
DATA GAPS INVESTIGATION REPORT

ExxonMobil/ADC Property, Ecology Site ID 2728

Everett, Washington

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ACRONYMS AND ABBREVIATIONS

°C	degrees Celsius
ADC	American Distributing Company
AMEC	AMEC Earth & Environmental, Inc.
AO	Agreed Order
bgs	below ground surface
BNSF	BNSR Railway Company
BTEX	benzene, toluene, ethylbenzene, and total xylenes
CFR	Code of Federal Regulations
CLP	contract laboratory program
COC	chain-of-custody
COS	Combine sewer overflow
cPAHs	carcinogenic polycyclic aromatic hydrocarbons
CSS	Colorado silica sand
DAHP	Washington State Department of Archaeology and Historic Preservation
DO	dissolved oxygen
DOT	US Department of Transportation
DQIs	data quality indicators
DQOs	data quality objectives
Ecology	Washington State Department of Ecology
EDB	ethylene dibromide
EDC	1,2-dichloroethane
EPA	US Environmental Protection Agency
EPH	extractable petroleum hydrocarbons
ExxonMobil	ExxonMobil Oil Corporation
FFS	Focused Feasibility Study
HASP	Health and Safety Plan
HAZWOPR	hazardous waste operations and emergency response
HSA	hollow stem auger
IDW	investigation-derived waste
LPH	liquid petroleum hydrocarbons
µg/L	micrograms per liter
mg/kg	milligrams per kilograms
mg/L	milligrams per liter
MDLs	method detection limits
MNA	monitored natural attenuation
MS/MSD	matrix spike/matrix spike duplicate
MTBE	methyl tert-butyl ether
MTCA	Model Toxics Control Act
mV	millivolt
NTUs	nephelometric turbidity units
ORP	oxidation-reduction potential
PAHs	polycyclic aromatic hydrocarbons
PID	photoionization detector
PPE	personal protective equipment
ppm	parts per million
PVC	polyvinyl chloride
Property	ExxonMobil/ADC Property



ACRONYMS AND ABBREVIATIONS
(Continued)

QA	quality assurance
QC	quality control
RCW	Revised Code of Washington
RPD	relative percent difference
SAP	Sampling and Analysis Plan
SOP	standard operating procedure
SD	standard deviation
SPT	standard penetration test
TEQ	toxicity equivalent quotient
TPH	total petroleum hydrocarbons
TPH-D	total petroleum hydrocarbons–diesel
TPH-O	total petroleum hydrocarbons–oil
TPH-G	total petroleum hydrocarbons–gasoline
TrueNorth	TrueNorth, Inc.
TWIC	transportation worker identity credential
VOCs	volatile organic compounds
VPH	volatile petroleum hydrocarbons
WAC	Washington Administrative Code
WP	Work Plan



DATA GAPS INVESTIGATION REPORT
ExxonMobil/ADC Property, Ecology Site ID 2728
Everett, Washington

1.0 INTRODUCTION

AMEC Earth & Environmental, Inc. (AMEC), has prepared this Data Gaps Investigation Report on behalf of ExxonMobil Oil Corporation (ExxonMobil) and the American Distributing Company (ADC) for the ExxonMobil/ADC property located at 2717/2731 Federal Avenue in Everett, Washington (Property). This document presents the results of field investigations at the Property and to the west and east of the Property. The Property and portions of neighboring parcels where releases of hydrocarbon products resulting from historic operations at the Property, may have migrated comprise the ExxonMobil/ADC Site (Ecology Facility ID 2728), hereafter referred to as “the Site,” as defined by the Washington Department of Ecology (Ecology) under the Model Toxics Control Act (MTCA) (Figures 1 and 2). The data gaps investigation was conducted to obtain the information required to complete a focused feasibility study (FFS) for the Site.

This report has been prepared pursuant to requirements of Agreed Order (AO) Number DE-6184 entered into in March 2010 between Ecology and ExxonMobil/ADC.



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2.0 OBJECTIVES AND APPROACH

The objective of the data gaps investigation was to fill existing data gaps and collect the additional data needed to complete the FFS. These data gaps were outlined in the FFS Work Plan (AMEC, 2010). The following field activities were conducted to fill these data gaps:

1. Seven deep soil borings were drilled around the perimeter of the Property (AB-1 through AB-5) and off-Property to the north and northeast (AP-6 and MW-7Ab) to evaluate lithologic conditions and determine if a silt confining layer is present that could potentially be used to anchor a slurry wall, which is a potential containment remedy for groundwater at the Site. Borings were advanced to depths ranging from 35 to 40 feet below ground surface (bgs). Soil samples from the deep borings were collected continuously to the bottom of the borings. Samples with obvious signs of petroleum hydrocarbons were analyzed for total petroleum hydrocarbons (TPH) as diesel (TPH-D) and oil (TPH-O).
2. Five groundwater monitoring wells (MW-A3 through MW-A7) were installed to depths ranging from 13 to 17 feet bgs to define the western, northwestern, and eastern limits of the dissolved-phase petroleum hydrocarbon plume.
3. Five shallow soil borings (AP-2 through AP-5, and AP-7) were advanced to the east of the Property to define the lateral and vertical extent of soil contamination near the former railroad spur fuel loading racks. These borings were advanced to maximum depths of 15 feet bgs.
4. One shallow boring (AP-1) was drilled to a depth of 17 feet bgs in the area of the former ADC Garage and Shop to identify potential contamination of soil and groundwater associated with the former ADC Garage and Shop.
5. Soil and groundwater samples were collected for chemical analyses from soil borings and monitoring wells to further define the nature and extent of petroleum impacts.
6. Aquifer testing was conducted at the Site to assess the hydraulic conductivity of off-Property aquifer materials.
7. Groundwater elevations were measured at monitoring wells to further refine the understanding of hydrogeologic conditions at the Site.
8. A comprehensive tidal influence study was conducted to evaluate the impact of tides on the groundwater flow regime at the Site.

Figure 3 shows the locations of soil borings and monitoring wells drilled during the 2010 data gaps investigation activities.



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3.0 FIELD ACTIVITIES

Field activities were conducted from June through February 2011. Field activities included soil borings, installation of monitoring wells, collection of soil and groundwater samples for chemical analyses, and groundwater level measurement. AMEC also conducted an aquifer test and tidal study (Appendix A and Appendix B, respectively).

A summary of planning and field activities conducted by AMEC is presented below. Boring logs and monitoring well construction details are presented in Appendix C.

3.1 FIELD PREPARATION

Final planning prior to initiating field activities included preparation of a site-specific Health and Safety Plan (HASP), securing property access from adjacent landowners, and clearing underground utilities.

3.1.1 Health and Safety

A site-specific HASP was prepared prior to initiating field work, as required by the Washington Industrial Safety and Health Act. The HASP specified field safety protocols for AMEC employees and subcontractors performing activities on the Site. All AMEC employees and drilling subcontractors involved in field activities were trained in Hazardous Waste Operations and Emergency Response (HAZWOPER) procedures in accordance with the Code of Federal Regulations (CFR) Title 29, Part 1910.120. All field sampling activities were conducted in accordance of applicable federal and state occupational health and safety regulations.

3.1.2 Property Access

Prior to entering the Port of Everett property, AMEC field personnel obtained Transportation Worker Identification Credential (TWIC) cards. Prior to entering the BNSF Railway Company (BNSF) property, AMEC personnel and AMEC's contractors completed a Contractor Orientation Course.

3.1.3 Utility Clearance

AMEC contracted the underground utilities location center (Call Before You Dig) prior to initiation of each drilling event. Prior to each subsurface investigation event, AMEC marked the proposed soil boring locations in the field. Underground Detection Services, Inc., of Seattle, Washington, and Applied Professional Services, Inc., of North Bend, Washington, applied spray paint on the ground surface to mark the location of subsurface utilities near each soil boring location.

To avoid potential electrical hazards, AMEC identified all aboveground and overhead power lines. AMEC also oversaw a geophysical survey conducted by a private utility locator to identify subsurface

utilities within 25 feet of the proposed soil boring locations. The presence of below-grade utilities was identified, and the inferred locations were marked with spray paint on the ground surface.

Per ExxonMobil Standard Operation Procedures (SOPs), a 4-foot to 5-foot subsurface clearance was performed using an air knife and a vactor truck at each boring location.

3.2 DEEP SOIL BORINGS

Seven deep soil borings (AB-1 through AB-5, AP-6 and MW-7Ab) were advanced to depths ranging from 35 to 40 feet bgs by Cascade Drilling Inc. (Cascade), of Woodinville, Washington. Cascade is a licensed drilling contractor in Washington State. The purpose of the deep soil borings was to evaluate lithologic conditions and determine if a silt confining layer is present beneath the Site and to evaluate the potential of a slurry wall containment system as a final potential remedy for the Site. If the silt layer is present and laterally continuous, a slurry wall could provide hydraulic and LNAPL containment.

The first 4 to 5 five feet of each boring was cleared for utilities using a vacuum truck. Once utility clearance was confirmed, drilling continued using a hollow-stem auger (HSA) rig. Samples were collected continuously in each boring using a hand auger during the utility clearance and using the standard penetration test (SPT) split-spoon samplers or Shelby Tubes for the remaining lengths of the boring. Soil sampling activities are described in more detail in Section 3.6.

Deep boring AB-1 was advanced along the western boundary of the ADC parcel to a total depth of 35 feet bgs. Boring AB-1 was cleared for utilities in June 2010 to the depth of 4 feet and covered with a concrete patch. Drilling and sampling of AB-1 resumed in December 2010. A shallow boring (AB-1A) was dug approximately 10 feet west of AB-1 using a hand auger. Hand auger boring AB-1A was sampled continuously.

In June 2010, deep borings AB-2 and AB-3 were advanced along the western boundary of the ExxonMobil/ADC property to total depths of 40 feet bgs.

In June 2010, deep borings AB-4 and AB-5 were advanced along the eastern boundary of the ExxonMobil/ADC property to a total depth of 35.5 bgs. In addition, a shallow boring (AB-5A) was dug approximately 10 feet east of AB-5 using a hand auger. Hand auger boring AB-5A was sampled continuously.

AMEC made three attempts to advance soil boring AB-6 along the northern boundary of the Property in June 2010. However, the boring was abandoned at a depth of 3 feet bgs due to the excessive groundwater and concrete chunks encountered in the boring.

In December 2010, deep borings AP-6 and MW-7Ab were advanced east of the Property to total depths of 35.5 feet and 35 feet, respectively. The FFS Work Plan proposed that soil samples be collected from deep boring MW-A7, and the deep boring to be backfilled to a depth of approximately 13 feet bgs and converted to a shallow monitoring well. In December 2010, a boring at the location for MW-A7 was drilled to a depth of 35 feet, and soil samples for lithologic description and chemical analysis were collected. However, due to substantial heave, a well could not practicably be installed in this boring. As such, the boring was backfilled and renamed as MW-7Ab. A new boring was drilled 5 feet south of the original location without sampling to avoid heave, and MW-A7 was installed in the relocated boring.

Upon completion, deep borings were backfilled with medium bentonite chips or bentonite slurry using a tremmie pipe.

3.3 MONITORING WELLS

Five monitoring wells (MW-A3, MW-A4, MW-A5, MW-A6, and MW-A7) were installed to the west, northwest, and east of the Property using a HSA drill rig. The monitoring wells were installed to assess the extent of the dissolved petroleum hydrocarbon plume.

Downgradient monitoring wells MW-A3, MW-A4, MW-A5, and MW-A6 were completed on the Port of Everett property in June 2010. Upgradient monitoring well MW-A7 was completed at the BNSF property on December 2, 2010.

During drilling, soil samples were collected from the borings for monitoring wells MW-A3, MW-A4, MW-A5, and MW-A6. Samples were collected at 5-foot intervals using split-spoon samplers. No soil samples were collected from the boring for MW-A7 (see Section 3.2 Deep Borings). Soil sampling activities are described in more detail in Section 3.6.

Monitoring wells were installed in accordance with Washington Administrative Code (WAC) 173-160 Minimum Standards for Construction and Maintenance of Wells. Each monitoring well was constructed using 2-inch-diameter, flush-threaded, Schedule 40 polyvinyl chloride (PVC) with a 10-foot-long prepack slotted screen with 0.010-inch slots and a 20/40 Colorado silica sand (CSS) pack. A prepack screen was used to minimize turbidity that has been observed at other monitoring wells at the Site. Additional sand (10/20 CSS) was placed in the annular space surrounding the prepack screens. The sand pack extended to a height of at least 1 foot above the top of the screen. The well screens were installed to straddle the water table. The well screen in monitoring well MW-A3 was placed from 5 to 15 feet bgs, the well screens in monitoring wells MW-A4, MW-A5, and MW-A6 were placed from 7 to 17 feet bgs. The well screen in monitoring well MW-A7 was placed from 3 to 13 feet bgs. The wells were completed with a grout seal to the ground surface. The surface

completion for MW-A3, MW-A4, MW-A5, and MW-A6 conformed to Port of Everett property standards and consisted of an 8-inch cast aluminum well cover to withstand a 300,000 pound load. Surface completion of MW-A7 conformed to State of Washington standards and consisted of an 8-inch-diameter, flush-mounted, traffic-rated well monument. All monitoring wells were fitted with water-tight locking well caps and locks.

Following installation, monitoring wells were developed by surging with a surge block, followed by removing water by pumping until the water was clear and free of suspended solids. A minimum of three well volumes were removed from each newly installed monitoring well. Appendix D includes the well development records.

3.4 TEMPORARY WELL

In June 2010, one soil boring AP-1 was advanced to a depth of 15 feet bgs using an HSA drill rig in the vicinity of the former ADC Garage and Shop. Soil samples were collected from the boring at 5-foot intervals using a split-spoon sampler. A “grab” groundwater sample was collected from a slotted PVC screen installed temporarily in the borehole. The soil boring was backfilled with medium bentonite chips after the groundwater sample was collected. The purpose of this boring and groundwater sampling was to evaluate the former garage and shop as an additional potential source area for groundwater impacts from hydrocarbons.

3.5 PUSH-PROBE SOIL BORINGS

From October to December 2010, five shallow soil borings (AP-2 through AP-5 and AP-7) were advanced to a maximum depth of 15 feet bgs using a direct-push drill rig. These soil borings were advanced near the former railroad spur fuel loading racks. Soil samples were collected continuously from the surface to the total depth of the borings (Section 3.6). The purpose of these borings was to evaluate the lateral extent of the petroleum impacted soils and groundwater in this area.

3.6 SOIL SAMPLING

Soil samples for chemical analyses were collected from each soil boring and monitoring well, except monitoring well MW-A7 (Section 3.3).

Soil samples from the deep soil borings were collected using a hand auger (the first 4-foot interval), 2-inch inside diameter SPT split-spoon samplers, and Shelby tubes. Soil samples from monitoring wells MW-A3, MW-A4, MW-A5, and MW-A6 and from soil boring AP-1 were collected using 3-inch inside diameter Dames & Moore split-spoon samplers. Soil samples from the push-probe soil borings (AP-2 through AP-5, AP-7) were collected using a hand auger (the first 4-foot interval) and a 4-foot, stainless steel sampler with a disposable liner.

AMEC inspected all soil samples and screened the soil samples for volatile organic compounds (VOCs) in the field using a photoionization detector (PID). Field instruments were calibrated daily at the beginning of field activities.

Each soil sample was examined and relevant sample information (e.g., depth of sample collection, date and time of sample acquisition, PID measurement, etc.) was recorded. To prevent cross contamination, any equipment that came in contact with soil was decontaminated before and after each individual sampling attempt.

AMEC selected at least two soil samples per soil boring for laboratory analyses, except at boring AB-4 (one sample per boring), and at borings AB-5 and AP-6 (three samples per each boring). Samples were selected from intervals exhibiting petroleum staining and/or elevated PID measurements, intervals within the capillary fringe, and/or intervals within an artificial fill unit. One soil sample for chemical analysis was collected at the soil/groundwater interface in each soil boring location. Additional samples were collected based on odor, staining, PID readings, or sheen. If no soil samples exhibited these characteristics, a soil sample was collected from the bottom of the boring to delineate the vertical extent of contamination.

Two soil samples were collected from the saturated zone of the perimeter borings for total organic carbon, soil bulk density, porosity, volumetric water content, and permeability (Shelby tube) analyses. Samples of drill cuttings were retained from each boring for potential use in slurry wall mix design. Two 5-gallon buckets of drill cuttings from the 5- to 15-foot depth interval were collected from each deep boring location. Shelby tube samples were collected from fine-grained materials as undisturbed samples. The Shelby tube sampler was pushed into undisturbed soil following retrieval of a spilt-spoon sample that indicated that a fine-grained formation had been encountered. Data from this geotechnical testing will be used to assist in the development of remedial alternatives. The selected samples for the physical properties of the soils beneath the Property were submitted to Analytical Resources, Inc., laboratory in Tukwila, Washington. The results of the geotechnical analyses will be presented in an addendum to this report.

3.7 SURVEYING

On August 25 and December 13, 2010, TrueNorth, Inc. (TrueNorth), a Washington-licensed surveyor, surveyed the horizontal locations and the elevations of the newly installed monitoring wells and soil borings. The survey of the newly installed monitoring wells included elevations at the tops of the monument and the tops of the inner PVC casings. The existing monitoring well network was re-projected to the correct State Plane Coordinate System using the new survey. Both horizontal and vertical controls used for the new well survey were consistent with horizontal and vertical controls used previously for surveying monitoring wells.

3.8 GROUNDWATER LEVEL MEASUREMENTS

Groundwater elevations were used to make an initial assessment of the groundwater potentiometric surface, surface gradient, and direction of groundwater flow.

The depths to groundwater were measured in the newly installed monitoring wells MW-A3 through MW-A6 on August 18, 2010, during the third Quarter 2010 groundwater monitoring event, on November 17 and 18, 2010, during the fourth Quarter 2010 groundwater monitoring event, and on February 16, 17, and 18, 2011, during the first Quarter 2011 groundwater monitoring event. Depth to water was measured with a decontaminated electronic water level meter or oil/water interface probe with an accuracy of plus or minus 0.01 foot. The measurements were made from a reference point marked on the top of the PVC well casing.

3.9 GROUNDWATER SAMPLING

In June 2010, a “grab” groundwater sample was collected from within a temporary screen installed in temporary soil boring AP-1. In August 2010, November 2010, and February 2011, groundwater samples were collected from the newly installed monitoring wells MW-A3, MW-A4, MW-A5, and MW-A6 during the quarterly groundwater monitoring events. Newly installed monitoring well MW-A7 was sampled during the first Quarter 2011 monitoring event (February 2011).

Groundwater samples from the monitoring wells were collected using a peristaltic pump and dedicated disposable tubing. Purge water was monitored for temperature, pH, specific conductivity, turbidity, dissolved oxygen, and oxidation-reduction potential at 5-minute intervals using a Horiba U-22 water quality meter. The well purging was deemed complete upon stabilization of water quality parameters. Stabilization is defined as three readings within 10 percent of the previous measurement. Records of groundwater purging and field parameters are provided in the groundwater report for 2011 (AMEC, 2011). Records of groundwater purging and field parameters for the first Quarter 2011 groundwater monitoring are provided in Appendix E. Due to the high turbidity of groundwater in the temporary well, the groundwater in AP-1 was not purged prior to sample collection.

3.10 SAMPLE CONTAINERS, PRESERVATION, AND STORAGE

Soil and groundwater samples were collected and placed into precleaned sample containers provided by the analytical laboratory. Each sample container was labeled with a unique alphanumeric sample identification. The samples were stored in a chilled cooler and transported under standard chain-of-custody (COC) procedures to TestAmerica Laboratories, Inc. (TestAmerica), in Nashville, Tennessee, for chemical analyses.

Soil samples for VOC analyses were collected using a plastic syringe and placed into laboratory-supplied, pre-weighed volatile organic analyte vials in accordance with U.S. Environmental Protection Agency (EPA) soil sampling Method 5035A. Soil samples for all other analyses were placed in laboratory-supplied glass sample jars and securely fitted with Teflon-lined plastic lids.

The groundwater samples were decanted from the tubing directly into laboratory-prepared glass sample containers.

3.11 EQUIPMENT DECONTAMINATION

Decontamination of sampling equipment was performed to maintain data quality, to prevent cross contamination, and to prevent the potential introduction of contaminants into previously un-impacted areas. Reusable sampling equipment, including the drill rig, downhole drilling equipment, and stainless-steel materials, were decontaminated prior to each sampling event.

General decontamination procedures were as follows:

1. Physically remove soils using a nonphosphate detergent solution.
2. Rinse with noncontaminated tap water.
3. Rinse with deionized water.
4. Rinse with Isopropyl alcohol.
5. Air dry.

3.12 INVESTIGATION DERIVED WASTE MANAGEMENT

Field investigation activities generated the following investigation-derived waste (IDW):

- Potentially contaminated solids, consisting principally of soil cuttings; and
- Potentially contaminated liquids, including fluids derived from purging, development of monitoring wells, and equipment decontamination water.

IDW was securely stored in labeled drums approved by the US Department of Transportation (DOT). Solids were contained in 55-gallon drums. Liquids were contained in 55-gallon drums placed in 85-gallon over-pack drums. The drums with IDW were stored at a designated location on the Property pending results of analytical testing.

Each drum was labeled with standardized IDW drum labels to indicate the contents, date of collection, location from which the IDW originated, and other pertinent information. In addition, all drums were labeled with indelible paint sticks or pens. AMEC maintained an inventory of the drums. Upon



completion of field activities, the IDW was disposed of at an appropriate off-site facility, following a review of analytical data results from samples collected. Certificates of disposal, bills of lading, and weight tickets are presented in Appendix F. Some of the waste material covered by the disposal certificates originated from the underground piping removal activities beneath Federal Avenue in June and November 2010.

3.13 HISTORIC AND CULTURAL RESOURCES

An archaeologist from the Tulalip Tribe was present during drilling and sampling pursuant to the Revised Code of Washington (RCW) Chapter 27.44 (Indian Graves and Records) and Chapter 27.53 (Archaeological Sites and Resources) to monitor subsurface explorations. No archaeological resources were discovered during field activities.

4.0 SAMPLE ANALYSES

Soil and groundwater samples were submitted for chemical analyses, and soil samples will be analyzed for geotechnical physical parameters, as specified in the Sampling and Analyses (SAP) plan included as an appendix to the FFS WP (AMEC, 2010). Results of the chemical analyses are presented in Section 6.0; results of the geotechnical testing are not yet available and will be reported in the FFS.

4.1 SOIL CHEMICAL ANALYSES

Soil samples were submitted to the laboratory for one or more of the following analyses:

- TPH as gasoline (TPH-G) by Ecology Method NWTPH-G;
- TPH as diesel and oil (TPH-D and TPH-O) by Ecology Method NWTPH-Dx, run with a silica gel cleanup to remove biogenic interference (typically from decaying plant matter);
- Benzene, toluene, ethylbenzene, and total xylenes (BTEX) and methyl tert-butyl ether (MTBE) by EPA Method 8260B;
- Low-level polycyclic aromatic hydrocarbons (PAHs) by EPA Method 8270D SIM;
- 1,2-Dichloroethane (EDC), ethylene dibromide (EDB), and n-hexane by EPA Method 8260B in select soil samples that exhibit contamination based on field screening;
- Extractable petroleum hydrocarbons (EPH) by Ecology Method NW-EPH; and
- Volatile petroleum hydrocarbons (VPH) by Ecology Method NW-VPH.

EPH and VPH analyses were requested for soil samples that exhibited the highest levels of petroleum hydrocarbons, based on field PID readings.

4.2 GROUNDWATER CHEMICAL ANALYSES

Groundwater samples from newly installed monitoring wells MW-A3 through MW-A7 were collected as part of routine groundwater monitoring conducted in August, November 2010, and February 2011. One grab groundwater sample was collected from temporary well AP-1 in June 2010.

Groundwater samples were submitted to the laboratory for one or more of the following analyses:

- TPH-D and TPH-O by Ecology Method NWTPH-Dx, with silica gel cleanup process;
- TPH-G by Ecology Method NWTPH-G;
- BTEX by EPA Method 8260B;
- MTBE by EPA Method 8260B;



- Low-level PAHs by EPA Method 8270D SIM; and
- Dissolved lead by EPA Method 6020.

The grab groundwater sample from AP-1 and samples from selected monitoring wells were also analyzed for EDC, EDB, and n-hexane by EPA Method 8260B.

Groundwater samples collected in November 2010 from the selected monitoring wells were analyzed for natural attenuation parameters (dissolved oxygen, oxidation-reduction potential, pH, specific conductance, temperature, sulfate, nitrate, ferrous iron [soluble], manganese [soluble], methane, alkalinity). The selection of natural attenuation parameters was consistent with Ecology guidance.

5.0 DATA VALIDATION

Data validation is the procedure of reviewing data against specific criteria to verify data validity prior to its use.

Procedures have been developed by EPA to standardize the data validation process for analytical results for both water-quality and soil-quality investigations (EPA, 2008).

The EPA Functional Guidelines are intended to be used as a guide to evaluate data generated under statements of work for organic and inorganic analyses associated with the US EPA Contract Laboratory Program (CLP). The Functional Guidelines also provide general data validation guidelines that can be applied to data generated by non-CLP analytical methods.

One hundred percent (100 percent) of the analytical data for data gaps investigation samples were validated using EPA Stage 4 data validation level. Stage 4 validation includes an examination of raw data and instrument printouts for sample analyses and quality control (QC) analyses to check for technical, calculation, analyte identification, analyte quantitation, and transcription or reduction errors.

AMEC performed data validation and data quality review on the soil and groundwater samples submitted to TestAmerica between June 24 and February 19, 2011. Results of the data validation and data quality review are presented in three separate reports, included in Appendix G.



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6.0 RESULTS

This section presents the overall findings of the AMEC data gaps investigation. Boring logs with analytical results for samples collected at specific depths are located in Appendix C. Results of the laboratory analyses of soil and groundwater samples are summarized below. Complete results for soil and groundwater analyses are presented in Tables 1 and 2. Results for natural attenuation parameters are presented in Table 3. Complete analytical laboratory data reports for soil samples and one grab groundwater sample are presented in Appendix H. The soil and groundwater analytical results discussed in this section are compared with MTCA Method A cleanup levels for Unrestricted Land Use. The MTCA Method A cleanup levels are used for comparison purposes as preliminary screening criteria. Final cleanup levels for the Site will be established in the FFS.

6.1 SITE GEOLOGY AND HYDROGEOLOGY

The area at the Site is underlain by Vashon advance outwash deposits (Qva) and Transitional beds (Qtb). The outwash deposits are primarily granular, and the Transitional beds are composed of interbedded, clayey, silty fine to medium sand. The area is underlain by a heterogeneous mixture of fill materials consisting of very loose to medium dense brown, brownish gray, and gray silty sand and sand with areas of wood and brick debris extending to depths of approximately 5 to 10 feet bgs. As observed during previous investigations, deeper materials that extend to approximate depths of 20 to 27 feet bgs consist of silty sand and silt and dark-brown to black peat mixed with wood debris; these deeper materials were interpreted as native marsh deposits. Materials that occur beneath the Property at depths greater than 20 to 27 feet bgs consist of dense, moist, brown, medium sand with various amounts of silt and discontinuous stiff, brown, organic-rich, clayey silt with some fine sand of Quaternary-aged transitional beds, deposited between Fraser and pre-Fraser glaciations. Past investigations have provided inconsistent information related to the description, depth, and continuity of the silt/clay unit that underlies the Property. During the data gaps investigation, seven deep borings were advanced at the Property and to the east of the Property to assess the continuity of the silt/clay layer. Stiff, olive to olive-gray silt with clay and brown fine organic materials were encountered in deep borings MW-7Ab, AB-4, and AP-6 at depths ranging from 22 feet to 32.6 feet bgs. The thickness of the silt/clay layer ranged from 1.5 feet in boring AB-4 to 5 feet in boring AP-6. No silt/clay layer was encountered in deep borings AB-1 through AB-3, or in AB-5, which extended to depths of 35 to 40 feet.

Shallow unconfined groundwater occurs at the Site and surrounding parcels at depths of 1 to 5 feet bgs and flows generally to the west and to the northwest. Previous groundwater elevation data indicate fluctuations of up to 3 feet between high and low seasonal water tables. Based on the August 2010 groundwater sampling event that incorporated groundwater elevations from the newly installed wells MW-A3 through MW-A6, the general direction of groundwater flow on the Site is toward

the west-northwest (Figure 4). The average hydraulic gradient for both the August 18 and November 24, 2010, events were calculated at 0.050 feet per foot. The average hydraulic gradient for the February 2011 groundwater monitoring is not calculated because depth to groundwater measurements were collected over a three-day period.

6.2 SOIL ANALYTICAL RESULTS

Analytical results for the soil samples collected during the 2010 data gaps investigation are provided in Table 1. Figures 5 through 12 show the lateral distribution of analytes in soil. The vertical distribution of analytes in soil is shown on the boring logs included in Appendix C, with analytical results shown next to sample depth. The soil sample analytical results were compared to the applicable MTCA Method A cleanup levels for soil. The MTCA Method A cleanup levels for unrestricted land use are being used only for comparison purposes as preliminary screening criteria. Cleanup levels will be developed for the Site as part of the FFS.

The results of these analyses are discussed below based on the chemical class of analytes.

6.2.1 Volatile Organic Compounds

In addition to the BTEX analyses, each soil sample was analyzed for MTBE, and three soil samples were analyzed for EDC, EDB, and n-hexane. The lateral distribution of benzene, toluene, ethylbenzene, and total xylenes detected in soil samples is shown on Figures 5 through 8, respectively. During the 2010 data gaps investigation, concentrations of benzene greater than the preliminary screening level of 0.03 milligrams per kilogram (mg/kg) were reported in soil samples collected from borings AB-5, AB-5A, and AP-5, all advanced near the eastern edge of the Property. The vertical extent of benzene in these borings ranged from near the surface to near the water table (1 to 5 feet bgs). In addition, concentrations of benzene below the preliminary screening level was detected in soil borings AB1A, AB-4, and AP-6. No benzene was reported in soil samples collected from the soil borings advanced to the west and northwest of the Property. No concentrations of ethylbenzene, toluene, total xylenes, EDC, EDB, or n-hexane were reported above the respective preliminary screening levels. MTBE was not detected above the laboratory method detection limits (MDLs) in any soil sample.

According to laboratory results from the 2010 data gaps investigation, no VOC impact in soil occurs downgradient of the Property.

6.2.2 PAHs

Laboratory results for carcinogenic PAH (cPAH) analyses were evaluated in the context of toxicity equivalencies (WAC 173-340-708[8][e]). The toxicity equivalent quotients (TEQs) were calculated by multiplying the concentration of each individual PAH constituent by its assigned TEQ factor, and then

summing the total. Nondetected compounds were assigned a value of one-half of the method reporting limit, and this value was then multiplied by the applicable TEQ factor. The lateral distribution of TEQ-adjusted concentrations of total cPAHs in soil is shown on Figure 9. During the 2010 data gaps investigation, soil samples collected from borings AB-1A, AB-5A, AP-1, and AP-5 contained concentrations of benzo(a)pyrene and/or TEQ-adjusted total cPAHs greater than the preliminary screening level for residential land use of 0.1 mg/kg. The vertical extent of cPAHs in these borings ranged from near the surface to near the water table (1 to 5 feet bgs). The remaining soil samples contained benzo(a)pyrene and/or TEQ-adjusted total cPAH concentrations less than the preliminary screening level or the applicable MDL.

6.2.3 TPH-G

The spatial distribution of TPH-G detected in soil samples is shown on Figure 10. During the 2010 data gaps investigation, concentrations of TPH-G greater than the preliminary screening level (30 mg/kg if benzene is present or 100 mg/kg if benzene is not present) were reported in soil samples collected from soil borings AB-1A, AB-2, AB-5, and AB-5A, located along the western and eastern margins of the Property. The vertical extent of TPH-G detected in these borings ranged from near the ground surface to near the water table (1 to 5 feet bgs). According to the soil sample analytical results, no detectable concentrations of TPH-G were reported in soil samples collected from soil borings advanced to the west and northwest of the Property. TPH-G concentrations above the preliminary screening level were also reported in samples from AP-5 and AP-6, located east of the Property. The vertical extent of TPH-G on the BNSF property ranged from near the surface to near the water table (1 to 1.5 feet bgs).

According to laboratory results from the 2010 data gaps investigation, TPH-G in soil occurs hydrogeologically downgradient (west and northwest) of the Property. However, TPH-G concentrations greater than the preliminary screening level were reported in borings AP-5 and AP-6 (BNSF property) at depths of 1 foot and 1.5 feet bgs. Therefore, TPH-G impact in soil exists upgradient (east) of the Property.

6.2.4 TPH-D and TPH-O

The spatial distribution of TPH-O and TPH-D detected in soil samples is shown on Figures 11 and 12, respectively. During the 2010 data gaps investigation, TPH-D, TPH-O, or both were detected at concentrations greater than the preliminary screening level (2,000 mg/kg for both constituents) on the ExxonMobil/ADC Property in samples collected from soil borings AB-1A, AB-5, and AB-5A and on the BNSF property in samples collected at AP-5 (Figures 11 and 12). The elevated concentrations of TPH-D and TPH-O in borings AB-1A, AB-5, and AB-5A were reported for the soil samples collected near the water table (1 foot to 5 feet bgs).

In soil boring AP-5, the concentrations of TPH-D and TPH-O greater than the preliminary screening levels were reported in the soil sample collected from the bottom of the boring at a depth of 14.5 feet bgs. According to the visual observations, the petroleum contamination was observed in this boring at approximately 4 feet bgs in wood waste material that contained considerable peat. Soil samples collected in soil borings AP-2 and AP-3, both advanced on the BNSF property near boring AP-5, did not have concentrations of TPH-D and TPH-O above the preliminary screening levels. These borings indicate that the petroleum-impacted soils and groundwater in the area around monitoring well MW-29, a well that has consistently contained free product, do not extend to the south. Boring AP-5 represents the western extent of this source area. The results are consistent with impacts from other historical sources of petroleum contamination east of the Property.

Concentrations of TPH-D and/or TPH-O less than the preliminary screening levels were reported in borings AB-1 through AB-3 on the western edge of the ExxonMobil/ADC Property; boring AB-4 on the southern portion of the ExxonMobil/ADC property; borings AP-4, AP-6, and AP-7 on the BNSF property (northeastern portion of the Site); MW-7Ab on the City of Everett parcel (also on the northeastern portion of the Site); and borings MW-A3 through MW-A6 and AP-1 on the Port of Everett property, west of the ExxonMobil/ADC property.

According to laboratory results from the 2010 data gaps investigation, no TPH-D or TPH-O impact in soil exists hydrogeologically downgradient (west and northwest) of the ExxonMobil/ADC Property.

However, TPH-D and TPH-O concentrations greater than the preliminary screening levels were reported in boring AP-5 (BNSF property) at the depth of 14.5 feet bgs. Therefore, a TPH-D and THP-O impact in soil exists upgradient (east) of the Property.

6.3 FREE PRODUCT MEASUREMENT AND REMOVAL

Routine monitoring and maintenance at the Site includes monthly gauging and periodic removal of liquid-phase hydrocarbons (LPH) from recovery wells. LPH thickness is gauged monthly in the following wells:

- LPH recovery wells: LPH-1, LPH-2, LPH-3, LPH-4, LPH-5, LPH-6, LPH-7, LPH-8, LPH-9, and RW-2; and
- Monitoring wells: W-1, W-3, W-6, MW-10, W-10R, MW-11, W-15R, W-17, MW-19, MW-27, MW-28, MW-30, MW-40R, MW-A1, and MW-A2.

Passive LPH recovery skimmers are installed in monitoring wells W-2 and MW-29; therefore, these wells are not gauged.

In addition to the water level gauging, monthly Site activities include free product removal from select LPH recovery and monitoring wells and replacement of oleophilic socks in wells with recent free product accumulation.

Between March 2010 and February 2011, the thickness of measured free product during the LPH gauging and recovery activities was as follows:

- Wells W-10R and MW-27 showed traces of LPH;
- The thickness of LPH in well W-1 ranged from trace to 0.17 foot;
- The thickness of LPH in well MW-15R ranged from 0.00 feet to trace.

Approximately 2.25 gallons and 3.04 gallons of LPH was recovered from wells W-2 and MW-29, respectively, using a bailer and passive skimmer between March 2010 and February 2011.

A tabulated summary of LPH thickness measured in LPH and monitoring wells from March 2010 to February 2011 is presented in Table 4.

6.4 GROUNDWATER ANALYTICAL RESULTS

This section presents the laboratory results for groundwater samples collected during the data gaps investigation and during three groundwater monitoring events (third and fourth quarters 2010 and the first quarter 2011). Figure 13 summarizes the groundwater monitoring results from February 2009 through February 2011. Laboratory analytical reports and COC documentation for the grab groundwater sample collected from AP-1 and First Quarter 2011 groundwater monitoring event are provided in Appendix H. Laboratory analytical reports and COC documentation for August and November 2010 groundwater monitoring events were submitted in the previous groundwater report (AMEC, 2011). A summary of the analytical results for groundwater samples collected from MW-11, MW-19, MW-40R, MW-A1 through MW-A7, and AP-1 is provided in Table 2. Figure 13 shows a map of groundwater analytical results from February 2009 through February 2011 for individual monitoring wells. Figures 14 through 22 display the analytical results for the most recent sampling event for each groundwater sampling point. The groundwater sample analytical results were compared to the applicable MTCA Method A cleanup levels for groundwater, which were selected as preliminary screening criteria.

6.4.1 Volatile Organic Compounds

The distribution of benzene, toluene, ethylbenzene, and total xylenes in groundwater is shown on Figures 14 through 17, respectively. In addition to the BTEX analyses, the groundwater sample collected from AP-1 was also analyzed for MTBE, EDC, EDB, and n-hexane. During the First Quarter 2011, each groundwater sample was also analyzed for MTBE. Groundwater samples

collected from monitoring wells MW-A1 and MW-A2 were also analyzed for EDC and EDB. No VOCs were detected in groundwater samples collected from the newly installed wells to the west and northwest of the Property in 2010 and in February 2011. In addition, VOCs were not detected in the sample from upgradient monitoring well MW-A7. During the First Quarter 2011 sampling event, benzene, toluene, and total xylenes were detected in monitoring well MW-40R and total xylenes were detected in monitoring well MW-19. The detected concentrations were below the preliminary screening level.

6.4.2 PAHs

Concentrations of cPAHs were evaluated based on toxicity-equivalent concentrations (WAC 173-340-708[8][e]). The TEQs were calculated assuming one-half of the method reporting limit for nondetected compounds. The distribution of cPAHs in groundwater is shown on Figure 18. TEQ-adjusted total cPAHs have not been reported either above the preliminary screening level of 0.1 micrograms per liter ($\mu\text{g/L}$) or method detection limit in groundwater samples collected west and northwest of the Property, except for a single detection in the “grab” groundwater sample collected from boring AP-1; the detected concentration was below the preliminary screening level. In addition, cPAHs were not detected in the sample from upgradient monitoring well MW-A7.

6.4.3 Dissolved Lead

The distribution of dissolved lead in groundwater is shown on Figure 19. Dissolved lead has not been reported in groundwater samples collected from the newly installed monitoring wells MW-A3 through MW-A7 and temporary well AP-1 at concentrations either above the preliminary screening level of 15 $\mu\text{g/L}$ or the MDL.

6.4.4 TPH-G

The distribution of TPH-G is shown on Figure 20. No detectable concentrations of TPH-G were reported in groundwater samples collected in 2010 from the temporary well AP-1, the newly installed downgradient monitoring wells MW-A3 through MW-A6, and the upgradient monitoring well MW-A7. In February 2011 (First Quarter 2011 sampling event), TPH-G at concentrations below the preliminary screening level was reported in monitoring wells MW-19 and MW-40R.

6.4.5 TPH-D and TPH-O

The distribution of TPH-O and TPH-D in groundwater is shown on Figures 21 and 22. The grab groundwater sample collected from the temporary well AP-1 had TPH-O and TPH-D at concentrations above the preliminary screening levels of 500 $\mu\text{g/L}$ for both analytes (Figures 21 and 22). TPH-D concentrations greater than the preliminary screening level were reported in the following newly installed monitoring wells:

- MW-A5, and MW-A6: Third and Fourth Quarter 2010 and First Quarter 2011,
- MW-A4: Fourth Quarter 2010 and First Quarter 2011, and
- MW-A3: First Quarter 2011.

TPH-O at a concentration greater than the preliminary screening level was reported in the following newly installed monitoring wells:

- MW-A4: Fourth Quarter 2010 and First Quarter 2011; and
- MW-A5: First Quarter 2011.

No detectable concentrations of TPH-D and TPH-O were reported in the newly installed upgradient monitoring well MW-A7. In addition, TPH-D and/or TPH-O at concentrations greater than the preliminary screening levels were reported in groundwater samples collected from MW-A1, MW-A2, MW-19, and MW-40R during each quarterly monitoring event.

6.5 EVALUATION OF MONITORED NATURAL ATTENUATION PARAMETERS

The following wells were sampled for monitored natural attenuation (MNA) parameters during the 4th Quarter 2010 groundwater monitoring event: MW-11, MW-19, MW-40R, MW-A2, MW-A3, and MW-A5. Additionally, wells W-6, W-3, MW-A1, MW-A4, and MW-A6 have also been sampled for a selection of MNA parameters during prior sampling events (Table 3).

6.5.1 Trends in Analyte Concentrations

From February 2009 through November 2010, the majority of the dissolved plume mass was located near wells MW-40R, MW-A2, W-3, and MW-A1. Two of these wells (MW-40R and MW-A2) were sampled for MNA parameters during the 4th Quarter sampling event. The maximum TPH-D concentration during the November 2010 sampling event was detected in the sample from MW-A1 (2,140 µg/L), followed by samples from MW-A2 (2,010 µg/L) and MW-40R (1,970 µg/L). TPH-G was detected in wells MW-19, MW-40R, MW-A2, MW-A1 at concentrations ranging from 48.2 to 905 µg/L. Benzene was detected only in MW-40R (1.18 µg/L).

The contaminant distribution appears to reflect a predominant groundwater flow from the east-southeast to the west-northwest. Based upon this interpretation of groundwater flow direction, monitoring well MW-11 is believed to be located outside of but near the upgradient edge of the plume; monitoring wells MW-40R, MW-A2, W-3, and MW-A1 are located near the source area (a discrete secondary source location as identified based on the occurrence of free product), MW-19, W-6, and MW-A3 are located cross-gradient from the source area; and MW-A4, MW-A5, and MW-A6 are located downgradient of the source area.

6.5.2 Spatial Pattern in Geochemical Parameters

The oxidation-reduction potential (ORP) of groundwater is a measure of electron activity and is an indicator of the relative tendency of a solution to accept or transfer electrons. The ORP of groundwater changes based on the predominant terminal-electron-accepting reaction. Conditions generally become more reducing as electron acceptors are depleted in the sequence oxygen, nitrate, manganese, iron, sulfate, and carbonate. Field testing of MNA parameters in groundwater indicated that the ORP varied across the Site. The highest ORP value of 24 millivolts (mV) recorded in November 2010 occurred at upgradient well MW-11. The November 2010 ORP measurements exhibit lower values within the source and downgradient areas of the plume, consistent with a reducing environment. The recorded ORP values in monitoring wells A3 through A6 were -198 mV, -230 mV, -134 mV, and -352 mV, respectively. The low ORP values on and downgradient of the Property are consistent with the presence of hydrocarbons on the Property, the highly organic nature of the fill soils that have a high percentage of wood waste, and the peaty native soils underlying the entire Site.

Dissolved oxygen (DO) is the favored electron acceptor used by some microbes for the biodegradation of many forms of organic carbon. During aerobic respiration, DO may become depleted. Thus, DO concentrations below background levels in areas with dissolved hydrocarbons provide evidence for active aerobic respiration. The recorded DO values in monitoring wells A3 through A6 were 0.13, 0.24, 0.11, and 0 milligrams per liter (mg/L), respectively. Field testing of groundwater indicated that DO concentrations varied across the Site. Some of the lowest values (zero, indicating non detection) occurred in wells with elevated levels of petroleum hydrocarbons. The instrument used to measure DO is very sensitive, so DO measurements of 0.5 mg/L or less are often not to be relied on too heavily in a discussion of patterns of DO concentrations.

Nitrate may be used as an electron acceptor for anaerobic biodegradation via denitrification. During denitrification, nitrate concentrations measured in groundwater may decrease. Thus, nitrate concentrations below background in areas with dissolved hydrocarbons provide evidence for active denitrification. The pattern of nitrate detection and concentrations is inconsistent across the Site, with most results being below the detection limit. Nitrate is present along the southern flank of the plume at MW-19, and appears at a trace concentration of 0.01 mg/L at the downgradient monitoring point MW-A5. The scant detection of nitrate means that nitrate is not a reliable indicator for assessing a spatial pattern in the November 2010 data set.

Manganese II [Mn(II)] is a metabolic byproduct of some microbial processes. When Mn(IV) is used as an electron acceptor during anaerobic biodegradation of organic carbon, it is reduced to Mn(II), a more soluble form of Mn. Thus, elevated concentrations of dissolved manganese [presumably Mn(II)] can be used as an indicator that anaerobic degradation of organic carbon has occurred via Mn(IV)

reduction. The November 2010 data show a spatial distribution of manganese that roughly mirrors the petroleum hydrocarbon distribution; thus the manganese distribution appears to support the hypothesis that anaerobic degradation is occurring.

Iron (Fe) II (ferrous iron) is a metabolic by-product of some microbial processes. When Fe(III) (ferric iron) is used as an electron acceptor during anaerobic biodegradation of organic carbon, it is reduced to Fe(II) which has higher solubility in water. Thus, elevated Fe(II) concentrations can be used as an indicator that anaerobic degradation of organic carbon has occurred via Fe(III) reduction. The November 2010 data show a spatial pattern of iron distribution that roughly mirrors the pattern of petroleum hydrocarbon distribution; thus Fe(III) reduction appears to be occurring within the plume.

Sulfate can serve as an electron acceptor for anaerobic biodegradation via sulfate reduction. During sulfate reduction, sulfate concentrations measured in groundwater may decrease. Thus, sulfate concentrations below background in areas with dissolved hydrocarbons provide evidence of sulfate reduction. The November 2010 sulfate concentration data exhibit a strong pattern of decreasing sulfate concentrations from upgradient locations to downgradient locations within the plume, consistent with sulfate consumption. The sulfate concentration falls most precipitously between the upgradient point at MW-11 and wells within the source area.

Methane is produced during anaerobic biodegradation of hydrocarbons via methanogenesis. Thus, increased levels of methane above background in areas with dissolved hydrocarbons provide evidence of methanogenesis. The November 2010 analytical results show a pattern of increasing methane concentration from upgradient to downgradient locations in and around the plume. The most significant jump in methane concentration is observed between the upgradient point at MW-11 and the source area wells.

Alkalinity may increase in biologically active areas where dissolved organic constituents are present. The increase in alkalinity is brought about by the production of carbon dioxide during biodegradation of organic carbon. The carbon dioxide that is produced during biodegradation forms carbonic acid, which dissolves minerals, increasing the alkalinity of the groundwater. Thus, elevated levels of alkalinity (measured as CaCO_3) in areas with dissolved organic compounds provide evidence of biodegradation. The alkalinity data show a clear pattern of increasing alkalinity from upgradient to downgradient areas of the plume.

The groundwater pH was near neutral, though slightly acidic, across most of the site. The pH of 8.35 standard units at the farthest downgradient point MW-A5 was alkaline. The groundwater temperature ranged between 10.3 and 12.7 degrees Celsius ($^{\circ}\text{C}$). The specific conductance generally increases from upgradient to downgradient locations. The specific conductance measures

the ionic character of the groundwater and may reflect either the increased liberation of metal species (e.g. manganese and iron) from minerals, or the influence of saltwater from the nearby harbor.

6.5.3 Geochemical Temporal Trends

The MNA monitoring program is not yet complete. Groundwater samples will be collected during the second quarter monitoring event to be representative of the dry season (May 2011). These samples will be tested for MNA parameters. Therefore, temporal geochemical trends cannot yet be established.

7.0 CONCLUSIONS

This section summarizes results from the data gaps investigation.

Soil: Soil beneath the Property is impacted with benzene, cPAHs, TPH-G, TPH-D, and TPH-O near the groundwater table (1 foot to 5 feet bgs). Soil to the east of the Property is impacted with TPH-G near the groundwater table (1 foot to 1.5 feet bgs) and with cPAHs, TPH-D, and TPH-O to a depth of 14.5 feet bgs in boring AP-5. The results are consistent with impacts from other historical sources of petroleum contamination east of the Property. No petroleum impact in soil was found to the west and northeast of the Property.

Free product.

Between March 2010 and February 2011, the thickness of measured free product during the LPH gauging and recovery activities was as follows:

- Wells W-10R and MW-27 showed traces of LPH.
- The thickness of LPH in well W-1 ranged from trace to 0.17 foot.
- The thickness of LPH in well MW-15R ranged from 0.00 to trace.
- Approximately 2.25 gallons and 3.04 gallons of LPH was recovered from wells W-2 and MW-29, respectively, using a bailer and passive skimmer between March 2010 and February 2011.

Groundwater.

The groundwater analytical data indicated that a petroleum hydrocarbon plume extends to the west and northwest of the Property. However, groundwater downgradient from the Property is not impacted with VOCs, benzene, cPAHs, lead, or TPH-G. Concentrations of hydrocarbons in downgradient wells to the west of the Property (MWs-A4, -A5, and -A6) exceed the TPH-D preliminary screening level, and these wells have no impacts from hazardous constituents of hydrocarbons. Monitoring well MW-A3, located to the southwest of the Property, had a concentration of TPH-D greater than the preliminary screening level only in February 2011. The upgradient monitoring well MW-A7 did not have reportable concentrations of analytes.

Monitoring wells in and around the petroleum hydrocarbon plume were sampled for analysis of geochemical parameters in November 2010. ORP and sulfate values are clearly lower in the presence of the plume than at upgradient locations. Manganese, iron, methane, and alkalinity values are clearly higher in the presence of the plume than at upgradient locations. Many of the changes in values for these geochemical parameters are more pronounced in the source area of the petroleum hydrocarbon plume. Therefore, spatial patterns in the geochemical parameters at the Site are



consistent with the development of an anaerobic environment in which petroleum biodegradation appears to be occurring.

Geotechnical Results.

According to results of the data gaps investigation, no continuous silt layer is situated beneath the Property. Groundwater was found at shallower depths (less than 1 foot bgs) to the east of the Property.

8.0 FOCUSED FEASIBILITY STUDY (FFS)

The results of the Data Gaps Investigation described in the previous sections indicate that the data collected is sufficient to define the extent of impacts at the Site and allow the project to proceed to the FFS with continued monitoring. Pursuant to a requirement of AO DE-6184, the purpose of the FFS is to identify and evaluate remedial alternatives for the contaminated subsurface soil to minimize or prevent further releases of pollutants into the groundwater and reduce downgradient migration of contaminated groundwater.

The FFS will:

- Establish remedial action objectives;
- Establish site-specific cleanup levels, points of compliance for soil and groundwater, and, if necessary, propose remediation levels;
- Identify state and federal laws applicable to remediation of the Site;
- Evaluate cleanup alternatives based on MTCA criteria (WAC 173-340-360), including threshold requirements, permanency of remedial solutions, restoration time frame, public concerns, and cost, as well as procedures to assess relative benefits versus disproportionate cost; and
 - Recommend a Remedial Action Alternative.

The FFS will also present an expected schedule of implementation and a public participation plan. In addition, geotechnical properties of the soils underlying the Site will be evaluated based on the geotechnical sample results.



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9.0 REFERENCES

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TABLES

TABLE 1

SOIL SAMPLE ANALYTICAL RESULTS ^{1,2}
ExxonMobil/ADC Property, Ecology Site ID 2728
Everett, Washington

		Street	ADC/ExxonMobil										City of Everett	Port of Everett			
Sample ID	Preliminary Screening	AB1A	AB1	AB1	AB2	AB2	AB3	AB3	AB4	AB5	AB5	AB5A	AP1	AP1	MWA3	MWA3	
Depth (ft bgs)	Levels ³	3.5-4.5	14	27	4.5-5	14	4.5-5	20	17	22	5	3-3.5	5	15	10	20	
Date Sampled		6/22/2010	12/03/2010	12/03/2010	6/21/2010	6/23/2010	6/21/2010	6/22/2010	6/23/2010	6/25/2010	6/25/2010	6/22/2010	6/24/2010	6/24/2010	6/24/2010	6/24/2010	
Percent Solids		74.1	80.7	78.8	37	86.6 P3	89.2	69.3	78.3 P3	82.4	80	82.9	86.5	36.7	82.4	85	
PAHs (mg/kg)																	
1-Methylnaphthalene	NE	2.52	0.0206	0.00422 U	0.343	0.00379 U	0.00373 U	0.0048 U	0.00422 U	0.00394 U	0.191	15.9	0.529	0.00906 U	0.00434	0.0058	
2-Methylnaphthalene	NE	1.22	0.014	0.00422 U	0.0598	0.00379 U	0.00373 U	0.0048 U	0.00422 U	0.00394 U	0.246	25.4	0.0843	0.00906 U	0.00394 U	0.00386 U	
Acenaphthene	NE	0.182	0.00535	0.00422 U	0.0193	0.00379 U	0.00373 U	0.0048 U	0.00422 U	0.00394 U	0.0198	0.94	0.261	0.00906 U	0.0343	0.00967	
Acenaphthylene	NE	0.113	0.00411 U	0.00422 U	0.00878 U	0.00379 U	0.00373 U	0.0048 U	0.00422 U	0.00394 U	0.00662	0.258	0.0383 U	0.00906 U	0.00394 U	0.0116	
Anthracene	NE	0.112	0.00411 U	0.00422 U	0.0141	0.00379 U	0.00373 U	0.0048 U	0.00422 U	0.00394 U	0.0141	0.38	0.15	0.00906 U	0.00631	0.0228	
Benzo(a)anthracene	NE	0.115	0.00412	0.00422 U	0.0193	0.00379 U	0.00373 U	0.0048 U	0.00422 U	0.00394 U	0.0194	0.162	0.196	0.00906 U	0.00907	0.046	
Benzo(a)pyrene	0.1	0.155	0.00494	0.00422 U	0.0211	0.00379 U	0.00373 U	0.0048 U	0.00422 U	0.00394 U	0.0157	0.114	0.13	0.00906 U	0.0071	0.0441	
Benzo(b)fluoranthene	NE	0.122	0.00535	0.00422 U	0.0176	0.00379 U	0.00373 U	0.0048 U	0.00422 U	0.00394 U	0.00827	0.11	0.142	0.00906 U	0.00592	0.0263	
Benzo(g,h,i)perylene	NE	0.095	0.00411 U	0.00422 U	0.0202	0.00379 U	0.00373 U	0.0048 U	0.00422 U	0.00394 U	0.012	0.0624	0.0958	0.00906 U	0.00434	0.0197	
Benzo(k)fluoranthene	NE	0.0937	0.00411 U	0.00422 U	0.0132	0.00379 U	0.00373 U	0.0048 U	0.00422 U	0.00394 U	0.00496	0.0612	0.0767	0.00906 U	0.0067	0.0313	
Chrysene	NE	0.163	0.00411 U	0.00422 U	0.0273	0.00379 U	0.00373 U	0.0048 U	0.00422 U	0.00394 U	0.0314	0.223	0.245	0.00906 U	0.0103	0.046	
Dibenzo(a,h)anthracene	NE	0.0363	0.00411 U	0.00422 U	0.00878 U	0.00379 U	0.00373 U	0.0048 U	0.00422 U	0.00394 U	0.00413 U	0.0236	0.0383	0.00906 U	0.00394 U	0.00696	
Fluoranthene	NE	0.278	0.0119	0.00422 U	0.0739	0.00379 U	0.00373 U	0.00672	0.0076	0.00394 U	0.0186	0.792	0.518	0.00906 U	0.0205	0.0804	
Fluorene	NE	0.404	0.00741	0.00422 U	0.0308	0.00379 U	0.00373 U	0.0048 U	0.00422 U	0.00394 U	0.0294	1.77	0.383	0.00906 U	0.017	0.0162	
Indeno(1,2,3-cd)pyrene	NE	0.0847	0.00411 U	0.00422 U	0.0106	0.00379 U	0.00373 U	0.0048 U	0.00422 U	0.00394 U	0.00538	0.0488	0.0728	0.00906 U	0.00394	0.0186	
Naphthalene	NE	0.056	0.00411 U	0.00422 U	0.0466	0.00379 U	0.00373 U	0.0048 U	0.00422 U	0.00394 U	0.0128	0.24	0.0767	0.00906 U	0.00828	0.00386 U	
Phenanthrene	NE	1.22	0.0156	0.00422 U	0.0853	0.00417	0.00373 U	0.0072	0.0106	0.00433	0.0926	4.84	0.686	0.00907	0.0296	0.0858	
Pyrene	NE	0.391	0.0115	0.00422 U	0.0721	0.00379 U	0.00373 U	0.00816	0.00464	0.00394 U	0.0633	1.07	0.709	0.00906 U	0.0229	0.0978	
Total cPAHs ⁴	0.1	0.2018	0.0065	0.0032 U	0.0279	0.0029 U	0.0028 U	0.0036 U	0.0032 U	0.0030 U	0.0200	0.1568	0.1850	0.0068 U	0.0100	0.0575	
TPH (mg/kg)																	
TPH-G (C4-C12)	30/100	73.9	5.29 U	6.09 U	354	6.39 U	3.85 U	7.64 U	5.3 U	5.41 U	131	804	44.1	18.6 U	5.98 U	4.69 U	
TPH-O	2,000	470	21.9	9.37	803	6.54	4.35 U	9.4	8.36	5.45	11,000	464 U	1,360	35.5	22.1	6.81	
TPH-D (C10-C28)	2,000	2,100	44.7	5.2	752	4.49 U	4.35 U	5.61 U	4.95 U	4.01 U	8,840	7,580	989	14.2	7.63	4.57 U	
EPH (mg/kg)																	
Aliphatic C8-C10	NE	--	--	--	--	--	--	--	--	--	31.5 J	--	--	--	--	--	
Aromatic C8-C10	NE	--	--	--	--	--	--	--	--	--	6.07 UJ	--	--	--	--	--	
Aliphatic C10-C12	NE	--	--	--	--	--	--	--	--	--	129 J	--	--	--	--	--	
Aromatic C10-C12	NE	--	--	--	--	--	--	--	--	--	38.8 J	--	--	--	--	--	
Aliphatic C12-C16	NE	--	--	--	--	--	--	--	--	--	303 UJ	--	--	--	--	--	
Aromatic C12-C16	NE	--	--	--	--	--	--	--	--	--	475 J	--	--	--	--	--	
Aliphatic C16-C21	NE	--	--	--	--	--	--	--	--	--	422 J	--	--	--	--	--	
Aromatic C16-C21	NE	--	--	--	--	--	--	--	--	--	430 J	--	--	--	--	--	
Aliphatic C21-C34	NE	--	--	--	--	--	--	--	--	--	148 J	--	--	--	--	--	
Aromatic C21-C34	NE	--	--	--	--	--	--	--	--	--	70.1 J	--	--	--	--	--	
VPH (mg/kg)																	
Aliphatic C5-C6	NE	--	--	--	--	--	--	--	--	--	5.76 UJ	--	--	--	--	--	
Aliphatic C6-C8	NE	--	--	--	--	--	--	--	--	--	10.4 J	--	--	--	--	--	
Aliphatic C8-C10	NE	--	--	--	--	--	--	--	--	--	17.3 J	--	--	--	--	--	
Aromatic C8-C10	NE	--	--	--	--	--	--	--	--	--	13 J	--	--	--	--	--	
Aliphatic C10-C12	NE	--	--	--	--	--	--	--	--	--	61.2 J	--	--	--	--	--	
Aromatic C10-C12	NE	--	--	--	--	--	--	--	--	--	21.2 J	--	--	--	--	--	
Aromatic C12-C13	NE	--	--	--	--	--	--	--	--	--	43.8 J	--	--	--	--	--	

TABLE 1

SOIL SAMPLE ANALYTICAL RESULTS ^{1,2}
 ExxonMobil/ADC Property, Ecology Site ID 2728
 Everett, Washington

Sample ID Depth (ft bgs) Date Sampled	Preliminary Screening Levels ³	Street	ADC/ExxonMobil										City of Everett	Port of Everett			
		AB1A	AB1	AB1	AB2	AB2	AB3	AB3	AB4	AB5	AB5	AB5A	AP1	AP1	MWA3	MWA3	
		3.5-4.5	14	27	4.5-5	14	4.5-5	20	17	22	5	3-3.5	5	15	10	20	
		6/22/2010	12/03/2010	12/03/2010	6/21/2010	6/23/2010	6/21/2010	6/22/2010	6/23/2010	6/25/2010	6/25/2010	6/22/2010	6/24/2010	6/24/2010	6/24/2010	6/24/2010	
VOCs (mg/kg)																	
1,2-Dibromoethane	NE	--	--	--	--	--	--	--	--	--	0.00372	--	--	--	--	--	
1,2-Dichloroethane	NE	--	--	--	--	--	--	--	--	--	0.00282	--	--	--	--	--	
Benzene	0.03	0.0056	0.00187 U	0.00219 U	0.0048 U	0.00209 U	0.00149 U	0.00277 U	0.0293	0.0969 U	0.0949	0.195	0.00222 U	0.00631 U	0.00212 U	0.002 U	
Ethylbenzene	6	0.0187	0.00187 U	0.00219 U	0.0048 U	0.00209 U	0.00149 U	0.00277 U	0.0145	0.0969 U	0.00967	0.105	0.00222 U	0.00631 U	0.00212 U	0.002 U	
Methyl t-butyl ether	0.1	0.00221 U	0.00187 U	0.00219 U	0.0048 U	0.00209 U	0.00149 U	0.00277 U	0.00213 U	0.0969 U	0.00229 U	0.104 U	0.00222 U	0.00631 U	0.00212 U	0.002 U	
n-Hexane	NE	--	--	--	--	--	--	--	--	--	0.615 U	--	--	--	--	--	
Toluene	7	0.00754	0.00187 U	0.00219 U	0.0048 U	0.00209 U	0.00149 U	0.00277 U	0.00213 U	0.0969 U	0.00711	0.104 U	0.00222 U	0.00631 U	0.00212 U	0.002 U	
Total Xylenes	9	0.0418	0.00467 U	0.00548 U	0.0249	0.00523 U	0.00372 U	0.00692 U	0.0313	0.242 U	0.0284	0.745	0.00555 U	0.0158 U	0.00529 U	0.00499 U	

TABLE 1

SOIL SAMPLE ANALYTICAL RESULTS ^{1,2}
ExxonMobil/ADC Property, Ecology Site ID 2728
Everett, Washington

Sample ID Depth (ft bgs) Date Sampled	Preliminary Screening Levels ³	Port of Everett						BNSF						
		MWA4	MWA4	MWA5	MWA5	MWA6	MWA6	AP2	AP2	AP3	AP3	AP4	AP4	AP4
		15	20	10	20	12	20	1	14	1	9	1	15	6
		6/24/2010	6/24/2010	6/24/2010	6/24/2010	6/25/2010	6/25/2010	11/30/2010	12/07/2010	11/30/2010	12/07/2010	11/30/2010	12/07/2010	12/07/2010
Percent Solids		79	87.2	88.1	83.8	76.2	69.4	88	85.1	85.8	85.8	81.9	84.1	59.6
PAHs (mg/kg)														
1-Methylnaphthalene	NE	0.148	0.00533	0.00375	0.00387 U	0.00435 U	0.0117	0.00372	0.00385 U	0.0171	0.00384 U	0.00201 J	--	0.00553 U
2-Methylnaphthalene	NE	0.192	0.011	0.00412	0.00387 U	0.00435 U	0.0187	0.0041	0.00385 U	0.0209	0.00384 U	0.00402	--	0.00553 U
Acenaphthene	NE	0.672	0.0323	0.0157	0.00387 U	0.00435 U	0.0206	0.000782 U	0.00385 U	0.000814 U	0.00384 U	0.000844 U	--	0.00553 U
Acenaphthylene	NE	0.0105	0.0038 U	0.0045	0.00387 U	0.00435 U	0.0164	0.00067 U	0.00385 U	0.00233 J	0.00384 U	0.00201 J	--	0.00553 U
Anthracene	NE	0.19	0.0731	0.0161	0.00387 U	0.00479	0.022	0.00223 J	0.00385 U	0.0031 J	0.00384 U	0.00241 J	--	0.00553 U
Benzo(a)anthracene	NE	0.0803	0.0114	0.00862	0.00387 U	0.00871	0.0744	0.00708	0.00385 U	0.0062	0.00384 U	0.00723	--	0.00553 U
Benzo(a)pyrene	0.1	0.0361	0.00419	0.00937	0.00387 U	0.00522	0.0861	0.0156	0.00385 U	0.00659	0.00807	0.00884	--	0.00609
Benzo(b)fluoranthene	NE	0.0437	0.00457	0.00675	0.00387 U	0.01	0.0796	0.00708	0.00385 U	0.0112	0.00384 U	0.0141	--	0.00609
Benzo(g,h,i)perylene	NE	0.016	0.0038 U	0.00525	0.00387 U	0.00435	0.0585	0.00782	0.00385 U	0.00698	0.00384 U	0.0113	--	0.00554
Benzo(k)fluoranthene	NE	0.029	0.00381	0.00712	0.00387 U	0.0074	0.0636	0.000782 U	0.00385 U	0.000814 U	0.00384 U	0.000844 U	--	0.00553 U
Chrysene	NE	0.0584	0.0126	0.0109	0.00387 U	0.0135	0.087	0.0108	0.00385 U	0.00581	0.00384 U	0.00804	--	0.00553 U
Dibenzo(a,h)anthracene	NE	0.0063	0.0038 U	0.00374 U	0.00387 U	0.00435 U	0.0154	0.00484	0.00385 U	0.00271 J	0.00384 U	0.00201 J	--	0.00553 U
Fluoranthene	NE	0.588	0.0617	0.0345	0.00813	0.0344	0.169	0.00633	0.00385 U	0.00775	0.00384 U	0.0104	--	0.0111
Fluorene	NE	0.731	0.0464	0.0131	0.00387 U	0.00435	0.0159	0.00186 J	0.00385 U	0.00116 U	0.00384 U	0.00121 U	--	0.00553 U
Indeno(1,2,3-cd)pyrene	NE	0.016	0.0038 U	0.00487	0.00387 U	0.00435 U	0.0505	0.00484	0.00385 U	0.00465	0.00384 U	0.00683	--	0.00553 U
Naphthalene	NE	0.118	0.0114	0.0112	0.00387 U	0.00435 U	0.0239	0.00067 U	0.00385 U	0.0093	0.00384 U	0.00281 J	--	0.00553 U
Phenanthrene	NE	1.7	0.135	0.0663	0.00852	0.017	0.095	0.0268	0.00385 U	0.012	0.00384 U	0.0104	--	0.00553 U
Pyrene	NE	0.358	0.0472	0.0379	0.00929	0.0292	0.199	0.0168	0.00385 U	0.0093	0.00384 U	0.0145	--	0.0116
Total cPAHs ⁴	0.1	0.0542	0.0067	0.0124	0.0029 U	0.0084	0.1153	0.0181	0.0029 U	0.0092	0.0090	0.0120	--	0.0078
TPH (mg/kg)														
TPH-G (C4-C12)	30/100	4.74 U	4.74 U	7.16 U	5.39 U	5.74 U	6.29 U	4.12 U	5.44 U	4.81 U	9.43 U	6.04 U	4.91 U	8.25 U
TPH-O	2,000	12.2	17	4.7	4.06	119	482	32.5	8.98	106	15.7	111	4.73 U	16.6
TPH-D (C10-C28)	2,000	12.1	7.25	3.74 U	3.95 U	23.8	273	4.39 U	4.56 U	8.37	4.62 U	6.95	4.73 U	6.64 U
EPH (mg/kg)														
Aliphatic C8-C10	NE	--	--	--	--	--	--	--	--	--	--	--	--	--
Aromatic C8-C10	NE	--	--	--	--	--	--	--	--	--	--	--	--	--
Aliphatic C10-C12	NE	--	--	--	--	--	--	--	--	--	--	--	--	--
Aromatic C10-C12	NE	--	--	--	--	--	--	--	--	--	--	--	--	--
Aliphatic C12-C16	NE	--	--	--	--	--	--	--	--	--	--	--	--	--
Aromatic C12-C16	NE	--	--	--	--	--	--	--	--	--	--	--	--	--
Aliphatic C16-C21	NE	--	--	--	--	--	--	--	--	--	--	--	--	--
Aromatic C16-C21	NE	--	--	--	--	--	--	--	--	--	--	--	--	--
Aliphatic C21-C34	NE	--	--	--	--	--	--	--	--	--	--	--	--	--
Aromatic C21-C34	NE	--	--	--	--	--	--	--	--	--	--	--	--	--
VPH (mg/kg)														
Aliphatic C5-C6	NE	--	--	--	--	--	--	--	--	--	--	--	--	--
Aliphatic C6-C8	NE	--	--	--	--	--	--	--	--	--	--	--	--	--
Aliphatic C8-C10	NE	--	--	--	--	--	--	--	--	--	--	--	--	--
Aromatic C8-C10	NE	--	--	--	--	--	--	--	--	--	--	--	--	--
Aliphatic C10-C12	NE	--	--	--	--	--	--	--	--	--	--	--	--	--
Aromatic C10-C12	NE	--	--	--	--	--	--	--	--	--	--	--	--	--
Aromatic C12-C13	NE	--	--	--	--	--	--	--	--	--	--	--	--	--

TABLE 1

SOIL SAMPLE ANALYTICAL RESULTS ^{1,2}
 ExxonMobil/ADC Property, Ecology Site ID 2728
 Everett, Washington

Sample ID Depth (ft bgs) Date Sampled	Preliminary Screening Levels ³	Port of Everett						BNSF						
		MWA4 15	MWA4 20	MWA5 10	MWA5 20	MWA6 12	MWA6 20	AP2 1	AP2 14	AP3 1	AP3 9	AP4 1	AP4 15	AP4 6
		6/24/2010	6/24/2010	6/24/2010	6/24/2010	6/25/2010	6/25/2010	11/30/2010	12/07/2010	11/30/2010	12/07/2010	11/30/2010	12/07/2010	12/07/2010
VOCs (mg/kg)														
1,2-Dibromoethane	NE	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dichloroethane	NE	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzene	0.03	0.00215 U	0.00192 U	0.00236 U	0.00191 U	0.00225 U	0.00318 U	0.000897 U	0.0022 U	0.00117 U	0.0032 U	0.00119 U	0.00202 U	0.00316 U
Ethylbenzene	6	0.00215 U	0.00192 U	0.00236 U	0.00191 U	0.00225 U	0.00318 U	0.000799 U	0.0022 U	0.00104 U	0.192 U	0.00106 U	0.00202 U	0.00316 U
Methyl t-butyl ether	0.1	0.00215 U	0.00192 U	0.00236 U	0.00191 U	0.00225 U	0.00318 U	0.000546 U	0.0022 U	0.000711 U	0.0032 U	0.000727 U	0.00202 U	0.00316 U
n-Hexane	NE	--	--	--	--	--	--	--	--	--	--	--	--	--
Toluene	7	0.00215 U	0.00192 U	0.00236 U	0.00191 U	0.00225 U	0.00318 U	0.000725 U	0.0022 U	0.000945 U	0.192 U	0.000966 U	0.00202 U	0.00316 U
Total Xylenes	9	0.00537 U	0.0048 U	0.0059 U	0.00477 U	0.00563 U	0.00795 U	0.00155 U	0.00549 U	0.00202 U	0.481 U	0.00206 U	0.00505 U	0.0079 U

TABLE 1

SOIL SAMPLE ANALYTICAL RESULTS ^{1,2}
ExxonMobil/ADC Property, Ecology Site ID 2728
Everett, Washington

Sample ID Depth (ft bgs) Date Sampled	Preliminary Screening Levels ³	BNSF										City of Everett		
		AP5	AP5	AP5	AP6	AP6	AP6	AP6	AP7	AP7		AP7	MW7A	MW7Ab
		1	1.5	14.5	1	23	FIELD DUP.	30	1	10	FIELD DUP	15	1	
		11/30/2010	12/07/2010	12/07/2010	11/30/2010	12/02/2010	12/02/2010	12/02/2010	10/28/2010	12/07/2010	12/07/2010	12/07/2010	11/30/2010	12/01/2010
Percent Solids		88.6	88.8	17.4	83.4	80.9	82.3	80.6		35.5	62.7	87.7	85.1	79.9
PAHs (mg/kg)														
1-Methylnaphthalene	NE	0.0161	0.574	0.925	2.44 J	0.00888	0.00558	--	0.00381 U	0.0839	0.1	0.00371 U	0.00466 J	0.000744 U
2-Methylnaphthalene	NE	0.00747	0.0444	0.397	0.219 J	0.000969 U	0.000956 U	--	0.00381 U	0.0466 U	0.0527 U	0.00371 U	0.00854	0.000992 U
Acenaphthene	NE	0.00261 J	0.0492	0.661	0.409 J	0.00242 J	0.00239 J	--	0.00801	0.0606	0.0633	0.00371 U	0.00163 U	0.000868 U
Acenaphthylene	NE	0.00523	0.0291	0.434	0.167 J	0.000727 U	0.000717 U	--	0.00381 U	0.0466	0.0527 U	0.00371 U	0.00621 J	0.000744 U
Anthracene	NE	0.00374	0.0306	0.831	0.544 J	0.00363 J	0.00358 J	--	0.00381 U	0.0792	0.0738	0.00371 U	0.00544 J	0.00062 U
Benzo(a)anthracene	NE	0.0071	0.0339	0.434	0.0397 J	0.00283 J	0.00319 J	--	0.00458	0.0513	0.0527	0.00371 U	0.0116	0.000744 U
Benzo(a)pyrene	0.1	0.0071	0.0324	0.283	0.0318 J	0.00323 J	0.00319 J	--	0.00420	0.0466 U	0.0527	0.00371 U	0.0264	0.00248 J
Benzo(b)fluoranthene	NE	0.00859	0.0401	0.359	0.0477 J	0.00363 J	0.00358 J	--	0.00458	0.0606	0.0633	0.00371 U	0.0264	0.00248 J
Benzo(g,h,i)perylene	NE	0.00897	0.0273	0.189	0.0238 J	0.00242 J	0.00279 J	--	0.00496	0.0466 U	0.0527 U	0.00371 U	0.0248	0.000868 U
Benzo(k)fluoranthene	NE	0.000784 U	0.0171	0.189 U	0.00835 U	0.000848 U	0.000836 U	--	0.00458	0.0466 U	0.0527 U	0.00371 U	0.00466 J	0.000868 U
Chrysene	NE	0.0112	0.0342	0.567	0.0358 J	0.00283 J	0.00279 J	--	0.00458	0.0699	0.0633	0.00371 U	0.0171	0.00124 U
Dibenzo(a,h)anthracene	NE	0.00448	0.0117	0.189 U	0.0238 J	0.00242 J	0.00239 J	--	0.00381 U	0.0466 U	0.0527 U	0.00371 U	0.00854	0.00248 J
Fluoranthene	NE	0.0071	0.0874	0.831	0.191 J	0.00565	0.00558	--	0.00915	0.0886	0.0843	0.00371 U	0.0163	0.00062 U
Fluorene	NE	0.00523	0.0856	1.25	0.779 J	0.00565	0.00558	--	0.00305 J	0.0979	0.1	0.00371 U	0.00233 U	0.00124 U
Indeno(1,2,3-cd)pyrene	NE	0.00486	0.0204	0.189 U	0.0278 J	0.00283 J	0.00279 J	--	0.00343 J	0.0466 U	0.0527 U	0.00371 U	0.0124	0.00248 J
Naphthalene	NE	0.00261 J	0.00364 U	0.189 U	0.0397 J	0.000727 U	0.000717 U	--	0.00381 U	0.0466 U	0.0527 U	0.00371 U	0.00544 J	0.000744 U
Phenanthrene	NE	0.0314	0.189	1.68	2.14 J	0.00969	0.00956	--	0.00534	0.0606	0.0843	0.00371 U	0.0163	0.00207 J
Pyrene	NE	0.0191	0.117	2.34	0.231 J	0.00969	0.0104	--	0.00877	0.0466 U	0.0527 U	0.00371 U	0.028	0.000992 U
Total cPAHs ⁴	0.1	0.0098	0.0451	0.3963	0.0465	0.0045	0.0045	--	0.0062	0.0422	0.0728	0.0028 U	0.0329	0.0033
TPH (mg/kg)														
TPH-G (C4-C12)	30/100	44.8	652	45.1 U	184	5.12 U	5.65 U	4.63 U	1.39 J	44.3	51.8	8.15 U	4.41 U	5.85 U
TPH-O	2,000	369	176	8,980	129	37.1 J	10.5 J	2.39 J	119	836	861	4.46 U	228	2.93 J
TPH-D (C10-C28)	2,000	44.4	440	8,660	1,990	45.3 J	13.2 J	3.43 J	3.04 J	553	717	4.46 U	10	2.36 J
EPH (mg/kg)														
Aliphatic C8-C10	NE	--	5.22 U	--	--	--	--	--	--	--	--	--	--	--
Aromatic C8-C10	NE	--	5.22 U	--	--	--	--	--	--	--	--	--	--	--
Aliphatic C10-C12	NE	--	7.28	--	--	--	--	--	--	--	--	--	--	--
Aromatic C10-C12	NE	--	5.22 U	--	--	--	--	--	--	--	--	--	--	--
Aliphatic C12-C16	NE	--	23.3	--	--	--	--	--	--	--	--	--	--	--
Aromatic C12-C16	NE	--	5.22 U	--	--	--	--	--	--	--	--	--	--	--
Aliphatic C16-C21	NE	--	19.9	--	--	--	--	--	--	--	--	--	--	--
Aromatic C16-C21	NE	--	9.18	--	--	--	--	--	--	--	--	--	--	--
Aliphatic C21-C34	NE	--	14.8	--	--	--	--	--	--	--	--	--	--	--
Aromatic C21-C34	NE	--	5.22 U	--	--	--	--	--	--	--	--	--	--	--
VPH (mg/kg)														
Aliphatic C5-C6	NE	--	4.76 U	--	--	--	--	--	--	--	--	--	--	--
Aliphatic C6-C8	NE	--	12.5	--	--	--	--	--	--	--	--	--	--	--
Aliphatic C8-C10	NE	--	19.9	--	--	--	--	--	--	--	--	--	--	--
Aromatic C8-C10	NE	--	14.2	--	--	--	--	--	--	--	--	--	--	--
Aliphatic C10-C12	NE	--	31.9	--	--	--	--	--	--	--	--	--	--	--
Aromatic C10-C12	NE	--	26.3	--	--	--	--	--	--	--	--	--	--	--
Aromatic C12-C13	NE	--	11.9	--	--	--	--	--	--	--	--	--	--	--

TABLE 1

SOIL SAMPLE ANALYTICAL RESULTS ^{1,2}
ExxonMobil/ADC Property, Ecology Site ID 2728
Everett, Washington

Sample ID Depth (ft bgs) Date Sampled	Preliminary Screening Levels ³	BNSF										City of Everett		
		AP5	AP5	AP5	AP6	AP6	AP6	AP6	AP7	AP7		AP7	MW7A	MW7Ab
		1	1.5	14.5	1	23	FIELD DUP.	30	1	10	FIELD DUP	15	1	
		11/30/2010	12/07/2010	12/07/2010	11/30/2010	12/02/2010	12/02/2010	12/02/2010	10/28/2010	12/07/2010	12/07/2010	12/07/2010	11/30/2010	12/01/2010
VOCs (mg/kg)														
1,2-Dibromoethane	NE	--	0.00183 U	--	0.000644 U	--	--	--	--	--	--	--	--	--
1,2-Dichloroethane	NE	--	0.00183 U	--	0.00049 U	--	--	--	--	--	--	--	--	--
Benzene	0.03	0.00094 U	0.0353	0.0168 U	0.00156 J	0.00115 U	0.00123 U	0.00108 U	0.00185 U	0.00962 U	0.00441 U	0.00215 U	0.000898 U	0.00123 U
Ethylbenzene	6	0.000838 U	0.0151	0.025	0.00128 J	0.00103 U	0.0011 U	0.000966 U	0.00185 U	0.00962 U	0.00688	0.00215 U	0.0008 U	0.0011 U
Methyl t-butyl ether	0.1	0.000573 U	0.00183 U	0.0168 U	0.000644 U	0.000703 U	0.000751 U	0.00066 U	0.00185 U	0.00962 U	0.00441 U	0.00215 U	0.000547 U	0.00075 U
n-Hexane	NE	--	1.37	--	0.0567 J	--	--	--	--	--	--	--	--	--
Toluene	7	0.000761 U	0.0142	0.0168 U	0.00288 J	0.000934 U	0.000998 U	0.000877 U	0.00185 U	0.00962 U	0.00441 U	0.00215 U	0.000726 U	0.000996 U
Total Xylenes	9	0.00162 U	0.062	0.0627	0.00588 J	0.00199 U	0.00213 U	0.00187 U	0.00461 U	0.024 U	0.0254	0.00537 U	0.00155 U	0.00213 U

Notes

- Data qualifiers are as follows:
-- = not analyzed
U = not detected at or above the laboratory reporting limit shown.
J = the result is an approximation
UJ = not detected at or above value shown, which is the estimated reporting limit.
- Bold** values exceed preliminary screening level.
- Preliminary screening levels are based on MTCA Method A cleanup levels for residential/unrestricted land use.
- Total cPAHs calculated using toxicity equivalency factors (TEF) in accordance with WAC 173-340-900, where one-half the reporting limit was used for non-detected values.

