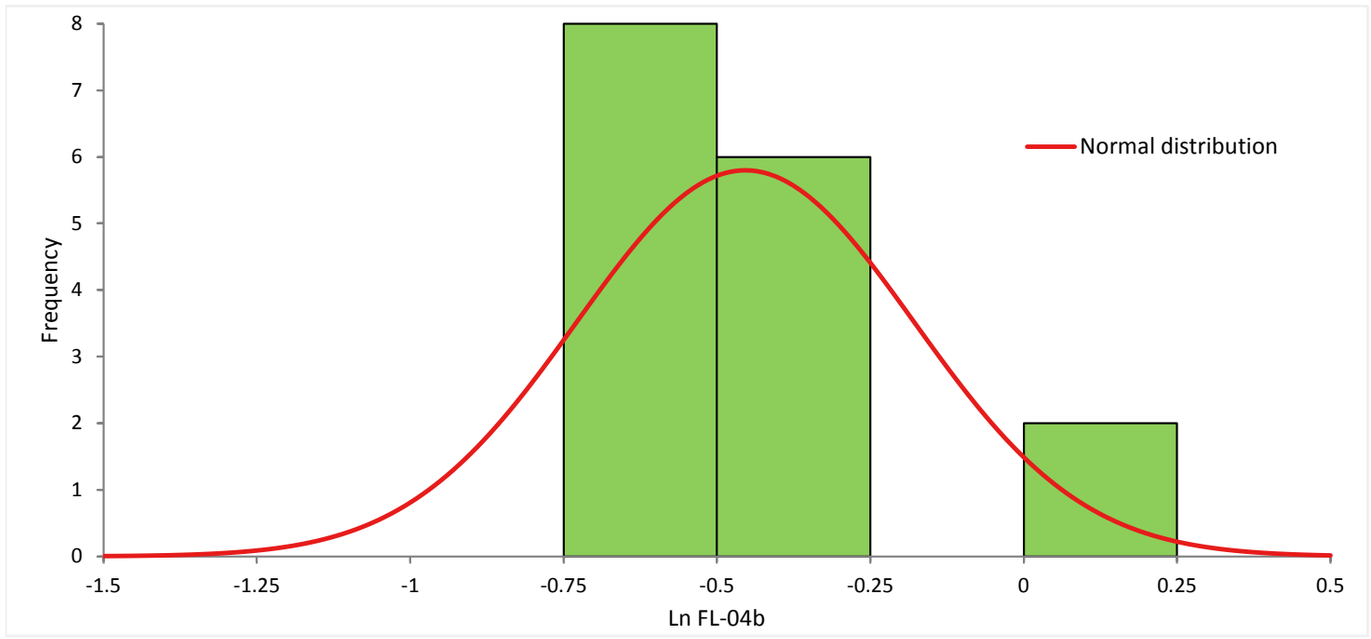

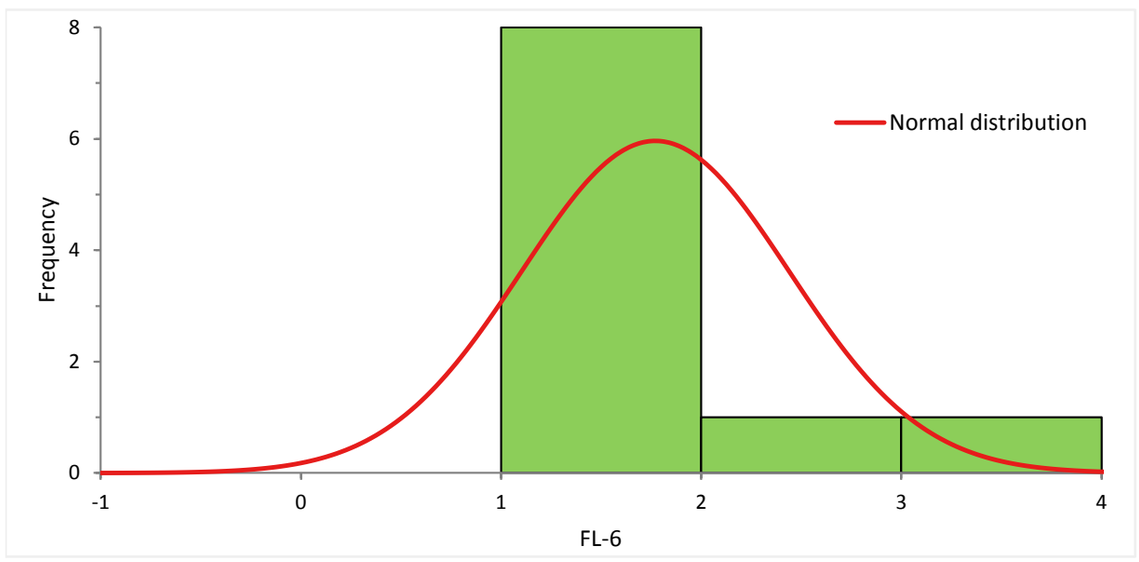

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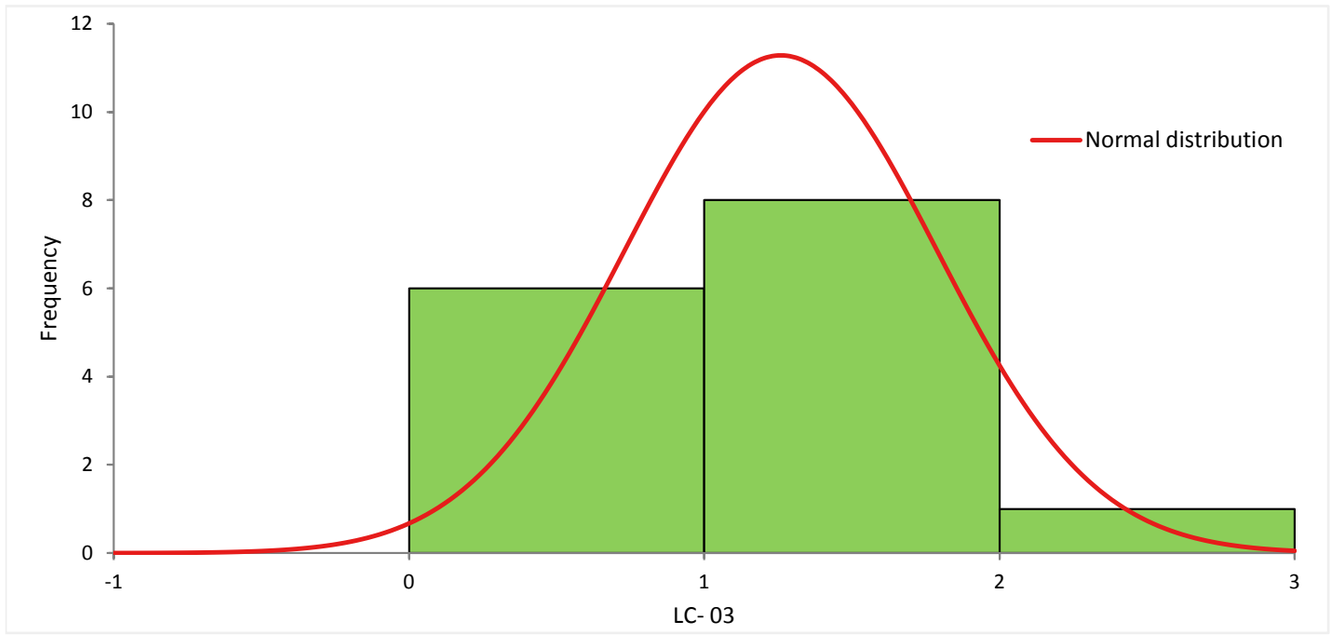

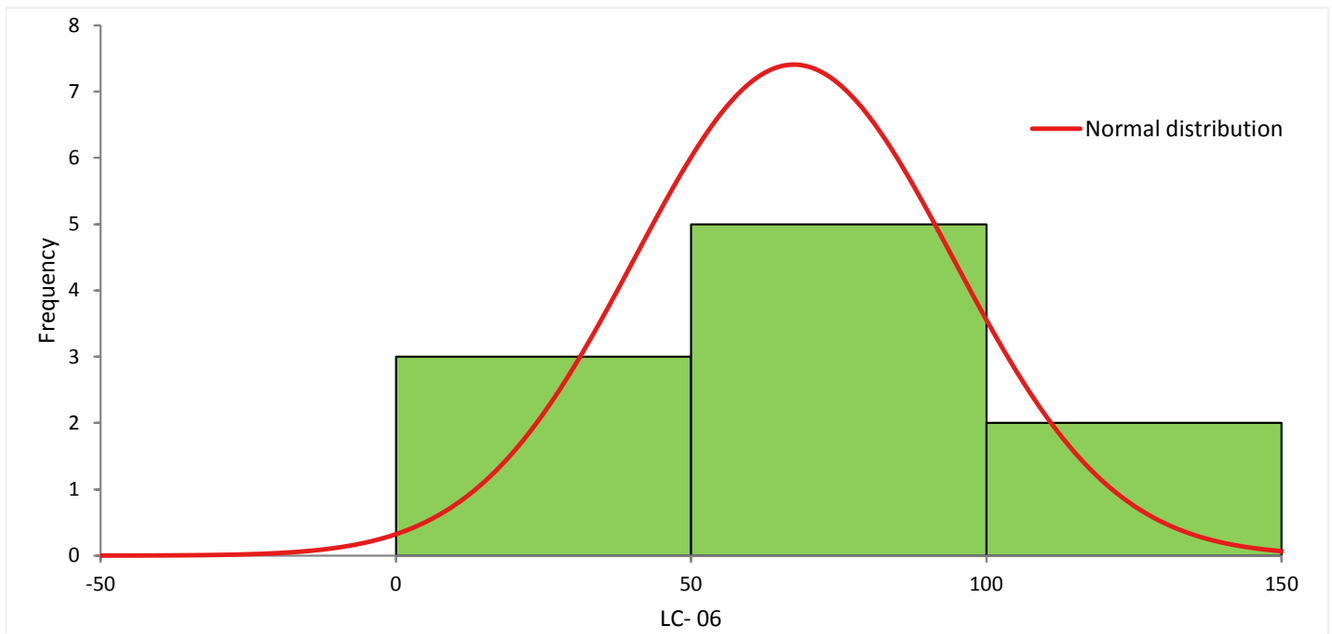

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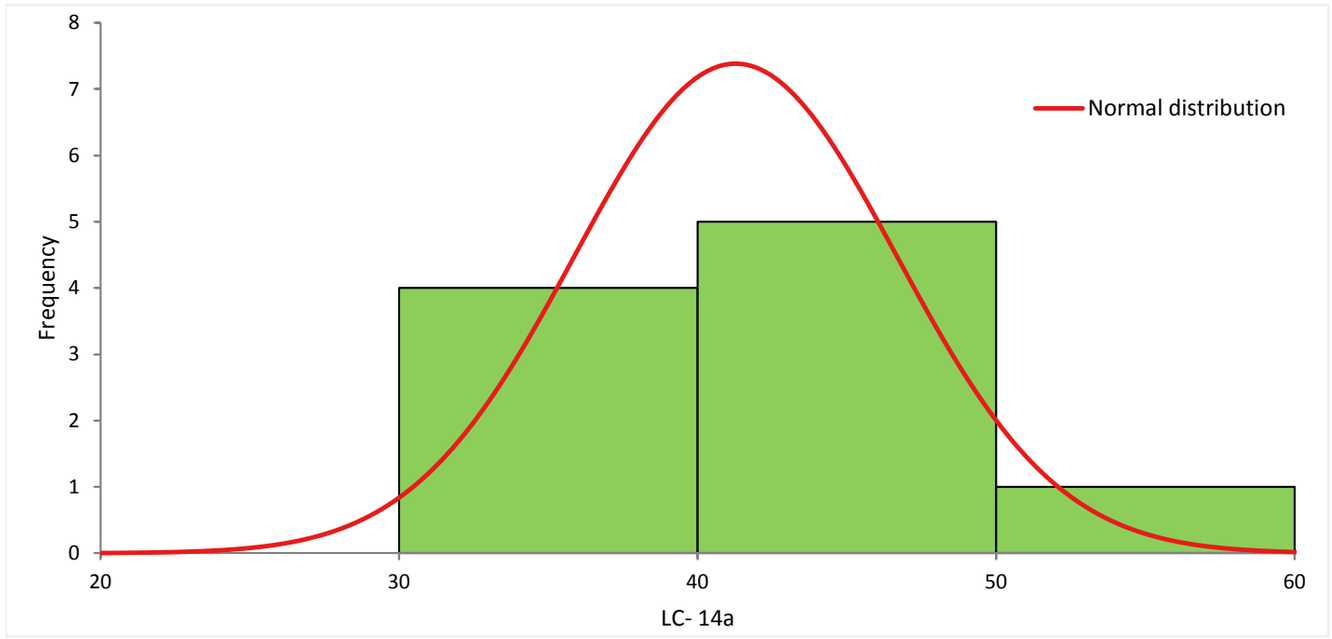

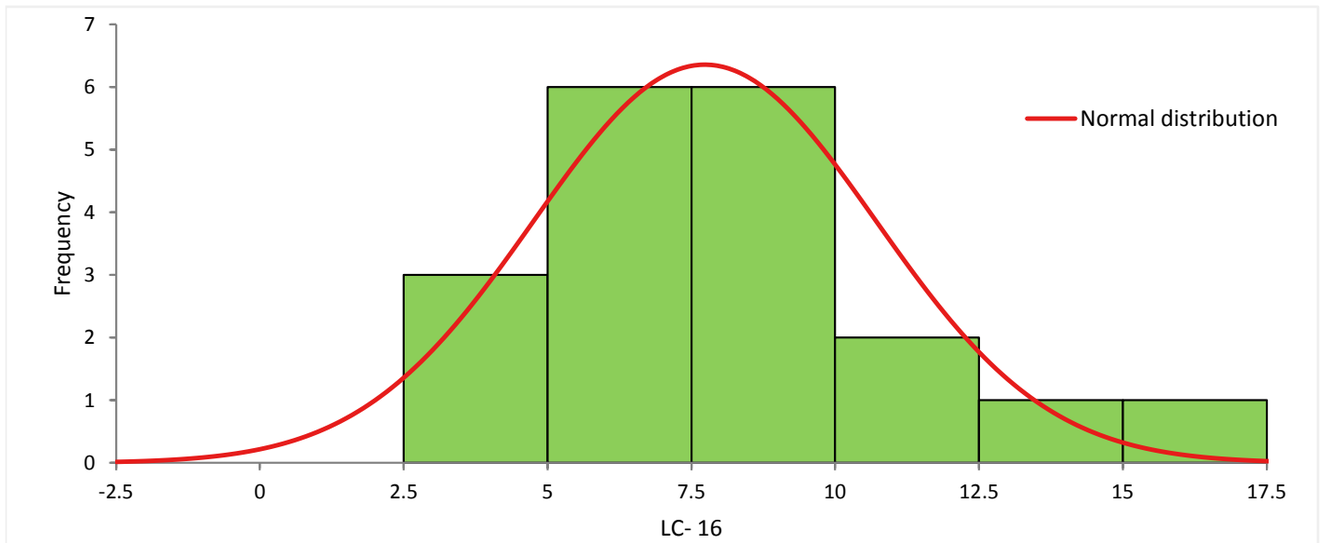

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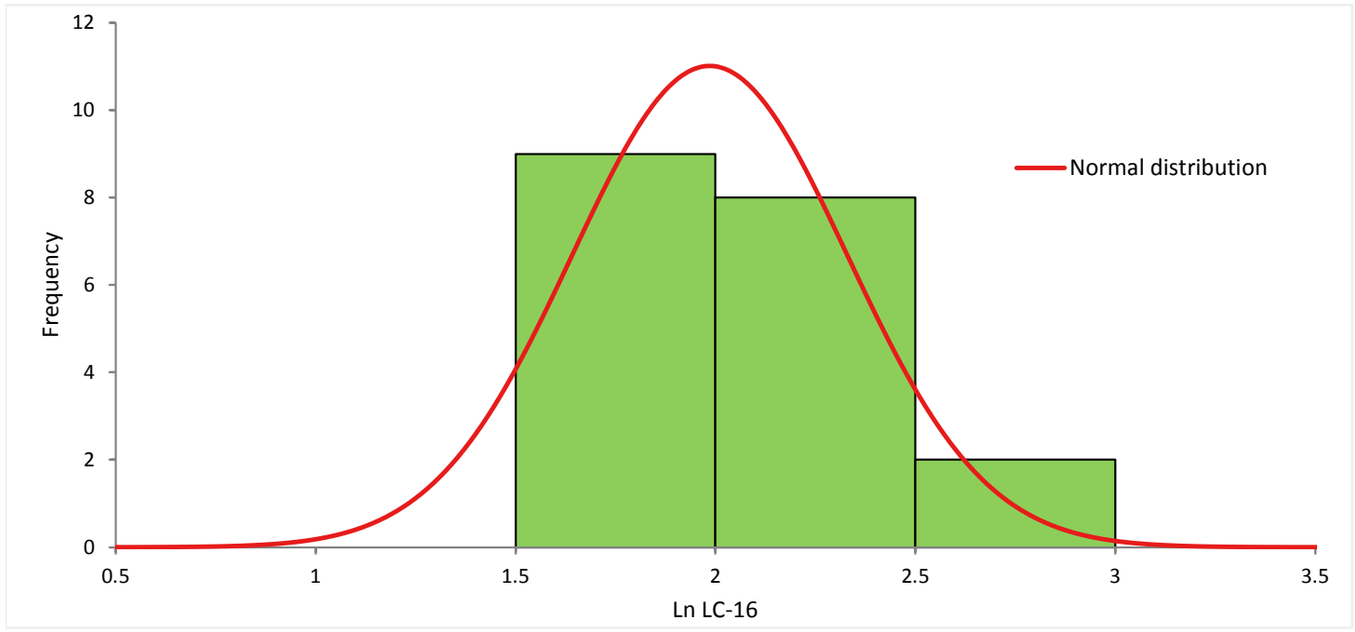

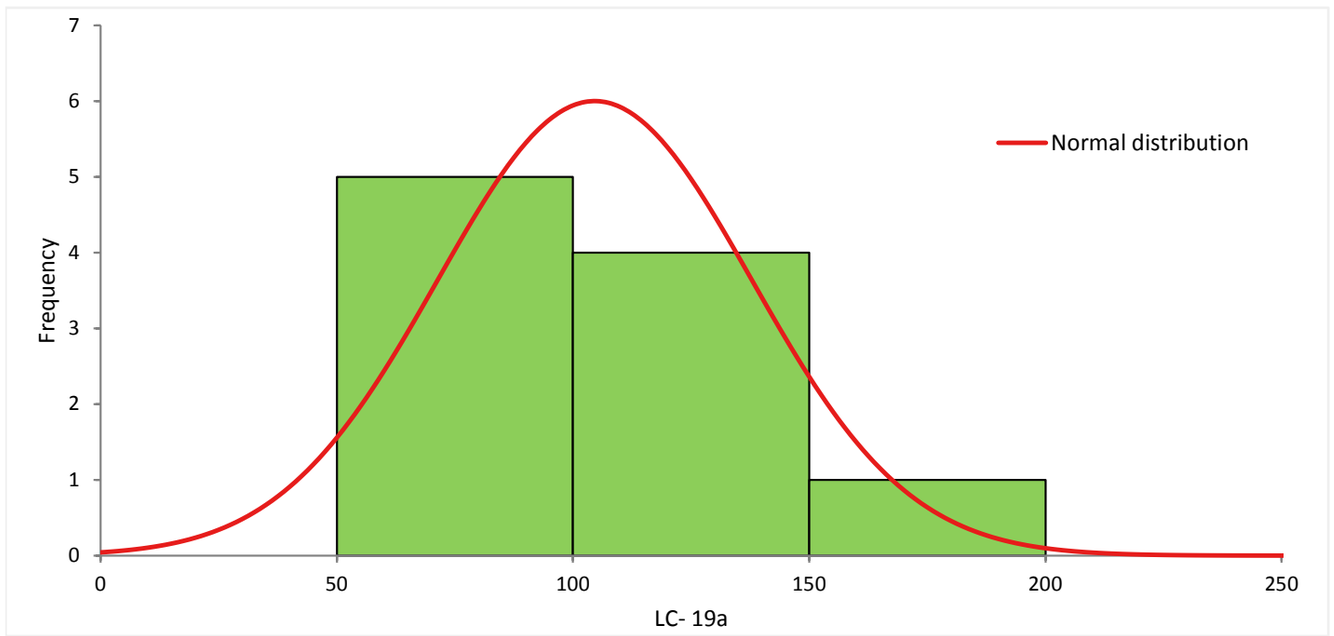

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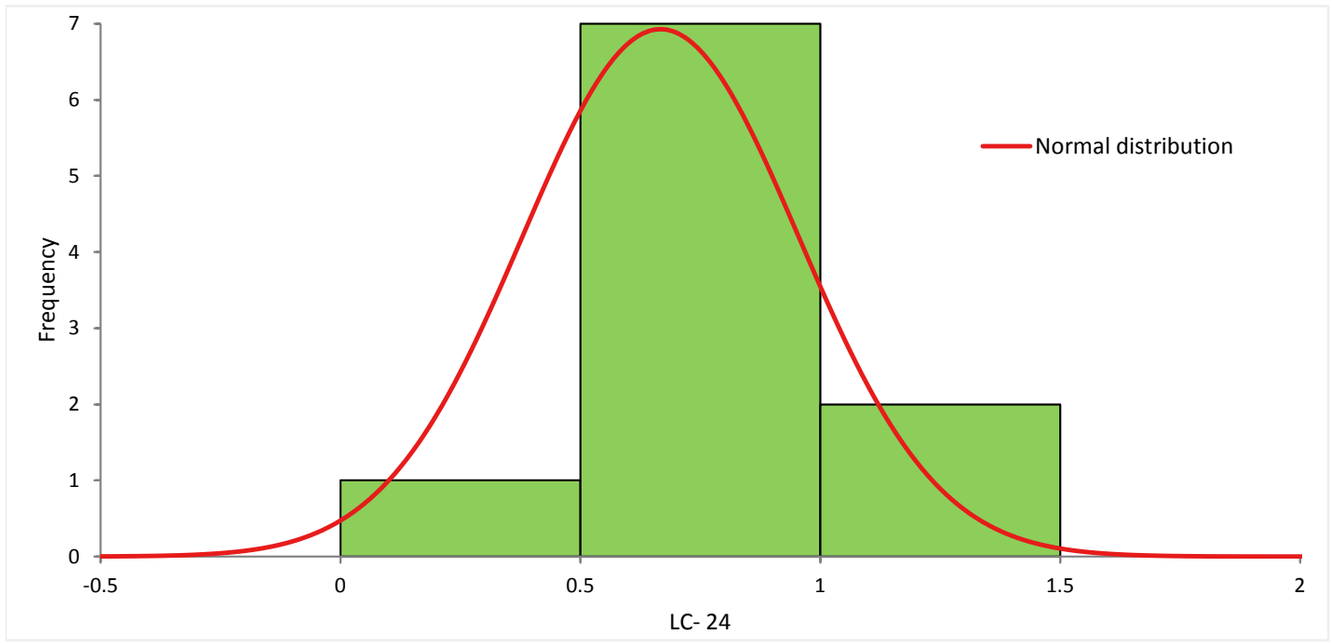

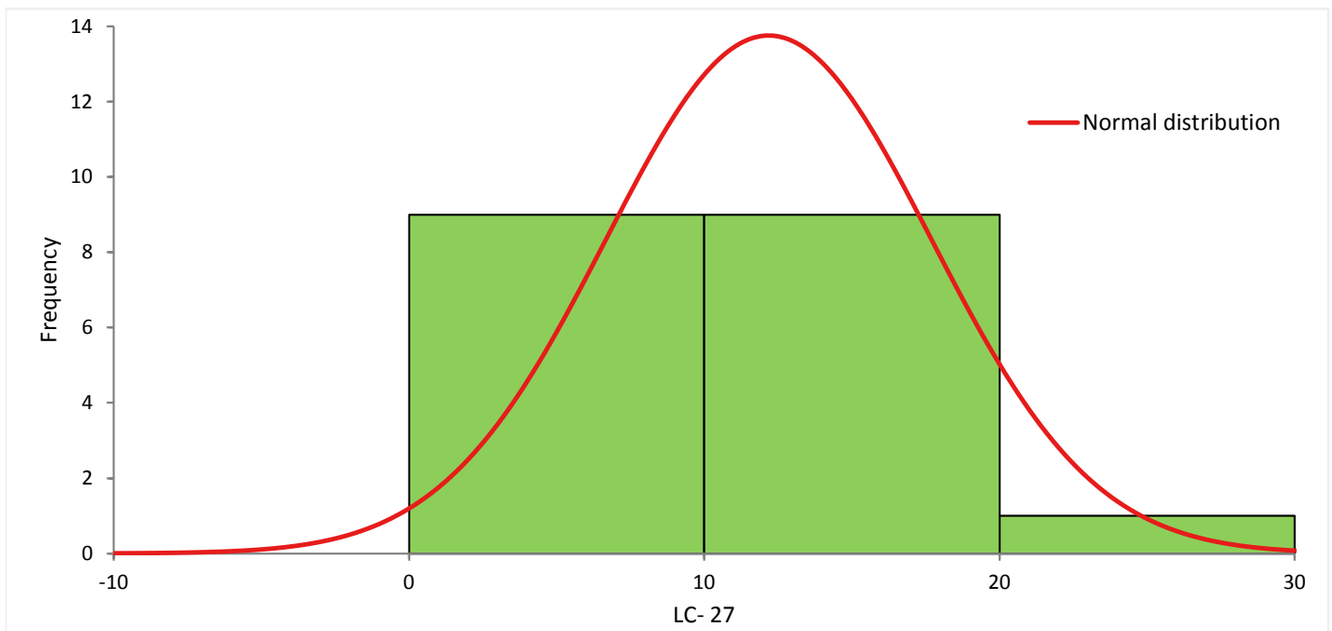

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Upper Vashon Aquifer Descriptive Statistics Histograms
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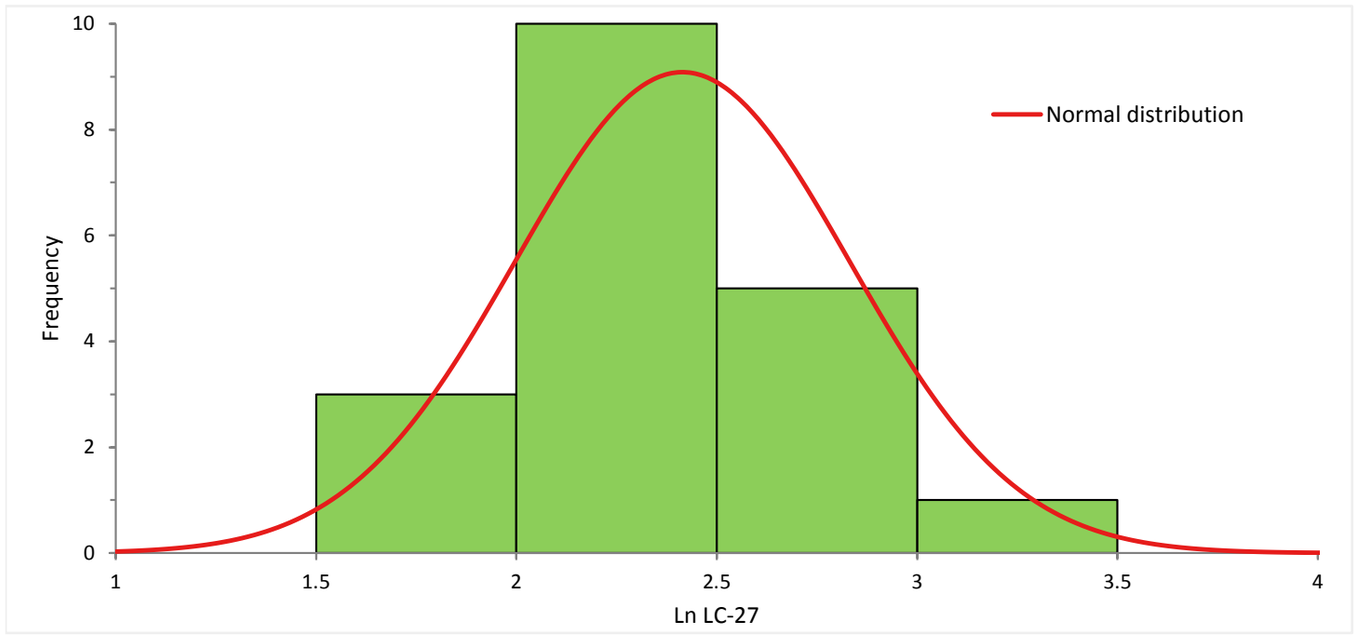

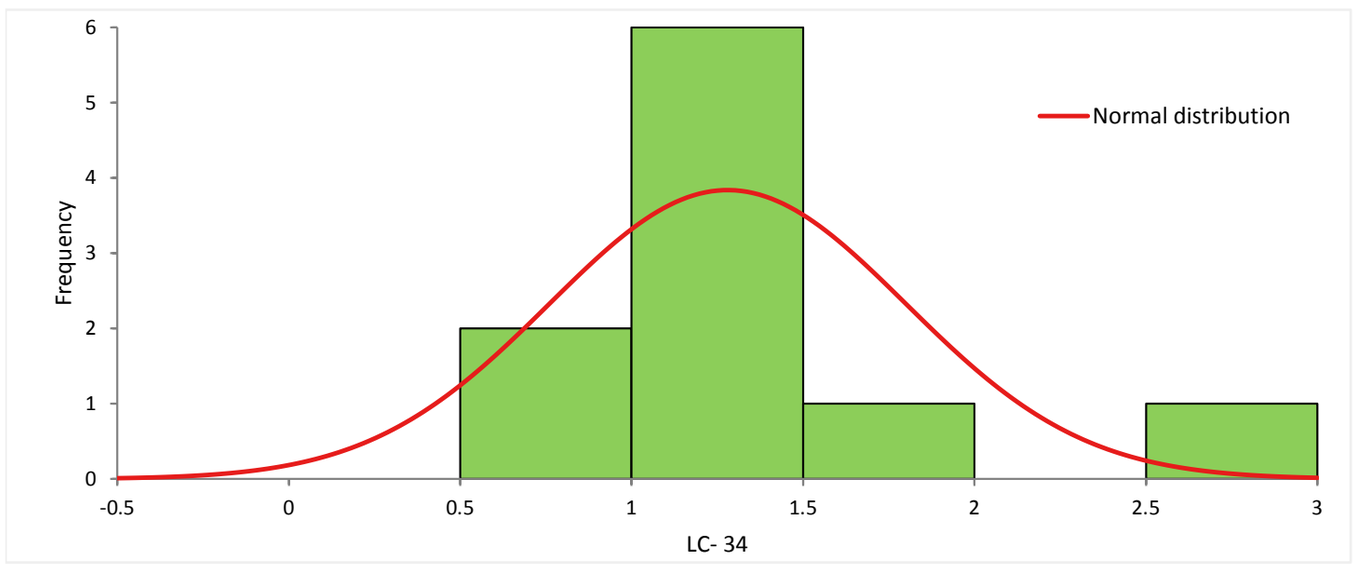

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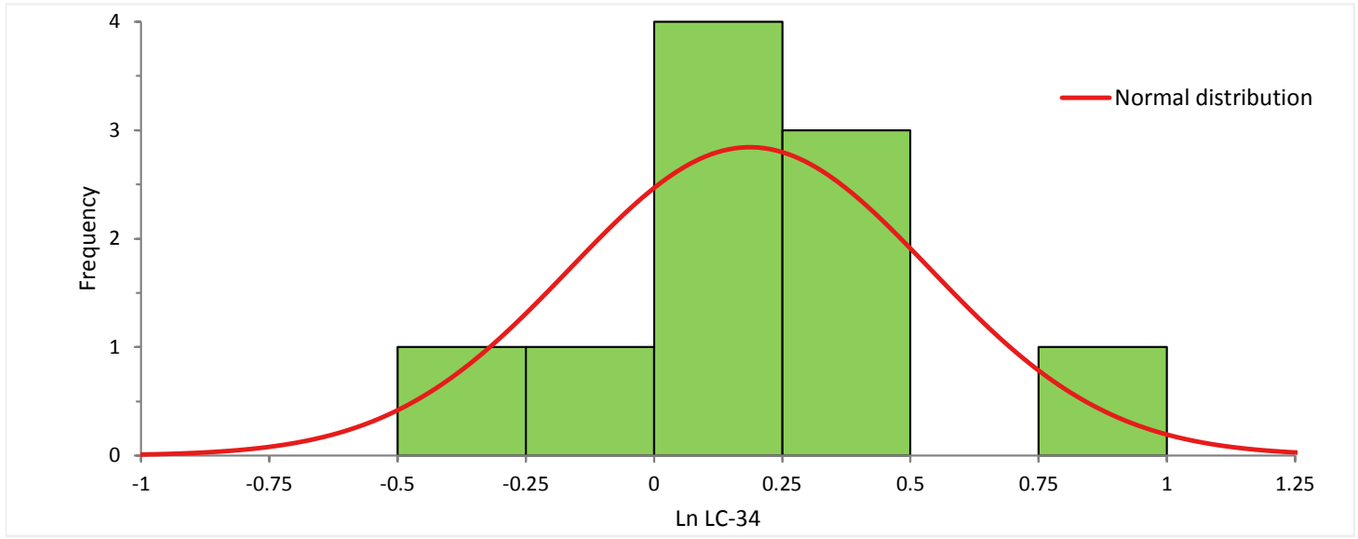

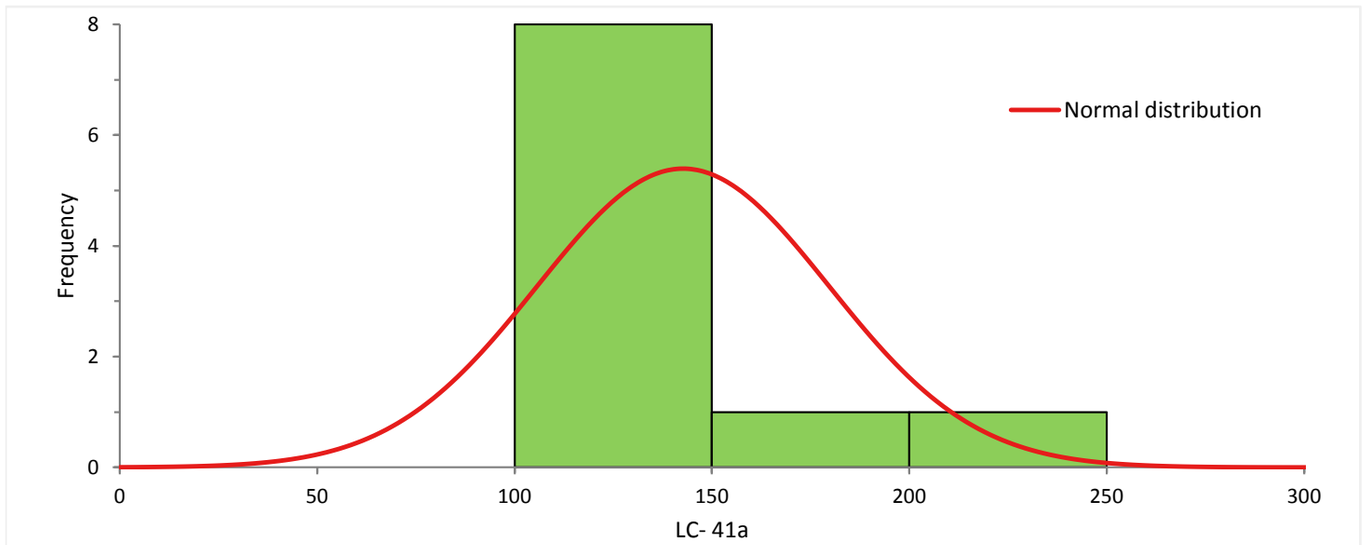

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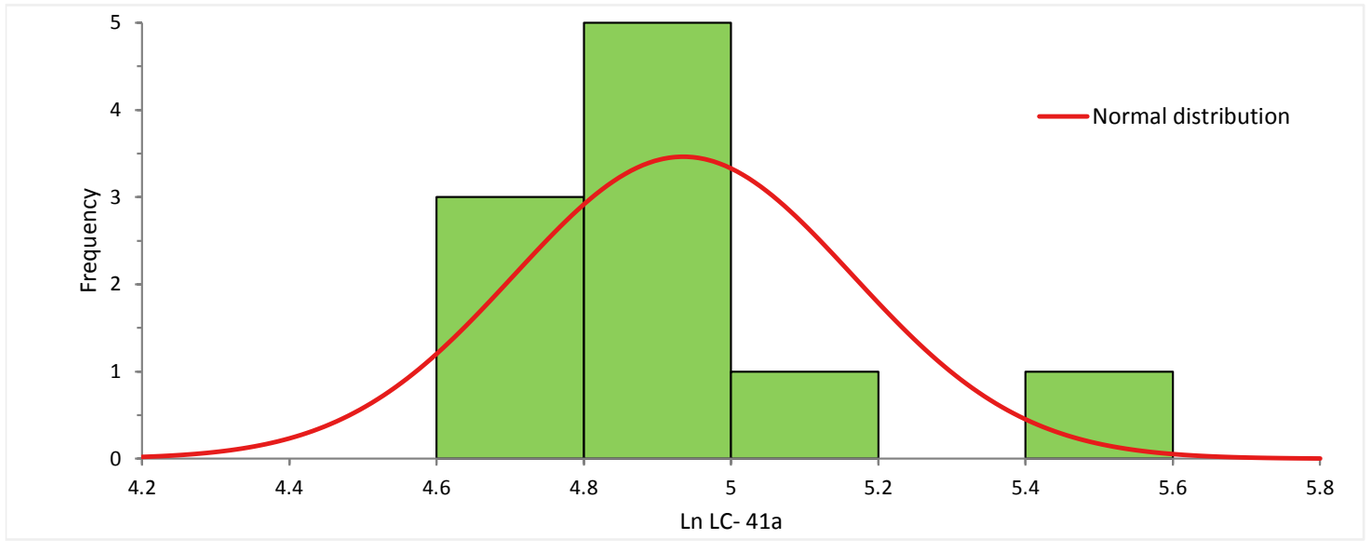

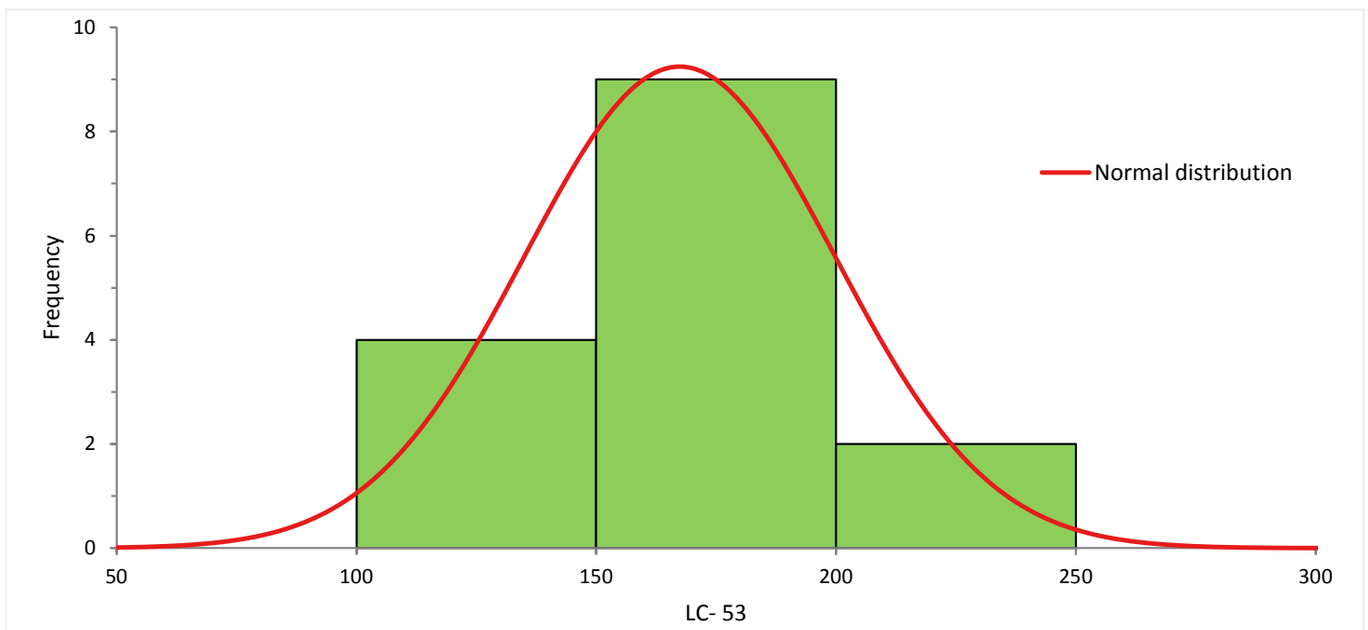

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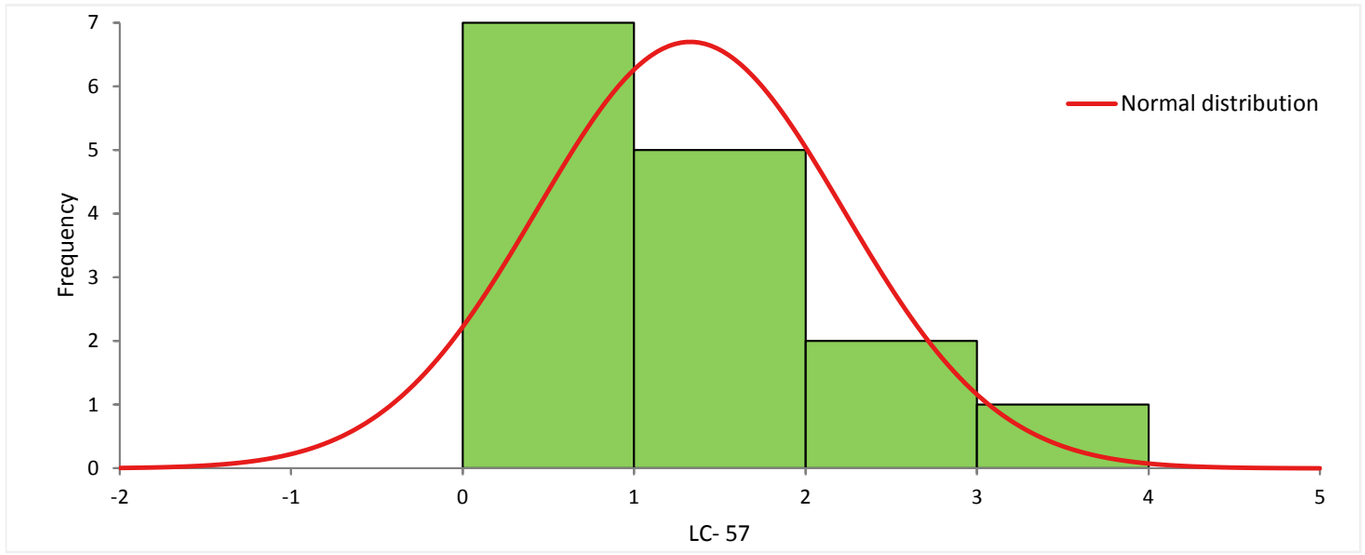

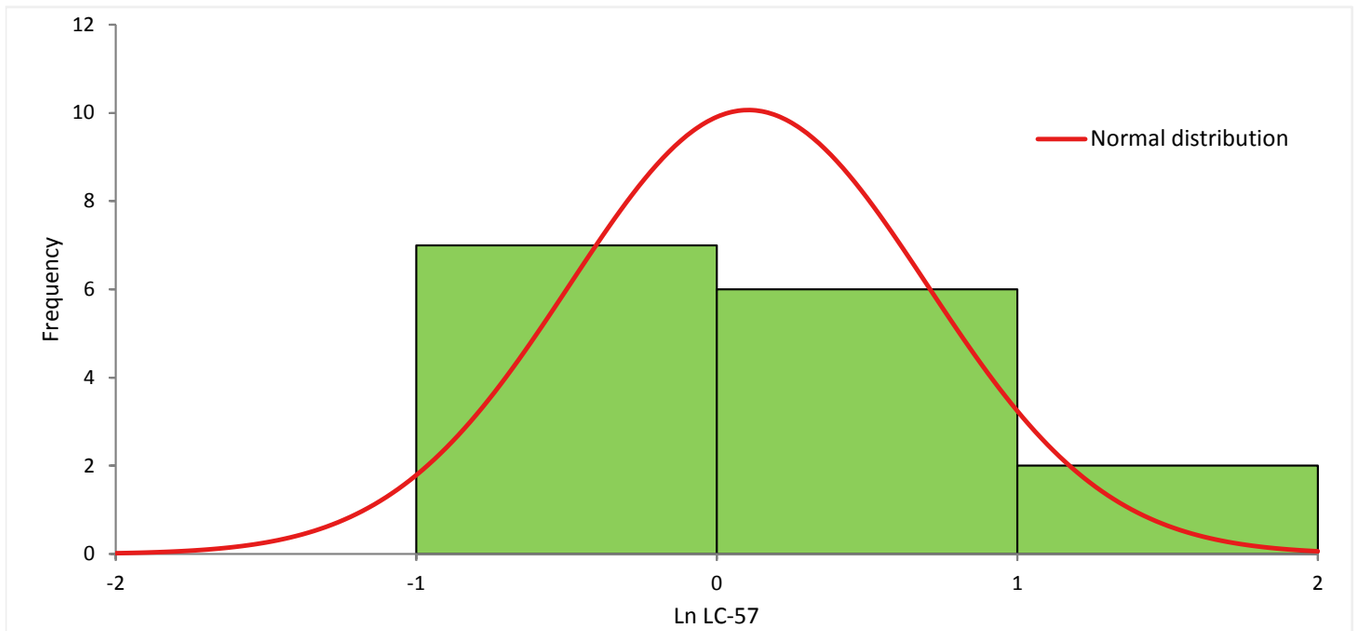

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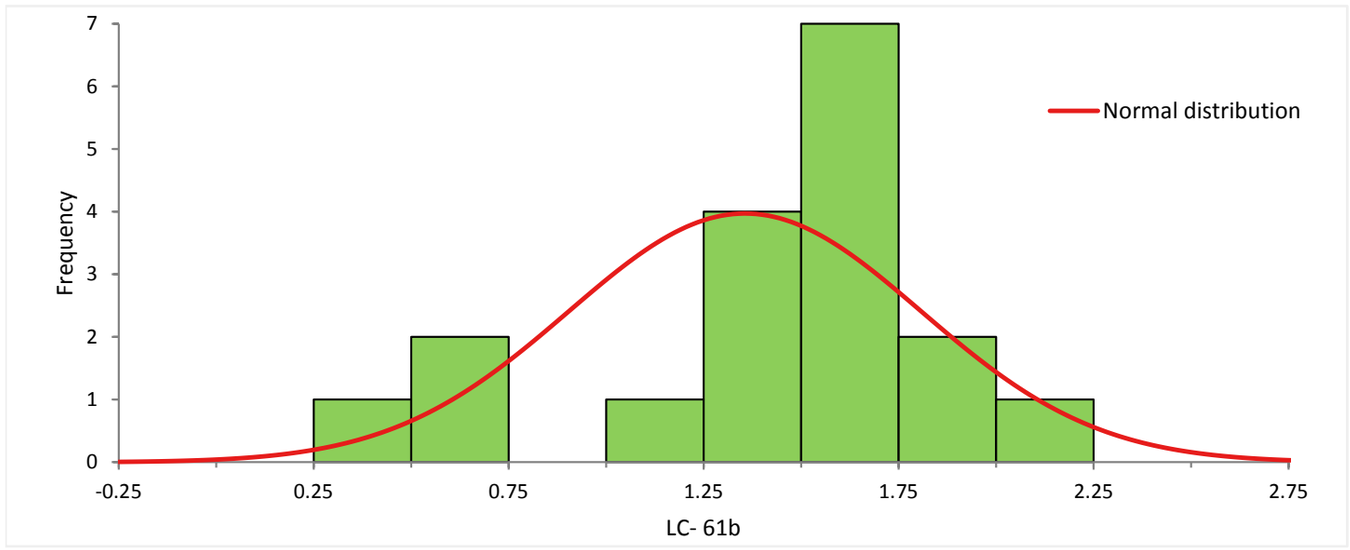

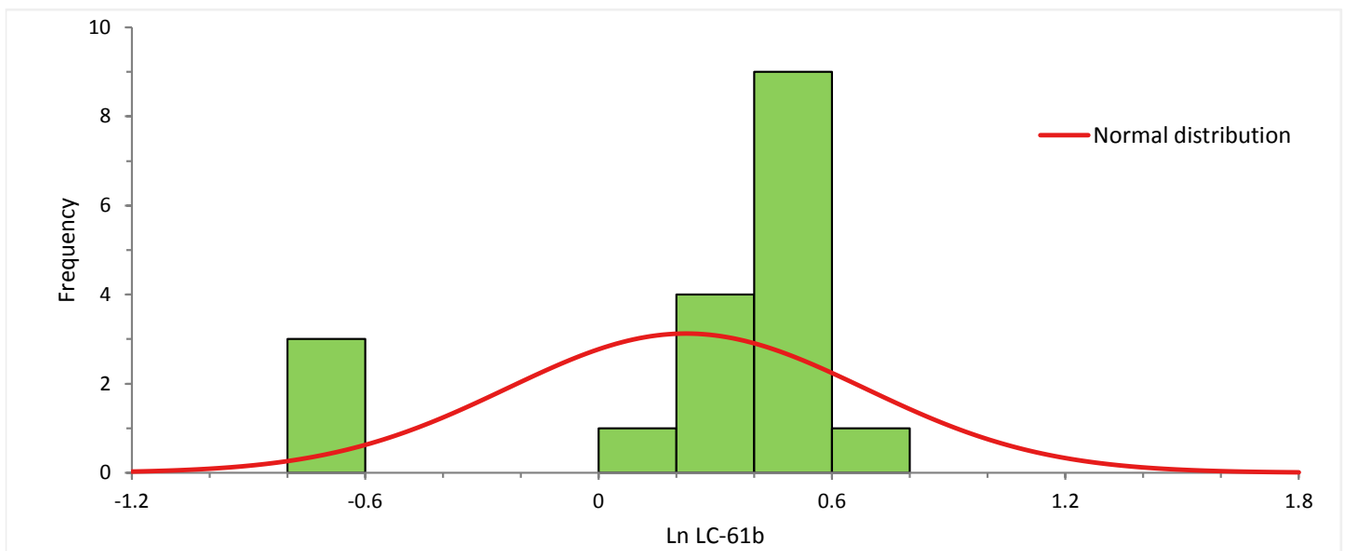

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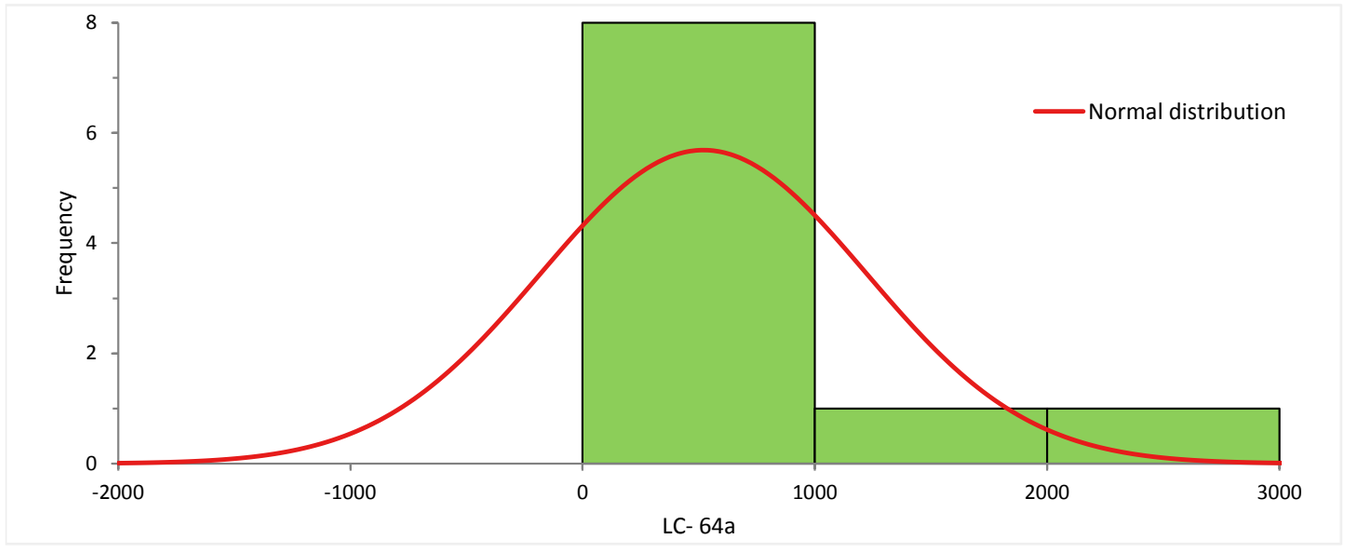

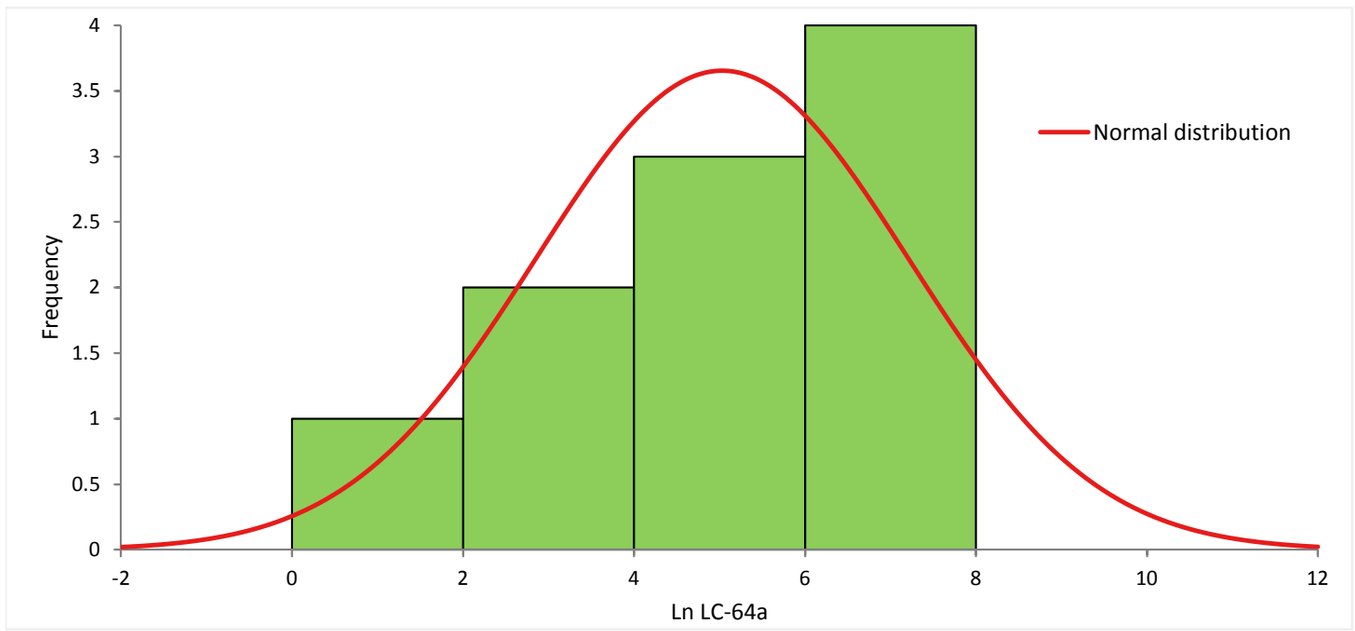

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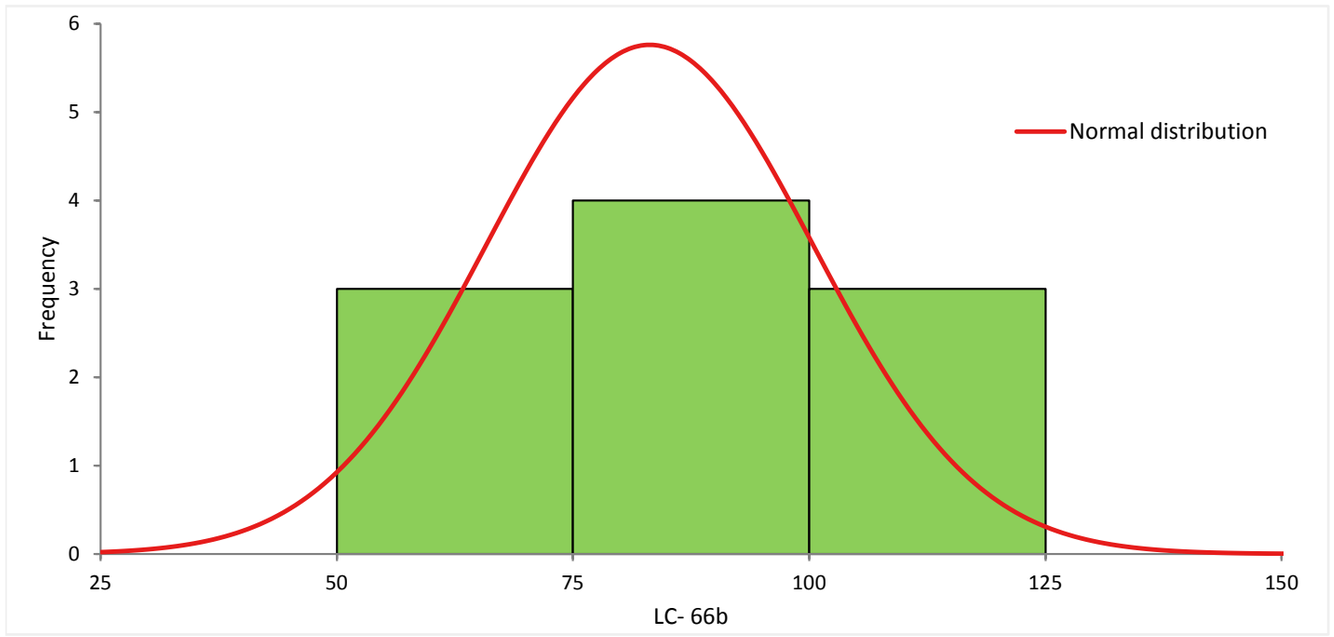

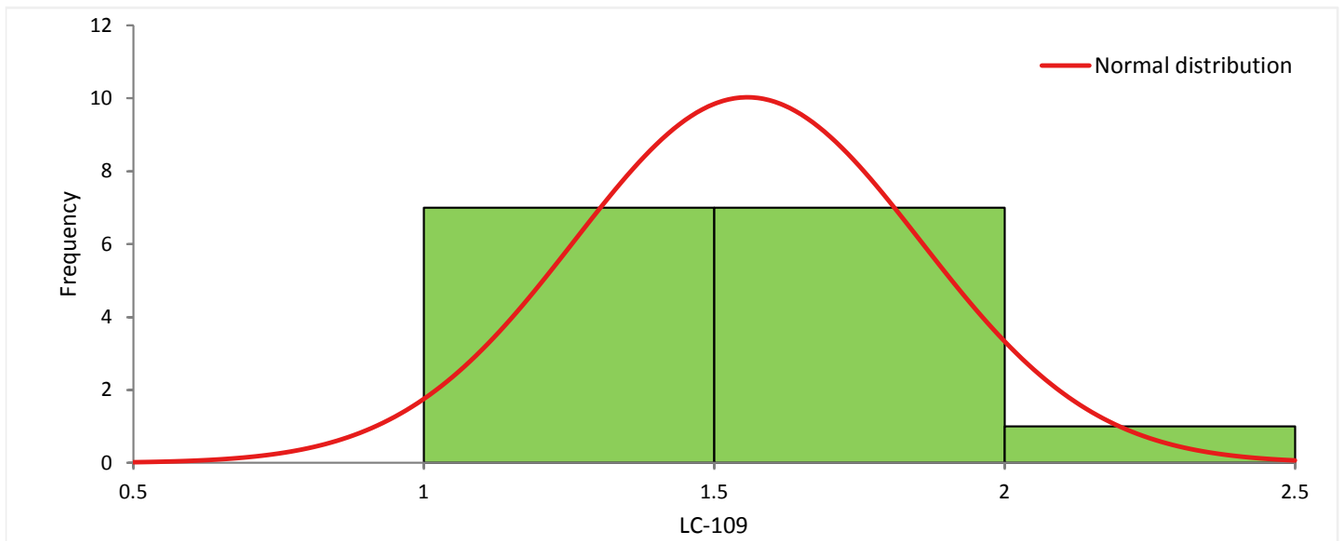

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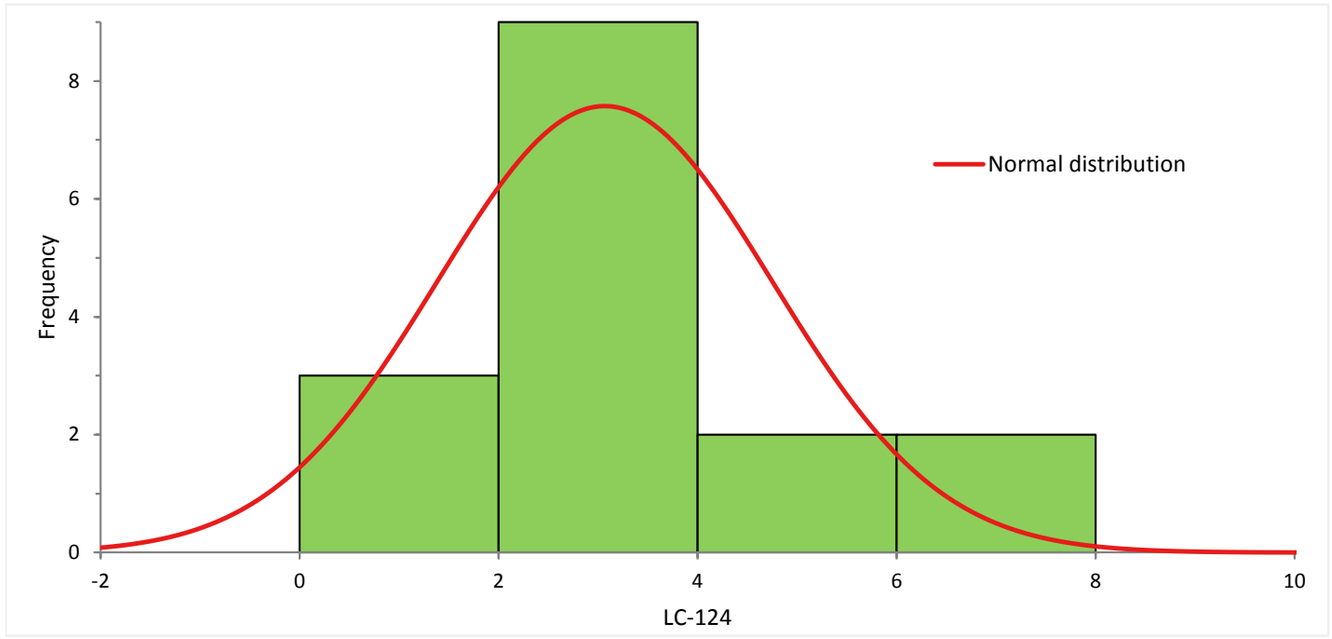