Abbreviations

- cPAHs = carcinogenic PAHs
- EPH = extractable petroleum hydrocarbons
- ft bgs = feet below ground surface
- mg/kg = milligrams per kilogram
- MTCA = Model Toxics Control Act
- NE = not established
- PAHs = polyaromatic hydrocarbons
- TPG-D = total petroleum hydrocarbons diesel range
- TPH = total petroleum hydrocarbons
- TPH-G = total petroleum hydrocarbons gasoline range
- TPH-O = total petroleum hydrocarbons motor oil
- VOCs = volatile organic compounds
- VPH = volatile petroleum hydrocarbons
- WAC = Washington Administrative Code

TABLE 2

GROUNDWATER SAMPLES ANALYTICAL RESULTS^{1,2}
ExxonMobil/ADC Property, Ecology Site ID 2728
Everett, Washington

Sample ID	Preliminary Screening Levels ³	AP1	MW-11	MW-19	MW-40R	MW-A1	MW-A2	MW-A3			MW-A4			MW-A5			MW-A6		MW-A7	
		6/24/2010	2/16/2011	2/17/2011	2/17/2011	2/18/2011	2/17/2011	8/18/2010	11/18/2010	2/17/2011	8/18/2010	11/17/2010	2/17/2011	8/18/2010	11/17/2010	2/17/2011	8/18/2010	11/17/2010	2/17/2011	2/18/2011
Metals (mg/L)																				
Lead	NE	0.005 U	2.00 U	2.00 U	2.00 U	2.00 U	2.00 U	2.00 U	2.00 U	2.00 U	40.0 U	200 U	200 U	2.00 U	0.090 J	2.00 U	2.00 U	0.110 J	2.00 U	2.00 U
PAHs (µg/L)																				
1-Methylnaphthalene	NE	6.42 J	0.0990 U	1.33	20.9	0.0588 J	0.0971 U	0.0952 U	0.0971 U	0.0971 U	0.558	0.100 U	1.32	0.0962 U	0.100 U	0.0990 U	0.125	0.100 U	0.0971 U	0.098 U
2-Methylnaphthalene	NE	0.171 J	0.0990 U	0.0777 J	0.971	0.0980 U	0.0971 U	0.0952 U	0.0971 U	0.0971 U	0.433	0.100 U	1.34	0.0962 U	0.100 U	0.0990 U	0.135	0.100 U	0.0971 U	0.098 U
Acenaphthene	NE	0.895 J	0.0990 U	0.223	1.09	0.0980 U	1.00	0.695	0.495	0.359	3.16	2.46	4.14	1.61	1.17	1.18	0.452	0.13	0.408	0.098 U
Acenaphthylene	NE	0.362 J	0.0990 U	0.0971 U	0.136	0.0980 U	0.0971 U	0.0952 U	0.0971 U	0.0971 U	0.0962 U	0.025 U	0.0971 U	0.0962 U	0.100 U	0.0990 U	0.0962 U	0.100 U	0.0971 U	0.098 U
Anthracene	NE	0.219 J	0.0990 U	0.0971 U	0.0583 J	0.0980 U	0.0971 U	0.0952 U	0.068 J	0.0971 U	0.173	0.13	0.165	0.212	0.100 U	0.0990 U	0.0962 U	0.100 U	0.0971 U	0.098 U
Benzo(a)anthracene	NE	0.0952 UJ	0.0990 U	0.0971 U	0.0971 U	0.0980 U	0.0971 U	0.0952 U	0.0971 U	0.0971 U	0.0962 U	0.018 U	0.0971 U	0.0962 U	0.100 U	0.0990 U	0.0962 U	0.100 U	0.0971 U	0.098 U
Benzo(a)pyrene	0.1	0.0952 UJ	0.0990 U	0.0971 U	0.0971 U	0.0980 U	0.0971 U	0.0952 U	0.0971 U	0.0971 U	0.0962 U	0.032 U	0.0971 U	0.0962 U	0.100 U	0.0990 U	0.0962 U	0.100 U	0.0971 U	0.098 U
Benzo(b)fluoranthene	NE	0.0952 UJ	0.0990 U	0.0971 U	0.0971 U	0.0980 U	0.0971 U	0.0952 U	0.0971 U	0.0971 U	0.0962 U	0.026 U	0.0971 U	0.0962 U	0.100 U	0.0990 U	0.0962 U	0.100 U	0.0971 U	0.098 U
Benzo(g,h,i)perylene	NE	0.0952 UJ	0.0990 U	0.0971 U	0.0971 U	0.0980 U	0.0971 U	0.0952 U	0.0971 U	0.0971 U	0.0962 U	0.024 U	0.0971 U	0.0962 U	0.100 U	0.0990 U	0.0962 U	0.100 U	0.0971 U	0.098 U
Benzo(k)fluoranthene	NE	0.0952 UJ	0.0990 U	0.0971 U	0.0971 U	0.0980 U	0.0971 U	0.0952 U	0.0971 U	0.0971 U	0.0962 U	0.04 U	0.0971 U	0.0962 U	0.100 U	0.0990 U	0.0962 U	0.100 U	0.0971 U	0.098 U
Chrysene	NE	0.114 J	0.0990 U	0.0971 U	0.0971 U	0.0980 U	0.0971 U	0.0952 U	0.0971 U	0.0971 U	0.0962 U	0.035 U	0.0971 U	0.0962 U	0.100 U	0.0990 U	0.0962 U	0.100 U	0.0971 U	0.098 U
Dibenzo(a,h)anthracene	NE	0.0952 UJ	0.0990 U	0.0971 U	0.0971 U	0.0980 U	0.0971 U	0.0952 U	0.0971 U	0.0971 U	0.0962 U	0.024 U	0.0971 U	0.0962 U	0.100 U	0.0990 U	0.0962 U	0.100 U	0.0971 U	0.098 U
Fluoranthene	NE	0.305 J	0.0990 U	0.0971 U	0.0583 J	0.0980 U	0.0971 U	0.200	0.165	0.0485 J	0.260	0.19	0.252	0.394	0.05 J	0.0990 U	0.154	0.100 U	0.0680 J	0.098 U
Fluorene	NE	1.64 J	0.0990 U	0.262	1.08	0.127	0.204	0.619	0.456	0.320	1.53	1.13	1.85	0.154	0.100 U	0.0990 U	0.269	0.04 J	0.107	0.098 U
Indeno(1,2,3-cd)pyrene	NE	0.0952 UJ	0.0990 U	0.0971 U	0.0971 U	0.0980 U	0.0971 U	0.0952 U	0.0971 U	0.0971 U	0.0962 U	0.028 U	0.0971 U	0.0962 U	0.100 U	0.0990 U	0.0962 U	0.100 U	0.0971 U	0.098 U
Naphthalene	NE	0.276 J	0.0990 U	0.456 N	0.903	0.0980 U	0.0971 U	0.0952 U	0.0485 J	0.0680 J	1.68	1.71	7.03	0.0962 U	0.100 U	0.0990 U	0.308	0.100 U	0.0971 U	0.098 U
Phenanthrene	NE	0.686 J	0.0990 U	0.0971 U	0.466	0.0784 J	0.0971 U	1.03	0.786	0.621	1.90	1.56	2.06	0.442	0.11	0.109	0.596	0.09 J	0.155	0.098 U
Pyrene	NE	0.438 J	0.0990 U	0.0971 U	0.0777 J	0.0980 U	0.0971 U	0.162	0.126	0.0971 U	0.144	0.11	0.146	0.260	0.100 U	0.0990 U	0.0962 U	0.100 U	0.0485 J	0.098 U
Total cPAHs ⁴	0.1	0.068	0.075 U	0.073 U	0.073 U	0.074 U	0.073 U	0.072 U	0.073 U	0.073 U	0.073 U	0.023 U	0.073 U	0.073 U	0.076 U	0.075 U	0.073 U	0.076 U	0.073 U	0.074 U
TPH (µg/L)																				
Gasoline Range Organics (C4-C12)	800/1,000	100 U	100 U	397	763	100 U	100	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U
Motor Oils	500	785	105 U	128 N	638 N	529 N	421 N	226	96.2 U	220 N	516	396	515 N	288	98.0 U	523 N	145	94.3 J	273 N	94.3 U
Petroleum Hydrocarbons C10-C28	500	2,700	105 U	570 J	2,030 J	3260	1,720 J	335	417	791	483	585	667	2,070	1,250 J	2,800	513	796	1,500	94.3 U
VOCs (µg/L)																				
1,2-Dibromoethane	NE	0.5 U	--	--	--	0.500 U	0.500 U	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dichloroethane	NE	0.5 U	--	--	--	0.500 U	0.500 U	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzene	5	0.5 U	0.500 U	0.500 U	0.720	0.500 U	0.500 U	0.500 U	0.500 U	0.500 U	0.500 U	0.500 U	0.500 U	0.500 U	0.500 U	0.500 U	0.270 J	0.500 U	0.500 U	0.500 U
Ethylbenzene	700	0.5 U	0.500 U	0.500 U	0.500 U	0.500 U	0.500 U	0.500 U	0.500 U	0.500 U	0.500 U	0.500 U	0.500 U	0.500 U	0.500 U	0.500 U	0.500 U	0.500 U	0.500 U	0.500 U
Methyl t-butyl ether	20	0.5 U	0.500 U	0.500 U	0.500 U	0.500 U	0.500 U	--	--	0.500 U	--	--	0.500 U	--	--	0.500 U	--	--	0.500 U	0.500 U
n-Hexane	NE	2 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Toluene	1,000	0.5 U	0.500 U	0.500 U	0.760	0.500 U	0.500 U	0.500 U	0.500 U	0.500 U	0.500 U	0.500 U	0.500 U	0.500 U	0.500 U	0.500 U	0.500 U	0.500 U	0.500 U	0.500 U
Total Xylenes	1,000	0.5 U	0.500 U	0.730	3.28	0.500 U	0.500 U	0.500 U	0.500 U	0.500 U	0.500 U	0.500 U	0.500 U	0.500 U	0.500 U	0.500 U	0.500 U	0.500 U	0.500 U	0.500 U

Notes

- Data qualifiers are as follows:
 -- = not analyzed
 U = not detected at or above the value presented
 J = the result is an approximation
 N = the analyte is presumptively identified. The associated result is qualitatively and quantitatively uncertain.
 UJ = not detected at the approximated value given.
- Bold** values exceed preliminary screening level.
- Preliminary screening levels are based on MTCA Method A cleanup levels for residential/unrestricted land use.
- Total cPAHs calculated using toxicity equivalency factors (TEF) in accordance with WAC 173-340-900, where one-half the reporting limit was used for non-detected values.

Abbreviations

- µg/L = micrograms per liter
- cPAHs = carcinogenic polycyclic aromatic hydrocarbons
- mg/L = milligrams per liter
- MTCA = Model Toxics Control Act
- NE = not established
- PAHs = polycyclic aromatic hydrocarbons
- TPH = Total Petroleum Hydrocarbons
- VOCs = Volatile Organic Compounds

TABLE 3

MONITORED NATURAL ATTENUATION PARAMETERS

ExxonMobil/ADC Property, Ecology Site ID 2728

Everett, Washington

Wells Date Sampled	MW-11					MW-19					W-6				
	Feb 2009	Aug 2009	Feb/Mar 2010	Aug 2010	Nov 2010	Feb 2009	Aug 2009	Feb/Mar 2010	Aug 2010	Nov 2010	Feb 2009	Aug 2009	Feb/Mar 2010	Aug 2010	Nov 2010
Analytes (µg/L)															
TPH-D	ND	ND	ND	ND	ND	993	1770	854	346	488	444	1,290	507	--	ND
TPH-G	ND	ND	ND	ND	ND	187	303	282	371	302	280	427	206	--	ND
Benzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	--	ND
T+E+X ³	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.6	ND	ND	ND	--	1.5
MNA Parameters															
ORP (mV)	--	--	151	78	24	--	--	-99	-109	-102	--	--	-17	--	--
DO (mg/L)	--	--	0	0.15	0.02	--	--	0	0.26	0	--	--	0	--	--
Nitrate (mg/L)	--	--	--	--	ND	--	--	--	--	0.315	--	--	--	--	--
Manganese (µg/L)	--	--	--	--	167	--	--	--	--	900	--	--	--	--	--
Iron (mg/L)	--	--	--	--	0.3	--	--	--	--	1.84	--	--	--	--	--
Sulfate (mg/L)	--	--	--	--	23.1	--	--	--	--	3.47	--	--	--	--	--
Methane (µg/L)	--	--	--	--	217	--	--	--	--	8,350	--	--	--	--	--
Alkalinity (mg/L)	--	--	--	--	85.2	--	--	--	--	147	--	--	--	--	--
Temp °C	--	--	13.3	19	11.6	--	--	10.7	24.4	11.7	--	--	9.7	--	--
pH	--	--	6.16	5.96	6.21	--	--	6.66	6.6	6.53	--	--	6.88	--	--
Conductance (mS/cm)	--	--	37.0	0.3	0.321	--	--	34.0	0.4	0.452	--	--	21.3	--	--

Wells Date Sampled	MW-40R					MW-A2					W-3				
	Feb 2009	Aug 2009	Feb/Mar 2010	Aug 2010	Nov 2010	Feb 2009	Aug 2009	Feb/Mar 2010	Aug 2010	Nov 2010	Feb 2009	Aug 2009	Feb/Mar 2010	Aug 2010	Nov 2010
Analytes (µg/L)															
TPH-D	3,110	11,900	3,790	4,390	1,970	1,840	1,650	2,400	1,720	2,010	1,400	1,770	1,610	--	--
TPH-G	855	391	1,300	785	905	188	175	243	206	171	239	340	316	--	--
Benzene	3.65	9.1	1.7	6.22	1.18	ND	ND	ND	--	ND	ND	ND	ND	--	--
T+E+X ³	11	10	4	9	4	ND	ND	ND	ND	ND	ND	ND	ND	--	--
MNA Parameters															
ORP (mV)	--	--	-131	-194	-144	--	--	-20	-83	-216	--	--	-69	--	--
DO (mg/L)	--	--	0	0.43	0	--	--	0	0.2	0.15	--	--	0	--	--
Nitrate (mg/L)	--	--	--	--	ND	--	--	--	--	ND	--	--	--	--	--
Manganese (µg/L)	--	--	--	--	471	--	--	--	--	2,160	--	--	--	--	--
Iron (mg/L)	--	--	--	--	3.3	--	--	--	--	3.3	--	--	--	--	--
Sulfate (mg/L)	--	--	--	--	1.87	--	--	--	--	1.31	--	--	--	--	--
Methane (µg/L)	--	--	--	--	9,750	--	--	--	--	9,940	--	--	--	--	--
Alkalinity (mg/L)	--	--	--	--	269	--	--	--	--	279	--	--	--	--	--
Temperature °C	--	--	11.4	18.2	12.4	--	--	12.8	23.9	12.7	--	--	12.8	--	--
pH	--	--	6.9	7.31	6.78	--	--	6.57	6.36	6.35	--	--	6.69	--	--
Conductance (mS/cm)	--	--	63.1	1.1	0.078	--	--	68.7	0.6	0.741	--	--	58.2	--	--

TABLE 3

MONITORED NATURAL ATTENUATION PARAMETERS

ExxonMobil/ADC Property, Ecology Site ID 2728
Everett, Washington

Wells Date Sampled	MW-A1					MW-A3					MW-A4				
	Feb 2009	Aug 2009	Feb/Mar 2010	Aug 2010	Nov 2010	Feb 2009	Aug 2009	Feb/Mar 2010	Aug 2010	Nov 2010	Feb 2009	Aug 2009	Feb/Mar 2010	Aug 2010	Nov 2010
Analytes (µg/L)															
TPH-D	2,080	2,240	3,390	2,200	2,140	--	--	--	335	417	--	--	--	483	585
TPH-G	145	223	ND	ND	48.2	--	--	--	ND	ND	--	--	--	ND	ND
Benzene	ND	ND	ND	ND	ND	--	--	--	ND	ND	--	--	--	ND	ND
T+E+X ³	ND	ND	ND	ND	ND	--	--	--	ND	ND	--	--	--	ND	ND
MNA Parameters															
ORP (mV)	--	--	91	-160	--	--	--	--	-172	-198	--	--	--	-194	--
DO (mg/L)	--	--	0	0.27	--	--	--	--	0.05	0.13	--	--	--	0.28	--
Nitrate (mg/L)	--	--	--	--	--	--	--	--	--	ND	--	--	--	--	--
Manganese (µg/L)	--	--	--	--	--	--	--	--	--	1,890	--	--	--	--	--
Iron (mg/L)	--	--	--	--	--	--	--	--	--	3.3	--	--	--	--	--
Sulfate (mg/L)	--	--	--	--	--	--	--	--	--	3.07	--	--	--	--	--
Methane (µg/L)	--	--	--	--	--	--	--	--	--	9,130	--	--	--	--	--
Alkalinity (mg/L)	--	--	--	--	--	--	--	--	--	331	--	--	--	--	--
Temp °C	--	--	12.9	25.2	--	--	--	--	20.8	10.3	--	--	--	24.4	--
pH	--	--	6.59	6.85	--	--	--	--	6.37	6.44	--	--	--	6.88	--
Conductance (mS/cm)	--	--	76.0	0.6	--	--	--	--	0.9	1.2	--	--	--	33.8	--

Wells Date Sampled	MW-A6					MW-A5				
	Feb 2009	Aug 2009	Feb/Mar 2010	Aug 2010	Nov 2010	Feb 2009	Aug 2009	Feb/Mar 2010	Aug 2010	Nov 2010
Analytes (µg/L)										
TPH-D	--	--	--	513	796	--	--	--	2,070	1,250
TPH-G	--	--	--	ND	ND	--	--	--	ND	ND
Benzene	--	--	--	ND	ND	--	--	--	ND	ND
T+E+X ³	--	--	--	ND	ND	--	--	--	ND	ND
MNA Parameters										
ORP (mV)	--	--	--	-350	--	--	--	--	-147	-134
DO (mg/L)	--	--	--	0.04	--	--	--	--	0.3	0.11
Nitrate (mg/L)	--	--	--	--	--	--	--	--	--	0.01
Manganese (µg/L)	--	--	--	--	--	--	--	--	--	968
Iron (mg/L)	--	--	--	--	--	--	--	--	--	1.24
Sulfate (mg/L)	--	--	--	--	--	--	--	--	--	0.80
Methane (µg/L)	--	--	--	--	--	--	--	--	--	10,100
Alkalinity (mg/L)	--	--	--	--	--	--	--	--	--	756
Temperature °C	--	--	--	23.7	--	--	--	--	22.9	11.6
pH	--	--	--	7.54	--	--	--	--	7.27	8.35
Conductance (mS/cm)	--	--	--	6.6	--	--	--	--	2.0	2.45

Notes

1. Values in **Bold** are greater than the preliminary screening level. The preliminary screening levels are based on MTCA Method A cleanup levels for residential/unrestricted land use.
2. Nondetected VOC analytes treated as 0 µg/L in sums.
3. Sum of concentrations of toluene, ethylbenzene, and total xylenes.

Abbreviations

- = data not available
- °C = degrees Celsius
- µg/L = micrograms per liter
- COPC = Constituents of Potential Concern
- DO = dissolved oxygen
- mg/L = milligrams per liter

- MNA = monitored natural attenuation
- mS/cm = millisiemens per centimeter
- mV = millivolts
- ND = not detected
- ND = not detected
- ORP = oxidation-reduction potential
- VOC = volatile organic compound



TABLE 4

RESULTS OF FLUID LEVEL AND
GROUNDWATER ELEVATION MEASUREMENTS ¹

ExxonMobil/ADC Property, Ecology Site ID 2728
Everett, Washington

Well Name & Top of Casing Elevation (feet) ²	Sample Date	Depth to Water (feet) ³	LPH Thickness (feet) ⁴	LPH Recovered (feet) ^{4,5}	Groundwater Elevation (feet) ⁶
LPH-1					
13.64	3/25/2010	1.57	0.00	0.00	12.07
	4/29/2010	1.47	0.00	0.00	12.17
	5/25/2010	1.64	0.00	0.00	12
	6/28/2010	3.14	0.00	0.00	10.5
	7/28/2010	3.11	0.00	0.00	10.53
	8/27/2010	3.13	0.00	0.00	10.51
	9/28/2010	1.51	0.00	0.00	12.13
	10/22/2010	1.62	0.00	0.00	12.02
	11/24/2010	1.50	0.00	0.00	12.14
	12/23/2010	1.41	0.00	0.00	12.23
	1/26/2011	1.45	0.00	0.00	12.19
	2/24/2011	1.50	0.00	0.00	12.14
LPH-2					
No survey	3/25/2010	Car parked over well	--	--	--
	4/29/2010	1.51	0.00	0.00	--
	5/25/2010	1.67	0.00	0.00	--
	6/28/2010	1.6	0.00	0.00	--
	7/28/2010	1.62	0.00	0.00	--
	8/27/2010	1.7	0.00	0.00	--
	9/28/2010	1.56	0.00	0.00	--
	10/22/2010	1.64	0.00	0.00	--
	11/24/2010	1.48	0.00	0.00	--
	12/23/2010	1.36	0.00	0.00	--
	1/26/2011	1.38	0.00	0.00	--
	2/24/2011	1.56	0.00	0.00	--
LPH-3					
13.35	3/25/2010	1.24	0.00	0.00	12.11
	4/29/2010	1.2	0.00	0.00	12.15
	5/25/2010	1.35	0.00	0.00	12.00
	6/28/2010	2.85	0.00	0.00	10.50
	7/28/2010	2.88	0.00	0.00	10.47
	8/27/2010	2.89	0.00	0.00	10.46
	9/28/2010	1.23	0.00	0.00	12.12
	10/22/2010	1.31	0.00	0.00	12.04
	11/24/2010	1.18	0.00	0.00	12.17
	12/23/2010	1.05	0.00	0.00	12.30
	1/26/2011	1.17	0.00	0.00	12.18
	2/24/2011	1.38	0.00	0.00	11.97



TABLE 4

RESULTS OF FLUID LEVEL AND
GROUNDWATER ELEVATION MEASUREMENTS ¹

ExxonMobil/ADC Property, Ecology Site ID 2728
Everett, Washington

Well Name & Top of Casing Elevation (feet) ²	Sample Date	Depth to Water (feet) ³	LPH Thickness (feet) ⁴	LPH Recovered (feet) ^{4,5}	Groundwater Elevation (feet) ⁶
LPH-4					
13.26	3/25/2010	1.15	0.00	0.00	12.11
	4/29/2010	1.13	0.00	0.00	12.13
	5/25/2010	1.31	0.00	0.00	11.95
	6/28/2010	2.81	0.00	0.00	10.45
	7/28/2010	2.8	0.00	0.00	10.46
	8/27/2010	2.81	0.00	0.00	10.45
	9/28/2010	1.15	0.00	0.00	12.11
	10/22/2010	1.21	0.00	0.00	12.05
	11/24/2010	1.05	0.00	0.00	12.21
	12/23/2010	1.01	0.00	0.00	12.25
	1/26/2011	1.01	0.00	0.00	12.25
	2/24/2011	1.05	0.00	0.00	12.21
LPH-5					
13.57	3/25/2010	1.51	0.00	0.00	12.06
	4/29/2010	1.42	0.00	0.00	12.15
	5/25/2010	1.3	0.00	0.00	12.27
	6/28/2010	3.06	0.00	0.00	10.51
	7/28/2010	3.08	0.00	0.00	10.49
	8/27/2010	3.12	0.00	0.00	10.45
	9/28/2010	1.49	0.00	0.00	12.08
	10/22/2010	1.54	0.00	0.00	12.03
	11/24/2010	1.5	0.00	0.00	12.07
	12/23/2010	1.42	0.00	0.00	12.15
	1/26/2011	1.41	0.00	0.00	12.16
	2/24/2011	1.32	0.00	0.00	12.25
LPH-6					
13.72	3/25/2010	1.57	0.00	0.00	12.15
	4/29/2010	1.55	0.00	0.00	12.17
	5/25/2010	1.42	0.00	0.00	12.30
	6/28/2010	3.14	0.00	0.00	10.58
	7/28/2010	3.15	0.00	0.00	10.57
	8/27/2010	3.17	0.00	0.00	10.55
	9/28/2010	1.58	0.00	0.00	12.14
	10/22/2010	1.66	0.00	0.00	12.06
	11/24/2010	1.52	0.00	0.00	12.20
	12/23/2010	1.38	0.00	0.00	12.34
	1/26/2011	1.5	0.00	0.00	12.22
	2/24/2011	1.42	0.00	0.00	12.30



TABLE 4

RESULTS OF FLUID LEVEL AND
GROUNDWATER ELEVATION MEASUREMENTS ¹

ExxonMobil/ADC Property, Ecology Site ID 2728
Everett, Washington

Well Name & Top of Casing Elevation (feet) ²	Sample Date	Depth to Water (feet) ³	LPH Thickness (feet) ⁴	LPH Recovered (feet) ^{4,5}	Groundwater Elevation (feet) ⁶
LPH -7					
13.70	3/25/2010	1.28	0.00	0.00	12.42
	4/29/2010	1.31	0.00	0.00	12.39
	5/25/2010	1.28	0.00	0.00	12.42
	6/28/2010	2.82	0.00	0.00	10.88
	7/28/2010	2.93	0.00	0.00	10.77
	8/27/2010	2.99	0.00	0.00	10.71
	9/28/2010	1.27	0.00	0.00	12.43
	10/22/2010	1.35	0.00	0.00	12.35
	11/24/2010	1.2	0.00	0.00	12.50
	12/23/2010	1.14	0.00	0.00	12.56
	1/26/2011	1.15	0.00	0.00	12.55
	2/24/2011	1.32	0.00	0.00	12.38
LPH-8					
13.20	3/25/2010	0.95	0.00	0.00	12.25
	4/29/2010	1	0.00	0.00	12.20
	5/25/2010	1.21	0.00	0.00	11.99
	6/28/2010	2.65	0.00	0.00	10.55
	7/28/2010	2.66	0.00	0.00	10.54
	8/27/2010	2.67	0.00	0.00	10.53
	9/28/2010	1.05	0.00	0.00	12.15
	10/22/2010	1.16	0.00	0.00	12.04
	11/24/2010	1.01	0.00	0.00	12.19
	12/23/2010	1	0.00	0.00	12.20
	1/26/2011	2.02	0.00	0.00	11.18
	2/24/2011	2.05	0.00	0.00	11.15
LPH -9					
13.26	3/25/2010	0.95	0.00	0.00	12.31
	4/29/2010	1.07	0.00	0.00	12.19
	5/25/2010	1.05	0.00	0.00	12.21
	6/28/2010		Car parked over well.		
	7/28/2010	1.09	0.00	0.00	12.17
	8/27/2010	1.1	0.00	0.00	12.16
	9/28/2010		Car parked over well.		
	10/22/2010	1.2	0.00	0.00	12.06
	11/24/2010	1.19	0.00	0.00	12.07
	12/23/2010	1.17	0.00	0.00	12.09
	1/26/2011	1.12	0.00	0.00	12.14
	2/24/2011	1.13	0.00	0.00	12.13



TABLE 4

RESULTS OF FLUID LEVEL AND
GROUNDWATER ELEVATION MEASUREMENTS ¹

ExxonMobil/ADC Property, Ecology Site ID 2728
Everett, Washington

Well Name & Top of Casing Elevation (feet) ²	Sample Date	Depth to Water (feet) ³	LPH Thickness (feet) ⁴	LPH Recovered (feet) ^{4,5}	Groundwater Elevation (feet) ⁶
W-1					
13.02	3/25/2010	2.69	Trace	0.00	10.33
	4/29/2010	2.76	Trace	0.00	10.26
	5/25/2010	2.65	Trace	0.00	10.37
	6/28/2010	3.69	Trace	0.00	9.33
	7/28/2010	3.71	Trace	0.00	9.31
	8/27/2010	3.77	Trace	0.00	9.25
	9/28/2010	3.62	Trace	0.00	9.40
	10/22/2010	3.52	0.17	0.03	9.50
	11/24/2010	3.5	Trace	0.00	9.52
	12/23/2010	3.32	Trace	0.00	9.70
	1/26/2011	2.89	Trace	0.00	10.13
	2/24/2011	2.7	Trace	0.00	10.32
W-2					
13.26 passive skimmer installed in February 2010	3/25/2010	5.25	5.00	0.82	8.01
	4/29/2010	--	--	0.13	--
	5/25/2010	--	--	0.13	--
	6/28/2010	--	--	0.13	--
	7/28/2010	--	--	0.13	--
	8/27/2010	--	--	0.13	--
	9/28/2010	--	--	0.13	--
	10/22/2010	--	--	0.13	--
	11/24/2010	--	--	0.13	--
	12/23/2010	--	--	0.13	--
	1/26/2011	--	--	0.13	--
	2/24/2011	--	--	0.13	--
W-3					
13.36	2/25/2010	--	--	--	--
	3/25/2010	5.62	0.00	0.00	7.74
	4/29/2010	5.57	0.00	0.00	7.79
	5/25/2010	5.79	0.00	0.00	7.57
	6/28/2010	5.84	0.00	0.00	7.52
	7/28/2010	6.01	0.00	0.00	7.35
	8/27/2010	6.05	0.00	0.00	7.31
	9/28/2010	5.86	0.00	0.00	7.50
	10/22/2010	5.96	0.00	0.00	7.40
	11/24/2010	5.71	0.00	0.00	7.65
	12/23/2010	5.56	0.00	0.00	7.80
	1/26/2011	5.35	0.00	0.00	8.01
	2/24/2011	5.32	0.00	0.00	8.04



TABLE 4

**RESULTS OF FLUID LEVEL AND
GROUNDWATER ELEVATION MEASUREMENTS ¹**

ExxonMobil/ADC Property, Ecology Site ID 2728
Everett, Washington

Well Name & Top of Casing Elevation (feet) ²	Sample Date	Depth to Water (feet) ³	LPH Thickness (feet) ⁴	LPH Recovered (feet) ^{4,5}	Groundwater Elevation (feet) ⁶
W-6					
14.76	3/1/2010	--	--	--	--
	3/25/2010	2.12	0.00	0.00	12.64
	4/29/2010	1.33	0	0	13.43
	5/25/2010	2.46	0	0	12.3
	6/28/2010	3.38	0	0	11.38
	7/28/2010	3.41	0	0	11.35
	8/27/2010	3.45	0	0	11.31
	9/28/2010	0.65	0	0	14.11
	10/22/2010	--	Car parked over well	--	--
	11/24/2010	0.33	0.00	0.00	14.43
	12/23/2010	0.42	0.00	0.00	14.34
	1/26/2011	0.6	0.00	0.00	14.16
	2/24/2011	0.45	0.00	0.00	14.31
W-10R					
13.67	3/25/2010	0.76	Trace	0.00	12.91
	4/29/2010	5.58	Trace	0.00	8.09
	5/25/2010	5.43	Trace	0.00	8.24
	6/28/2010	5.04	Trace	0.00	8.63
	7/28/2010	5.06	Trace	0.00	8.61
	8/27/2010	5.1	Trace	0.00	8.57
	9/28/2010	4.84	Trace	0.00	8.83
	10/22/2010	5.11	Trace	0.00	8.56
	11/24/2010	5.1	Trace	0.00	8.57
	12/23/2010	5.15	Trace	0.00	8.52
	1/26/2011	5.05	Trace	0.00	8.62
	2/24/2011	4.89	Trace	0.00	8.78



TABLE 4

RESULTS OF FLUID LEVEL AND
GROUNDWATER ELEVATION MEASUREMENTS ¹

ExxonMobil/ADC Property, Ecology Site ID 2728
Everett, Washington

Well Name & Top of Casing Elevation (feet) ²	Sample Date	Depth to Water (feet) ³	LPH Thickness (feet) ⁴	LPH Recovered (feet) ^{4,5}	Groundwater Elevation (feet) ⁶
MW-10					
13.73	3/25/2010	1.94	0.00	0.00	11.79
	4/29/2010	1.51	0.00	0.00	12.22
	5/25/2010	2.75	0.00	0.00	10.98
	6/28/2010	3.26	0.00	0.00	10.47
	7/28/2010	3.3	0.00	0.00	10.43
	8/27/2010	3.35	0.00	0.00	10.38
	9/28/2010	1.8	0.00	0.00	11.93
	10/22/2010	1.93	0.00	0.00	11.80
	11/24/2010	1.72	0.00	0.00	12.01
	12/23/2010	1.72	0.00	0.00	12.01
	1/26/2011	2.1	0.00	0.00	11.63
	2/24/2011	2.15	0.00	0.00	11.58
MW-11					
16.50	3/25/2010	1.75	0.00	0.00	14.75
	4/29/2010	2.08	0.00	0.00	14.42
	5/25/2010	3	0.00	0.00	13.50
	6/28/2010	3.12	0.00	0.00	13.38
	7/28/2010	3.15	0.00	0.00	13.35
	8/18/2010	2.22	0.00	0.00	14.28
	8/27/2010	3.18	0.00	0.00	13.32
	9/28/2010	2.05	0.00	0.00	14.45
	10/22/2010	2.1	0.00	0.00	14.40
	11/24/2010	1.95	0.00	0.00	14.55
	12/23/2010	1.65	0.00	0.00	14.85
	1/26/2011	1.75	0.00	0.00	14.75
	2/16/2011	1.41	0.00	0.00	15.09
	2/24/2011	1.8	0.00	0.00	14.70



TABLE 4

RESULTS OF FLUID LEVEL AND
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ExxonMobil/ADC Property, Ecology Site ID 2728
Everett, Washington

Well Name & Top of Casing Elevation (feet) ²	Sample Date	Depth to Water (feet) ³	LPH Thickness (feet) ⁴	LPH Recovered (feet) ^{4,5}	Groundwater Elevation (feet) ⁶
W-15R					
15.52	3/25/2010	3.05	Trace	0.00	12.47
	4/29/2010	2.31	0.00	0.00	13.21
	5/25/2010	3.42	0.00	0.00	12.10
	6/28/2010	3.91	0.00	0.00	11.61
	7/28/2010	4	0.00	0.00	11.52
	8/27/2010	4.01	0.00	0.00	11.51
	9/28/2010	2.39	Trace	0.00	13.13
	10/22/2010	2.81	Trace	0.00	12.71
	11/24/2010	2.63	Trace	0.00	12.89
	12/23/2010	2.63	Trace	0.00	12.89
	1/26/2011	3.02	0.00	0.00	12.50
	2/24/2011	3.1	0.00	0.00	12.42
W-17					
13.86	3/25/2010	1.64	0.00	0.00	12.22
	4/29/2010	1.7	Trace	0.00	12.16
	5/25/2010	1.65	0.00	0.00	12.21
	6/28/2010	2.79	Trace	0.00	11.07
	7/28/2010	2.81	Trace	0.00	11.05
	8/27/2010	2.89	Trace	0.00	10.97
	9/28/2010	1.72	Trace	0.00	12.14
	10/22/2010	1.71	Trace	0.00	12.15
	11/24/2010	1.68	Trace	0.00	12.18
	11/24/2010	5.71	0.00	0.00	7.65
	12/23/2010	5.56	0.00	0.00	7.80
	1/26/2011	5.35	0.00	0.00	8.01
	2/24/2011	5.32	0.00	0.00	8.04



TABLE 4

RESULTS OF FLUID LEVEL AND
GROUNDWATER ELEVATION MEASUREMENTS ¹

ExxonMobil/ADC Property, Ecology Site ID 2728
Everett, Washington

Well Name & Top of Casing Elevation (feet) ²	Sample Date	Depth to Water (feet) ³	LPH Thickness (feet) ⁴	LPH Recovered (feet) ^{4,5}	Groundwater Elevation (feet) ⁶
RW-2					
13.74	3/25/2010	1.05	0.00	0.00	12.69
	4/29/2010	1.08	0.00	0.00	12.66
	5/25/2010	1.21	0.00	0.00	12.53
	6/28/2010	2.51	0.00	0.00	11.23
	7/28/2010	2.55	0.00	0.00	11.19
	8/27/2010	2.52	0.00	0.00	11.22
	9/28/2010	1.92	0.00	0.00	11.82
	10/22/2010	1.40	0.00	0.00	12.34
	11/24/2010	1.9	0.00	0.00	11.84
	12/23/2010	1.81	0.00	0.00	11.93
	1/26/2011	4.02	0.00	0.00	9.72
	2/24/2011	2.82	0.00	0.00	10.92
MW-19					
12.75	3/1/2010	--	--	--	--
	3/25/2010	2.53	0.00	0.00	10.22
	4/29/2010	2.46	0.00	0.00	10.29
	5/25/2010	2.65	0.00	0.00	10.10
	6/28/2010	2.73	0.00	0.00	10.02
	7/28/2010	2.7	0.00	0.00	10.05
	8/18/2010	2.84	0.00	0.00	9.91
	8/27/2010	2.72	0.00	0.00	10.03
	9/28/2010	2.6	0.00	0.00	10.15
	10/22/2010	2.78	0.00	0.00	9.97
	11/24/2010	2.72	0.00	0.00	10.03
	12/23/2010	2.68	0.00	0.00	10.07
	1/26/2011	2.02	0.00	0.00	10.73
	2/17/2011	2.11	0.00	0.00	10.64
	2/24/2011	2	0.00	0.00	10.75



TABLE 4

**RESULTS OF FLUID LEVEL AND
GROUNDWATER ELEVATION MEASUREMENTS ¹**

ExxonMobil/ADC Property, Ecology Site ID 2728
Everett, Washington

Well Name & Top of Casing Elevation (feet) ²	Sample Date	Depth to Water (feet) ³	LPH Thickness (feet) ⁴	LPH Recovered (feet) ^{4,5}	Groundwater Elevation (feet) ⁶
MW-27					
13.11	3/25/2010	0.76	Trace	0.00	12.35
	4/29/2010	0.65	Trace	0.00	12.46
	5/25/2010	0.55	Trace	0.00	12.56
	6/28/2010	1.47	Trace	0.00	11.64
	7/28/2010	1.51	Trace	0.00	11.60
	8/27/2010	1.55	Trace	0.00	11.56
	9/28/2010	1.02	Trace	0.00	12.09
	10/22/2010	0.35	Trace	0.00	12.76
	11/24/2010	0.28	Trace	0.00	12.83
	12/23/2010	0.33	Trace	0.00	12.78
	1/26/2011	1.05	Trace	0.00	12.06
	2/24/2011	1.1	Trace	0.00	12.01
MW-28					
13.86	3/25/2010	0.56	0.00	0.00	13.30
	4/29/2010	0.85	0.00	0.00	13.01
	5/25/2010	0.89	0.00	0.00	12.97
	6/28/2010	1.38	0.00	0.00	12.48
	7/28/2010	1.4	0.00	0.00	12.46
	8/27/2010	1.55	0.00	0.00	12.31
	9/28/2010	1.02	0.00	0.00	12.84
	10/22/2010	0.4	0.00	0.00	13.46
	11/24/2010	1	0.00	0.00	12.86
	12/23/2010	0.25	0.00	0.00	13.61
	1/26/2011	0.9	0.00	0.00	12.96
	2/24/2011	0.95	0.00	0.00	12.91
MW-29					
13.37 passive skimmer installed in March 2010	3/25/2010	1.35	1.11	0.18	12.85
	4/29/2010	--	--	0.26	--
	5/25/2010	--	--	0.26	--
	6/28/2010	--	--	0.26	--
	7/28/2010	--	--	0.26	--
	8/27/2010	--	--	0.26	--
	9/28/2010	--	--	0.26	--
	10/22/2010	--	--	0.26	--
	11/24/2010	--	--	0.26	--
	12/23/2010	--	--	0.26	--
	1/26/2011	--	--	0.26	--
	2/24/2011	--	--	0.26	--



TABLE 4

RESULTS OF FLUID LEVEL AND
GROUNDWATER ELEVATION MEASUREMENTS ¹

ExxonMobil/ADC Property, Ecology Site ID 2728
Everett, Washington

Well Name & Top of Casing Elevation (feet) ²	Sample Date	Depth to Water (feet) ³	LPH Thickness (feet) ⁴	LPH Recovered (feet) ^{4,5}	Groundwater Elevation (feet) ⁶
MW-30					
13.97	3/25/2010	0.9	0.00	0.00	13.07
	4/29/2010	0.9	0.00	0.00	13.07
	5/25/2010	0.96	0.00	0.00	13.01
	6/28/2010	1.87	0.00	0.00	12.10
	7/28/2010	1.9	0.00	0.00	12.07
	8/27/2010	1.98	0.00	0.00	11.99
	9/28/2010	0.25	0.00	0.00	13.72
	10/22/2010	0.9	0.00	0.00	13.07
	11/24/2010	0.25	0.00	0.00	13.72
	12/23/2010	0.25	0.00	0.00	13.72
	1/26/2011	1	0.00	0.00	12.97
	2/24/2011	1.15	0.00	0.00	12.82
MW-40R					
15.53	3/1/2010	--	--	--	--
	3/25/2010	3.55	0.00	0.00	11.98
	4/29/2010	3.45	0.00	0.00	12.08
	5/25/2010	3.62	0.00	0.00	11.91
	6/28/2010	4.57	0.00	0.00	10.96
	7/28/2010	4.55	0.00	0.00	10.98
	8/18/2010	3.63	0.00	0.00	11.90
	8/27/2010	4.58	0.00	0.00	10.95
	9/28/2010	3.11	0.00	0.00	12.42
	10/22/2010	3.19	0.00	0.00	12.34
	11/24/2010	3.06	0.00	0.00	12.47
	12/23/2010	2.99	0.00	0.00	12.54
	1/26/2011	2.75	0.00	0.00	12.78
	2/17/2011	1.87	0.00	0.00	13.66
	2/24/2011	2.5	0.00	0.00	13.03



TABLE 4

RESULTS OF FLUID LEVEL AND
GROUNDWATER ELEVATION MEASUREMENTS ¹

ExxonMobil/ADC Property, Ecology Site ID 2728
Everett, Washington

Well Name & Top of Casing Elevation (feet) ²	Sample Date	Depth to Water (feet) ³	LPH Thickness (feet) ⁴	LPH Recovered (feet) ^{4,5}	Groundwater Elevation (feet) ⁶
MW-A1					
14.07	3/25/2010	6.83	0.00	0.00	7.24
	4/29/2010	6.71	0.00	0.00	7.36
	5/25/2010	7.14	0.00	0.00	6.93
	6/28/2010	7.04	0.00	0.00	7.03
	7/28/2010	7.06	0.00	0.00	7.01
	8/18/2010	7.06	0.00	0.00	7.01
	8/27/2010	7.07	0.00	0.00	7.00
	9/28/2010	6.92	0.00	0.00	7.15
	10/22/2010	7.14	0.00	0.00	6.93
	11/24/2010	6.5	0.00	0.00	7.57
	12/23/2010	6.23	0.00	0.00	7.84
	1/26/2011	5.6	0.00	0.00	8.47
	2/18/2011	6.34	0.00	0.00	7.73
2/24/2011	5.5	0.00	0.00	8.57	
MW-A2					
12.56	3/25/2010	5.46	0.00	0.00	7.10
	4/29/2010	5.42	0.00	0.00	7.14
	5/25/2010	5.77	0.00	0.00	6.79
	6/28/2010	5.74	0.00	0.00	6.82
	7/28/2010	5.73	0.00	0.00	6.83
	8/18/2010	5.76	0.00	0.00	6.80
	8/27/2010	5.81	0.00	0.00	6.75
	9/28/2010	5.54	0.00	0.00	7.02
	10/22/2010	5.82	0.00	0.00	6.74
	11/24/2010	5.71	0.00	0.00	6.85
	12/23/2010	5.65	0.00	0.00	6.91
	1/26/2011	5.23	0.00	0.00	7.33
	2/17/2011	5.05	0.00	0.00	7.51
MW-A3					
13.79	8/18/2010	7.58	0.00	0.00	6.21
	11/18/2010	7.52	0.00	0.00	6.27
	2/17/2011	7.07	0.00	0.00	6.72
MW-A4					
16.33	8/18/2010	10.85	0.00	0.00	5.48
	11/17/2010	10.61	0.00	0.00	5.72
	2/17/2011	10.54	0.00	0.00	5.79
MW-A5					
17.74	8/18/2010	12.50	0.00	0.00	5.24
	11/17/2010	12.18	0.00	0.00	5.56
	2/18/2011	11.52	0.00	0.00	6.22



TABLE 4

RESULTS OF FLUID LEVEL AND
GROUNDWATER ELEVATION MEASUREMENTS ¹

ExxonMobil/ADC Property, Ecology Site ID 2728
Everett, Washington

Well Name & Top of Casing Elevation (feet) ²	Sample Date	Depth to Water (feet) ³	LPH Thickness (feet) ⁴	LPH Recovered (feet) ^{4,5}	Groundwater Elevation (feet) ⁶
MW-A6					
16.94	8/18/2010	11.12	0.00	0.00	5.82
	11/17/2010	11.00	0.00	0.00	5.94
	2/18/2011	11.52	0.00	0.00	5.42
MW-A7					
14.2	2/18/2011	0.00	0.00	0.00	14.20

Notes

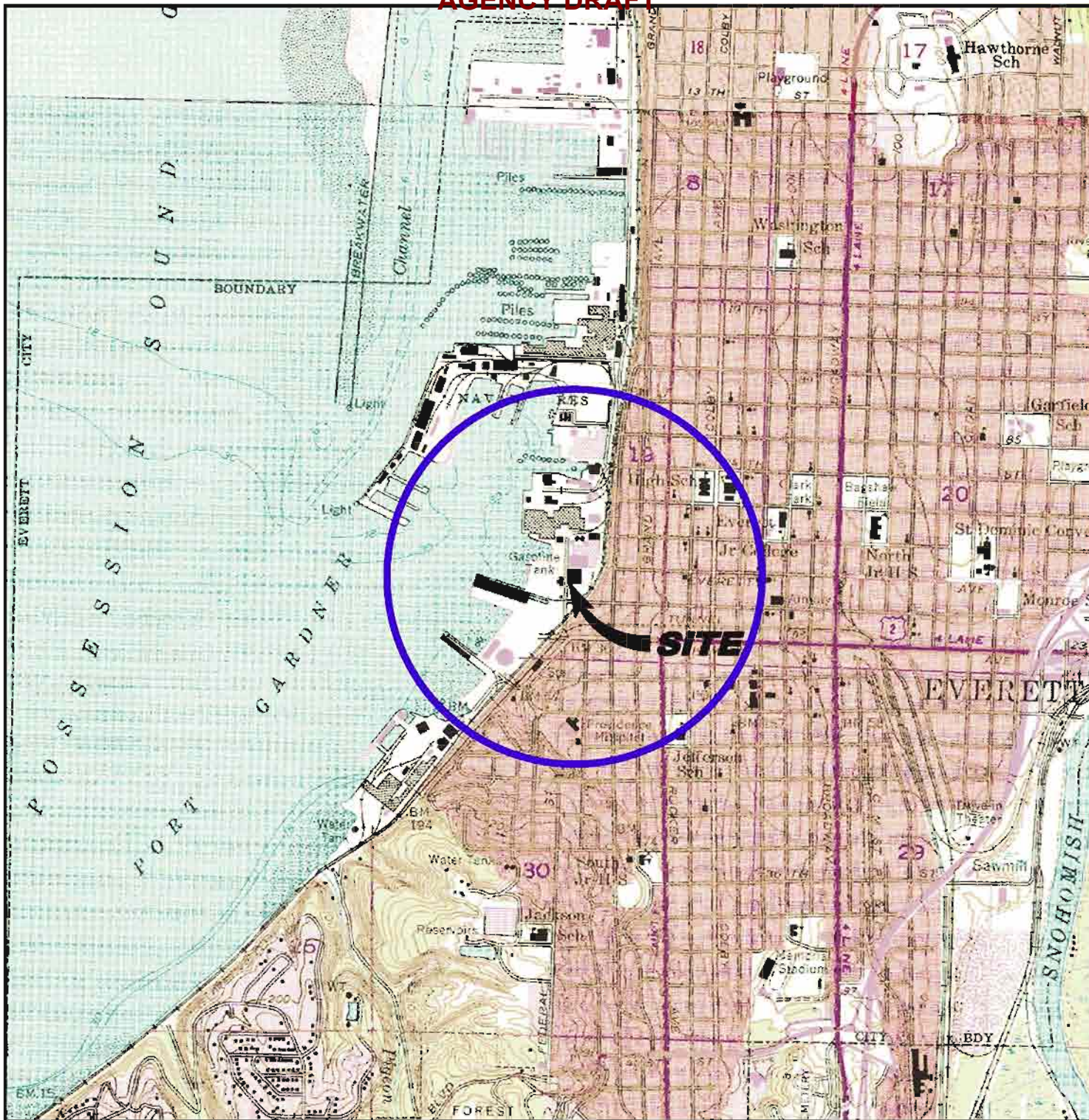
- = not recorded at this point.
- Wellhead elevations surveyed on May 13, 2008, August 25, 2010, and December 13, 2010.
- Depth to water in feet below top of casing.
Liquid-phase petroleum hydrocarbon thickness in feet.
- Values in **bold** indicate LPH present and/or LPH recovered.
- Value is equal to the observed LPH volume in a given well based on observed thickness, and is calculated using the equation for volume in monitoring wells.
- Groundwater elevation relative to established benchmark; corrected for LPH using a specific gravity of 0.75 [(top of casing elevation - depth of water) + (LPH x 0.75)].

Abbreviations

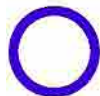
LPH = liquid-phase petroleum hydrocarbons



FIGURES

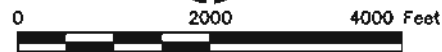


EXPLANATION



1/2-MILE RADIUS CIRCLE

SOURCE: USGS Quad Topo of Everett and Marysville, Photorevised 1973.



SCALE: 1:24,000

AMEC Earth & Environmental

11810 North Creek Parkway North
Bothell, WA, U.S.A. 98011-6201



CLIENT LOGO

CLIENT

**EXXONMOBIL AND
AMERICAN DISTRIBUTING COMPANY**

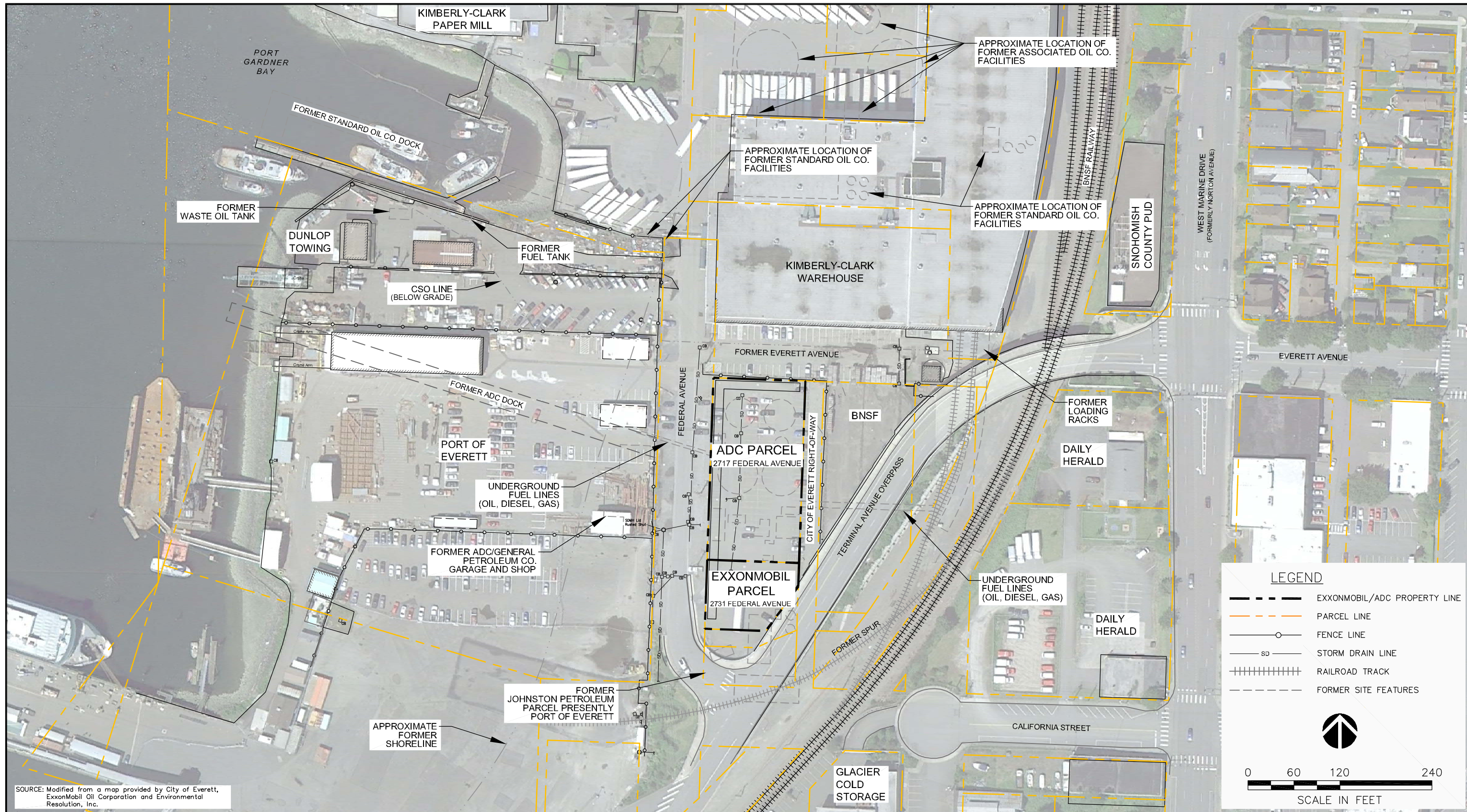
PROJECT **EXXONMOBIL/ADC PROPERTY, ECOLOGY SITE ID 2728**

DWN BY: JRS DATUM: NONE DATE: FEBRUARY 2011

TITLE **SITE LOCATION MAP** CHK'D BY: AS REV. NO.: PROJECT NO: 1-915-15716-E

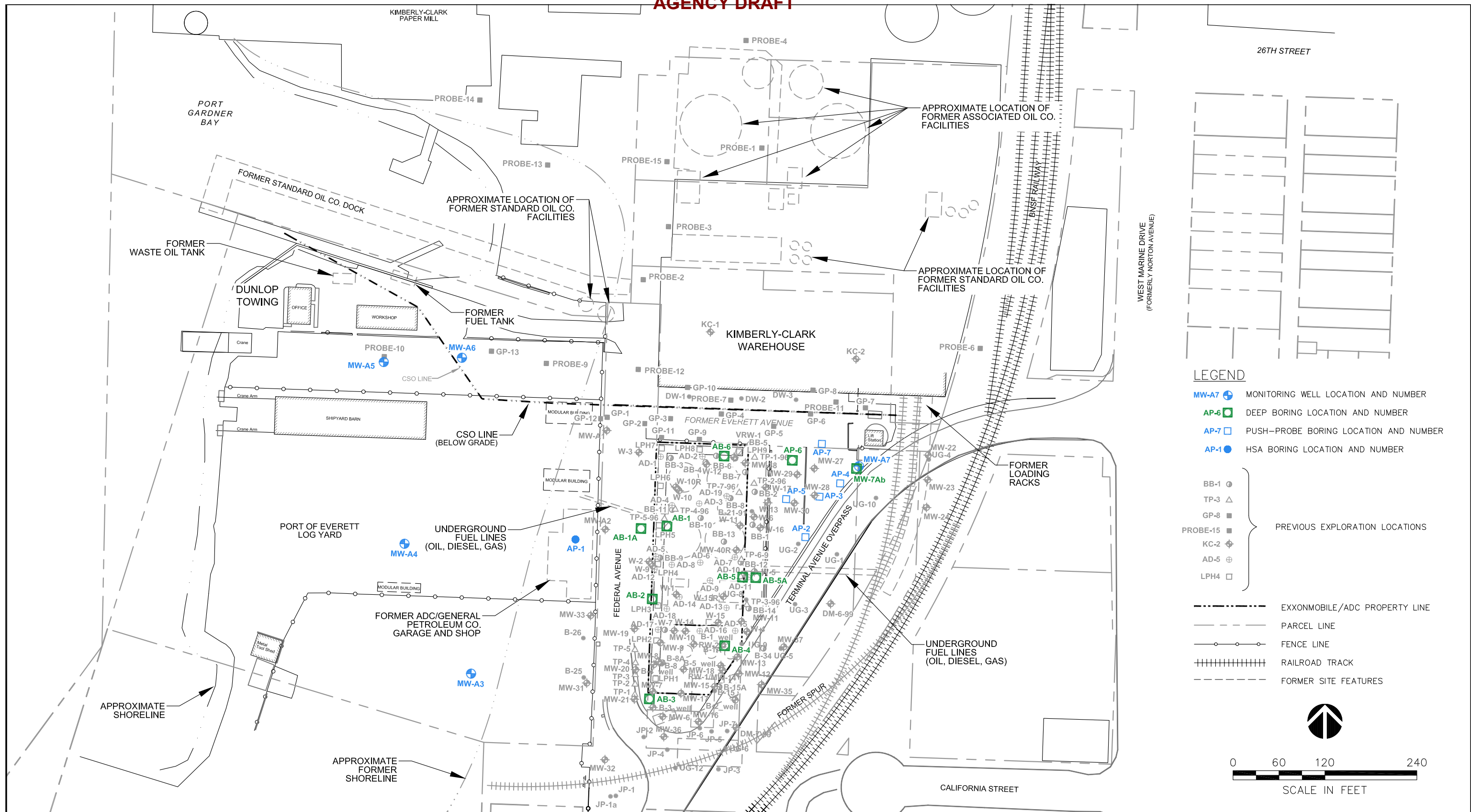
PROJECTION: NONE SCALE: AS SHOWN FIGURE No. 1

AGENCY DRAFT



SOURCE: Modified from a map provided by City of Everett, ExxonMobil Oil Corporation and Environmental Resolution, Inc.

CLIENT LOGO	CLIENT:	DWN BY:	PROJECT	DATE:
	EXXONMOBIL AMERICAN DISTRIBUTING CO.	APS	EXXONMOBIL/ADC PROPERTY ECOLOGY SITE ID 2728	MARCH 2011
AMEC Earth & Environmental 11810 North Creek Parkway North Bothell, WA, U.S.A. 98011-8201		CHK'D BY:	TITLE	PROJECT NO:
		LV/MS		9-915-15716-E
		DATUM:	PLAN OF THE PROPERTY AND VICINITY	REV. NO.:
		NAD 83 N FT		
		PROJECTION:		FIGURE No.
		WASP		2
		SCALE:		
		AS SHOWN		



SOURCE: Modified from a map provided by City of Everett, ExxonMobil Oil Corporation and Environmental Resolution, Inc.

CLIENT LOGO

CLIENT:
**EXXONMOBIL
 AMERICAN DISTRIBUTING CO.**

DWN BY: JRS
 CHK'D BY: AS/MS
 DATUM: NONE
 PROJECTION: NONE
 SCALE: AS SHOWN

PROJECT
**EXXONMOBIL/ADC PROPERTY
 ECOLOGY ID 2728**

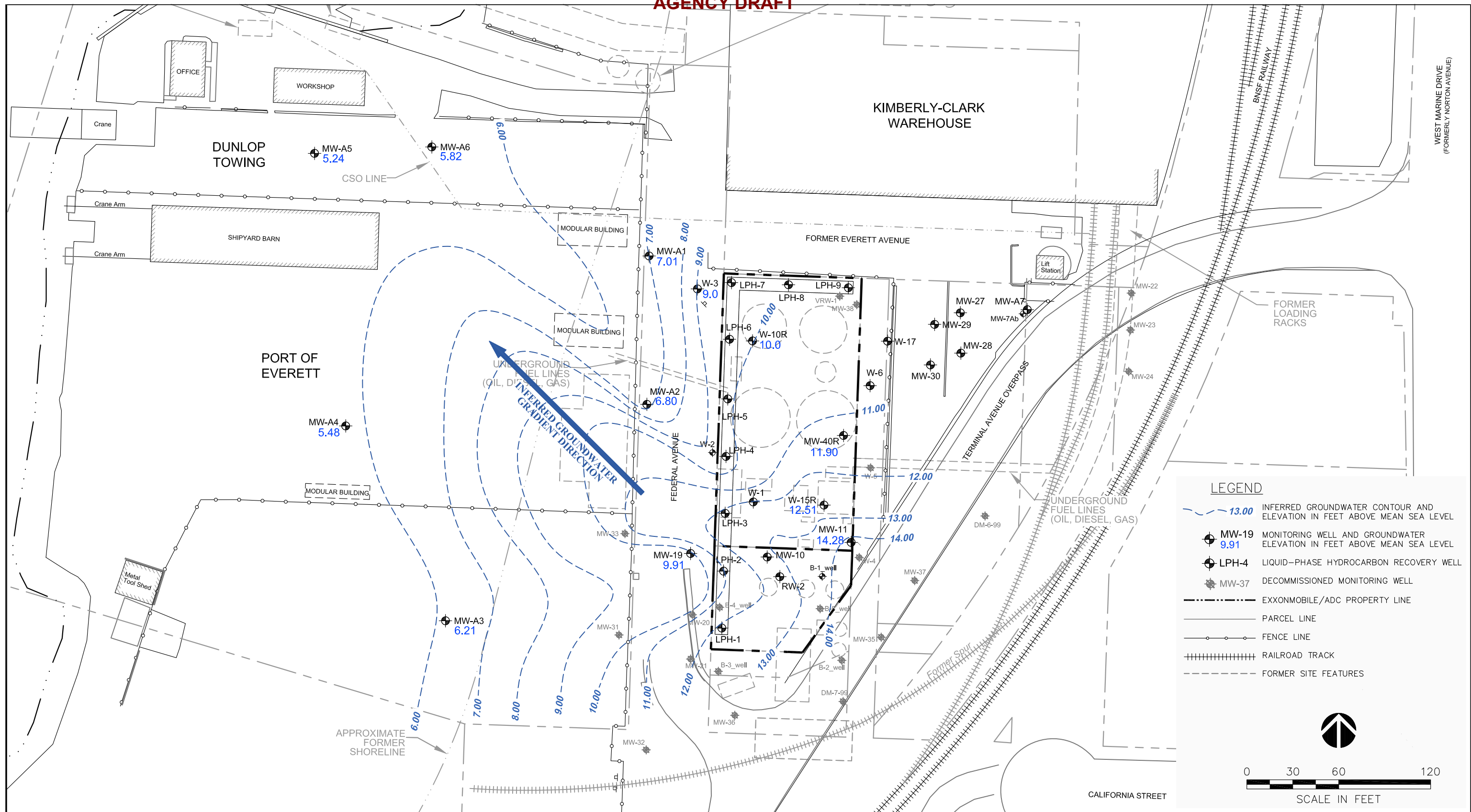
DATE: MARCH 2011
 PROJECT NO: 1-915-15716-E

AMEC Earth & Environmental
 11810 North Creek Parkway N
 Bothell, WA, U.S.A. 98011-8201



TITLE
**DATA GAPS INVESTIGATION
 EXPLORATION LOCATIONS**

REV. NO.:
 FIGURE No. **3**



LEGEND

- 13.00 INFERRED GROUNDWATER CONTOUR AND ELEVATION IN FEET ABOVE MEAN SEA LEVEL
- MW-19 9.91 MONITORING WELL AND GROUNDWATER ELEVATION IN FEET ABOVE MEAN SEA LEVEL
- LPH-4 LIQUID-PHASE HYDROCARBON RECOVERY WELL
- MW-37 DECOMMISSIONED MONITORING WELL
- EXXONMOBILE/ADC PROPERTY LINE
- PARCEL LINE
- FENCE LINE
- RAILROAD TRACK
- FORMER SITE FEATURES

0 30 60 120
SCALE IN FEET

SOURCE: Modified from a map provided by City of Everett, ExxonMobil Oil Corporation and Environmental Resolution, Inc.