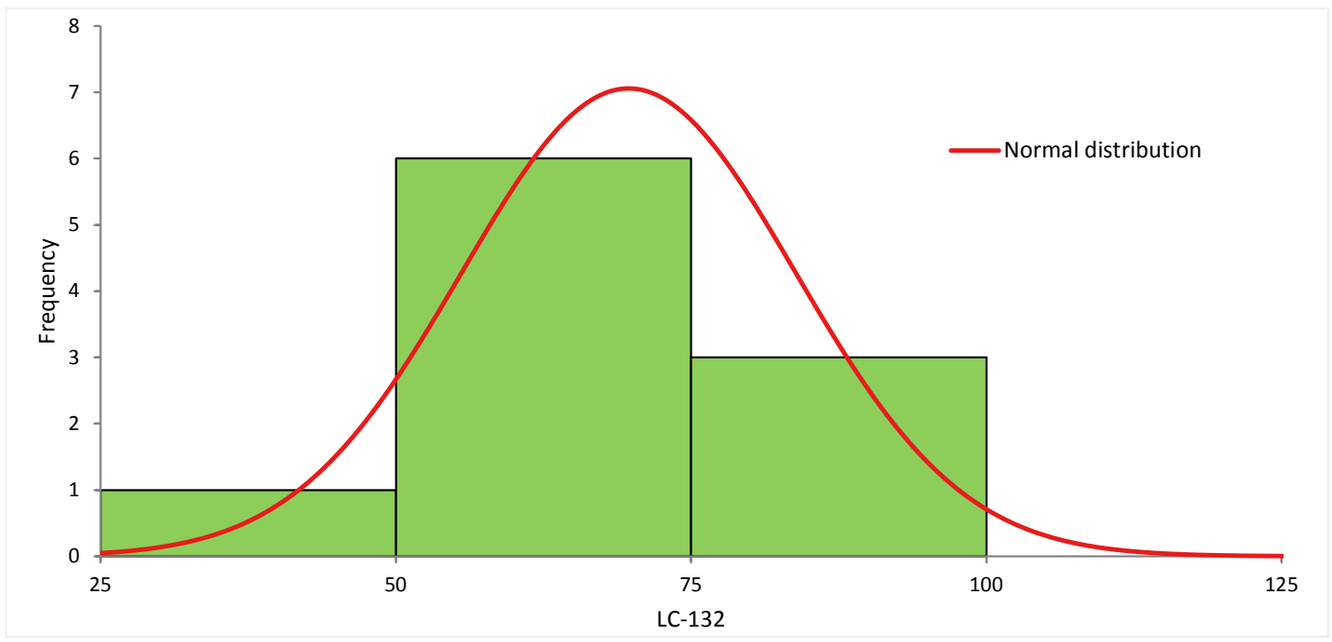

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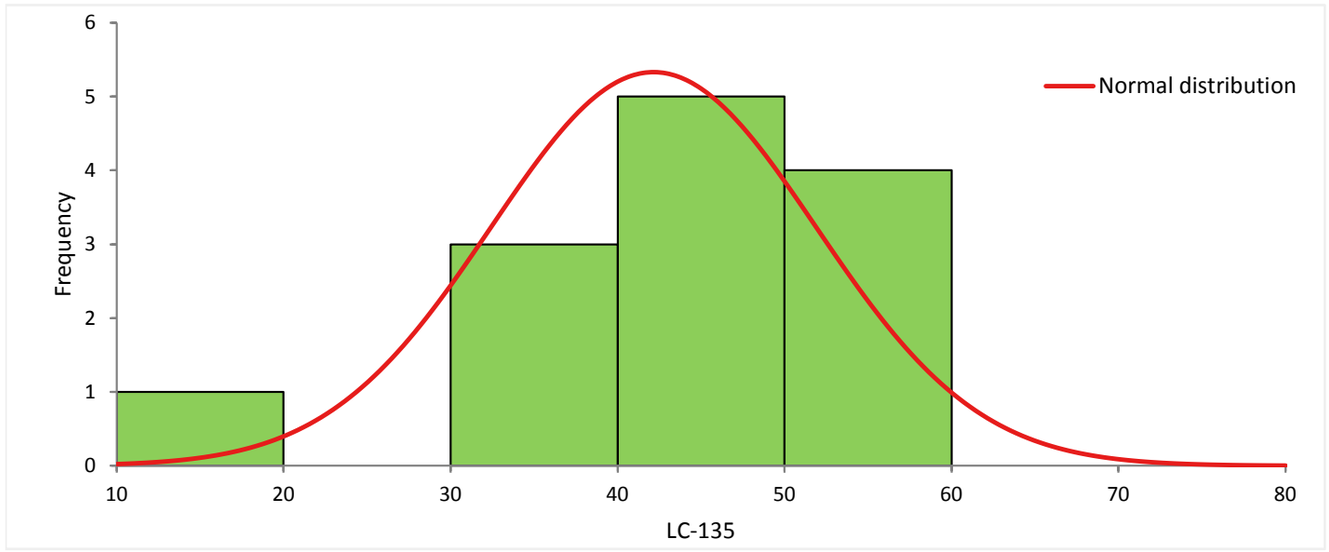

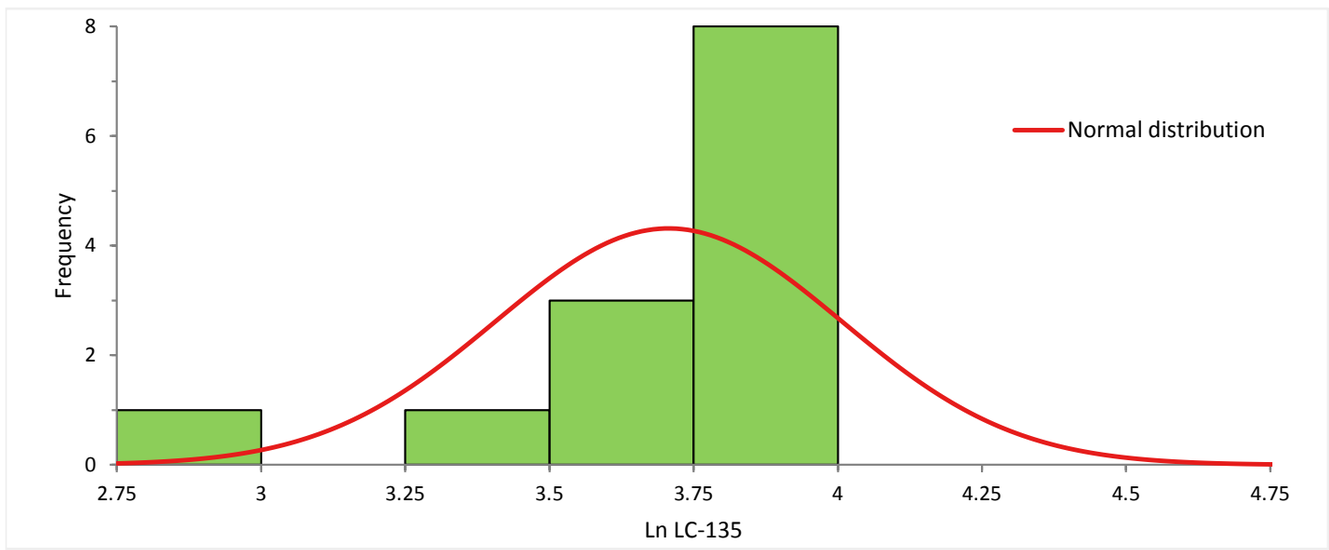

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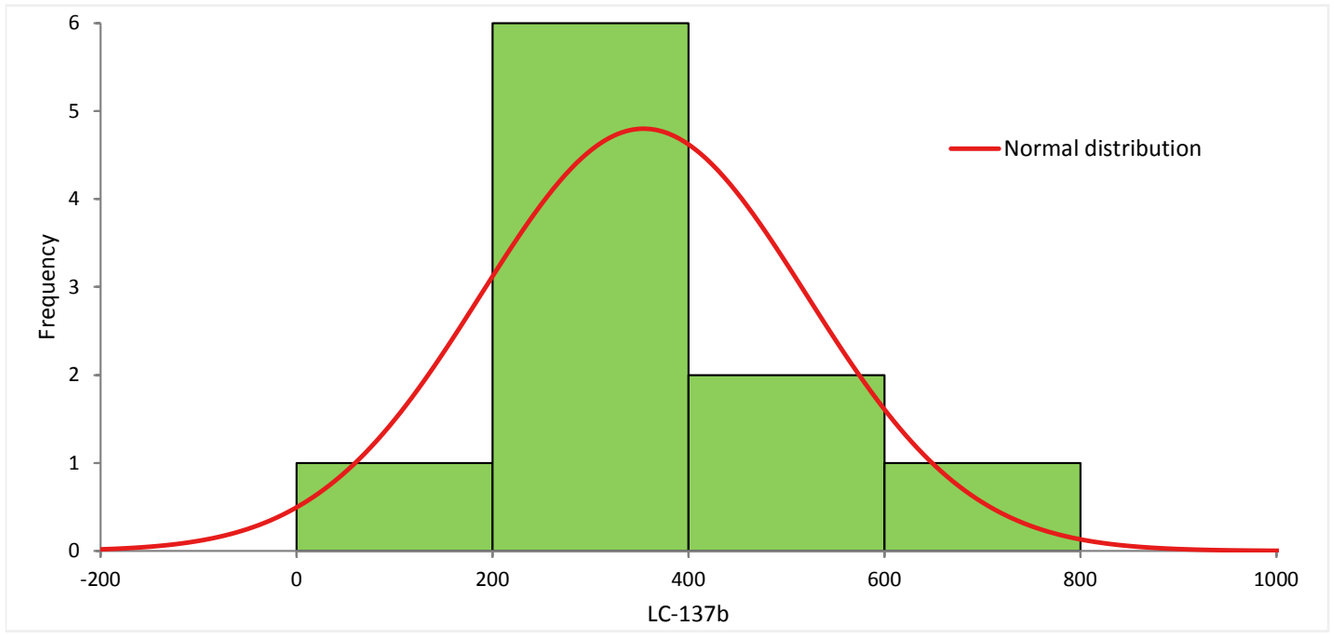

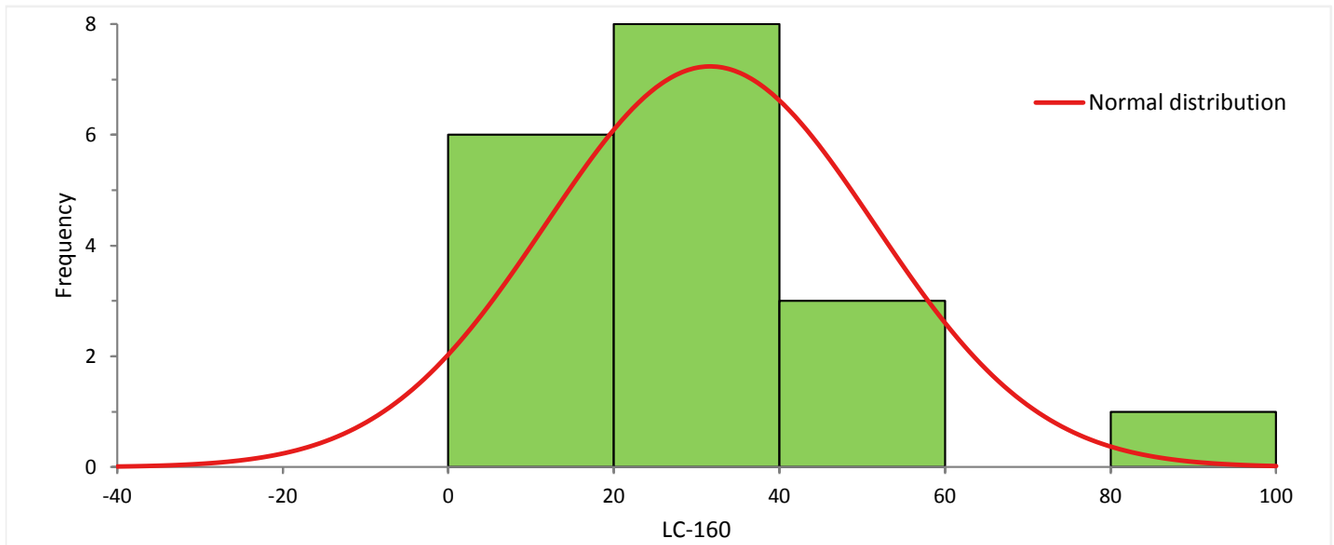

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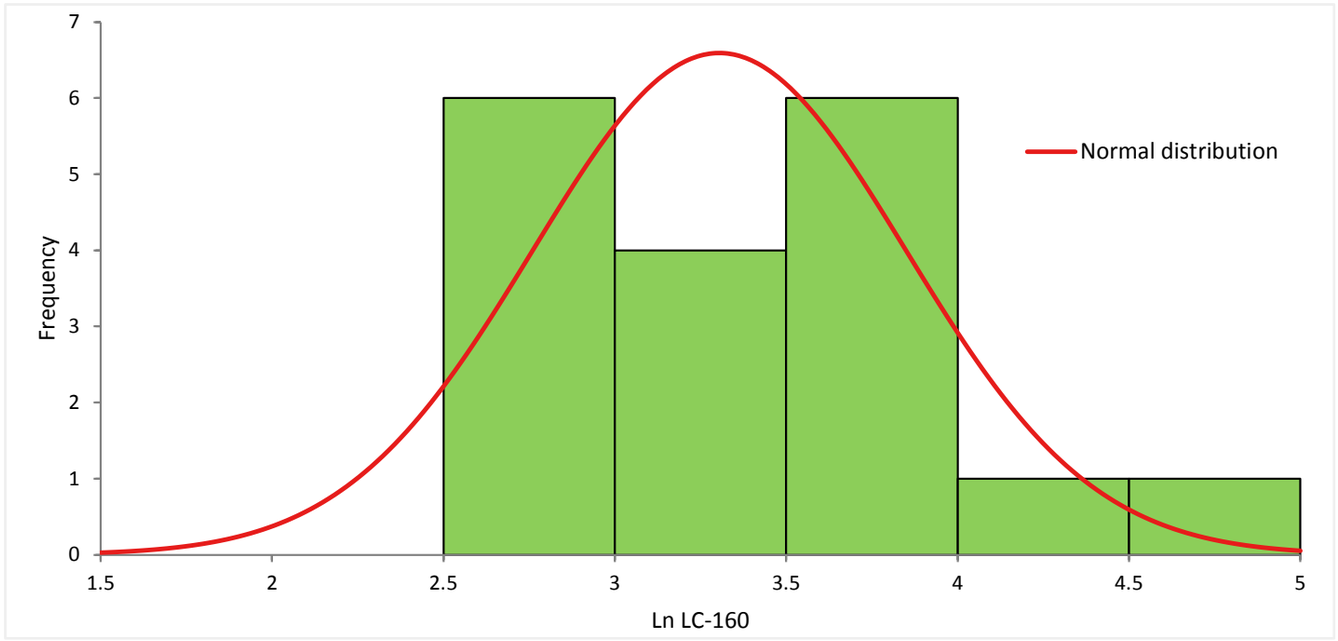

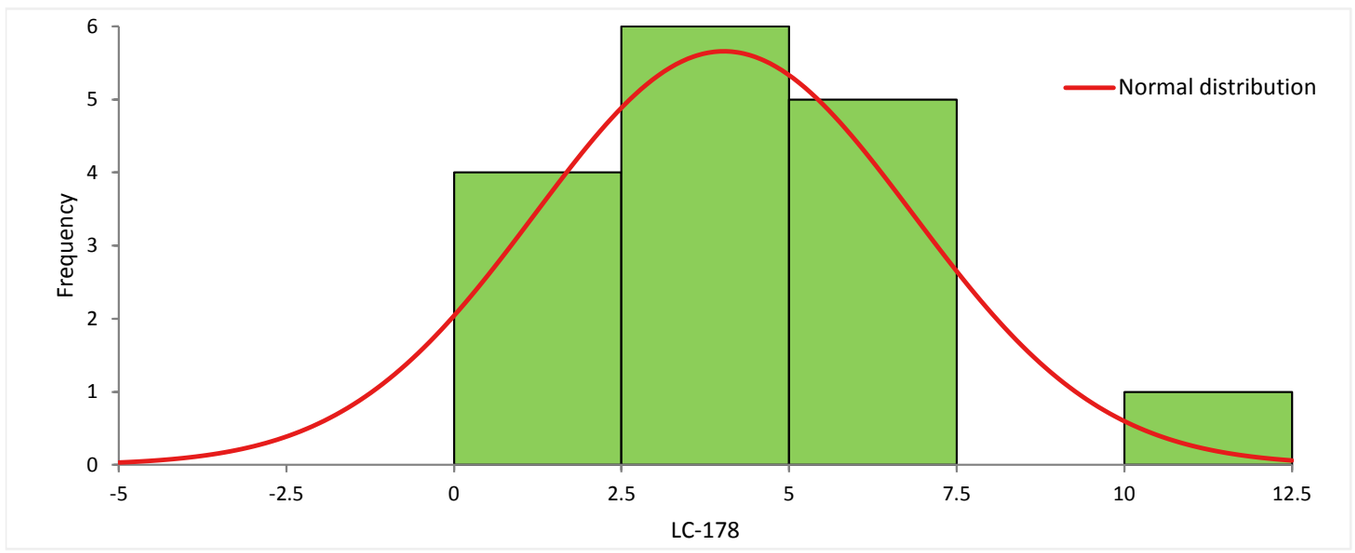

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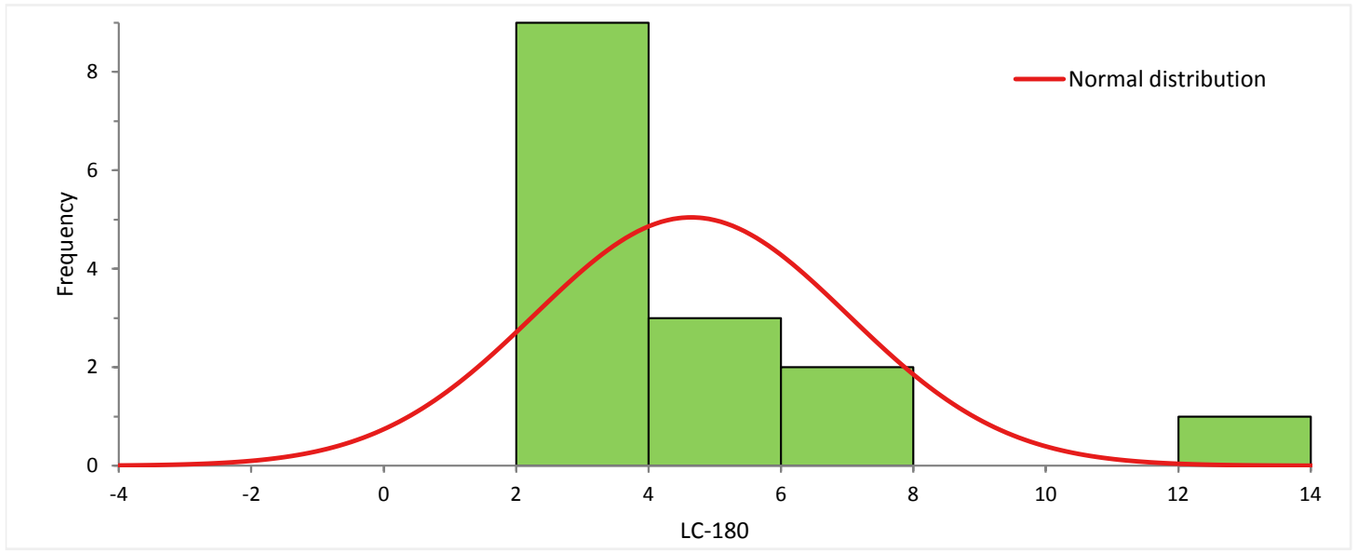

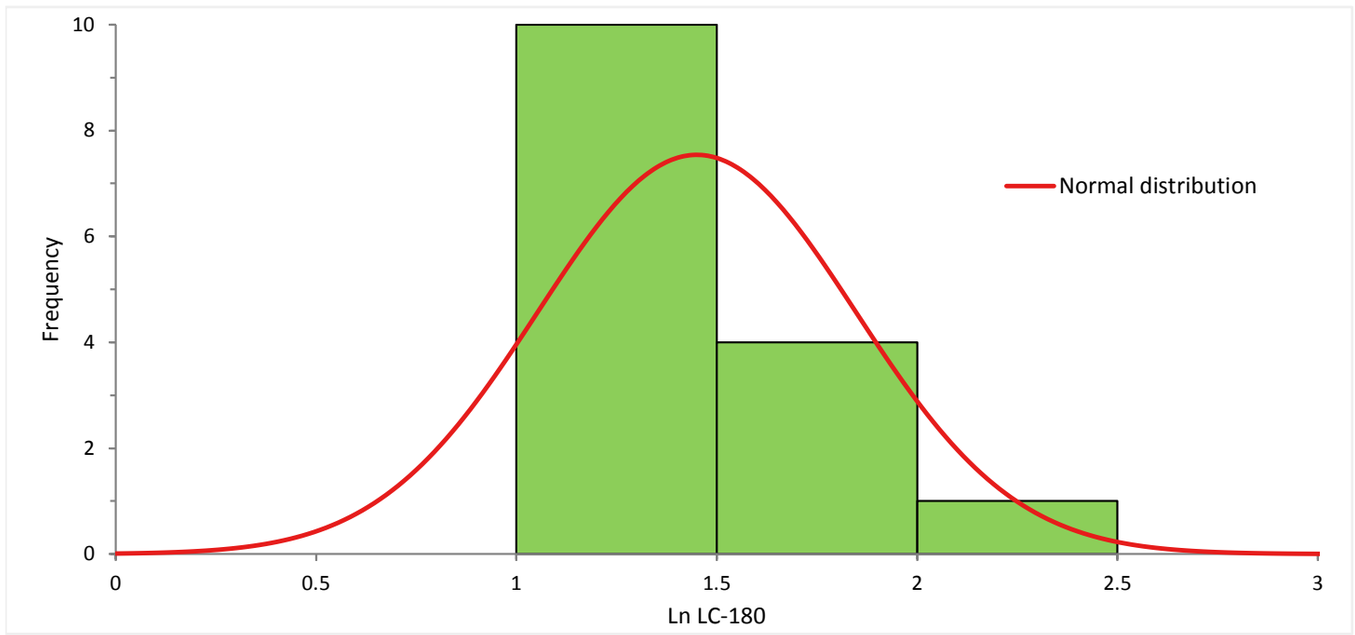

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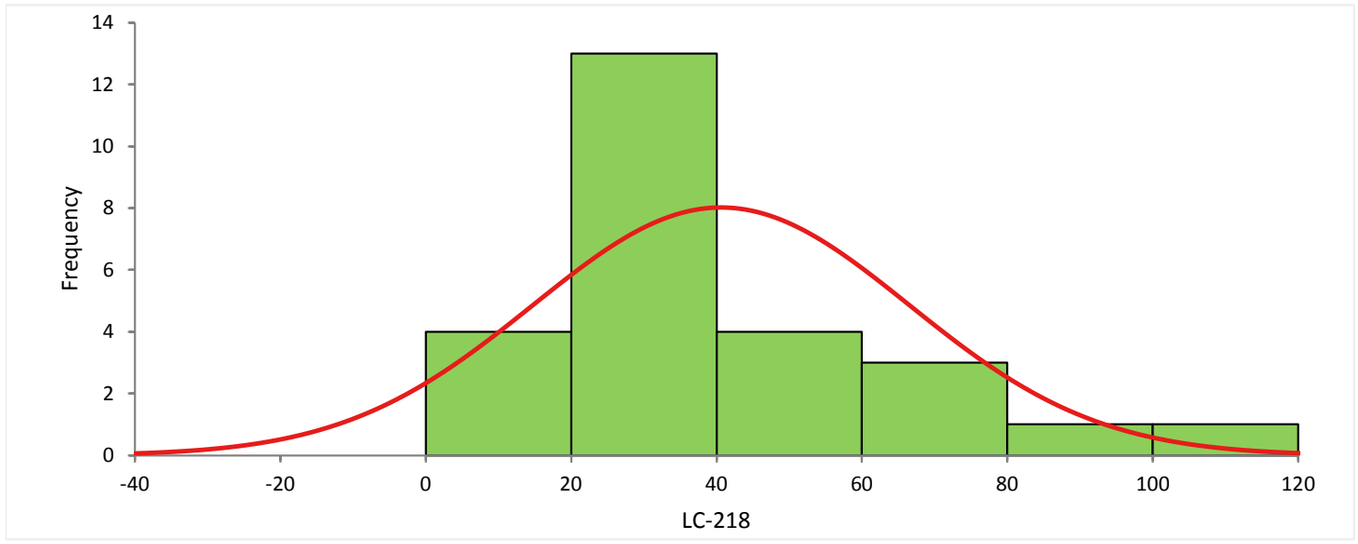

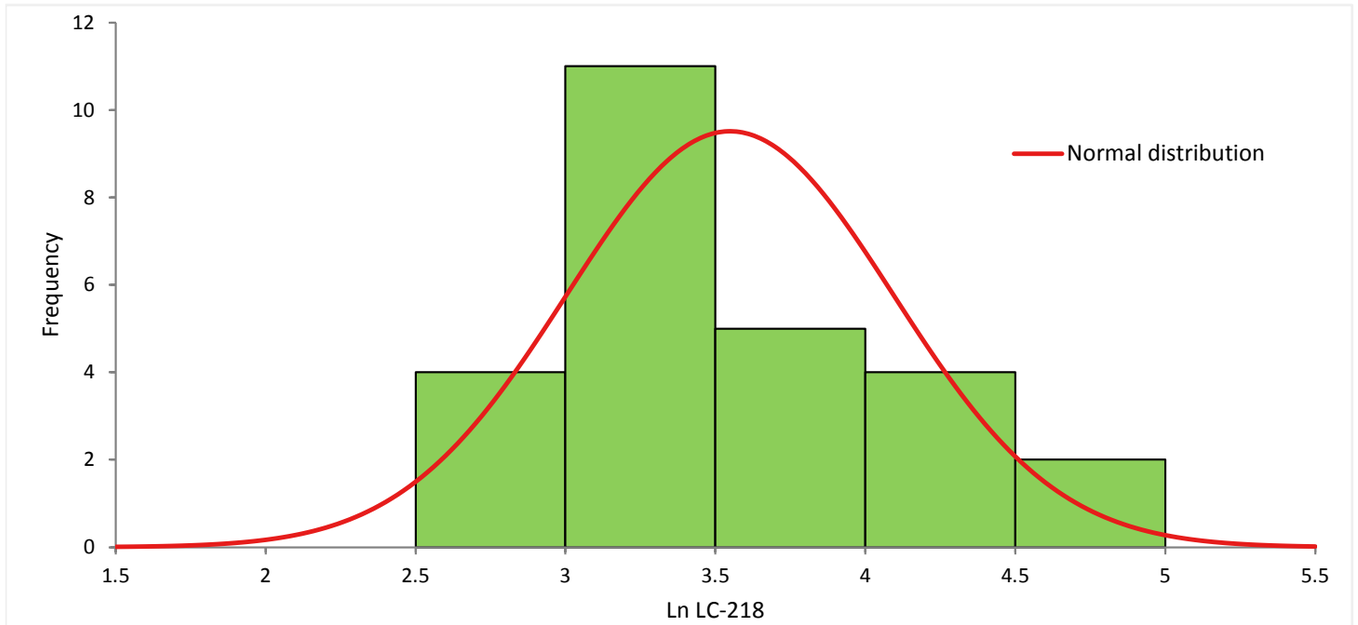

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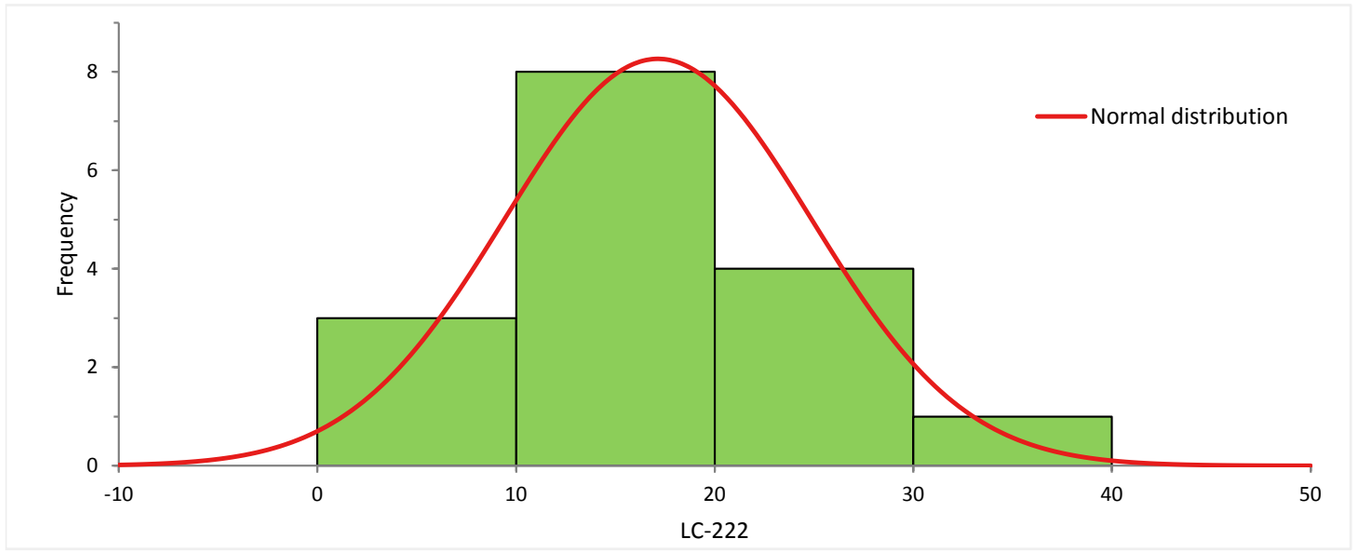

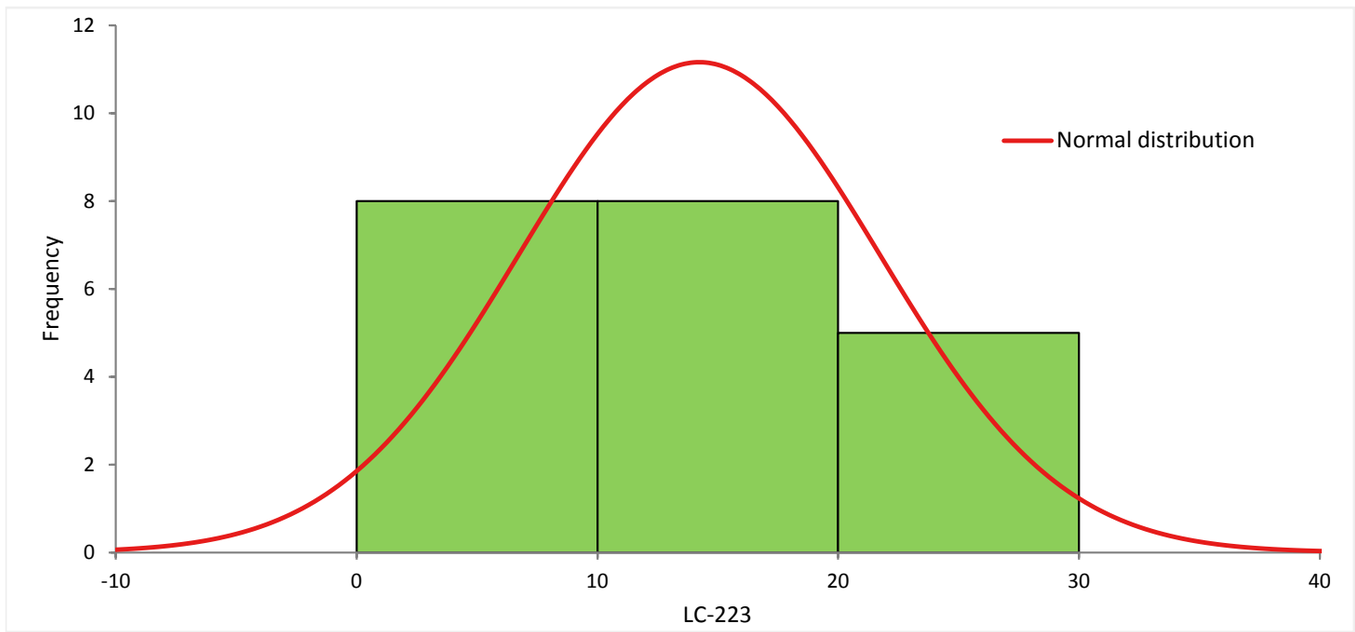

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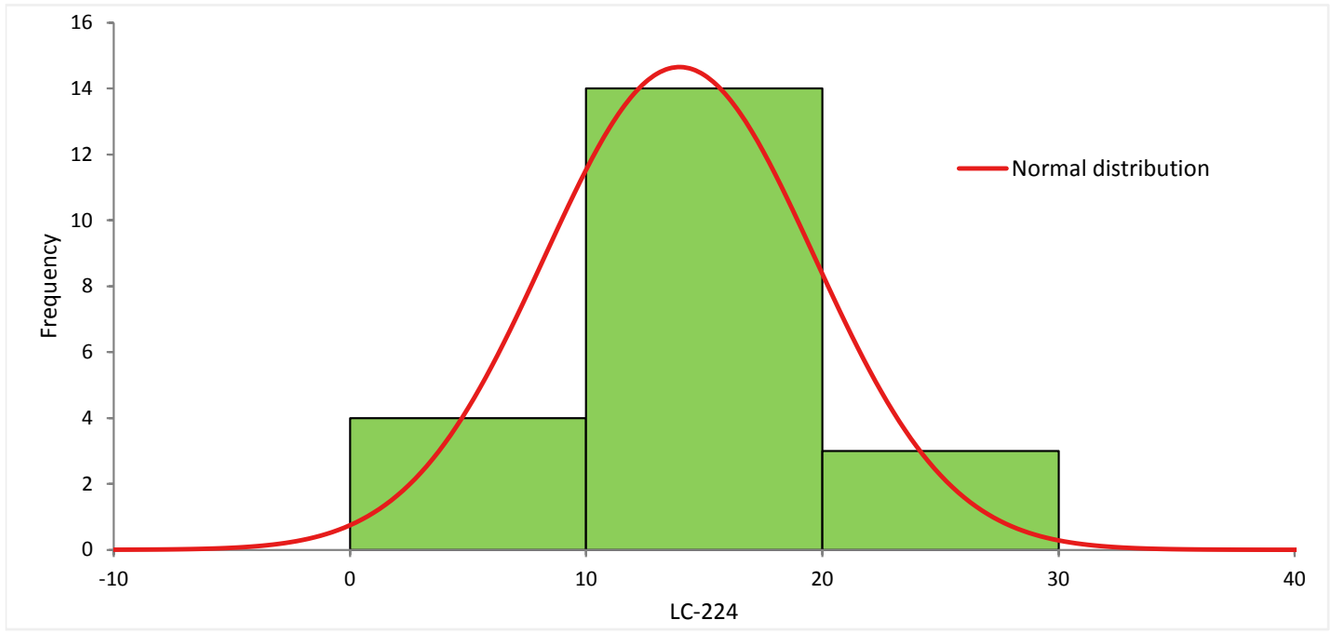

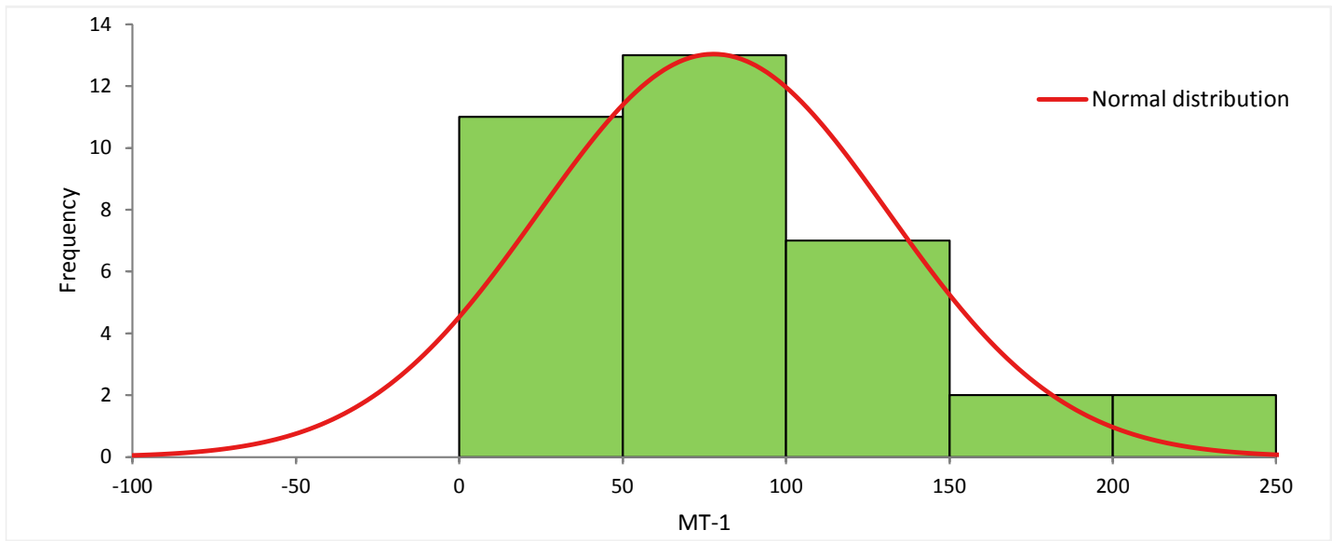

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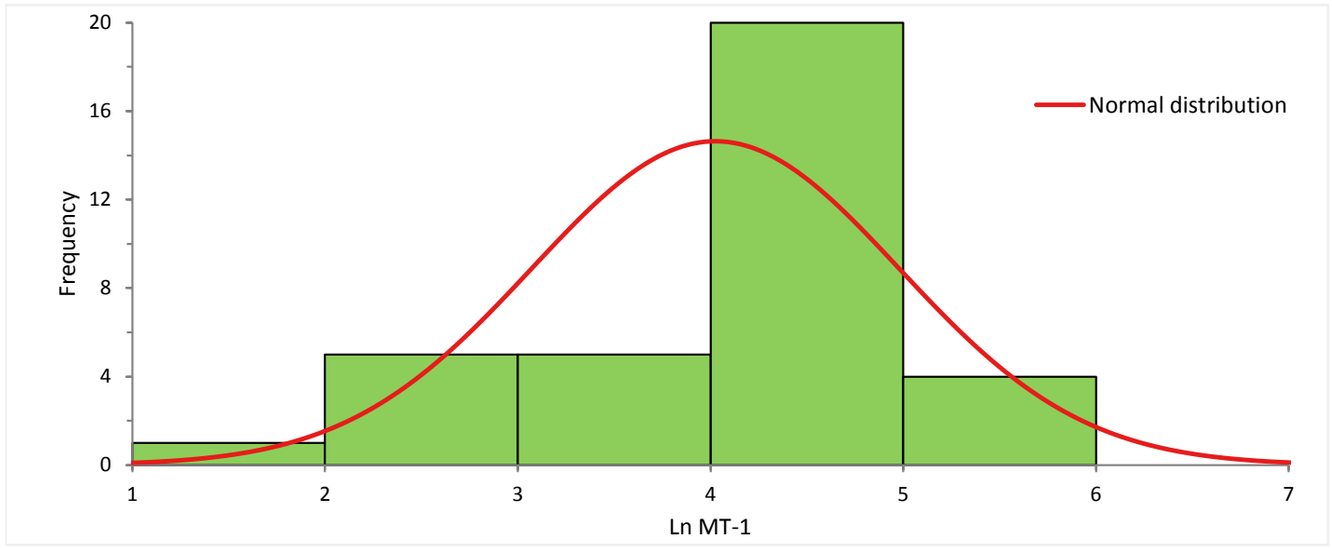

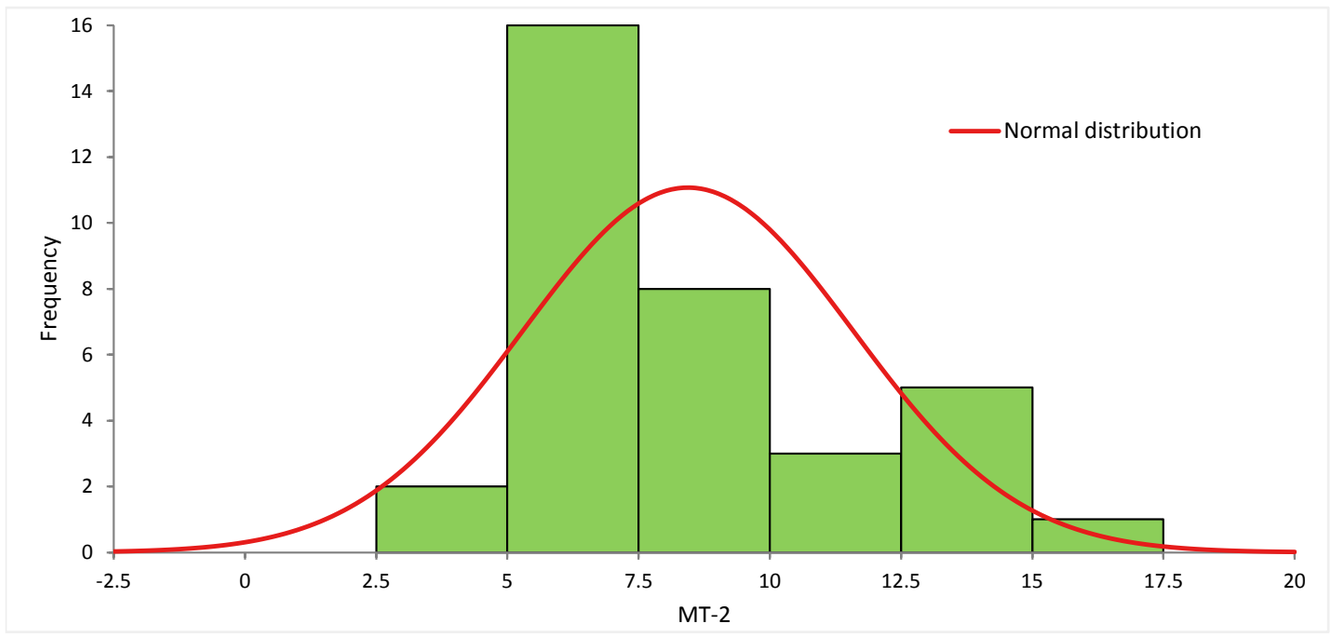

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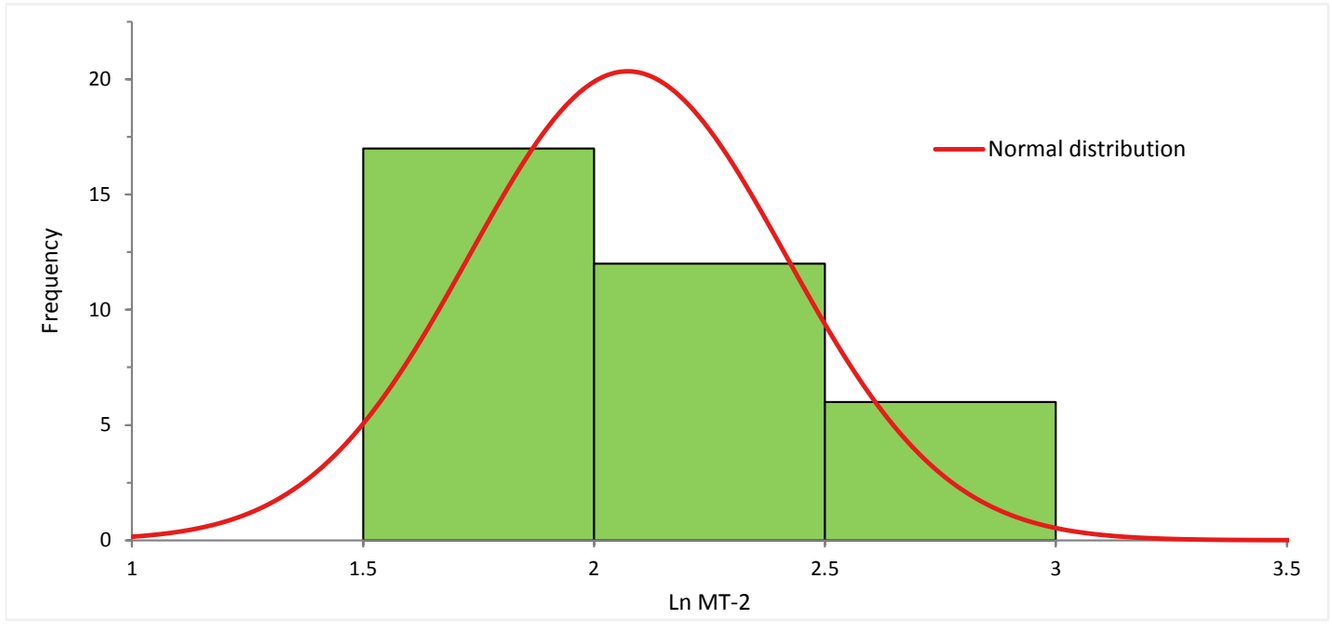

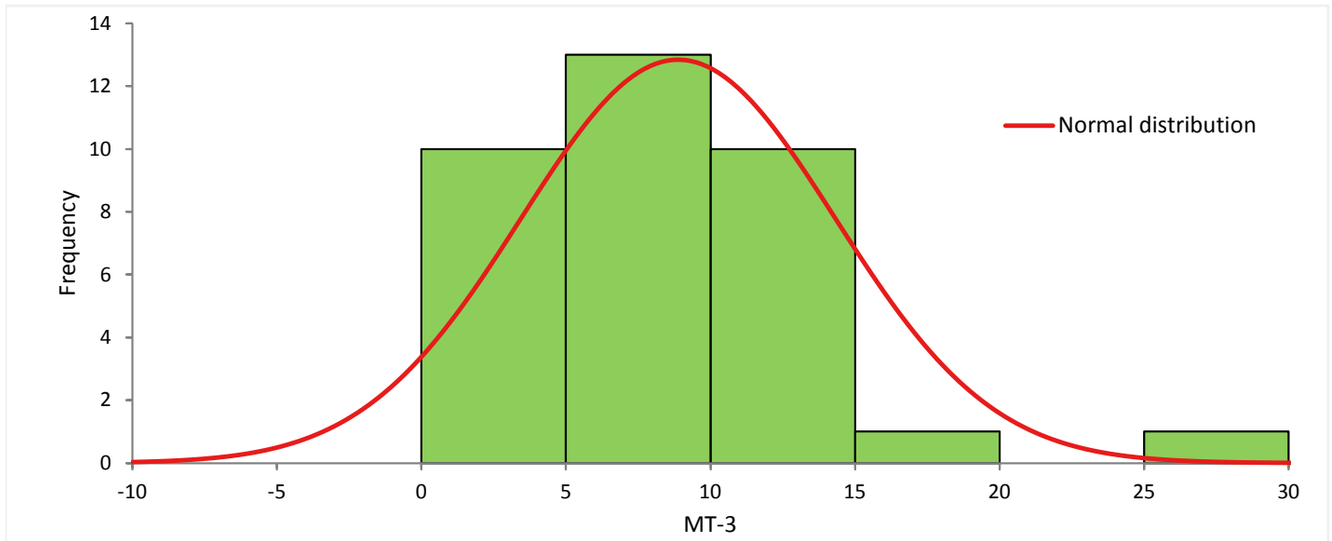

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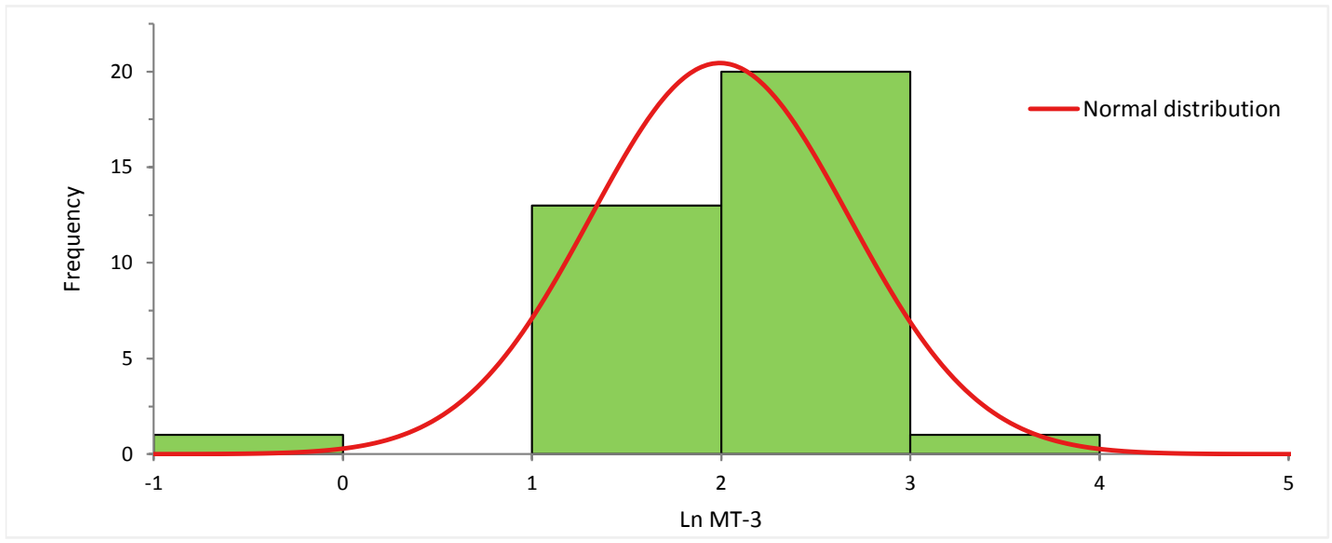

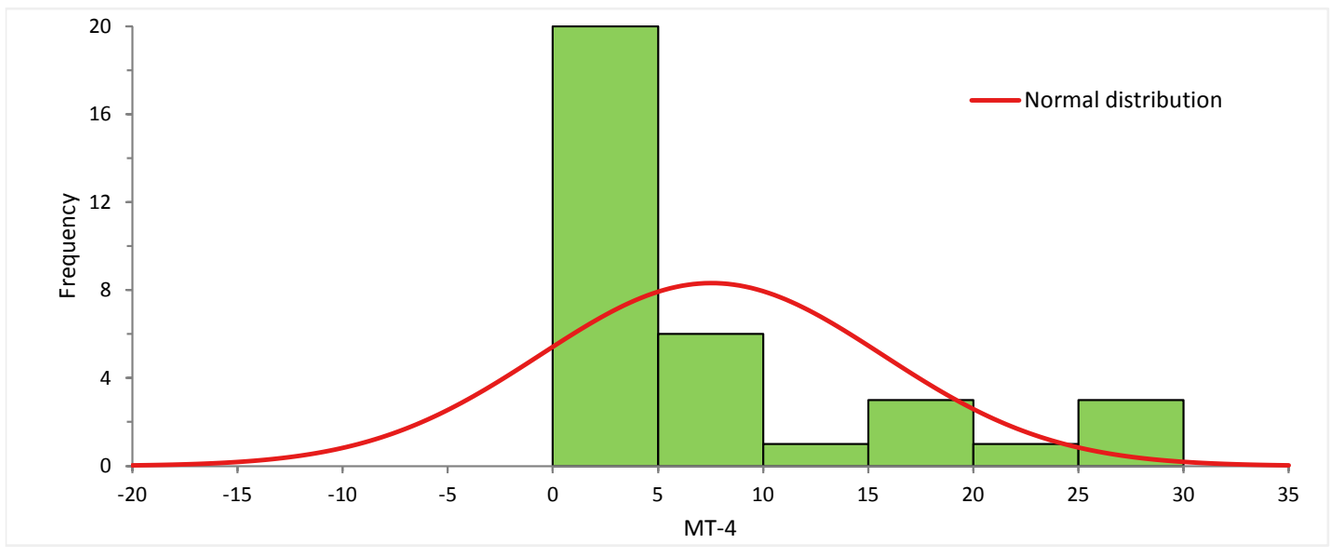

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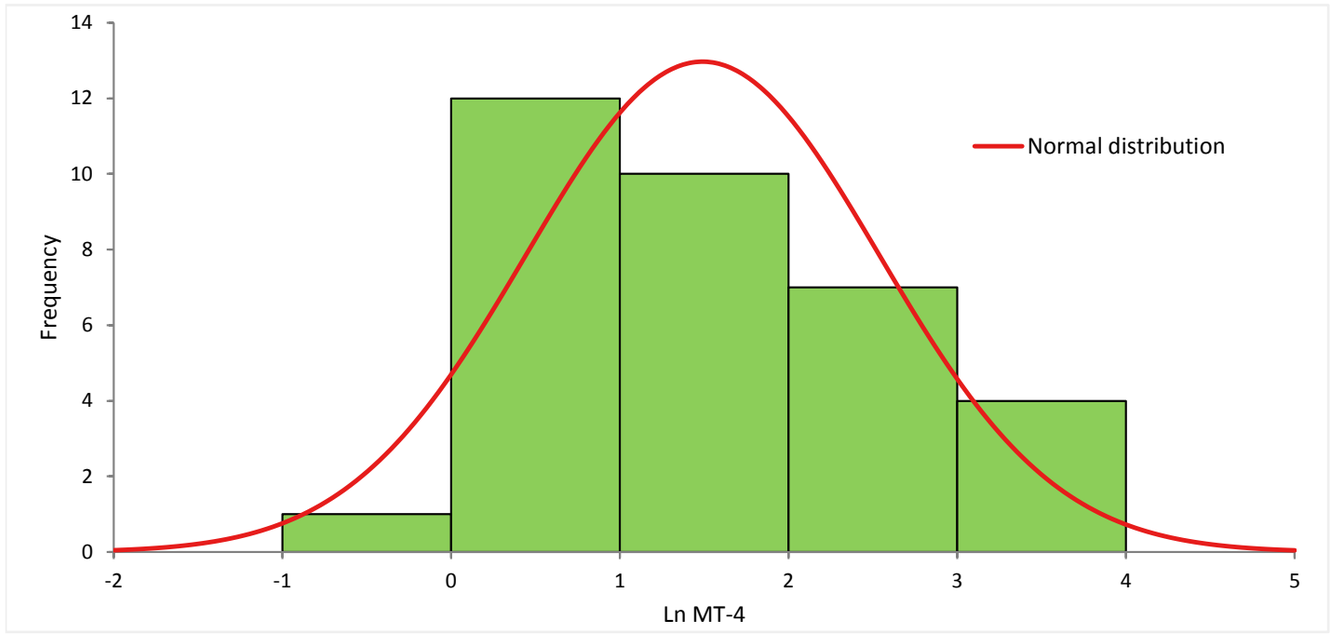

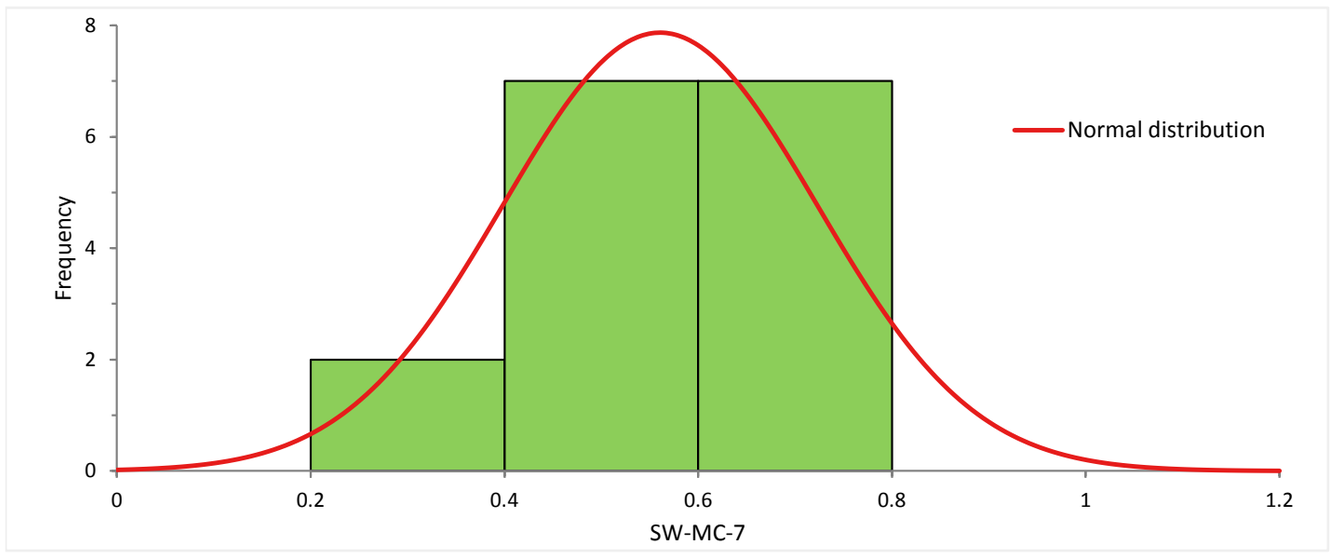

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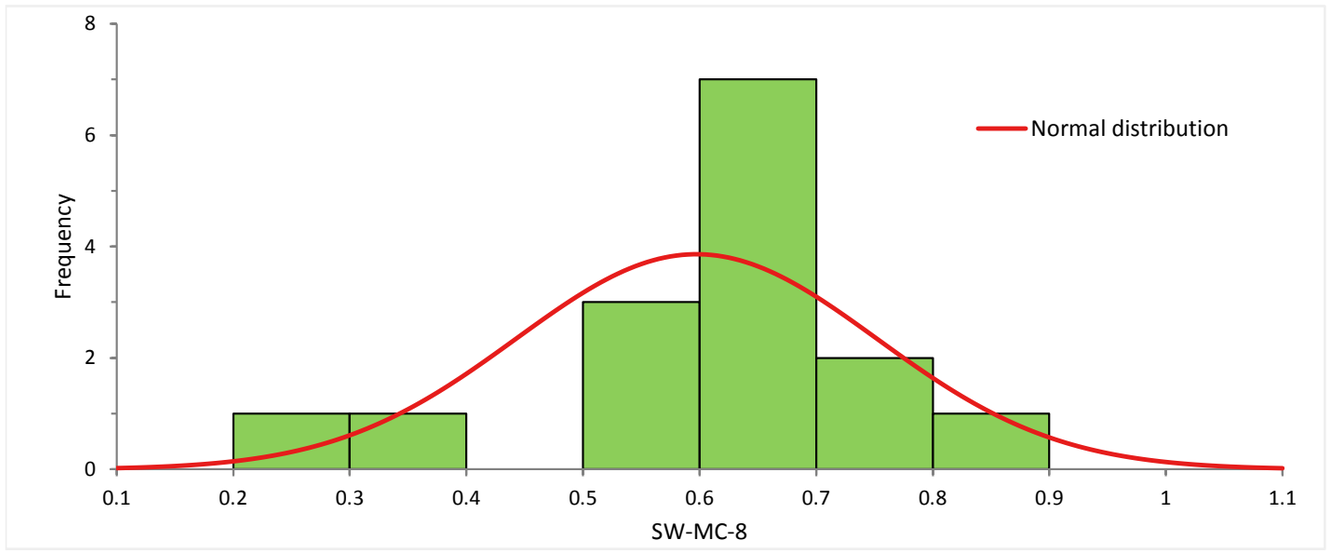