CLIENT LOGO

CLIENT:
EXXONMOBIL AND AMERICAN DISTRIBUTING CO.

AMEC Earth & Environmental
11810 North Creek Parkway North
Bothell, WA, U.S.A. 98011-8201



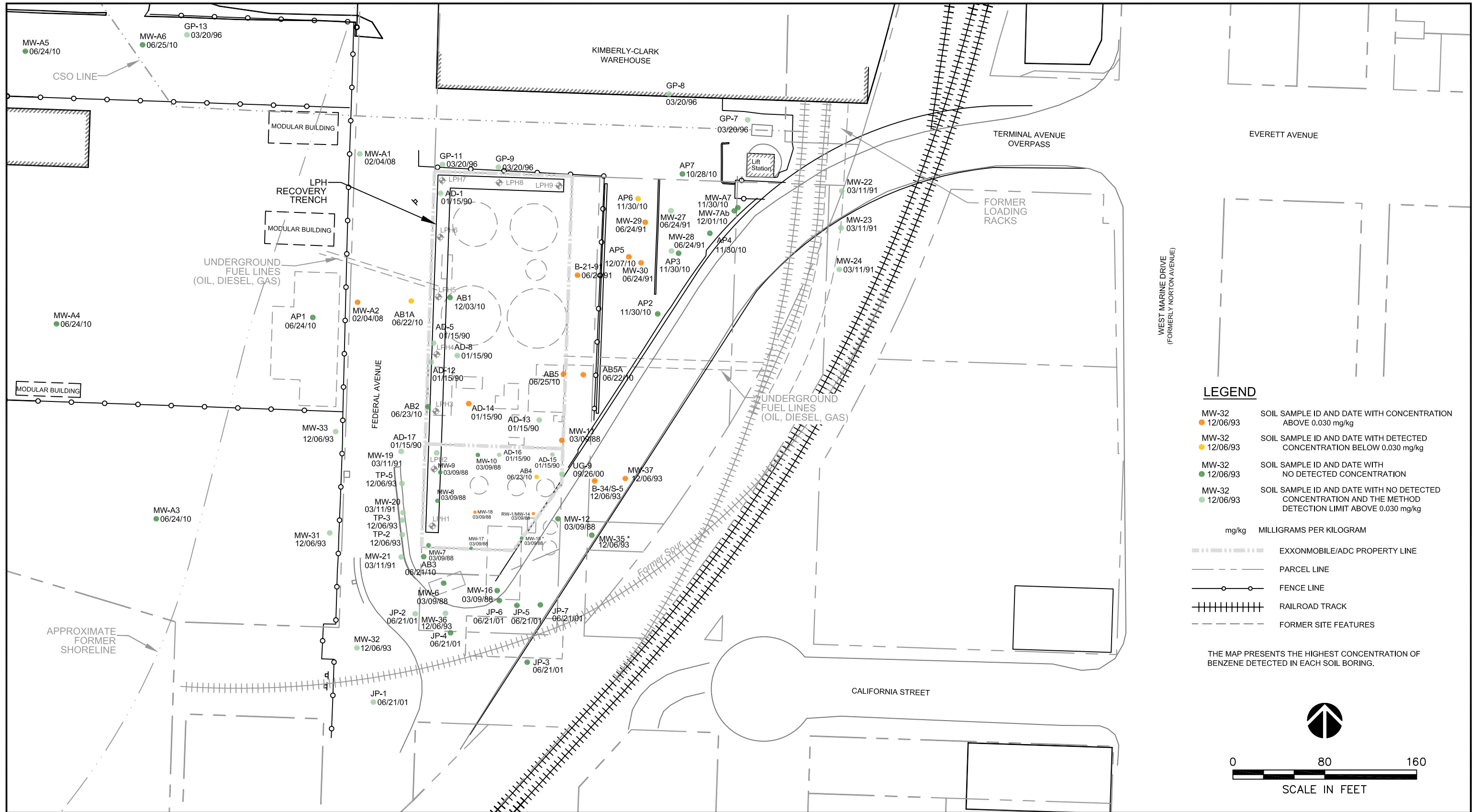
DWN BY: JRS
CHK'D BY: LV/MS
DATUM: NAD 83 N FT
PROJECTION: WASP
SCALE: AS SHOWN

PROJECT
**EXXONMOBIL/ADC PROPERTY
ECOLOGY SITE ID 2728**

TITLE
**AUGUST 2010 GROUNDWATER ELEVATION
AND FLOW DIRECTION**

DATE: MARCH 2011
PROJECT NO.: 9-915-15716-E
REV. NO.:
FIGURE No. **4**

AGENCY DRAFT



SOURCE: Modified from a map provided by City of Everett, ExxonMobil Oil Corporation and Environmental Resolution, Inc.

CLIENT LOGO

CLIENT:

EXXONMOBIL AND AMERICAN DISTRIBUTING COMPANY

AMEC Earth & Environmental
11810 North Creek Parkway North
Bothell, WA, U.S.A. 98011-8201

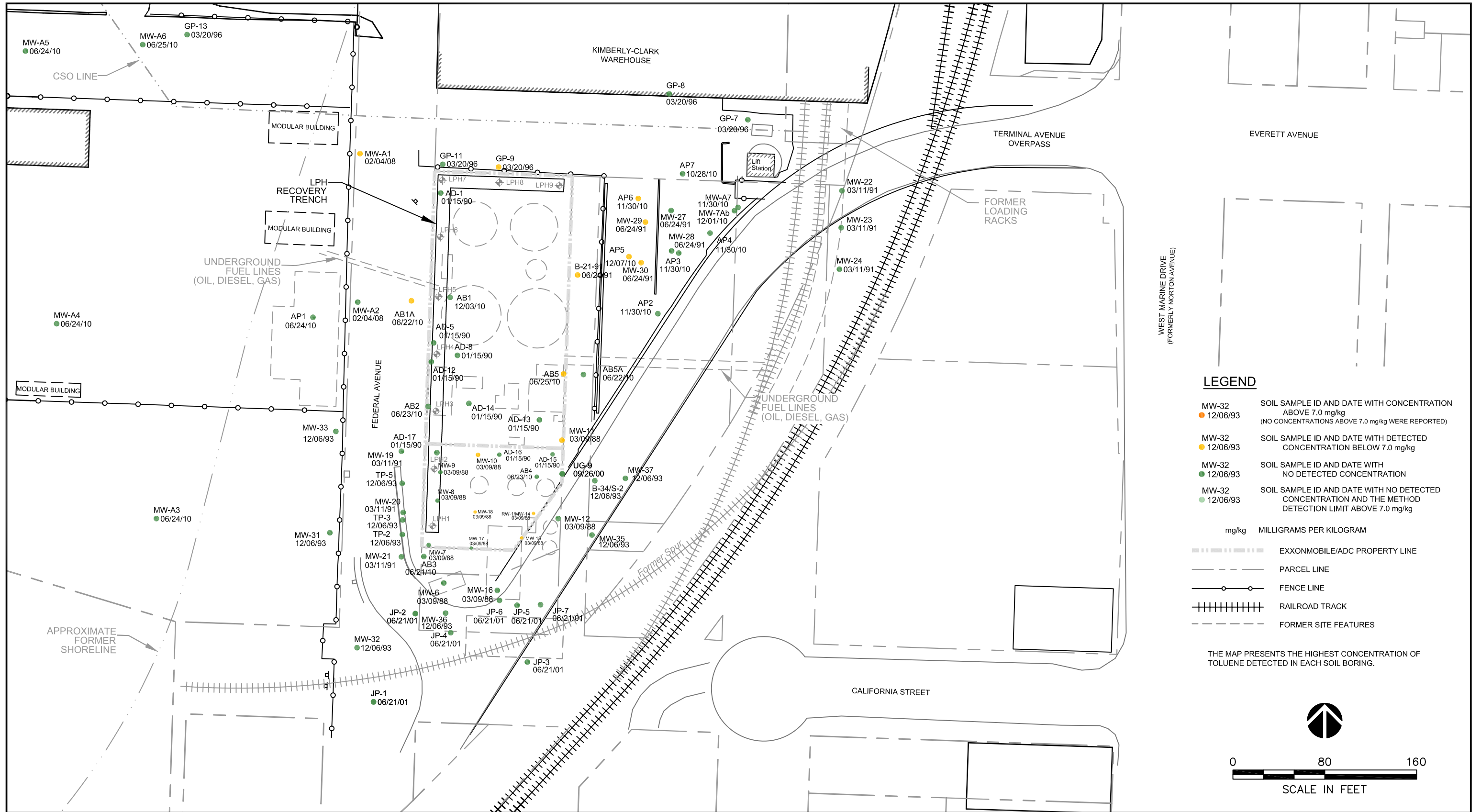
DWN BY: JRS / BRJ
CHK'D BY: AIS
DATUM: NONE
PROJECTION: NONE
SCALE: 1" = 80'

PROJECT
EXXONMOBIL/ADC PROPERTY ECOLOGY SITE ID 2728

TITLE
SPATIAL DISTRIBUTION OF BENZENE IN SOIL

DATE: MARCH 2011
PROJECT NO: 1-915-15716-E
REV. NO.: 1
FIGURE No. 5

AGENCY DRAFT



SOURCE: Modified from a map provided by City of Everett, ExxonMobil Oil Corporation and Environmental Resolution, Inc.

CLIENT LOGO

CLIENT:

EXXONMOBIL AND AMERICAN DISTRIBUTING COMPANY

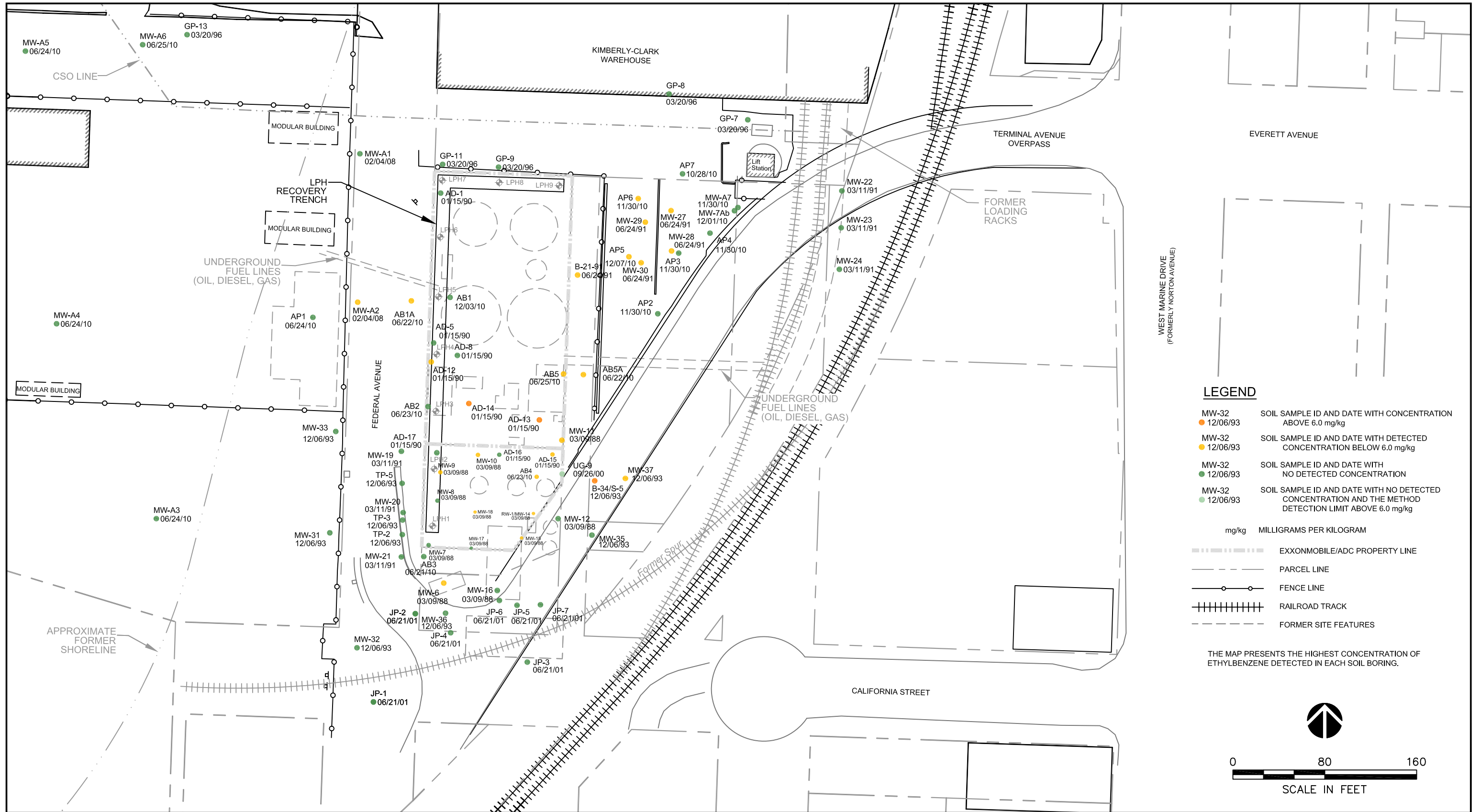
AMEC Earth & Environmental
11810 North Creek Parkway North
Bothell, WA, U.S.A. 98011-8201

DWN BY: JRS / BRJ
CHK'D BY: AIS
DATUM: NONE
PROJECTION: NONE
SCALE: 1" = 80'

PROJECT
EXXONMOBIL/ADC PROPERTY ECOLOGY SITE ID 2728

TITLE
SPATIAL DISTRIBUTION OF TOLUENE IN SOIL

DATE: MARCH 2011
PROJECT NO: 1-915-15716-E
REV. NO.: 1
FIGURE No. 6



SOURCE: Modified from a map provided by City of Everett, ExxonMobil Oil Corporation and Environmental Resolution, Inc.

CLIENT LOGO

CLIENT:

EXXONMOBIL AND AMERICAN DISTRIBUTING COMPANY

AMEC Earth & Environmental
11810 North Creek Parkway North
Bothell, WA, U.S.A. 98011-8201



DWN BY: JRS / BRJ
CHK'D BY: AIS
DATUM: NONE
PROJECTION: NONE
SCALE: 1" = 80'

PROJECT

EXXONMOBIL/ADC PROPERTY ECOLOGY SITE ID 2728

TITLE

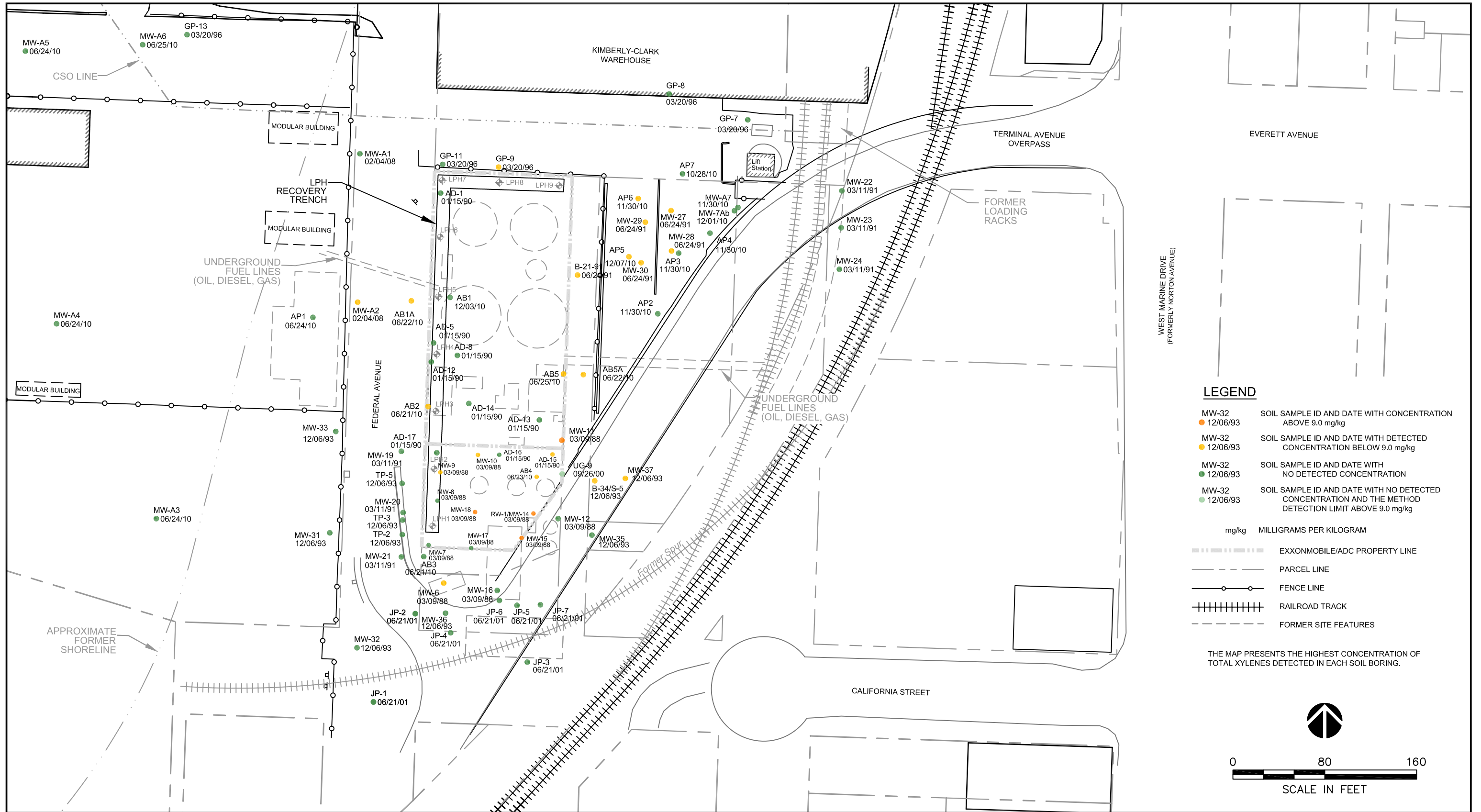
SPATIAL DISTRIBUTION OF ETHYLBENZENE IN SOIL

DATE: MARCH 2011

PROJECT NO: 1-915-15716-E

REV. NO.: 1

FIGURE No. 7



SOURCE: Modified from a map provided by City of Everett, ExxonMobil Oil Corporation and Environmental Resolution, Inc.

CLIENT LOGO

CLIENT:

EXXONMOBIL AND AMERICAN DISTRIBUTING COMPANY

AMEC Earth & Environmental
11810 North Creek Parkway North
Bothell, WA, U.S.A. 98011-8201



DWN BY: JRS / BRJ
CHK'D BY: AIS
DATUM: NONE
PROJECTION: NONE
SCALE: 1" = 80'

PROJECT

EXXONMOBIL/ADC PROPERTY ECOLOGY SITE ID 2728

TITLE

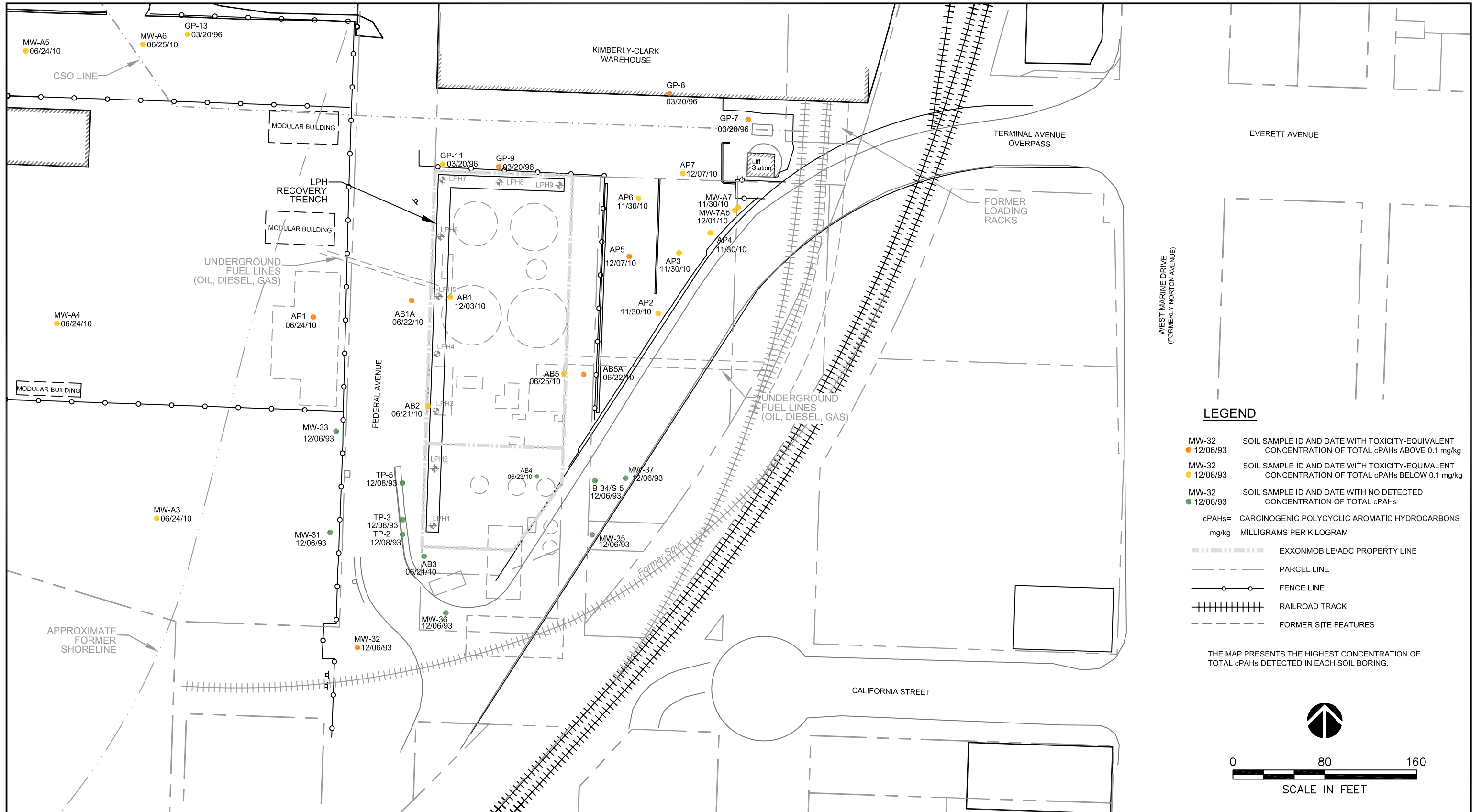
SPATIAL DISTRIBUTION OF TOTAL XYLENES IN SOIL

DATE: MARCH 2011

PROJECT NO:
1-915-15716-E

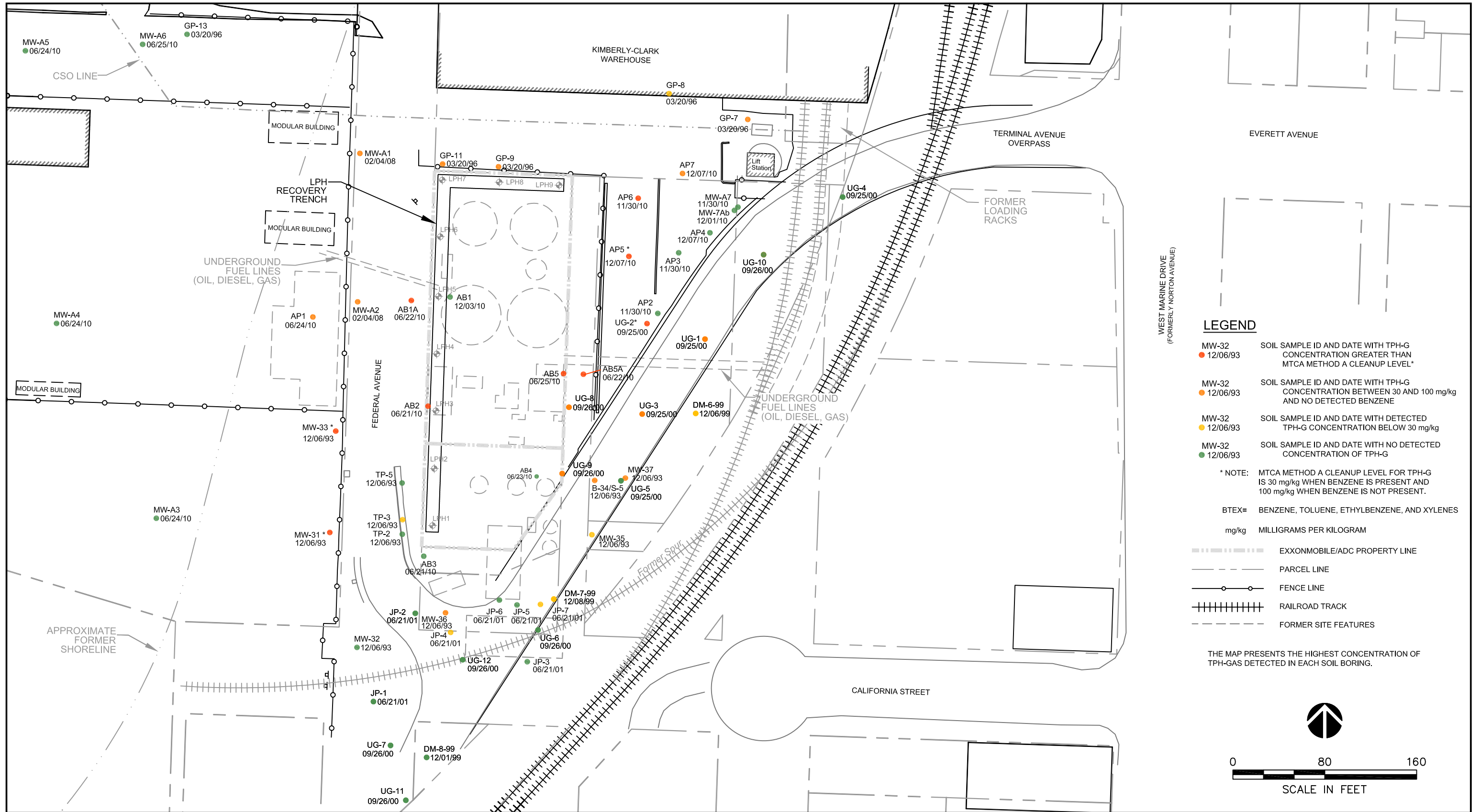
REV. NO.: 1

FIGURE No. 8



SOURCE: Modified from a map provided by City of Everett, ExxonMobil Oil Corporation and Environmental Resolution, Inc.	CLIENT LOGO	CLIENT:	DWN BY:	PROJECT	DATE:
		EXXONMOBIL AND AMERICAN DISTRIBUTING COMPANY	JRS / BRJ	EXXONMOBIL/ADC PROPERTY ECOLOGY SITE ID 2728	MARCH 2011
		AMEC Earth & Environmental 11810 North Creek Parkway North Bothell, WA, U.S.A. 98011-8201	CHK'D BY:	TITLE	PROJECT NO:
			AIS	SPATIAL DISTRIBUTION OF ADJUSTED TOTAL cPAHs IN SOIL	1-915-15716-E
			DATUM:		REV. NO.:
			NONE		1
			PROJECTION:		FIGURE No.
			NONE		9
			SCALE:		
			1" = 80'		

AGENCY DRAFT



SOURCE: Modified from a map provided by City of Everett, ExxonMobil Oil Corporation and Environmental Resolution, Inc.

CLIENT LOGO

CLIENT:

EXXONMOBIL AND AMERICAN DISTRIBUTING COMPANY

AMEC Earth & Environmental
 11810 North Creek Parkway North
 Bothell, WA, U.S.A. 98011-8201

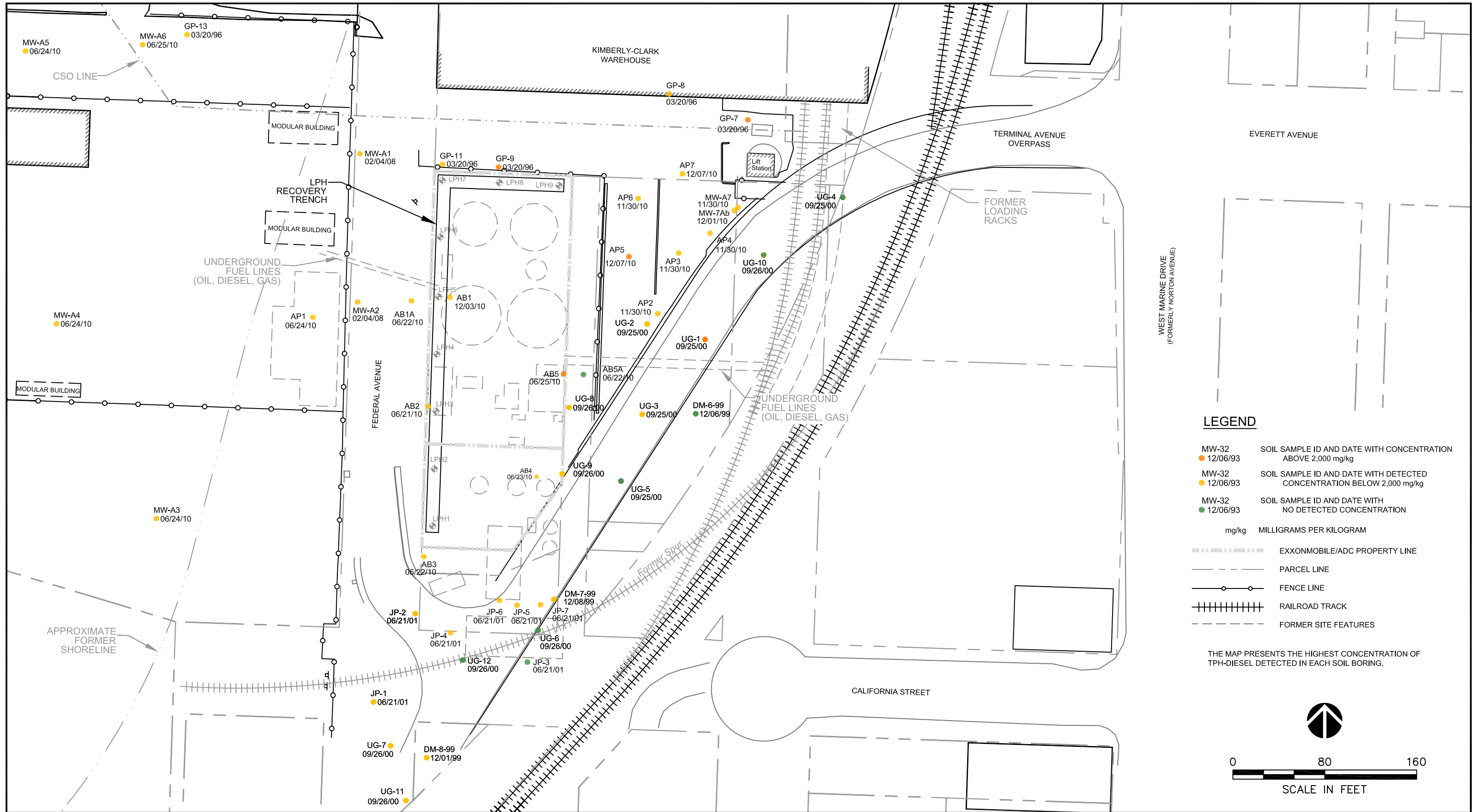
DWN BY: JRS / BRJ
 CHK'D BY: AIS
 DATUM: NONE
 PROJECTION: NONE
 SCALE: 1" = 80'

PROJECT: **EXXONMOBIL/ADC PROPERTY ECOLOGY SITE ID 2728**

TITLE: **SPATIAL DISTRIBUTION OF TPH-GASOLINE IN SOIL**

DATE: MARCH 2011
 PROJECT NO: 1-915-15716-E
 REV. NO.: 1
 FIGURE No. 10

AGENCY DRAFT



SOURCE: Modified from a map provided by City of Everett, ExxonMobil Oil Corporation and Environmental Resolution, Inc.

CLIENT LOGO

CLIENT:
EXXONMOBIL AND AMERICAN DISTRIBUTING COMPANY

AMEC Earth & Environmental
11810 North Creek Parkway North
Bothell, WA, U.S.A. 98011-8201



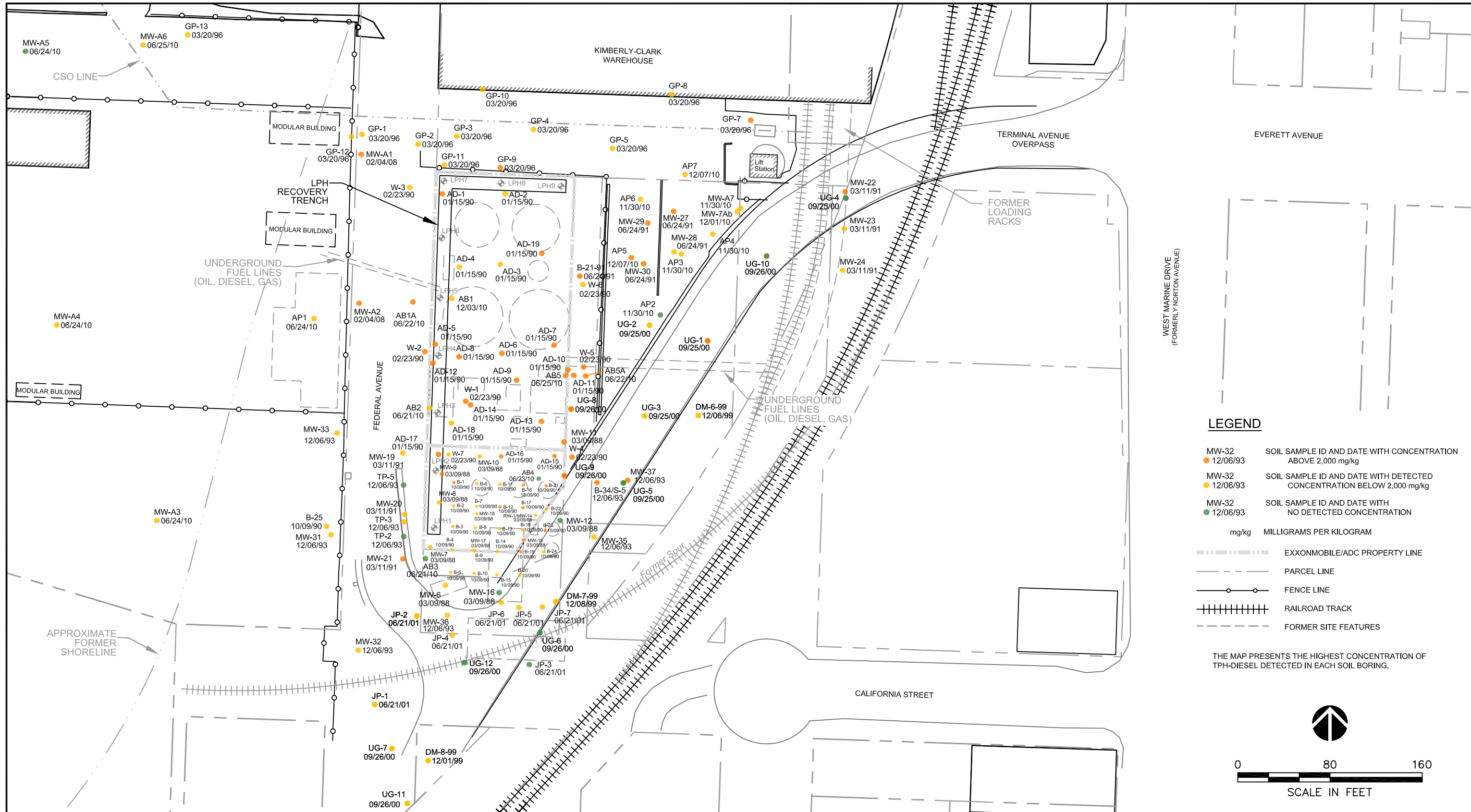
DWN BY: JRS / BRJ
CHK'D BY: AIS
DATUM: NONE
PROJECTION: NONE
SCALE: 1" = 80'

PROJECT
EXXONMOBIL/ADC PROPERTY ECOLOGY SITE ID 2728

TITLE
SPATIAL DISTRIBUTION OF TPH-OIL IN SOIL

DATE: MARCH 2011
PROJECT NO: 1-915-15716-E
REV. NO.: 1
FIGURE No. 11

AGENCY DRAFT



SOURCE: Modified from a map provided by City of Everett, ExxonMobil Oil Corporation and Environmental Resolution, Inc.

CLIENT LOGO

CLIENT:

EXXONMOBIL AND AMERICAN DISTRIBUTING COMPANY

AMEC Earth & Environmental
11810 North Creek Parkway North
Bothell, WA, U.S.A. 98011-8201



DWN BY: JRS / BRJ
CHK'D BY: AIS
DATUM: NONE
PROJECTION: NONE
SCALE: 1" = 80'

PROJECT

EXXONMOBIL/ADC PROPERTY
ECOLOGY SITE ID 2728

TITLE
SPATIAL DISTRIBUTION OF TPH-DIESEL
AND UNDIFFERENTIATED TPH IN SOIL

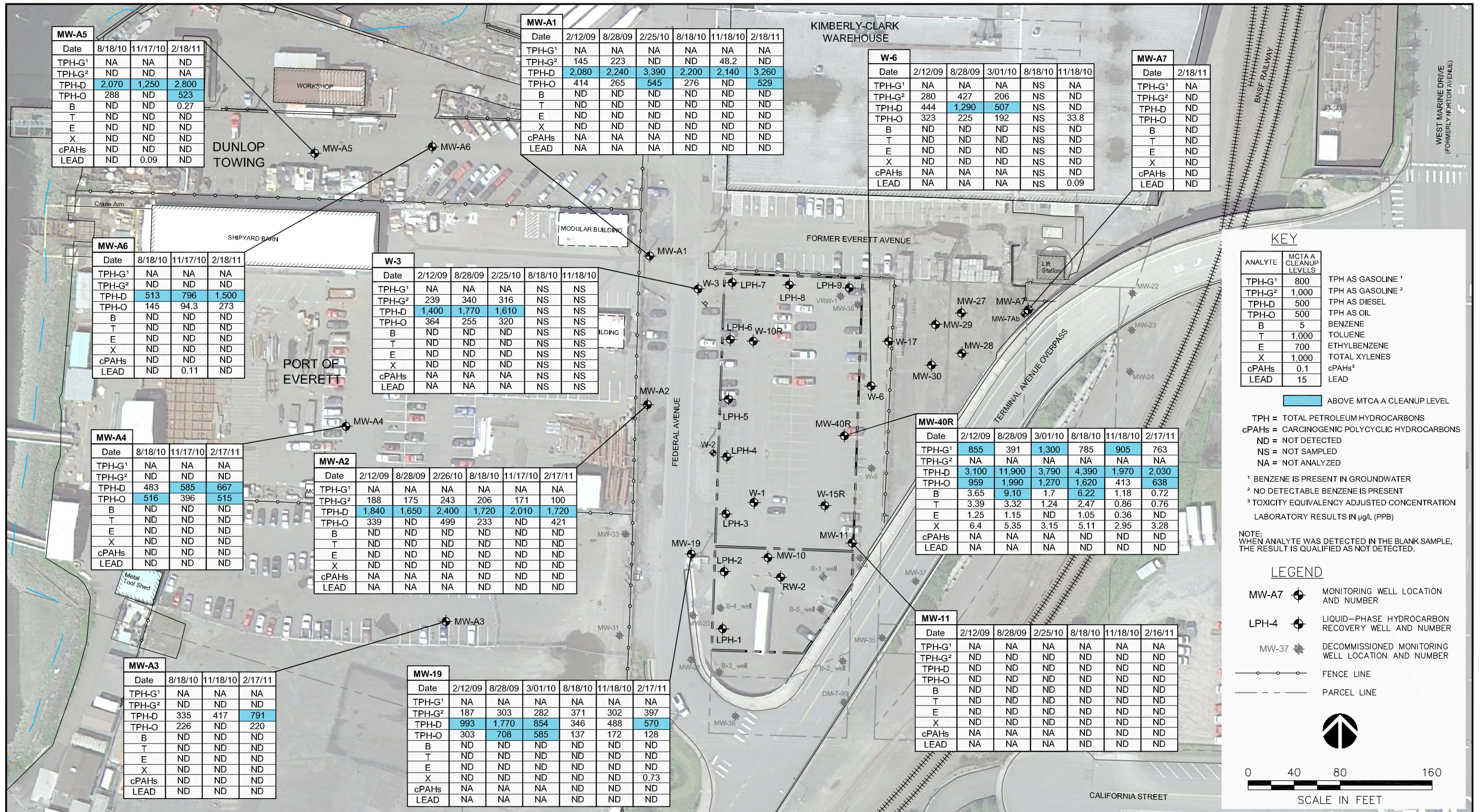
DATE: MARCH 2011

PROJECT NO:
1-915-15716-E

REV. NO.: 1

FIGURE No. 12

AGENCY DRAFT

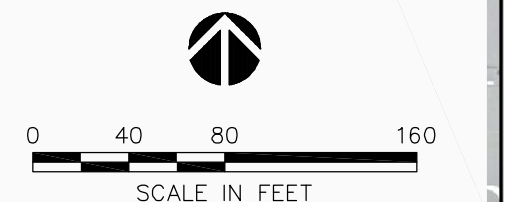


KEY

ANALYTE	MCTA A CLEANUP LEVELS	
TPH-G ¹	800	TPH AS GASOLINE ¹
TPH-G ²	1,000	TPH AS GASOLINE ²
TPH-D	500	TPH AS DIESEL
TPH-O	500	TPH AS OIL
B	5	BENZENE
T	1,000	TOLUENE
E	700	ETHYL BENZENE
X	1,000	TOTAL XYLENES
cPAHs	0.1	cPAHs ³
LEAD	15	LEAD

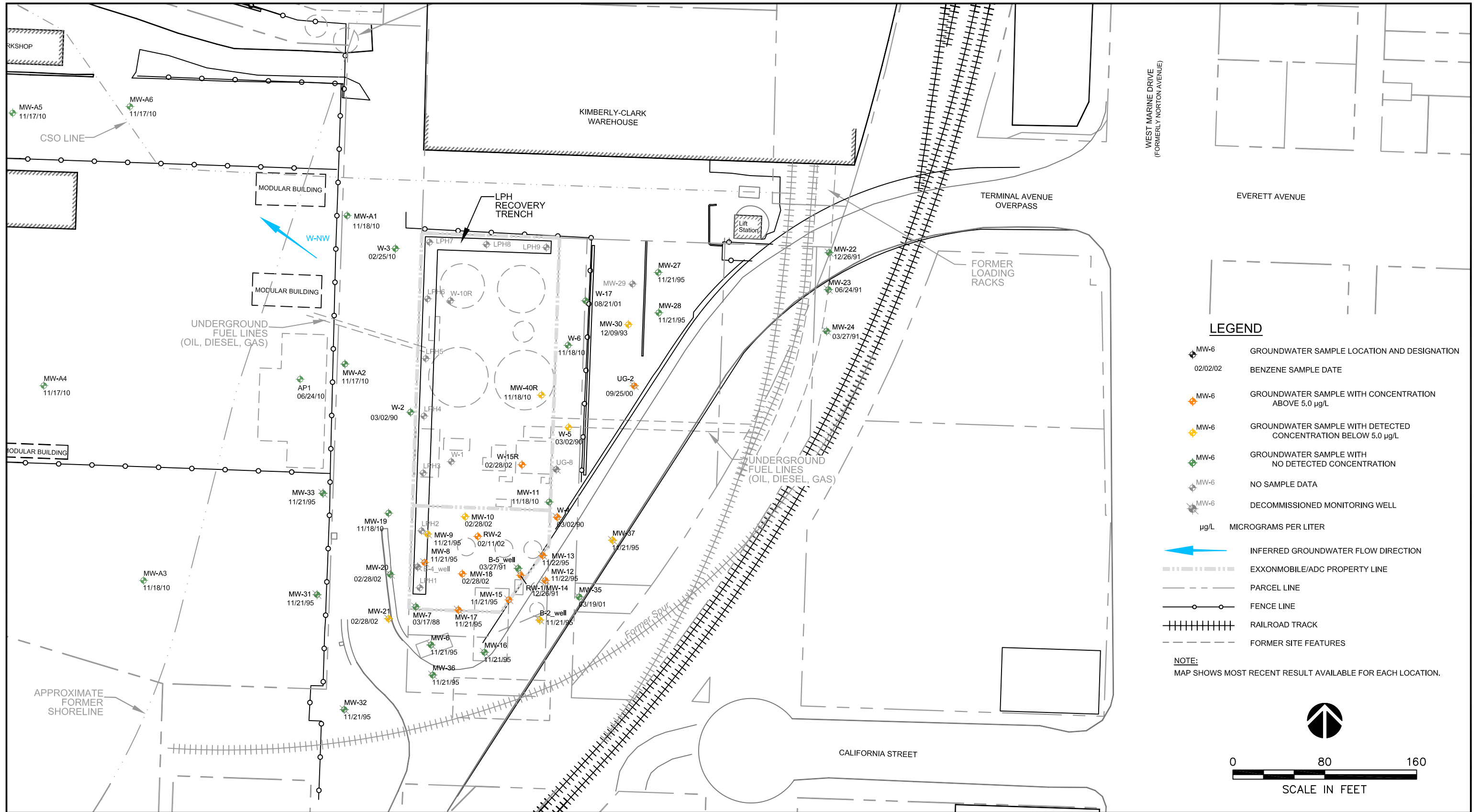
ABOVE MCTA A CLEANUP LEVEL
 TPH = TOTAL PETROLEUM HYDROCARBONS
 cPAHs = CARCINOGENIC POLYCYCLIC HYDROCARBONS
 ND = NOT DETECTED
 NS = NOT SAMPLED
 NA = NOT ANALYZED
¹ BENZENE IS PRESENT IN GROUNDWATER
² NO DETECTABLE BENZENE IS PRESENT
³ TOXICITY EQUIVALENCY ADJUSTED CONCENTRATION
 LABORATORY RESULTS IN µg/L (PPB)
 NOTE:
 WHEN ANALYTE WAS DETECTED IN THE BLANK SAMPLE,
 THE RESULT IS QUALIFIED AS NOT DETECTED.

- LEGEND**
- MW-A7 MONITORING WELL LOCATION AND NUMBER
 - LPH-4 LIQUID-PHASE HYDROCARBON RECOVERY WELL AND NUMBER
 - MW-37 DECOMMISSIONED MONITORING WELL LOCATION AND NUMBER
 - FENCE LINE
 - PARCEL LINE



CLIENT LOGO CLIENT: <p style="text-align: center;">EXXONMOBIL AMERICAN DISTRIBUTING CO.</p>	CLIENT: <p style="text-align: center;">AMEC Earth & Environmental 11810 North Creek Parkway North Bothell, WA, U.S.A. 98011-8201</p>	DWN BY: APS CHK'D BY: LV/MS DATUM: NAD 83 N FT PROJECTION: WASP SCALE: AS SHOWN	PROJECT <p style="text-align: center;">EXXONMOBIL/ADC PROPERTY ECOLOGY SITE ID 2728</p> TITLE <p style="text-align: center;">GROUNDWATER SAMPLE ANALYSIS MAP</p>	DATE: <p style="text-align: center;">MARCH 2011</p> PROJECT NO: <p style="text-align: center;">9-915-15716-E</p> REV. NO.: <p style="text-align: center;">13</p>
--	--	---	--	--

AGENCY DRAFT



SOURCE: Modified from a map provided by City of Everett, ExxonMobil Oil Corporation and Environmental Resolution, Inc.

CLIENT LOGO

CLIENT:

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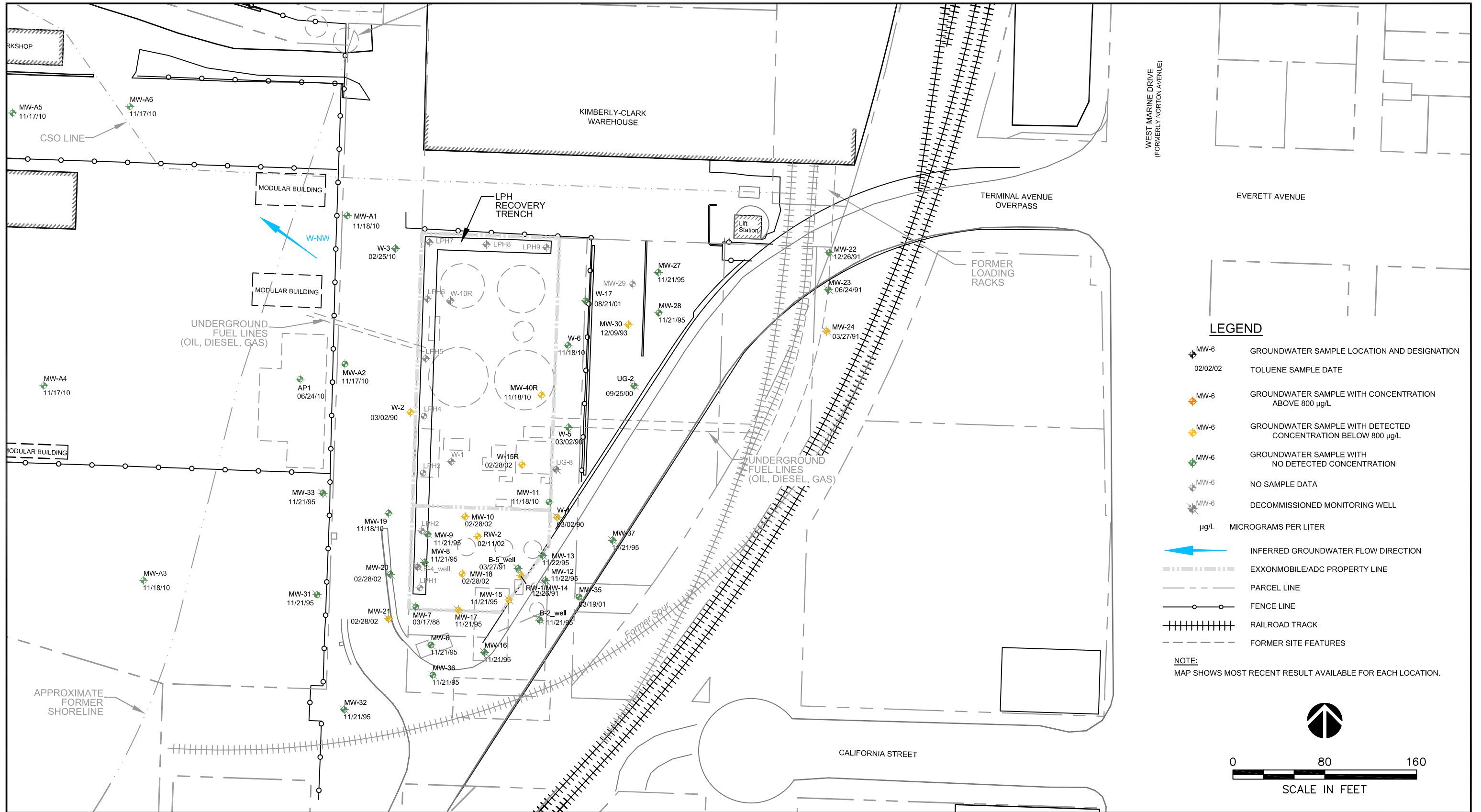


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CHK'D BY: AIS/MS
DATUM: NONE
PROJECTION: NONE
SCALE: 1" = 80'

PROJECT: **EXXONMOBIL/ADC PROPERTY ECOLOGY SITE ID 2728**
TITLE: **DISTRIBUTION OF BENZENE IN GROUNDWATER BASED ON MOST RECENT REPORTED RESULTS**

DATE: MARCH 2011
PROJECT NO: 1-915-15716-E
REV. NO.: 1
FIGURE No. 14

AGENCY DRAFT



SOURCE: Modified from a map provided by City of Everett, ExxonMobil Oil Corporation and Environmental Resolution, Inc.

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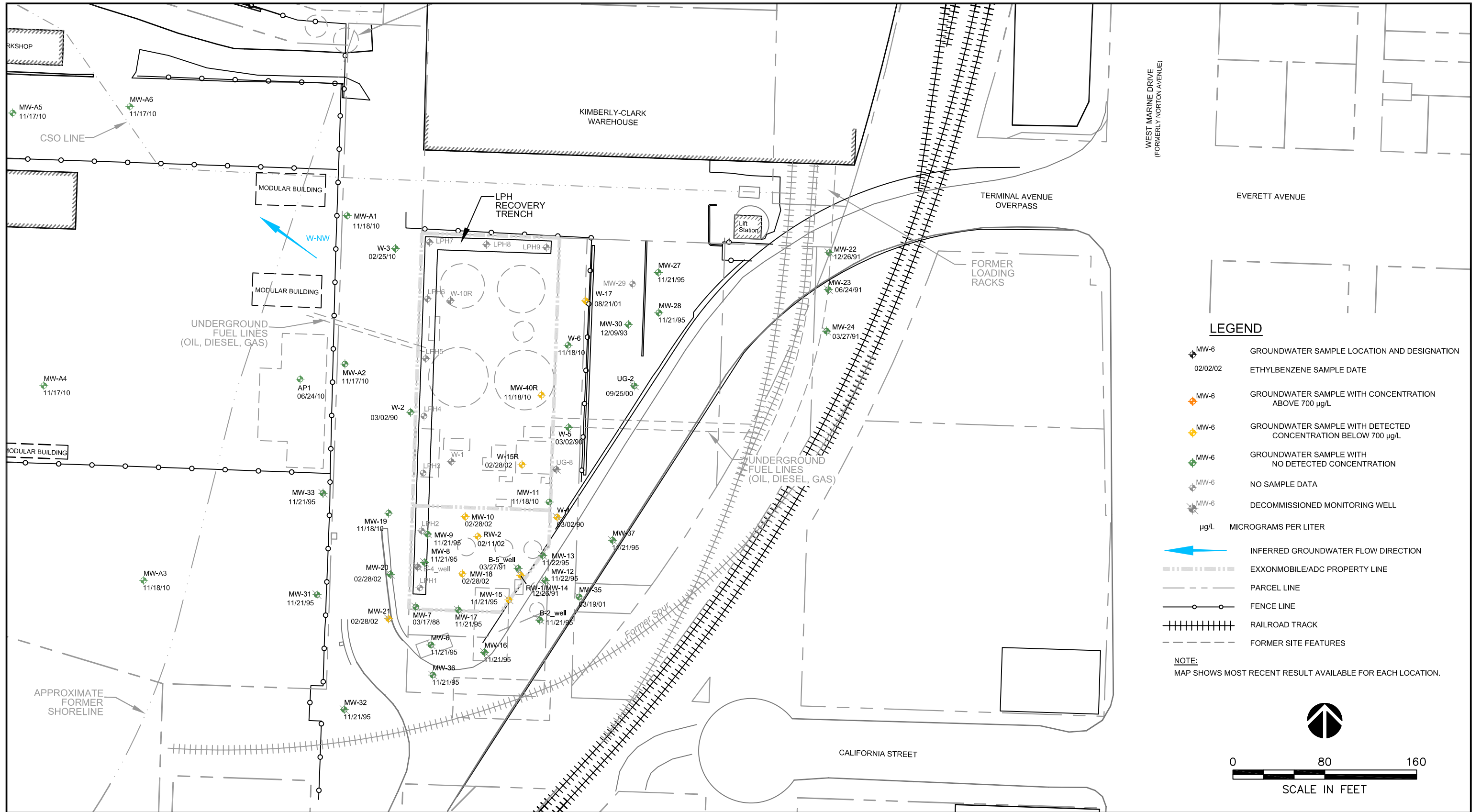
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CHK'D BY: AIS/MS
DATUM: NONE
PROJECTION: NONE
SCALE: 1" = 80'

PROJECT
**EXXONMOBIL/ADC PROPERTY
ECOLOGY SITE ID 2728**

TITLE
**DISTRIBUTION OF TOLUENE IN GROUNDWATER
BASED ON MOST RECENT REPORTED RESULTS**

DATE: MARCH 2011
PROJECT NO: 1-915-15716-E
REV. NO.: 1
FIGURE No. 15

AGENCY DRAFT



SOURCE: Modified from a map provided by City of Everett, ExxonMobil Oil Corporation and Environmental Resolution, Inc.

CLIENT LOGO

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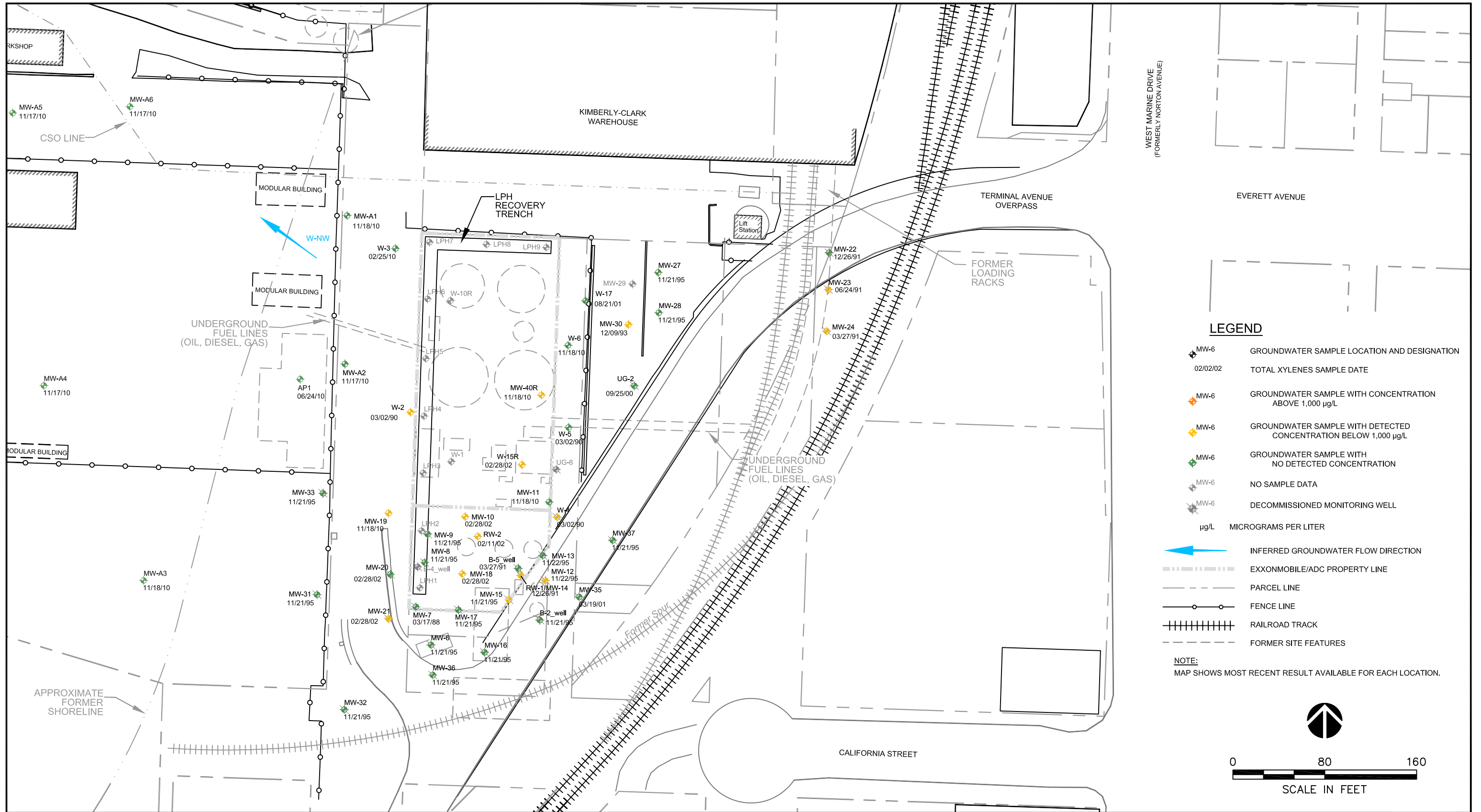


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DATUM: NONE
PROJECTION: NONE
SCALE: 1" = 80'

PROJECT: **EXXONMOBIL/ADC PROPERTY ECOLOGY SITE ID 2728**
TITLE: **DISTRIBUTION OF ETHYLBENZENE IN GROUNDWATER BASED ON MOST RECENT REPORTED RESULTS**

DATE: MARCH 2011
PROJECT NO: 1-915-15716-E
REV. NO.: 1
FIGURE No. 16

AGENCY DRAFT



SOURCE: Modified from a map provided by City of Everett, ExxonMobil Oil Corporation and Environmental Resolution, Inc.

CLIENT LOGO

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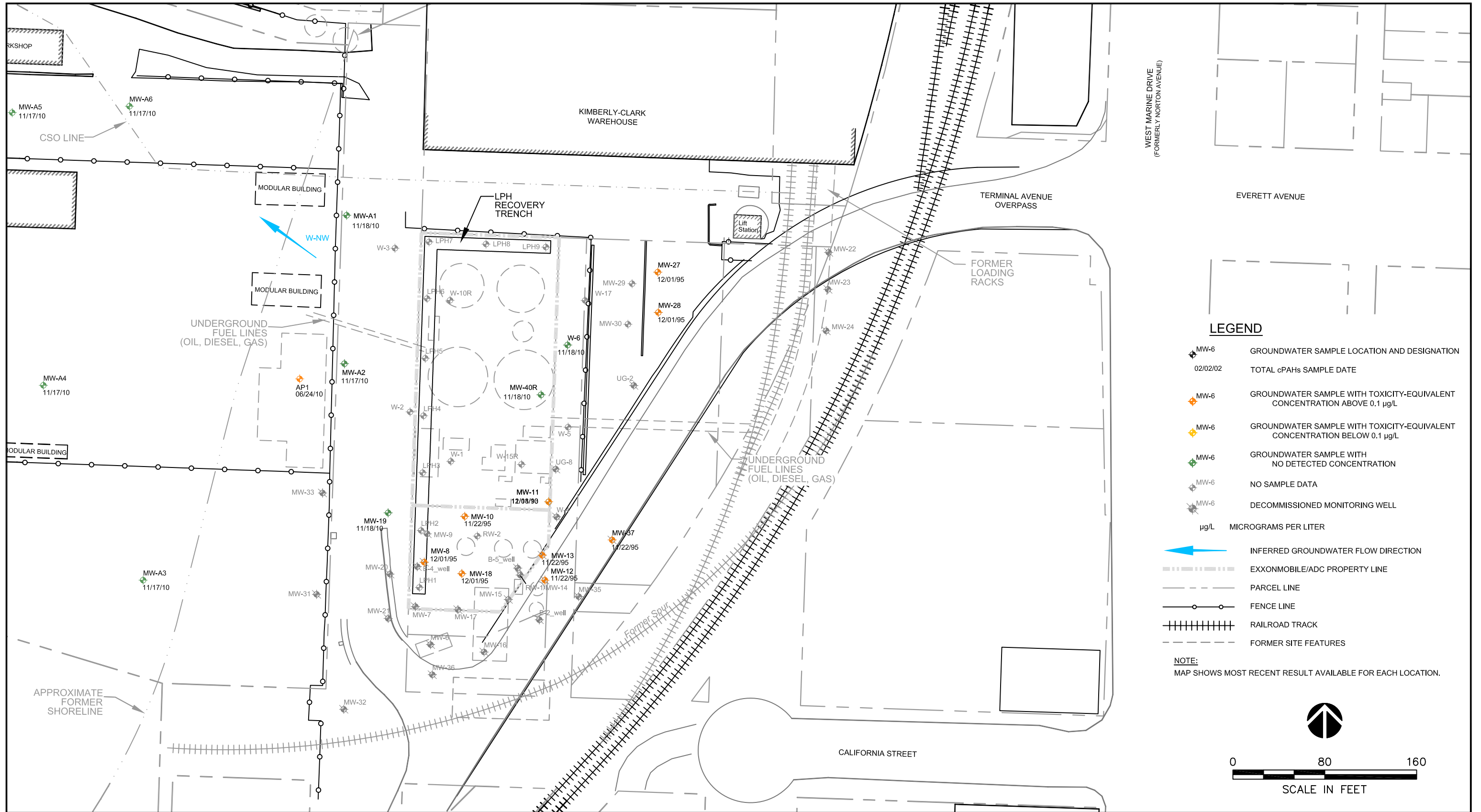


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CHK'D BY: AIS/MS
DATUM: NONE
PROJECTION: NONE
SCALE: 1" = 80'

PROJECT
**EXXONMOBIL/ADC PROPERTY
ECOLOGY SITE ID 2728**
TITLE
**DISTRIBUTION OF TOTAL XYLENES IN GROUNDWATER
BASED ON MOST RECENT DETECTED VALUE**

DATE: MARCH 2011
PROJECT NO: 1-915-15716-E
REV. NO.: 1
FIGURE No. 17

AGENCY DRAFT



SOURCE: Modified from a map provided by City of Everett, ExxonMobil Oil Corporation and Environmental Resolution, Inc.

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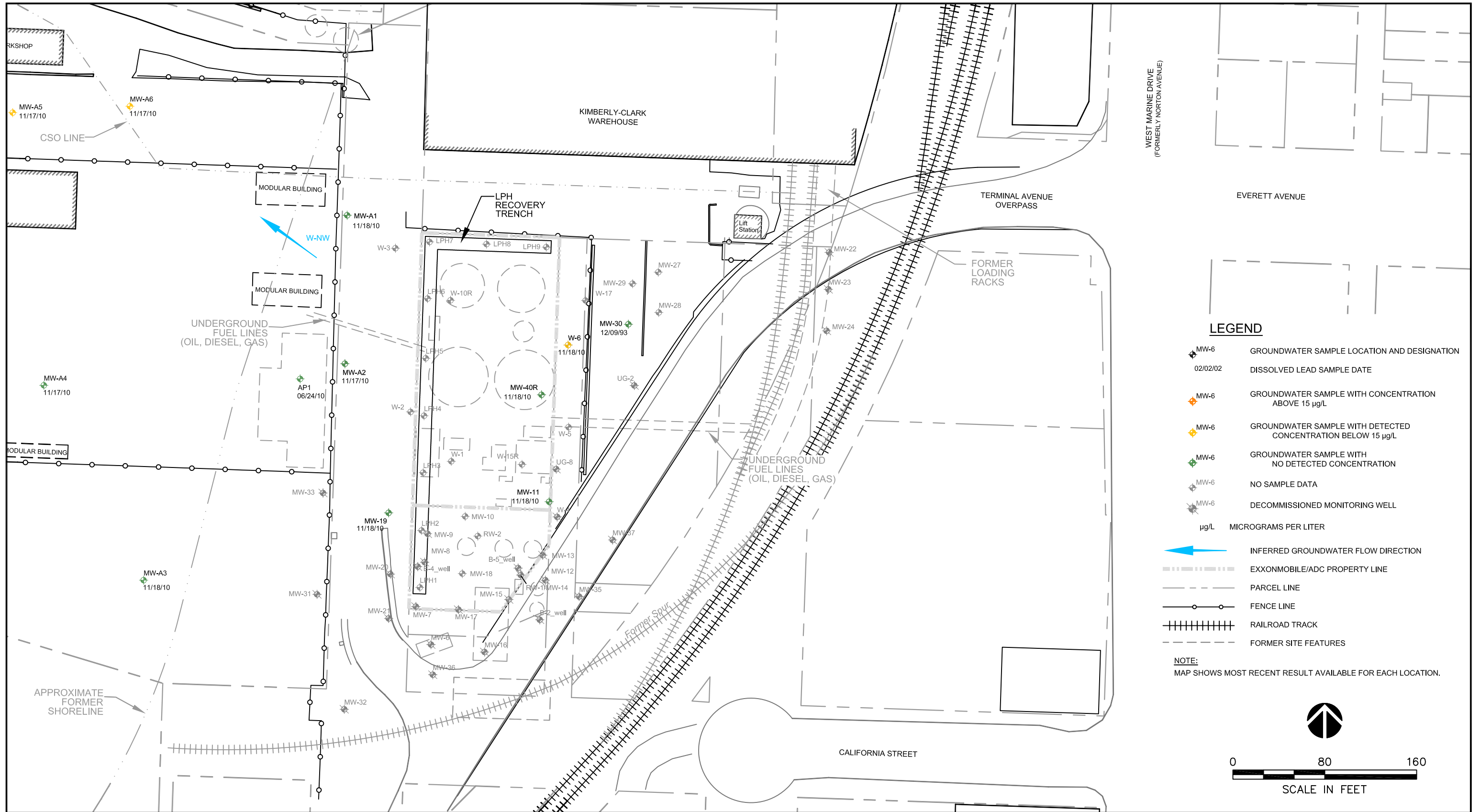


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CHK'D BY: AIS/MS
DATUM: NONE
PROJECTION: NONE
SCALE: 1" = 80'

PROJECT
**EXXONMOBIL/ADC PROPERTY
ECOLOGY SITE ID 2728**

TITLE
**DISTRIBUTION OF ADJUSTED TOTAL cPAHs
CONCENTRATIONS IN GROUNDWATER
BASED ON MOST RECENT REPORTED RESULTS**

DATE: MARCH 2011
PROJECT NO: 1-915-15716-E
REV. NO.: 1
FIGURE No. 18



SOURCE: Modified from a map provided by City of Everett, ExxonMobil Oil Corporation and Environmental Resolution, Inc.