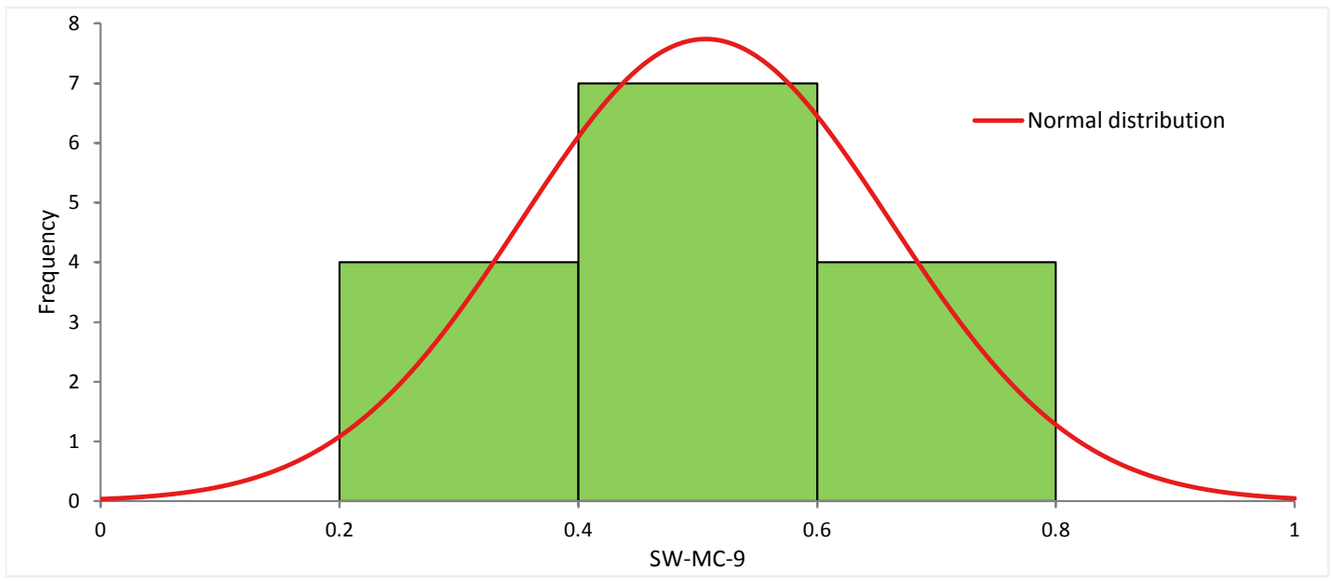

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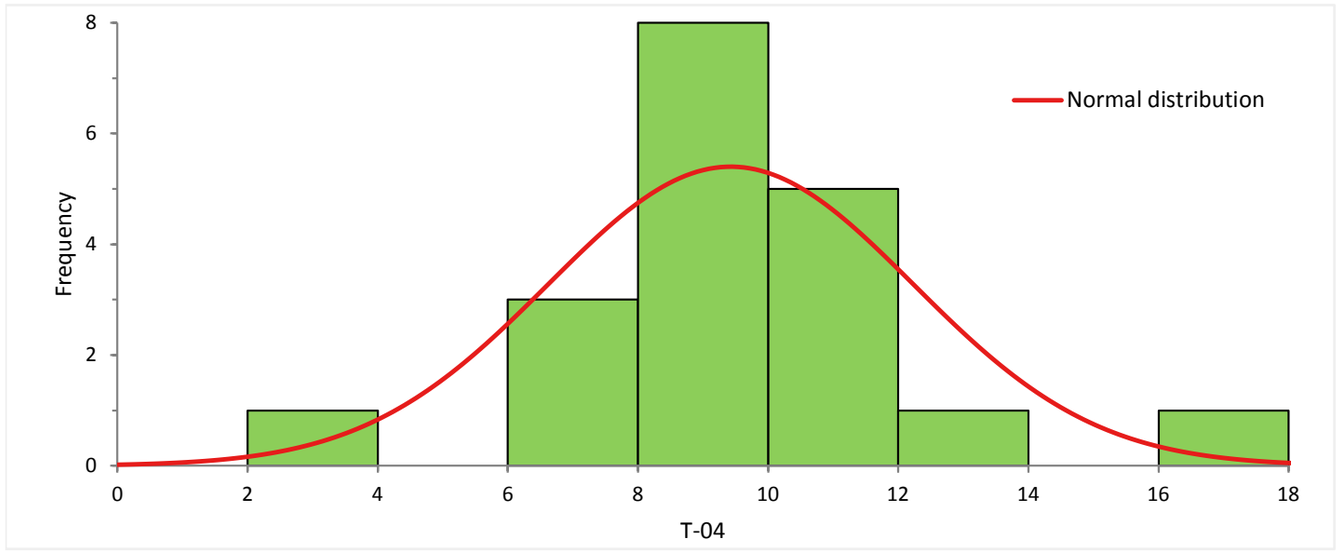

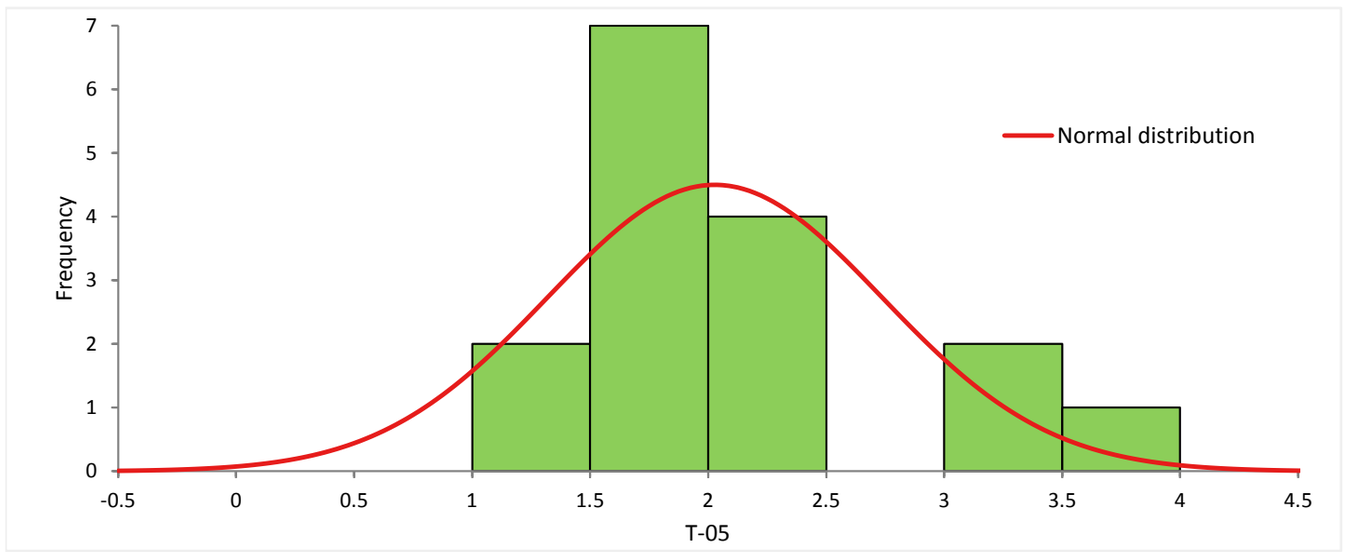

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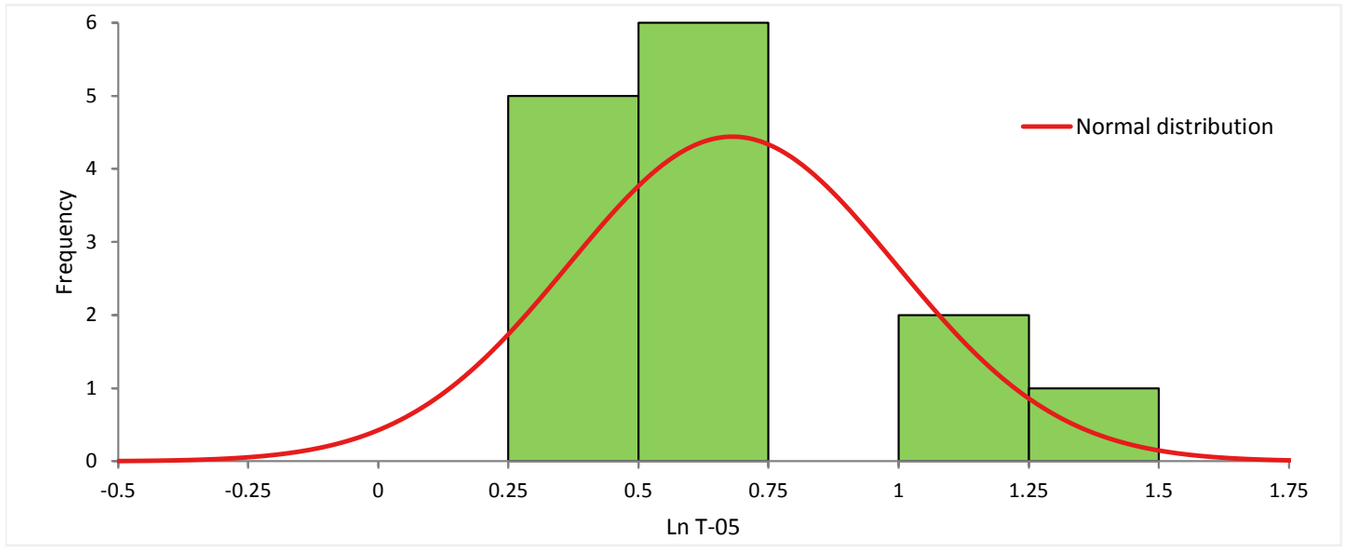

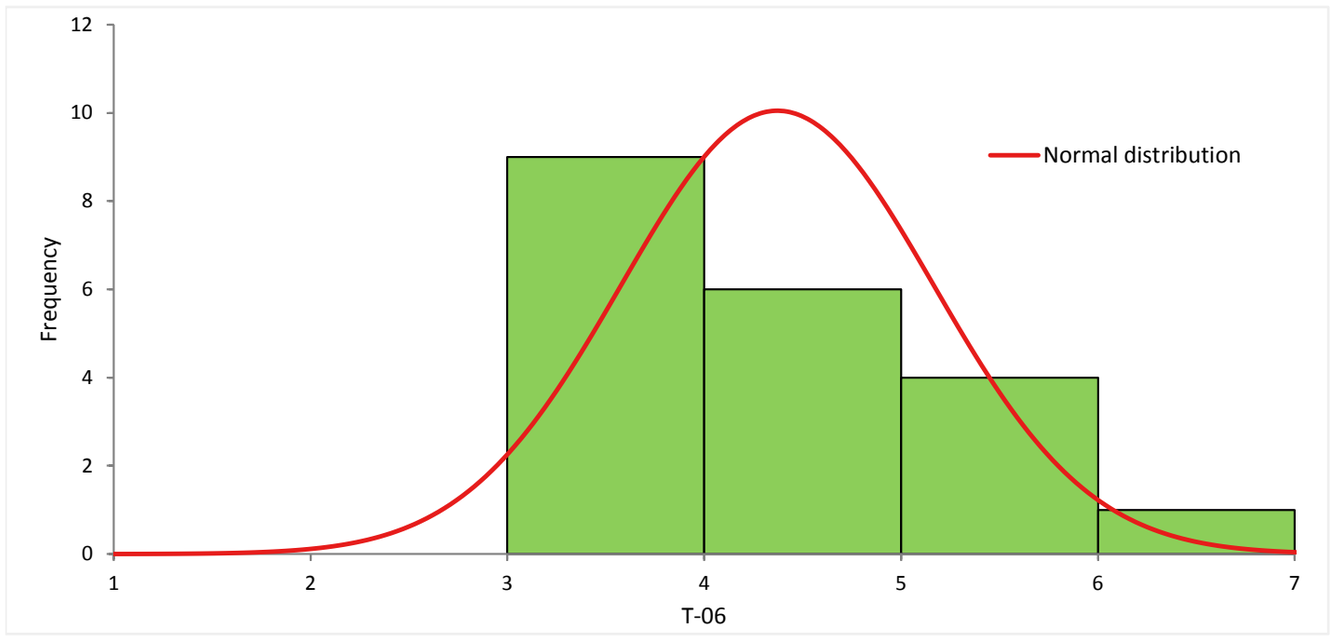

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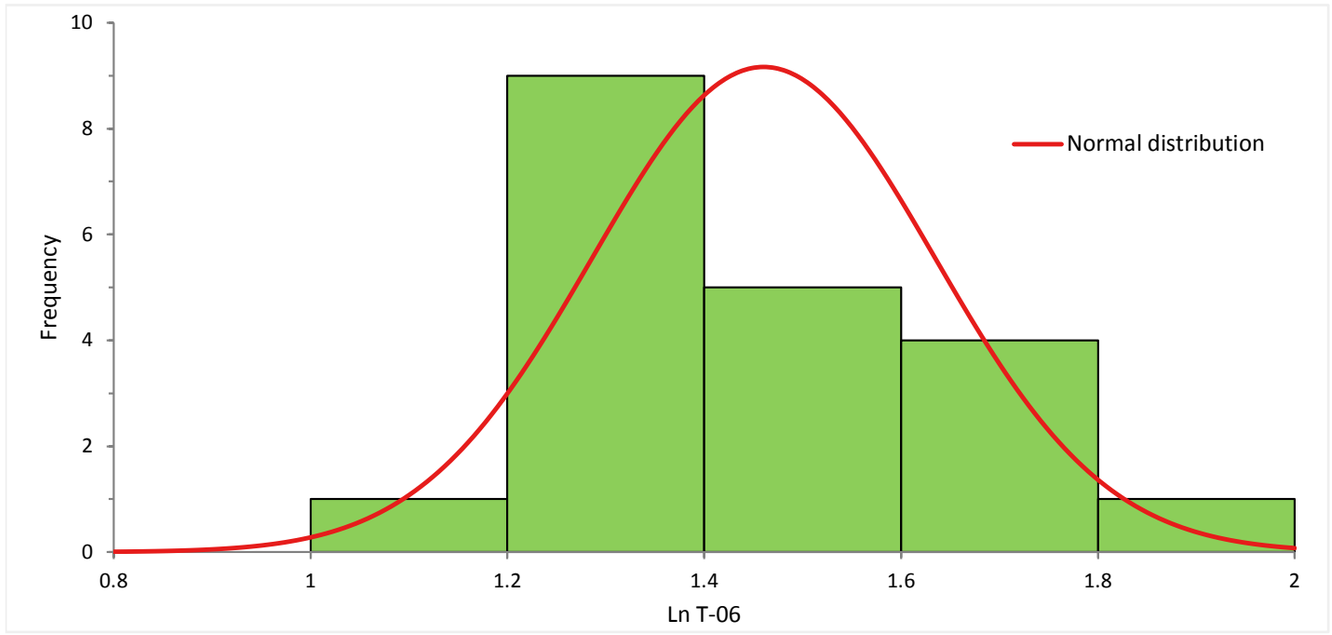

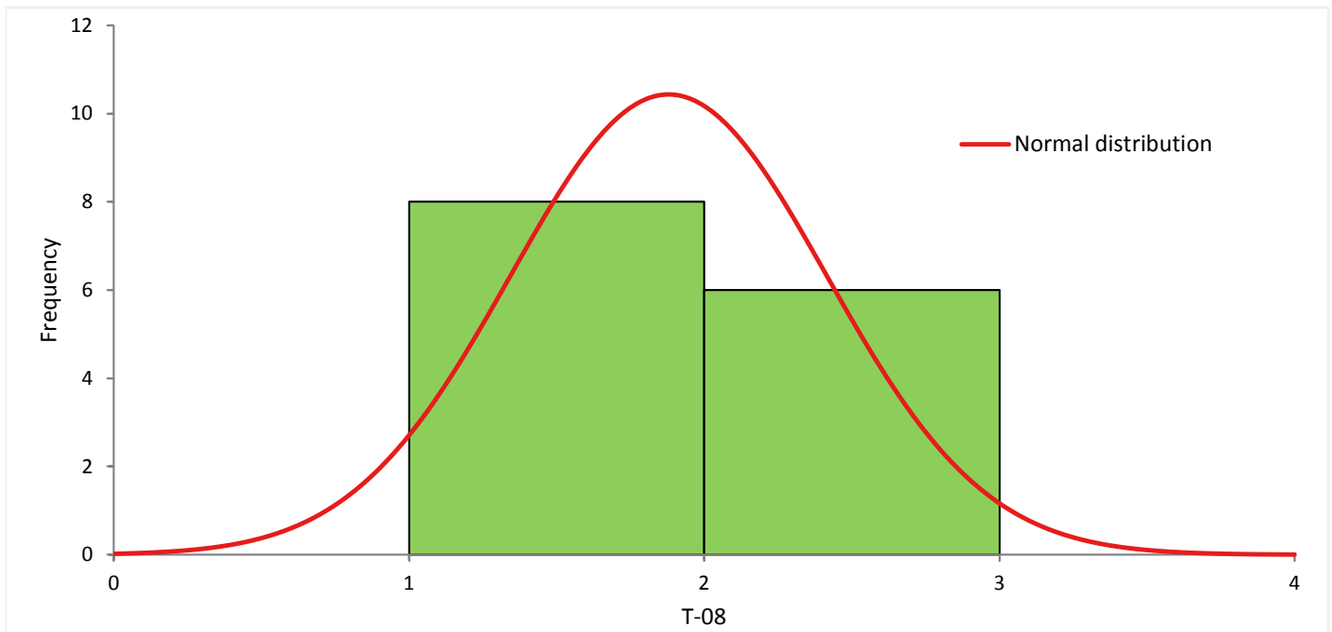

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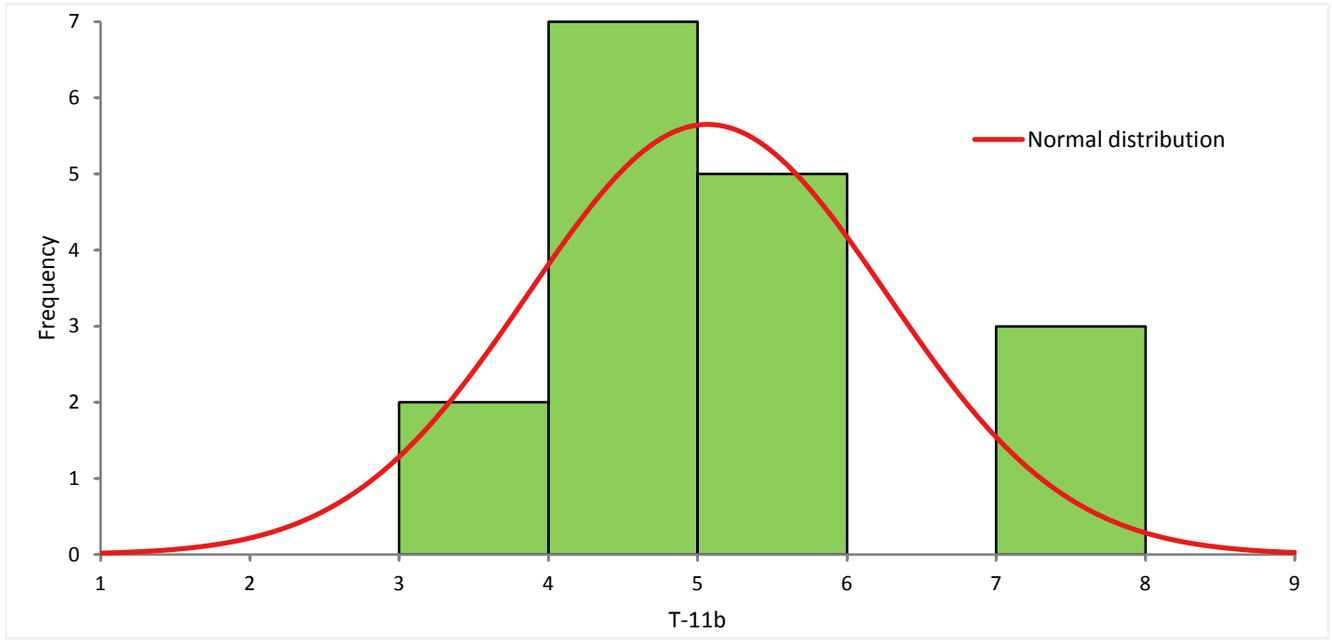

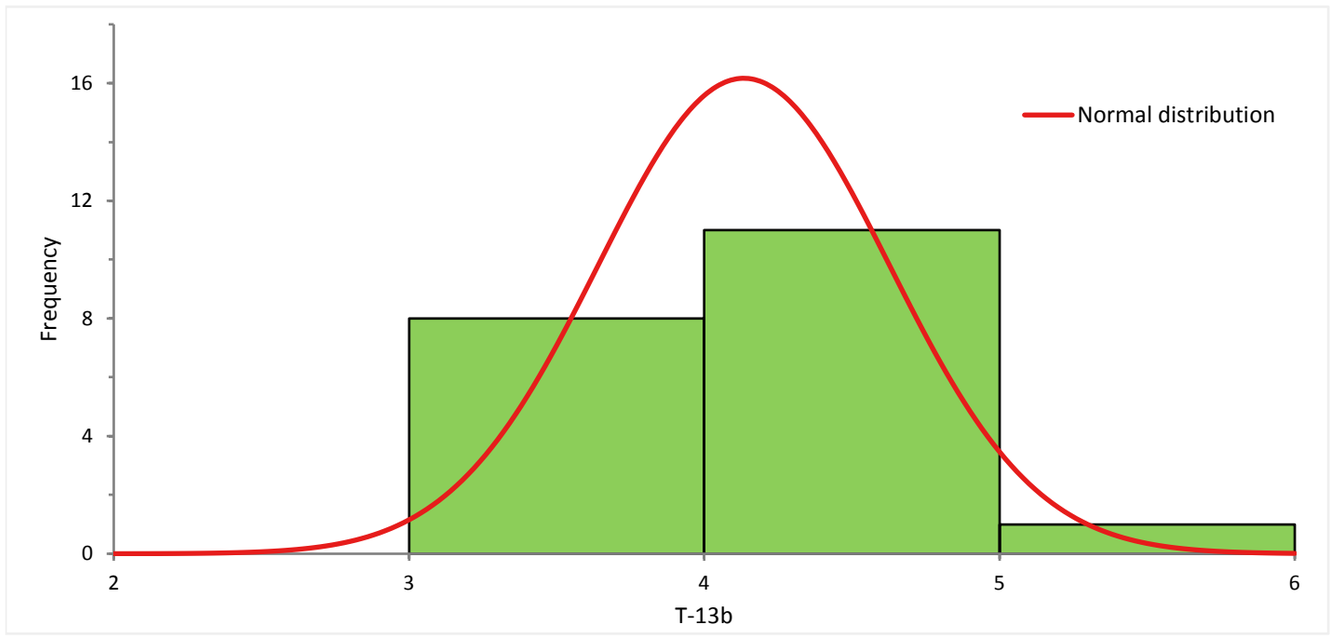

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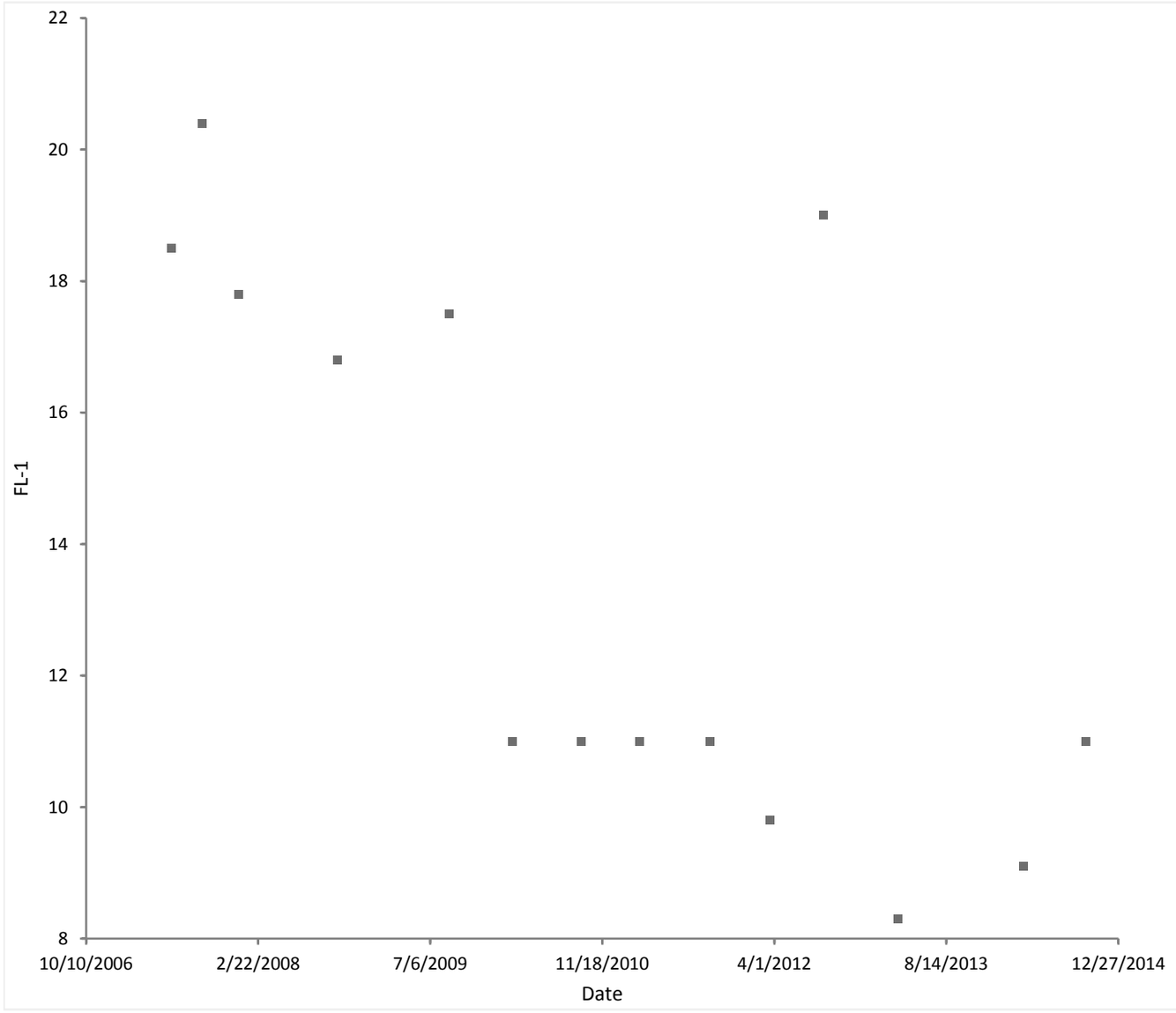
Upper Vashon Aquifer Kendall Correlation Graphs
Log RAM, Joint Base Lewis-McChord, Washington 98433



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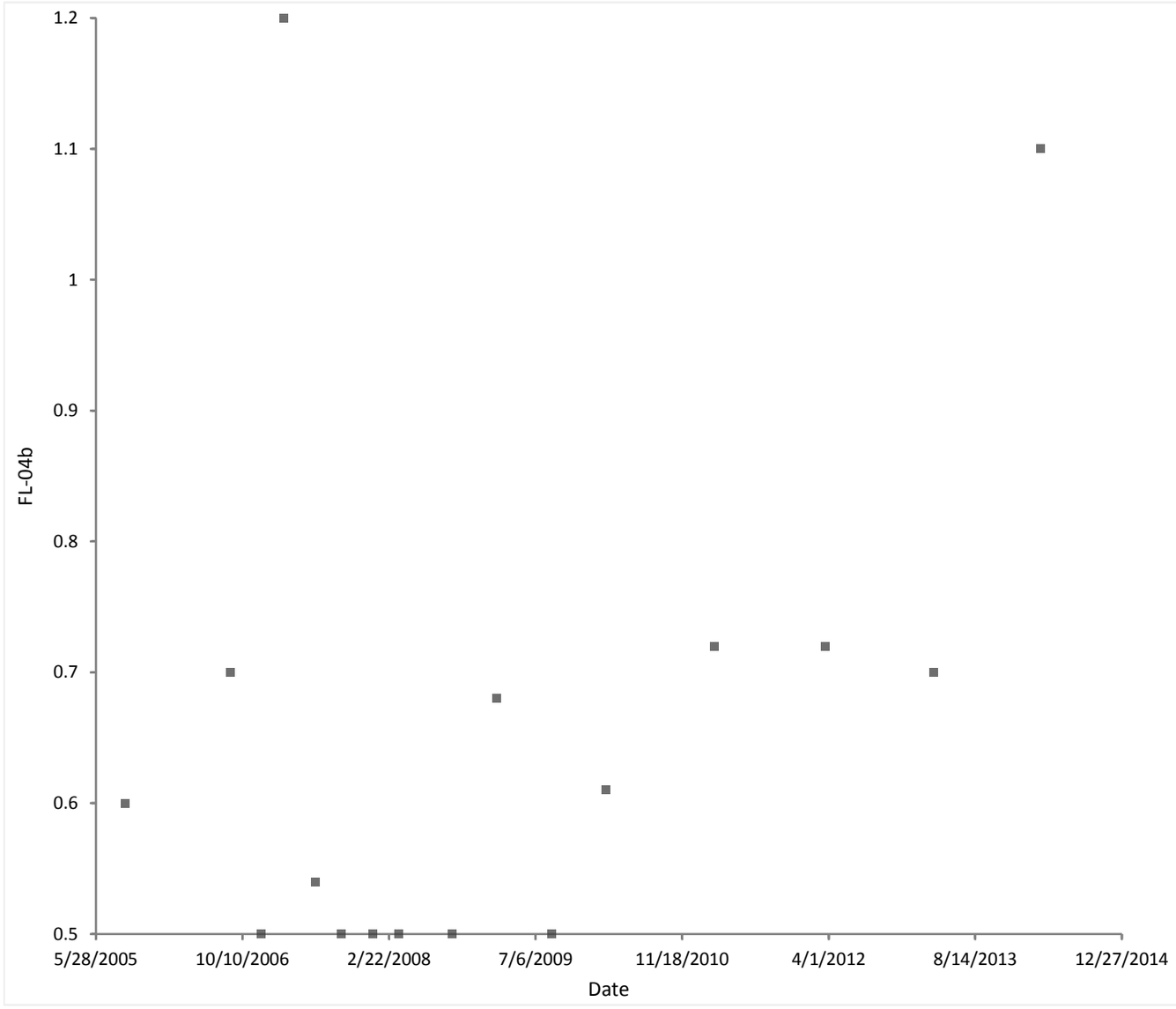

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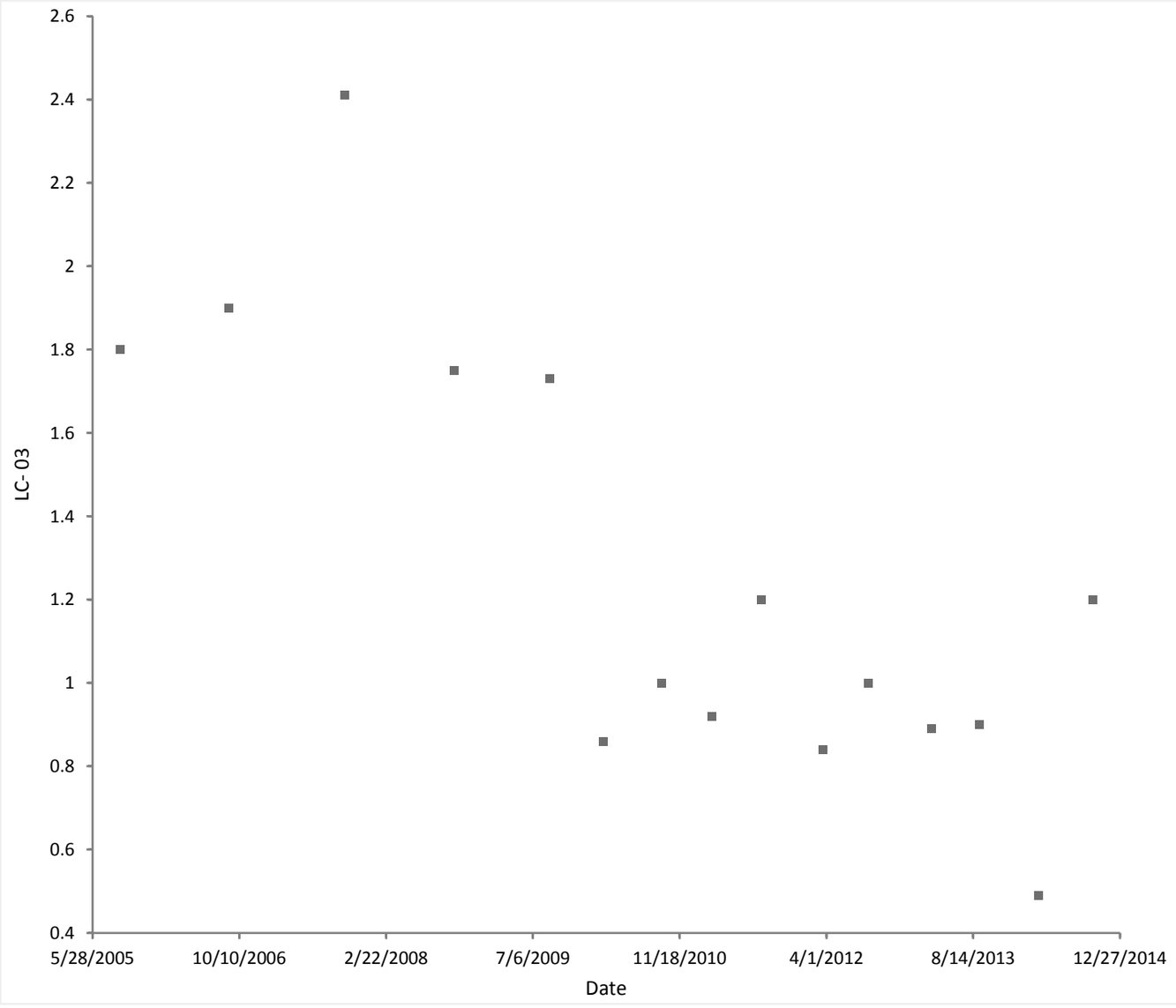

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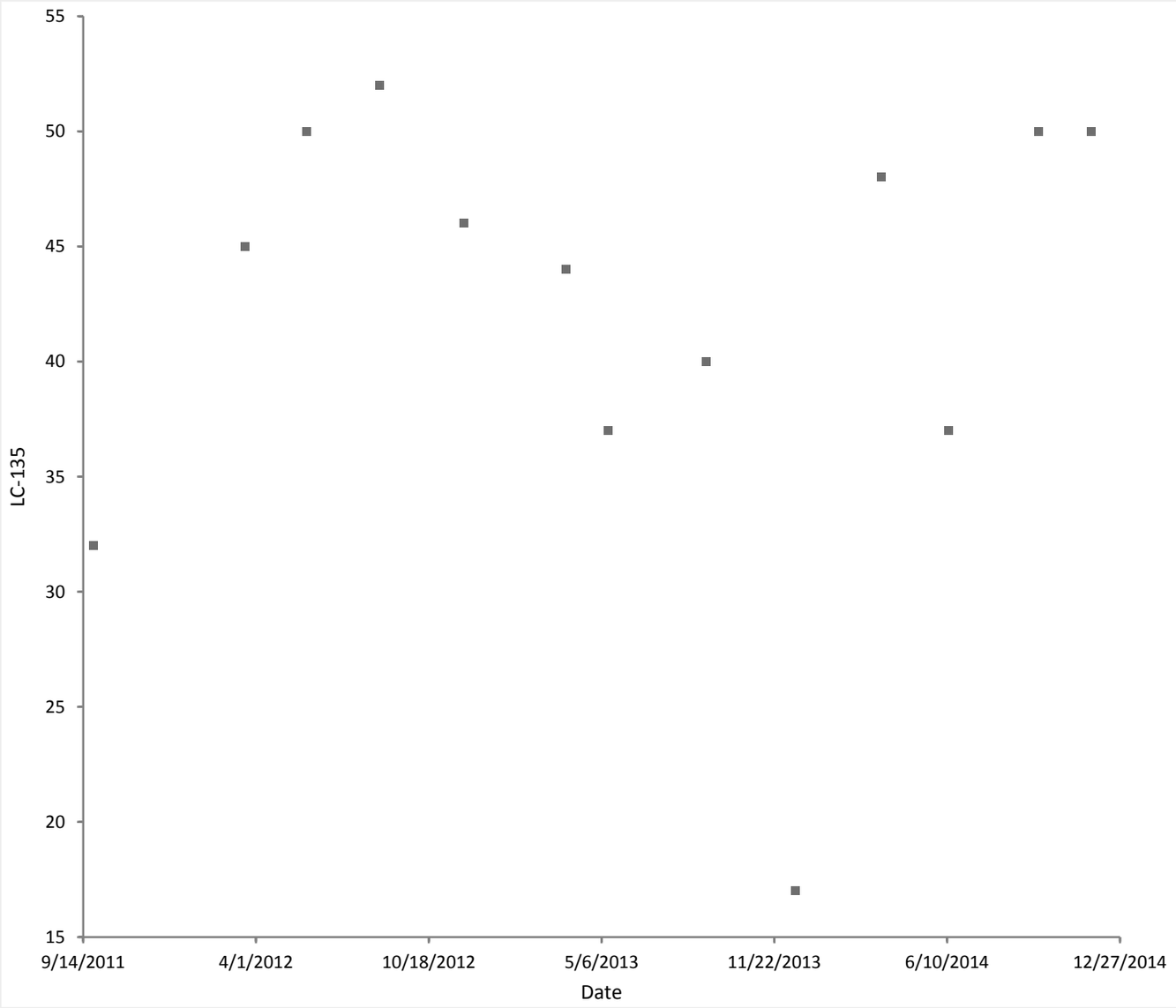

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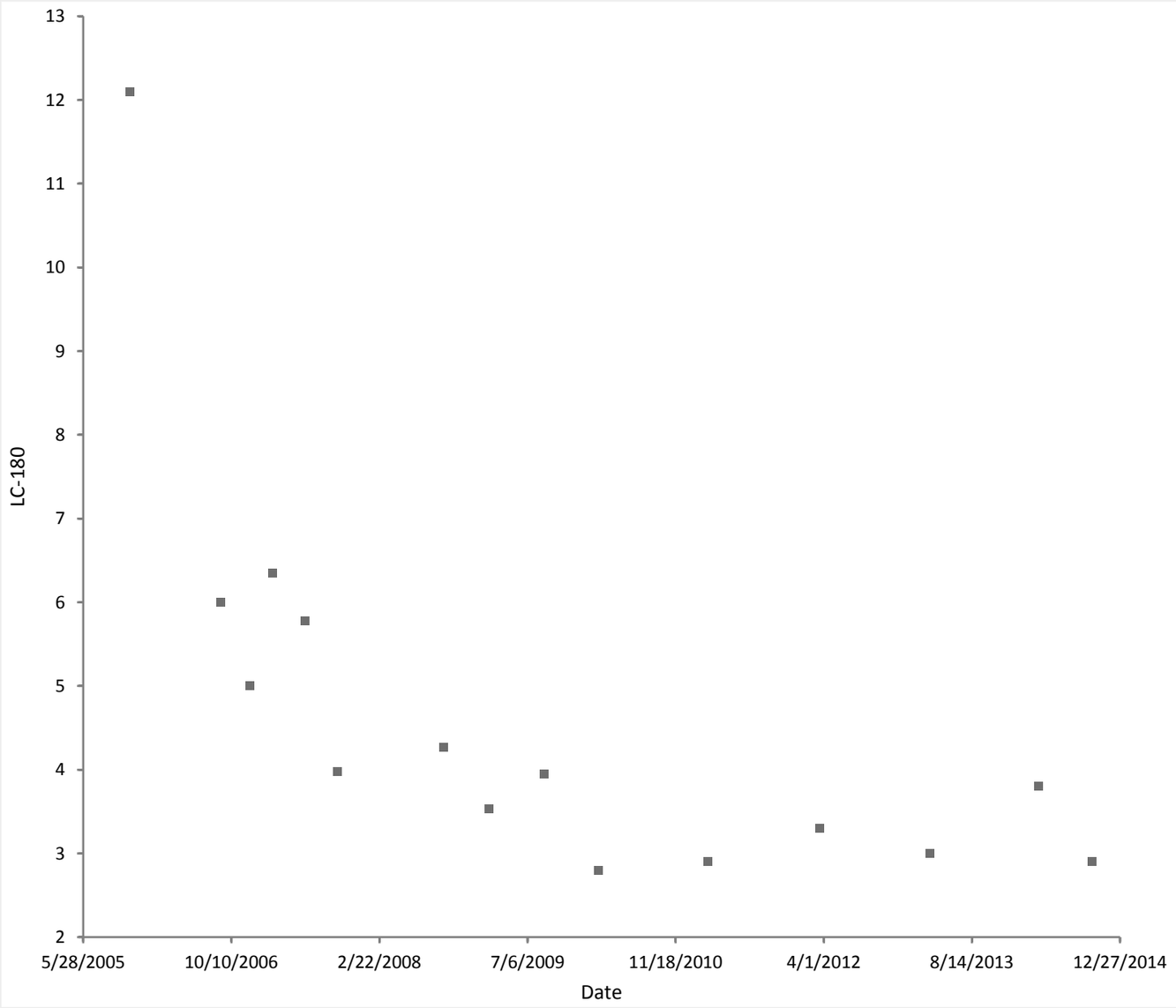

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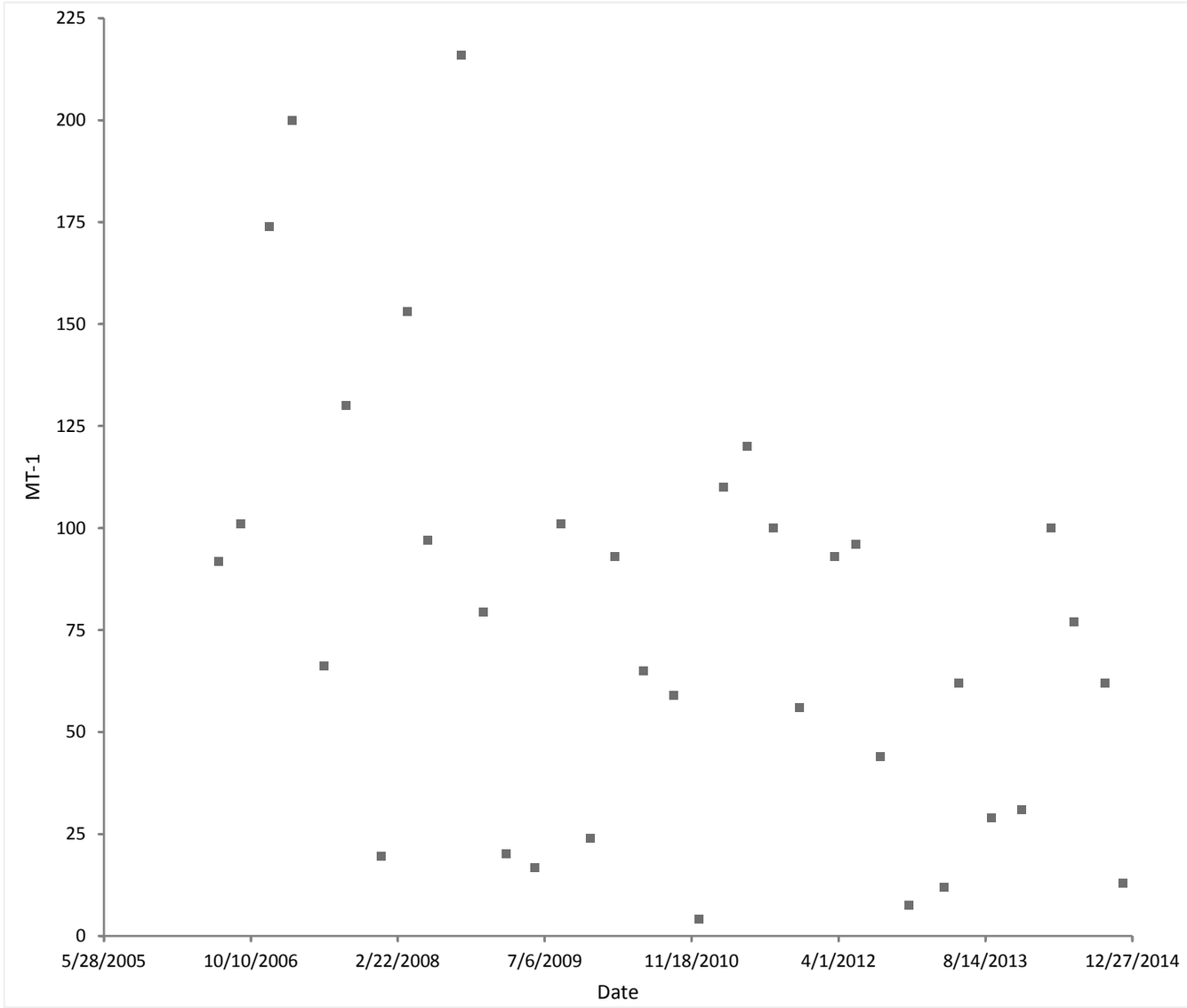

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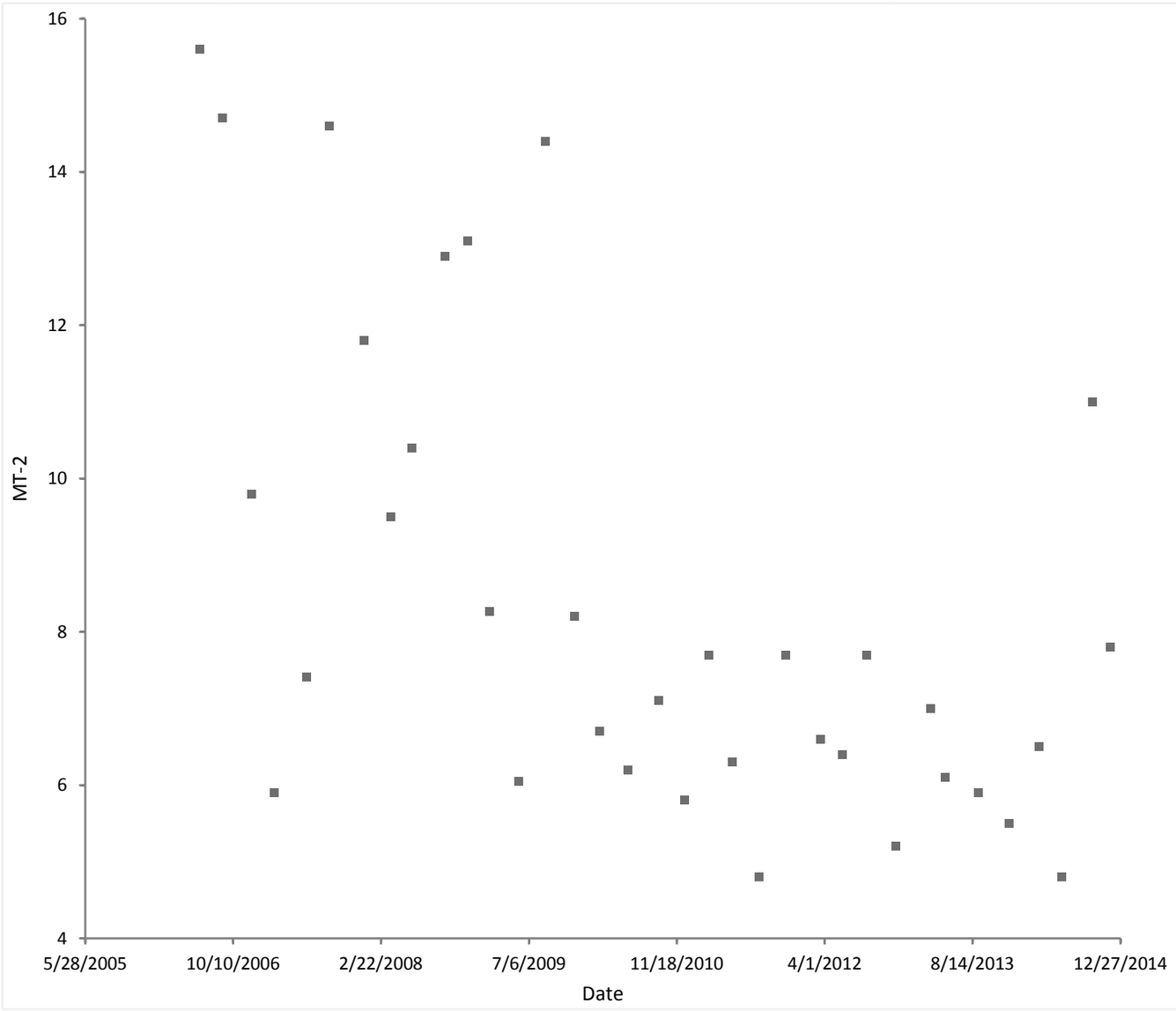

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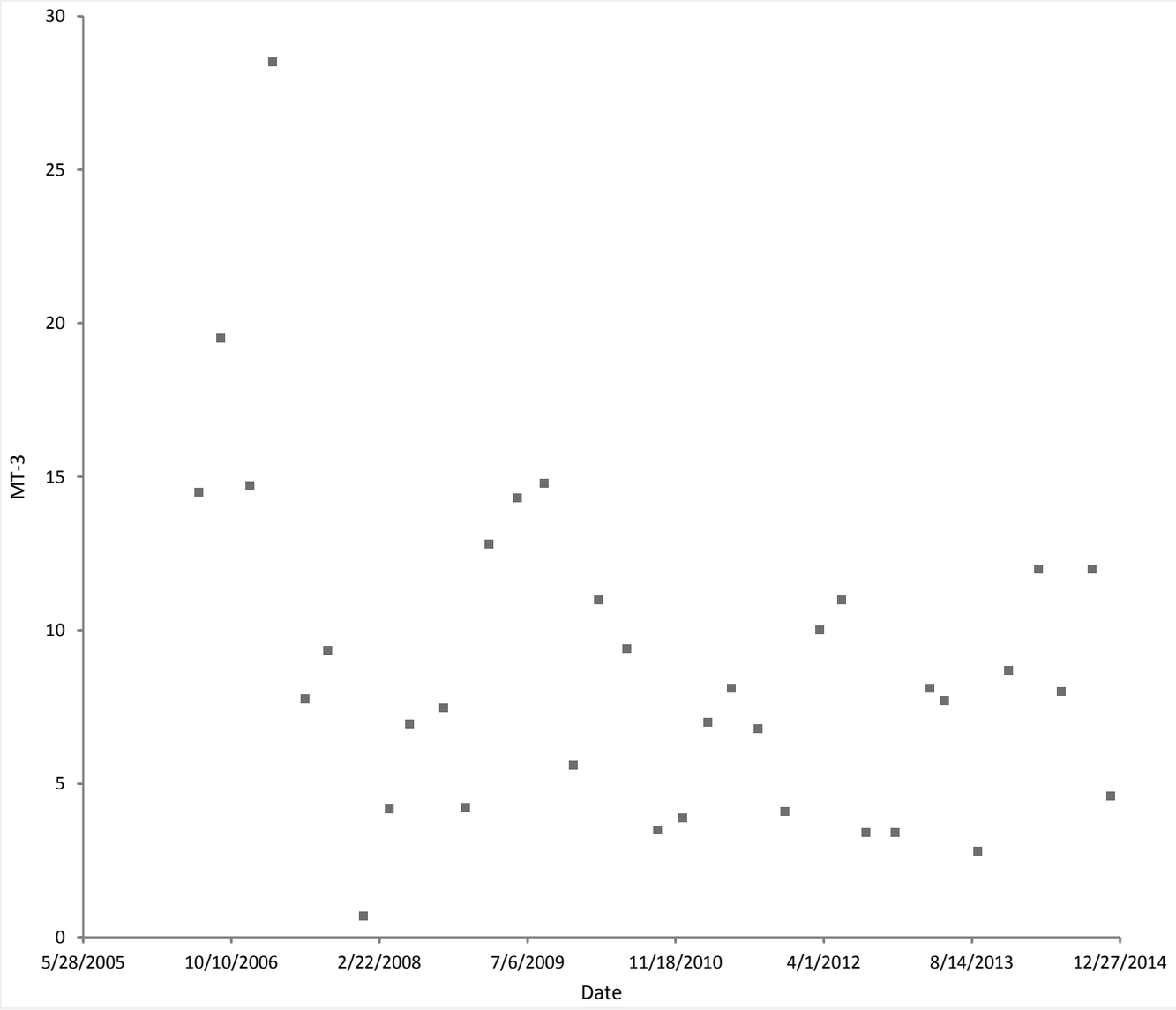

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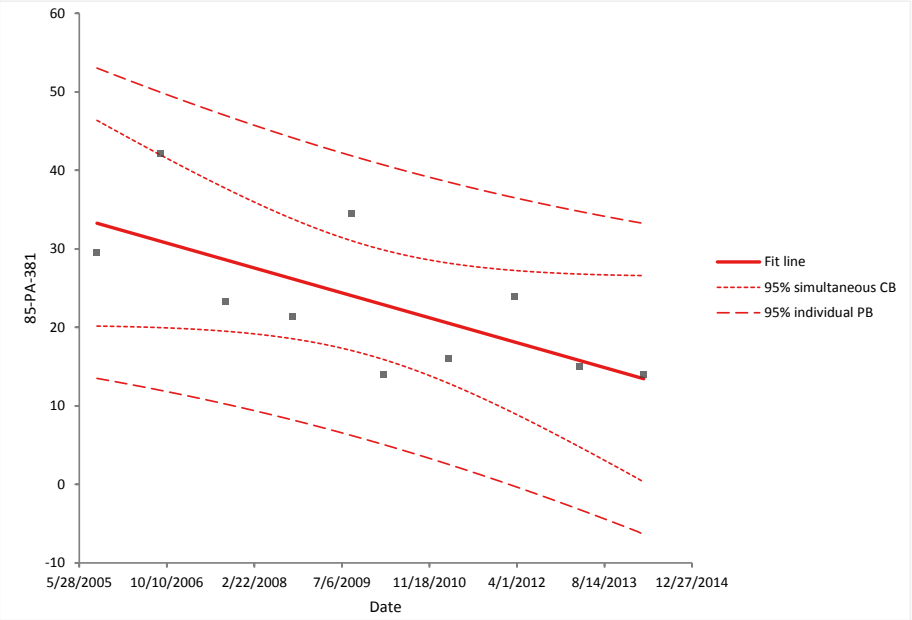

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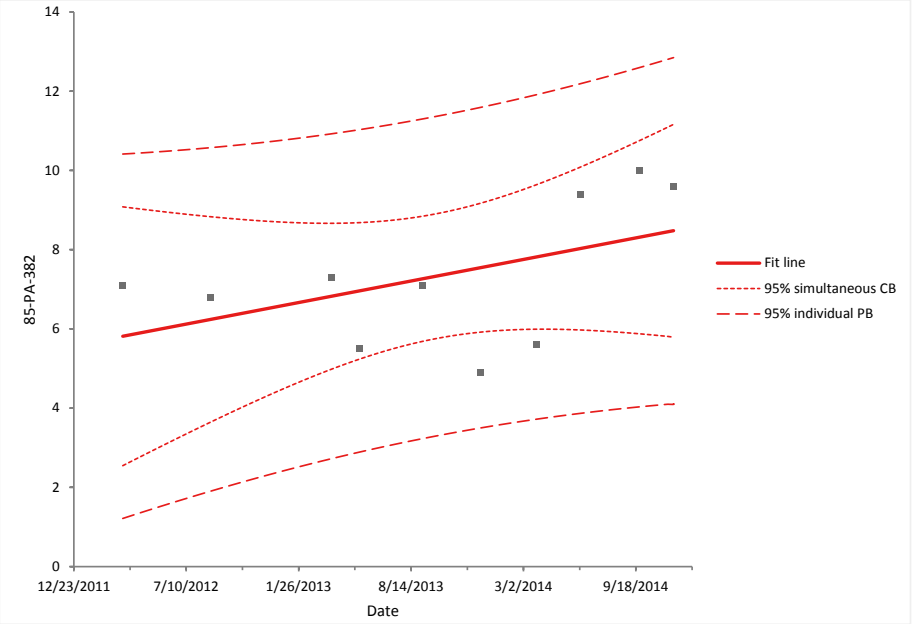

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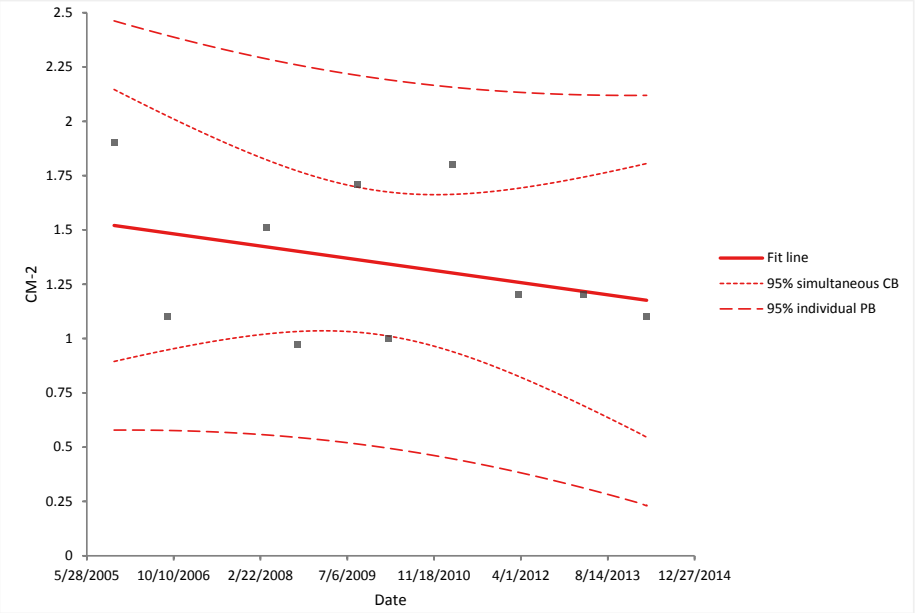

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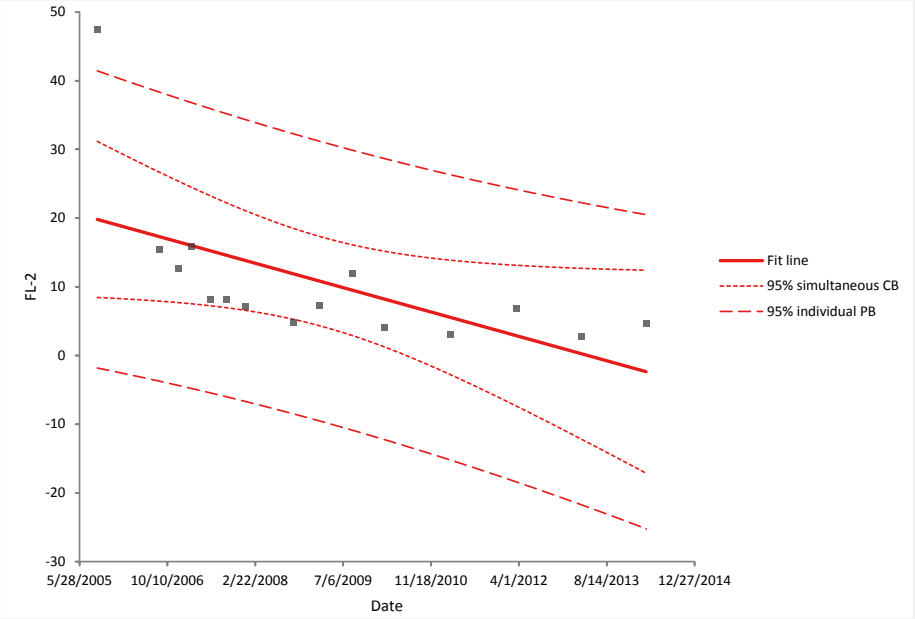