CLIENT LOGO

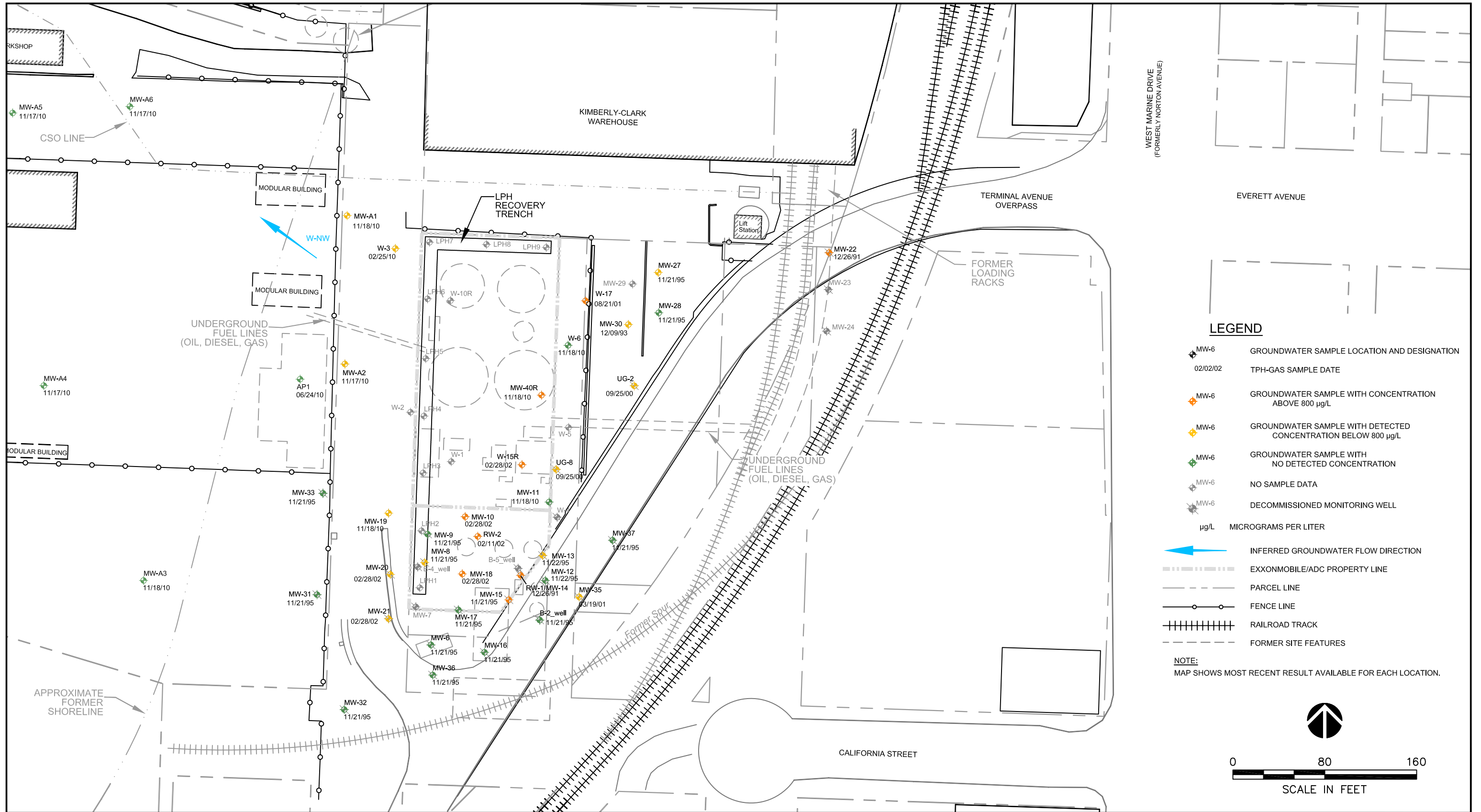
CLIENT:
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 AMEC Earth & Environmental
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 Bothell, WA, U.S.A. 98011-8201

DWN BY: JRS / BRJ
 CHK'D BY: AIS/MS
 DATUM: NONE
 PROJECTION: NONE
 SCALE: 1" = 80'

PROJECT
**EXXONMOBIL/ADC PROPERTY
 ECOLOGY SITE ID 2728**
 TITLE
**DISTRIBUTION OF DISSOLVED LEAD IN GROUNDWATER
 BASED ON MOST RECENT REPORTED RESULTS**

DATE: MARCH 2011
 PROJECT NO: 1-915-15716-E
 REV. NO.: 1
 FIGURE No. 19

AGENCY DRAFT



SOURCE: Modified from a map provided by City of Everett, ExxonMobil Oil Corporation and Environmental Resolution, Inc.

CLIENT LOGO

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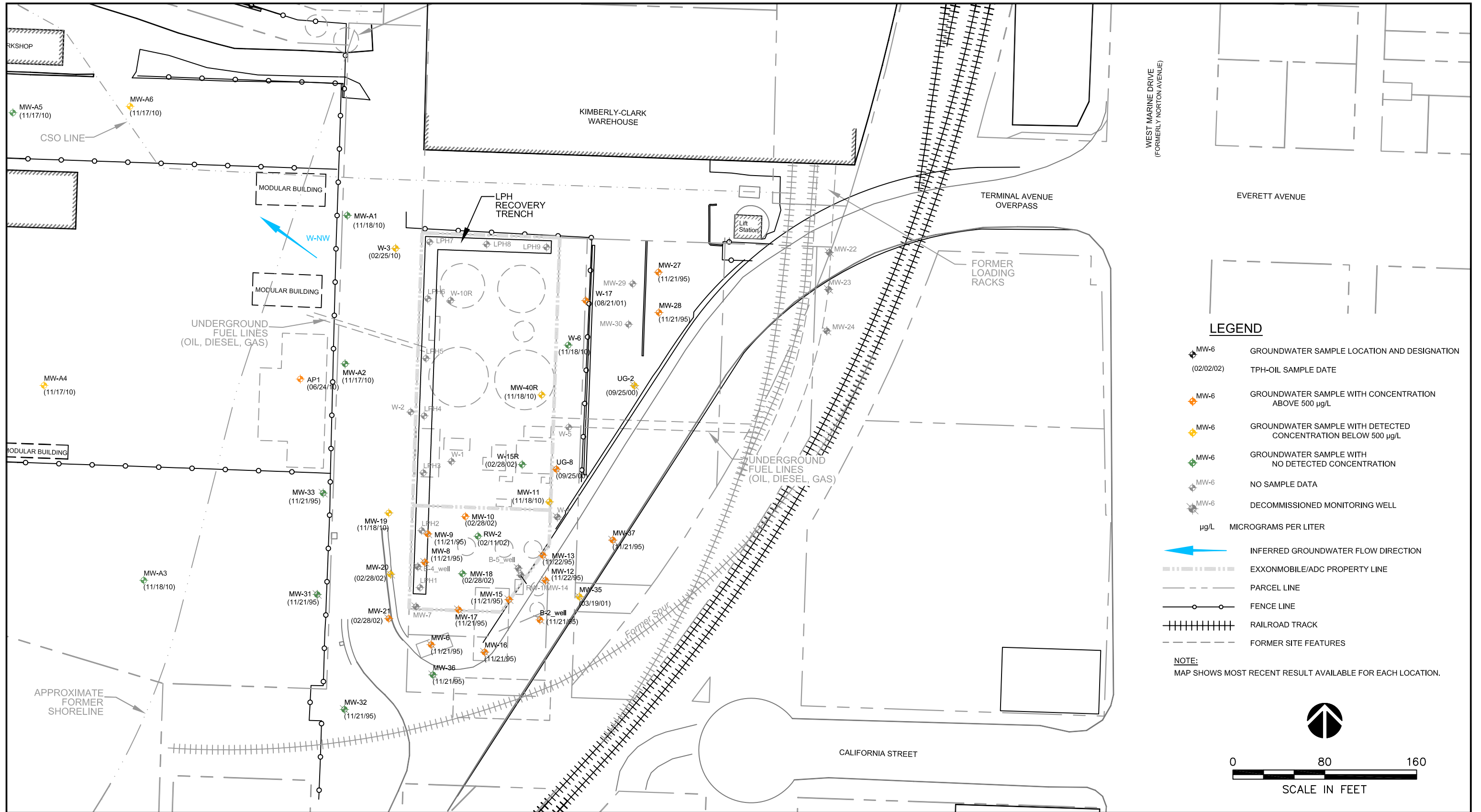
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CHK'D BY: AIS/MS
DATUM: NONE
PROJECTION: NONE
SCALE: 1" = 80'

PROJECT
**EXXONMOBIL/ADC PROPERTY
ECOLOGY SITE ID 2728**

TITLE
**DISTRIBUTION OF TPH-G IN GROUNDWATER
BASED ON MOST RECENT REPORTED RESULTS**

DATE: MARCH 2011
PROJECT NO: 1-915-15716-E
REV. NO.: 1
FIGURE No. 20

AGENCY DRAFT



SOURCE: Modified from a map provided by City of Everett, ExxonMobil Oil Corporation and Environmental Resolution, Inc.

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CLIENT:

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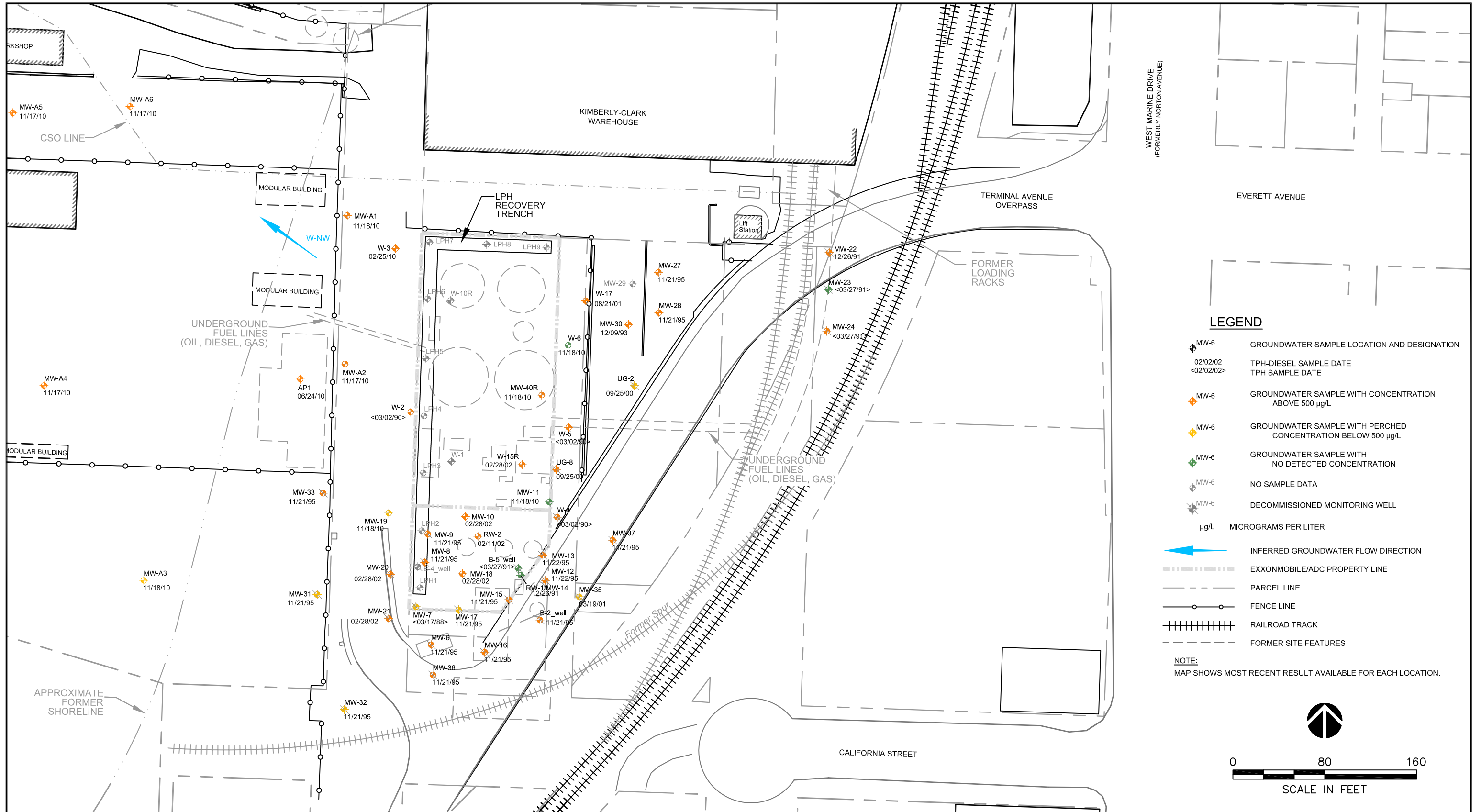
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DATUM: NONE
PROJECTION: NONE
SCALE: 1" = 80'

PROJECT
**EXXONMOBIL/ADC PROPERTY
ECOLOGY SITE ID 2728**

TITLE
**DISTRIBUTION OF TPH-O IN GROUNDWATER
BASED ON MOST RECENT REPORTED RESULTS**

DATE: MARCH 2011
PROJECT NO: 1-915-15716-E
REV. NO.: 1
FIGURE No. 21

AGENCY DRAFT



SOURCE: Modified from a map provided by City of Everett, ExxonMobil Oil Corporation and Environmental Resolution, Inc.

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DWN BY: JRS / BRJ
 CHK'D BY: AIS/MS
 DATUM: NONE
 PROJECTION: NONE
 SCALE: 1" = 80'

PROJECT
**EXXONMOBIL/ADC PROPERTY
 ECOLOGY SITE ID 2728**
 TITLE
**DISTRIBUTION OF TPH-D AND UNDIFFERENTIATED
 TPH IN GROUNDWATER BASED ON
 MOST RECENT REPORTED RESULT**

DATE: MARCH 2011
 PROJECT NO: 1-915-15716-E
 REV. NO.: 1
 FIGURE No. 22



APPENDIX A

Aquifer Study



Memo
December 15, 2010
Page 2 of 6

Boring logs for monitoring wells MW-A1, MW-A5, and MW-A6 include well construction diagrams and are presented in Attachment 1. The monitoring wells are primarily screened in fine to fine to coarse sand with varying proportions of silt and traces of gravel. Water level data provided in Table 1 indicate that the 10-foot-long well screens in the monitoring wells straddle the water table (i.e., the well screens are partially submerged in each of the wells).

To conduct the slug tests, a Schlumberger Micro-Diver pressure transducer/data logger was placed at the bottom of the well and activated to collect readings of feet of head above the transducer at 0.5-second intervals. A polyvinyl chloride (PVC) slug was lowered into the well to a height just above the water table. The slug was then dropped so that the top was just below the static water in the well while displacement was recorded by the transducer. After several minutes, the water level was measured again to assure that the well had recovered to static conditions. Once water levels had stabilized, the slug was removed instantaneously. This procedure was repeated several times in each well to obtain several slug test results. The transducer and the slug were decontaminated between tests. New nylon rope was used to lower and raise the slug in each of the wells, and the rope was replaced in between wells.

Water level displacement during the rising head tests ranged from 1.80 to 3.36 feet (Table 2). The amount of displacement in each monitoring well was fairly consistent between tests. Recovery of water levels in the falling head tests was too rapid to allow for proper analysis. This is because the flow of water into the aquifer following insertion of the slug takes place through the vadose zone above the original water table, which increases the rate of fall of the water level in the borehole beyond that caused by inflow into the aquifer. Analysis of these data can lead to an over estimation of K .

The rising head slug test data were analyzed using the Bouwer and Rice method (Bouwer 1976, 1989a, 1989b) with Aquifer^{Win32} software to obtain estimates of K for each monitoring well tested. An aquifer thickness of 30 feet was assumed. The "Recovery within the Well Screen" correction in Aquifer^{Win32} (based on equations from Bouwer and Rice [1989a]) were applied to the analytical solution to account for the filter pack porosity and thickness in the portion of the borehole where the water level is rising. The "double straight-line effect" often occurs in slug test analyses when the well screen is partially submerged (Bouwer, 1989a) and the early time data are more representative of drainage from a permeable gravel pack. Butler (1998) recommends that the straight line in the Bouwer and Rice analysis be fitted to normalized displacement values between 0.2 and 0.3. This approach was used in the slug test analyses, which are provided in Attachment 2.

The geometric mean of the K values for each well were calculated and are provided in Table 2. Values of average hydraulic conductivity range from 18.0 to 75.2 feet/day, which correspond to median values expected for silty sand to clean sand (Freeze and Cherry, 1979).



Memo
December 15, 2010
Page 3 of 6

REFERENCES

Bouwer, H. and R.C. Rice, 1976. A slug test method for determining hydraulic conductivity of unconfined aquifers with completely or partially penetrating wells, *Water Resources Research*, vol. 12, no. 3, pp. 423-428.

Bouwer, H., 1989a. The Bouwer and Rice slug test--an update, *Ground Water*, vol. 27, no. 3, pp. 304-309.

Bouwer, H., 1989b. Discussion of "The Bouwer and Rice slug test-an update". *Ground Water*, vol. 27, no. 5, p. 715.

Butler, J.J., Jr., 1998. *The Design, Performance, and Analysis of Slug Tests*, Lewis Publishers, New York, 252p

Freeze, R.A., and J.A. Cherry, 1979, *Groundwater*, Prentice Hall, Inc.

Attachments: Attachment 1 Boring Logs
Attachment 2 Slug Test Data and Analysis



TABLES

AGENCY DRAFT

TABLE 1
MONITORING WELL DATA
Exxon Mobil/ADC Facility
Everett, Washington

Field Event	Monitoring Well ID		
	MW-1A	MW-5A	MW-6A
August 10, 2010			
Time	1:20:00 PM	5:35:00 PM	6:45:00 PM
Depth to Water (ft)	7.03	12.30	11.09
Total Depth of Well (ft)	15.11	17.21	17.70
Water Column Height (ft)	8.08	4.91	6.61
October 12, 2010			
Time	10:15:00 AM	1:30:00 PM	3:10:00 PM
Depth to Water (ft)	6.90	12.60	10.95
Total Depth of Well (ft)	15.11	17.21	17.70
Water Column Height (ft)	8.21	4.61	6.75

AGENCY DRAFT

TABLE 2
HYDRAULIC CONDUCTIVITY ESTIMATES FROM SLUG TEST RESULTS
Exxon Mobil/ADC Facility
Everett, Washington

Well ID	Test Number	Initial Displacement (ft)	Hydraulic Conductivity - K (ft/day)
MW-1A	1	2.36	77.2
	2	1.8	84.1
	3	2.11	75.5
	4	2.16	61.6
	5	3.89	79.4
	<i>geometric mean K for well</i>		
MW-5A	1	2.79	11.2
	2	2.62	17.2
	3	2.8	21.1
	4	2.88	21.7
	5	2.69	21.3
	<i>geometric mean K for well</i>		
MW-6A	1	3.11	30.9
	2	3.2	25.6
	3	3.36	31.2
	4	3.13	28.2
	<i>geometric mean K for well</i>		



ATTACHMENT 1

Boring Logs

AGENCY DRAFT

O DEPTH (ft bgs)	GRAPHIC LOG	USCS SYMBOL	SOIL DESCRIPTION	SAMPLE	BLOW COUNT SPT N VALUE	VOLATILE READING (ppm)	GROUNDWATER	FIELD AND LABORATORY TESTING	WELL SCHEMATIC
0			Surface: 0.2 feet of asphalt over 1.6 feet of gray fine to medium angular gravel (crushed rock base course) A vac-truck was utilized from 0 to 5 feet below the ground surface to ensure utilities were cleared.						Flush mount in cement seal Hydrated bentonite chip seal
5		SP-SM	Medium dense, moist, brown, fine to coarse SAND with some silt and trace fine gravel Moist to wet, wood; possibly a large block		22	0.0	▼		2-inch PVC casing in 2/12 silica sand filter pack 2-inch PVC 10 slot screen in 2/12 silica sand filter pack
		SP	Loose, wet, brown, fine to medium SAND with trace silt and petroleum odor Becomes saturated and gray at 8.3 feet Water appeared viscous and sediments appeared to have a metallic luster from 8.3 to 9 feet Becomes medium dense at 9.5 feet		6	0.0	▽	A1_S-1_020408 Sheen Test None Observed A1_S-2_020408	
10		GP-GM	Medium dense, saturated, dark gray, fine GRAVEL with some fine to medium sand and silt, light to medium sheen		21	0.0			
		SP	Medium dense, saturated, gray fine to medium SAND with trace silt and fine gravel and occasional organics (wood splinters) Approximately 0.01 foot thick layers of wood splinters at 13, 14, and 15 feet Becomes loose, with petroleum odor and no visible gravel at 14.5 feet		16	0.0		Sheen Test Light Observed	
15					14	0.0			2/12 silica sand Bentonite chips
			Approximatley 0.1 foot thick layer of stiff, moist, brown, SILT with numerous organics / organic SILT (plant fragments, wood fibers, roots) at 18 feet		14	0.0		Sheen Test Light Observed	
20					24	0.0		Sheen Test None Observed	
		ML	Very stiff, moist, brown, SILT with trace fine to coarse sand and numerous organics / organic SILT with trace fine to coarse sand		20	0.0			
25		SP	Becomes with occasional organics (roots) at 25 feet Medium dense, saturated, gray, fine to medium SAND with trace silt		17	0.0			
			Exploration terminated at 26.5 feet below the existing ground surface.						
30									

BORING METHOD: HSA	ELEVATION REFERENCE: NA
BOREHOLE DIAMETER: 8 (in)	GROUND SURFACE ELEVATION: NA
DRILL RIG: CME	CASING ELEVATION: NA
CONTRACTOR: Cascade Drilling, Inc./Scott	START CARD/TAG ID: /BAB238
LOGGED BY: LME	DRILLING DATES: 2/4/2008 - 2/4/2008

REMARKS:

ENV/R+WELL BORING FEDERAL AVENUE ADD ON GPJ AMEC PORTLAND.GDT 12/9/10








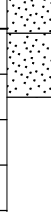

ExxonMobil / American Distributing Company
0-915-15716-D

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11810 North Creek Parkway N
Bothell, Washington
USA 98011
Tel (425) 368-1000
Fax (425) 368-1001



**LOG OF BORING
MW-A1**


AGENCY DRAFT

DEPTH (ft bgs)	GRAPHIC LOG	USCS SYMBOL	SOIL DESCRIPTION	SAMPLE	BLOW COUNT SPT N VALUE	VOLATILE READING (ppm)	GROUNDWATER	FIELD AND LABORATORY TESTING	WELL SCHEMATIC
0		SP							Flush mount in cement seal
5			Gray, slightly moist, very dense(?) medium to coarse-grained SAND (SP) with silt; trace gravel; no odor or discoloration		29-30-35	3.6			Hydrated bentonite chip seal
10			Gray, moist to wet (bottom of sample), dense (?) medium to coarse-grained SAND (SP), some fine-grained SAND w/ gravel; no odor or discoloration		6-8-9	10.9			2-inch PVC casing in 2/12 silica sand filter pack
15			Gray, wet, very dense fine to coarse-grained SAND (SP) with silt and trace gravel		30-35-32	3.2	▽		2-inch PVC 10 slot screen in 2/12 silica sand filter pack
20			Coarse-grained SP with fine-grained sand, some silt, trace gravel		25, 50/2"	3.5			2/12 silica sand
			End of boring at 21.5 feet						

ENV/R+WELL BORING FEDERAL AVENUE ADD ON GPJ AMEC PORTLAND.GDT 12/9/10

BORING METHOD: HSA	ELEVATION REFERENCE: NA
BOREHOLE DIAMETER: 8 (in)	GROUND SURFACE ELEVATION: NA
DRILL RIG: NA	CASING ELEVATION: NA
CONTRACTOR: Cascade Drilling, Inc.	START CARD/TAG ID: /BCH301
LOGGED BY: AS	DRILLING DATES: 6/24/2010 - 6/24/2010

REMARKS:

ExxonMobil / American Distributing Company 0-915-15716-D	AMEC Earth and Environmental, Inc. 11810 North Creek Parkway N Bothell, Washington USA 98011 Tel (425) 368-1000 Fax (425) 368-1001		LOG OF BORING MW-A5 PAGE 1 OF 1
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AGENCY DRAFT

DEPTH (ft bgs)	GRAPHIC LOG	USCS SYMBOL	SOIL DESCRIPTION	SAMPLE	BLOW COUNT SPT N VALUE	VOLATILE READING (ppm)	GROUNDWATER	FIELD AND LABORATORY TESTING	WELL SCHEMATIC
0		SM							
5			Grey, moist, dense fine to medium-grained silty SAND (SM), bricks, burnt wood, some gravel; no odor, discoloration or sheen.	17-20-121	1.5				
10			cobble; drilled through						
15			Grey, moist to wet, medium dense, fine to medium-grained silty SAND (SM) wit gravel, rocks, burnt wood, slight odor (non-petroleum), no discoloration; some sheen	10-12-14	2.2		▽		
20			Grey, wet, medium dense, fine-grained silty SAND (SM) with coarse-grained sand and SIIT lenses (<2"); abundant organics (wood chips < 1")	9-7-5					
21.5			End of boring at 21.5 feet						
25									
30									

BORING METHOD: HSA	ELEVATION REFERENCE: NA
BOREHOLE DIAMETER: 8 (in)	GROUND SURFACE ELEVATION: NA
DRILL RIG: NA	CASING ELEVATION: NA
CONTRACTOR: Cascade Drilling, Inc.	START CARD/TAG ID: /BCH304
LOGGED BY: AS	DRILLING DATES: 6/25/2010 - 6/25/2010

REMARKS:

ENV/R+WELL BORING FEDERAL AVENUE ADD ON GPJ AMEC PORTLAND.GDT 12/9/10

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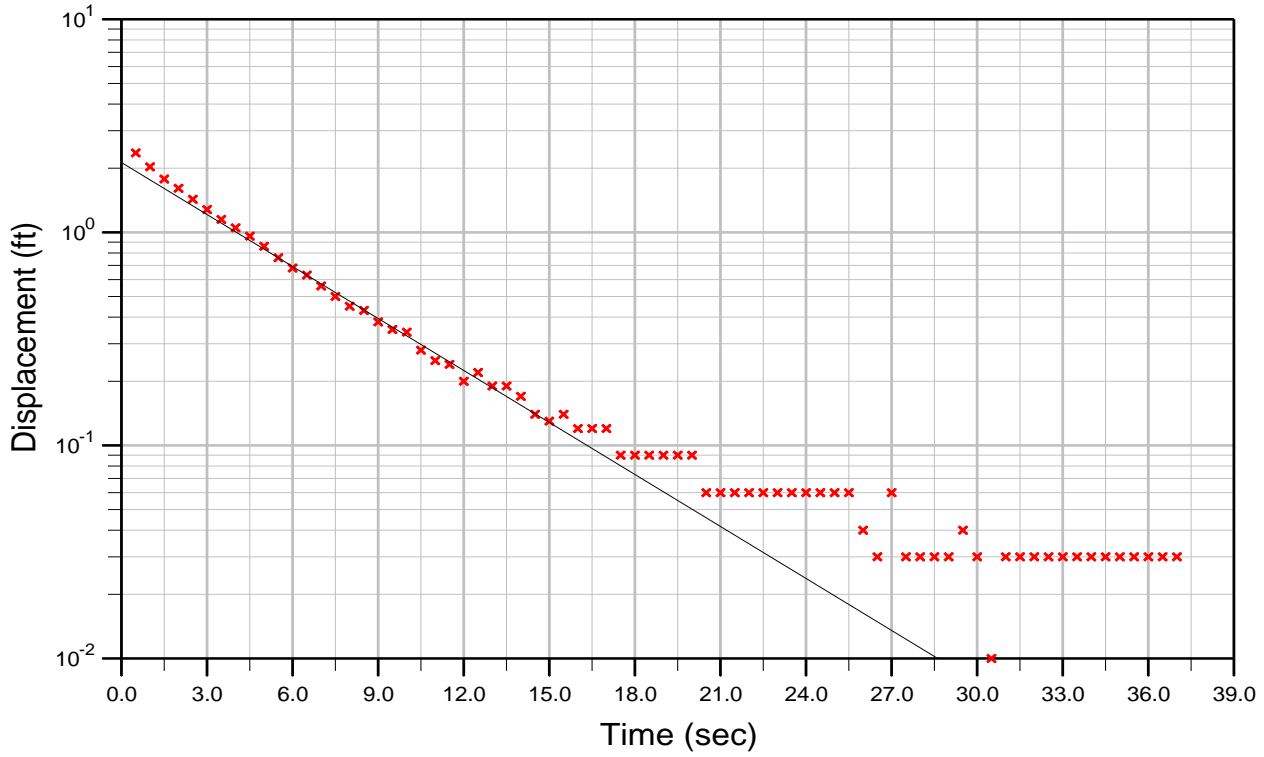
LOG OF BORING MW-A6
PAGE 1 OF 1



ATTACHMENT 2

Slug Test Data and Analysis

Bouwer & Rice

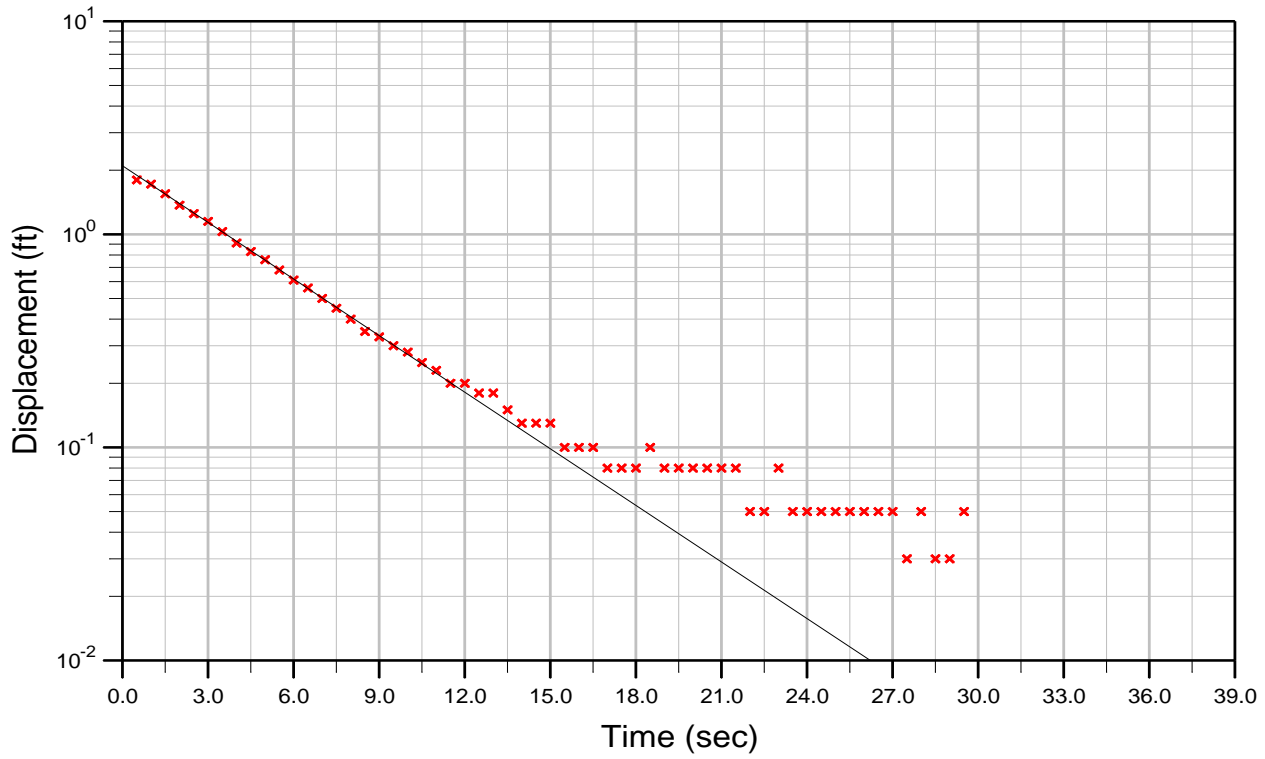


Well Tested: MW-A1
Test Number: RH-1
Solution: Bouwer and Rice (1976, 1989a)

K = 77.2 feet/day

Initial Displacement: 2.13 feet
Total Well Penetration Depth: 8 feet
Casing Diameter: 0.1667 feet
Borehole Diameter: 0.667 feet

Bouwer & Rice

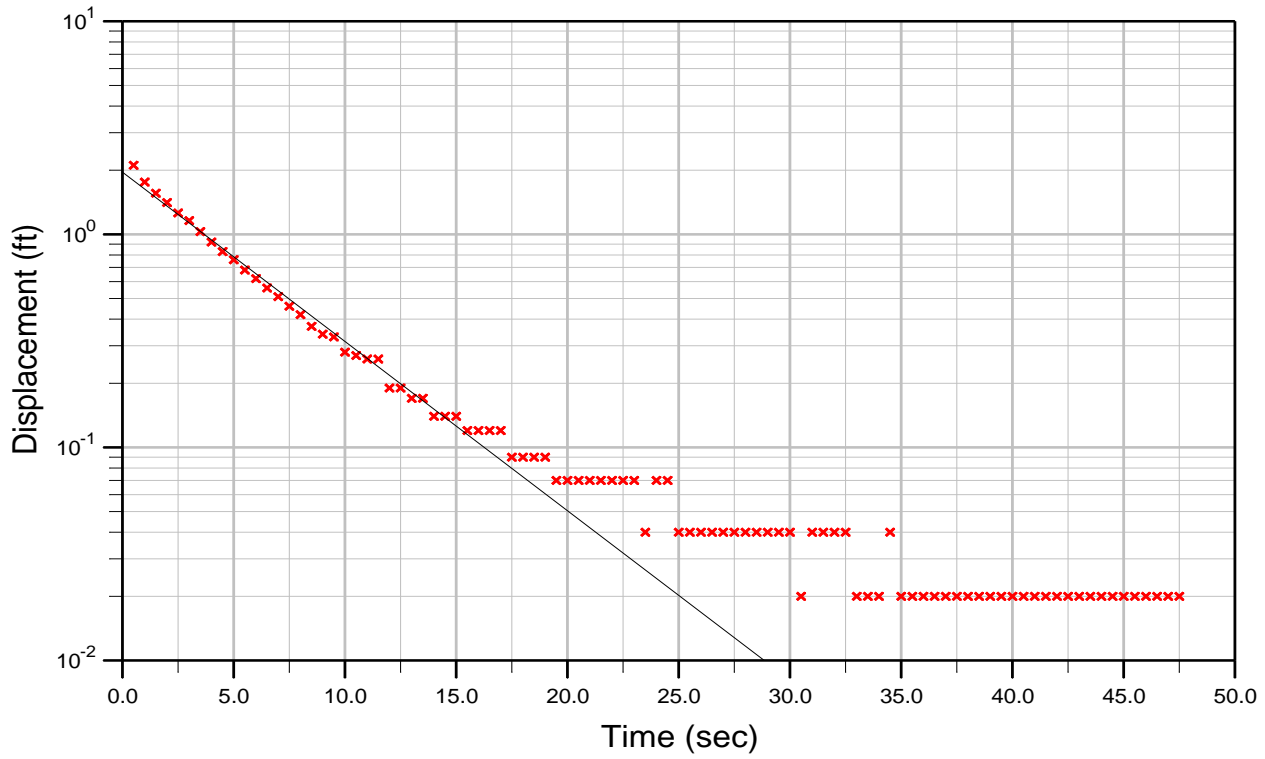


Well Tested: MW-A1
Test Number: RH-2
Solution: Bouwer and Rice (1976, 1989a)

Initial Displacement: 2.10 feet
Total Well Penetration Depth: 8 feet
Casing Diameter: 0.1667 feet
Borehole Diameter: 0.6667 feet

K = 84.1 feet/day

Bouwer & Rice

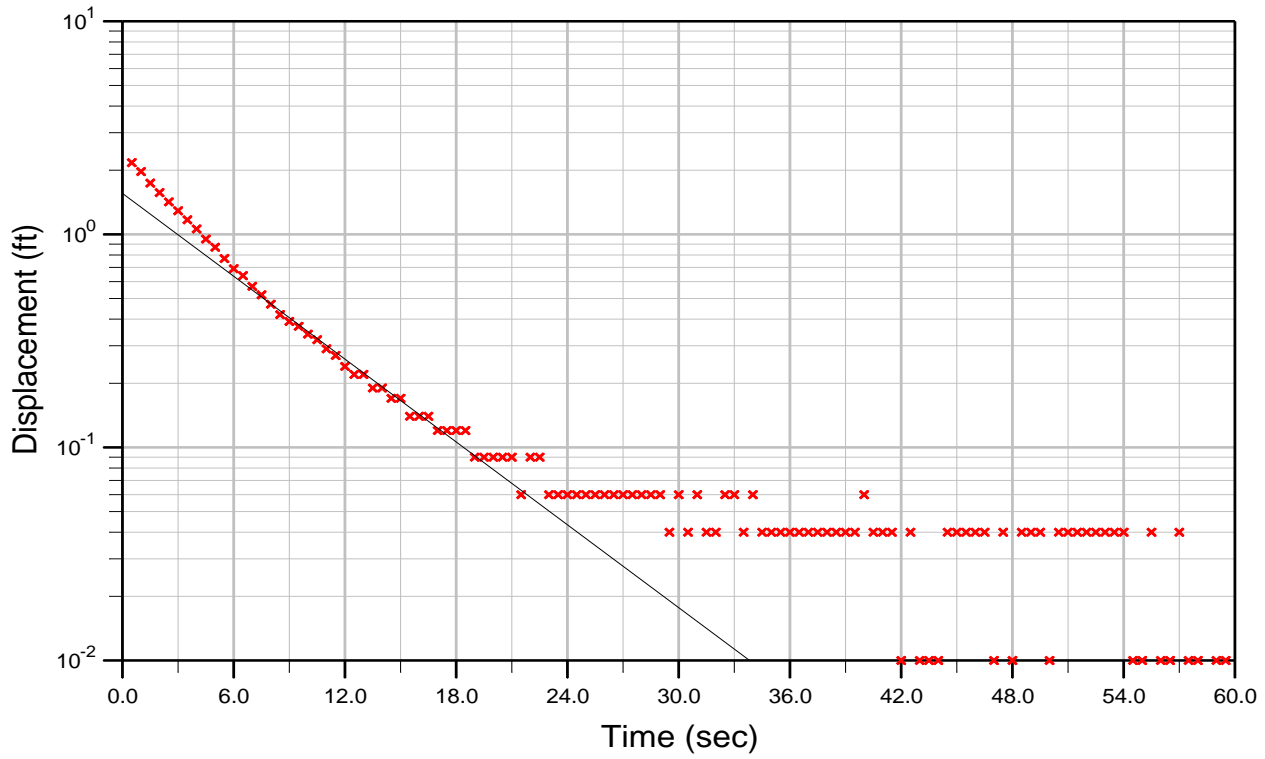


Well Tested: MW-A1
Test Number: RH-3
Solution: Bouwer and Rice (1976, 1989a)

K = 75.5 feet/day

Initial Displacement: 1.96 feet
Total Well Penetration Depth: 8 feet
Casing Diameter: 0.1667 feet
Borehole Diameter: 0.6667 feet

Bouwer & Rice

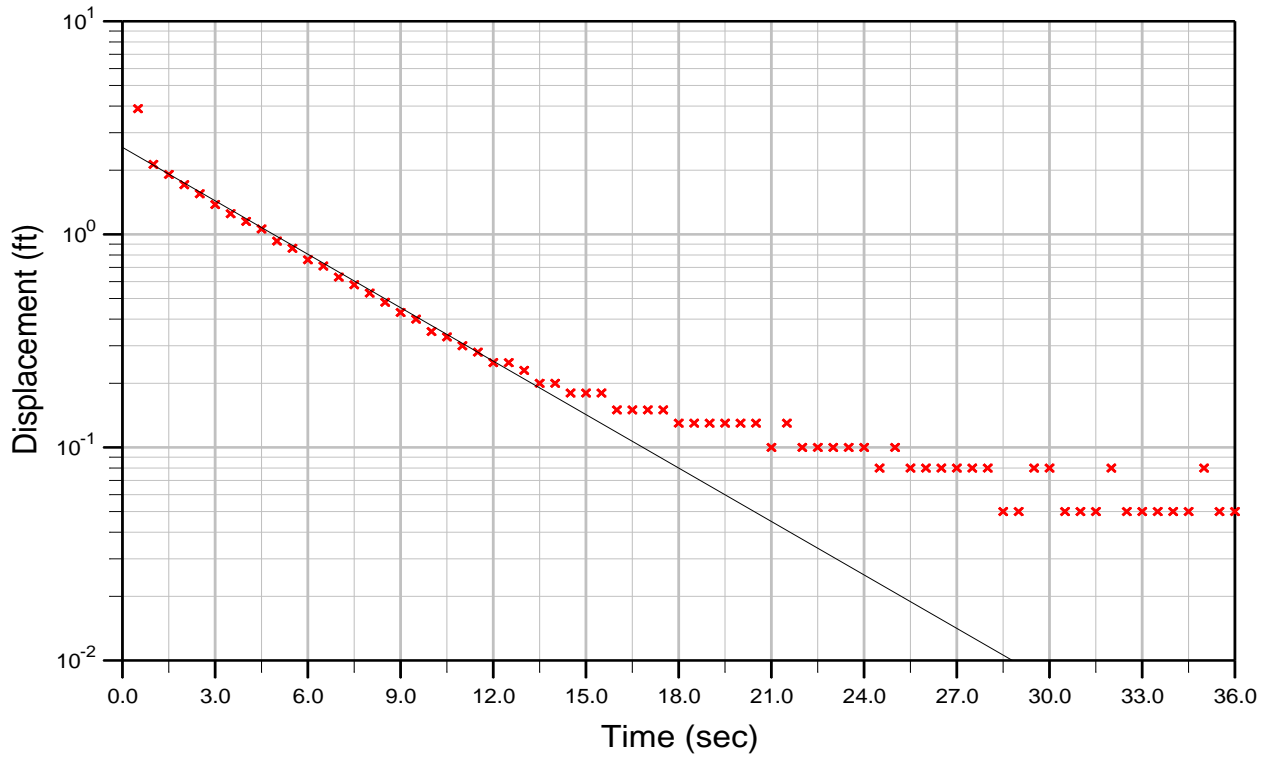


Well Tested: MW-A1
Test Number: RH-4
Solution: Bouwer and Rice (1976, 1989a)

Initial Displacement: 1.56 feet
Total Well Penetration Depth: 8 feet
Casing Diameter: 0.1667 feet
Borehole Diameter: 0.6667 feet

K = 61.6 feet/day

Bouwer & Rice

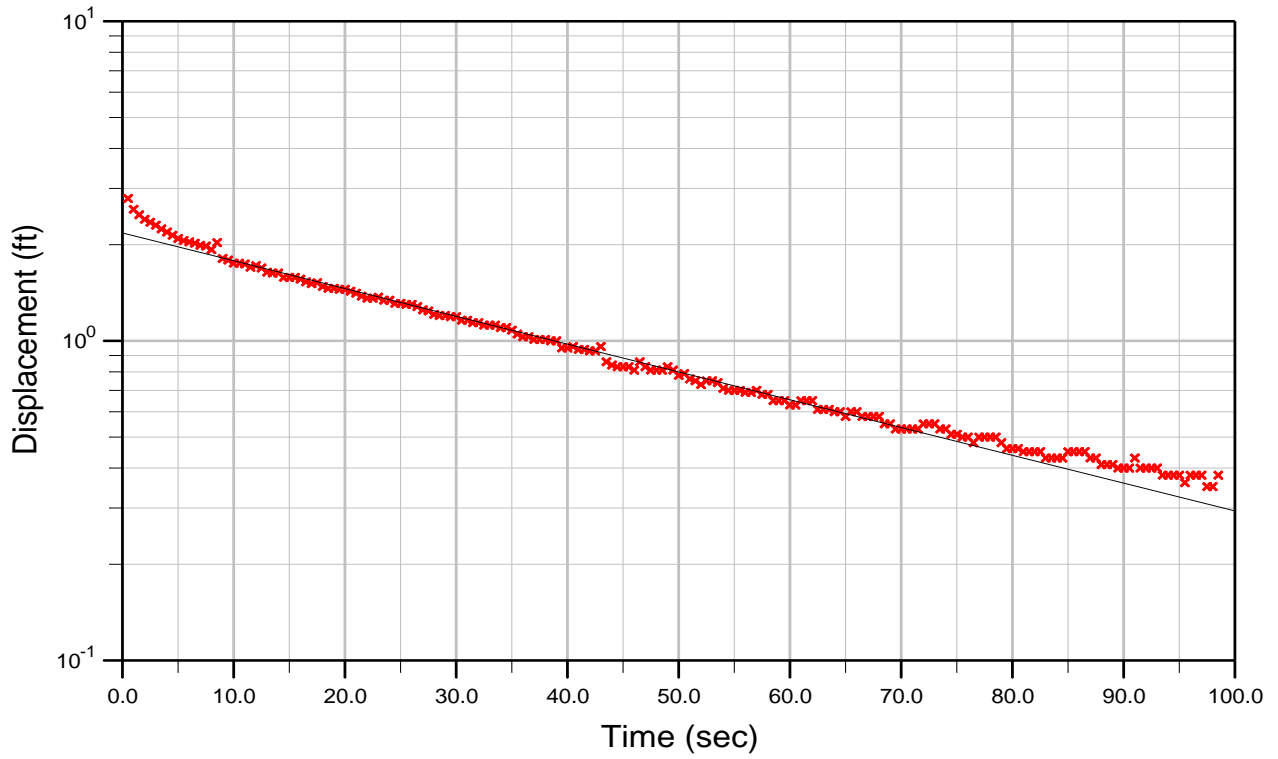


Well Tested: MW-A1
Test Number: RH-5
Solution: Bouwer and Rice (1976, 1989a)

Initial Displacement: 2.56 feet
Total Well Penetration Depth: 8 feet
Casing Diameter: 0.1667 feet
Borehole Diameter: 0.6667 feet

K = 79.4 feet/day

Bouwer & Rice

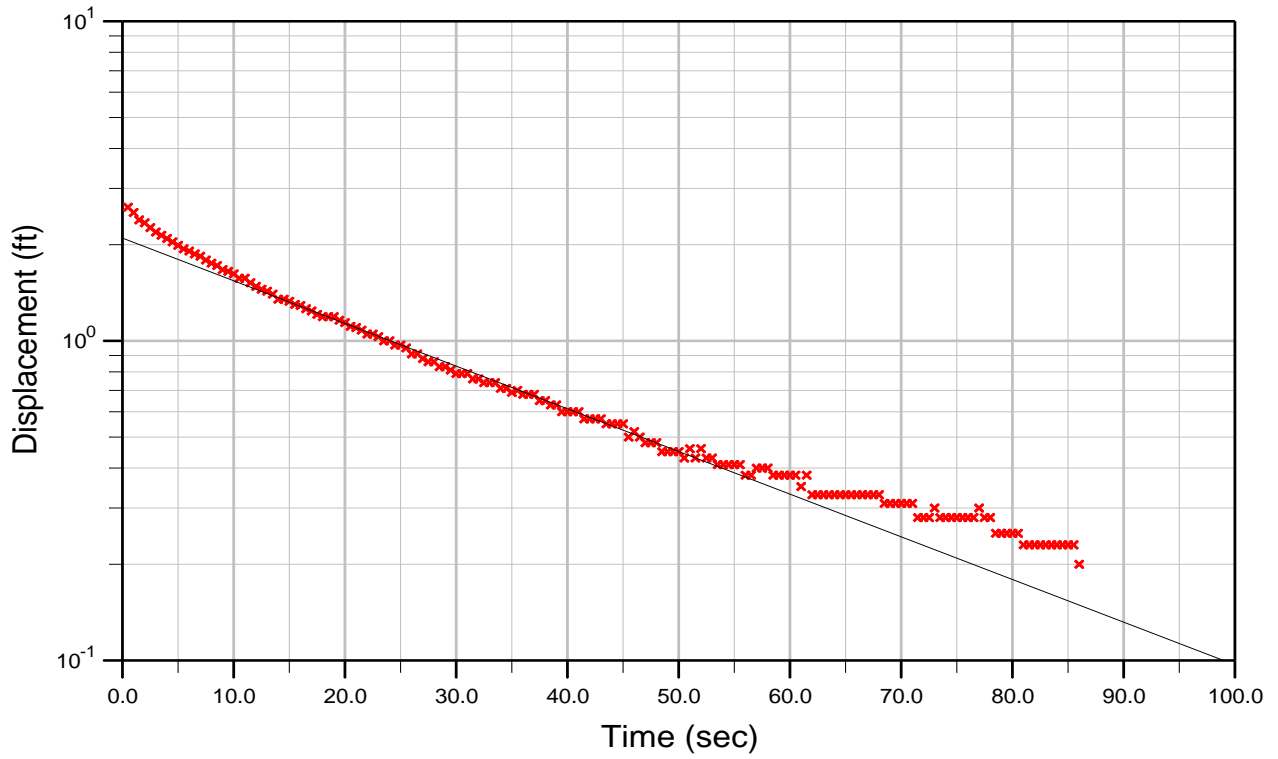


Well Tested: MW-A5
Test Number: RH-1
Solution: Bouwer and Rice (1976, 1989a)

Initial Displacement: 2.17 feet
Total Well Penetration Depth: 4.5 feet
Casing Diameter: 0.1667 feet
Borehole Diameter: 0.6667 feet

K = 11.1 feet/day

Bouwer & Rice

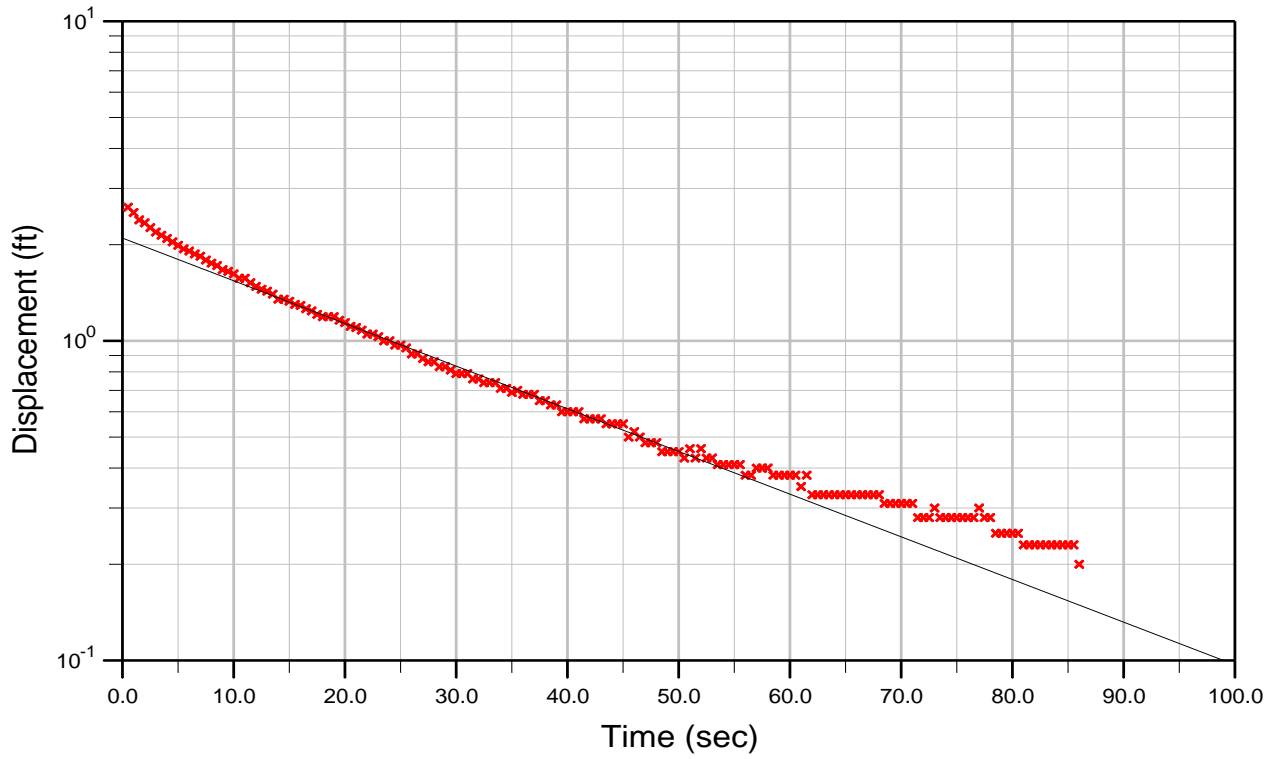


Well Tested: MW-A5
Test Number: RH-2
Solution: Bouwer and Rice (1976, 1989a)

Initial Displacement: 2.62 feet
Total Well Penetration Depth: 4.5 feet
Casing Diameter: 0.1667 feet
Borehole Diameter: 0.6667 feet

K = 17.2 feet/day

Bouwer & Rice

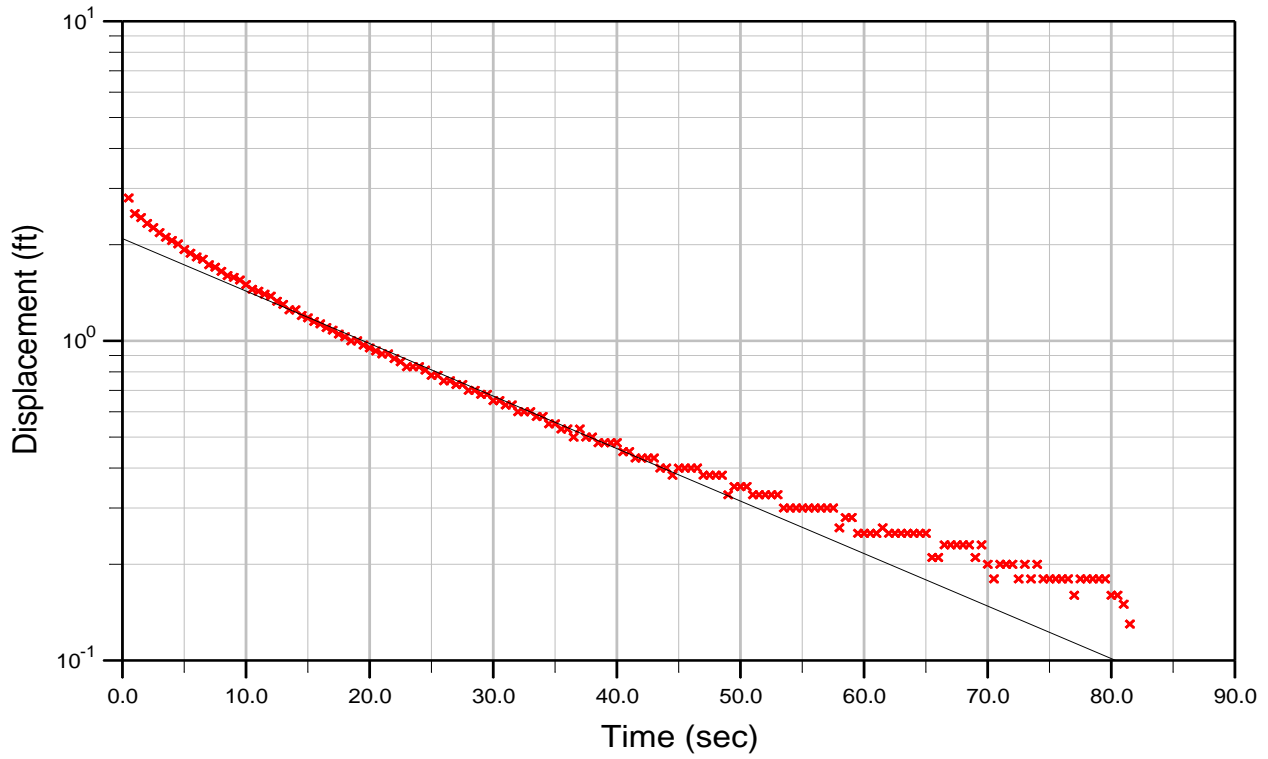


Well Tested: MW-A5
Test Number: RH-3
Solution: Bouwer and Rice (1976, 1989a)

Initial Displacement: 2.17 feet
Total Well Penetration Depth: 4.5 feet
Casing Diameter: 0.1667 feet
Borehole Diameter: 0.6667 feet

K = 21.1 feet/day

Bouwer & Rice

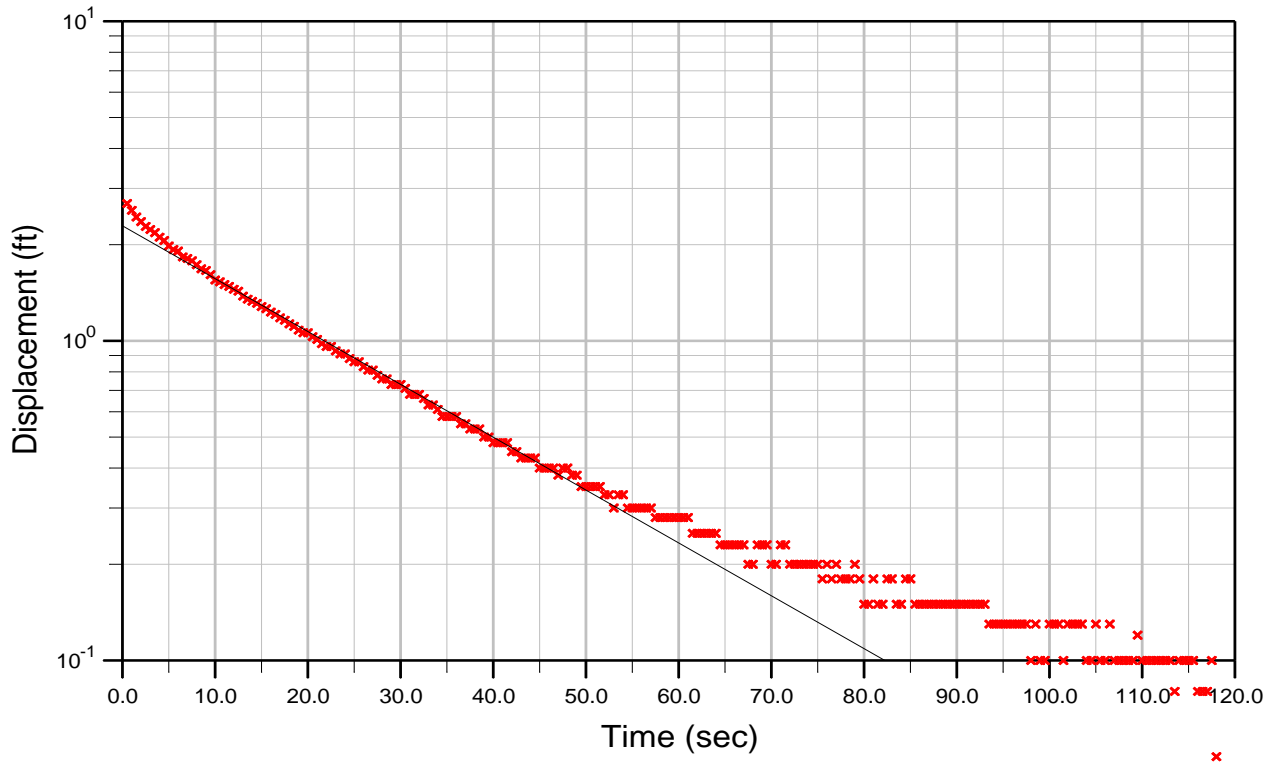


Well Tested: MW-A5
Test Number: RH-4
Solution: Bouwer and Rice (1976, 1989a)

Initial Displacement: 2.18 feet
Total Well Penetration Depth: 4.5 feet
Casing Diameter: 0.1667 feet
Borehole Diameter: 0.6667 feet

K = 21.7 feet/day

Bouwer & Rice

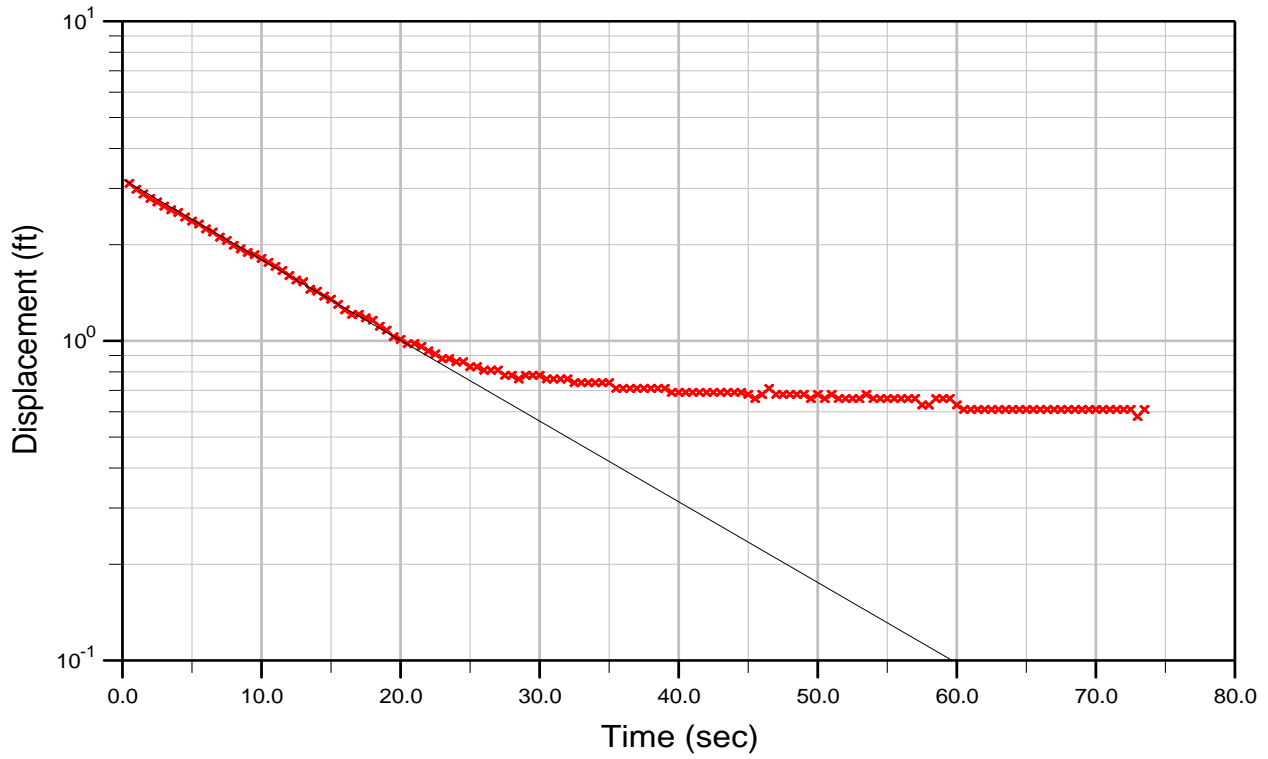


Well Tested: MW-A5
Test Number: RH-5
Solution: Bouwer and Rice (1976, 1989a)

K = 21.3feet/day

Initial Displacement: 2.18 feet
Total Well Penetration Depth: 4.5 feet
Casing Diameter: 0.1667 feet
Borehole Diameter: 0.6667 feet

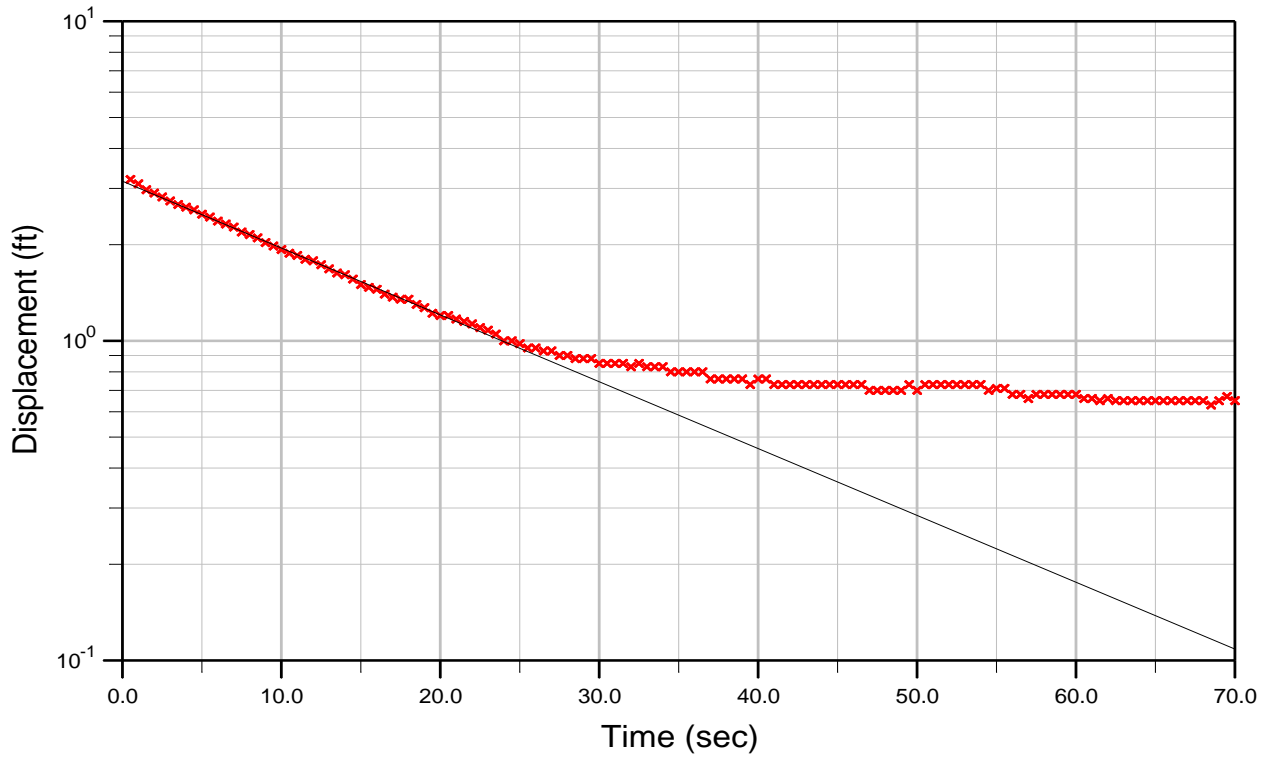
Bouwer & Rice



Well Tested: MW-A6
Test Number: RH-1
Solution: Bouwer and Rice (1976, 1989a)
K = 30.9 feet/day

Initial Displacement: 3.21 feet
Total Well Penetration Depth: 5.0 feet
Casing Diameter: 0.1667 feet
Borehole Diameter: 0.6667 feet

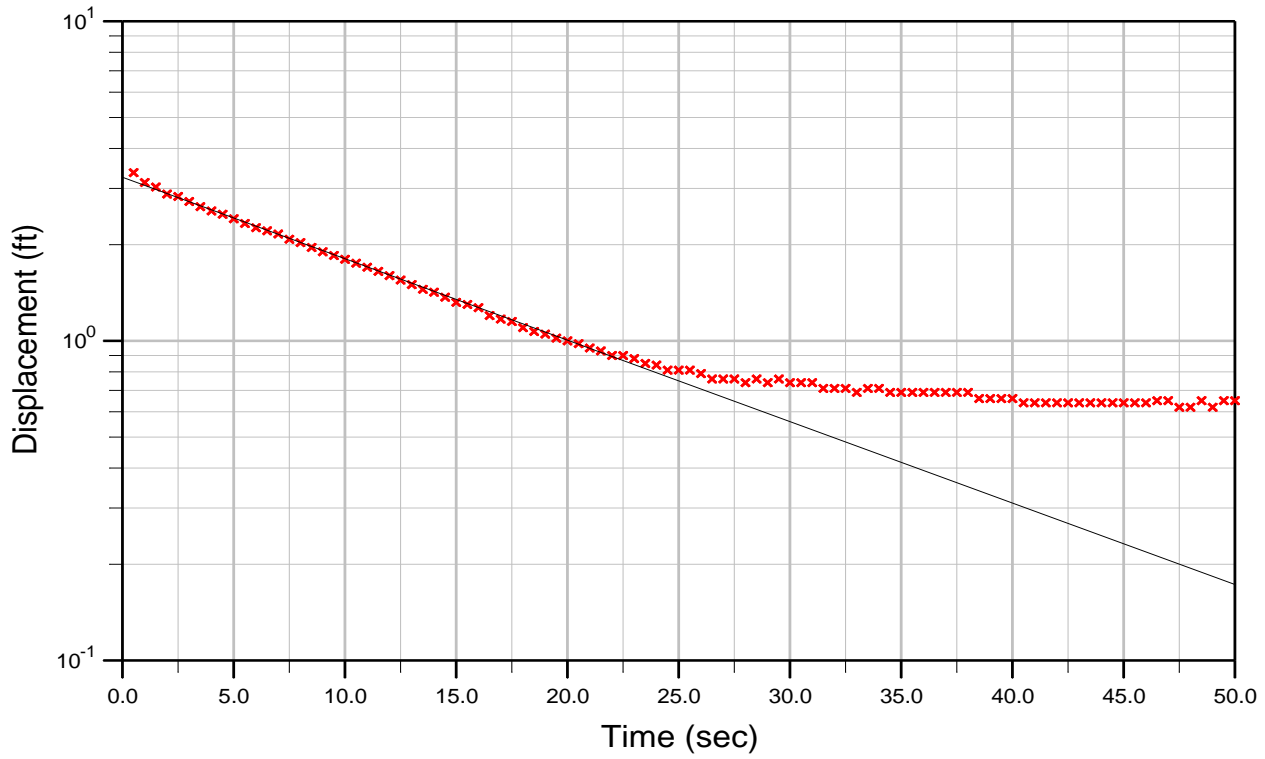
Bouwer & Rice



Well Tested: MW-A6
Test Number: RH-2
Solution: Bouwer and Rice (1976, 1989a)
K = 25.6 feet/day

Initial Displacement: 3.16 feet
Total Well Penetration Depth: 5.0 feet
Casing Diameter: 0.1667 feet
Borehole Diameter: 0.6667 feet

Bouwer & Rice

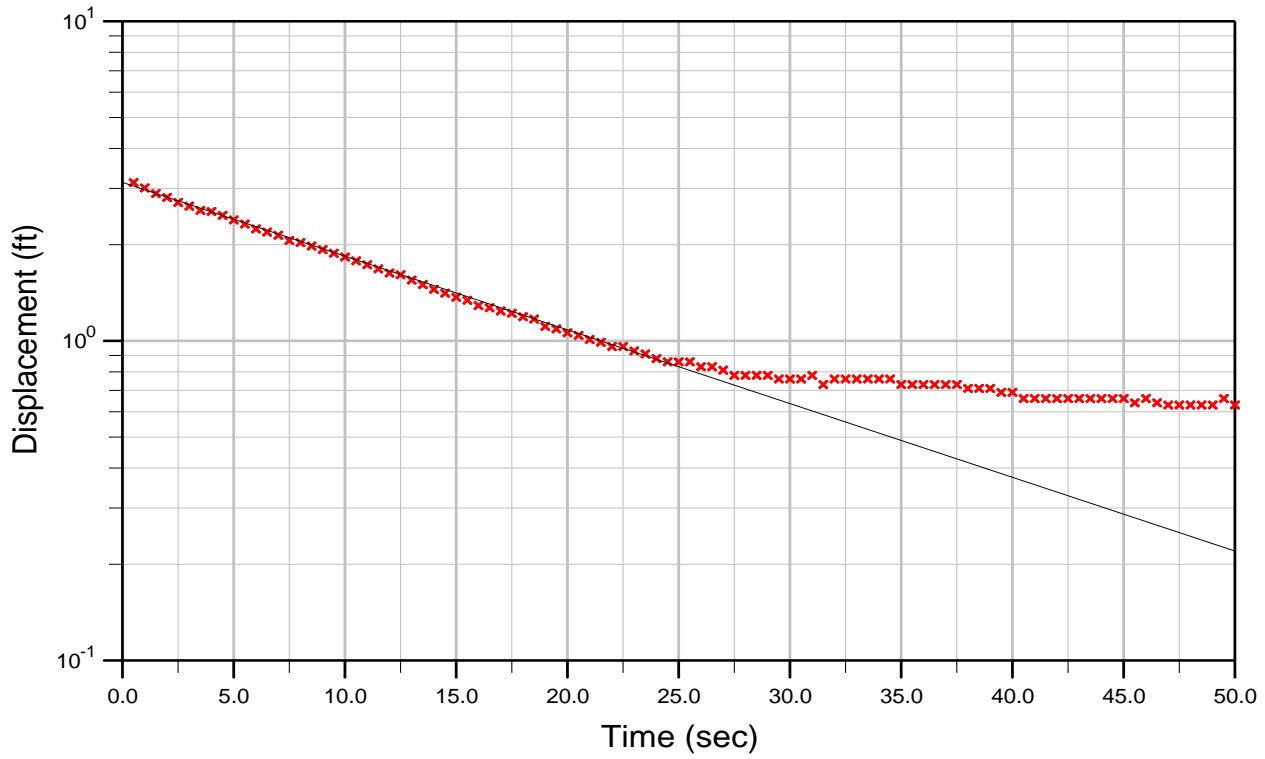


Well Tested: MW-A6
Test Number: RH-3
Solution: Bouwer and Rice (1976, 1989a)

K = 31.2 feet/day

Initial Displacement: 3.25 feet
Total Well Penetration Depth: 5.0 feet
Casing Diameter: 0.1667 feet
Borehole Diameter: 0.6667 feet

Bouwer & Rice



Well Tested: MW-A6
Test Number: RH-4
Solution: Bouwer and Rice (1976, 1989a)

Initial Displacement: 3.13 feet
Total Well Penetration Depth: 5.0 feet
Casing Diameter: 0.1667 feet
Borehole Diameter: 0.6667 feet

K = 28.2 feet/day



APPENDIX B

Tidal Study



March 11, 2011

1-915-15716E

Mr. Andrew Kallus
Washington State Department of Ecology
Headquarters
Toxics Cleanup Program
P.O. Box 47600
Olympia, Washington 98504-7600

Subject: 2011 Tidal Study Report
ExxonMobil/ADC Property
2717/2731 Federal Avenue
Everett, Washington
Ecology Agreed Order DE98TCP-N223

Dear Mr. Kallus:

AMEC Earth & Environmental, Inc. (AMEC), prepared this report on behalf of ExxonMobil Oil Corporation (ExxonMobil) and American Distributing Company (ADC) to document the results of a tidal study conducted in February 2011 at 2717/2731 Federal Avenue in Everett, Washington (the Property) (Figure 1). The Property and portions of neighboring parcels comprise the ExxonMobil/ADC Site (Ecology Facility ID 2728), hereafter, referred to as "the Site". Due to the proximity of the Property to Port Gardner Bay in Puget Sound, groundwater levels at the Site are potentially tidally influenced. A tidal influence study (tidal study) was conducted to assess whether fluctuations in groundwater levels are related to tidal fluctuations and, if so, to evaluate the extent of tidal influences.