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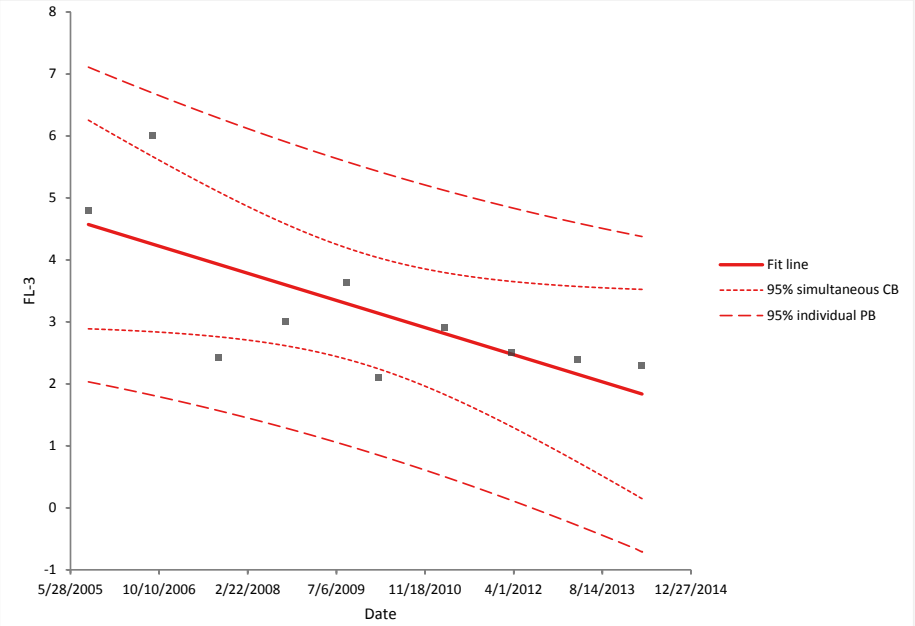

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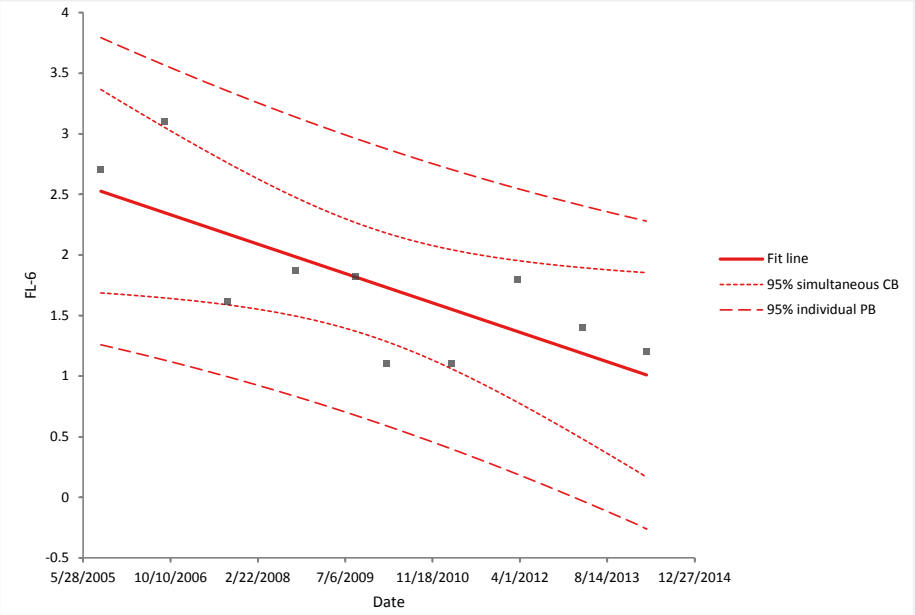

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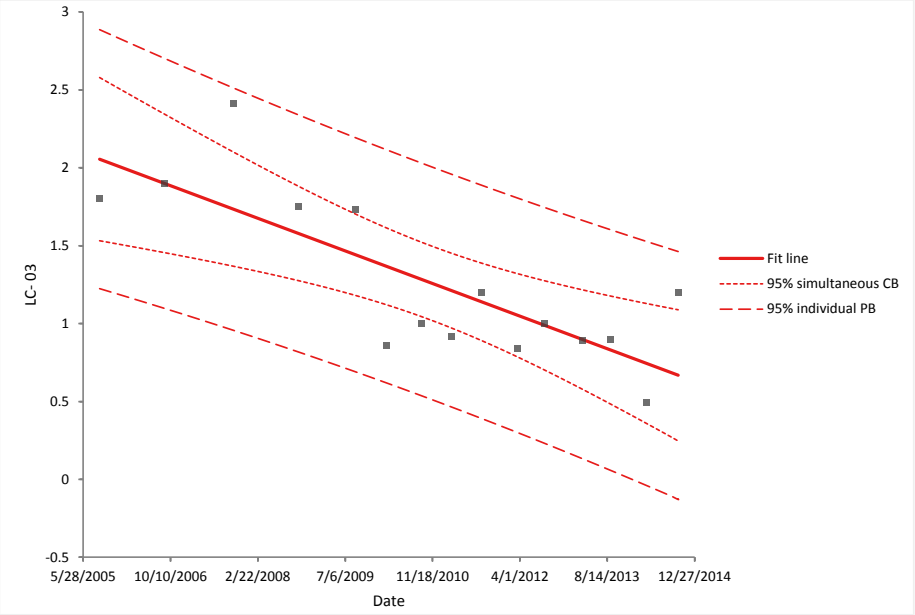

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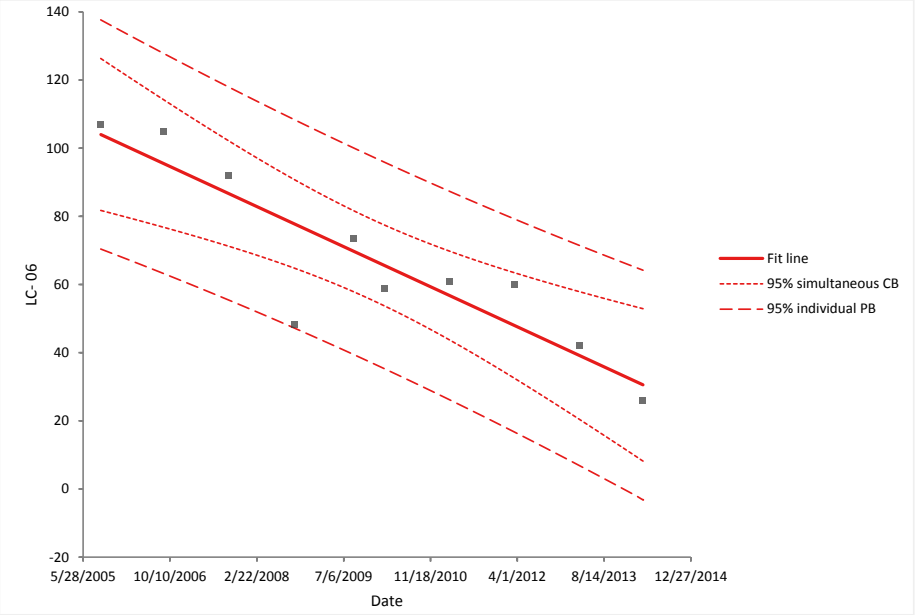

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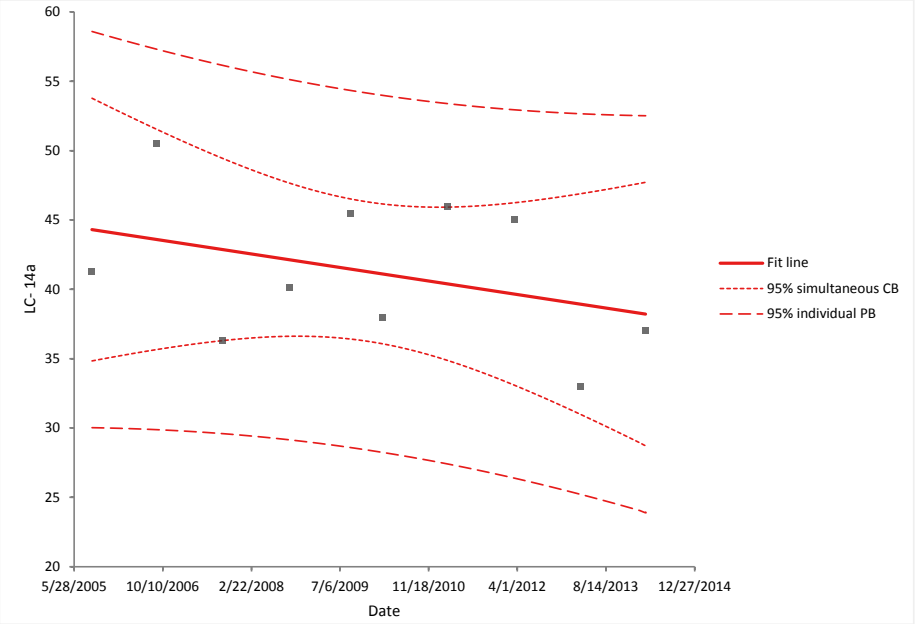

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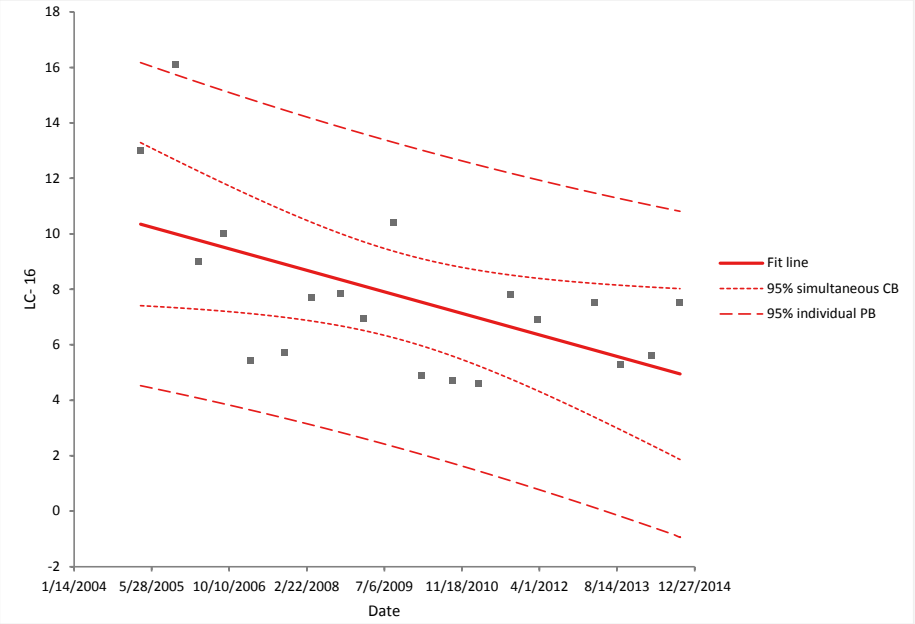

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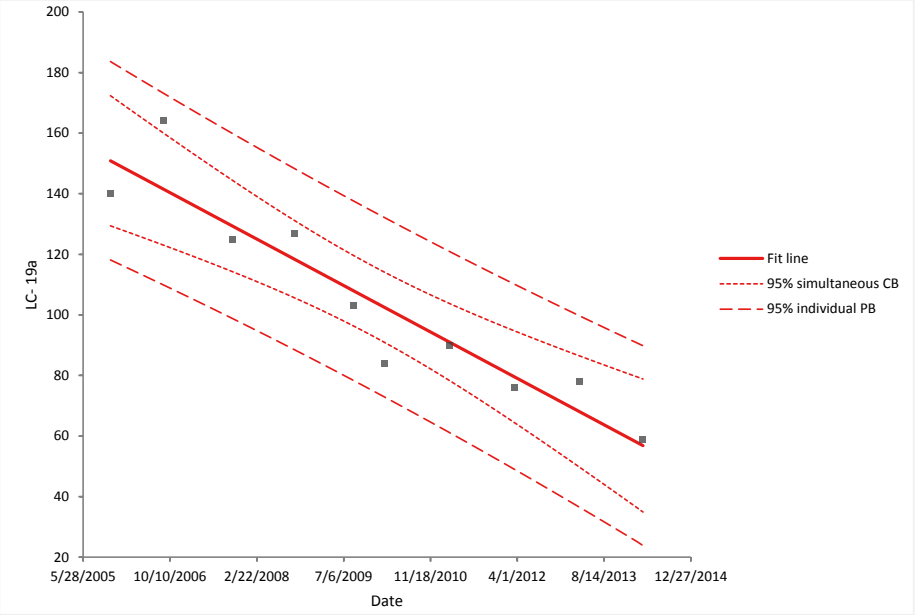

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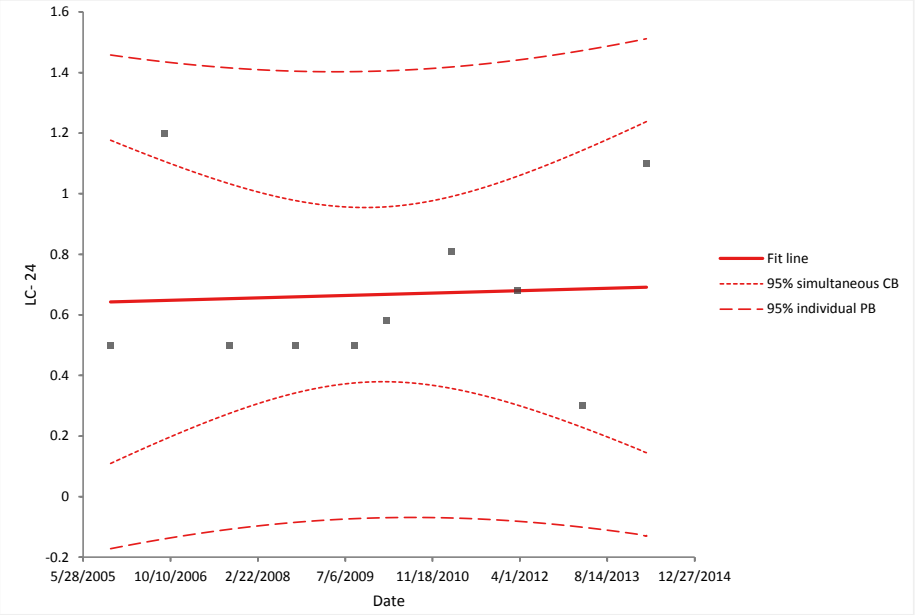

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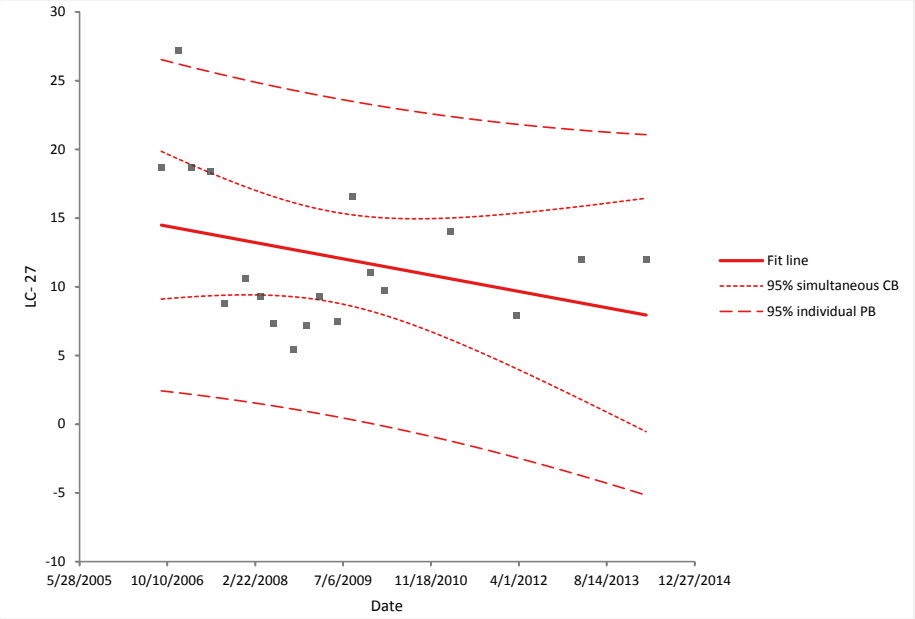

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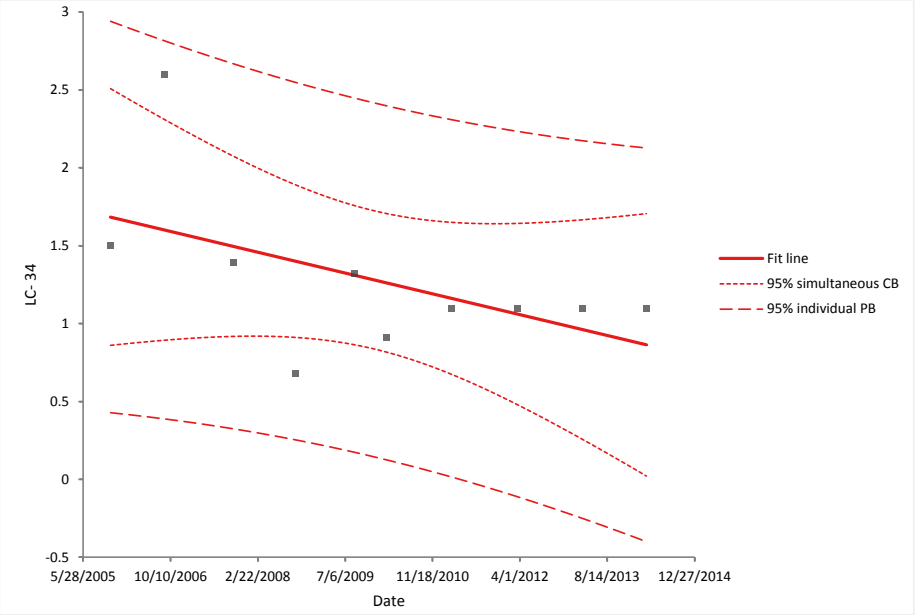

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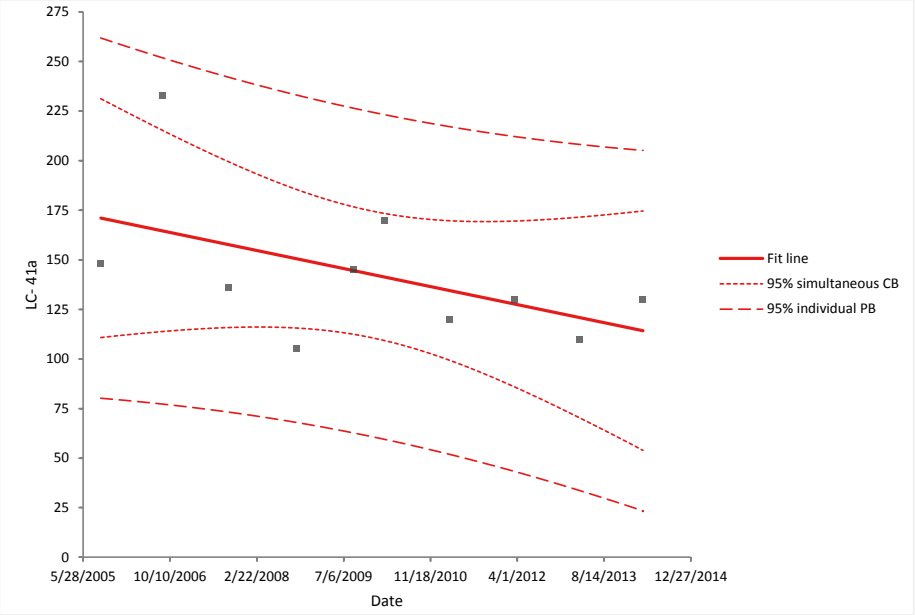

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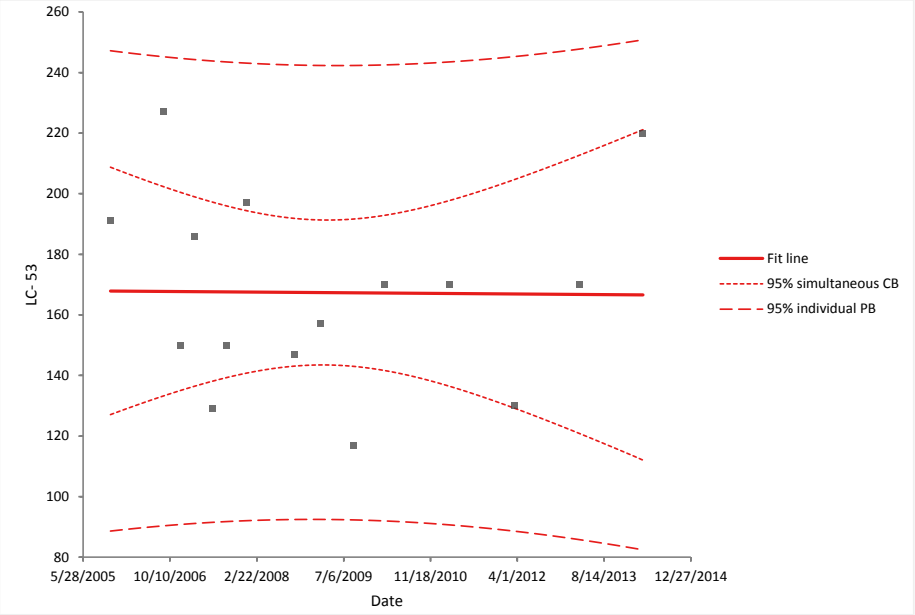

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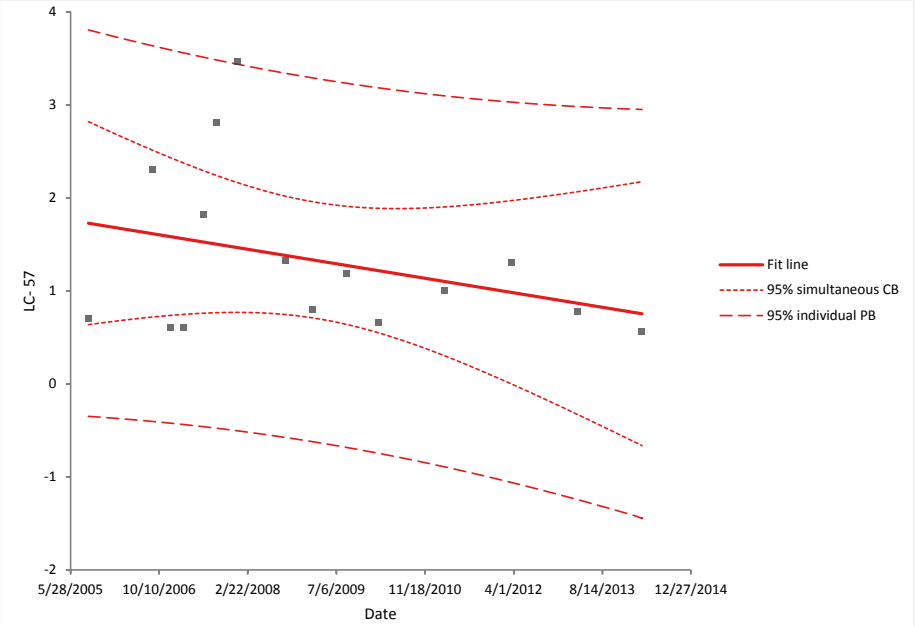

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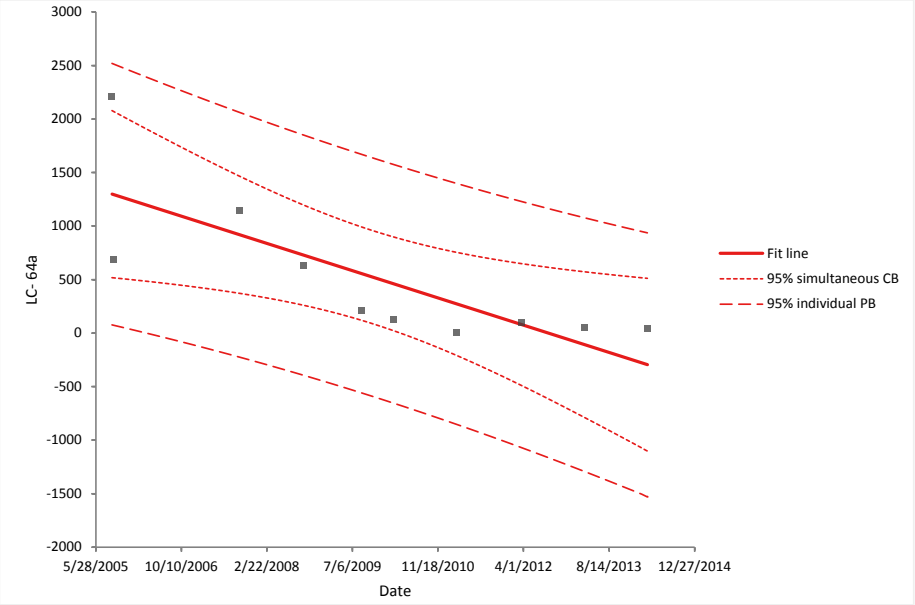

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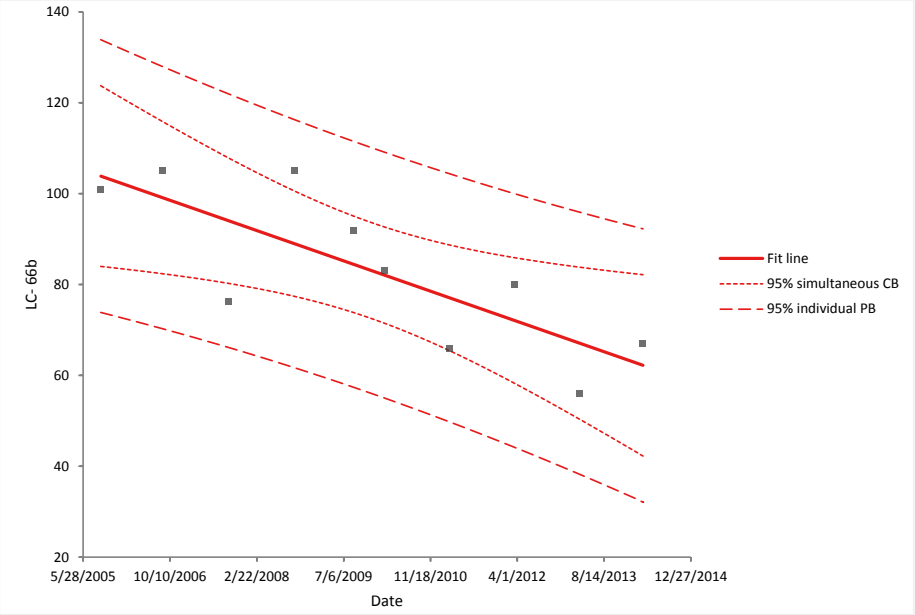

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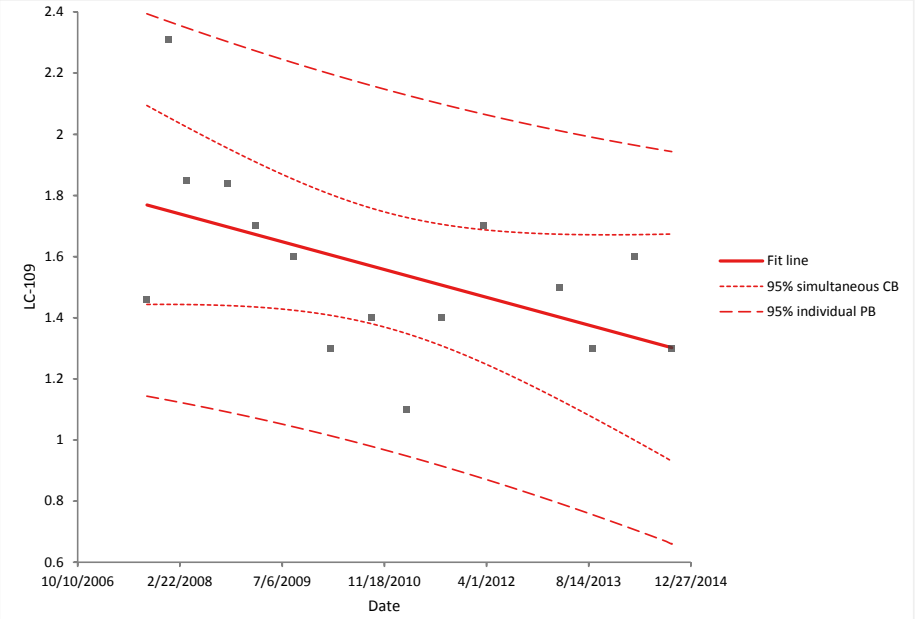

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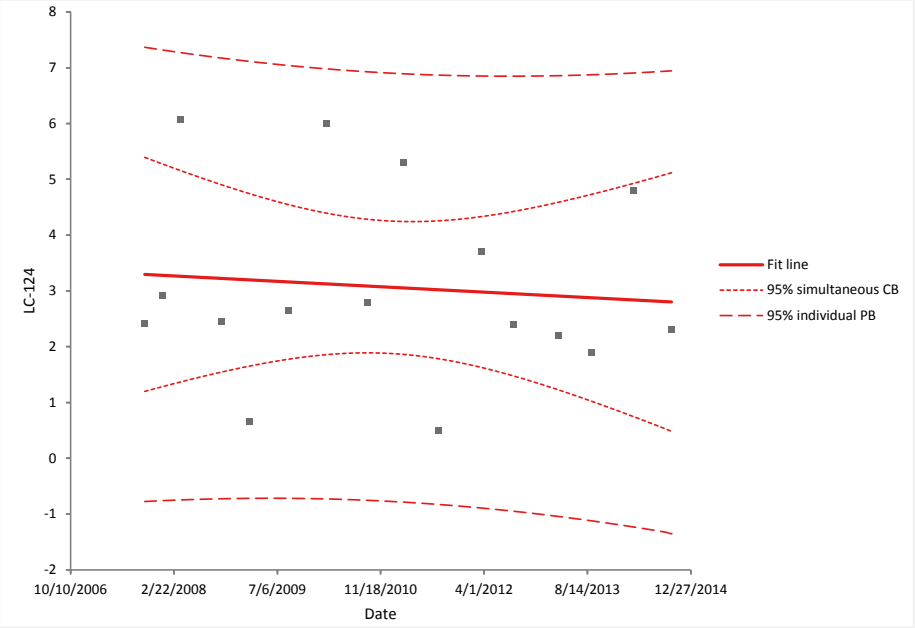

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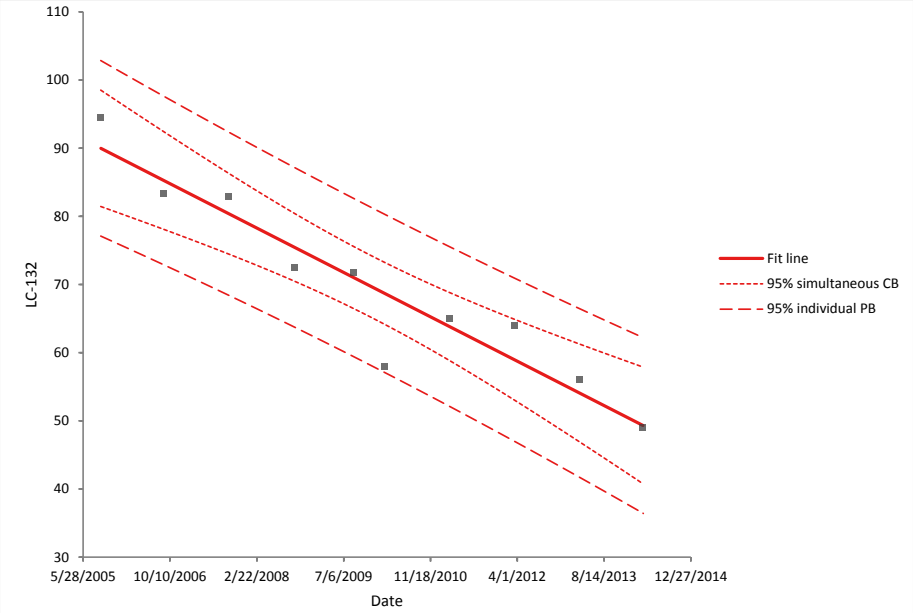

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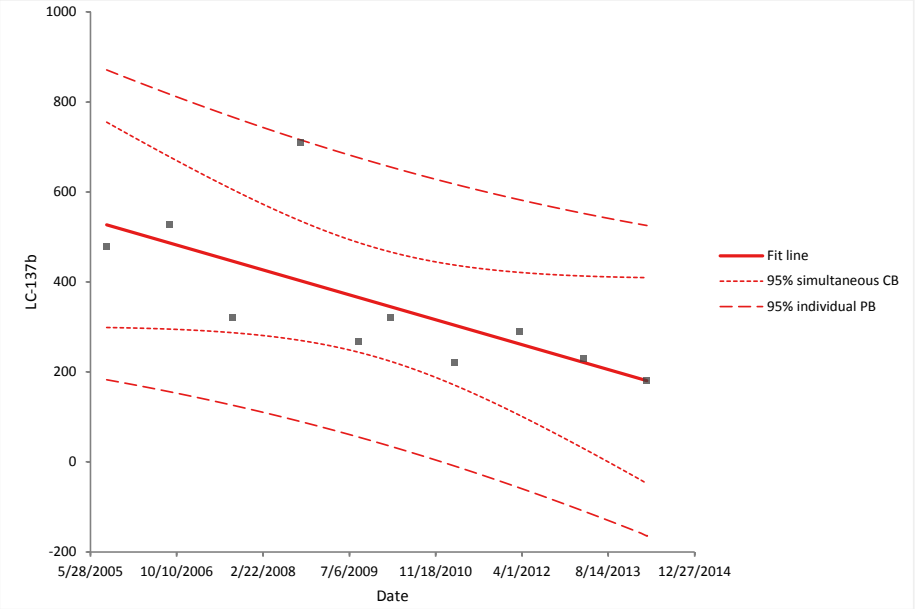

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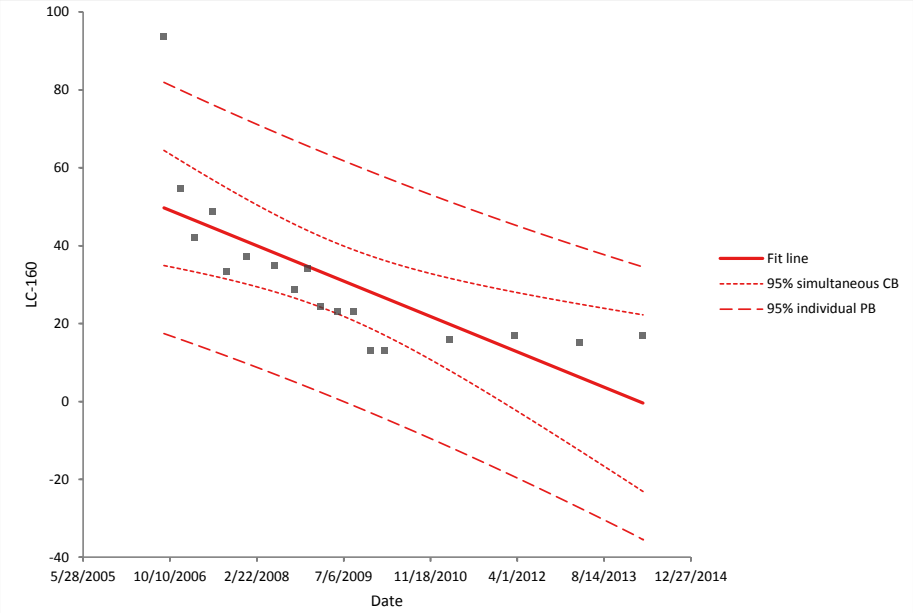

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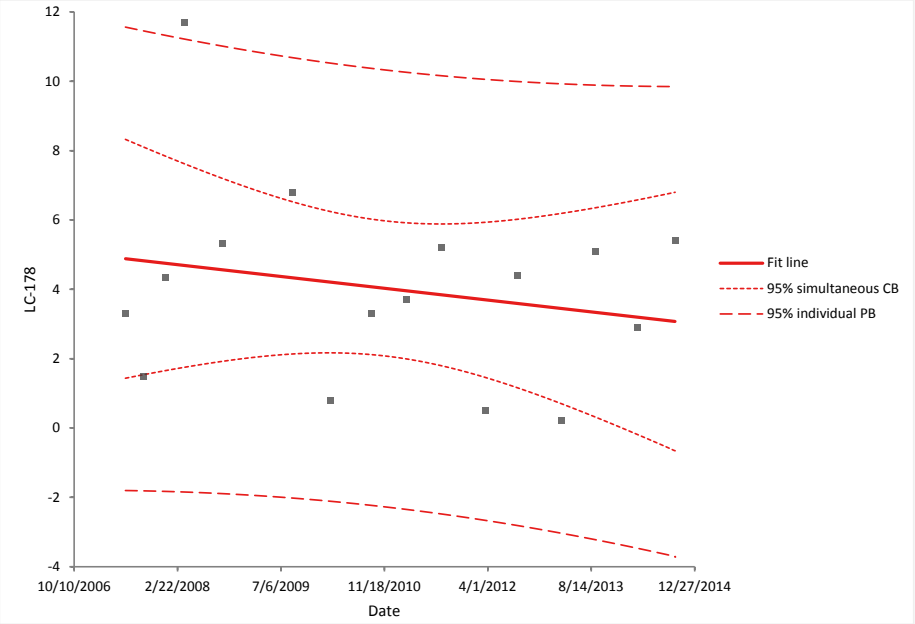

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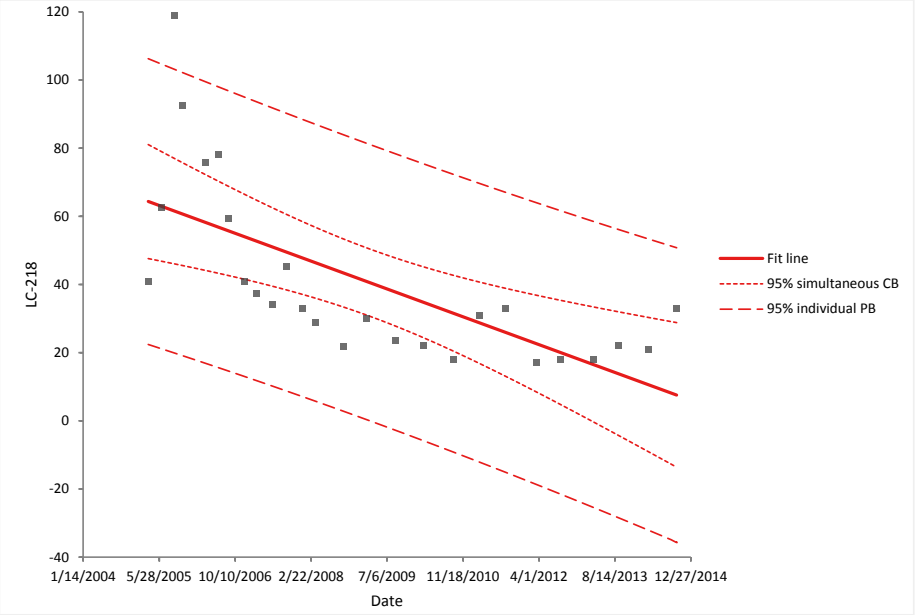

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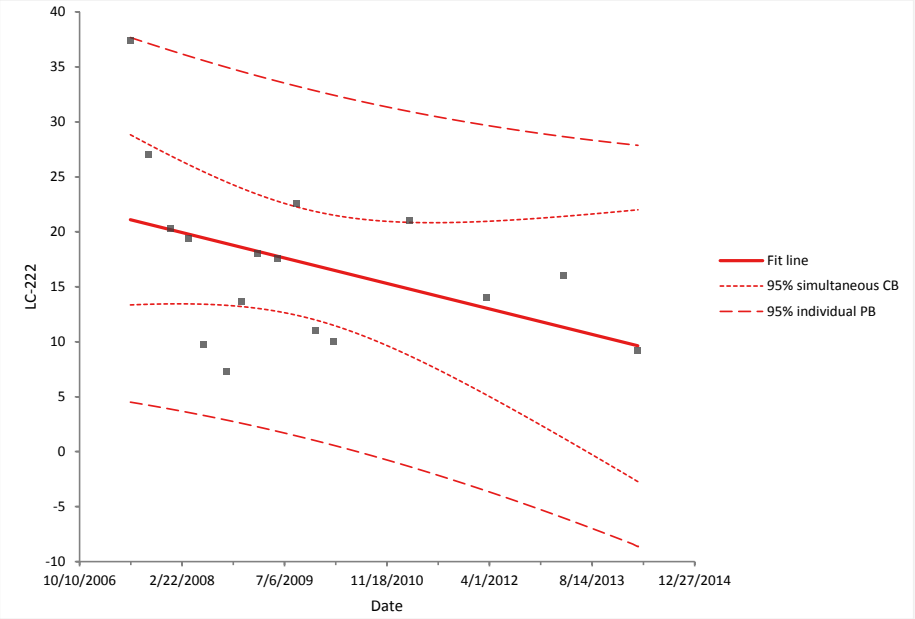

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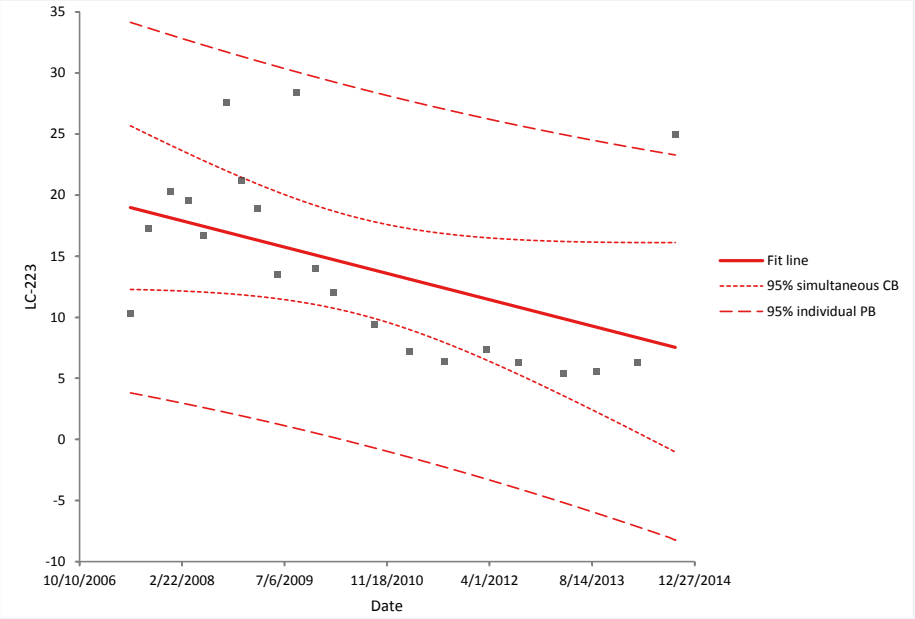

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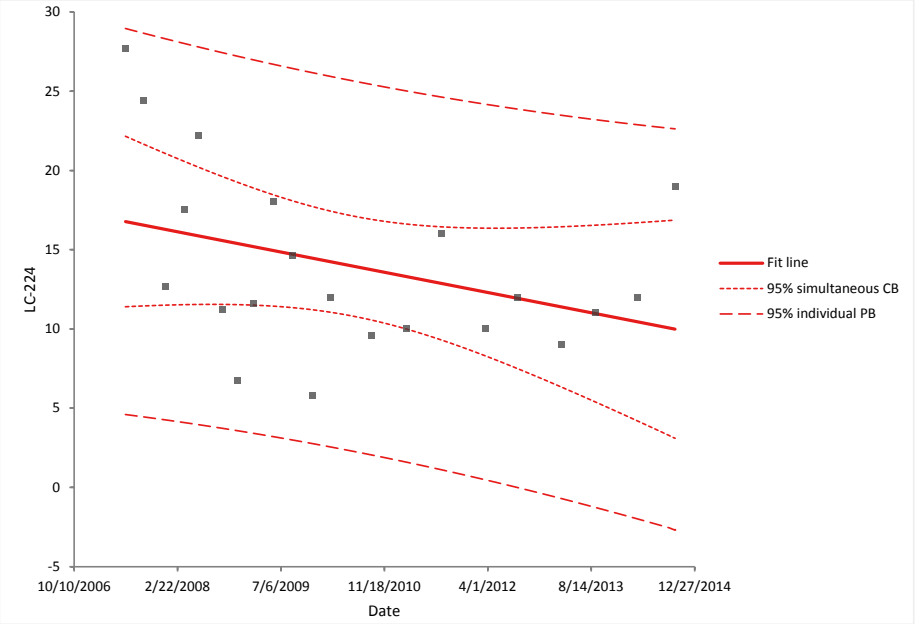

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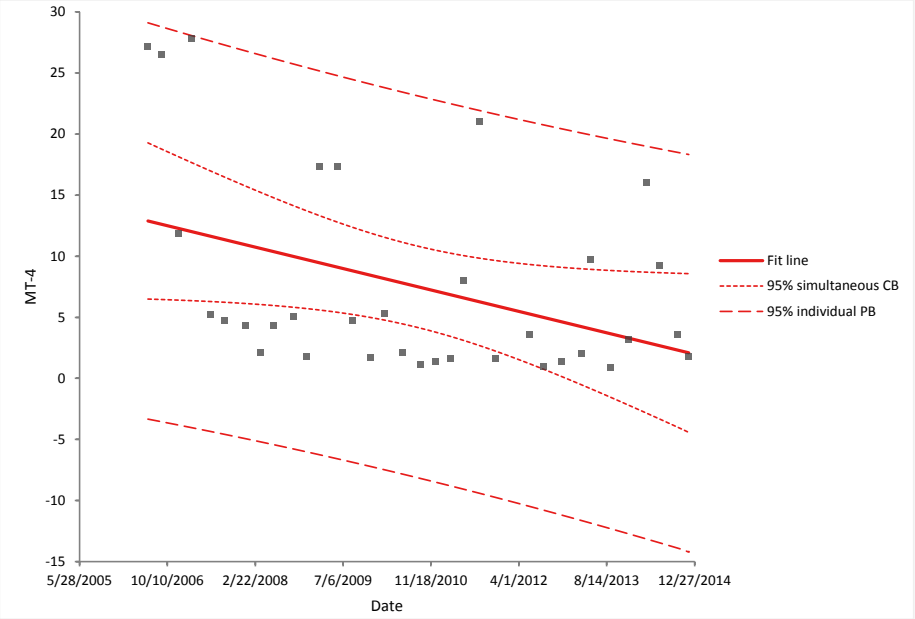

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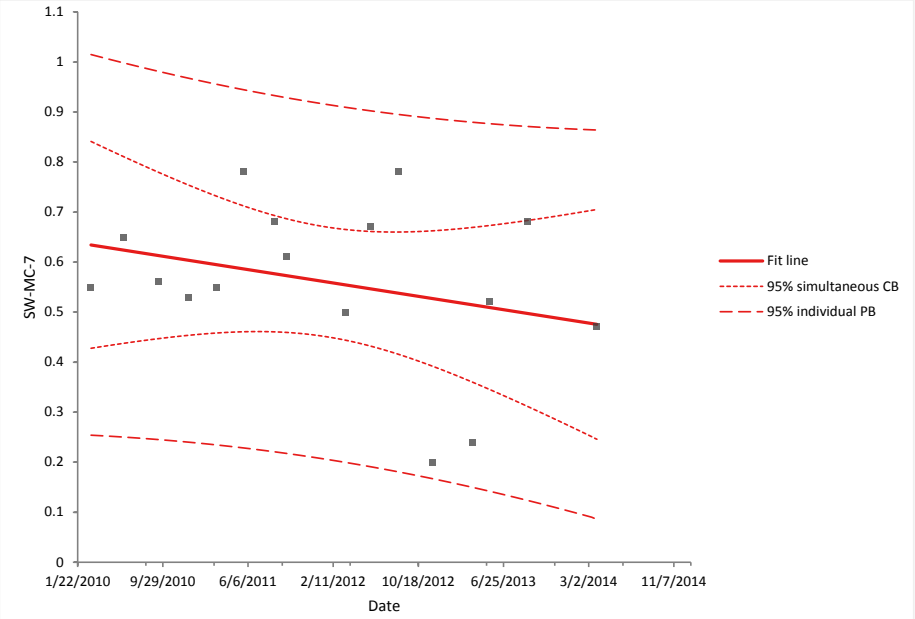

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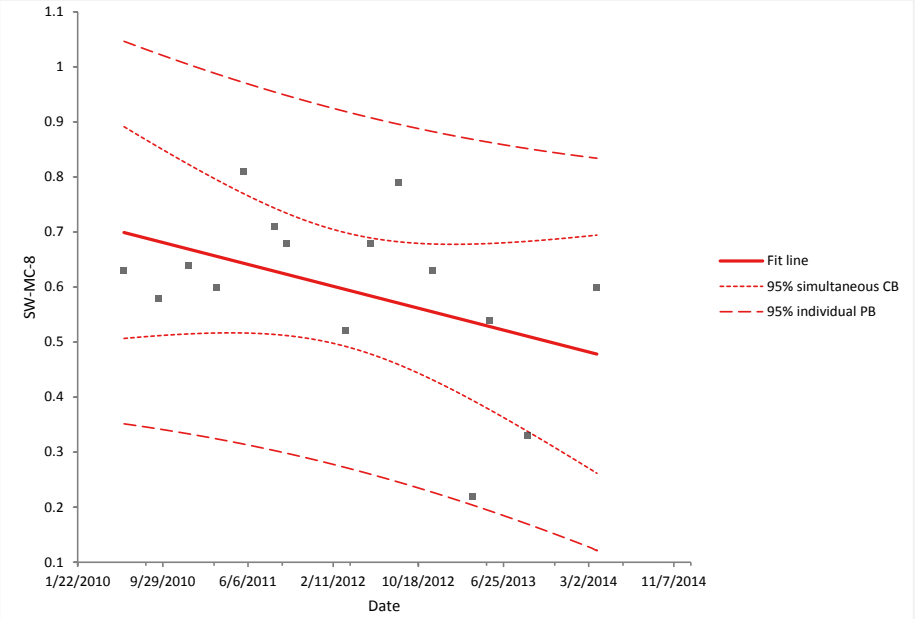

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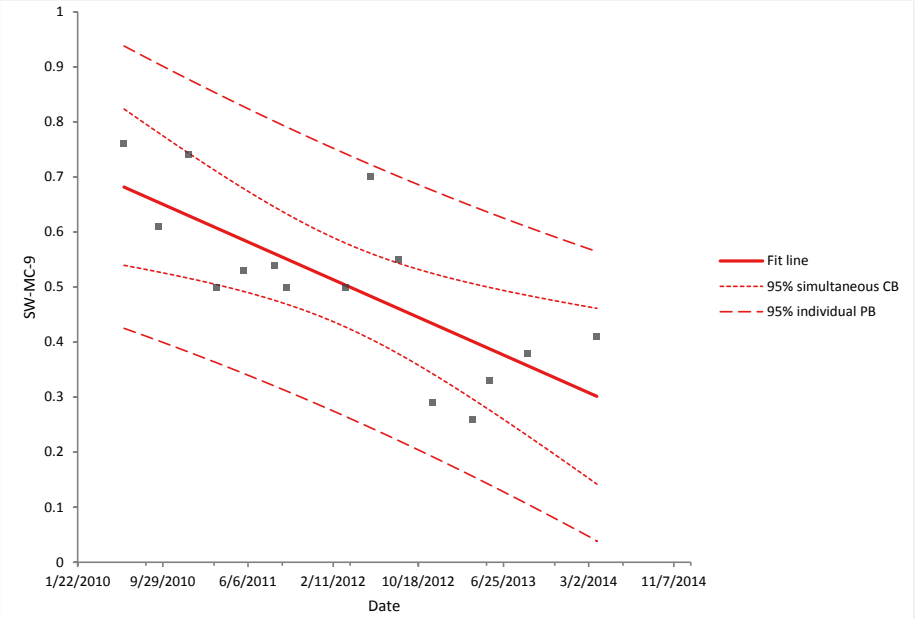

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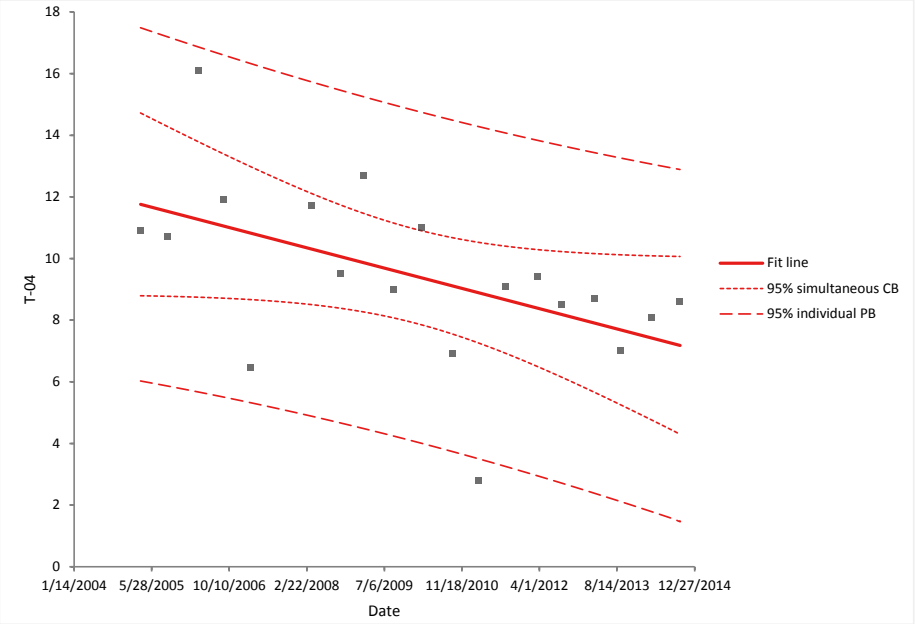

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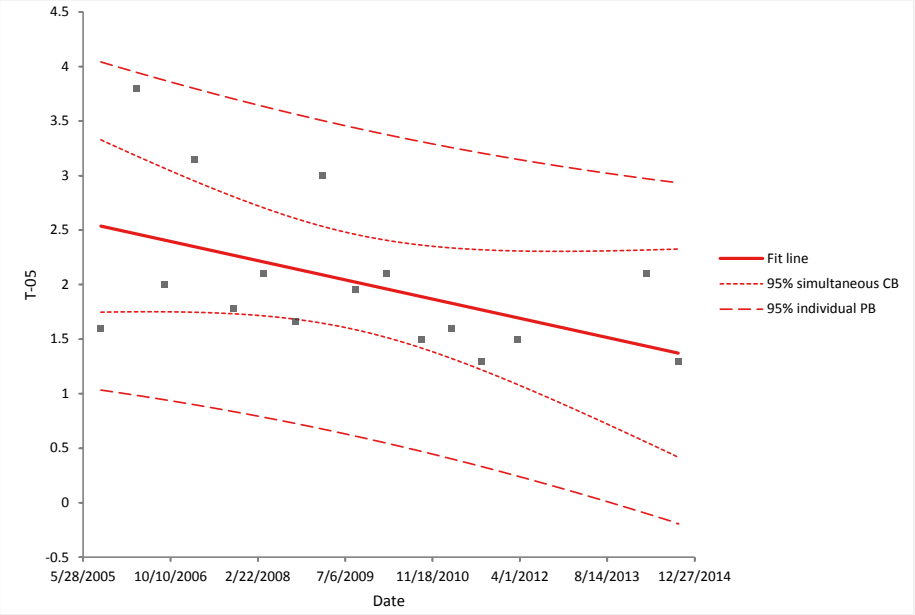

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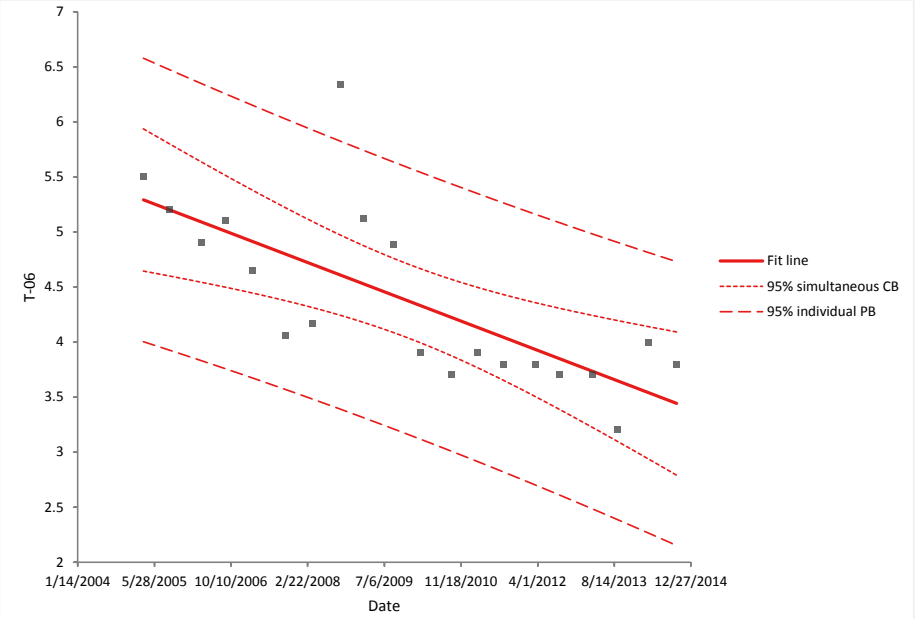

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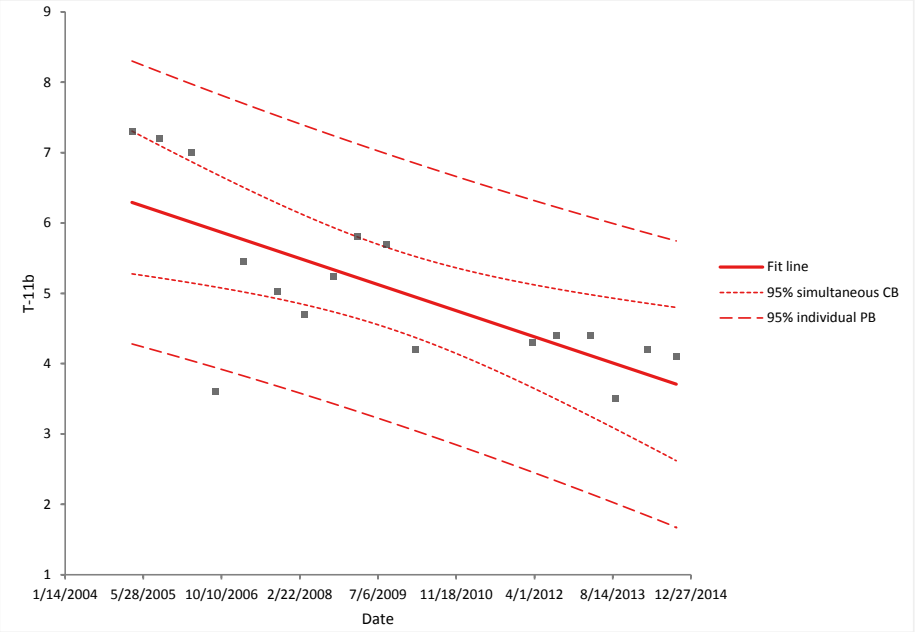
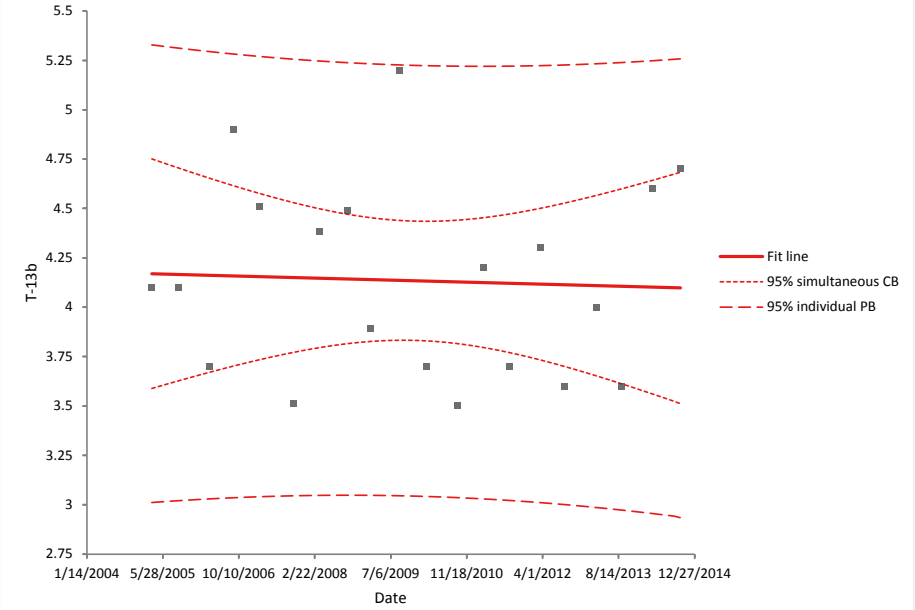
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