The Property is located approximately 300 feet from the Puget Sound shoreline on Everett's industrial waterfront (Figure 1). The tides of Puget Sound are predominantly mixed, semidiurnal tides, with both the diurnal (daily) and semi-diurnal (twice daily) components playing an important role. The range of Puget Sound tides is 9 to 12 feet (Finlayson 2006).

This report presents background information about the Site, data collection and analysis methods, and a discussion of the results of the tidal study. Figures and tables cited in the text are presented in Attachments A and B, respectively. Attachment C presents technical specifications and information about the transducers used in the monitoring wells. Attachment D presents hydrographs of water level data collected as part of this study. Field activities documented in this report occurred from February 8 to February 14, 2011.

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BACKGROUND

From at least the 1920s, the Property was used for petroleum bulk storage, transfer, and distribution operations; marine offloading; truck loading; and rail loading and/or unloading operation of petroleum products that included fuel oils, stove oil, Bunker C, diesel, and gasoline. In addition PS 300, a blend of synthetic and petroleum-based fluids specially designed for compressor applications, was used/stored on the Property in small quantities. Petroleum constituents have been found in soil and groundwater beneath the Property and beneath adjoining properties. In 1998, Mobil and ADC entered into an Agreed Order (DE-98TCP-N223) with the Washington State Department of Ecology (Ecology) to complete a remedial investigation and focused feasibility study (FFS).

Interim remedial actions at the Property have included a light-phase hydrocarbons (LPH) infiltration gallery installed in 1988, a groundwater extraction and treatment system installed in 1989, and an LPH recovery trench installed in the southwest portion of the Property in 1993. The LPH recovery trench is a passive system consisting of nine recovery wells in a trench along portions of the western and northern margins of the Property. In addition, a concrete wall extending to a depth of approximately 6 feet below ground surface (bgs) is located around the perimeter of part of the Property.

Subsurface materials at the Site consist of a heterogeneous mixture of very loose to moderately dense, brown, brownish-gray, and gray sand and silty sand with areas of peat and wood waste/debris fill. The areas of fill extend to depths of approximately 5 feet bgs. Additional fill materials underlie the shallow fill to depths of 20 to 23 feet bgs. The deeper fill is more consistent in color (gray), sandier, and less dense. The deeper fill is characterized as silty sand with gravel, silt, and peat, mixed with debris (wood, metal, and glass). Native materials occur at depths of 20 to 25 feet bgs and consist of organic silts and silty clays interpreted to be Quaternary-aged transitional beds, deposited between Fraser and pre-Fraser glaciations.

Depth to groundwater is approximately 1 to 5 feet bgs. Previous groundwater elevation data indicate that water table elevations fluctuate seasonally by up to 2.3 feet. Groundwater levels near tidal bodies often fluctuate in a manner similar to the rise and fall of the tide and are said to be "tidally influenced." The magnitude of groundwater level fluctuation is generally less than the actual tidal range. The influence of tides is typically greatest adjacent to the shoreline, with diminishing effects farther inland. The ratio of the tidal amplitude in groundwater to that of the sea is termed the "tidal efficiency." The length of time it takes for groundwater to respond to the tidal cycle is known as the "tidal time lag" (Fetter 1994). The tidal time lag varies but is typically shortest closer to shore and progressively longer inland. Additional factors, such as lithologic conditions, site surface elevations, and barriers to flow, can also affect tidal impacts to groundwater in a coastal environment.

In 1996 AGRA conducted a 24-hour pumping test on monitoring well MW-10. Observation well drawdown was monitored in wells MW-18, RW-1, and RW-2 during the test (Exponent 1998).

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Estimates of hydraulic conductivity based on results of pumping tests range from 4.0 to 9.5 feet/day. Following the pumping test, AGRA monitored water levels in select wells for a 48-hour period to measure recovery and to assess potential tidal influences on shallow groundwater in the fill unit. During the 48-hour recovery period, no clear evidence of tidal fluctuation was observed. Based on the monitoring results, the hydraulic gradient at the Property, and the distance from Port Gardner Bay, Exponent (1998) concluded that tidal influences on shallow groundwater at the Property would be expected to be negligible.

DATA COLLECTION

Monitoring wells used in the tidal influence study included W-3, W-6, MW-11, MW-19, MW-28, MW-40R, and MW-A1 through MW-A7. Locations of these monitoring wells are shown on Figure 2. Well construction specifications and summaries of the lithology encountered at each of the monitoring wells used in the tidal study are provided in Table 1. Data collection activities are described below to determine if groundwater beneath the Property is affected by tides.

Stilling Well Installation

Stilling well SW-1 was installed on the Everett Pier by AMEC in October 2010 to provide a location for monitoring surface water elevations in Puget Sound. SW-1 is 30 feet long and consists of 1.5-inch-diameter polyvinyl chloride (PVC) pipe installed such that approximately 10 feet of pipe remains submerged at all times. The PVC pipe was perforated to allow the water level inside and outside of the pipe to remain the same at all times. The horizontal coordinates and elevation of SW-1 were surveyed in December 2010.

Transducer Installation and Automated Water Level Measurements

On February 8, 2011, AMEC installed 13 Schlumberger Micro-Diver pressure transducer/data loggers in monitoring wells on the Site. Technical information regarding the pressure transducers and data loggers is included in Attachment C. In addition, a Schlumberger ceramic (corrosion-resistant) Cera-Diver was installed in stilling well SW-1. The integrity of the lower portion of SW-1 was verified prior to installing the Cera-Diver. Prior to installation, the transducers were programmed to automatically record water levels every 6 minutes. Except for the stilling well, the Divers were placed at the bottom of each well. The clock in each data recorder was synchronized with the programming computer to allow simultaneous data collection at all locations. CTD-Diver sensors were installed in three of the wells to record conductivity data in addition to water level and temperature measurements. The transducers were left in place to collect data for a period of 6 days or approximately 144 hours. On the morning of February 14, 2011, the transducers were removed and the data downloaded.

Barometric Pressure

In addition to the transducer/data loggers described above, a Schlumberger Baro-Diver was programmed to collect barometric pressure readings throughout the tidal study period.

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Water level data collected in the monitoring wells and stilling well were adjusted for barometric pressure.

Manual Water Level Measurements

Depth to groundwater was measured manually in each of the wells using an electronic water level indicator, and the results were recorded prior to deployment of the pressure transducers/dataloggers. The depth to groundwater and water levels measured in each well are shown in Table 2. After the transducers were placed in the wells, manual depth-to-groundwater measurements were repeated to correlate heads measured by the transducers with groundwater elevations. Except for stilling well SW-1, water levels were also measured by hand on February 11. A round of manual water levels was also conducted on February 14, 2011, when the transducers were removed. The manual water level data correlated well with the transducer data.

Weather Data

Precipitation and temperature data were not collected at the site during the tidal study. Hourly precipitation and temperature data for the Everett Airport were retrieved online from Weather Underground (2011) which provides recent real time data.

DATA ANALYSIS

Analysis of data collected during the study is discussed below.

Weather

Hourly precipitation data recorded for the Everett Airport indicate that no precipitation occurred in the area from February 8, 2011, through noon on February 12, 2011 (Weather Underground 2011). Rainfall amounts up to 0.1 inch per hour occurred on February 12 in the afternoon and on February 13 from 8 PM to midnight. Steady rain began at 5 AM on February 14 and continued throughout the day. The air temperature during the tidal study ranged from 36 to 56 degrees Fahrenheit (°F).

Barometric pressure readings are plotted on Figure D-4A. The barometric pressure decreased steadily during the first four days of the tidal study. On February 13, 2011, the barometric pressure dropped sharply between about 10:40 AM and 5:00 PM, increased sharply until 5:00 AM on February 14, 2011, and then decreased during the remainder of the study.

Hydrographs

Groundwater and surface water elevation data collected in the stilling well and monitoring wells were used to create hydrographs depicting changes in water levels over time. Appendix D contains figures showing the hydrographs used to evaluate the data.

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Figure D-1 is a plot of surface water level data from stilling well SW-1. Figure D-2 is a hydrograph showing data from all monitoring wells plotted with the surface water level data. Figures D-3 through D-15 show hydrographs of water levels in the monitoring wells plotted with the stilling well data. For most hydrographs, the surface water elevation in SW-1 is plotted on the primary Y axis and groundwater elevation is plotted on the secondary Y axis at an exaggerated scale.

Hydrographs for monitoring wells W-3 (Figure D-3), MW-11 (Figure D-5), MW-A1 (Figure D-9), MW-A2 (Figure D-10), MW-A3 (Figure D-11), MW-A5 (Figure D-13), and MW-A6 (Figure D-14) indicate that water levels in these wells are tidally influenced with tidal fluctuations ranging from 0.1 ft to 1.1 ft.

Hydrographs for monitoring wells MW-19, MW-28, MW-40R, and MW-A4 (Figures D-6, D-7, D-8, and D-12, respectively) indicate minimal tidal influence. Figures D-6A, D-7A, D-8A, and D-12A are hydrographs for these same wells plotted along with barometric pressure. Plots of water levels in these wells generally mirror the barometric pressure curve, indicating that water levels in these wells are most influenced by changes in barometric pressure. The minimal tidal influence indicates that groundwater in these wells may be tidally-influenced. The measured influence may be affected by distance, well depths, wells screened in fill materials and the remains of the former concrete wall around the perimeter of the Site.

The hydrograph for monitoring well W-6 (Figure D-4) indicates minimal response to tidal fluctuations. Water levels in this well decreased generally between February 8, 2011, and February 12, 2011, when the water level increased by more than a foot in a few hours. Water levels in the well then dropped over the next 24 hours, and then increased again during the last day of data collection. Increases in water levels on February 12 and 14 roughly correspond to precipitation events and periods of falling barometric pressure (Figure D-4A).

Water levels in monitoring well MW-A7 changed by less than 0.1 foot throughout the study period (Figure D-15). This well was flowing during this period (Table 2), making it difficult to detect a tidal influence in the water level data.

Mean Groundwater Elevations and Flow Direction

In tidally influenced aquifers, tidal fluctuations can cause short-term and short-range changes in groundwater flow directions and hydraulic gradients. In near-shore aquifers, synoptic measurements of groundwater elevations can lead to mischaracterization of groundwater flow directions and flow patterns. Synoptic measurements can be misleading because they define one point in time, not the average head at monitoring points. In most cases, only the mean groundwater elevations obtained, after the tidal correction is applied, should be used to provide meaningful interpretations of groundwater flow directions and hydraulic gradients. Tidal effects in groundwater elevation data were filtered out using the method described by Serfes (1991). This method requires a minimum of 72 consecutive hourly water-level readings. The method is

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used to filter out dominant tidal fluctuations and determine a mean groundwater elevation at each monitoring point. Using moving averages, a filtered, mean groundwater level was computed for the median time at Hour 36 of the tidal study (Table 3), which corresponds to 3:00 AM on February 10, 2011.

Filtered, mean groundwater elevations for the tidal study period were determined for each of the monitoring wells in the study. Mean groundwater elevations range from 5.29 to 14.53 feet above mean sea level (msl). The mean water level elevation in the stilling well at that time was 3.94 feet msl. Figure 3 is a potentiometric surface map derived from mean groundwater elevations calculated from the transducer data. Figure 3 indicates that the mean direction of groundwater flow at the Property on February 10, 2011, was toward the west.

Tidal Time Lag and Tidal Efficiency

The average time lag and tidal efficiency for monitoring wells exhibiting tidal influence were also calculated from the tidal study data.

The time lag represents the time delay between the timing of tidal cycles and the corresponding fluctuation in groundwater levels. The tidal efficiency is defined as the ratio of tidally induced changes in groundwater levels to tidal changes in surface water levels. Both time lag and tidal efficiency are influenced by a number of factors, including aquifer hydraulic conductivity, storativity, thickness, and distance from to the shoreline.

The calculation of tidal time lag and tidal efficiency can be performed for any time period [from time zero (t_0) to a specified time (t_1)] of groundwater and tidal data if the parameters can be assumed to be constant over this period. For this study, specific data points (i.e., high and low tide and corresponding groundwater levels) were selected as the start and end points. The specific procedure used to calculate tidal efficiency and time lag is summarized below.

- The tidally induced fluctuations in groundwater levels were separated from the observed groundwater levels by subtracting the mean groundwater levels throughout the study period from the measured groundwater elevations.
- The time and magnitude of the high and low tides were identified in tidal records, as were the corresponding groundwater high and low levels.
- The time lag for each tidal cycle at each monitoring well was calculated using Equation (1)

$$t_{lag} = t_i - T_i \quad \text{Equation (1)}$$

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Where

T_i = time of the i^{th} high (or low) tide [T]
 t_i = time for the i^{th} corresponding high (or low) level of the tidally induced groundwater fluctuation [T]

- The average time lag was calculated as the arithmetic mean of the individual tidal time lags calculated from Equation (1).
- The tidal efficiency (E_{tide}) was calculated using Equation (2):

$$E_{tide} = \frac{h_i - h_{i-1}}{H_i - H_{i-1}} \quad \text{Equation (2)}$$

where

H_i = the i^{th} high (or low) tidal elevation [L]
 h_i = the i^{th} corresponding high (or low) level of the tidally induced groundwater fluctuation [L]

Estimates of tidal time lag and tidal efficiency calculated from the tidal study data are provided in Table 4. Tidal efficiency was determined to be minimal in monitoring wells W-6 and MW-A4. The tidal time lag was not calculated for these wells as the limited efficiency made tidal highs and lows difficult to pinpoint. In addition, tidal time lag and tidal efficiency were not calculated from data collected in MW-A7. Total tidal fluctuations in MW-A7 could not be determined since the well was flowing.

Tidal time lag estimates in other wells range from 80 minutes in well MW-A3 to 12 hours 10 minutes at MW-28. Among wells displaying a meaningful tidal signal, tidal time lag was lowest in monitoring wells MW-11 and MW-A3. In general and as expected, monitoring wells west of the Property and closest to the Puget Sound shoreline exhibited shorter time lags. Tidal efficiencies in wells displaying a meaningful tidal signal ranged from 0.81 percent at MW-19 to 7.44 percent at MW-A3. The tidal efficiencies were highest in monitoring wells west of the Property and closest to the Puget Sound shoreline with the exception of MW-11 which is further inland.

DISCUSSION

Groundwater elevations recorded in monitoring wells can be influenced by ocean tides and barometric pressure. Groundwater elevations in tidally influenced aquifers rise in response to increasing surface water elevations and fall in response to decreasing surface water elevations. Increasing barometric pressure tends to depress groundwater elevations, while decreasing pressure can lead to higher groundwater elevations. The manner in which a well/aquifer system responds to changes in atmospheric pressure, however, varies and is directly related to the



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degree of aquifer confinement and hydraulic/storage characteristics of the well/aquifer system (Rasmussen and Crawford 1997).

During the data collection period, daily surface water elevations in stilling well SW-1 fluctuated by about 8–10 feet. Groundwater elevations in most wells west of the Property exhibit tidal influence, with daily fluctuations of 0.1 feet to 1.1 feet. The time lag between surface water and groundwater highs and lows in these wells ranges from about 1.5 to 2.5 hours.

Groundwater levels in most on-Property wells fluctuate slightly in response to tides but are influenced more by changes in barometric pressure than by tidal fluctuations. The exception is well MW-11, which responds to tidal fluctuations more like wells closer to Puget Sound and is less influenced by changes in barometric pressure.

Monitoring wells MW-11 and MW-A3 both have low time lags and are located in the southern portion of the study area. Monitoring MW-19, also a well in the southern portion of the site and located between MW-A3 and MW-11, is completed only 5 feet below ground surface which may be insufficient to measure tidally-influenced groundwater. Additionally, MW-11's proximity to the California Street roadway construction area may have resulted in promoting a connection with areas further west.

A potentiometric surface map was prepared using mean groundwater elevations calculated from groundwater level data collected from monitoring wells, which were then corrected for tidal influence. The resulting map indicates that the average direction of groundwater flow in the area is westward toward Puget Sound.

Sincerely,

AMEC Earth & Environmental, Inc.

Heather Vick
Senior Hydrogeologist

Gary Dupuy
Principal Hydrogeologist

HV/km
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Enclosures: Attachment A Figures

Figure 1 Site Location Map

Figure 2 Monitoring Wells Used in Tidal Study, February 2011

Figure 3 Contour Map of Mean Groundwater Elevations, February 2011

AGENCY DRAFT

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Attachment B Tables

Table 1 Specifications of Monitoring Wells Used in Tidal Study

Table 2 Water Level Data Collected During Tidal Study

Table 3 Mean Groundwater Elevations

Table 4 Estimates of Tidal Time Lag and Tidal Efficiency

Attachment C Pressure Transducer Specifications and Information

Attachment D Hydrographs

Attachment E Pressure Transducer Data (will be issued as a PDF for Final report)

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REFERENCES

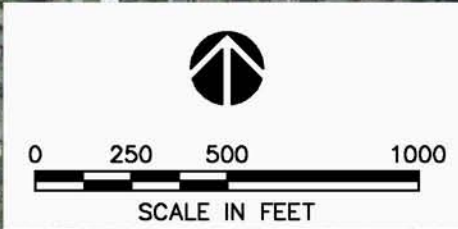
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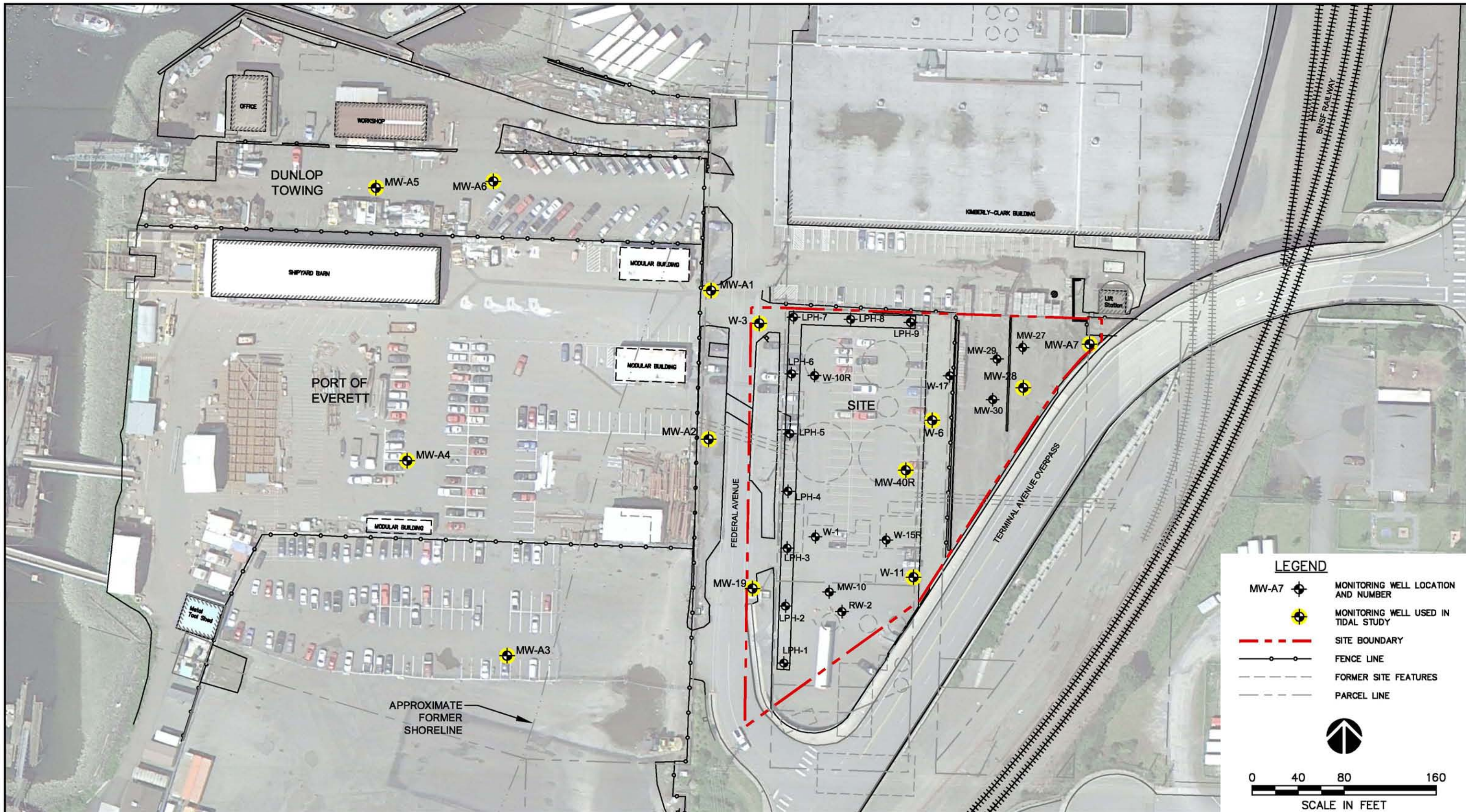
ATTACHMENT A

Figures

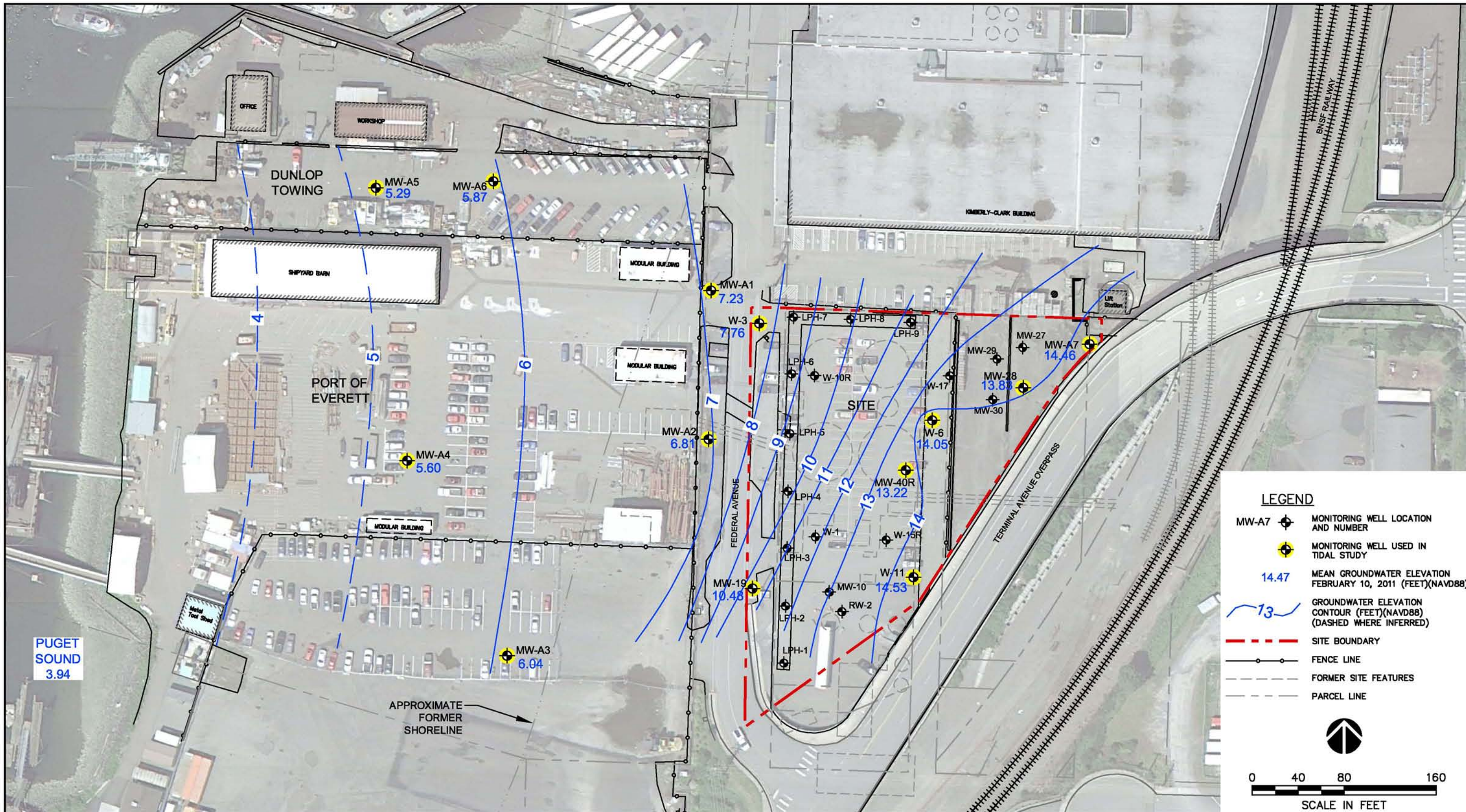
AGENCY DRAFT



AMEC Earth & Environmental 11810 North Creek Parkway North Bothell, WA, U.S.A. 98011-8201				CLIENT LOGO		CLIENT EXXONMOBIL/ AMERICAN DISTRIBUTING CO.			
PROJECT EXXONMOBIL/ADC PROPERTY				DWN BY: APS		DATUM: NAD83 N FT		DATE: FEBRUARY 2011	
TITLE SITE LOCATION MAP				CHK'D BY: HV		REV. NO.: -		PROJECT NO: 9-915-15716-E	
				PROJECTION: WASP		SCALE: AS SHOWN		FIGURE No. 1	



SOURCE: Base map modified from a map provided by City of Everett, ExxonMobil Oil Corporation and Environmental Resolutions, Inc.	CLIENT LOGO	CLIENT:	DWN BY:	PROJECT	DATE:
		EXXONMOBIL AMERICAN DISTRIBUTING CO.	APS	EXXONMOBIL/ADC PROPERTY	FEBRUARY 2011
			CHK'D BY:		PROJECT NO:
			LV/AS/MS		9-915-15716-E
			DATUM:	TITLE	REV. NO.:
			NAD 83 N FT	MONITORING WELLS USED IN TIDAL STUDY, FEBRUARY 2011	
			PROJECTION:		FIGURE No.
			WASP		2
			SCALE:		
			AS SHOWN		



SOURCE: Base map modified from a map provided by City of Everett, ExxonMobil Oil Corporation and Environmental Resolutions, Inc.	CLIENT LOGO	CLIENT:	DWN BY:	PROJECT	DATE:
		EXXONMOBIL AMERICAN DISTRIBUTING CO.	APS	EXXONMOBIL/ADC PROPERTY	FEBRUARY 2011
			CHK'D BY:		PROJECT NO:
			LV/AS/MS		9-915-15716-E
			DATUM:	TITLE	REV. NO.:
			NAD 83 N FT	CONTOUR MAP OF MEAN GROUNDWATER ELEVATIONS, FEBRUARY 2011	
			PROJECTION:		FIGURE No.
			WASP		3
			SCALE:		
			AS SHOWN		



ATTACHMENT B

Tables



TABLE 1

SPECIFICATIONS OF MONITORING WELLS USED IN TIDAL STUDY

ExxonMobil/ADC Property
Everett, Washington

Well No.	Date Installed	Measured Depth (feet bgs) ¹	Screened Interval Depth (feet bgs)	Summary of Lithology
W-3	Feb-90	22.9	3 to 23	Sand
W-6	Feb-90	6.5	NS in log	Sand; organic clay
MW-11	Mar-88	18.72	NS in log	Sand (fill); peat
MW-19	Mar-91	5.26	NS in log	Sand
MW-28	Jun-91	12.18	2.5 to 11.5	Silty sand; peat
MW-40R	Jun-91	12.51	No log	No log
MW-A1	8-Feb	14.9	5 to 15	Sand
MW-A2	8-Feb	12.18	5 to 15	Silty sand; peat
MW-A3	10-Jun	15.7	5 to 15	Sand; silty sand
MW-A4	10-Jun	17.3	7 to 17	Silty sand
MW-A5	10-Jun	17.1	7 to 17	Sand; gravel
MW-A6	10-Jun	17.5	7 to 17	Silty sand; peat
MW-A7	10-Dec	12.9	3 to 13	Sand

Notes

1. On December 13, 2010, total depth of well and depth to water were measured prior to installation of the pressure transducer.

Abbreviations

bgs=below ground surface
NS = Not specified



TABLE 2

MANUAL WATER LEVEL DATA COLLECTED DURING TIDAL STUDY
ExxonMobil/ADC Property
Everett, Washington

Well No.	TOC Elevation ¹	Date	Time	Depth to Water ^{2,3} (feet)	Water Level Elevation ⁴	Date	Time	Depth to Water ^{3,5} (feet)	Water Level Elevation ⁴	Date	Time	Depth to Water ^{3,5}	Water Level Elevation ⁴
W-3	13.27	2/8/2011	12:36 PM	5.46	7.81	2/11/2011	5:42 PM	5.47	7.80	2/14/2011	12:36 PM	5.16	8.11
W-6	14.95	2/8/2011	12:24 PM	0.85	14.10	2/11/2011	5:18 PM	1.28	13.67	2/14/2011	11:54 AM	0.08	14.87
MW-11	16.28	2/8/2011	11:36 AM	1.68	14.60	2/11/2011	5:12 PM	1.85	14.43	2/14/2011	11:30 AM	1.52	14.76
MW-19	12.79	2/8/2011	11:42 AM	2.29	10.50	2/11/2011	5:06 PM	2.32	10.47	2/14/2011	11:18 AM	2.11	10.68
MW-28	13.86	2/8/2011	1:00 PM	0.15	14.01	2/11/2011	5:36 PM	0.01	13.87	2/14/2011	12:12 PM	0.21	14.07
MW-40R	15.56	2/8/2011	12:12 PM	2.28	13.28	2/11/2011	5:34 AM	2.30	13.26	2/14/2011	11:42 AM	2.02	13.54
MW-A1	14.07	2/8/2011	12:42 PM	6.69	7.38	2/11/2011	5:00 PM	7.01	7.06	2/14/2011	1:12 PM	6.55	7.52
MW-A2	12.56	2/8/2011	11:54 AM	5.39	7.17	2/11/2011	5:06 PM	5.56	7.00	2/14/2011	12:48 PM	5.18	7.38
MW-A3	13.79	2/8/2011	9:42 AM	7.35	6.44	2/11/2011	4:36 PM	8.02	5.77	2/14/2011	1:24 PM	7.02	6.77
MW-A4	16.33	2/8/2011	1:42 PM	10.73	5.60	2/11/2011	4:42 PM	10.73	5.60	2/14/2011	1:18 PM	10.55	5.78
MW-A5	17.74	2/8/2011	1:24 PM	12.16	5.58	2/11/2011	4:48 PM	12.44	5.30	2/14/2011	12:54 PM	11.67	6.07
MW-A6	16.94	2/8/2011	1:30 PM	11.02	5.92	2/11/2011	4:54 PM	11.21	5.73	2/14/2011	1:06 PM	10.84	6.10
MW-A7	14.20	2/8/2011	1:06 PM	0.21	14.41	2/11/2011	5:30 PM	flowing	NA	2/14/2011	12:16 PM	flowing	NA
SW-1 ⁶	17.28	2/8/2011	10:54 AM	12.26	5.02	2/11/2011	NM	NM	NM	2/14/2011	11:06 AM	9.46	7.82

Notes

1. TOC elevation is in feet above mean sea level.
2. Depth to water measured at the time of installation of pressure transducer on February 8, 2011.
3. Grey shading indicates water level was above PVC TOC
4. Groundwater elevation is in feet above mean sea level.
5. Depth to water measured at the time of removal of pressure transducer on February 14, 2011.
6. SW-1 is a stilling well installed on Everett Pier.

Abbreviations

- NA = not applicable
- NM = not measured due to lack of access
- TOC = top of casing



TABLE 3

MEAN GROUNDWATER ELEVATIONS

ExxonMobil/ADC Property
Everett, Washington

Well No.	Mean Groundwater Elevation ¹ (feet MSL)
W-3	7.76
W-6	14.05
MW-11	14.53
MW-19	10.48
MW-28	13.83
MW-40R	13.22
MW-A1	7.23
MW-A2	6.81
MW-A3	6.04
MW-A4	5.60
MW-A5	5.29
MW-A6	5.87
MW-A7	14.46
SW-1 ²	3.94

Notes

1. Mean groundwater elevations calculated to adjust for tidal influence, as discussed in text.
2. SW-1 is a stilling well installed on Everett Pier.

Abbreviations

feet MSL = feet above mean sea level



TABLE 4
ESTIMATES OF TIDAL TIME LAG AND TIDAL EFFICIENCY
 ExxonMobil/ADC Property
 Everett, Washington

Monitoring Well Number	Tidal Time Lag ¹ (hours:minutes)	Tidal Efficiency ²
W-3	5:16	1.14%
W-6	IDQ	minimal
MW-11	1:36	2%
MW-19	6:36	0.81%
MW-28	12:10	1.13%
MW-40R	7:24	1.20%
MW-A1	2:08	2.80%
MW-A2	2:24	1.77%
MW-A3	1:20	7.44%
MW-A4	IDQ	minimal
MW-A5	2:42	5.38%
MW-A6	2:26	2.55%
MW-A7	IDQ	IDQ

Notes

1. The tidal time lag is the average time difference between tidal fluctuations in Puget Sound and the corresponding response observed in a monitoring well.
2. The tidal efficiency is the ratio of water level change in a monitoring well to the corresponding change in water level in Puget Sound.

Abbreviations

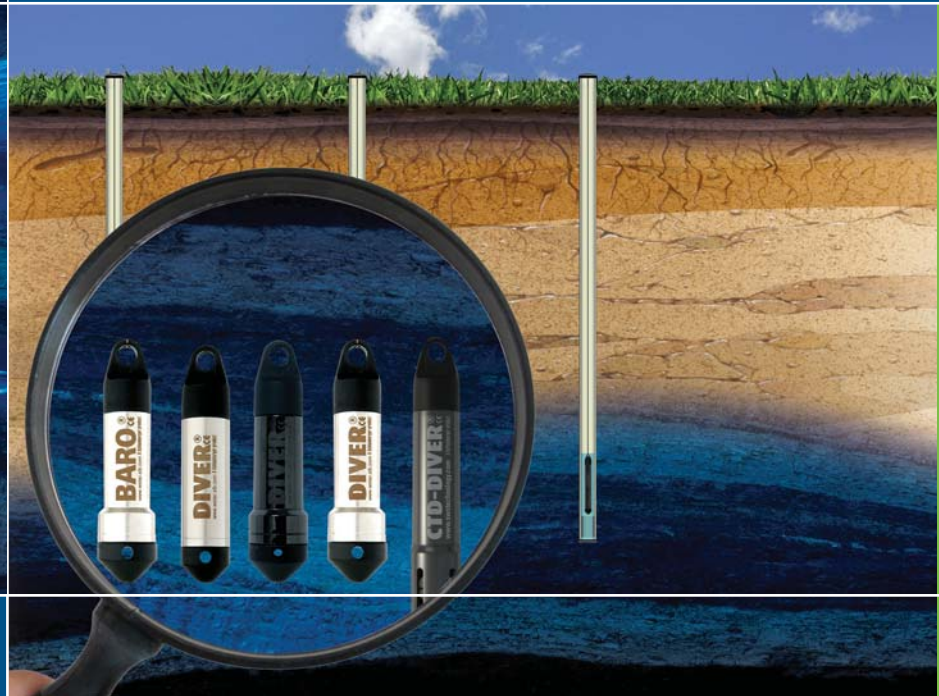
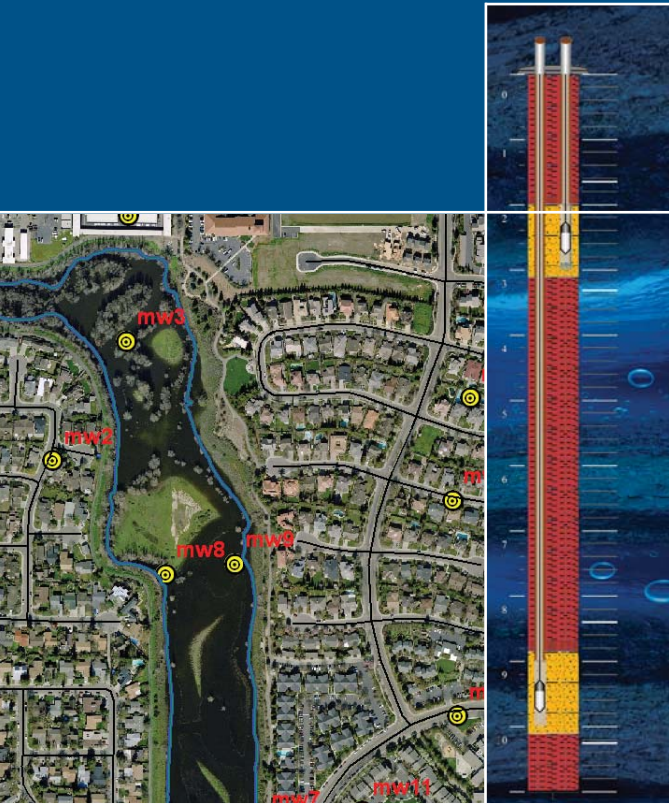
NS = Not specified
 IDQ = Insufficient data quality



ATTACHMENT C

Pressure Transducer Specifications and Information

Diver-Suite



*Reliable, accurate groundwater
Diver dataloggers and software*

Diver-Suite

SMART MONITORING TECHNOLOGY

Diver-Suite*, from Schlumberger Water Services, provides groundwater and environmental professionals with state-of-the-art instrumentation technology for monitoring groundwater networks.

Available in several models, this robust line of Diver* dataloggers accurately measures and records fluctuations in groundwater levels, temperature and conductivity[†].

SUITABLE FOR ANY ENVIRONMENT

From the technologically advanced Micro-Diver* to the corrosion resistant CTD-Diver*, Diver dataloggers are hermetically sealed to external effects, so moisture and/or electrical influences cannot affect measurement results. With an extended battery life, this translates to long-term uninterrupted service. All Divers are calibrated to operate from 32 °F to 122°F.

WIDE RANGE OF APPLICATIONS

- Long-term water level monitoring
- Groundwater monitoring network automation
- Pumping and slug tests
- Watershed, drainage basin and recharge areas
- Stream gauging, lake levels and reservoirs
- Harbour and tidal fluctuation monitoring
- Wetlands and stormwater run-off monitoring
- Aquifer storage and recovery projects
- Saltwater intrusion projects
- Discharge monitoring
- Monitoring landfill sites
- Monitoring groundwater and surface water interactions

ACCURATE MEASUREMENTS

Divers monitor groundwater level and temperature with a typical accuracy of up to ±0.05% FS (Full Scale). In addition, the CTD-Diver is equipped with a four-electrode sensor for accurately recording conductivity.

From the Field to the Office



Field Advantage

Achieve precise measurements of groundwater levels, temperature, and conductivity in the field. Diver-Suite is part of a full range of products designed to streamline your monitoring workflow.



Office Integration

Program multiple Diver dataloggers, download measurements onto your PC, and export data to a spreadsheet or modeling program - Diver-VisiONE* is a flexible "project-based" data management application designed for exchanging critical Diver information.

Mini-Diver

A proven concept

The Mini-Diver* is based on an ingenious and proven concept and is acknowledged as the most reliable instrument for the autonomous measuring and recording of groundwater level and temperature. Its internal memory of 24000 measurements per parameter provides sufficient capacity to perform nearly one measurement every ten minutes for six months. For each measurement, the Diver registers the date and time, groundwater level, and temperature.



Highlights:

- hermetically sealed in stainless steel housing
- fixed measurements
- suitable for small diameter wells

General Specifications

Dimensions	ø 0.87 in x 3.54 in.
Memory	24000 measurements
Wetted parts	
housing	stainless steel (316L)
o-rings	fluorocarbon rubber (FKM)
pressure sensor	ceramic (Al ₂ O ₃)
cap / nose cone	Akulon (PAG 30%)
Battery life	Dependant on usage
Sample interval	0.5 second to 99 hours
Mass	0.15 lbs

Temperature specifications

range / compensated	-4 °F to 176 °F / 32 °F to 122 °F
accuracy*	±0.18 °F
resolution	0.018 °F

Pressure specifications

Type	DI 501	DI 502	DI 505	DI 510
Range	32.8 ftH ₂ O	65.6 ftH ₂ O	164 ftH ₂ O	328 ftH ₂ O
- accuracy*	±0.2 inH ₂ O	±0.4 inH ₂ O	±0.98 inH ₂ O	±1.97 inH ₂ O
- resolution	0.08 inH ₂ O	0.16 inH ₂ O	0.4 inH ₂ O	0.79 inH ₂ O

* typical accuracy

[†]Only available with CTD-Diver.

Micro-Diver

Small in size, great in performance

Measuring only 3.54 in in length and 0.71 in in diameter, the Micro-Diver is the smallest Diver capable of accurately recording groundwater levels and temperature. Micro-Diver is specifically designed for monitoring wells too small to accommodate larger data loggers. In addition to its compact size, the Micro-Diver's memory capacity can store up to 48000 measurements per parameter - almost one measurement every ten minutes for an entire year.



AGENCY DRAFT

- hermetically sealed in stainless steel housing
- various measurement methods: fixed, event dependent, averaging, and pumping test
- suitable for 0.75 inch monitoring wells

General Specifications

Dimensions	ø0.71 in x 3.54 in.
Memory	48000 measurements
Wetted parts	
housing	stainless steel (316L)
o-rings	fluorocarbon rubber (FKM)
pressure sensor	ceramic (Al ₂ O ₃)
cap / nose cone	Akulon (PAG 30%)
Battery life	Dependant on usage
Sample interval	0.5 second to 99 hours
Mass	0.13 lbs

Temperature specifications

range / compensated	-4 °F to 176 °F / 32 °F to 122 °F
accuracy*	±0.18 °F
resolution	0.018 °F

Pressure specifications

Type	DI 601	DI 602	DI 605	DI 610
Range	32.8 ftH ₂ O	65.6 ftH ₂ O	164 ftH ₂ O	328 ftH ₂ O
- accuracy*	±0.4 inH ₂ O	±0.79 inH ₂ O	±1.97 inH ₂ O	±3.94 inH ₂ O
- resolution	0.08 inH ₂ O	0.16 inH ₂ O	0.4 inH ₂ O	0.79 inH ₂ O

* typical accuracy

Cera-Diver

At home in any environment

Monitoring groundwater under potentially corrosive conditions, such as brackish water and seawater, requires a robust and durable datalogger. The ceramic-shelled Cera-Diver* is designed specifically for such environments. This highly reliable and compact Diver measures groundwater levels with a typical accuracy of ±0.05% (FS). The Cera-Diver is equipped with a memory for 48000 measurements per parameter.



Highlights:

- hermetically sealed in ceramic housing
- various measurement methods: fixed, event dependent, averaging, and pumping test
- robust corrosion resistant housing

General Specifications

Dimensions	ø0.71 in x 3.54 in.
Memory	48000 measurements
Wetted parts	
housing	ceramic (ZrO ₂)
o-rings	fluorocarbon rubber (FKM)
pressure sensor	ceramic (Al ₂ O ₃)
cap / nose cone	Akulon (PAG 30%)
Battery life	Dependant on usage
Sample interval	0.5 second to 99 hours
Mass	0.12 lbs

Temperature specifications

range / compensated	-4 °F to 176 °F / 32 °F to 122 °F
accuracy*	±0.18 °F
resolution	0.018 °F

Pressure specifications

Type	DI 701	DI 702	DI 705	DI 710
Range	32.8 ftH ₂ O	65.6 ftH ₂ O	164 ftH ₂ O	328 ftH ₂ O
- accuracy*	±0.2 inH ₂ O	±0.4 inH ₂ O	±0.98 inH ₂ O	±1.97 inH ₂ O
- resolution	0.08 inH ₂ O	0.16 inH ₂ O	0.4 inH ₂ O	0.79 inH ₂ O

* typical accuracy

CTD-Diver

Reliable in all conditions

Where there is a need to monitor not only groundwater levels but also saltwater intrusion, injected wastewater, or contamination from chemical discharges and landfill sites, the ceramic-casing on the CTD-Diver is the instrument of choice. In addition to the pressure and temperature sensor, the CTD-Diver has a four-electrode conductivity sensor for reading conductivity across an expanded measurement range (0-120 mS/cm). There are two options for measuring conductivity: displaying measured conductivity or specific conductivity at 77 °F.

The CTD-Diver accurately records up to 48000 measurements of groundwater levels, temperature, and conductivity with corresponding date and time.



Highlights

- Hermetically sealed in ceramic housing
- Various measurement methods: fixed, event-dependent, averaging, and pumping test
- Robust corrosion resistant sensor and housing

General Specifications

Dimensions	ø0.87 in x 5.3 in
Memory	48000 measurements
Wetted parts	
housing	ceramic (ZrO ₂)
conductivity sensor housing	ceramic (ZrO ₂)
conductivity sensor	platinum electrodes on ceramic (Al ₂ O ₃) carrier
o-rings	fluorocarbon rubber (FKM)
pressure sensor	ceramic (Al ₂ O ₃)
cap / nose cone	Akulon (PAG 30%)
Battery life	Dependant on usage
Sample interval	1 second to 99 hours
Mass	0.21 lbs

Temperature specifications

range / compensated	-4 °F to 176 °F / 32 °F to 122 °F
accuracy*	±0.18 °F
resolution	0.018 °F

Conductivity specifications

user adjustable range	10 µS/cm to 120 mS/cm
accuracy*	± 1 % of reading
resolution	± 0.1 % of reading

Pressure specifications

Type	DI 271	DI 272	DI 273
Range	32.8 ftH ₂ O	164 ftH ₂ O	328 ftH ₂ O
- accuracy*	±0.2 inH ₂ O	±0.98 inH ₂ O	±1.97 inH ₂ O
- resolution	0.08 inH ₂ O	0.4 inH ₂ O	0.79 inH ₂ O

* typical accuracy

Baro-Diver

Compensate barometric pressure

The Baro-Diver* ensures that you accurately capture changes in atmospheric pressure. Conveniently priced and easy to adjust, one Baro-Diver covers a radius of up to 9 miles, depending on the topography.

Based on proven, innovative technology, the Baro-Diver has an internal memory capable of storing 24000 measurements per parameter.

For each measurement, the Baro-Diver simultaneously registers barometric pressure, air temperature, date and time.



Highlights:

- measures atmospheric pressure for accurate barometric compensation of Divers
- hermetically sealed in stainless steel housing

General Specifications

Dimensions	ø0.87 in x 3.54 in.
Memory	24000 measurements
Wetted parts	
housing	stainless steel (316L)
o-rings	fluorocarbon rubber (FKM)
pressure sensor	ceramic (Al ₂ O ₃)
cap / nose cone	Akulon (PAG 30%)
Battery life	Dependant on usage
Sample interval	0.5 second to 99 hours
Mass	0.15 lbs

Temperature specifications

range / compensated	-4 °F to 176 °F / 14 °F to 122 °F
accuracy*	±0.18 °F
resolution	0.018 °F

Pressure specifications

Type	DI 500
Range	4.9 ftH ₂ O
- accuracy*	±0.2 inH ₂ O
- resolution	0.08 inH ₂ O

* typical accuracy

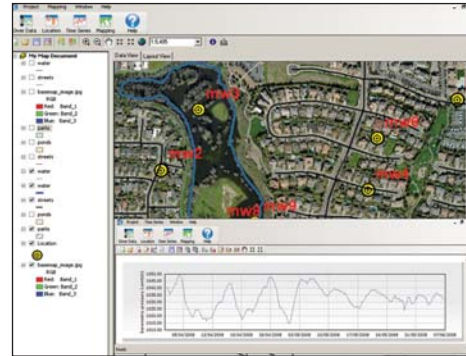
Diver data management software

User-friendly applications for your Desktop or Handheld PC

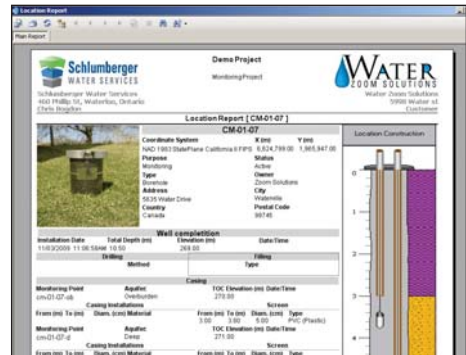
Diver-Vision[®]

The Diver-Vision[®] software provides users with a full range of graphical tools for management of well location details, displaying borehole lithology and well construction, plotting time-varying Diver data (groundwater water elevation, temperature, conductivity), and mapping capabilities in a seamlessly integrated groundwater software package.

- **Monitoring Well Data Management** - Create, modify, and display X, Y, Z location data, borehole lithology, well construction design, and time-series.
- **Mapping** - View and label your monitoring well data over a map and display attribute data at each point using the power of the built in ESRI ArcGIS[®] Engine[†]
- **Expanded Data Options** - Capture a full range of environmental variables affecting groundwater recharge including precipitation, evaporation, discharge, and manual measurements.
- **QA/QC and Statistics** - Identify data anomalies, understand spatial and temporal trends, and gain confidence in the data assessments.
- **Reporting Automation** - Quickly create customized reports that incorporate logo and company details, site photos, well completion and lithology profiles, monitoring data, sampling dates, and other information.
- **Data Flexibility** - Export location profiles to an image, import/export time-series to MS Excel[™] and import from MS Access[™], export maps to Google[®] Earth[™] or as ESRI Shapefile[†] format.



Map monitoring wells and plot time-series



Report on well construction and lithology

MS Excel and MS Access are trademarks of Microsoft Corp

Diver-Pocket Reader

Built for your Handheld PC or PDA, the Diver-Pocket Reader[®] software reads data stored in Diver dataloggers, displays time-series plots, and exports data to various formats. Download a complimentary version from our website www.swstechnology.com

Diver-Pocket Manager

The Diver-Pocket Manager[®] software extends the features of Diver-Pocket Reader, with the added capability to program Divers, including the measurement method, frequency, and the start date/time.

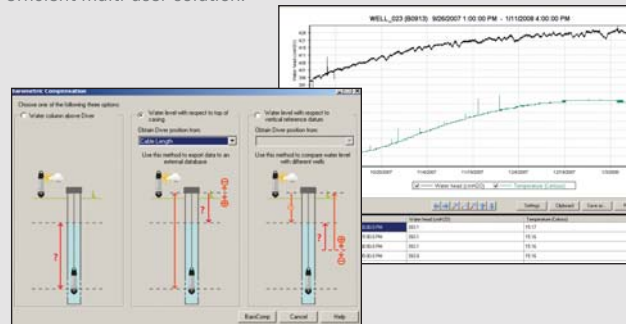


Diver-Office

Use the Diver-Office[®] desktop application to calibrate, read, and program all Divers in the Diver-Suite. Download measurements onto your PC, view time series data in a plot or tabular form, and export data to a spreadsheet or groundwater modeling program. Download a complimentary version from our website www.swstechnology.com

Diver-Office Network

Diver-Office Network[®] extends the features of Diver-Office, with the added capability to share your database over a network, providing an efficient multi-user solution.





About Schlumberger Water Services

Managing the world's water resources is no small task. We tackle global water challenges with our worldwide network of hydrologists, geologists, and environmental experts. Combined with powerful and cost-effective technologies, we are successfully managing the world's water resources, for now and the future.

Our people and technology drive your success.





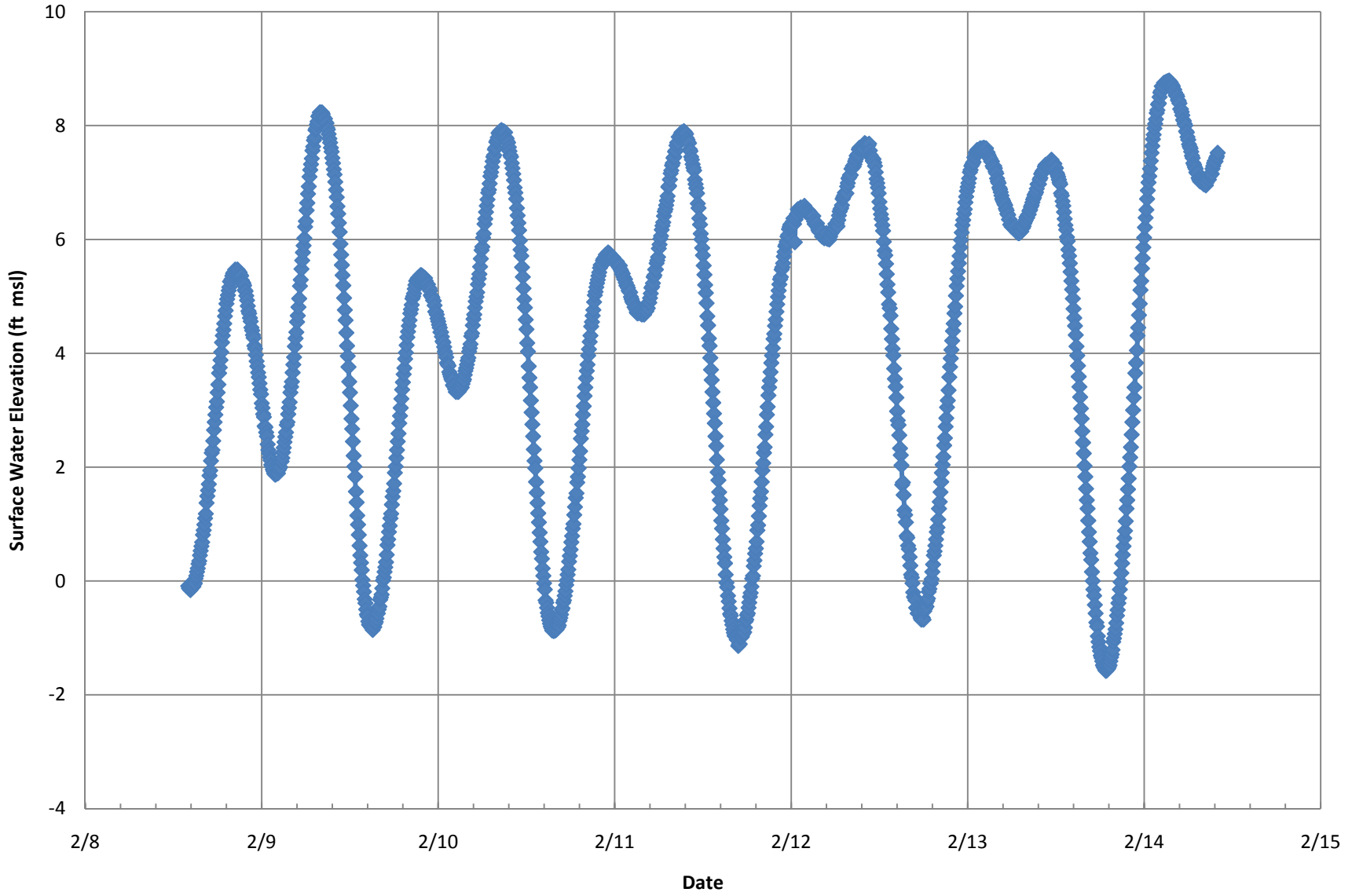
ATTACHMENT D

Hydrographs

AGENCY DRAFT

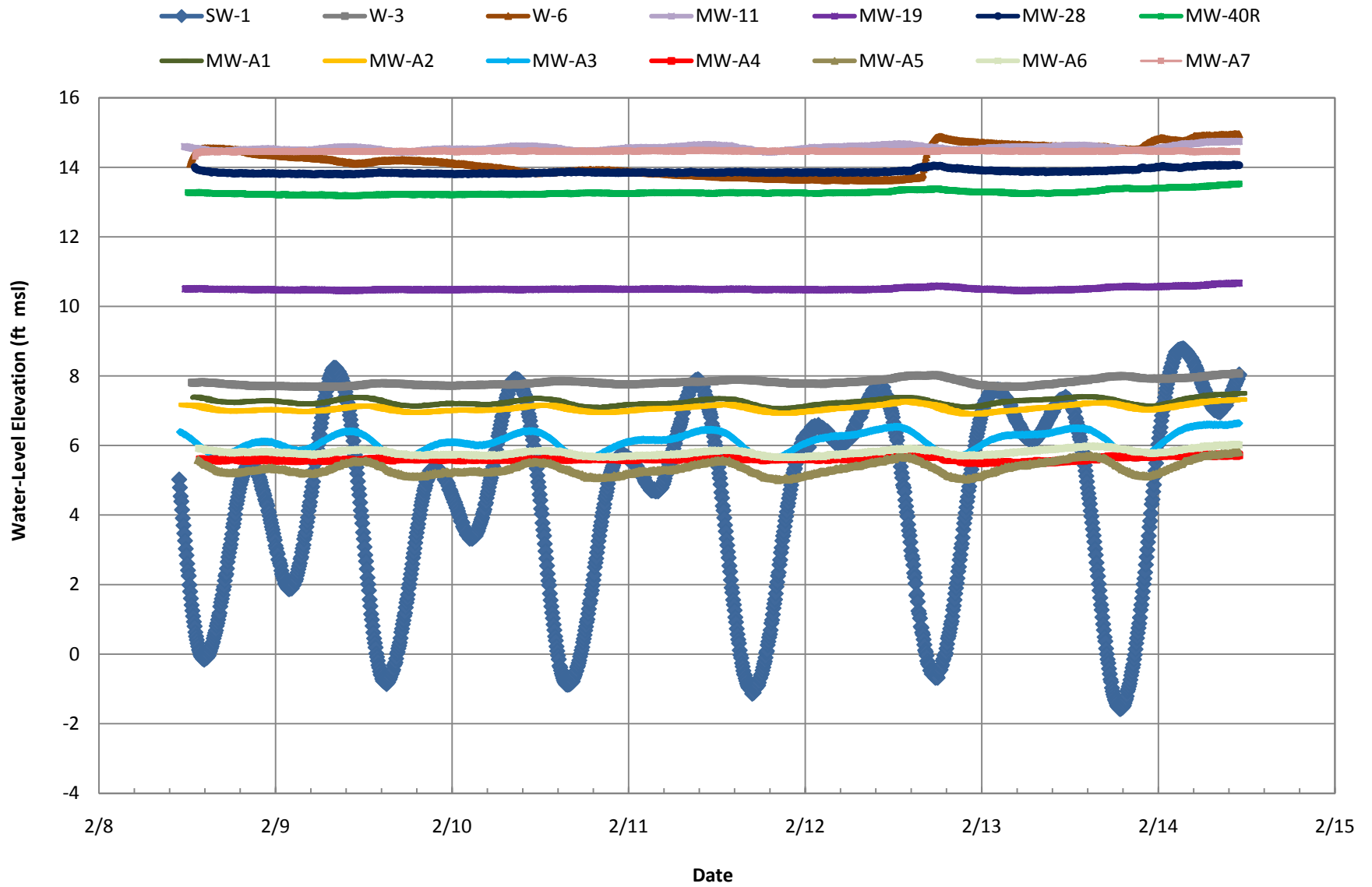
FIGURE D-1
Hydrograph of Stilling Well SW-1
February 8 - 14, 2011

—◆— SW-1



AGENCY DRAFT

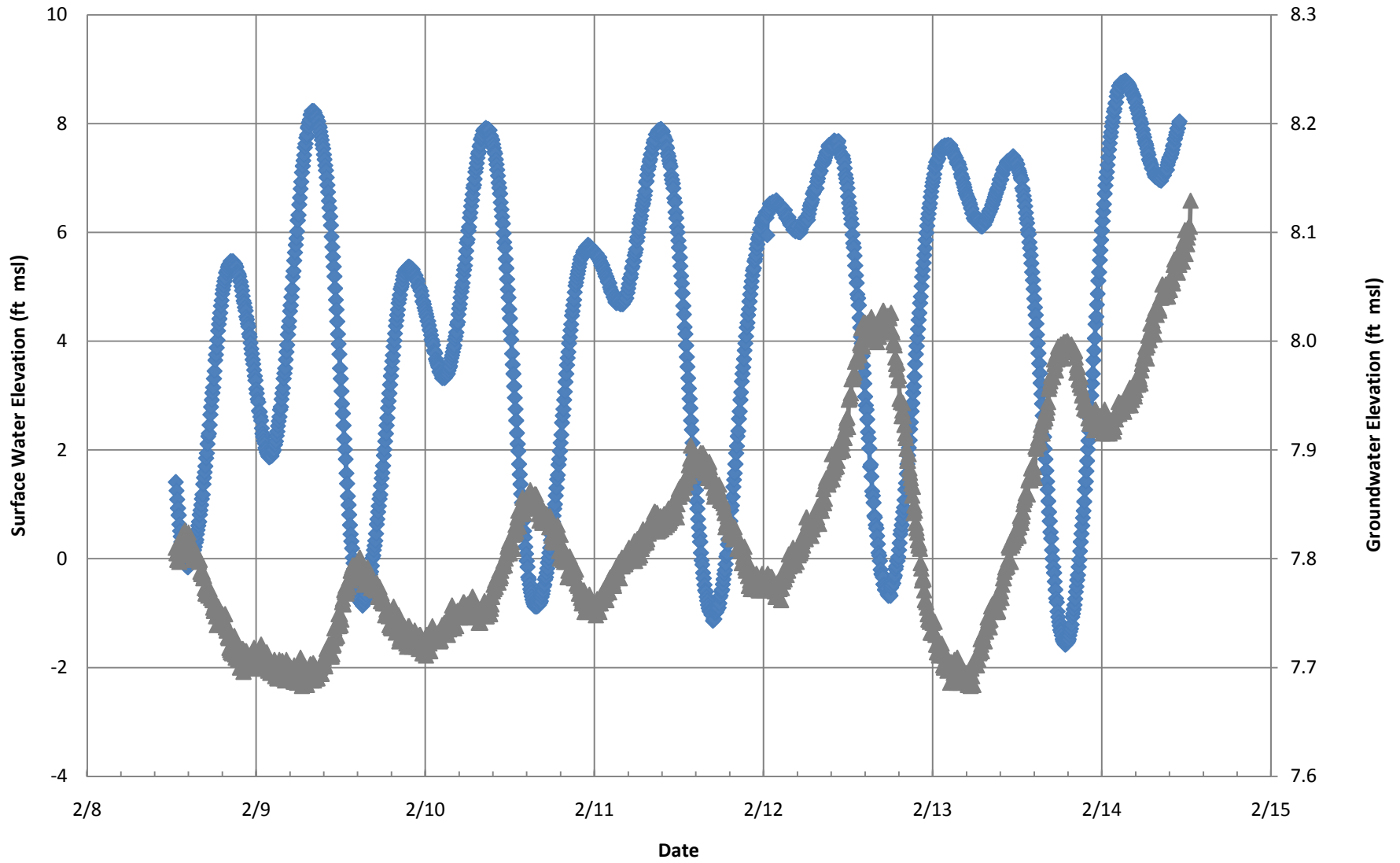
FIGURE D-2
Hydrographs of Surface Water and Groundwater
February 8 - 14, 2011



AGENCY DRAFT

FIGURE D-3
Hydrograph of W-3
February 8 - 14, 2011

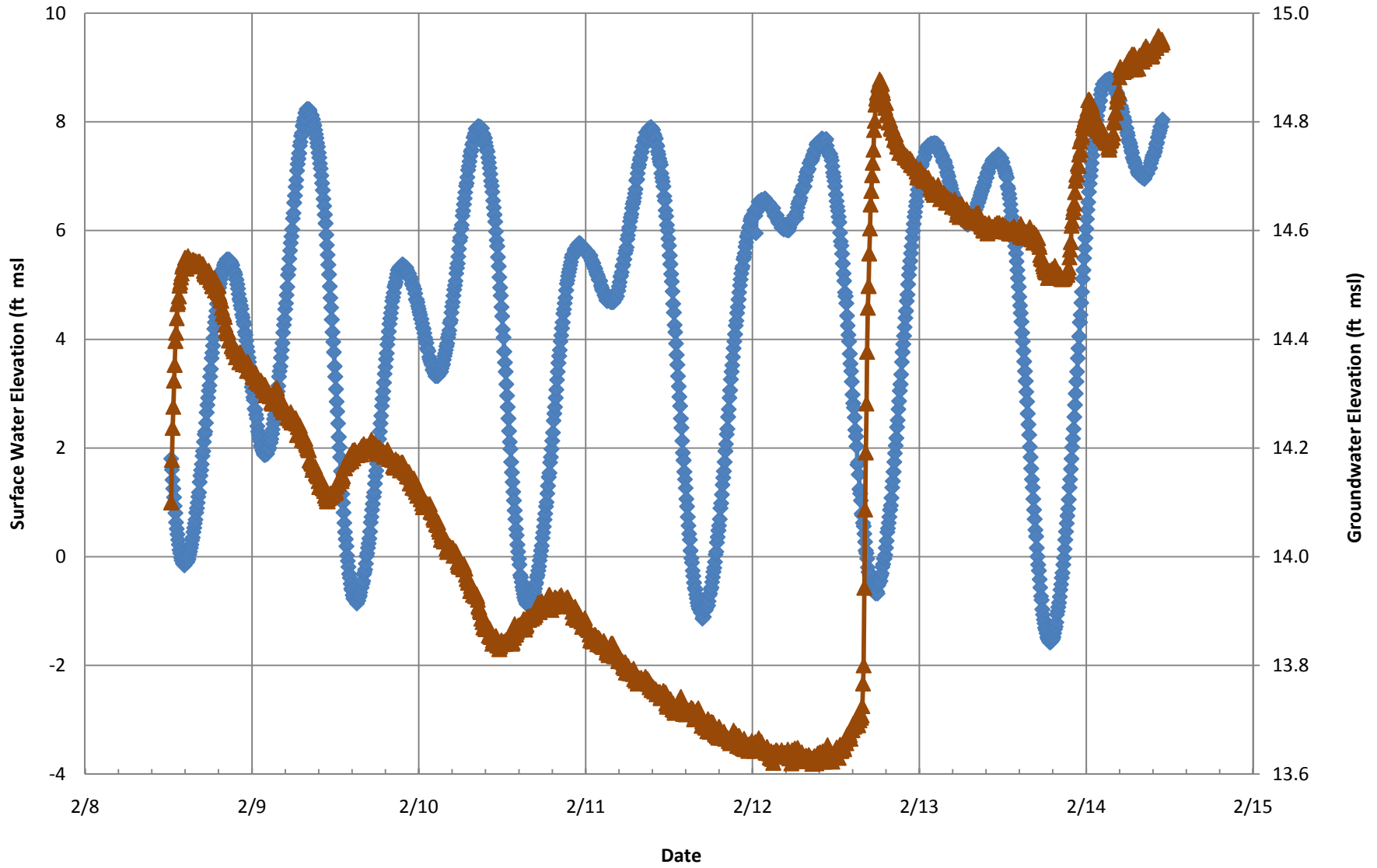
SW-1 W-3



AGENCY DRAFT

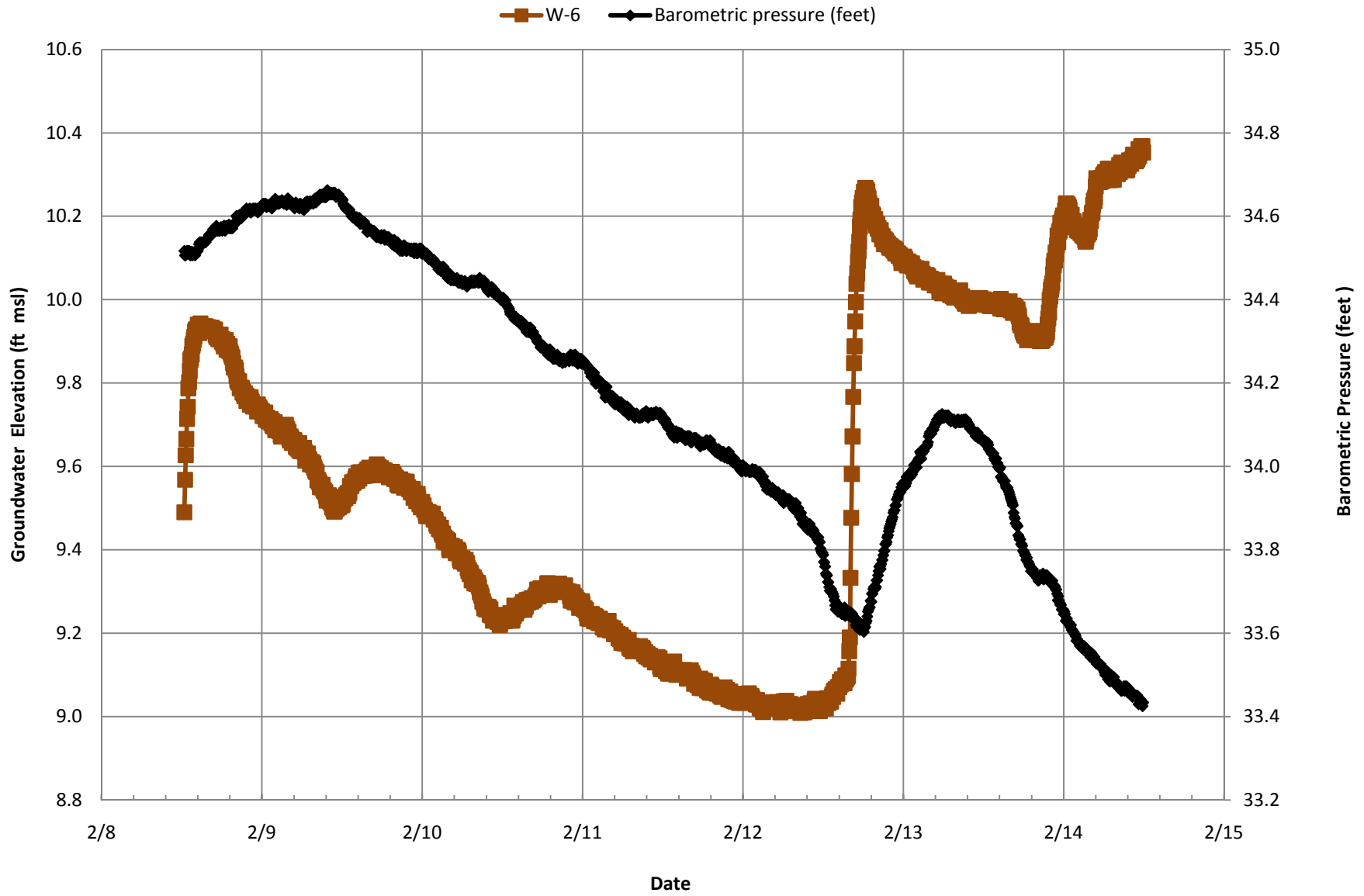
FIGURE D-4
Hydrograph of W-6
February 8 - 14, 2011

—◆— SW-1 —▲— W-6



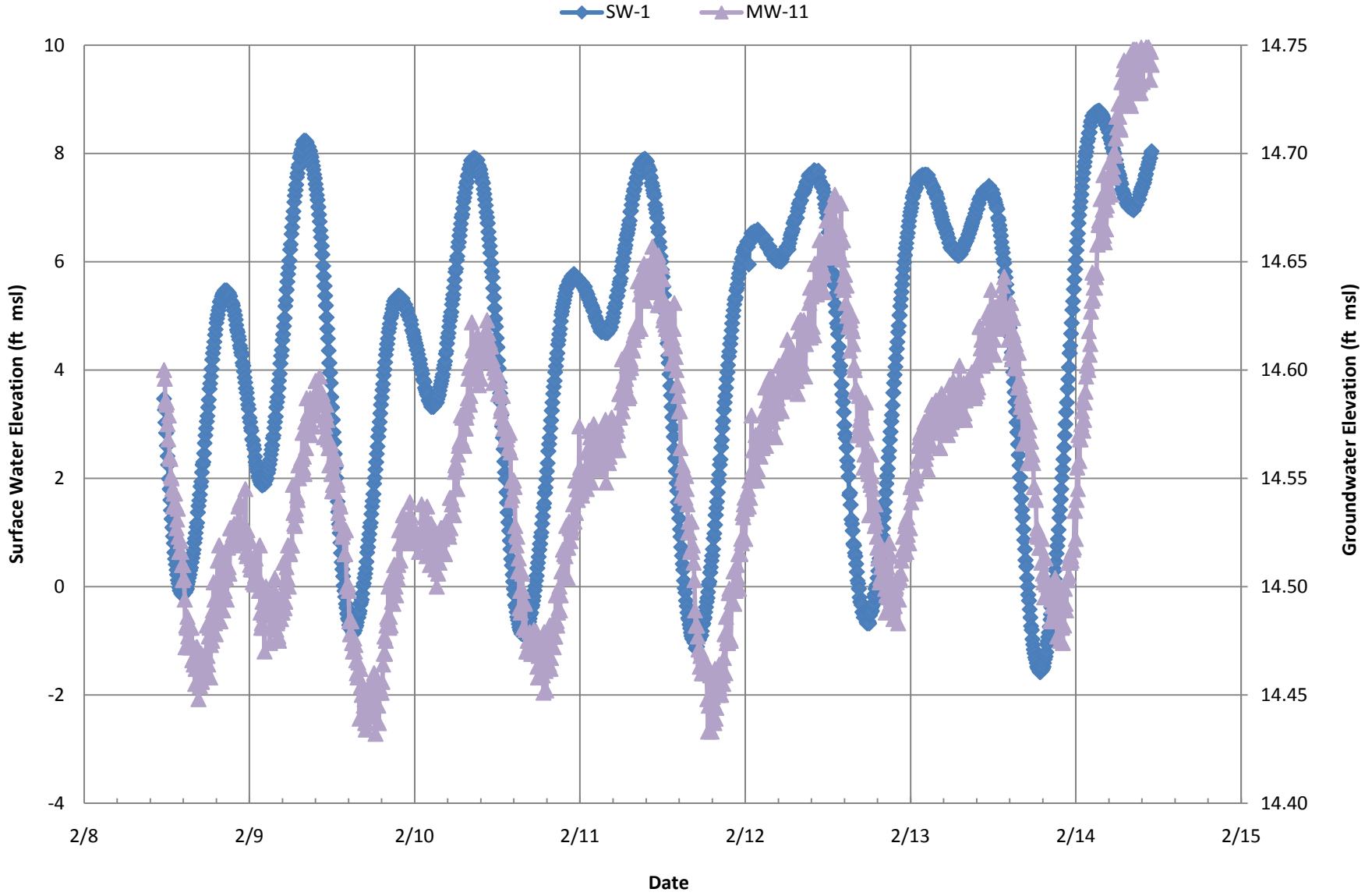
AGENCY DRAFT

FIGURE D-4A
Hydrograph of W6 & Barometric Pressure
February 8 - 14, 2011



AGENCY DRAFT

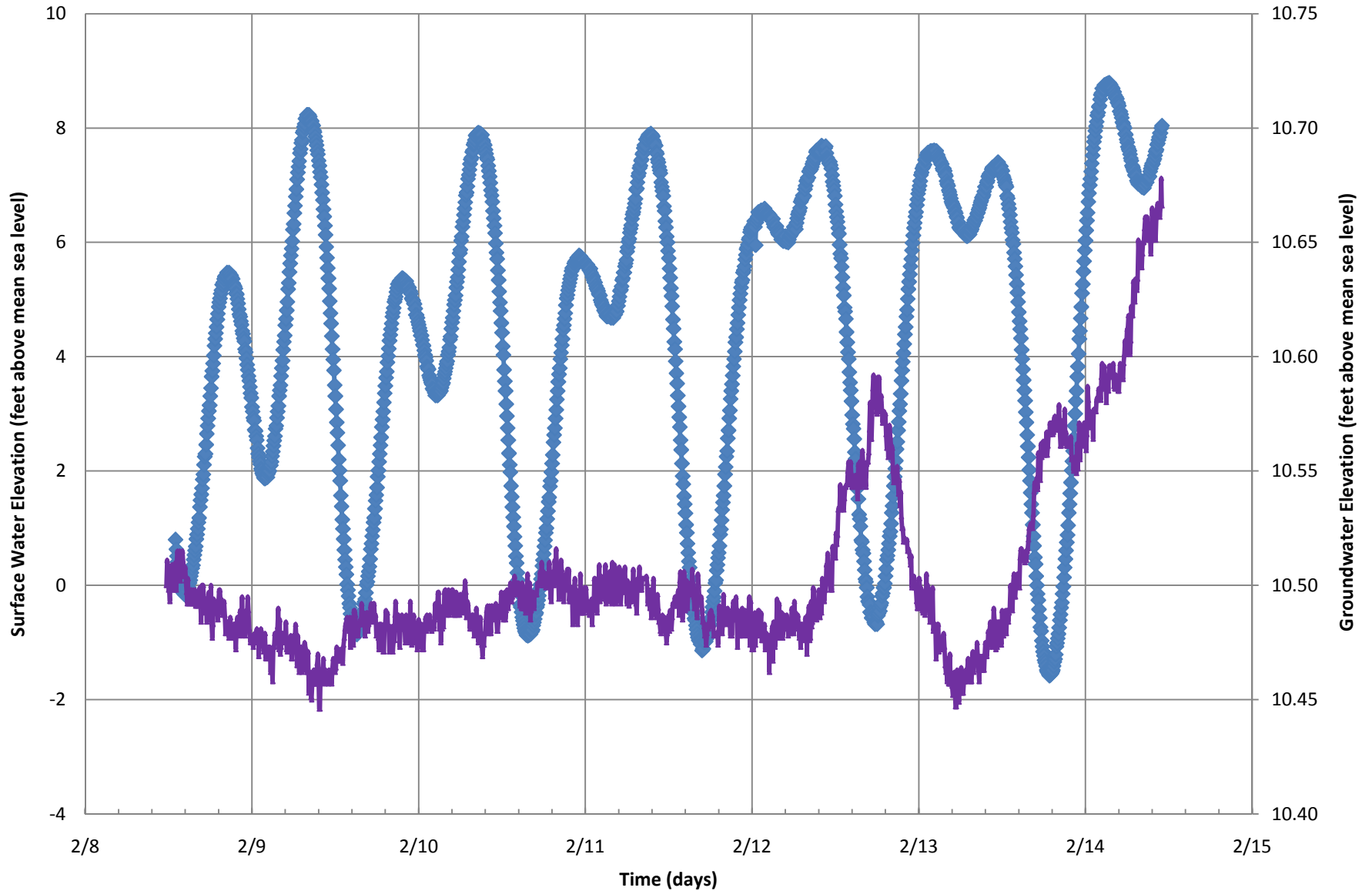
FIGURE D-5
Hydrograph of MW-11
February 8 - 14, 2011



AGENCY DRAFT

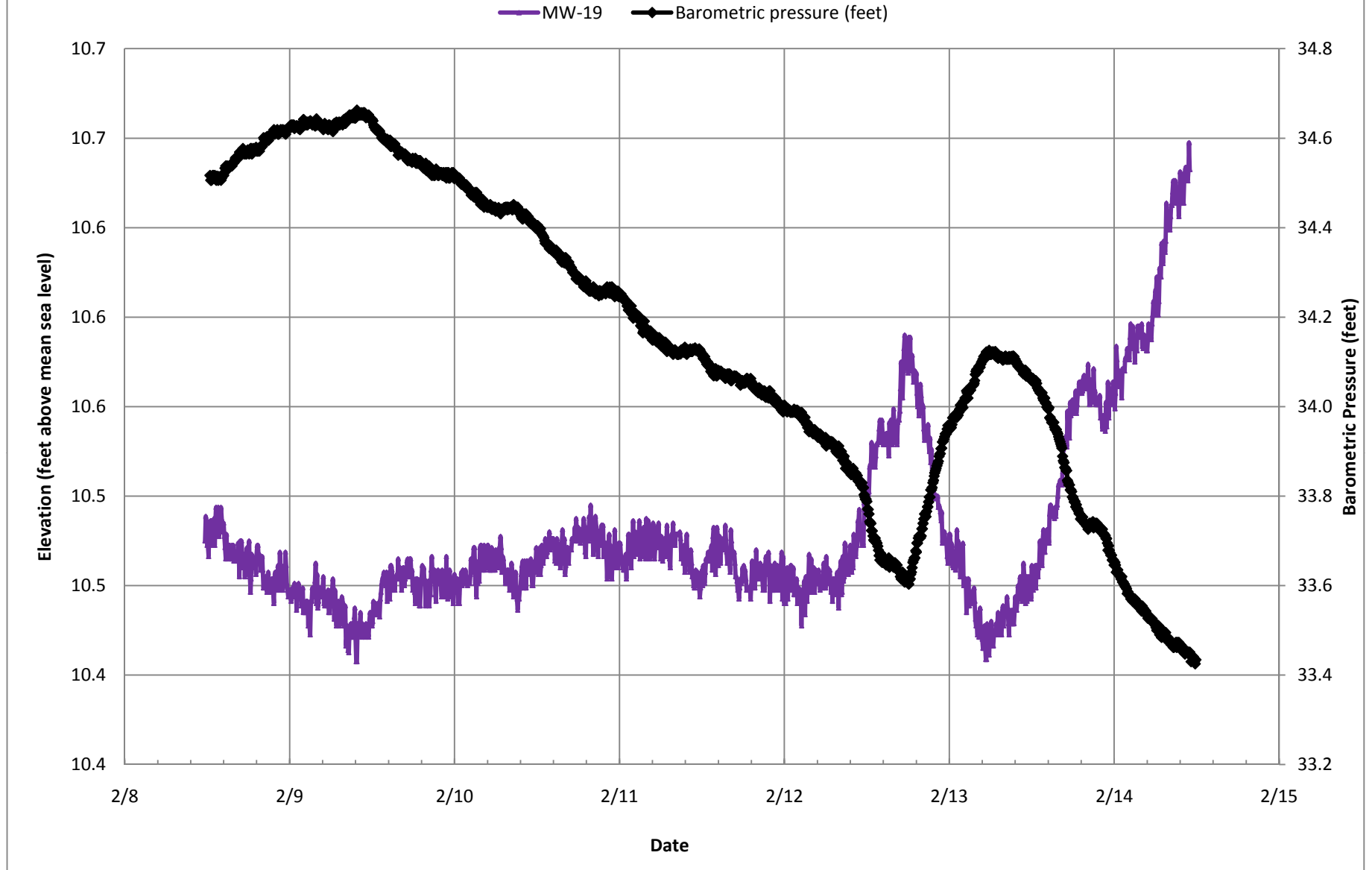
FIGURE D-6
Hydrograph of MW-19
February 8 - 14, 2011

SW-1 MW-19



AGENCY DRAFT

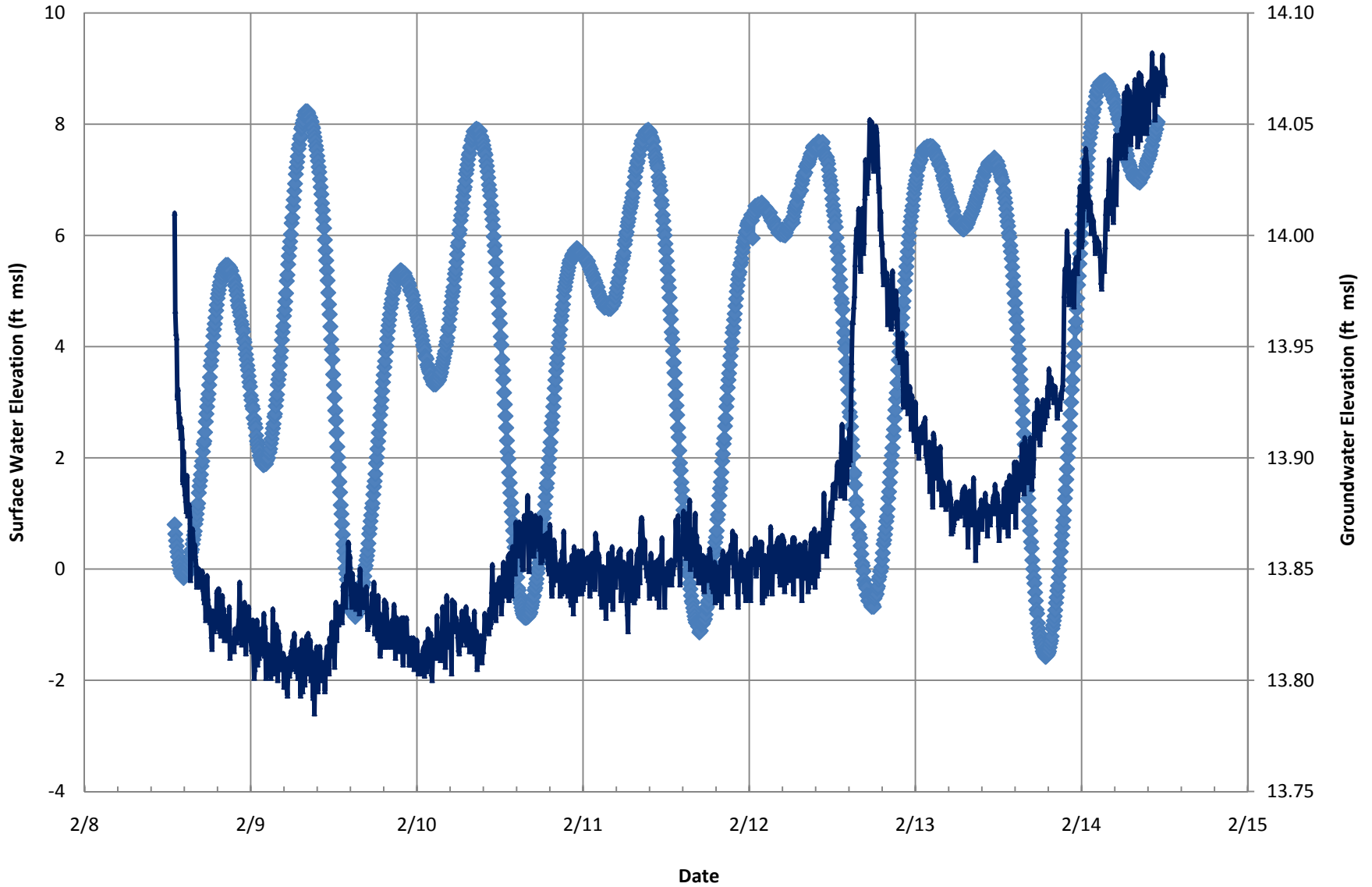
FIGURE D-6A
Hydrograph of MW-19 & Barometric Pressure
February 8 - 14, 2011



AGENCY DRAFT

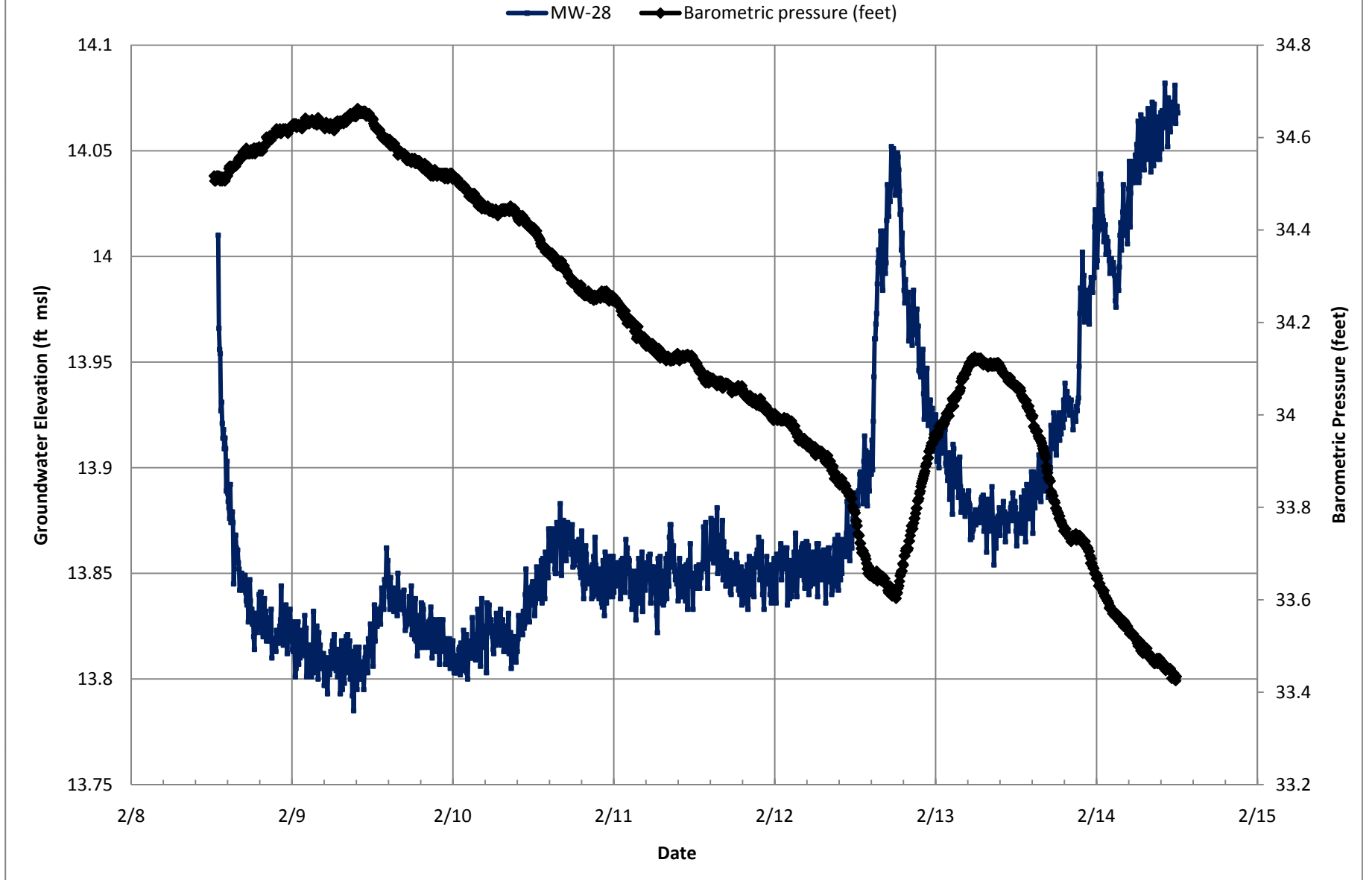
FIGURE D-7
Hydrograph of MW-28
February 8 - 14, 2011

◆ SW-1 — MW-28



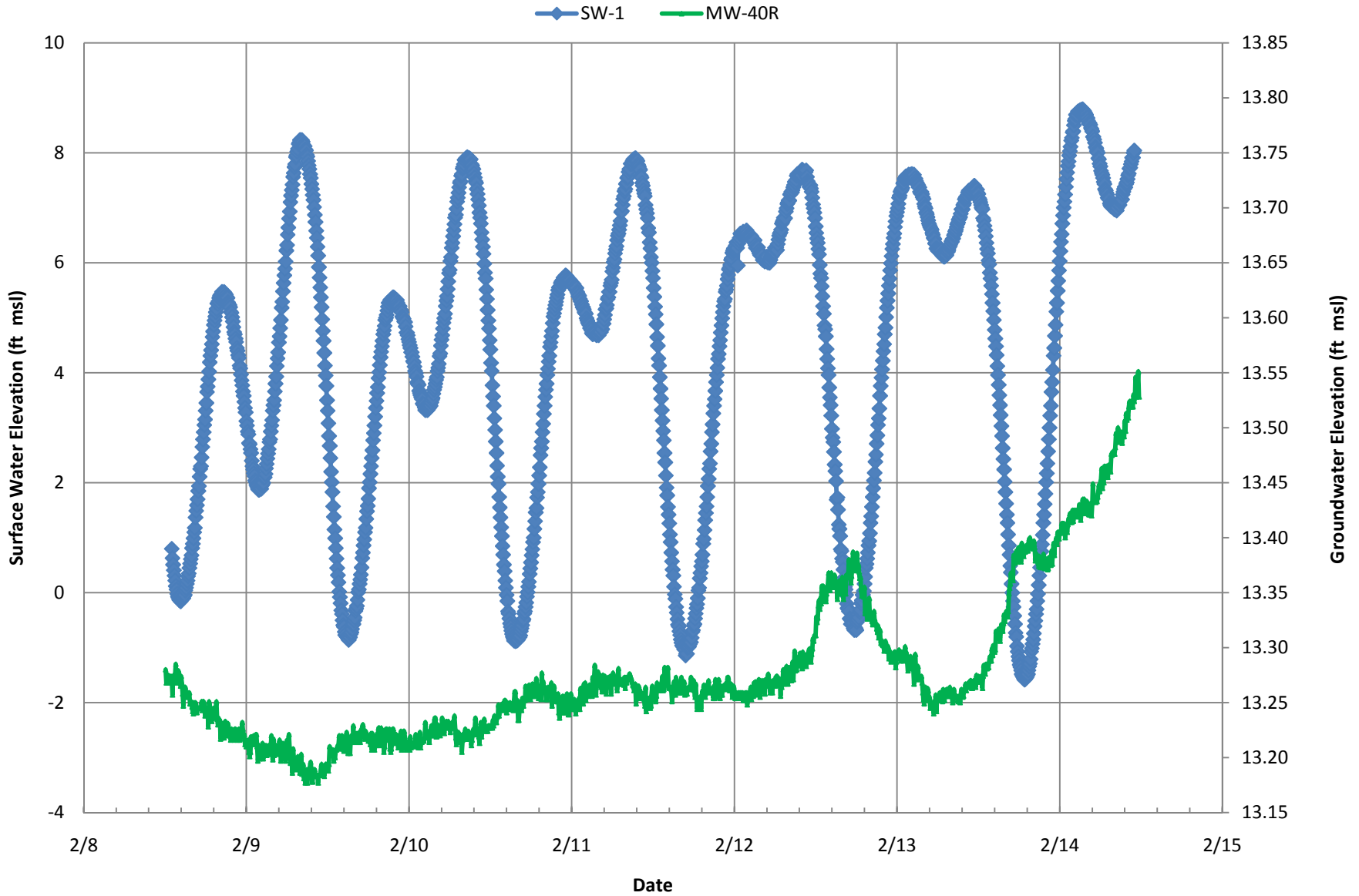
AGENCY DRAFT

FIGURE D-7A
Hydrograph of MW-28 & Barometric Pressure
February 8 - 14, 2011



AGENCY DRAFT

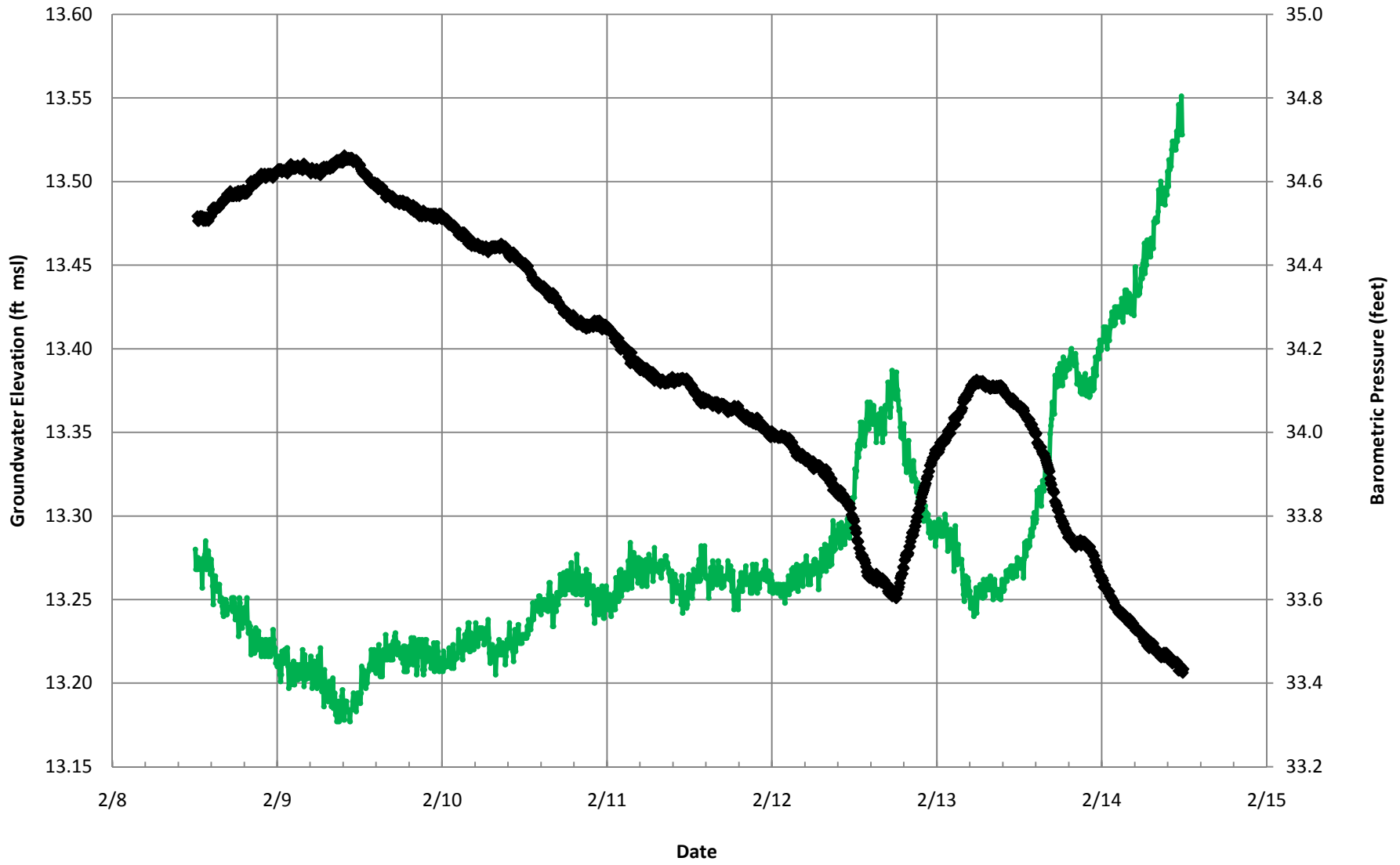
FIGURE D-8
Hydrograph of MW-40R
February 8 - 14, 2011



AGENCY DRAFT

FIGURE D-8A
Hydrograph of MW-40R & Barometric Pressure
February 8 - 14, 2011

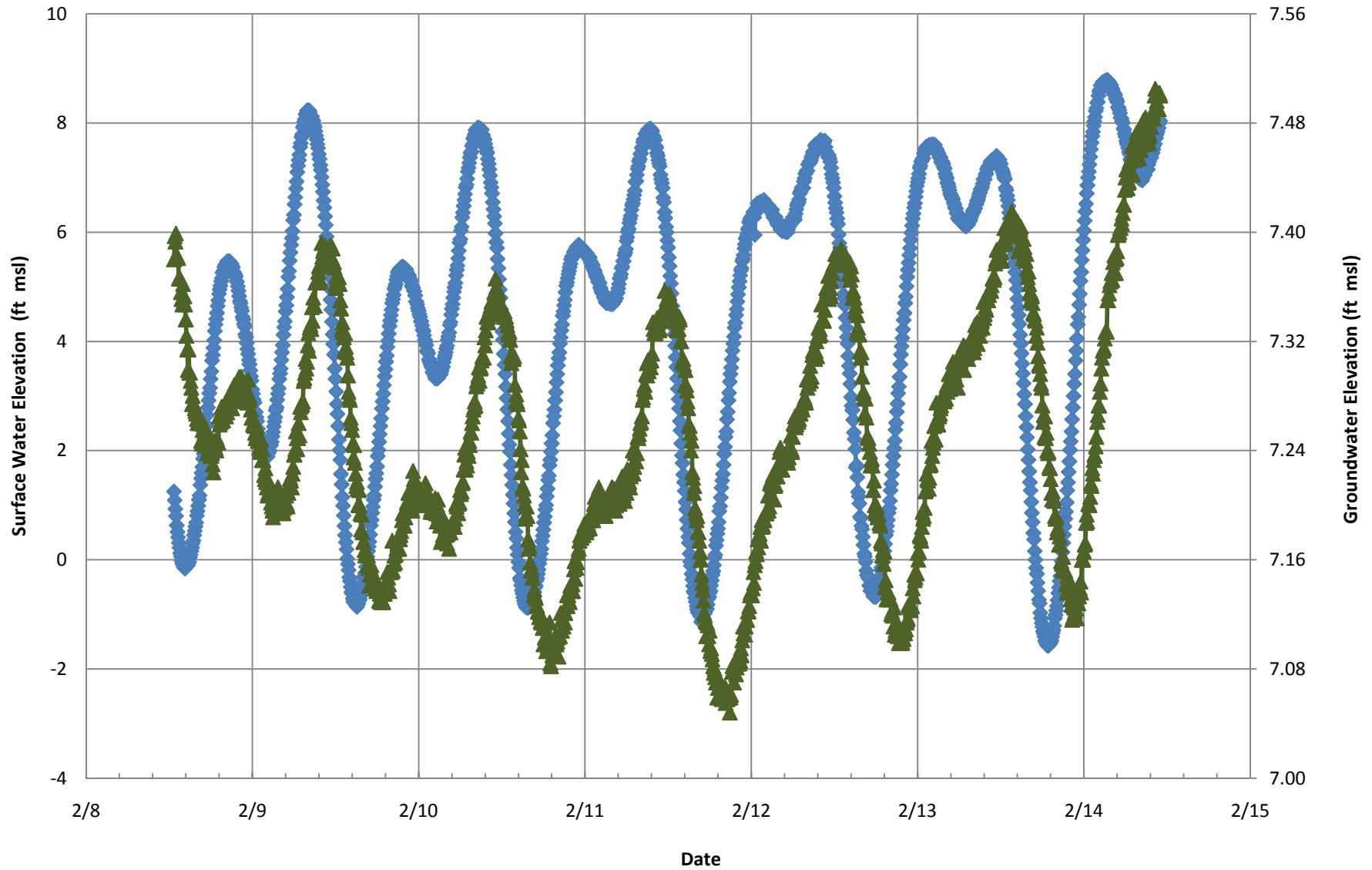
MW-40R Barometric pressure (feet)



AGENCY DRAFT

FIGURE D-9
Hydrograph of MW-A1
February 8 - 14, 2011

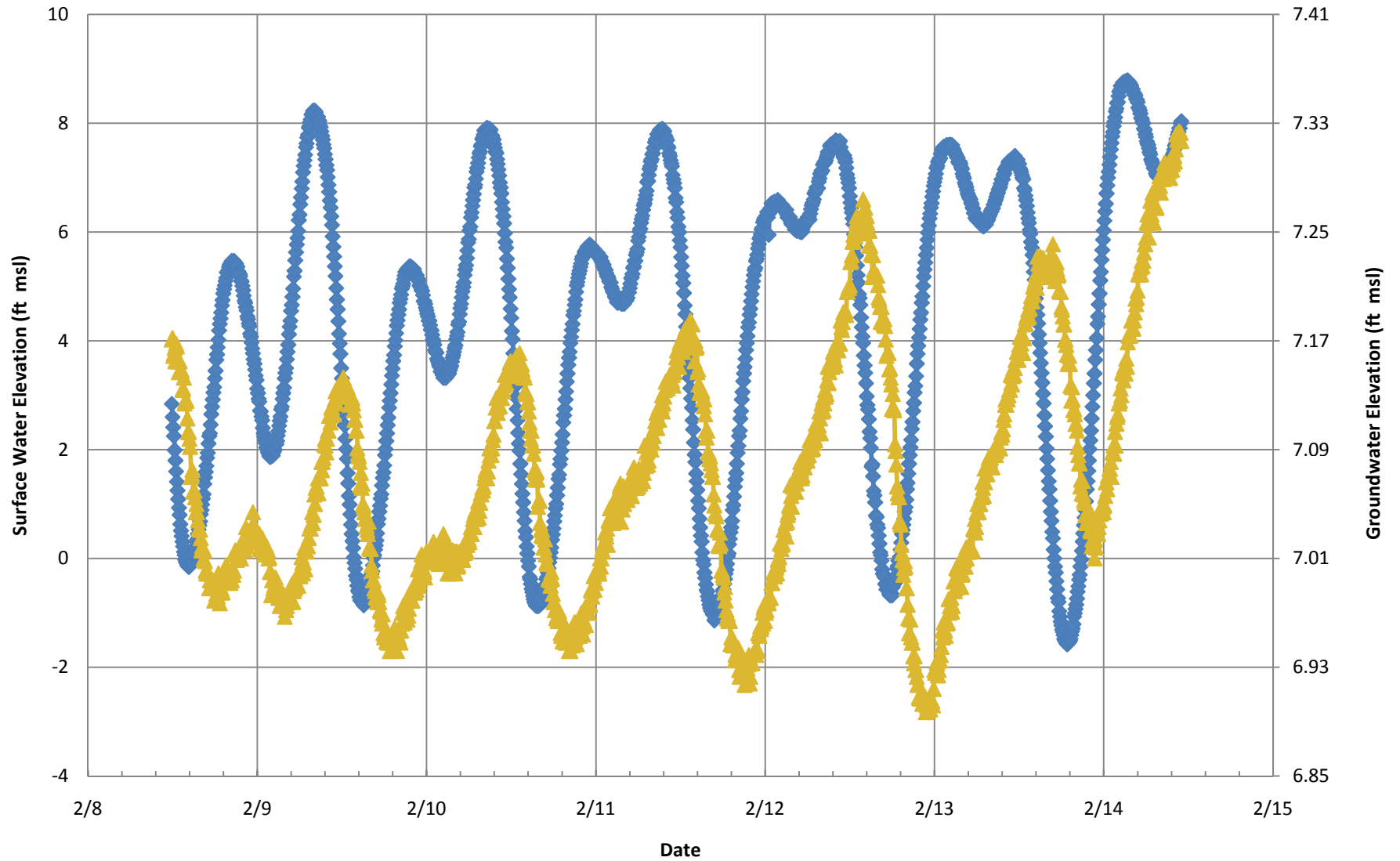
SW-1 MW-A1



AGENCY DRAFT

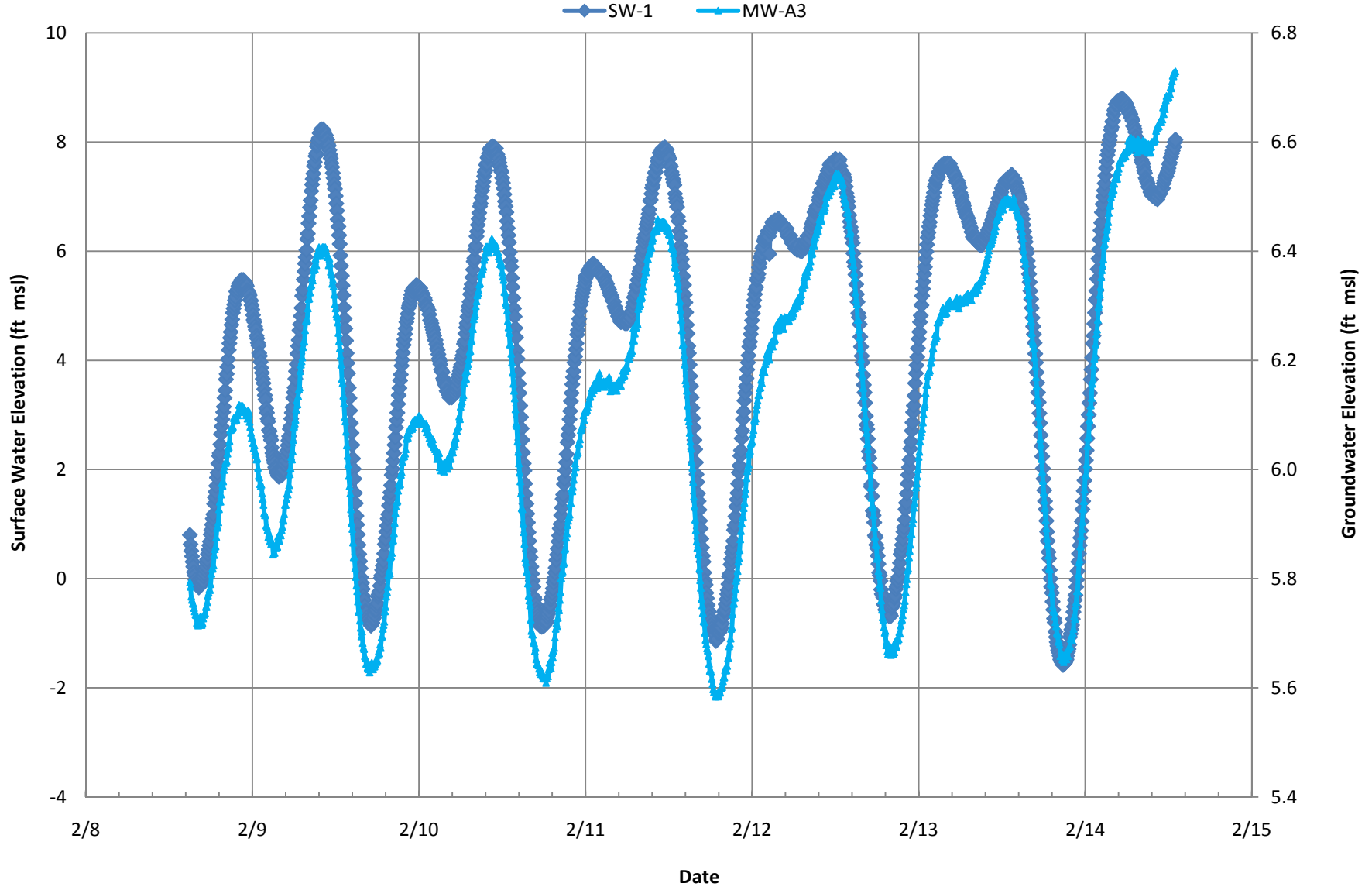
FIGURE D-10
Hydrograph of MW-A2
February 8 - 14, 2011

SW-1 MW-A2



AGENCY DRAFT

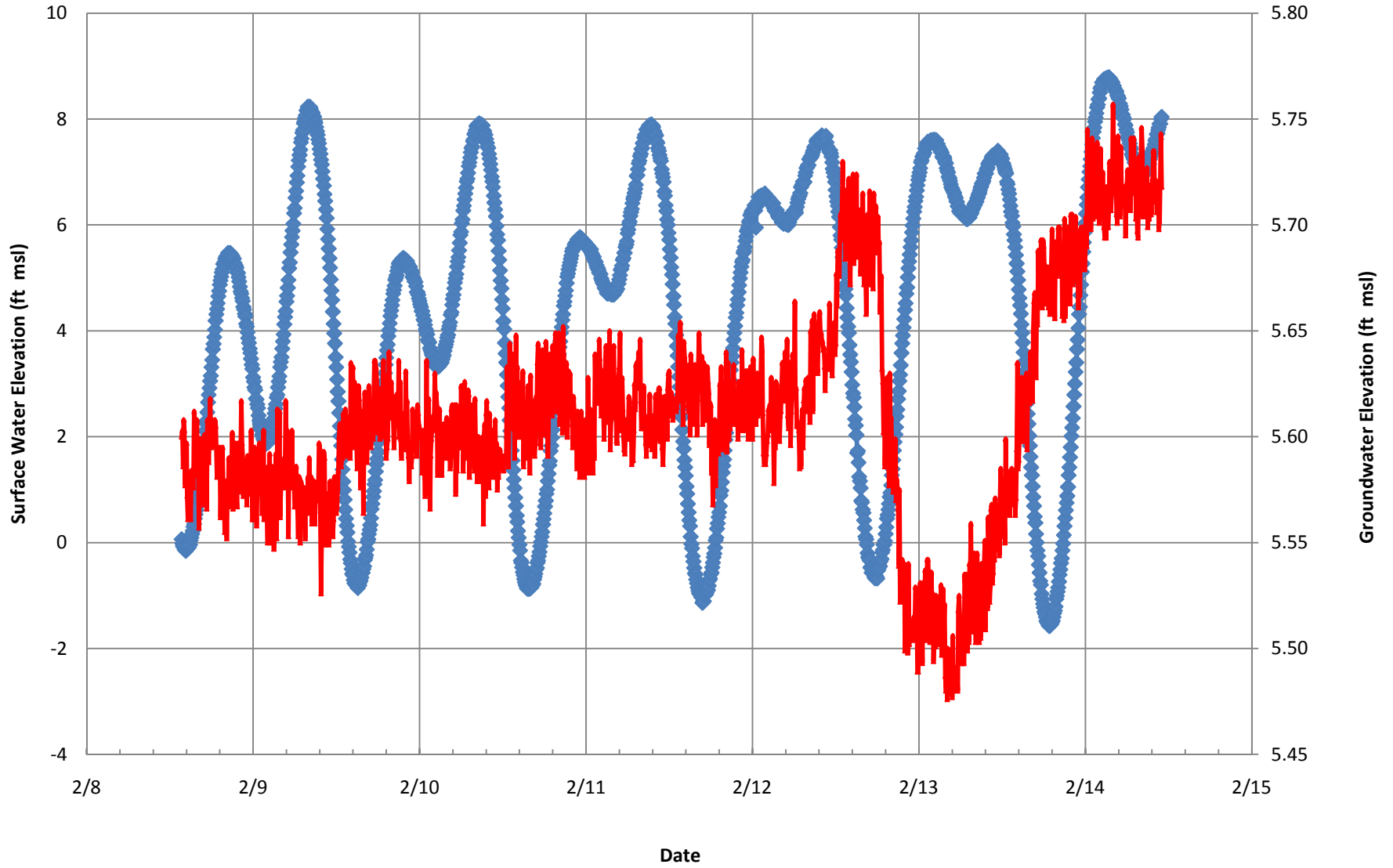
FIGURE D-11
Hydrograph of MW-A3
February 8 - 14, 2011



AGENCY DRAFT

FIGURE D-12
Hydrograph of MW-A4
February 8 - 14, 2011

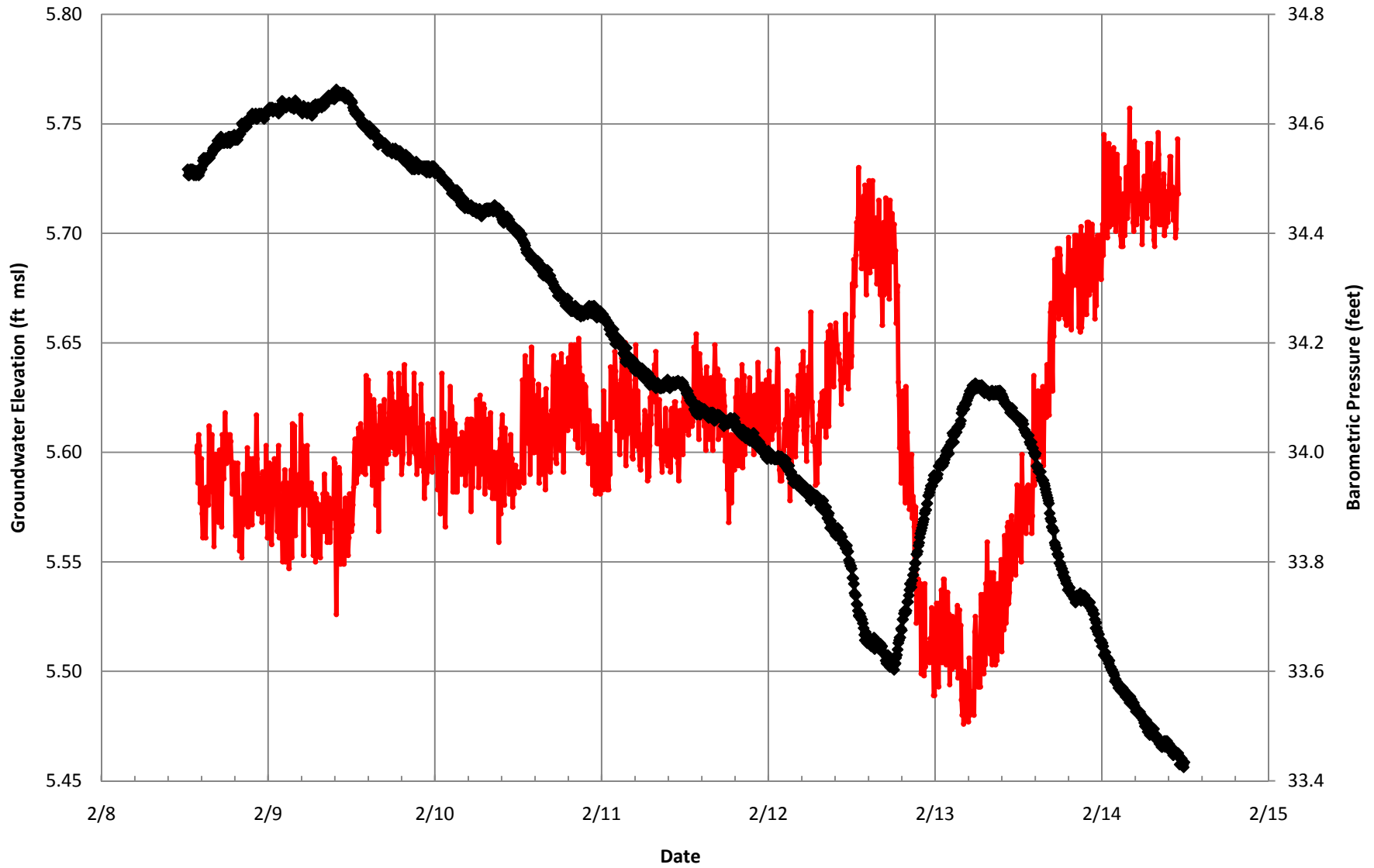
—◆— SW-1 — MW-A4



AGENCY DRAFT

FIGURE D-12A
Hydrograph of MW-4A & Barometric Pressure
February 8 - 14, 2011

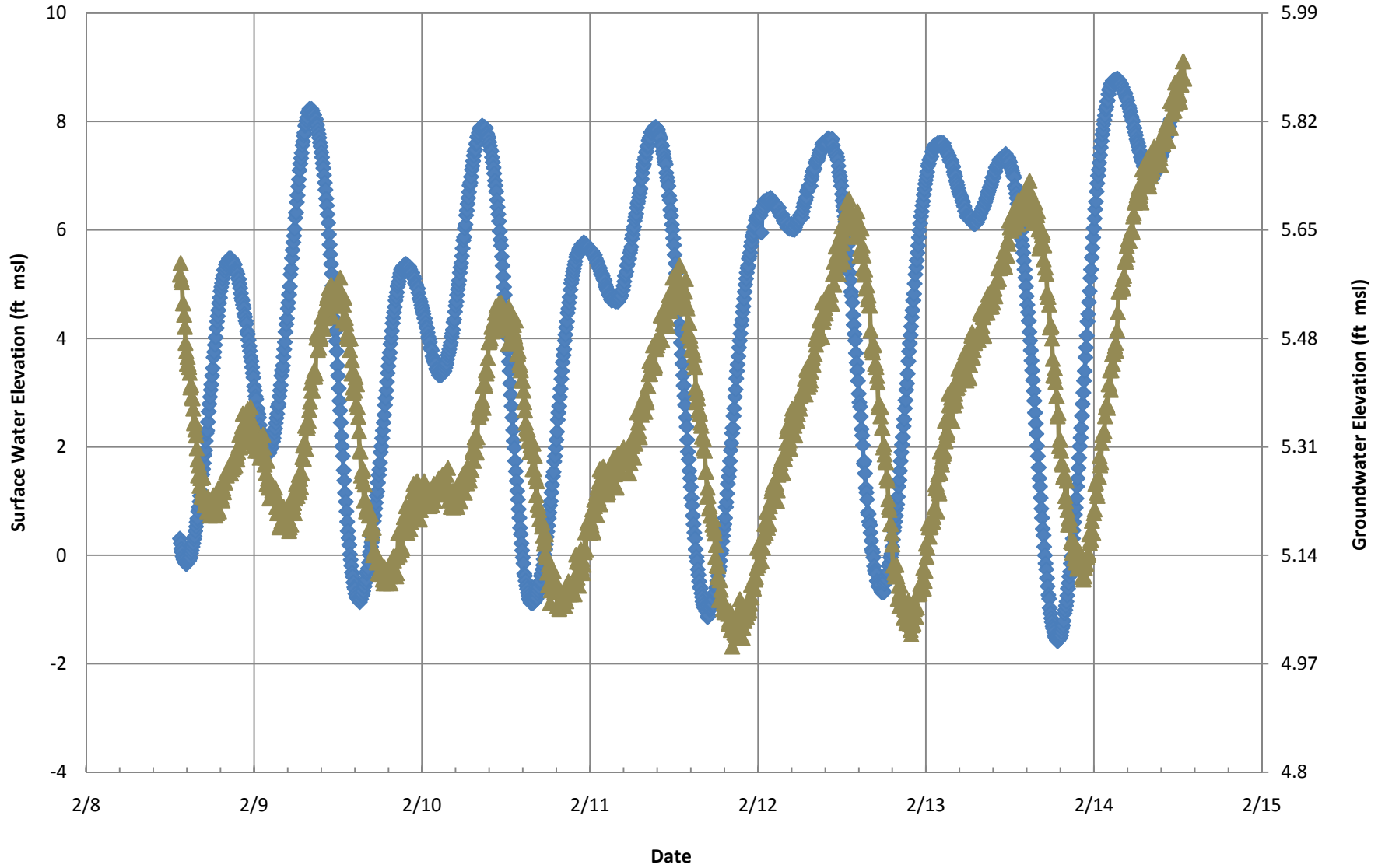
MW-A4 Barometric pressure (feet)



AGENCY DRAFT

FIGURE D-13
Hydrograph of MW-A5
February 8 - 14, 2011

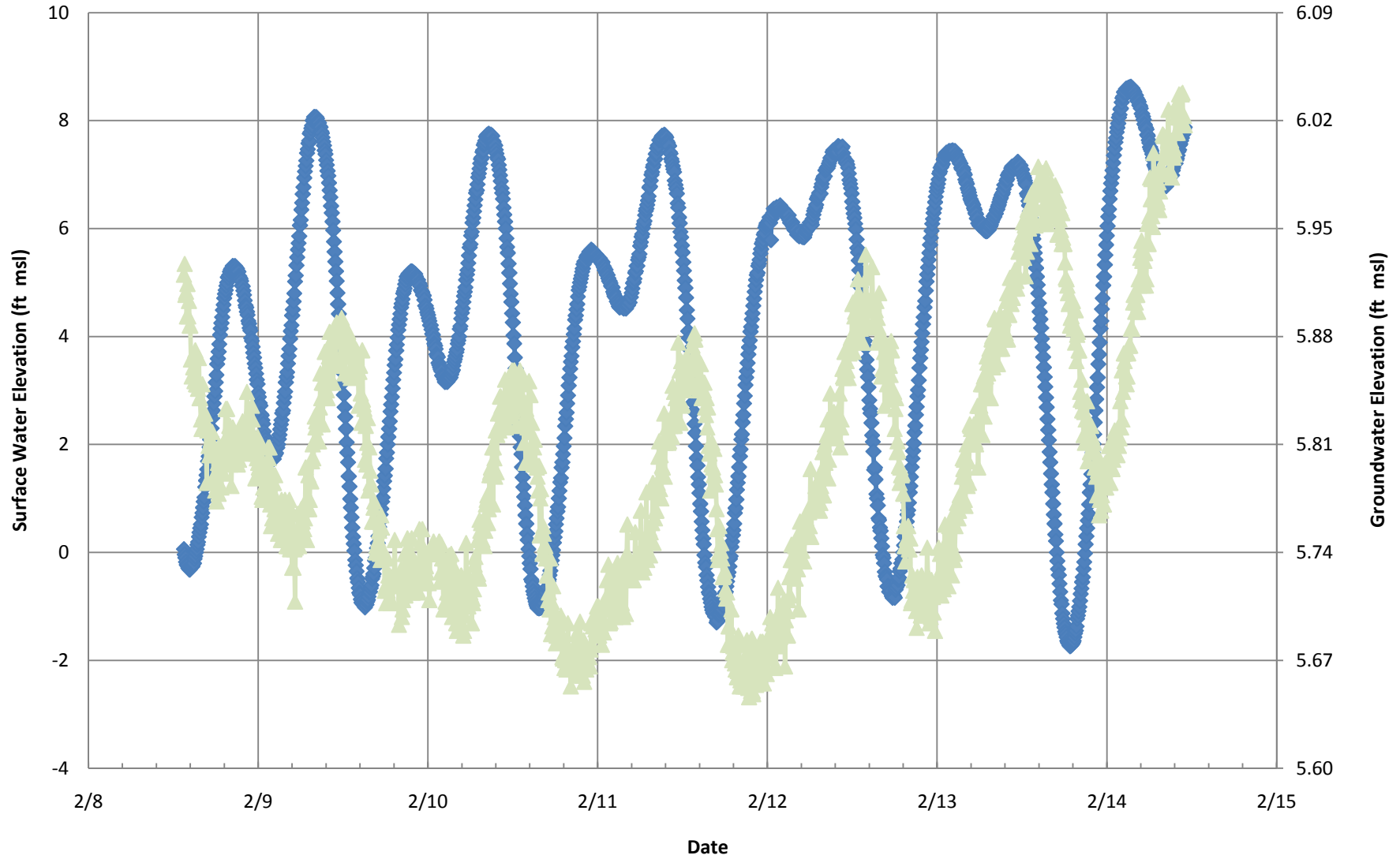
SW-1 MW-A5



AGENCY DRAFT

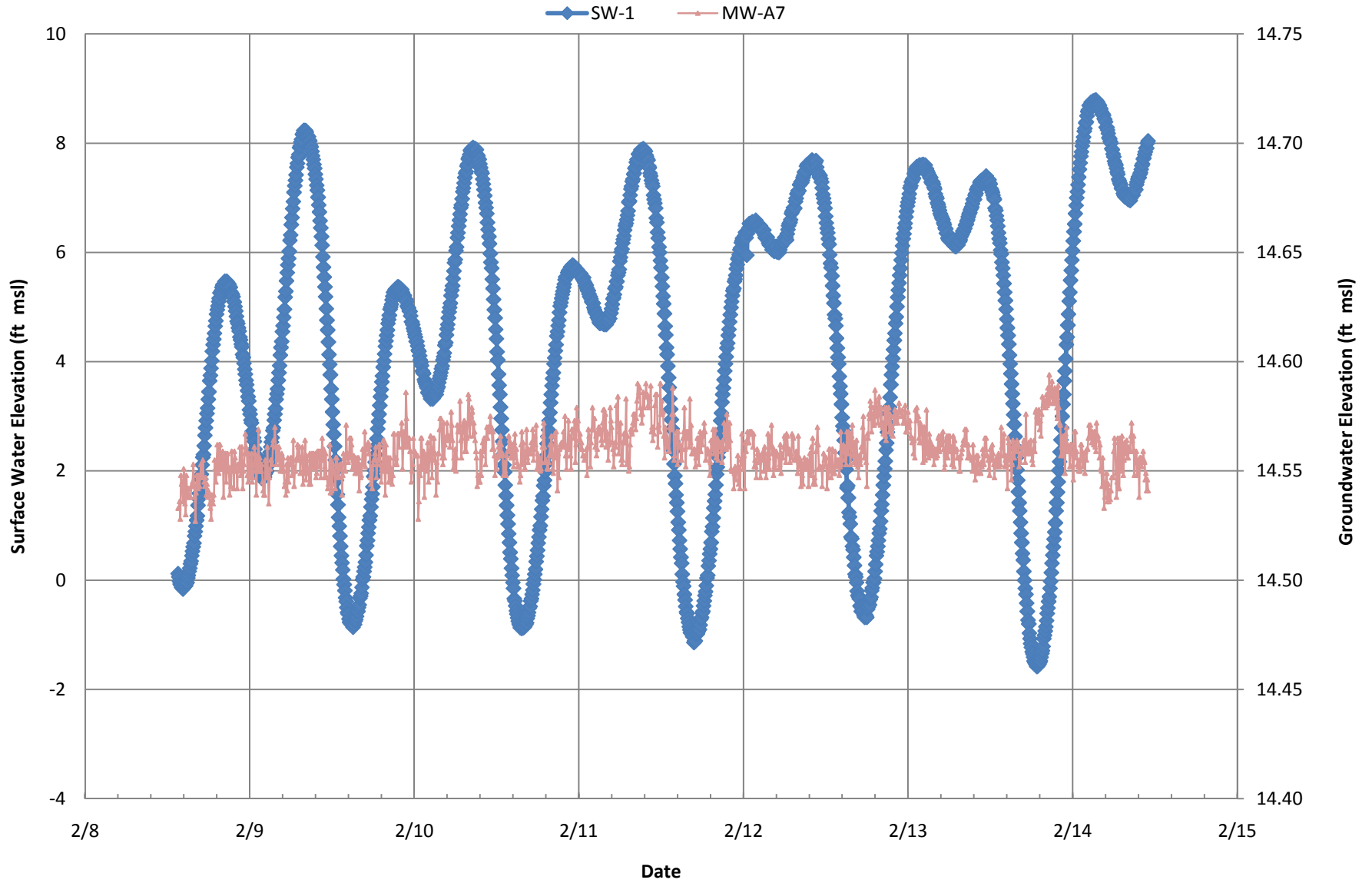
FIGURE D-14
Hydrograph of MW-A6
February 8 - 14, 2011

SW-1 MW-A6



AGENCY DRAFT

FIGURE D-15
Hydrograph of MW-A7
February 8 - 14, 2011





ATTACHMENT E

Pressure Transducer Data (will be issued as a PDF for the Final Report)



APPENDIX C

Boring Logs and Monitoring Well Logs

BORING AND TEST PIT LOGS

DISTINCTION BETWEEN FIELD LOGS AND FINAL LOGS

AMEC representatives prepare field logs for each boring or test pit. The field log contains information concerning soil and groundwater encountered, sampling depths, sampler types used, and identification of samples selected for laboratory analysis. The final logs presented in this report represent our interpretation of subsurface conditions based on the contents of the field logs, observations made during explorations, and the results of laboratory testing. Our recommendations are based on the contents of the final logs and the information contained therein, and not on the field logs.

SOIL CLASSIFICATION SYSTEM

Soil samples are classified in the field in general accordance with the Unified Soil Classification (USCS) presented in ASTM D 2488 "Standard Practice for Description and Identification of Soils (Visual-Manual Procedure)." Final logs reflect field soil classifications and laboratory testing results. A summary of the USCS is provided on page 3. Classifications and sampling intervals are shown in the logs.

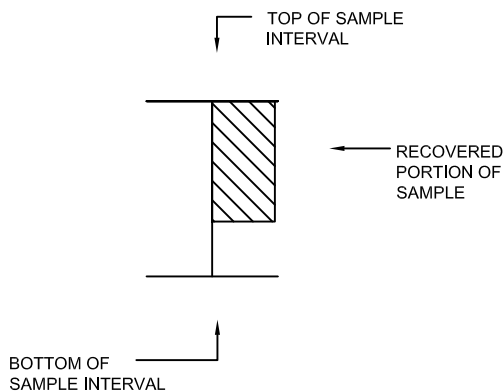
VARIATION OF SOIL BETWEEN EXPLORATIONS

The final logs and related information depict subsurface conditions only at the specific location and on the date(s) indicated. Those using the information contained herein should be aware that soil conditions at other locations, or on other dates, may differ.


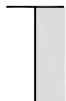

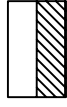





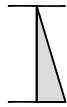
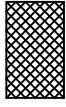






TRANSITION BETWEEN SOIL OR ROCK CLASSIFICATIONS

The lines designating the interface between soil, fill, or rock on the final logs and on the subsurface profiles presented in the report are determined by interpolation and are therefore approximate. The transition between the materials may be abrupt or gradual. Only at specific exploration locations should profiles be considered as reasonably accurate, and then only to the degree implied by the notes.

BORING LOG SAMPLES



EXPLORATION LOG SYMBOLS

 <p>Sample Location with No Sample Recovery</p>	 <p>Sample Location Using Thin-Walled Tube Sampler (ASTM D 1587)</p>	 <p>Water Sample Screened Interval</p>
 <p>Sample Location Using Direct Push Sampler (ASTM D 6282)</p>	 <p>Rock Core Interval</p>	 <p>Water Sample Submitted for Chemical Testing</p>
 <p>Sample Location Using Ring-Lined Barrel Sampler (ASTM D 3550)</p>	 <p>Sonic Core Interval</p>	 <p>Water Sample Tested in the Field</p>
 <p>Sample Location Using Split-Barrel Sampler (ASTM D 1586)</p>	 <p>Grab Sample Location</p>	 <p>Groundwater Level Encountered while Drilling</p>
	 <p>Soil Sample Submitted for Chemical Testing</p>	 <p>Static Groundwater Level</p>
	 <p>Soil Sample Submitted for Physical Property Testing</p>	 <p>Perched Groundwater Level</p>
		 <p>Groundwater Level at Time of Sampling</p>

SOIL CHARACTER

Granular Soil		Cohesive Soil		
Density	Standard Penetration Test *	Consistency	Standard Penetration Test*	Unconfined Compressive Strength (tsf)
Very Loose	0 - 4	Very Soft	Less Than 2	Less Than 0.25
Loose	4 - 10	Soft	2 - 4	0.25 - 0.5
Medium Dense	10 - 30	Medium Stiff	4 - 8	0.50 - 1.0
Dense	30 - 50	Stiff	8 - 16	1.0 - 2.0
Very Dense	Greater Than 50	Very Stiff	16 - 32	2.0 - 4.0
* Blows Required to Drive a Split-Barrel Sampler 12 inches		Hard	Greater Than 32	Greater Than 4.0

DEFINITIONS AND ABBREVIATIONS

AT	ATTERBERG LIMITS TEST	LL	LIQUID LIMIT	PSF	POUNDS PER SQUARE FOOT
BGS	BELOW GROUND SURFACE	MC	MOISTURE CONTENT	PW	PERCHED WATER
Cc	COMPRESSION INDEX	NP	NON PLASTIC	RS	SOIL RESISTIVITY TEST
Con	CONSOLIDATION TEST	OC	ORGANIC CONTENT	SG	SPECIFIC GRAVITY TEST
Cr	RECOMPRESSION INDEX	P	PUSHED SAMPLE	SPT	STD. PENETRATION TEST
Cv	COEFFICIENT OF CONSOLIDATION	P200	P200 FINES CONTENT TEST	SW	STATIC WATER
DS	DIRECT SHEAR TEST	PCF	POUNDS PER CUBIC FOOT	TO	TOREVANE
DW	DRY UNIT WEIGHT	PD	PHOTOIONIZATION DETECTOR	TS	TIME OF SAMPLING
GNP	GRANULAR NON-PLASTIC	PI	PLASTICITY INDEX	TSF	TONS PER SQUARE FOOT
GS	MECHANICAL GRAIN SIZE TEST	PL	PLASTIC LIMIT	WD	WHILE DRILLING
HYD	HYDROMETER TEST	PP	POCKET PENETROMETER		

GRAIN SIZE DEFINITIONS			MINOR FRACTIONS IN FINE GRAINED SOIL		GROUNDWATER SEEPAGE	
SAND	FINE	No. 200 to No. 40	No Mention (CLAY, SILT)	< 15 percent	Slow	< 1 gpm
	MEDIUM	No. 40 to No. 10	With Sand, With Gravel	15 to 30 percent	Moderate	1-3 gpm
	COARSE	No. 10 to No. 4	Sandy, Gravelly	30 to 49 percent	Rapid	> 3 gpm
GRAVEL	FINE	No. 4 to 3/4-inch	FIELD MOISTURE OBSERVATION		CAVING	
	COARSE	3/4- to 3-inch	Dry	Absence of moisture, dusty, dry to touch	Minor	
COBBLE		3-inches to 12-inches	Moist	Damp but no visible water	Moderate	
BOULDER		> 12-inches	Wet	Saturated, below groundwater	Severe	





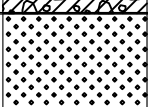
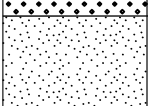
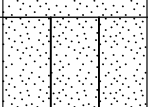
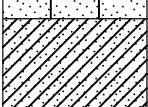

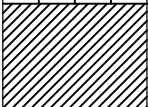
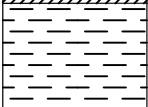
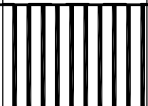

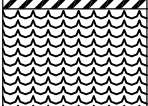
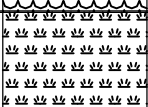
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INFORMATION AND SYMBOLS

GENERAL

AGENCY DRAFT

MAJOR DIVISIONS			SYMBOLS		TYPICAL DESCRIPTIONS	
			GRAPH	LETTER		
COARSE GRAINED SOIL	GRAVEL AND GRAVELLY SOIL	CLEAN GRAVEL		GW	WELL-GRADED GRAVEL, GRAVEL-SAND MIXTURES, LITTLE OR NO FINES	
		(LESS THAN 5% FINES)		GP	POORLY-GRADED GRAVEL, GRAVEL-SAND MIXTURES, LITTLE OR NO FINES	
	(MORE THAN 50% OF COARSE FRACTION RETAINED ON NO. 4 SIEVE)	GRAVEL WITH FINES		GM	SILTY GRAVEL, GRAVEL-SAND-SILT MIXTURES	
		(GREATER THAN 12% FINES)		GC	CLAYEY GRAVEL, GRAVEL-SAND-CLAY MIXTURES	
(MORE THAN 50% OF MATERIAL IS LARGER THAN NO. 200 SIEVE SIZE) (DUAL SYMBOLS USED WITH FINES CONTENT BETWEEN 5 AND 12%)	SAND AND SANDY SOIL	CLEAN SAND		SW	WELL-GRADED SAND, GRAVELLY SAND, LITTLE OR NO FINES	
		(LESS THAN 5% FINES)		SP	POORLY-GRADED SAND, GRAVELLY SAND, LITTLE OR NO FINES	
	(MORE THAN 50% OF COARSE FRACTION PASSING ON NO. 4 SIEVE)	SAND WITH FINES		SM	SILTY SAND, SAND-SILT MIXTURES	
		(GREATER THAN 12% FINES)		SC	CLAYEY SAND, SAND-CLAY MIXTURES	
FINE GRAINED SOIL	SILT AND CLAY	(LIQUID LIMIT LESS THAN 50)		ML	INORGANIC SILT, ROCK FLOUR, OR CLAYEY SILT WITH SLIGHT PLASTICITY	
				CL	INORGANIC CLAY OF LOW TO MEDIUM PLASTICITY, GRAVELLY CLAY, SANDY CLAY, SILTY CLAY, LEAN CLAY	
				OL	ORGANIC SILT AND ORGANIC SILTY CLAY OF LOW PLASTICITY	
	(MORE THAN 50% OF MATERIAL IS SMALLER THAN NO. 200 SIEVE SIZE)	SILT AND CLAY	(LIQUID LIMIT GREATER THAN 50)		MH	INORGANIC SILT, MICACEOUS OR DIATOMACEOUS SILTY SOIL
					CH	INORGANIC CLAY OF HIGH PLASTICITY
					OH	ORGANIC CLAY OF MEDIUM TO HIGH PLASTICITY, ORGANIC SILT
HIGHLY ORGANIC SOIL				PT	PEAT, HUMUS, SWAMP SOIL WITH HIGH ORGANIC CONTENT	

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INFORMATION AND SYMBOLS

SOIL CLASSIFICATION

PAGE
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AGENCY DRAFT

ROCK CLASSIFICATION GUIDELINES

HARDNESS		DESCRIPTION
Very soft	(RH-0)	For plastic material only
Soft	(RH-1)	Carved or gouged with a knife
Moderate	(RH-2)	Scratched with a knife
Hard	(RH-3)	Difficult to scratch with a knife
Very hard	(RH-4)	Rock scratches metal; rock cannot be scratched with a knife
STRENGTH		DESCRIPTION
Plastic		Easily deformable with finger pressure
Friable		Crumbles by rubbing with fingers
Weak		Crumbles only under light hammer blows
Moderately Strong		Few heavy hammer blows before breaking
Strong		Withstands few heavy hammer blows and yields large fragments
Very Strong		Withstands many heavy hammer blows, yields dust and small fragments
WEATHERING		DESCRIPTION
Severe		Rock decomposed; thorough discoloration; all fractures extensively coated with clay, oxides, or carbonates.
Moderate		Intense localized discoloration of rock; fracture surfaces coated with weathering minerals.
Little		Slight and intermittent discoloration of rock; few stains on fracture surfaces.
Fresh		Rock unaffected by weathering
FRACTURING		FRACTURE SPACING
Crushed		Contains clay to less than 5/8 inch
Highly Fractured		5/8 inch to 2 inches
Closely Fractured		2 inches to 6 inches
Moderately fractured		6 inches to 1 foot
Little Fractured		1 foot to 4 feet
Massive		Greater than 4 feet
JOINT SPACING		DESCRIPTION
Papery		Less than 1/8 inch
Shaley or Platey		1/8 inch to 5/8 inch
Very Close		5/8 inch to 3 inches
Close		3 inches to 2 feet
Blocky		2 to 4 feet
Massive		Greater than 4 feet
AMEC Earth and Environmental, Inc. 600 University St., Suite 1020 Seattle, Washington USA 98101-4107 Tel (206) 432-1760 Fax (206) 342-1761 www.amec.com		INFORMATION AND SYMBOLS ROCK CLASSIFICATION
		PAGE 4 OF 4

AGENCY DRAFT

DEPTH (ft bgs)	GRAPHIC LOG	USCS SYMBOL	SOIL DESCRIPTION	SAMPLE	BLOW COUNT SPT N VALUE	VOLATILE READING (ppm)	GROUNDWATER	FIELD TESTING	TESTING AND LABORATORY DATA
0			Asphalt (5 inches), base gravel, CAP fabric at 1 foot bgs.						
		SM	Silty SAND (SM), wood waste; petroleum hydrocarbon-like odor from 1 to 4 feet bgs.			60			
5		SM	Medium dense, moist, fine to coarse, silty SAND (SM) with gravel; gray discoloration, petroleum hydrocarbon-like odor. Becomes loose; gray discoloration, petroleum hydrocarbon-like odor. Becomes olive-gray; some odor.		23	61 50	▽		S-1 S-2 S-3 S-4
10		SM	Medium dense, wet, dark brown, fine to coarse, silty SAND with organics (decayed wood); some discoloration, petroleum hydrocarbon-like odor.		11	18 1.5			S-5 S-6
15		SP	Loose, wet, gray, fine to medium SAND (SP) with silt, some gravel and coarse sand, some fine organics. Driller reports soft material at 14 feet bgs.		6 9	0.4			S-7 AB1-14' @1015 12/03/10 S-8 (Shelby)
		SP-SM	Loose, wet, dark gray, fine to coarse SAND (SP/SM) with some silt to silty sand with fine organics; no discoloration, no odor.		7 7	0.1 0.0			S-9 S-10
20		SP	Very loose, wet, gray, fine to coarse SAND (SP) with silt, fine organics and some decayed wood; no discoloration, no odor. Wood waste in sampler shoe. Becomes loose. Becomes medium dense, with organics (fine wood).		2 7 13	0.0 0.0 0.0			S-11 S-12 S-13 S-14
25			Decayed wood (4 inches). Becomes very dense, gray.		13 19 14				S-15 AB1-27' @ 1115 12/03/10 S-16 S-17
30					50/6"				

BORING METHOD: HSA

ELEVATION REFERENCE: NA

REMARKS:

Air knife to 4 feet bgs for utilities clearance.

BOREHOLE DIAMETER:

GROUND SURFACE ELEVATION: NA

DRILL RIG: Hollow Stem Auger

CASING ELEVATION: NA

CONTRACTOR: Cascade Drilling, Inc.

LOGGED BY: A.Speransky

DRILLING DATES: 6/22/2010 - 12/3/2010

ENVIRONMENTAL BORING 1-915-15716E.02LS.GPJ AMEC PORTLAND.GDT 3/30/11

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**LOG OF BORING
AB-1**

PAGE 1 OF 2

AGENCY DRAFT

DEPTH (ft bgs)	GRAPHIC LOG	USCS SYMBOL	SOIL DESCRIPTION	SAMPLE	BLOW COUNT SPT N VALUE	VOLATILE READING (ppm)	GROUNDWATER	FIELD TESTING	TESTING AND LABORATORY DATA
30		SP	Very loose, wet, gray, fine to coarse SAND (SP) with silt, fine organics and some decayed wood; no discoloration, no odor. Wood (last 6 inches of sampler).		19				■ S-18
		SM	Wood (last 6 inches). Loose, wet, olive-brown, fine to medium, silty SAND (SM) with brown, fine gravel, some dark brown, decayed organics.		8				■ S-19
		SP-SM	Medium dense, wet, gray, fine to medium SAND (SP/SM) with silt to silty sand, some fine gravel.		19				
35			Boring terminated at 35 feet bgs; backfilled with bentonite slurry via tremmie pipe then patched with concrete on top.						
40									
45									
50									
55									
60									

BORING METHOD: HSA

ELEVATION REFERENCE: NA

REMARKS:

Air knife to 4 feet bgs for utilities clearance.

BOREHOLE DIAMETER:

GROUND SURFACE ELEVATION: NA

DRILL RIG: Hollow Stem Auger

CASING ELEVATION: NA

CONTRACTOR: Cascade Drilling, Inc.

LOGGED BY: A.Speransky

DRILLING DATES: 6/22/2010 - 12/3/2010

ENVIRONMENTAL BORING 1-915-15716E.02LS.GPJ AMEC PORTLAND.GDT 3/30/11

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


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**LOG OF BORING
AB-1**

PAGE 2 OF 2

AGENCY DRAFT

DEPTH (ft bgs)	GRAPHIC LOG	USCS SYMBOL	SOIL DESCRIPTION	SAMPLE	BLOW COUNT SPT N VALUE	VOLATILE READING (ppm)	GROUNDWATER	FIELD TESTING	TESTING AND LABORATORY DATA
0		GW	Gravel surface.						<div style="border: 1px solid black; padding: 5px; width: fit-content;"> AB1A 3.5-4.5 6/22/10 Total cPAHs = 0.2018; TPH-G = 73.9; TPH-D = 2,100 </div>
		SM	Gray, moist, fine to coarse, silty SAND (SM) with gravel (Fill); petroleum hydrocarbon-like odor.		NA	30			
					NA	21			
					NA	29			
					NA	61			
		SM	Brownish, oily discolored, silty SAND (SM), silt content increased; hydrocarbon-like odor.		NA	49			
5		SM	Dark brown, silty SAND (SM); free product; petroleum hydrocarbon-like odor.		NA		▽		
			Boring terminated at 5.5 feet bgs; backfilled with medium bentonite chips.						
-10									
-15									
-20									
-25									
-30									

BORING METHOD: Hand Auger	ELEVATION REFERENCE: NA
BOREHOLE DIAMETER: 3 (in)	GROUND SURFACE ELEVATION: NA
DRILL RIG:	CASING ELEVATION: NA
CONTRACTOR: Cascade Drilling, Inc./AS	
LOGGED BY: A.Speranksy	DRILLING DATES: 6/22/2010

REMARKS:
Air knife to 5 feet bgs, sampled using hand auger.

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**LOG OF BORING
AB-1A**

PAGE 1 OF 1

AGENCY DRAFT

DEPTH (ft bgs)	GRAPHIC LOG	USCS SYMBOL	SOIL DESCRIPTION	SAMPLE	BLOW COUNT SPT N VALUE	VOLATILE READING (ppm)	GROUNDWATER	FIELD TESTING	TESTING AND LABORATORY DATA
0		GW	Asphalt (0.5 feet). Drain gravel.						
		SM	CAP fabric at 1.5 feet bgs. Silty SAND and GRAVEL (SM).						
5		PT	Brown, gravel, sand, silt, wood waste, bricks (PT); strong organic odor.		2.5		▽		AB-2-4.5-5' 6/21/10 TPH-G = 354 S-1
		SM	Very loose, wet, brown, silty SAND (SM) with gravel, decayed organics; some organic odor, 50% sheen.		3				S-2
		PT	Dark brown wood waste, organics, some silt and sand, very light material (PT); no sheen.		1				S-3
10			Increasing sand content.		2				S-4
		SP	Medium dense, wet, gray, fine to coarse SAND (SP) with silt, trace subrounded to subangular gravel; no discoloration, no odor.		2				S-5 (Shelby)
			Some decayed organics.		4.5				S-6
			Silt increases.		0.0				S-7
15			Wood at 20.5 feet.		12				S-8
			Some organics (wood chips < 1 inch), trace gravel; no odor or sheen.		10				AB-2-14 6/23/10, Dup 1 S-9
			Becomes dense, trace organics.		10				S-10
			No samples collected from 25 to 27 feet bgs.		17				S-11
20		SP	Very dense, wet, gray, fine to coarse SAND (SP) with silt, some dark brown organics (wood chips).		24				S-12
		PT	Peat (PT).		15	2.3			S-13
		SP	Very dense, wet, gray, fine to coarse SAND (SP) with silt, some organics (wood chips); no odor.		28				S-14
25			No samples collected from 25 to 27 feet bgs.		40	2.7			S-15
30			No samples collected from 25 to 27 feet bgs.						

BORING METHOD: HSA

ELEVATION REFERENCE: NA

BOREHOLE DIAMETER: 8 (in)

GROUND SURFACE ELEVATION: NA

DRILL RIG:

CASING ELEVATION: NA

CONTRACTOR: Cascade Drilling, Inc.

LOGGED BY: A.Speransky

DRILLING DATES: 6/21/2010 - 6/23/2010

REMARKS:

Air knife to 5 feet bgs for utilities clearance.

From 30 feet bgs changed to D&M sampler; field density is approximate.

ENVIRONMENTAL BORING 1-915-15716E.02LS.GPJ AMEC PORTLAND.GDT 3/30/11

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**LOG OF BORING
AB-2**

PAGE 1 OF 2

AGENCY DRAFT

DEPTH (ft bgs)	GRAPHIC LOG	USCS SYMBOL	SOIL DESCRIPTION	SAMPLE	BLOW COUNT SPT N VALUE	VOLATILE READING (ppm)	GROUNDWATER	FIELD TESTING	TESTING AND LABORATORY DATA
0			Asphalt (5 inches); CAP fabric @ 0.5 bgs.						
		SM	Moist to wet, gray, fine to coarse, silty SAND (SM) with gravel (Fill); gray discoloration, petroleum hydrocarbon-like odor. (Logged using a hand auger.)						
5			Medium dense, wet, olive-gray, fine to coarse, silty SAND (SM) with gravel (Fill); no discoloration, petroleum hydrocarbon-like odor.		18	1.1	▽		AB3-4.5-5' 6/21/10 S-1
					21	3.7			S-2
			Becomes loose with increased silt content.		9	3.7			S-3
10					5	3.3			S-4
		SP	Very dense, wet, olive-brown SAND (SP) with silt, occasional gravel; no discoloration, no odor.		50/1"	1.4			S-4
		SP	Loose, wet, gray, fine to coarse SAND (SP); no discoloration, no odor.						
15		PT	Wood waste (PT), some very loose, gray, silty sand and trace gravel; organic odor.		3	5.9			S-5
			No recovery.						
			Soft material.						S-6 (Shelby)
20		SP	Dense, wet, olive-brown SAND (SP) with silt, gravel and some wood; no odor.		21	0.0			AB3-20' 6/22/10 S-7
					24	0.0			S-8
			Becomes olive-gray, some gravel; no discoloration, no odor.		31	0.0			S-9
					42	0.0			S-10
25			Heave; added water to hole.		30	0.0			S-11
					64	0.0			S-12
			Becomes gray with occasional wood (non-decayed) and little no fines.		83	0.0			S-13
30									

BORING METHOD: HSA

ELEVATION REFERENCE: NA

BOREHOLE DIAMETER: 8 (in)

GROUND SURFACE ELEVATION: NA

DRILL RIG:

CASING ELEVATION: NA

CONTRACTOR: Cascade Drilling, Inc.

LOGGED BY: A. Speransky

DRILLING DATES: 6/21/2010 - 6/22/2010

REMARKS:

Air knife and vactor truck to 5 feet bgs for utilities clearance.

At 34 feet bgs changed to D&M sampler; field density is approximate.

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**LOG OF BORING
AB-3**

PAGE 1 OF 2

AGENCY DRAFT

DEPTH (ft bgs)	GRAPHIC LOG	USCS SYMBOL	SOIL DESCRIPTION	SAMPLE	BLOW COUNT SPT N VALUE	VOLATILE READING (ppm)	GROUNDWATER	FIELD TESTING	TESTING AND LABORATORY DATA
0			Asphalt (4 inches thick), gravel base (2 inches thick), CAP fabric at 1 foot bgs.						
		SM	Moist, gray, fine to coarse, silty SAND (SM) with gravel (Fill), organics (wood chips); organic odor.						
5		SM	Medium dense, moist, gray, fine to coarse, silty SAND (SM) with gravel; gray discoloration, petroleum hydrocarbon-like odor.		18	>455			■ S-1
					7	>500	▽		■ S-2
					3				■ S-3
10			Wood waste, silt and sand.			3.3			■ S-4 (Shelby)
						1.4			■ S-5
		PT	Medium dense, brown peat (decayed wood waste) with some silt and sand; no odor.		13				■ S-6
			Wood waste.		3				■ S-7
15					4	8.3			■ S-7
						2.0			■ S-8
		SP	Medium dense, wet, gray, medium to coarse SAND (SP) with silt, trace gravel; no discoloration, no odor.		21				■ AB4-17' 6/23/10
					24	0.0			■ S-9
20			Some gravel; no discoloration, no odor.			0.0			■ S-10
					12	0.0			■ S-11
			Becomes fine to coarse SAND (SP); no discoloration, no odor.		25	0.0			■ S-12
					22	0.0			■ S-13
			Becomes dense.		36	0.0			■ S-14
25			Becomes very dense, fine organics; no discoloration, no odor.			0.0			■ S-14
					50	0.0			■ S-15
					38	0.0			■ S-16
			No organics; no discoloration, no odor.		50	0.0			■ S-16
30		SM				0.0			■ S-17

ENVIRONMENTAL BORING 1-915-15716E.02LS.GPJ AMEC PORTLAND.GDT 3/30/11

BORING METHOD: HSA BOREHOLE DIAMETER: 8 (in) DRILL RIG: CONTRACTOR: Cascade Drilling, Inc. LOGGED BY: A.Speransky	ELEVATION REFERENCE: NA GROUND SURFACE ELEVATION: NA CASING ELEVATION: NA DRILLING DATES: 6/21/2010
--	--

REMARKS:
Air knife to 4 feet bgs for utilities clearance.

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**LOG OF BORING
AB-4**

AGENCY DRAFT

DEPTH (ft bgs)	GRAPHIC LOG	USCS SYMBOL	SOIL DESCRIPTION	SAMPLE	BLOW COUNT SPT N VALUE	VOLATILE READING (ppm)	GROUNDWATER	FIELD TESTING	TESTING AND LABORATORY DATA
30		SM	Dense to very dense, wet, yellow-brown, fine to medium coarse, silty SAND (SM) with trace subrounded gravel, micaceous. Becomes dense, olive-gray, fine, silty SAND (SM) with some medium sand.	▲	61	0.0			<ul style="list-style-type: none"> ■ S-18 ■ S-19 ■ S-19A ■ S-20
		ML	Stiff, moist, gray SILT (ML), some fine sand with clay, trace gravel, slightly plastic, iron-oxide staining.	▲	31	0.0			
		SP	Very dense, gray, fine to coarse SAND (SP), little fines; no discoloration, no odor.	▲	31				
35			Boring terminated at 35.5 feet bgs. Backfilled with medium bentonite chips, concrete patch at top.	▲	61				
40									
45									
50									
55									
60									

BORING METHOD: HSA

ELEVATION REFERENCE: NA

REMARKS:

BOREHOLE DIAMETER: 8 (in)

GROUND SURFACE ELEVATION: NA

Air knife to 4 feet bgs for utilities clearance.

DRILL RIG:

CASING ELEVATION: NA

CONTRACTOR: Cascade Drilling, Inc.

LOGGED BY: A.Speransky

DRILLING DATES: 6/21/2010

ENVIRONMENTAL BORING 1-915-15716E.02LS.GPJ AMEC PORTLAND.GDT 3/30/11

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**LOG OF BORING
AB-4**

PAGE 2 OF 2

AGENCY DRAFT

DEPTH (ft bgs)	GRAPHIC LOG	USCS SYMBOL	SOIL DESCRIPTION	SAMPLE	BLOW COUNT SPT N VALUE	VOLATILE READING (ppm)	GROUNDWATER	FIELD TESTING	TESTING AND LABORATORY DATA
0			Asphalt (6 inches thick), rock drain beneath, CAP fabric at 1 foot bgs.						
		SM	Moist, gray, silty SAND (SM) with fine to coarse gravel (Fill); petroleum hydrocarbon-like odor, sheen.			4.4			
			Becomes moist; petroleum hydrocarbon-like odor; 50% sheen; oily.			30			
5		SM	Wet wood waste, bricks, silty SAND (SM) mixture (Fill); oily; 100% sheen.		10	>100	▽		<ul style="list-style-type: none"> ■ AB5-5' 6/25/10 & S-1 TPH-G = 131; TPH-O = 11,000; TPH-D = 8,840; Benzene = 0.0949 ■ S-2
		SM-PT	Very loose, wet, brown, fine to coarse, silty SAND (SM), with organics (peat); 100% sheen. Trace gravel.		3	125			■ S-3
			Very loose, wet, gray, silty SAND (SM), wood waste; petroleum hydrocarbon-like odor, 75% sheen.		2	400			■ S-4
10			Wood waste, some gray sand.		2	>200			■ S-5 (Shelby)
		PT	Becomes loose, wood waste (PT); petroleum hydrocarbon-like odor, sheen.		9	75.7			■ S-6
15					13	>200			■ S-7
			Petroleum hydrocarbon-like odor, 100% sheen.		11	>200			■ S-8
		SM	Medium dense, wet, gray, fine to coarse, silty SAND (SM).		8	>200			■ S-9
20		SP	Medium dense, wet, yellow-brown, fine to coarse SAND (SP) with silt and some organics (wood); petroleum hydrocarbon-like odor, 25% sheen.		11	321			■ S-10
		SM	Dense, wet, olive-brown, fine to coarse, silty SAND (SM); no discoloration, no odor.		12	9			■ S-11
			Becomes loose.		9	3.8			■ AB5-22' 6/25/10 S-12
25			Becomes medium dense, trace gravel, trace organics (< 1 inch). Trace to some gravel; no discoloration, no odor.		30	3.5			■ S-13
					26	4.2			■ S-14
			Becomes dense, fine organics.		34	3.2			■ S-15
					26	5.2			■ S-16
					34				■ S-17

BORING METHOD: HSA

ELEVATION REFERENCE: NA

BOREHOLE DIAMETER:

GROUND SURFACE ELEVATION: NA

DRILL RIG:

CASING ELEVATION: NA

CONTRACTOR: Cascade Drilling, Inc.

LOGGED BY: A.Speransky

DRILLING DATES: 6/25/2010

REMARKS:
Air knife to 5 feet bgs, samples collected using hand auger to 5 feet bgs. At 31 feet bgs changed to D&M sampler; field density is approximate.

ENVIRONMENTAL BORING 1-915-15716E.02LS.GPJ AMEC PORTLAND.GDT 3/30/11













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LOG OF BORING AB-5

AGENCY DRAFT

DEPTH (ft bgs)	GRAPHIC LOG	USCS SYMBOL	SOIL DESCRIPTION	SAMPLE	BLOW COUNT SPT N VALUE	VOLATILE READING (ppm)	GROUNDWATER	FIELD TESTING	TESTING AND LABORATORY DATA
0		GW	Gravel surface.		NA	90			<div style="display: flex; flex-direction: column; gap: 5px;"> <div> AB5A 0.5-1.1'</div> <div> AB5A 1.5-2.5'</div> <div> AB5A 3-3.5'</div> <div> AB5A 4-4.5'</div> <div> AB5A 5-5.5'</div> </div> <p style="font-size: small; margin-top: 10px;">Total cPAHs = 0.1568; TPH-G = 804; TPH-D = 7,580; Benzene = 0.195</p>
		SM	Gray, moist, silty SAND (SM) with gravel; gray discoloration, petroleum hydrocarbon-like odor.		NA	>110			
			Petroleum hydrocarbon-like odor.		NA	>300			
			Moist, dark brown, wood waste; oily free product, oily discoloration, petroleum hydrocarbon-like odor.		NA	>1,000			
5			Becomes wet; free product.		NA	>1,500	▽		
			Boring terminated at 5.5 feet bgs.		NA	700			

ENVIRONMENTAL BORING 1-915-15716E.02LS.GPJ AMEC PORTLAND.GDT 3/30/11

BORING METHOD: Hand Auger BOREHOLE DIAMETER: 3 (in) DRILL RIG: CONTRACTOR: Cascade Drilling, Inc. LOGGED BY: A.Speranksy	ELEVATION REFERENCE: NA GROUND SURFACE ELEVATION: NA CASING ELEVATION: NA DRILLING DATES: 6/22/2010
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REMARKS:
Air knife to 5 feet bgs, sampled using hand auger.

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LOG OF BORING
AB-5A
PAGE 1 OF 1

AGENCY DRAFT

DEPTH (ft bgs)	GRAPHIC LOG	USCS SYMBOL	SOIL DESCRIPTION	SAMPLE	BLOW COUNT SPT N VALUE	VOLATILE READING (ppm)	GROUNDWATER	FIELD TESTING	TESTING AND LABORATORY DATA
0			Asphalt (6 inches), gravel base, CAP fabric at 1 foot bgs.						
			Brown, free product on water approximately 25%.						
			Water seeps into drain rock, impossible to vacuum. Brown, free product on water table approximately 25%.						
5			Boring terminated at 3.5 feet bgs; backfilled with medium bentonite chips and capped with concrete patch.						
10									
15									
20									
25									
30									

BORING METHOD: Air Knife

ELEVATION REFERENCE: NA

REMARKS:

BOREHOLE DIAMETER:

GROUND SURFACE ELEVATION: NA

Air knife to 3 feet bgs, no samples collected.

DRILL RIG:

CASING ELEVATION: NA

CONTRACTOR: Cascade Drilling, Inc.

LOGGED BY: A.Speranksy

DRILLING DATES: 6/21/2010

ENVIRONMENTAL BORING 1-915-15716E.02LS.GPJ AMEC PORTLAND.GDT 3/30/11

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**LOG OF BORING
AB-6**

PAGE 1 OF 1

AGENCY DRAFT

DEPTH (ft bgs)	GRAPHIC LOG	USCS SYMBOL	SOIL DESCRIPTION	SAMPLE	BLOW COUNT SPT N VALUE	VOLATILE READING (ppm)	GROUNDWATER	FIELD TESTING	TESTING AND LABORATORY DATA
0			Asphalt (5 inches).						
		SM	Gray, moist, silty, fine to coarse SAND (SM) with gravel, wood, glass (Fill); grayish discoloration, petroleum hydrocarbon-like odor, staining.						
5		SM	Medium dense, moist to wet (at bottom), gray, fine to medium, silty SAND (SM) with gravel; grayish discoloration, petroleum hydrocarbon-like odor, sheen approximately 50%.		9	12			AP1-5' Total cPAHs = 0.1850
10		SM	Dense, wet, gray, fine to coarse, silty SAND (SM) with some subrounded gravel; no discoloration, petroleum hydrocarbon-like odor, no sheen.		25	3.1			AP1-10'
15		ML	Organics. Brown wood waste with silt (ML), laminated; no discoloration, some organic odor.		26	5.1			AP1-15'
20			Boring terminated at 17 feet bgs; sand installed to 15 feet bgs; installed and sampled temporary well with screened interval from 5 to 15 feet bgs. Backfilled with medium bentonite chips; cement patch at surface.						

ENVIRONMENTAL BORING 1-915-15716E.02LS.GPJ AMEC PORTLAND.GDT 3/31/11

BORING METHOD: HSA	ELEVATION REFERENCE: NA
BOREHOLE DIAMETER: 8 (in)	GROUND SURFACE ELEVATION: NA
DRILL RIG:	CASING ELEVATION: NA
CONTRACTOR: Cascade Drilling, Inc.	
LOGGED BY: A.Speransky	DRILLING DATES: 6/23/2010 - 6/24/2010

REMARKS:
 Air knife and vactor truck to 4 feet bgs for utilities clearance.
 Sampled with hand auger to 5 feet bgs, D&M sampler to 17 feet bgs; field density is approximate.

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LOG OF BORING
AP-1

AGENCY DRAFT

DEPTH (ft bgs)	GRAPHIC LOG	USCS SYMBOL	SOIL DESCRIPTION	SAMPLE	BLOW COUNT SPT N VALUE	VOLATILE READING (ppm)	GROUNDWATER	FIELD TESTING	TESTING AND LABORATORY DATA
0		SP	Asphalt (0.3 feet).						
		SM	Olive-brown, fine to coarse SAND (SP) with silt. Moist to wet, fine, silty SAND (SM), with some dark brown organics, micaceous; gray discoloration, petroleum hydrocarbon-like odor.			>100	▽		■ AP2-1' 11/30/10
5		SM-PT	Wet, dark brown, fine to coarse, silty SAND (SM) with wood waste; petroleum hydrocarbon-like odor. Oily wood waste.			25			
10			Dark brown, silty SAND; petroleum hydrocarbon-like odor, sheen. Orange to dark brown, wood waste (PT); no discoloration, no odor.			3.5 - 6.0			
		SM	Wet, brown, fine to coarse, silty SAND (SM) with organics; petroleum hydrocarbon-like odor, 30% sheen.						
		SP	Wet, yellow-brown, medium to coarse SAND (SP) with fine sand and some silt, trace gravel; no discoloration, no odor.			0.0			■ AP2-14' 12/07/10
15			Boring terminated at 15 feet bgs; backfilled with fine bentonite chips.						
20									
25									
30									
BORING METHOD: Push-probe ELEVATION REFERENCE: NA BOREHOLE DIAMETER: 4 (in) GROUND SURFACE ELEVATION: NA DRILL RIG: Push-probe CASING ELEVATION: NA CONTRACTOR: Cascade Drilling, Inc.					REMARKS: Air knife and vactor truck to 5 feet bgs for utilities clearance.				
LOGGED BY: A.Speransky DRILLING DATES: 11/30/2010 - 12/7/2010									

ENVIRONMENTAL BORING 1-915-15716E.02LS.GPJ AMEC PORTLAND.GDT 3/30/11

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LOG OF BORING
AP-2

AGENCY DRAFT

DEPTH (ft bgs)	GRAPHIC LOG	USCS SYMBOL	SOIL DESCRIPTION	SAMPLE	BLOW COUNT SPT N VALUE	VOLATILE READING (ppm)	GROUNDWATER	FIELD TESTING	TESTING AND LABORATORY DATA
0		SM	Asphalt (0.3 feet). Moist to wet, gray, fine to coarse, silty SAND (SM) with gravel (Fill); no discoloration, no odor.			2.2	▽		■ AP3-1' 11/30/10
		SM	Wet, olive-gray, fine, silty SAND (SM), trace gravel, micaceous; gray discoloration, petroleum hydrocarbon-like odor, 30% sheen.						
5		SM-PT	Wet, brown, fine to coarse, silty SAND (SM) with gravel, organics, bricks. Wood waste; product, 100% sheen, petroleum hydrocarbon-like odor.			80			
			Trace gravel; sheen.						
10			Dark brown wood waste with some silt; petroleum hydrocarbon-like odor.			0.2			■ AP3-9' 12/07/10
			Driller reports soft material. Groundwater rose up to surface.						
15			Boring terminated at 15 feet bgs; backfilled with fine bentonite chips.						
20									
25									
30									

BORING METHOD: Push-probe BOREHOLE DIAMETER: 4 (in) DRILL RIG: Push-probe CONTRACTOR: Cascade Drilling, Inc. LOGGED BY: A.Speransky	ELEVATION REFERENCE: NA GROUND SURFACE ELEVATION: NA CASING ELEVATION: NA DRILLING DATES: 11/30/2010 - 12/7/2010
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REMARKS:
Air knife and vactor truck to 5 feet bgs for utilities clearance.

ENVIRONMENTAL BORING 1-915-15716E.02LS.GPJ AMEC PORTLAND.GDT 3/30/11

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AGENCY DRAFT

DEPTH (ft bgs)	GRAPHIC LOG	USCS SYMBOL	SOIL DESCRIPTION	SAMPLE	BLOW COUNT SPT N VALUE	VOLATILE READING (ppm)	GROUNDWATER	FIELD TESTING	TESTING AND LABORATORY DATA
0		SM	Asphalt (0.3 feet).			1.7	▽		<p>■ AP4-1' 11/30/10</p> <p>■ AP4-6' 12/07/10</p> <p>■ AP4-15' 12/07/10</p>
		SM	Moist to wet, olive-gray, fine to medium, silty SAND (SM), trace gravel; iron-oxide discoloration.			0.0			
		SP	Wet, gray, fine to coarse, silty SAND (SM) with gravel; no discoloration, no odor.						
5		SM	Wet, olive-gray, fine to coarse SAND (SP) with some silt.						
		SM-PT	Wet, olive, fine to medium, silty SAND (SM); no discoloration, no odor.			0.0			
		SM-PT	Wet, red-brown, fine to medium, silty SAND (SM) with trace fine gravel, brown organics. Dark brown wood waste.						
		SP	Wet, gray, fine to coarse, silty SAND (SM) with gravel; no discoloration, no odor.						
		SP	Wet, olive-gray, fine to coarse SAND (SP) with silt, trace fine gravel; no discoloration, no odor.						
			Dark brown, wood waste (decayed) with some silt; no odor.						
		SM	Brown, silty SAND (SM).						
15		SP	Wet, yellow-brown, coarse SAND (SP) with some fine and medium sand, little to no fines, trace fine gravel; no discoloration, no odor.						
			Boring terminated at 15 feet bgs; backfilled with fine bentonite chips.						

BORING METHOD: Push-probe

ELEVATION REFERENCE: NA

REMARKS:

BOREHOLE DIAMETER: 4 (in)

GROUND SURFACE ELEVATION: NA

Air knife and vactor truck to 5 feet bgs for utilities clearance.

DRILL RIG: Push-probe

CASING ELEVATION: NA

CONTRACTOR: Cascade Drilling, Inc.

LOGGED BY: A.Speransky

DRILLING DATES: 11/30/2010 - 12/7/2010

ENVIRONMENTAL BORING 1-915-15716E.02LS.GPJ AMEC PORTLAND.GDT 3/30/11

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**LOG OF BORING
AP-4**

PAGE 1 OF 1

AGENCY DRAFT

DEPTH (ft bgs)	GRAPHIC LOG	USCS SYMBOL	SOIL DESCRIPTION	SAMPLE	BLOW COUNT SPT N VALUE	VOLATILE READING (ppm)	GROUNDWATER	FIELD TESTING	TESTING AND LABORATORY DATA
0	[Symbol: Dotted pattern]	SM	Asphalt (0.3 feet). Wet, gray, fine to coarse, silty SAND (SM) with gravel; no discoloration, no odor. Trace gravel, some organics (wood waste); gray discoloration, petroleum hydrocarbon-like odor, 100% sheen.	[Symbol: Triangular wedge]		>200	▽		<ul style="list-style-type: none"> ■ AP5-1' 11/30/10 ■ AP5-1.5' 12/07/10 <li style="padding-left: 20px;">TPH-G = 652; Benzene = 0.0353
5	[Symbol: Dotted pattern]	SM-PT	Some gravel, refuse (bricks), dark brown wood waste; petroleum product on wood waste. Wood waste; petroleum hydrocarbon-like odor.	[Symbol: Triangular wedge]		>300			
10	[Symbol: Dotted pattern]		Petroleum product on liner. Wet, dark brown, fine to coarse, silty SAND (SM) with wood waste, refuse (bricks); petroleum product, petroleum hydrocarbon-like odor. Wood waste; some petroleum.	[Symbol: Triangular wedge]		>300			
15	[Symbol: Dotted pattern]		Boring terminated at 15 feet bgs; backfilled with fine bentonite chips.						<ul style="list-style-type: none"> ■ AP5-14.5' 12/07/10 <li style="padding-left: 20px;">Total cPAHs = 0.3963; TPH-O = 8,980; TPH-D = 8,660

BORING METHOD: Push-probe BOREHOLE DIAMETER: 4 (in) DRILL RIG: Push-probe CONTRACTOR: Cascade Drilling, Inc. LOGGED BY: A.Speransky	ELEVATION REFERENCE: NA GROUND SURFACE ELEVATION: NA CASING ELEVATION: NA DRILLING DATES: 11/30/2010 - 12/7/2010	REMARKS: Air knife and vactor truck to 5 feet bgs for utilities clearance.
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LOG OF BORING
AP-5
 PAGE 1 OF 1

ENVIRONMENTAL BORING 1-915-15716E.02LS.GPJ AMEC PORTLAND.GDT 3/30/11

AGENCY DRAFT

C DEPTH (ft bgs)	GRAPHIC LOG	USCS SYMBOL	SOIL DESCRIPTION	SAMPLE	BLOW COUNT SPT N VALUE	VOLATILE READING (ppm)	GROUNDWATER	FIELD TESTING	TESTING AND LABORATORY DATA
0			Asphalt (0.3 feet), 0.5 feet asphalt base.						
		SP	Gray, fine to coarse SAND (SP) with silt and gravel; gray discoloration, petroleum hydrocarbon-like odor. Petroleum product was rising to the surface.				▽		■ AP6-1 11/30/10 TPH-G = 184
5			Rod dropped to 7 feet bgs unexpectedly. Oil is dripping from the rod.						
		SM-PT	Dark brown, wet, silty SAND (SM) and wood waste; petroleum product, petroleum hydrocarbon-like odor.		5				■ S-1
					2				■ S-2
10		PT	No recovery (wood waste). (Logged from drill cuttings.)		0				
			No recovery (wood waste).		1				■ S-3
			Dark brown, wood waste (decayed, fine and large, 6 inch thick wood) (PT); petroleum product, petroleum hydrocarbon-like odor.		4				■ S-4
15			No recovery (wood waste); petroleum product. (Logged from drill cuttings.)		1				
		ML-PT	Soft, wet, dark brown, SILT (ML) and wood waste (PT); petroleum product; petroleum hydrocarbon-like odor.		4				■ S-5
20		SM	No recovery. Silty SAND (SM) on ring lines.		18				■ S-6
			Medium dense, wet, yellow-brown, fine to coarse, silty SAND (SM) with trace fine organics; no discoloration, no odor.		29				■ AP6-23' 12/02/10 ■ S-7
					50/6"	0.4 - 16			
25			Abundant fine organics, trace fine gravel.		1.5				■ S-8
		SP	Fine to coarse SAND (SP) with some gravel.		20				■ S-9
					23	3.1 - 4.5			■ S-10
		ML	Stiff, olive to gray SILT (ML) with sand, trace gravel, slightly plastic.		8	1.4			■ S-11
30						0.0			

BORING METHOD: HSA

ELEVATION REFERENCE: NA

REMARKS:

BOREHOLE DIAMETER:

GROUND SURFACE ELEVATION: NA

Air knife and vactor truck to 5 feet bgs for utilities clearance.

DRILL RIG: Hollow Stem Auger

CASING ELEVATION: NA

CONTRACTOR: Cascade Drilling, Inc.

LOGGED BY: A.Speransky

DRILLING DATES: 11/30/2010 - 12/2/2010

ENVIRONMENTAL BORING 1-915-15716E.02LS.GPJ AMEC PORTLAND.GDT 3/30/11

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**LOG OF BORING
AP-6**

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AGENCY DRAFT

DEPTH (ft bgs)	GRAPHIC LOG	USCS SYMBOL	SOIL DESCRIPTION	SAMPLE	BLOW COUNT SPT N VALUE	VOLATILE READING (ppm)	GROUNDWATER	FIELD TESTING	TESTING AND LABORATORY DATA
30		ML	Stiff to very stiff, moist, gray to olive-gray SILT (ML) with fine sand, iron oxidation; no discoloration, no odor.		16	0.0			<ul style="list-style-type: none"> ■ AP6-30' 12/02/10 ■ S-12 ■ S-13 ■ S-14
			Becomes very stiff, gray, trace organics; no discoloration, no odor.		31				
		SM	Brown, wet, fine to medium, silty SAND (SM).		38				
		SP	Dense, wet, olive-gray, fine to coarse SAND (SP) with gravel		31				
35		SM	Becomes silty SAND (SM) with gravel.						
			Boring terminated at 35.5 feet bgs; backfilled with bentonite slurry via tremmie pipe.						
40									
45									
50									
55									
60									

BORING METHOD: HSA

ELEVATION REFERENCE: NA

REMARKS:

Air knife and vactor truck to 5 feet bgs for utilities clearance.

BOREHOLE DIAMETER:

GROUND SURFACE ELEVATION: NA

DRILL RIG: Hollow Stem Auger

CASING ELEVATION: NA

CONTRACTOR: Cascade Drilling, Inc.

LOGGED BY: A.Speransky

DRILLING DATES: 11/30/2010 - 12/2/2010

ENVIRONMENTAL BORING 1-915-15716E.02LS.GPJ AMEC PORTLAND.GDT 3/30/11

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**LOG OF BORING
AP-6**

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AGENCY DRAFT

0 DEPTH (ft bgs)	GRAPHIC LOG	USCS SYMBOL	SOIL DESCRIPTION	SAMPLE	BLOW COUNT SPT N VALUE	VOLATILE READING (ppm)	GROUNDWATER	FIELD AND LABORATORY TESTING	WELL SCHEMATIC
0			Surface: 0.2 feet of asphalt over 1.6 feet of gray fine to medium angular gravel (crushed rock base course). A vac-truck was utilized from 0 to 5 feet bgs to insure utilities were cleared.						
5		SP-SM	Medium dense, moist, brown, fine to coarse SAND (SP/SM) with some silt and trace fine gravel. Moist to wet, wood; possibly a large block		22	0.0	▼		
		SP	Loose, wet, brown, fine to medium SAND (SP) with trace silt; petroleum hydrocarbon-like odor. Becomes saturated and gray at 8.3 feet bgs. Water appeared viscous and sediments appeared to have a metallic luster from 8.3 to 9 feet bgs. Becomes medium dense at 9.5 feet bgs.		6	0.0	▽	A1_S-1_020408 Sheen Test None Observed A1_S-2_020408	
10		GP-GM	Becomes gray and brown, with some fine gravel and trace silt; no odor observed at 10.4 feet bgs. Cobble in sampler shoe.		21	0.0			
		SP	Medium dense, saturated, dark gray, fine GRAVEL (GP/GM) with some fine to medium sand and silt; light to medium sheen. Medium dense, saturated, gray, fine to medium SAND (SP) with trace silt and fine gravel and occasional organics (wood splinters). Approximately 0.01 foot thick layers of wood splinters at 13, 14, and 15 feet bgs. Becomes loose, no visible gravel; petroleum hydrocarbon-like odor at 14.5 feet bgs.		16	0.0		Sheen Test Light Observed	
15			Approximately 0.1 foot thick layer of stiff, moist, brown SILT (ML) with numerous organics / organic SILT (plant fragments, wood fibers, roots) at 18 feet bgs.		14	0.0		TPH-D = 3,260; TPH-O = 529	
		ML	Very stiff, moist, brown SILT (ML) with trace fine to coarse sand and numerous organics / organic SILT with trace fine to coarse sand.		14	0.0		Sheen Test Light Observed	
20			Becomes with occasional organics (roots) at 25 feet bgs. Medium dense, saturated, gray, fine to medium SAND (SP) with trace silt.		24	0.0		Sheen Test None Observed	
25		SP			17	0.0			
30			Boring terminated at 26.5 feet bgs.						

BORING METHOD: HSA

ELEVATION REFERENCE: NA

BOREHOLE DIAMETER: 8 (in)

GROUND SURFACE ELEVATION: NA

DRILL RIG: CME

CASING ELEVATION: NA

CONTRACTOR: Cascade Drilling, Inc./Scott

START CARD/TAG ID: /BAB238

LOGGED BY: LME

DRILLING DATES: 2/4/2008

REMARKS:

ENVR+WELL-BORING 1-915-15716E:02LS.GPJ AMEC PORTLAND.GDT 3/31/11

ExxonMobil / American Distributing Company

1-915-15716E

AMEC Earth and Environmental, Inc.
600 University Street, Suite 1020
Seattle, Washington
USA 98101
Tel (206) 342-1760
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**LOG OF BORING
MW-A1**

PAGE 1 OF 1

AGENCY DRAFT

O DEPTH (ft bgs)	GRAPHIC LOG	USCS SYMBOL	SOIL DESCRIPTION	SAMPLE	BLOW COUNT SPT N VALUE	VOLATILE READING (ppm)	GROUNDWATER	FIELD AND LABORATORY TESTING	WELL SCHEMATIC
0			Surface: moist, dark gray, angular fine to medium gravel (crushed rock). A vac-truck was utilized from 0 to 5 feet bgs to insure utilities were cleared. Approximately 2 feet of wood; creosote odor (appeared to be blocks of wood treated with creosote).						
5	SP	SP	Very loose, moist, black, fine to medium SAND (SP/SM) with some silt and numerous organics (wood splinters).		5	0.0	▼	A2_S-1_020408 Sheen Test Light Observed	
	SP	ML	Very loose, moist, brown, fine to medium SAND (SP) with trace silt.						
	ML	OL	Stiff, wet to saturated, blue-gray, sandy SILT (ML); slight petroleum hydrocarbon-like odor, light sheen.		11	0.0	▽	A2_S-2_020408	
	OL	SM	Stiff, moist, dark brown to black, organic SILT to SILT (ML/OL) with numerous organics (roots, plant fragments); petroleum hydrocarbon-like odor.						
	SM	ML	Loose, wet to saturated, silty, fine to medium SAND (SM) with trace fine gravel; petroleum hydrocarbon-like odor, light sheen.		25	0.0		Sheen Test None Observed	
	ML	SP	Stiff, moist, brown, SILT (ML) with some clay and numerous organics (roots).						
	SP	SP	Loose, moist to wet, gray, fine to medium SAND (SP) with trace silt and scattered organics (roots).		17	0.0		TPH-D = 1,720	
	SP	SP	Medium dense, saturated, gray, fine to medium SAND (SP) with trace silt.						
15			Becomes with occasional organics (roots, plant fragments) at 15 feet bgs.		11	0.0		Sheen Test None Observed	
			Tip of sampler shoe contained wet, brown, organic SILT / SILT (ML/OL) with numerous organics (roots, plant fragments).		14	0.0			
20					16	0.0		Sheen Test None Observed	
	OL	ML	Stiff, moist, brown, organic stratified SILT with some clay and trace fine to medium sand / stratified SILT (OL/ML) with some clay and trace fine to medium sand and numerous organics (roots, plant fragments).						
	ML	SP	Medium dense, saturated, gray, fine to medium SAND (SP) with trace silt and occasional organics (roots, plant fragments).		25	0.0		Sheen Test None Observed	
	SP	SP	Becomes no visible organics at 22 feet bgs.		25	0.0		Sheen Test None Observed	
25					25	0.0		Sheen Test None Observed	
			Boring terminated at 26.5 feet bgs.						

BORING METHOD: HSA	ELEVATION REFERENCE: NA
BOREHOLE DIAMETER: 8 (in)	GROUND SURFACE ELEVATION: NA
DRILL RIG: CME	CASING ELEVATION: NA
CONTRACTOR: Cascade Drilling, Inc./Scott	START CARD/TAG ID: /BAB237
LOGGED BY: LME	DRILLING DATES: 2/4/2008

REMARKS:

ENVR+WELL-BORING 1-915-15716E:02LS.GPJ AMEC PORTLAND.GDT 3/31/11

<p>ExxonMobil / American Distributing Company</p> <p>1-915-15716E</p>	<p>AMEC Earth and Environmental, Inc. 600 University Street, Suite 1020 Seattle, Washington USA 98101 Tel (206) 342-1760 Fax (206) 342-1761</p>		<p>LOG OF BORING MW-A2</p> <p>PAGE 1 OF 1</p>
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AGENCY DRAFT

O DEPTH (ft bgs)	GRAPHIC LOG	USCS SYMBOL	SOIL DESCRIPTION	SAMPLE	BLOW COUNT SPT N VALUE	VOLATILE READING (ppm)	GROUNDWATER	FIELD AND LABORATORY TESTING	WELL SCHEMATIC
0		SM	Asphalt. Gray, silty SAND (SM) with gravel (Fill).						
5		SM	Medium dense, slightly moist, gray, fine to coarse, silty SAND (SM) with some gravel; no discoloration, no odor.		17	1.6		MWA3-5'	
10		SP	Medium dense, wet, gray, fine to coarse SAND (SP) with some gravel and abundant white shells, some organics (wood); no discoloration, no odor, no sheen.		12	1.3	▽	MWA3-10'	
15		SM	Medium dense, wet, gray, fine to coarse, silty SAND (SM) with trace subrounded to subangular gravel; no discoloration, no odor.		18	1.0	△ TPH-D = 791	MWA3-15'	
20		SP	Very dense, wet, gray, medium to coarse SAND (SP) with some silt, some shells, trace gravel; no discoloration, no odor.		50/6"	1.2		MWA3-20'	
			Boring terminated at 20 feet bgs.						

BORING METHOD: HSA	ELEVATION REFERENCE: NA
BOREHOLE DIAMETER: 8 (in)	GROUND SURFACE ELEVATION: NA
DRILL RIG: NA	CASING ELEVATION: NA
CONTRACTOR: Cascade Drilling, Inc.	START CARD/TAG ID: /BCM 305
LOGGED BY: A.Speransky	DRILLING DATES: 6/23/2010 - 6/24/2010

REMARKS:
 Air knife to 4 feet bgs for utilities clearance.
 D&M sampler; field density is approximate.

ENVR+WELL-BORING 1-915-15716E:02LS.GPJ AMEC PORTLAND.GDT 3/31/11

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AGENCY DRAFT

0 DEPTH (ft bgs)	GRAPHIC LOG	USCS SYMBOL	SOIL DESCRIPTION	SAMPLE	BLOW COUNT SPT N VALUE	VOLATILE READING (ppm)	GROUNDWATER	FIELD AND LABORATORY TESTING	WELL SCHEMATIC
0		SM	Asphalt (0.3 feet). Silty SAND (SM) with gravel (Fill).						
5		SM	Medium dense, slightly moist, gray, fine to coarse, silty SAND (SM) with some gravel; no discoloration, no odor.		16	4.3		■ MW-A4-5'	
10			Moist to wet; no discoloration, no odor, no sheen.		21	4.5		■ MW-A4-10'	
15			Same as above. wood (< 1 inch); petroleum hydrocarbon-like odor.		26	6.7		■ MW-A4-15'	
20		SP	Medium dense, wet, gray, medium to coarse SAND (SP) with some silt and gravel, some organics (wood), abundant shells; no discoloration, no odor.		26	4.6		■ MW-A4-20'	
			Boring terminated at 20 feet bgs.						

BORING METHOD: HSA BOREHOLE DIAMETER: 8 (in) DRILL RIG: NA CONTRACTOR: Cascade Drilling, Inc. LOGGED BY: A.Speransky	ELEVATION REFERENCE: NA GROUND SURFACE ELEVATION: NA CASING ELEVATION: NA START CARD/TAG ID: /BCM 306 DRILLING DATES: 6/22/2010 - 6/24/2010	REMARKS: Air knife to 4 feet bgs for utilities clearance. D&M sampler; field density is approximate.
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ENVR+WELL-BORING 1-915-15716E:02LS.GPJ AMEC PORTLAND.GDT 3/31/11

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AGENCY DRAFT

O DEPTH (ft bgs)	GRAPHIC LOG	USCS SYMBOL	SOIL DESCRIPTION	SAMPLE	BLOW COUNT SPT N VALUE	VOLATILE READING (ppm)	GROUNDWATER	FIELD AND LABORATORY TESTING	WELL SCHEMATIC
0		SM	Asphalt.						
5		SP-SW	Gray, fine to coarse, silty SAND (SM) with gravel. (Logged from cuttings.) Very dense, slightly moist, gray, medium to coarse SAND (SP/SW) with silt and coarse gravel; no discoloration, no odor.		65	3.6		■ MWA5-5'	
10		SP	Dense, moist to wet (bottom of sampler), gray, medium to coarse SAND (SP) with some fine sand with gravel; no discoloration, no odor.		17	11		■ MWA5-10'	
15			Very dense, wet, gray, fine to coarse SAND (SP) with silt, trace gravel.		67	3.2		■ MWA5-15' △ TPH-D = 2,800; TPH-O = 523	
20			Becomes coarse SAND (SP) with fine sand, some silt, trace gravel. Boring terminated at 20 feet bgs. Tide is 2 feet above MSL.		50/2"	3.5		■ MWA5-20'	


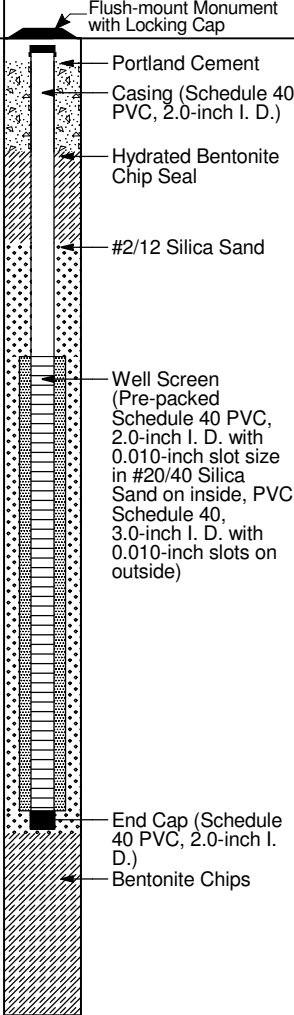









BORING METHOD: HSA	ELEVATION REFERENCE: NA
BOREHOLE DIAMETER: 8 (in)	GROUND SURFACE ELEVATION: NA
DRILL RIG: NA	CASING ELEVATION: NA
CONTRACTOR: Cascade Drilling, Inc.	START CARD/TAG ID: /BCM 301
LOGGED BY: A.Speransky	DRILLING DATES: 6/23/2010 - 6/24/2010

REMARKS:
Air knife to 4 feet bgs for utilities clearance.
D&M sampler; field density is approximate.

ENVR+WELL-BORING 1-915-15716E.02LS.GPJ AMEC PORTLAND.GDT 3/31/11

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AGENCY DRAFT

0 DEPTH (ft bgs)	GRAPHIC LOG	USCS SYMBOL	SOIL DESCRIPTION	SAMPLE	BLOW COUNT SPT N VALUE	VOLATILE READING (ppm)	GROUNDWATER	FIELD AND LABORATORY TESTING	WELL SCHEMATIC
0		SM	Asphalt (0.3 feet).						
5			Dense, moist, gray, fine to medium, silty SAND (SM), some gravel, bricks, burnt wood (Fill); no discoloration, no odor, no sheen.		41	1.5		■ MWA6-5'	
10			Cobble; drilled through.						
15		SM	Same as above; petroleum hydrocarbon-like odor, some sheen.		26	2.2	▽	■ MWA6-12'	
20		SM	Medium dense, wet, gray, fine, silty SAND (SM) with coarse sand and silt lenses (< 2 inches), abundant organics (wood chips < 1 inch).		12			△ TPH-D = 1,500	
20		SP	Laminated peat to silty SAND to SILT (PT/SM/ML) at 20 feet bgs. Medium dense, wet, gray, fine to medium SAND (SP) with wood in shoe; petroleum hydrocarbon-like odor, ~15% sheen.		9	2.8		■ MWA6-20'	
21.5			Boring terminated at 21.5 feet bgs.						

BORING METHOD: HSA	ELEVATION REFERENCE: NA
BOREHOLE DIAMETER: 8 (in)	GROUND SURFACE ELEVATION: NA
DRILL RIG: NA	CASING ELEVATION: NA
CONTRACTOR: Cascade Drilling, Inc.	START CARD/TAG ID: /BCM 304
LOGGED BY: A.Speransky	DRILLING DATES: 6/25/2010

REMARKS:
Air knife to 4 feet bgs for utilities clearance.
D&M sampler; field density is approximate.

ENVR+WELL-BORING 1-915-15716E:02LS.GPJ AMEC PORTLAND.GDT 3/31/11

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AGENCY DRAFT

O DEPTH (ft bgs)	GRAPHIC LOG	USCS SYMBOL	SOIL DESCRIPTION	SAMPLE	BLOW COUNT SPT N VALUE	VOLATILE READING (ppm)	GROUNDWATER	FIELD AND LABORATORY TESTING	WELL SCHEMATIC
0			No samples collected, for lithology descriptions refer to MW-7AB boring log.						
5									
10									
15			Boring terminated at 15 feet bgs.						
20									
25									
30									

BORING METHOD: HSA	ELEVATION REFERENCE: NA
BOREHOLE DIAMETER: 8 (in)	GROUND SURFACE ELEVATION: NA
DRILL RIG: Hollow Stem Auger	CASING ELEVATION: NA
CONTRACTOR: Cascade Drilling, Inc.	START CARD/TAG ID: /BLT 570
LOGGED BY: A.Speransky	DRILLING DATES: 12/2/2010

REMARKS:

ENVR+WELL-BORING 1-915-15716E:02LS.GPJ AMEC PORTLAND.GDT 3/31/11

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AGENCY DRAFT

DEPTH (ft bgs)	GRAPHIC LOG	USCS SYMBOL	SOIL DESCRIPTION	SAMPLE	BLOW COUNT SPT N VALUE	VOLATILE READING (ppm)	GROUNDWATER	FIELD TESTING	TESTING AND LABORATORY DATA
0		SP	Surface: 0.3 feet of asphalt over 0.5 feet asphalt base. Wet, olive-brown, medium to coarse SAND (SP) with some fine sand and silt; no discoloration, no odor.				▽		<ul style="list-style-type: none"> ■ MW-7A-1 11/30/10
			Very loose.		2	3.2 - 6.1			<ul style="list-style-type: none"> ■ S-1
			Becomes fine to coarse SAND (SP).		2				<ul style="list-style-type: none"> ■ S-2
5			No recovery. Driller reports very loose SAND.		0	12			<ul style="list-style-type: none"> ■ S-3
			No recovery.		0				
10		SM	Very loose, wet, olive to brown, fine to coarse, silty SAND (SM), organics.		10				<ul style="list-style-type: none"> ■ S-5
		SM-SP	Medium dense, wet, yellow to yellow-brown, fine to coarse, silty SAND (SM/SP), trace gravel.		19	23 - 30			<ul style="list-style-type: none"> ■ MW-7AB-12 12/1/10 ■ S-6
			Sand increases.		25	80			<ul style="list-style-type: none"> ■ S-7
15		SM	Dense, wet, brown to olive-brown, fine to coarse, silty SAND (SM); no discoloration, no odor.		42	7.0			<ul style="list-style-type: none"> ■ S-8
			Becomes, moist, iron oxidation discoloration, approximately 1 foot heave.		26	1.3			<ul style="list-style-type: none"> ■ S-9
		SM	Medium dense, wet, orange-brown, fine, silty SAND (SM), trace gravel.		17	2.5			<ul style="list-style-type: none"> ■ S-10
20		SM-ML	Medium dense, moist, gray to olive-gray, fine, silty SAND to SILT (SM/ML) with iron oxidation discoloration.		18	4.4			<ul style="list-style-type: none"> ■ S-11
		ML	Soft, gray SILT (ML).			0.0			<ul style="list-style-type: none"> ■ S-12 (Shelby)
		ML	Stiff, moist, olive-gray SILT (ML) with brown, fine organics.		63				<ul style="list-style-type: none"> ■ S-13
25		SP	Very dense, wet, olive, fine to coarse SAND (SP) with some silt, trace gravel, micaceous; no discoloration, no odor.		94				<ul style="list-style-type: none"> ■ S-14
			Gravel increases in last 6 inches of sampler shoe.		56	1.5 - 2.5			<ul style="list-style-type: none"> ■ S-15
			Becomes with gravel.		50/6"	7.0			<ul style="list-style-type: none"> ■ S-16
			Becomes with trace gravel.		50/5"				<ul style="list-style-type: none"> ■ S-17
30			Lenses of moist, brown, silty SAND (SM) with brown, very fine organics (approximately 4 inches thick).						

BORING METHOD: HSA BOREHOLE DIAMETER: 8 (in) DRILL RIG: Hollow Stem Auger CONTRACTOR: Cascade Drilling, Inc. LOGGED BY: A.Speransky	ELEVATION REFERENCE: NA GROUND SURFACE ELEVATION: NA CASING ELEVATION: NA DRILLING DATES: 11/30/2010 - 12/1/2010	REMARKS: Cleared to 5 feet bgs with hand auger and vacuum truck.
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ENVIRONMENTAL BORING 1-915-15716E.02LS.GPJ AMEC PORTLAND.GDT 3/31/11

ExxonMobil / American Distributing Company
 1-915-15716E

AMEC Earth and Environmental, Inc.
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**LOG OF BORING
MW-7AB**

PAGE 1 OF 2

AGENCY DRAFT

DEPTH (ft bgs)	GRAPHIC LOG	USCS SYMBOL	SOIL DESCRIPTION	SAMPLE	BLOW COUNT SPT N VALUE	VOLATILE READING (ppm)	GROUNDWATER	FIELD TESTING	TESTING AND LABORATORY DATA
30		SP-SM	Very dense, wet, olive, fine to coarse SAND (SP/SM) with silt and silty sand; no discoloration, no odor. No samples collected due to reported heave.		0	NA			■ S-18
35			Boring terminated at 35.5 feet bgs; backfilled with bentonite slurry via tremmie pipe.		50/5"				
40									
45									
50									
55									
60									

BORING METHOD: HSA	ELEVATION REFERENCE: NA
BOREHOLE DIAMETER: 8 (in)	GROUND SURFACE ELEVATION: NA
DRILL RIG: Hollow Stem Auger	CASING ELEVATION: NA
CONTRACTOR: Cascade Drilling, Inc.	
LOGGED BY: A.Speransky	DRILLING DATES: 11/30/2010 - 12/1/2010

REMARKS:
Cleared to 5 feet bgs with hand auger and vacuum truck.

ENVIRONMENTAL BORING 1-915-15716E.02LS.GPJ AMEC PORTLAND.GDT 3/31/11

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APPENDIX D

Well Development Records

AGENCY DRAFT



WELL SAMPLING AND/OR DEVELOPMENT RECORD

Well ID: <u>GA</u>	Initial Depth to Water: <u>11.42 @ 1534</u>
Sample ID: <u>—</u> Duplicate ID: <u>—</u>	Depth to Water after Sampling: _____
Sample Depth: <u>—</u>	Total Depth to Well: <u>17.71</u>
Project and Task No.: _____	Well Diameter: <u>2"</u>
Project Name: <u>XOM/ADC</u>	1 Casing/Borehole Volume: _____ (Circle one)
Date: <u>7/7/10</u>	3 Casing/Borehole Volumes: _____ (Circle one)
Sampled By: <u>J. Petrich</u>	Total Casing/Borehole Volumes Removed: _____
Method of Purging: _____	
Method of Sampling: _____	

Time	Intake Depth	Rate (gpm)	Cum. Vol. (gal.)	Temp. (°C)	pH (units)	Specific Electrical Conductance (µS/cm)	Remarks (color, turbidity, and sediment)
1538		/	initial	33.2	7.18	7.12	Dark Grey silty.
Surging							
1601		1.2gpm	3	33.5	7.58	7.02	Dark Grey, silty. wet dry
1616			5	30.5	7.70	7.05 6.98	" " wet dry
1630			8	31.3	7.75	6.67	Light Grey, opaque wet dry.
1639			9	30.6	7.05	6.30	80% clear, wet dry
1642			10	29.4	7.21	6.63	Turb = 27.4 dry
1648			11	29.4	7.34	6.56	Turb = 9.5 dry.

pH CALIBRATION (choose two)				Model or Unit No.:			
Buffer Solution	pH 4.0	pH 7.0	pH 10.0				
Temperature C							
Instrument Reading							
SPECIFIC ELECTRICAL CONDUCTANCE - CALIBRATION				Model or Unit No.:			
KCL Solution (µS/cm=µmhos/cm)							
Temperature C							
Instrument Reading							

Notes:

AGENCY DRAFT



WELL SAMPLING AND/OR DEVELOPMENT RECORD

Well ID: AS Initial Depth to Water: 12.85 @ 1650

Sample ID: _____ Duplicate ID: - Depth to Water after Sampling: _____

Sample Depth: _____ Total Depth to Well: 17.21

Project and Task No.: _____ Well Diameter: 2"

Project Name: XOM/ADC 1 Casing/Borehole Volume: _____
(Circle one)

Date: 7.07.10 3 Casing/Borehole Volumes: _____
(Circle one)

Sampled By: J. Petrich Total Casing/Borehole Volumes Removed: _____

Method of Purging: _____

Method of Sampling: _____

Time	Intake Depth	Rate (gpm)	Cum. Vol. (gal.)	Temp. (°C)	pH (units)	Specific Electrical Conductance (µS/cm)	Remarks (color, turbidity, and sediment)
1703		initial	↗	30.5	7.25	1.90	Dark Grey, silty, Turb > 999
Surging							
1713		1.2	3	29.4	7.26	1.88	Dark Grey, Silty, Turb > 999, Dry
1718		1	4	29.5	7.27	1.78	" " " Dry
1723			5	29.2	7.21	1.76	light Grey, Silty, Turb = > 999, Dry
1735			6	29.4	7.44	1.79	light Grey, Silty, Turb = 480, Dry
1745			7	30.1	7.45	1.764	" " Turb = 317, Dry
1753			8	28.8	7.27	1.78	light Grey, Silty Turb = 191, Dry
1800			9	28.3	7.32	1.80	light Grey, opaque, Turb = 153, Dry
1808			11	27.5	7.33	1.80	opaque, Turb = 99.0
1810			13	26.8	7.21	1.80	clear 80% clear, Turb = 47.9
1812			15	20.5	7.25	1.80	clear 90% - Turb = 51.2

pH CALIBRATION (choose two)					Model or Unit No.:		
Buffer Solution	pH 4.0	pH 7.0	pH 10.0				
Temperature C							
Instrument Reading							
SPECIFIC ELECTRICAL CONDUCTANCE - CALIBRATION					Model or Unit No.:		
KCL Solution (µS/cm=µmhos/cm)							
Temperature C							
Instrument Reading							

Notes:

AGENCY DRAFT



WELL SAMPLING AND/OR DEVELOPMENT RECORD

Well ID: <u>4A</u>	Initial Depth to Water: <u>10.80 @ 1829</u>
Sample ID: <u>—</u> Duplicate ID: <u>—</u>	Depth to Water after Sampling: _____
Sample Depth: <u>—</u>	Total Depth to Well: <u>17.30</u>
Project and Task No.: _____	Well Diameter: <u>2"</u>
Project Name: <u>XOM/ADC</u>	1 Casing/Borehole Volume: _____ (Circle one)
Date: <u>7.07.10</u>	3 Casing/Borehole Volumes: _____ (Circle one)
Sampled By: <u>J. Petrich</u>	Total Casing/Borehole Volumes Removed: _____
Method of Purging: <u>Sub. Pump</u>	
Method of Sampling: <u>—</u>	

Time	Intake Depth	Rate (gpm)	Cum. Vol. (gal.)	Temp. (°C)	pH (units)	Specific Electrical Conductance (µS/cm)	Remarks (color, turbidity, and sediment)
1834	initial	—	—	27.7	6.65	30.1	Dark Grey, silty Turb = >999
Surging							
1846		1.2	3	29.0	6.68	30.5	Dark Grey silty Turb = >999.
1850		1.2	8	29.2	6.71	30.5	light Grey, silty, Turb = 178
1855		1.2	13	29.2	6.94	30.6	80% clear, Turb = 40.1
1858		↓	14	28.2	6.98	30.8	90% clear Turb = 22.8

pH CALIBRATION (choose two)				Model or Unit No.:	
Buffer Solution	pH 4.0	pH 7.0	pH 10.0	Horiba U-22	
Temperature C					
Instrument Reading	pH 4.0	pH 7.0	pH 10.1		
SPECIFIC ELECTRICAL CONDUCTANCE - CALIBRATION				Model or Unit No.:	
KCL Solution (µS/cm=µmhos/cm)		4.5 S/CM		Horiba U-22	
Temperature C					
Instrument Reading		4.5 S/CM			

Notes:

AGENCY DRAFT



WELL SAMPLING AND/OR DEVELOPMENT RECORD

Well ID: <u>A3</u>	Initial Depth to Water: <u>8.08 @ 1905</u>
Sample ID: <u> </u> Duplicate ID: <u> </u>	Depth to Water after Sampling: <u> </u>
Sample Depth: <u> </u>	Total Depth to Well: <u>15.54</u>
Project and Task No.: <u> </u>	Well Diameter: <u>2"</u>
Project Name: <u>XOM/ADC</u>	1 Casing/Borehole Volume: <u> </u> (Circle one)
Date: <u>7.07.10</u>	3 Casing/Borehole Volumes: <u> </u> (Circle one)
Sampled By: <u>J. Petrick</u>	Total Casing/Borehole Volumes Removed: <u> </u>
Method of Purging: <u>Sub Pump</u>	
Method of Sampling: <u> </u>	

Time	Intake Depth	Rate (gpm)	Cum. Vol. (gal.)	Temp. (°C)	pH (units)	Specific Electrical Conductance (µS/cm)	Remarks (color, turbidity, and sediment)
1911 1911	<u> </u>	<u>initial</u>	<u> </u>	<u>28.4</u>	<u>7.97</u>	<u>1.90</u>	<u>Dark Grey, Silty, Turb = >999.</u>
<u>Surging</u>							
<u>1920</u>		<u>1.2</u>	<u>4</u>	<u>28.3</u>	<u>7.34</u>	<u>0.96</u>	<u>Dark Grey, Silty, Turb = >999.</u>
<u>1924</u>		<u>1.2</u>	<u>9</u>	<u>27.6</u>	<u>6.75</u>	<u>0.765</u>	<u>light Grey, Turb = 196</u>
<u>1927</u>		<u>1.2</u>	<u>12</u>	<u>26.9</u>	<u>6.72</u>	<u>0.755</u>	<u>light Grey, Turb = 98.6</u>
<u>1931</u>		<u>1.2</u>	<u>16</u>	<u>26.2</u>	<u>6.40</u>	<u>0.736</u>	<u>80% clear, Turb = 66.2</u>
<u>1934</u>			<u>20</u>	<u>25.7</u>	<u>6.24</u>	<u>0.773</u>	<u>90% clear, Turb = 40.1</u>

pH CALIBRATION (choose two)					Model or Unit No.:
Buffer Solution	pH 4.0	pH 7.0	pH 10.0		
Temperature C					
Instrument Reading					
SPECIFIC ELECTRICAL CONDUCTANCE - CALIBRATION					Model or Unit No.:
KCL Solution (µS/cm=µmhos/cm)					
Temperature C					
Instrument Reading					

Notes:



**WELL SAMPLING
AND/OR DEVELOPMENT RECORD**

Well ID: <u>MWA7</u>	Initial Depth to Water: <u>0.75</u>
Sample ID: <u>—</u> Duplicate ID: <u>—</u>	Depth to Water after Sampling: <u>—</u>
Sample Depth: <u>—</u>	Total Depth to Well: <u>14.04</u>
Project and Task No.: <u>15716</u>	Well Diameter: <u>2"</u>
Project Name: <u>XOM/ADC</u>	1 Casing/Borehole Volume: _____ (Circle one)
Date: <u>12.03.10</u>	3 Casing/Borehole Volumes: _____ (Circle one)
Sampled By: <u>—</u>	Total Casing/Borehole Volumes Removed: _____
Method of Purging: <u>high flow pump.</u>	
Method of Sampling: <u>—</u>	

Time	Intake Depth	Rate (gpm)	Cum. Vol. (gal.)	Temp. (°C)	pH (units)	Specific Electrical Conductance (µS/cm)	Remarks (color, turbidity, and sediment)
1122		3gpm	3g		4.84	0.621	494 Turb - Dark Brown
1123	well	Dry					
1124	Surging well.						
1128		3gpm	6g		6.02	0.598	999 - Turb, Dark Brown
	well pumped Dry.						
1129	Surging well during Recharge.						
1135		3gpm	9g		6.47	0.524	999 Turb - Dark Brown
1138		3gpm	12g		6.57	0.475	506 Turb - Light Brown
1141		2gpm	18g		6.58	0.472	120 Turb - light Turbidity.
1150		2gpm	30g		6.59	0.470	130 Turb - light Turbidity
1152		2gpm	34g		6.59	0.470	93 Turb - opaque.
1154		2gpm	36g		6.59	0.472	60 Turb - Fairly Clear.

pH CALIBRATION (choose two)				Model or Unit No.:	
Buffer Solution	pH 4.0	pH 7.0	pH 10.0		
Temperature C					
Instrument Reading					
SPECIFIC ELECTRICAL CONDUCTANCE - CALIBRATION				Model or Unit No.:	
KCL Solution (µS/cm=µmhos/cm)					
Temperature C					
Instrument Reading					

Notes: heavy brown sediment at start of development. Gradually reducing as water removed. No odor or sheen on water observed.



**WELL SAMPLING
AND/OR DEVELOPMENT RECORD**

Well ID: MUA7 Initial Depth to Water: 0.75
 Sample ID: _____ Duplicate ID: _____ Depth to Water after Sampling: _____
 Sample Depth: _____ Total Depth to Well: 14.04
 Project and Task No.: 15716 Well Diameter: 2"
 Project Name: KOH/ADC. 1 Casing/Borehole Volume: _____
 Date: 12.03.10 (Circle one)
 3 Casing/Borehole Volumes: _____
 (Circle one)
 Sampled By: _____
 Method of Purging: _____
 Method of Sampling: _____ Total Casing/Borehole Volumes Removed: _____

Time	Intake Depth	Rate (gpm)	Cum. Vol. (gal.)	Temp. (°C)	pH (units)	Specific Electrical Conductance (µS/cm)	Remarks (color, turbidity, and sediment)
1157		2 gpm	40 g		6.36	0.192	25 Turb - clear
			well development completed.				

pH CALIBRATION (choose two)				Model or Unit No.:			
Buffer Solution	pH 4.0	pH 7.0	pH 10.0				
Temperature C							
Instrument Reading							
SPECIFIC ELECTRICAL CONDUCTANCE - CALIBRATION				Model or Unit No.:			
KCL Solution (µS/cm=µmhos/cm)							
Temperature C							
Instrument Reading							

Notes:



APPENDIX E

February 2011 Groundwater Sampling Log

AGENCY DRAFT



LOW-FLOW GROUNDWATER SAMPLING LOG

WELL NO: MW-11 LOCATION: Everett PROJECT NO: 15716
 DATE: 02/16/11 TIME: 1520 CLIMATIC CONDITIONS: _____
 OVA/PID READING WHEN WELL OPENED: 0.0 DEPTH TO PRODUCT (TOC): NA
 STATIC WATER LEVEL (TOC): 1.41 TOTAL DEPTH OF WELL (TOC): _____

METHOD OF REMOVAL: Peristaltic PUMPING RATE: _____

WELL	DTW	Time	Gallons Removed	Temp. (C°)	pH	(M S/cm)	Turbidity (NTU)	DO (mg/L)	REDOX (mv)
						Sp. Cond. (mS/cm)			
PURGE	<u>1.41</u>	<u>3:25</u>		<u>11.9</u>	<u>5.48</u>	<u>0.282</u>	<u>47</u>	<u>5.35</u>	<u>-52</u>
DATA:	<u>1.41</u>	<u>1530</u>		<u>12.1</u>	<u>6.71</u>	<u>0.280</u>	<u>15</u>	<u>3.39</u>	<u>-192</u>
	<u>1.41</u>	<u>1535</u>		<u>12.1</u>	<u>6.89</u>	<u>0.277</u>	<u>6</u>	<u>2.88</u>	<u>-225</u>
	<u>1.41</u>	<u>1540</u>		<u>12.3</u>	<u>6.95</u>	<u>0.276</u>	<u>5</u>	<u>2.47</u>	<u>-242</u>
	<u>1.41</u>	<u>1545</u>		<u>12.4</u>	<u>6.99</u>	<u>0.275</u>	<u>5</u>	<u>2.16</u>	<u>-254</u>
	<u>1.41</u>	<u>1550</u>		<u>12.5</u>	<u>6.99</u>	<u>0.274</u>	<u>5</u>	<u>2.01</u>	<u>-259</u>
	<u>1.41</u>	<u>1555</u>		<u>12.6</u>	<u>6.97</u>	<u>0.273</u>	<u>5</u>	<u>1.84</u>	<u>-263</u>
	<u>1.41</u>	<u>1600</u>		<u>12.6</u>	<u>6.97</u>	<u>0.272</u>	<u>4</u>	<u>1.72</u>	<u>-267</u>
	<u>1.41</u>	<u>1605</u>		<u>12.6</u>	<u>6.94</u>	<u>0.272</u>	<u>4</u>	<u>1.66</u>	<u>-269</u>
	<u>1.41</u>	<u>1610</u>		<u>12.7</u>	<u>6.94</u>	<u>0.271</u>	<u>9</u>	<u>1.63</u>	<u>-272</u>
	<u>1.41</u>	<u>1615</u>		<u>12.8</u>	<u>6.93</u>	<u>0.271</u>	<u>3</u>	<u>1.58</u>	<u>-274</u>

SAMPLE WITHDRAWAL METHOD: _____ SAMPLED BY: TR.
 SAMPLE NUMBER(S) AND TIME: MW11 - 021611 @ 1620

NOTES: Approx 4 gallon water removed

LAB ANALYSIS PARAMETERS AND PRESERVATIVES: _____

NUMBER AND TYPES OF SAMPLE CONTAINERS USED: _____

DECON. PROCEDURES: _____

SAMPLES DELIVERED TO: _____ TRANSPORTER: _____
 DATE: _____ TIME: _____

CAPACITY OF CASING (GALLONS/LINEAR FOOT)
 2" - 0.16 • 4" - 0.65 • 6" - 1.47 • 8" - 2.61 • 10" - 4.08 • 12" - 5.57

AGENCY DRAFT



LOW-FLOW GROUNDWATER SAMPLING LOG

WELL NO: 40n LOCATION: Everett PROJECT NO: 157
 DATE: 2/17/11 TIME: 0900 CLIMATIC CONDITIONS: Rain
 OVA/PID READING WHEN WELL OPENED: 0.0 DEPTH TO PRODUCT (TOC): NA
 STATIC WATER LEVEL (TOC): 1.17 TOTAL DEPTH OF WELL (TOC): _____

METHOD OF REMOVAL: Peristaltic PUMPING RATE: _____

WELL	DTW	Time	Gallons Removed	Temp. (C°)	pH	(u s/cm)		DO (mg/L)	REDOX (mv)
						Sp. Cond. (mS/cm)	Turbidity (NTU)		
PURGE	<u>1.17</u>	<u>0909</u>		<u>9.8</u>	<u>6.30</u>	<u>0.624</u>	<u>140</u>	<u>3.70</u>	<u>-205</u>
DATA	<u>1.17</u>	<u>0914</u>		<u>9.3</u>	<u>6.80</u>	<u>0.615</u>	<u>51</u>	<u>2.12</u>	<u>-247</u>
	<u>1.17</u>	<u>0919</u>		<u>10.2</u>	<u>6.81</u>	<u>0.575</u>	<u>48</u>	<u>1.64</u>	<u>-251</u>
		<u>0924</u>		<u>10.2</u>	<u>6.96</u>	<u>0.575</u>	<u>42</u>	<u>1.50</u>	<u>-264</u>
	<u>2.01</u>	<u>0931</u>		<u>10</u>	<u>6.79</u>	<u>0.540</u>	<u>51</u>	<u>2.97</u>	<u>-247</u>
	<u>1.99</u>	<u>0936</u>		<u>10.1</u>	<u>6.96</u>	<u>0.560</u>	<u>35</u>	<u>1.51</u>	<u>-264</u>
	<u>1.98</u>	<u>0941</u>		<u>10.1</u>	<u>7.05</u>	<u>0.551</u>	<u>31</u>	<u>1.32</u>	<u>-275</u>
	<u>2.00</u>	<u>0946</u>		<u>10.3</u>	<u>7.08</u>	<u>0.541</u>	<u>30</u>	<u>1.23</u>	<u>-279</u>
	<u>2.00</u>	<u>0951</u>		<u>10.3</u>	<u>7.06</u>	<u>0.534</u>	<u>31</u>	<u>1.66</u>	<u>-286</u>
	<u>2.00</u>	<u>0956</u>		<u>10.3</u>	<u>7.04</u>	<u>0.530</u>	<u>32</u>	<u>1.19</u>	<u>-282</u>
	<u>2.00</u>	<u>1001</u>		<u>10.3</u>	<u>7.07</u>	<u>0.531</u>	<u>33</u>	<u>1.15</u>	<u>-283</u>
	<u>2.00</u>	<u>1006</u>		<u>10.4</u>	<u>7.09</u>	<u>0.527</u>	<u>35</u>	<u>1.13</u>	<u>-285</u>

SAMPLE WITHDRAWAL METHOD: _____ SAMPLED BY: Tn.
 SAMPLE NUMBER(S) AND TIME: MW40n-021711 @ 1015

NOTES: Approx 4 gallons of water removed.

LAB ANALYSIS PARAMETERS AND PRESERVATIVES: _____

NUMBER AND TYPES OF SAMPLE CONTAINERS USED: _____

DECON. PROCEDURES: _____

SAMPLES DELIVERED TO: _____ TRANSPORTER: _____
 DATE: _____ TIME: _____

AGENCY DRAFT



LOW-FLOW GROUNDWATER SAMPLING LOG

WELL NO: MW19 LOCATION: Everett PROJECT NO: 15714
 DATE: 2/17/11 TIME: 1655
 OVA/PID READING WHEN WELL OPENED: 0.0 CLIMATIC CONDITIONS: _____
 STATIC WATER LEVEL (TOC): 2.11 DEPTH TO PRODUCT (TOC): NA
 TOTAL DEPTH OF WELL (TOC): _____

METHOD OF REMOVAL: Peristaltic PUMPING RATE: _____

WELL PURGE DATA	DTW	Time	Gallons Removed	Temp.		Sp. Cond. (mS/cm)	Turbidity (NTU)	DO (mg/L)	REDOX (mv)
				(C°)	pH				
	2.11	1100		8.3	6.43	0.282	260	3.85	-189
	2.15	1105		8.6	6.50	0.274	180	1.77	-197
	2.15	1110		8.9	6.51	0.265	82	1.28	-202
	2.15	1115		9.1	6.55	0.266	40	1.15	-209
	2.15	1120		9.1	6.62	0.272	25	1.11	-218
	2.15	1125		9.1	6.72	0.270	15	1.05	-231
	2.15	1130		9.1	6.79	0.271	11	1.02	-242
	2.15	1135		9.1	6.88	0.273	8	0.99	-254
	2.15	1140		9.2	6.94	0.274	6	0.94	-265
	2.15	1145		9.2	6.94	0.275	6	0.92	-267

SAMPLE WITHDRAWAL METHOD: _____
 SAMPLE NUMBER(S) AND TIME: MW19-021711 @ 1150 SAMPLED BY: T.A.

NOTES: Approx 4g of water removed.

LAB ANALYSIS PARAMETERS AND PRESERVATIVES: _____

NUMBER AND TYPES OF SAMPLE CONTAINERS USED: _____

DECON. PROCEDURES: _____

SAMPLES DELIVERED TO: _____

DATE: _____ TRANSPORTER: _____
 TIME: _____

CAPACITY OF CASING (GALLONS/LINEAR FOOT)
 2" - 0.16 • 4" - 0.65 • 6" - 1.47 • 8" - 2.61 • 10" - 4.08 • 12" - 5.57

AGENCY DRAFT



LOW-FLOW GROUNDWATER SAMPLING LOG

WELL NO: A4 LOCATION: Eventt. PROJECT NO: 15716
 DATE: 2/13/11 TIME: 1230 CLIMATIC CONDITIONS: _____
 OVA/PID READING WHEN WELL OPENED: 0.0 DEPTH TO PRODUCT (TOC): NA
 STATIC WATER LEVEL (TOC): 10:54 TOTAL DEPTH OF WELL (TOC): _____

METHOD OF REMOVAL: Peristaltic PUMPING RATE: _____

WELL	DTW	Time	Gallons Removed	Temp.		Sp. Cond. (mS/cm)	Turbidity (NTU)	DO (mg/L)	REDOX (mv)
				(C°)	pH				
PURGE	10.55	1230		12.5	6.21	6.82	40	4.74	-175
DATA:	10.55	1241		13.2	6.54	35.2	45	2.56	-209
	10.55	1246		13.4	6.65	35.3	46	2.29	-221
	10.56	1251		13.5	6.74	35.4	49	2.16	-236
	10.56	1256		13.4	6.82	35.4	48	2.08	-246
	10.56	1301		13.4	6.87	35.3	48	2.01	-256
	10.56	1306		13.5	6.91	35.3	50	1.95	-262
	10.56	1311		13.5	6.93	35.3	51	1.91	-267

SAMPLE WITHDRAWAL METHOD: _____ SAMPLED BY: TA
 SAMPLE NUMBER(S) AND TIME: MWA4-02171 @ 1320

NOTES: Approx 4g of solids removed.

LAB ANALYSIS PARAMETERS AND PRESERVATIVES: _____

NUMBER AND TYPES OF SAMPLE CONTAINERS USED: _____

DECON. PROCEDURES: _____

SAMPLES DELIVERED TO: _____ TRANSPORTER: _____
 DATE: _____ TIME: _____

CAPACITY OF CASING (GALLONS/LINEAR FOOT) -
 2" - 0.16 • 4" - 0.65 • 6" - 1.47 • 8" - 2.61 • 10" - 4.08 • 12" - 5.57

AGENCY DRAFT



LOW-FLOW GROUNDWATER SAMPLING LOG

WELL NO: MWA3 LOCATION: Event. PROJECT NO: 15716
 DATE: 2/17/11 TIME: 1400 CLIMATIC CONDITIONS: _____
 OVA/PID READING WHEN WELL OPENED: 0.0 DEPTH TO PRODUCT (TOC): NA
 STATIC WATER LEVEL (TOC): 7.07 TOTAL DEPTH OF WELL (TOC): _____

METHOD OF REMOVAL: Peristaltic PUMPING RATE: _____

WELL	DTW	Time	Gallons Removed	Temp. (C°)	pH	Sp. Cond. (mS/cm)	Turbidity (NTU)	DO (mg/L)	REDOX (mv)
PURGE	<u>7.09</u>	<u>1402</u>		<u>13.4</u>	<u>7.61</u>	<u>1.61</u>	<u>20</u>	<u>4.12</u>	<u>-280</u>
DATA	<u>7.09</u>	<u>1403</u>		<u>13.3</u>	<u>7.37</u>	<u>1.42</u>	<u>20</u>	<u>2.48</u>	<u>-301</u>
	<u>7.09</u>	<u>1412</u>		<u>13.3</u>	<u>7.20</u>	<u>1.30</u>	<u>27</u>	<u>1.72</u>	<u>-319</u>
	<u>7.10</u>	<u>1417</u>		<u>13.3</u>	<u>7.15</u>	<u>1.28</u>	<u>28</u>	<u>1.58</u>	<u>-323</u>
	<u>7.16</u>	<u>1422</u>		<u>13.4</u>	<u>7.12</u>	<u>1.25</u>	<u>29</u>	<u>1.50</u>	<u>-327</u>
	<u>7.16</u>	<u>1427</u>		<u>13.3</u>	<u>7.09</u>	<u>1.25</u>	<u>31</u>	<u>1.36</u>	<u>-330</u>
	<u>7.10</u>	<u>1432</u>		<u>13.5</u>	<u>7.04</u>	<u>1.23</u>	<u>38</u>	<u>1.32</u>	<u>-329</u>
	<u>7.10</u>	<u>1437</u>		<u>13.6</u>	<u>7.02</u>	<u>1.20</u>	<u>39</u>	<u>1.32</u>	<u>-330</u>

SAMPLE WITHDRAWAL METHOD: _____ SAMPLED BY: _____
 SAMPLE NUMBER(S) AND TIME: MWA3-021711 @ 1450

NOTES: Approx 4g of water removed.

LAB ANALYSIS PARAMETERS AND PRESERVATIVES: _____

NUMBER AND TYPES OF SAMPLE CONTAINERS USED: _____

DECON. PROCEDURES: _____

SAMPLES DELIVERED TO: _____ TRANSPORTER: _____
 DATE: _____ TIME: _____

CAPACITY OF CASING (GALLONS/LINEAR FOOT)
 2" - 0.16 • 4" - 0.65 • 6" - 1.47 • 8" - 2.61 • 10" - 4.08 • 12" - 5.57

AGENCY DRAFT



LOW-FLOW GROUNDWATER SAMPLING LOG

WELL NO: MWAZ LOCATION: Everett PROJECT NO: 15716
 DATE: 2/17/11 TIME: 1600 CLIMATIC CONDITIONS: _____
 OVA/PID READING WHEN WELL OPENED: 0.0 DEPTH TO PRODUCT (TOC): NA
 STATIC WATER LEVEL (TOC): 5.05 TOTAL DEPTH OF WELL (TOC): _____

METHOD OF REMOVAL: Peristaltic PUMPING RATE: _____

WELL	DTW	Time	Gallons Removed	Temp. (C°)	pH	(in %/min)		Turbidity (NTU)	DO (mg/L)	REDOX (mv)
						Sp. Cond. (mS/cm)	DO			
PURGE	<u>5.08</u>	<u>1607</u>		<u>11.8</u>	<u>6.32</u>	<u>0.645</u>		<u>9</u>	<u>4.28</u>	<u>-181</u>
DATA:	<u>5.08</u>	<u>1612</u>		<u>12.0</u>	<u>6.56</u>	<u>0.629</u>		<u>7</u>	<u>2.26</u>	<u>-228</u>
	<u>5.10</u>	<u>1617</u>		<u>12</u>	<u>6.62</u>	<u>0.622</u>		<u>7</u>	<u>1.82</u>	<u>-239</u>
	<u>5.10</u>	<u>1622</u>		<u>12</u>	<u>6.66</u>	<u>0.612</u>		<u>7</u>	<u>1.58</u>	<u>-249</u>
	<u>5.10</u>	<u>1627</u>		<u>12</u>	<u>6.68</u>	<u>0.607</u>		<u>8</u>	<u>1.39</u>	<u>-256</u>
	<u>5.12</u>	<u>1632</u>		<u>12.1</u>	<u>6.68</u>	<u>0.615</u>		<u>10</u>	<u>1.26</u>	<u>-261</u>
	<u>5.12</u>	<u>1638</u>		<u>12.0</u>	<u>6.69</u>	<u>0.602</u>		<u>13</u>	<u>1.16</u>	<u>-264</u>
	<u>5.13</u>	<u>1643</u>		<u>12</u>	<u>6.69</u>	<u>0.601</u>		<u>13</u>	<u>1.07</u>	<u>-269</u>
	<u>5.13</u>	<u>1648</u>		<u>11.9</u>	<u>6.70</u>	<u>0.600</u>		<u>15</u>	<u>1.05</u>	<u>-270</u>
	<u>5.13</u>	<u>1653</u>		<u>11.9</u>	<u>6.69</u>	<u>0.600</u>		<u>15</u>	<u>1.01</u>	<u>-271</u>

SAMPLE WITHDRAWAL METHOD: _____ SAMPLED BY: _____
 SAMPLE NUMBER(S) AND TIME: MWAZ-021711 @ 1705

NOTES: Approx 45 gal of water removed.

LAB ANALYSIS PARAMETERS AND PRESERVATIVES: _____

NUMBER AND TYPES OF SAMPLE CONTAINERS USED: _____

DECON. PROCEDURES: _____

SAMPLES DELIVERED TO: _____ TRANSPORTER: _____
 DATE: _____ TIME: _____

CAPACITY OF CASING (GALLONS/LINEAR FOOT)
 2" - 0.16 • 4" - 0.65 • 6" - 1.47 • 8" - 2.61 • 10" - 4.08 • 12" - 5.57



LOW-FLOW GROUNDWATER SAMPLING LOG

WELL NO: MWAS LOCATION: Quatt. PROJECT NO: 15714
 DATE: 2/18/11 TIME: 840 CLIMATIC CONDITIONS: _____
 OVA/PID READING WHEN WELL OPENED: 0.0 DEPTH TO PRODUCT (TOC): NA
 STATIC WATER LEVEL (TOC): 11.52 TOTAL DEPTH OF WELL (TOC): _____

METHOD OF REMOVAL: Peristaltic PUMPING RATE: _____

WELL	DTW	Time	Gallons Removed	Temp. (C°)	pH	Sp. Cond. (mS/cm)	Turbidity (NTU)	DO (mg/L)	REDOX (mv)
PURGE	<u>11.52</u>	<u>0852</u>		<u>11.4</u>	<u>6.58</u>	<u>2.43</u>	<u>130</u>	<u>2.79</u>	<u>-167</u>
DATA:	<u>11.55</u>	<u>0857</u>		<u>12.1</u>	<u>6.95</u>	<u>2.41</u>	<u>80</u>	<u>1.91</u>	<u>-214</u>
	<u>11.55</u>	<u>0902</u>		<u>12.3</u>	<u>7.12</u>	<u>2.35</u>	<u>69</u>	<u>1.58</u>	<u>-238</u>
	<u>11.56</u>	<u>0907</u>		<u>12.4</u>	<u>7.19</u>	<u>2.32</u>	<u>75</u>	<u>1.41</u>	<u>-249</u>
	<u>11.56</u>	<u>0912</u>		<u>12.3</u>	<u>7.21</u>	<u>2.32</u>	<u>92</u>	<u>1.32</u>	<u>-256</u>
	<u>11.56</u>	<u>0917</u>		<u>12.3</u>	<u>7.19</u>	<u>2.31</u>	<u>110</u>	<u>1.32</u>	<u>-263</u>
	<u>11.55</u>	<u>0922</u>		<u>12.5</u>	<u>7.21</u>	<u>2.29</u>	<u>96</u>	<u>1.24</u>	<u>-269</u>
	<u>11.55</u>	<u>0934</u>		<u>12.5</u>	<u>7.20</u>	<u>2.29</u>	<u>100</u>	<u>1.25</u>	<u>-270</u>

SAMPLE WITHDRAWAL METHOD: _____ SAMPLED BY: TR.
 SAMPLE NUMBER(S) AND TIME: MWAS-021811 @ 0945

NOTES: Added 4g of water removed.

LAB ANALYSIS PARAMETERS AND PRESERVATIVES: _____

NUMBER AND TYPES OF SAMPLE CONTAINERS USED: _____

DECON. PROCEDURES: _____

SAMPLES DELIVERED TO: _____ TRANSPORTER: _____
 DATE: _____ TIME: _____

CAPACITY OF CASING (GALLONS/LINEAR FOOT)
 2" - 0.16 • 4" - 0.65 • 6" - 1.47 • 8" - 2.61 • 10" - 4.08 • 12" - 5.57



LOW-FLOW GROUNDWATER SAMPLING LOG

WELL NO: MWAG LOCATION: Eventt PROJECT NO: 15714
 DATE: 2/18/11 TIME: 1005 CLIMATIC CONDITIONS: Sunny
 OVA/PID READING WHEN WELL OPENED: 0.0 DEPTH TO PRODUCT (TOC): NA
 STATIC WATER LEVEL (TOC): 10.51 TOTAL DEPTH OF WELL (TOC): _____

METHOD OF REMOVAL: Peristaltic PUMPING RATE: _____

WELL	DTW	Time	Gallons Removed	Temp.		Sp. Cond. (mS/cm)	Turbidity (NTU)	DO (mg/L)	REDOX (mv)
				(C°)	pH				
PURGE	<u>10.55</u>	<u>1013</u>		<u>12.5</u>	<u>8.02</u>	<u>4.58</u>	<u>12</u>	<u>2.74</u>	<u>-358</u>
DATA:	<u>10.55</u>	<u>1018</u>		<u>12.7</u>	<u>7.99</u>	<u>4.53</u>	<u>12</u>	<u>1.40</u>	<u>-363</u>
	<u>10.55</u>	<u>1023</u>		<u>12.8</u>	<u>7.94</u>	<u>4.52</u>	<u>11</u>	<u>1.22</u>	<u>-365</u>
	<u>10.56</u>	<u>1028</u>		<u>12.9</u>	<u>7.93</u>	<u>4.52</u>	<u>12</u>	<u>1.16</u>	<u>-367</u>
	<u>10.56</u>	<u>1033</u>		<u>12.9</u>	<u>7.92</u>	<u>4.52</u>	<u>14</u>	<u>1.10</u>	<u>-371</u>
	<u>10.56</u>	<u>1038</u>		<u>12.7</u>	<u>7.90</u>	<u>4.52</u>	<u>15</u>	<u>1.09</u>	<u>-372</u>
	<u>10.56</u>	<u>1043</u>		<u>12.7</u>	<u>7.90</u>	<u>4.52</u>	<u>14</u>	<u>1.08</u>	<u>-372</u>

SAMPLE WITHDRAWAL METHOD: _____ SAMPLED BY: TA
 SAMPLE NUMBER(S) AND TIME: MWAG-021811 @ 1055

NOTES: Approx 4g of water removed.

LAB ANALYSIS PARAMETERS AND PRESERVATIVES: _____

NUMBER AND TYPES OF SAMPLE CONTAINERS USED: _____

DECON. PROCEDURES: _____

SAMPLES DELIVERED TO: _____ TRANSPORTER: _____
 DATE: _____ TIME: _____

CAPACITY OF CASING (GALLONS/LINEAR FOOT)
 2" - 0.16 • 4" - 0.65 • 6" - 1.47 • 8" - 2.61 • 10" - 4.08 • 12" - 5.57

AGENCY DRAFT



LOW-FLOW GROUNDWATER SAMPLING LOG

WELL NO: MWA1 LOCATION: Evett PROJECT NO: 6710
 DATE: 02/18/11 TIME: 1120 CLIMATIC CONDITIONS: _____
 OVA/PID READING WHEN WELL OPENED: 0.0 DEPTH TO PRODUCT (TOC): NA
 STATIC WATER LEVEL (TOC): 6.34 TOTAL DEPTH OF WELL (TOC): _____

METHOD OF REMOVAL: Peristaltic PUMPING RATE: _____
(in s/cm)

WELL	DTW	Time	Gallons Removed	Temp.		Sp. Cond. (mS/cm)	Turbidity (NTU)	DO (mg/L)	REDOX (mv)
				(C°)	pH				
PURGE	<u>6.40</u>	<u>1125</u>		<u>12.2</u>	<u>6.78</u>	<u>0.752</u>	<u>170</u>	<u>4.11</u>	<u>-179</u>
DATA:	<u>6.40</u>	<u>1130</u>		<u>12.1</u>	<u>6.66</u>	<u>0.726</u>	<u>30</u>	<u>2.35</u>	<u>-203</u>
	<u>6.40</u>	<u>1135</u>		<u>12.0</u>	<u>6.65</u>	<u>0.725</u>	<u>21</u>	<u>2.00</u>	<u>-211</u>
	<u>6.40</u>	<u>1140</u>		<u>11.9</u>	<u>6.62</u>	<u>0.724</u>	<u>19</u>	<u>1.79</u>	<u>-217</u>
	<u>6.42</u>	<u>1145</u>		<u>11.9</u>	<u>6.60</u>	<u>0.721</u>	<u>27</u>	<u>1.71</u>	<u>-222</u>
	<u>6.42</u>	<u>1150</u>		<u>11.9</u>	<u>6.59</u>	<u>0.718</u>	<u>30</u>	<u>1.66</u>	<u>-225</u>
	<u>6.42</u>	<u>1155</u>		<u>11.9</u>	<u>6.58</u>	<u>0.717</u>	<u>12</u>	<u>1.64</u>	<u>-226</u>
	<u>6.42</u>	<u>11200</u>		<u>11.9</u>	<u>6.58</u>	<u>0.716</u>	<u>11</u>	<u>1.60</u>	<u>-227</u>

SAMPLE WITHDRAWAL METHOD: _____ SAMPLED BY: Tn
 SAMPLE NUMBER(S) AND TIME: MWA1-021811 @ 1212

NOTES: Approx 4g of water removed

LAB ANALYSIS PARAMETERS AND PRESERVATIVES: _____

NUMBER AND TYPES OF SAMPLE CONTAINERS USED: _____

DECON. PROCEDURES: _____

SAMPLES DELIVERED TO: _____ TRANSPORTER: _____
 DATE: _____ TIME: _____

CAPACITY OF CASING (GALLONS/LINEAR FOOT)
 2" - 0.16 • 4" - 0.65 • 6" - 1.47 • 8" - 2.81 • 10" - 4.08 • 12" - 5.57



LOW-FLOW GROUNDWATER SAMPLING LOG

WELL NO: MWA7 LOCATION: Eventt PROJECT NO: 1571C
 DATE: 2.15.11 TIME: 1215 CLIMATIC CONDITIONS: _____
 OVA/PID READING WHEN WELL OPENED: 0.0 DEPTH TO PRODUCT (TOC): NA
 STATIC WATER LEVEL (TOC): Above well TOTAL DEPTH OF WELL (TOC): _____

METHOD OF REMOVAL: Peristaltic PUMPING RATE: _____
 (M S/CM)

WELL	DTW	Time	Gallons Removed	Temp. (C°)	pH	Sp. Cond. (mS/cm)	Turbidity (NTU)	DO (mg/L)	REDOX (mv)
PURGE	<u>Above PUL</u>	<u>1230</u>		<u>12.1</u>	<u>6.34</u>	<u>0.379</u>	<u>6</u>	<u>4.74</u>	<u>-130</u>
DATA:		<u>1235</u>		<u>11.8</u>	<u>6.55</u>	<u>0.370</u>	<u>5</u>	<u>2.64</u>	<u>-175</u>
		<u>1240</u>		<u>11.8</u>	<u>6.52</u>	<u>0.368</u>	<u>7</u>	<u>2.06</u>	<u>-219</u>
		<u>1245</u>		<u>11.9</u>	<u>6.95</u>	<u>0.366</u>	<u>7</u>	<u>1.74</u>	<u>-245</u>
		<u>1250</u>		<u>11.9</u>	<u>6.96</u>	<u>0.363</u>	<u>9</u>	<u>1.47</u>	<u>-252</u>
		<u>1255</u>		<u>11.9</u>	<u>6.97</u>	<u>0.364</u>	<u>9</u>	<u>1.38</u>	<u>-260</u>
		<u>1300</u>		<u>12</u>	<u>6.95</u>	<u>0.363</u>	<u>9</u>	<u>1.32</u>	<u>-260</u>
		<u>1305</u>		<u>12</u>	<u>6.95</u>	<u>0.363</u>	<u>9</u>	<u>1.30</u>	<u>-260</u>

SAMPLE WITHDRAWAL METHOD: _____ SAMPLED BY: TR
 SAMPLE NUMBER(S) AND TIME: MWA7-021811 @ 1315

NOTES: Dup, Approx 4g of water removed.

LAB ANALYSIS PARAMETERS AND PRESERVATIVES: _____

NUMBER AND TYPES OF SAMPLE CONTAINERS USED: _____

DECON. PROCEDURES: _____

SAMPLES DELIVERED TO: _____ TRANSPORTER: _____
 DATE: _____ TIME: _____

CAPACITY OF CASING (GALLONS/LINEAR FOOT)
 2" - 0.16 • 4" - 0.65 • 6" - 1.47 • 8" - 2.61 • 10" - 4.08 • 12" - 5.57



APPENDIX F

Certificates of Disposal, Bills of Lading, and Weight Tickets



Certificate of Disposal

October 4, 2010

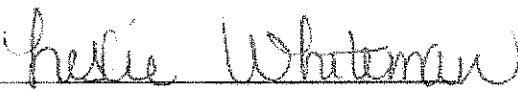
Amec

Exxon Mobil
2717 / 2731 Federal Ave.
Everett, WA

Job # LW-10293

This is to certify that 180.162 tons of petroleum impacted soil was shipped from jobsite 2717 / 2731 Federal Ave. Everett WA by ExxonMobil and received by Regional Disposal Company. The waste was shipped by rail to Roosevelt Regional Landfill, 500 Roosevelt Grade Road, Roosevelt WA 98356 for final disposal. The above-described NON-DANGEROUS WASTE was managed in compliance with all Permits and Laws Regulating this Facility.

Final Disposition: Subtitle D and WAC 173-351 MSW Landfill


Signature

For Regional Disposal Company

AGENCY DRAFT

TRUCK# 538

TIME LEAVING SITE 813

Signature [Handwritten Signature]

Certification No: LW-10293
Billing Acct. No: 110224
Product Code: VIT

BILL OF LADING
CONTAMINATED SOIL

REGIONAL DISPOSAL COMPANY

54 S. Dawson Street
Seattle, WA 98134

Telephone: (206) 332-7700 Fax: (206) 332-7600

This Bill of Lading augments the Master Service Agreement ("Agreement") entered into by AMEC ("Generator/Agent") and Regional Disposal Company ("RDC") on 6/28/10 (date).

The terms herein are made a part of the Agreement. In the event of conflict between this Bill of Lading and the Agreement, the terms of the Agreement prevail.

RDC hereby authorizes the Wastes ("Waste") described in Certification No. LW-10293, signed by Generator/Agent on 6/28/10 (date), for disposal at Roosevelt Regional Landfill. Generator/Agent shall present a copy of this Bill of Lading with each shipment delivered.

Location of Waste: 2717/2731 Federal Ave., Everett

Method of Shipment: RDC haul

Additional Fees (e.g., laboratory fees, transportation fees, special handling fees, etc. If none, so state):

* This will include the drums of soil with the bulk material.

PERFORMANCE DATE

FOR RDC TRANSPORTATION: Generator/Agent shall make the Waste available for shipment no later than _____ (date). RDC shall transport the Waste no later than _____ (date), unless RDC notifies the Generator/Agent in writing that Waste transport shall be suspended or canceled due to RDC's exercise of its right to inspect or analyze the Waste (as provided in the Agreement).

GENERATOR/AGENT TRANSPORTATION: Generator/Agent shall begin delivery of the Waste at [check one]:

- Roosevelt Regional Landfill.
- Seattle Transfer Station located at Third and Lander.

Waste delivery shall begin no later than 6/30/10 (date), and shall complete delivery of the Waste no later than 12/30/10 (date), unless RDC notifies Generator/Agent in writing to suspend or cancel the waste delivery due to RDC's exercise of its right to inspect or analyze the Waste (As provided in the Agreement).

GENERATOR/AGENT

REGIONAL DISPOSAL COMPANY

Leak R. Vujan on behalf of Everett M&B
and ADK

Leslie Whiteman

Signature

Signature

Leak R. Vujan, Project Manager

Leslie Whiteman

Printed Name and Title

Printed Name and Title

6/27/10
Date

6/28/10
Date

ALL TRUCKS MUST HAVE A COPY OF THIS BILL OF LADING WHEN DELIVERING WASTE TO THE TRANSFER STATION OR TO THE LANDFILL.

AGENCY DRAFT

3RD AND LANDER
3RD AND LANDER

SEATTLE, WA
016224 - 0001
AMEC Earth & Environmental Inc
2717 / 2731 Federal Ave, Everett
Bothell, WA
Contract: LW-10293

18343

SITE 01	TICKET DE1092	GRID
WEIGHMASTER		
TE00091 TIARA C		
DATE IN 27 September 2010	TIME IN 9:20 AM	
DATE OUT 27 September 2010	TIME OUT 9:27 AM	
VEHICLE SOIL		ROLL OFF
REFERENCE	ORIGIN EVERETT/SNOH	

00 Gross Weight 100,300.00 lb
Tare Weight 39,720.00 lb
Net Weight 60,580.00 lb 30.29 TN

538 INTERWEST

QTY	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
30.29	TN	SLW-CONT SOIL W/FUEL				
Manifest: CORRECT						

SAFETY MEMOS:

- Hard hats **MUST** be worn.
- High Visibility vests **MUST** be worn.
- Passengers **MUST** remain in vehicle at all times.

SIGNATURE

Wacke

RECEIVED
TENDERED
CHANGE
CHECK NO

AGENCY DRAFT

3RD AND LANDER
3RD AND LANDER

SEATTLE, WA
01224 - 0001
AMED Earth & Environmental Inc
2717 /2731 Federal Ave, Everett
Bothell, WA
Contract: LW-10293

SITE 01	TICKET 351093	GRID
WEIGHMASTER		
TC00094 TIARA C		
DATE IN 27 September 2010	TIME IN 9:20 am	
DATE OUT 27 September 2010	TIME OUT 9:27 am	
VEHICLE SOIL	ROLL OFF	
REFERENCE	ORIGIN EVERETT/SNM	

00 Gross Weight 100,300.00 lb
Tare Weight 39,780.00 lb
Net Weight 60,520.00 lb 30.26 TN

530 INTEREST

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
30.26	TN	SW-CONT SOIL W/FUEL				
		Manifest: CORRECT				

SAFETY MEMOS:

- Hard hats MUST be worn.
- High Visibility vests MUST be worn.
- Passengers MUST remain in vehicle at all times.

SIGNATURE

Wacke

NET AMOUNT
TENDERED
CHANGE
CHECK NO.

Scanned

SITE	TICKET	GRID
00	000001	0000 000000
WEIGHMASTER		
DATE IN	TIME IN	
01/15/00	11:55:00 AM	
DATE OUT	TIME OUT	
01/15/00	11:55:00 AM	
VEHICLE	ROLL OFF	
0000		
REFERENCE	ORIGIN	

AND LAMMER
AND LAMMER

SEATTLE, WA
015224 - 0001
AMEC Earth & Environmental, Inc.
2717 2731 Federal Ave, Everett
Boothell, WA 98001
Contract: LHM-10225

0000

00 Gross Weight 80,320.00 lb
Tare Weight 36,220.00 lb
Net Weight 50,100.00 lb 26.05 TN

QTY	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
26.05	TN	30-00FT SOIL W/FUEL				
		PRICE TARE				

TENDERED
CHANGE
CHECK NO.

SAFETY MEMOS:

- Hard hats MUST be worn.
- High Visibility vests MUST be worn.
- Passengers MUST remain in vehicle at all times.

SIGNATURE

AGENCY DRAFT

Certification No: LW-10293
Billing Acct. No. 110224
Product Code VH

TRUCK# 72
TIME LEAVING SITE 8:30
Signature David Smith

BILL OF LADING
CONTAMINATED SOIL

REGIONAL DISPOSAL COMPANY
54 S. Dawson Street
Seattle, WA 98134
Telephone: (206) 332-7700; Fax: (206) 332-7600

This Bill of Lading augments the Master Service Agreement ("Agreement") entered into by Ametec ("Generator/Agent") and Regional Disposal Company ("RDC") on 6/28/10 (date). The terms herein are made a part of the Agreement. In the event of conflict between this Bill of Lading and the Agreement, the terms of the Agreement prevail.

RDC hereby authorizes the Wastes ("Waste") described in Certification No. LW-10293, signed by Generator/Agent on 6/28/10 (date), for disposal at Roosevelt Regional Landfill. Generator/Agent shall present a copy of this Bill of Lading with each shipment delivered.

Location of Waste: 2717/2731 Federal Ave., Everett
Method of Shipment: RDC haul

Additional Fees (e.g., laboratory fees, transportation fees, special handling fees, etc. If none, so state):

* This will include the drums of soil with the bulk material -

PERFORMANCE DATE

FOR RDC TRANSPORTATION: Generator/Agent shall make the Waste available for shipment no later than _____ (date). RDC shall transport the Waste no later than _____ (date), unless RDC notifies the Generator/Agent in writing that Waste transport shall be suspended or canceled due to RDC's exercise of its right to inspect or analyze the Waste (as provided in the Agreement).

GENERATOR/AGENT TRANSPORTATION: Generator/Agent shall begin delivery of the Waste at [check one]:

- Roosevelt Regional Landfill.
- Seattle Transfer Station located at Third and Lander.

Waste delivery shall begin no later than 6/30/10 (date), and shall complete delivery of the Waste no later than 12/30/10 (date), unless RDC notifies Generator/Agent in writing to suspend or cancel the waste delivery due to RDC's exercise of its right to inspect or analyze the Waste (As provided in the Agreement).

GENERATOR/AGENT

REGIONAL DISPOSAL COMPANY

Leah R. Vigora on behalf of Ebasco
Signature out and
Ad

Leslie Whitman
Signature

Leah R. Vigora, Project Manager
Printed Name and Title

Leslie Whitman
Printed Name and Title

6/27/10
Date

6/28/10
Date

ALL TRUCKS MUST HAVE A COPY OF THIS BILL OF LADING WHEN DELIVERING WASTE TO THE TRANSFER STATION OR TO THE LANDFILL.

Scanned

AND LANDER
AND LANDER

SEATTLE, WA
016224 -- 0001
AMEC Earth & Environmental Inc
2717 Federal Ave, Everett
Bothell, WA 98011
Contract: LW-10293

SITE	TICKET	GRID
01	051206	VOID 051100
MECHMASTER		
T000091 TIARA 5		
DATE IN	TIME IN	
27 September 2010	11:56 am	
DATE OUT	TIME OUT	
27 September 2010	11:56 am	
VEHICLE	ROLL OFF	
SOIL		
REFERENCE	ORIGIN	

QTY	UNIT	DESCRIPTION	RATE	EA PERSSION	TAX	TOTAL
00		Gross Weight 88,320.00 lb				
		Tare Weight 56,320.00 lb				
		Net Weight 32,000.00 lb 24.05 TN				
24.05	TN	50-CONY SOIL W/FUEL				
		Material Fee \$				

RECEIVED
TENDERED
CHANGE
CHECK NO.

SAFETY MEMOS:

- Hard hats **MUST** be worn.
- High Visibility vests **MUST** be worn.
- Passengers **MUST** remain in vehicle at all times.

SIGNATURE

BEYOND LANDER
BEYOND LANDER

#22 - 1ST

01 251100

SEATTLE, WA
01000 - 0001
Pacific Pile and Piering
Port of Anchorage Phase 2, Anchorage
Seattle, WA 98101
Contract 1401277A

Handwritten initials

00 Gross Weight 80,200.00 LB
Tare Weight 30,200.00 LB
Net Weight 50,000.00 LB 26.05 TN

50.05 TN 50-CENT SOIL METER

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL

AGENCY DRAFT

REVENUE

TENDERED

CHANGE

CHECK NO.

SAFETY MEMOS:

- Hard hats **MUST** be worn.
- High Visibility vests **MUST** be worn.
- Passengers **MUST** remain in vehicle at all times.

SIGNATURE

TRUCK# 43

TIME LEAVING SITE 847

Signature [Signature]

Certification No: LW-10293
Billing Acct. No: 110224
Product Code VH

BILL OF LADING
CONTAMINATED SOIL

REGIONAL DISPOSAL COMPANY

54 S. Dawson Street
Seattle, WA 98134

Telephone: (206) 332-7700 / Fax: (206) 332-7600

This Bill of Lading augments the Master Service Agreement ("Agreement") entered into by AMEC ("Generator/Agent") and Regional Disposal Company ("RDC") on 6/28/10 (date). The terms herein are made a part of the Agreement. In the event of conflict between this Bill of Lading and the Agreement, the terms of the Agreement prevail.

RDC hereby authorizes the Wastes ("Waste") described in Certification No. LW-10293, signed by Generator/Agent on 6/28/10 (date), for disposal at Roosevelt Regional Landfill. Generator/Agent shall present a copy of this Bill of Lading with each shipment delivered.

Location of Waste: 2717/2731 Federal Ave., Everett

Method of Shipment: RDC haul

Additional Fees (e.g., laboratory fees, transportation fees, special handling fees, etc. If none, so state):

* This will include the drums of soil with the bulk material.

PERFORMANCE DATE

FOR RDC TRANSPORTATION: Generator/Agent shall make the Waste available for shipment no later than _____ (date). RDC shall transport the Waste no later than _____ (date), unless RDC notifies the Generator/Agent in writing that Waste transport shall be suspended or canceled due to RDC's exercise of its right to inspect or analyze the Waste (as provided in the Agreement).

GENERATOR/AGENT TRANSPORTATION: Generator/Agent shall begin delivery of the Waste at [check one]:

Roosevelt Regional Landfill.

Seattle Transfer Station located at Third and Lander.

Waste delivery shall begin no later than 6/30/10 (date), and shall complete delivery of the Waste no later than 12/30/10 (date), unless RDC notifies Generator/Agent in writing to suspend or cancel the waste delivery due to RDC's exercise of its right to inspect or analyze the Waste (As provided in the Agreement).

GENERATOR/AGENT

REGIONAL DISPOSAL COMPANY

[Signature]

[Signature]

Signature

Signature

Leah R. Usden, Project Manager

Leslie Whitman

Printed Name and Title

Printed Name and Title

8/27/10

6/28/10

Date

Date

ALL TRUCKS MUST HAVE A COPY OF THIS BILL OF LADING WHEN DELIVERING WASTE TO THE TRANSFER STATION OR TO THE LANDFILL.

3RD AND LANDER
3RD AND LANDER

SEATTLE, WA
016224 - 0001
AMEC Earth & Environmental, Inc
2717 27th Federal Ave, Everett
Everett, WA 98201
Contract# LP-10293

SITE 01	TICKET 351114	GRID WEIGHMASTER
T000091 TIARA C		
DATE IN 27 September 2010	TIME IN 7:53 AM	
DATE OUT 27 September 2010	TIME OUT 10:06 AM	
VEHICLE SOIL	ROLL OFF	
REFERENCE	ORIGIN EVERETT/SNOH	

43 CLEARCREEK

00 Gross Weight 96,160.00 lb
Tare Weight 99,860.00 lb
Net Weight 56,300.00 lb @ 15 28,15 TN

QTY	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
28.15	TN	SM-CONT SOIL W/FUEL				
		Mani feat:				

Handwritten signature

SAFETY MEMOS:

- Hard hats **MUST** be worn.
- High Visibility vests **MUST** be worn.
- Passengers **MUST** remain in vehicle at all times.

SIGNATURE

TENDERED
CHANGE
CHECK NO.

TRUCK# 44
TIME LEAVING SITE 930
Signature [Signature]

Certification No: LW-10293
Billing Acct. No: 16224
Product Code VH

BILL OF LADING
CONTAMINATED SOIL

REGIONAL DISPOSAL COMPANY
54 S. Dawson Street
Seattle, WA 98134
Telephone: (206) 332-7700 / Fax: (206) 332-7600

This Bill of Lading augments the Master Service Agreement ("Agreement") entered into by AMEC ("Generator/Agent") and Regional Disposal Company ("RDC") on 6/28/10 (date). The terms herein are made a part of the Agreement. In the event of conflict between this Bill of Lading and the Agreement, the terms of the Agreement prevail.

RDC hereby authorizes the Wastes ("Waste") described in Certification No: LW-10293, signed by Generator/Agent on 6/28/10 (date), for disposal at Roosevelt Regional Landfill. Generator/Agent shall present a copy of this Bill of Lading with each shipment delivered.

Location of Waste: 2717/2731 Federal Ave., Everett
Method of Shipment: RDC haul

Additional Fees (e.g., laboratory fees, transportation fees, special handling fees, etc. If none, so state):

* This will include the drums of soil with the bulk material.

PERFORMANCE DATE

FOR RDC TRANSPORTATION: Generator/Agent shall make the Waste available for shipment no later than _____ (date). RDC shall transport the Waste no later than _____ (date), unless RDC notifies the Generator/Agent in writing that Waste transport shall be suspended or canceled due to RDC's exercise of its right to inspect or analyze the Waste (as provided in the Agreement).

GENERATOR/AGENT TRANSPORTATION: Generator/Agent shall begin delivery of the Waste at [check one]:

- Roosevelt Regional Landfill.
- Seattle Transfer Station located at Third and Lander.

Waste delivery shall begin no later than 6/30/10 (date), and shall complete delivery of the Waste no later than 12/31/10 (date), unless RDC notifies Generator/Agent in writing to suspend or cancel the waste delivery due to RDC's exercise of its right to inspect or analyze the Waste (As provided in the Agreement).

GENERATOR/AGENT

REGIONAL DISPOSAL COMPANY

Leah R. Vigoren on behalf of ExxonMobil Oil and AGC

Leslie Whitman

Signature

Signature

Leah R. Vigoren, Project Manager

Leslie Whitman

Printed Name and Title

Printed Name and Title

8/27/10

6/28/10

Date

Date

ALL TRUCKS MUST HAVE A COPY OF THIS BILL OF LADING WHEN DELIVERING WASTE TO THE TRANSFER STATION OR TO THE LANDFILL.

3RD AND LANEER
3RD AND LANEER

REARVIEW MIRROR
GLASS - CRACK
APPC ELECTRIC & REPAIR WORKS, INC.
2017 2014 FORD FOCUS, ELWOOD
BOSTON, MA 02128
CONTACT: 617-452-1028

CRACK REPAIR 25.000.00 LB
TARE WEIGHT 40.000.00 LB
NET WEIGHT 50.120.70 LB 26.54 TN

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
1	TN	SHORT SOIL W/PAV.				
		50.120.70 LB				

SAFETY MEMOS:

- Hard hats MUST be worn.
- High Visibility vests MUST be worn.
- Passengers MUST remain in vehicle at all times.

SIGNATURE

SITE 000	TICKET 0001140	GRID
WEIGHMASTER 0000001100010		
DATE IN 07/20/2010	TIME IN 10:30 AM	
DATE OUT 07/20/2010	TIME OUT 10:41 AM	
VEHICLE 0001	ROLL OFF	
REFERENCE	ORIGIN	SUBJECT 00001

AGENCY DRAFT

TOTAL
TENDERED
CHANGE
CHECK NO.

3RD AND LANDER
3RD AND LANDER

SEATTLE, WA
98104

AMES Earth & Environmental, Inc
3717 Federal Ave, Everett
Everett, WA 98201
Contract: LW-10293

SITE: 01
TICKET: 051143

INVESTIGATOR

05000011143 C

TIME IN

27 September 2010

10:36 AM

TIME OUT

27 September 2010

10:41 AM

SOIL OFF

VEHICLE REFERENCE

SOIL

ORIGIN

EVERETT/ENCOM

44 CLEARONEK

00 Gross Weight 93,780.00 lb

Tare Weight 40,660.00 lb

Net Weight 53,120.00 lb 26.56 TN

QTY	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
53.16	TN	50-DINT SOIL W/FUEL				
		Net Weight				

AGENCY DRAFT

SAFETY MEMOS:

- Hard hats **MUST** be worn.
- High Visibility vests **MUST** be worn.
- Passengers **MUST** remain in vehicle at all times.

SIGNATURE

TENDERED

CHANGE

CHECK NO.

AGENCY DRAFT

SFD AND LANDER
SFD AND LANDER

SEATTLE, WA
016224 - 0001

AMEC Earth & Environmental Inc
2717 / 2731 Federal Ave, Everett
Bothell, WA 98201
Contract: LW-10293

SITE 01	TICKET 351143	GRID
WEIGHMASTER T000091 TIARA C		
DATE IN 27 September 2010		TIME IN 10:30 am
DATE OUT 27 September 2010		TIME OUT 10:41 am
VEHICLE SOIL		ROLL OFF
REFERENCE	ORIGIN EVERETT/SFDM	

00 Gross Weight 93,780.00 lb 44 CLEARCREEK
Tare Weight 40,660.00 lb
Net Weight 53,120.00 lb 26.56 TN

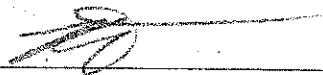
QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
26.56	TN	SW-CONT SOIL W/ FUEL		59.54 TONS		
		Hard Hats:				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.

SAFETY MEMOS:

Hard hats **MUST** be worn.
High Visibility vests **MUST** be worn.
Passengers **MUST** remain in vehicle at all times.

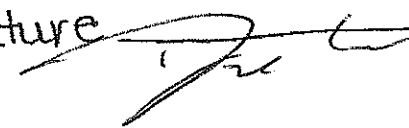
SIGNATURE



Scanned

AGENCY DRAFT

Certification No: LW-10293
Billing Acct. No. 16224
Product Code VH

TRUCK# 22 - S35 1044
TIME LEAVING SITE ~~1044~~ AM
Signature 

BILL OF LADING
CONTAMINATED SOIL

822

REGIONAL DISPOSAL COMPANY
54 S. Dawson Street
Seattle, WA 98134

Telephone: (206) 332-7600 Fax: (206) 332-7600

This Bill of Lading augments the Master Service Agreement ("Agreement") entered into by AMEC ("Generator/Agent") and Regional Disposal Company ("RDC") on 6/28/10 (date). The terms herein are made a part of the Agreement. In the event of conflict between this Bill of Lading and the Agreement, the terms of the Agreement prevail.

RDC hereby authorizes the Wastes ("Waste") described in Certification No. LW-10293 signed by Generator/Agent on 6/28/10 (date), for disposal at Roosevelt Regional Landfill. Generator/Agent shall present a copy of this Bill of Lading with each shipment delivered.

Location of Waste: 2717/2731 Federal Ave., Everett
Method of Shipment: RDC haul

Additional Fees (e.g., laboratory fees, transportation fees, special handling fees, etc. If none, so state):
* This will include the drums of soil with the bulk material.

PERFORMANCE DATE

FOR RDC TRANSPORTATION: Generator/Agent shall make the Waste available for shipment no later than _____ (date). RDC shall transport the Waste no later than _____ (date), unless RDC notifies the Generator/Agent in writing that Waste transport shall be suspended or canceled due to RDC's exercise of its right to inspect or analyze the Waste (as provided in the Agreement).

GENERATOR/AGENT TRANSPORTATION: Generator/Agent shall begin delivery of the Waste at [check one]:
 Roosevelt Regional Landfill. Seattle Transfer Station located at Third and Lander.

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GENERATOR/AGENT REGIONAL DISPOSAL COMPANY

Leah R. Vigoren on behalf of Exxon Mobil at and ADC
Signature

Leslie Whitman
Signature

Leah Vigoren, Project Manager
Printed Name and Title

Leslie Whitman
Printed Name and Title

6/27/10
Date

6/28/10
Date

ALL TRUCKS MUST HAVE A COPY OF THIS BILL OF LADING WHEN DELIVERING WASTE TO THE TRANSFER STATION OR TO THE LANDFILL.

Revised 10.15/06

Scanned

3RD AND LANDER
3RD AND LANDER

SEATTLE, WA
016224 - 0001
Epic Earth & Environmental Inc
2717 2731 Federal Ave, Everett
Bothell, WA 98011
Contract: UU-10299

DATE	TICKET	GRID
04	281111	VOID 081208
WEIGHMASTER		
T000091 TIARA C		
DIVER	TIME IN	TIME OUT
27 September 2010	11:55	2010
DIVE	TIME IN	TIME OUT
27 September 2010	11:55	2010
VEHICLE	ROLL OFF	
501L		
REFERENCE	ORIGIN	

5000

00 Gross Weight 55,280.00 LB
Tare Weight 25,240.00 LB
Net Weight 49,340.00 LB 29.27 TN

QTY	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
29.27	TN	50-TON 501L W/FUEL				
		Standard feet				

AGENCY DRAFT

TENDERED
CHANGE
CHECK NO.

SAFETY MEMOS:

- Hard hats MUST be worn.
- High Visibility vests MUST be worn.
- Passengers MUST remain in vehicle at all times.

SIGNATURE

OFF OF LANCER
AND AND LANCER

SEATTLE, WA
CLASSY 0701
OFFICE BIRTH & ENVIRONMENTAL INC
2121 1st Ave, Seattle, WA 98101
Seattle, WA 98101
COURTESY 11-1-2000

SITE	TICKET	GRID
01	151011	1011 1512049
WEIGHMASTER		
DATE IN	TIME IN	
11/15/00	11:50	RD
DATE OUT	TIME OUT	
11/15/00	11:53	RD
VEHICLE	ROLL OFF	
011		
REFERENCE	ORIGIN	

QTY	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
24.00	TN	24.00 TN WILL BE PAID				
		24.00 TN				

AGENCY DRAFT

TENDERED
CHANGE
CHECK NO.

SAFETY MEMOS:

- Hard hats **MUST** be worn.
- High Visibility vests **MUST** be worn.
- Passengers **MUST** remain in vehicle at all times.

SIGNATURE _____

AGENCY DRAFT

TRUCK# 43

TIME LEAVING SITE 1057

Signature [Signature]

Certification No: LW-10293
Billing Acct. No. 16224
Product Code VH

BILL OF LADING
CONTAMINATED SOIL

REGIONAL DISPOSAL COMPANY

54 S. Dawson Street
Seattle, WA 98134

Telephone: (206) 332-7700 / Fax: (206) 332-7600

This Bill of Lading augments the Master Service Agreement ("Agreement") entered into by AMEC ("Generator/Agent") and Regional Disposal Company ("RDC") on 6/28/10 (date). The terms herein are made a part of the Agreement. In the event of conflict between this Bill of Lading and the Agreement, the terms of the Agreement prevail.

RDC hereby authorizes the Wastes ("Waste") described in Certification No. LW-10293, signed by Generator/Agent on 6/28/10 (date), for disposal at Roosevelt Regional Landfill. Generator/Agent shall present a copy of this Bill of Lading with each shipment delivered.

Location of Waste: 2717/2731 Federal Ave., Everett

Method of Shipment: RDC haul

Additional Fees (e.g., laboratory fees, transportation fees, special handling fees, etc. If none, so state):
* This will include the drums of soil with the bulk material.

PERFORMANCE DATE

FOR RDC TRANSPORTATION: Generator/Agent shall make the Waste available for shipment no later than _____ (date). RDC shall transport the Waste no later than _____ (date), unless RDC notifies the Generator/Agent in writing that Waste transport shall be suspended or canceled due to RDC's exercise of its right to inspect or analyze the Waste (as provided in the Agreement).

GENERATOR/AGENT TRANSPORTATION: Generator/Agent shall begin delivery of the Waste at [check one]:
 Roosevelt Regional Landfill. Seattle Transfer Station located at Third and Lander.

Waste delivery shall begin no later than 6/30/10 (date), and shall complete delivery of the Waste no later than 12/30/10 (date), unless RDC notifies Generator/Agent in writing to suspend or cancel the waste delivery due to RDC's exercise of its right to inspect or analyze the Waste (As provided in the Agreement).

GENERATOR/AGENT

REGIONAL DISPOSAL COMPANY

Leah N. Vijoren in behalf of Exxamdata
Signature

Leslie Whitman
Signature

Leah N. Vijoren, Project Manager
Printed Name and Title

Leslie Whitman
Printed Name and Title

9/27/10
Date

6/28/10
Date

ALL TRUCKS MUST HAVE A COPY OF THIS BILL OF LADING WHEN DELIVERING WASTE TO THE TRANSFER STATION OR TO THE LANDFILL.

SPD AND LADDER
SPD AND LADDER

SEATTLE, WA
016324 - 0001
AMES Earth & Environmental Inc
2717 / 2731 Federal Ave, Everett
Everett, WA 98011
Contract# LM-10293

TICKET
01 051245

WEIGHMASTER

T000091 T1AFA E

DATE IN 27 September 2010

TIME IN 12:27 PM

DATE OUT 27 September 2010

TIME OUT 12:43 PM

VEHICLE SOIL

ROLL OFF

REFERENCE

ORIGIN

EVERETT/GRUW

43 CLEARCUTTER

GC Gross Weight 95,740.00 lb
Tard Weight 37,520.00 lb
Net Weight 58,220.00 lb 29.11 TN

QTY	UNIT	DESCRIPTION	DATE	EXTENSION	TAX	TOTAL
29.11	TN	50-CENT SOIL W/FUEL				
		Hard forest				

AGENCY DRAFT

SAFETY MEMOS:

- Hard hats **MUST** be worn.
- High Visibility vests **MUST** be worn.
- Passengers **MUST** remain in vehicle at all times. SIGNATURE _____

TENDERED

CHANGE

CHECK NO.

AGENCY DRAFT

210067
Paul

3RD AND LANDER
3RD AND LANDER

SEATTLE, WA
0162294 - 0001
AMED Earth & Environmental Inc
3717 / 2731 Federal Ave, Everett
Bothell, WA 98011
Contracts LW-10293

SITE 01	TICKET CAN 247	GRID
WEIGHMASTER T000091 TIARA C		
DATE IN 27 September 2010		TIME IN 12:27 pm
DATE OUT 27 September 2010		TIME OUT 12:48 pm
VEHICLE SOIL		ROLL OFF
REFERENCE	ORIGIN EVERETT/SPDM	

00 Gross Weight 55,340.00 lb 43 CLEARCREEK
Tare Weight 37,520.00 lb
Net Weight 58,220.00 lb 22.11 TN

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
29.11	TN	50-CONT SOIL W/FUEL Manifest		2726		

NET AMOUNT
TENDERED
CHANGE
CHECK NO.

SAFETY MEMOS:

Hard hats **MUST** be worn.
High Visibility vests **MUST** be worn.
Passengers **MUST** remain in vehicle at all times.

SIGNATURE _____

Scanned

AGENCY DRAFT

TRUCK# 22

TIME LEAVING SITE 112

Certification No: LW-10293
Billing Acct. No: 110224
Product Code VH

Signature 

BILL OF LADING
CONTAMINATED SOIL

REGIONAL DISPOSAL COMPANY
54 S. Dawson Street
Seattle, WA 98134
Telephone: (206) 332-7700 / Fax: (206) 332-7600

This Bill of Lading augments the Master Service Agreement ("Agreement") entered into by AMEC ("Generator/Agent") and Regional Disposal Company ("RDC") on 6/23/10 (date). The terms herein are made a part of the Agreement. In the event of conflict between this Bill of Lading and the Agreement, the terms of the Agreement prevail.

RDC hereby authorizes the Wastes ("Waste") described in Certification No. LW-10293, signed by Generator/Agent on 6/23/10 (date), for disposal at Roosevelt Regional Landfill. Generator/Agent shall present a copy of this Bill of Lading with each shipment delivered.

Location of Waste: 2717/2731 Federal Ave., Everett

Method of Shipment: RDC haul

Additional Fees (e.g., laboratory fees, transportation fees, special handling fees, etc. If none, so state):

* This will include the drums of soil with the bulk material.

PERFORMANCE DATE

FOR RDC TRANSPORTATION: Generator/Agent shall make the Waste available for shipment no later than _____ (date). RDC shall transport the Waste no later than _____ (date), unless RDC notifies the Generator/Agent in writing that Waste transport shall be suspended or canceled due to RDC's exercise of its right to inspect or analyze the Waste (as provided in the Agreement).

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- Seattle Transfer Station located at Third and Lander.

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GENERATOR/AGENT

REGIONAL DISPOSAL COMPANY

Leah R. Vigoren, on behalf of Emerald Oil
ADP
Signature

Hessie Whitman
Signature

Leah R. Vigoren, Project Manager
Printed Name and Title

Leslie Whitman
Printed Name and Title

9/27/10

Date

6/23/10

Date

ALL TRUCKS MUST HAVE A COPY OF THIS BILL OF LADING WHEN DELIVERING WASTE TO THE TRANSFER STATION OR TO THE LANDFILL.

SPD AND LAWYER
SPD AND LAWYER

SEATTLE, WA
01-0224 -- 0001
AMEC Earth & Environmental Inc
2717 Federal Ave, Everett
Northall, WA 98201
Contract: LW-10223

DATE	01	TICKET	361533	GRID
MEMORANDUM				
TO: 0001 TIARA C				
DATE IN	27 September 2010	TIME IN	0702	Z01
DATE OUT	27 September 2010	TIME OUT	0726	Z01
VEHICLE	SOIL	ROLL OFF		
PREFERENCE	CRIBBY EUBENETT/ENOH			

00 Gross Weight 66,380.00 lb
Tare Weight 35,720.00 lb
Net Weight 30,660.00 lb 15.33 TN

00 Gross Weight 66,380.00 lb
Tare Weight 35,720.00 lb
Net Weight 30,660.00 lb 15.33 TN

QTY	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
15.33	TN	SOIL WAFUEL				
		Grand Total:				

AGENCY DRAFT

TENDERED
CHANGE
CHECK NO

SAFETY MEMOS:

- Hard hats **MUST** be worn.
- High Visibility vests **MUST** be worn.
- Passengers **MUST** remain in vehicle at all times.

SIGNATURE

AGENCY DRAFT

WEIGHTMASTER
 11111111111111111111

WEIGHTMASTER
 11111111111111111111
 11111111111111111111
 11111111111111111111
 11111111111111111111
 11111111111111111111

SITE	TICKET	GRID
01	001000	
WEIGHMASTER		
WEIGHMASTER		
DATE IN	TIME IN	
09 September 2010	0700 AM	
DATE OUT	TIME OUT	
09 September 2010	0800 AM	
VEHICLE	ROLL OFF	
0011		
REFERENCE	ORIGIN	
	EMERGENCY BAND	

Gross Weight: 10000.00
 Tare Weight: 1000.00
 Net Weight: 9000.00

SNS TRANSPORTING

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
1	TR	WEIGHTMASTER				

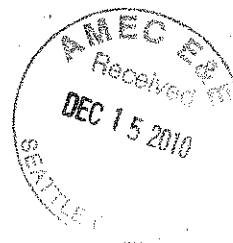
NET AMOUNT
TENDERED
CHANGE
CHECK NO.

SAFETY MEMOS:
 -Hard hats **MUST** be worn.
 -High Visibility vests **MUST** be worn.
 -Passengers **MUST** remain in vehicle at all times.

Dave S.

SIGNATURE _____

Scanned



Certificate of Disposal

December 13,2010

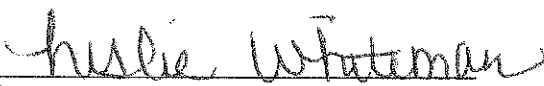
Amec

Exxon Mobil
2717 / 2731 Federal Ave.
Everett, WA

Job # LW-10293

This is to certify that 4.54 tons of petroleum impacted soil and RCRA empty drums which once contained non-regulated liquid was shipped from jobsite 2717 / 2731 Federal Ave. Everett WA by ExxonMobil and received by Regional Disposal Company. The waste was shipped by rail to Roosevelt Regional Landfill, 500 Roosevelt Grade Road, Roosevelt WA 98356 for final disposal. The above-described NON-DANGEROUS WASTE was managed in compliance with all Permits and Laws Regulating this Facility.

Final Disposition: Subtitle D and WAC 173-351 MSW Landfill


Signature

For Regional Disposal Company

SITE STREET: SPR
 CITY: SEATTLE
 STATE: WA
 ZIP: 98101
 PROJECT NO: 01-072000
 CONTRACT NO: 01-072000-01
 DATE: 12/15/10
 TIME IN: 12:45 PM
 TIME OUT: 1:00 PM
 DATE: 12/15/10
 TIME IN: 12:45 PM
 TIME OUT: 1:00 PM
 DATE: 12/15/10
 TIME IN: 12:45 PM
 TIME OUT: 1:00 PM

SKD AND LANDER
 SKD AND LANDER
 SEATTLE, WA
 016224 - 0001
 AMEC Earth & Environmental Inc
 2717 2231 Federal Ave, Everett
 Bothell, WA
 Contract: LN-10093

QTY	UNIT	DESCRIPTION	EXTENSION	TAX	TOTAL
00		Gross Weight 35,100.00 lb Tare Weight 27,580.00 lb Net Weight 7,520.00 lb	3-66 TN		
3-66	TN	SM-CONT SOIL W/FUEL			
		Maui forest			

SAFETY MEMOS:

- Hard hats MUST be worn.
- High Visibility vests MUST be worn.
- Passengers MUST remain in vehicle at all times.

[Handwritten signature]

TRANSMITTED
 CHANGE
 CHECK NO.

AGENCY DRAFT

Certification No: LW-10293
Billing Acct. No. 160224
Product Code VH

TRUCK# 44
TIME LEAVING SITE 12:00
Signature [Handwritten Signature]

BILL OF LADING
CONTAMINATED SOIL

REGIONAL DISPOSAL COMPANY
54 S. Dawson Street
Seattle, WA 98134
Telephone: (206) 332-7700 • Fax: (206) 332-7600

This Bill of Lading augments the Master Service Agreement ("Agreement") entered into by AMEC ("Generator/Agent") and Regional Disposal Company ("RDC") on 6/28/10 (date). The terms herein are made a part of the Agreement. In the event of conflict between this Bill of Lading and the Agreement, the terms of the Agreement prevail.

RDC hereby authorizes the Wastes ("Waste") described in Certification No. LW-10293, signed by Generator/Agent on 6/28/10 (date), for disposal at Roosevelt Regional Landfill. Generator/Agent shall present a copy of this Bill of Lading with each shipment delivered.

Location of Waste: 2717/2731 Federal Ave., Everett
Method of Shipment: RDC haul

Additional Fees (e.g., laboratory fees, transportation fees, special handling fees, etc. If none, so state):

* This will include the drums of soil with the bulk material -

PERFORMANCE DATE

FOR RDC TRANSPORTATION: Generator/Agent shall make the Waste available for shipment no later than _____ (date). RDC shall transport the Waste no later than _____ (date), unless RDC notifies the Generator/Agent in writing that Waste transport shall be suspended or canceled due to RDC's exercise of its right to inspect or analyze the Waste (as provided in the Agreement).

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- Seattle Transfer Station located at Third and Lander.

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GENERATOR/AGENT

REGIONAL DISPOSAL COMPANY

[Handwritten Signature]
Signature

[Handwritten Signature]
Signature

[Handwritten Name and Title]
Printed Name and Title

[Handwritten Name and Title]
Printed Name and Title

12-9-10
Date

6/28/10
Date

ALL TRUCKS MUST HAVE A COPY OF THIS BILL OF LADING WHEN DELIVERING WASTE TO THE TRANSFER STATION OR TO THE LANDFILL.

Revised 10.15.06

scanned

3RD AND LANDER
3RD AND LANDER

SEATTLE, WA

016224 - 0001

AMEC Earth & Environmental Inc.

1217 / 2731 Federal Ave, Everett

Bothell, WA

Contract: LM-10293

OFF NUMBER/S

GRID

LESLIE U

WECHASER

3/27/2010

085412 GM

085412 GM

085412 GM

ROLL OFF

ROLL OFF

DISPOSE

ORGANICITY/SACH

00 GROSS WEIGHT 12,507.00 LB

Tare Weight 10,740.00 LB

Net Weight 1,760.00 LB 0.88 TN

DATE TIME

LOCATION COMMENTS

DATE

EXPRESSION

TAR

TOTAL

Manifest

SAFETY MEMOS:

- Hard hats **MUST** be worn.
- High Visibility vests **MUST** be worn.
- Passengers **MUST** remain in vehicle at all times.

Checked by

M. Sullivan



SIGNATURE

TENDERED

CHANGE

CHECK NO.

AGENCY DRAFT

210067

TRUCK# 49
TIME LEAVING SITE 2:30
Signature [Signature]

Certification No. LW-10293
Billing Acct. No. 110224
Product Code VH

BILL OF LADING
CONTAMINATED SOIL

REGIONAL DISPOSAL COMPANY
34 S. Dawson Street
Seattle, WA 98134
Telephone: (206) 332-7700; Fax: (206) 332-7600

This Bill of Lading augments the Master Service Agreement ("Agreement") entered into by AMEC ("Generator/Agent") and Regional Disposal Company ("RDC") on 6/23/10 (date). The terms herein are made a part of the Agreement. In the event of conflict between this Bill of Lading and the Agreement, the terms of the Agreement prevail.

RDC hereby authorizes the Wastes ("Waste") described in Certification No. LW-10293, signed by Generator/Agent on 6/23/10 (date), for disposal at Roosevelt Regional Landfill. Generator/Agent shall present a copy of this Bill of Lading with each shipment delivered.

Location of Waste: 2717/2731 Federal Ave., Everett
Method of Shipment: RDC haul

Additional Fees (e.g., laboratory fees, transportation fees, special handling fees, etc. If none, so state):

* This will include the drums of soil with the bulk material.

PERFORMANCE DATE

FOR RDC TRANSPORTATION: Generator/Agent shall make the Waste available for shipment no later than _____ (date). RDC shall transport the Waste no later than _____ (date), unless RDC notifies the Generator/Agent in writing that Waste transport shall be suspended or canceled due to RDC's exercise of its right to inspect or analyze the Waste (as provided in the Agreement).

GENERATOR/AGENT TRANSPORTATION: Generator/Agent shall begin delivery of the Waste at [check one]:

- Roosevelt Regional Landfill.
- Seattle Transfer Station located at Third and Lander.

Waste delivery shall begin no later than 6/30/10 (date), and shall complete delivery of the Waste no later than 12/30/10 (date), unless RDC notifies Generator/Agent in writing to suspend or cancel the waste delivery due to RDC's exercise of its right to inspect or analyze the Waste (As provided in the Agreement).

GENERATOR/AGENT

REGIONAL DISPOSAL COMPANY

Leah A. Vigen Project Manager
Signature

Leslie Whitman
Signature

Leah Vigen Project Manager
Printed Name and Title

Leslie Whitman
Printed Name and Title

11/12/10
Date

6/23/10
Date

ALL TRUCKS MUST HAVE A COPY OF THIS BILL OF LADING WHEN DELIVERING WASTE TO THE TRANSFER STATION OR TO THE LANDFILL.

AGENCY DRAFT

1045973



INVOICE/Bill of Lading - D

PO # _____

Next Delivery N/A

Truck Gross Wt _____
Tare Wt _____
Truck Net Wt _____
Truck # 117477506-2118

FED ID 59-3210374

US DOT # 641752

CUST LOC # 132710

Generator Name <u>Essex 1600/1400</u>	Transporter Name <u>TD</u>	Receiving Facility <u>Cascade Guard</u>
Address <u>717-713 Industrial Ave</u>	Address <u>1021 20th St</u>	Address <u>5455 W. Commerce Ave.</u>
City, St Zip <u>North, VA 24001</u>	City, St Zip <u>North, VA 24036</u>	City, St Zip <u>North, VA 24017</u>
Phone <u>540-540-7449</u>	Phone <u>540-913-7311</u>	Phone <u>540-545-1111</u>
EPA # (if required) <u>9999</u>	EPA # (if required) <u>117477506-2118</u>	EPA # (if required) <u>117477506-2118</u>

Billing Address (if Different) _____

Materials	Inventory/ Tank Size	QTY		U of M	Rate	Total
		P/U	DEL			
*On Spec Used Oil ___ High Flash ___ Low Flash (if low flash, use shipping name #1 on reverse)					APA	
AF Premix/Conc/Extended Life (Circle) (>RQ use shipping name #2 on reverse)					APA	
Other <u>Van Rec. 200lb 4</u> <u>Water 100 200</u>						
Other						
Other						

SHIPPING NAME FOR OTHER: _____ TOTAL _____

GENERATOR SIGN BELOW, Subject to terms and conditions as specified on reverse side of form.

Generator Signature <u>[Signature]</u>	Transporter Signature <u>[Signature]</u>	Receiver Signature <u>[Signature]</u>
Name <u>[Name]</u>	Name <u>[Name]</u>	Name <u>[Name]</u>
Date <u>[Date]</u>	Date <u>[Date]</u>	Date <u>[Date]</u>

REMIT TO: THERMO FLUIDS INC.
PO BOX 30837
LOS ANGELES, CA 90030-0837

METHOD OF PAYMENT:
CASH/CREDIT/
CHECK # _____

AGENCY DRAFT

1045974



INVOICE/Bill of Lading - D

PO # _____

Next Delivery MA

Truck Gross Wt _____
Tare Wt _____
Truck Net Wt _____
Truck # 2771 377 645-5711

FED ID 59-3210374

US DOT # 641752

CUST LOC # 2771

Generator Name <u>Washburn</u>	Transporter Name <u>Washburn</u>	Receiving Facility <u>Washburn</u>
Address <u>Washburn</u>	Address <u>Washburn</u>	Address <u>Washburn</u>
City, St Zip <u>Washburn WA 98221</u>	City, St Zip <u>Washburn WA 98221</u>	City, St Zip <u>Washburn WA 98221</u>
Phone <u>360 291 4419</u>	Phone <u>360 291 4419</u>	Phone <u>360 291 4419</u>
EPA # (if required) <u>201569 9999</u>	EPA # (if required) <u>201569 9999</u>	EPA # (if required) <u>201569 9999</u>

Billing Address (if Different) _____

Materials	Inventory/ Tank Size	QTY		U of M	Rate	Total
		P/U	DEL			
*On Spec Used Oil ____ High Flash ____ Low Flash (if low flash, use shipping name #1 on reverse)					APA	
AF Premix/Conc/Extended Life (Circle) (->RQ use shipping name #2 on reverse)					APA	
Other <u>Washburn</u>			<u>8029</u>	<u>Washburn</u>		
Other						
Other						

SHIPPING NAME FOR OTHER: _____ TOTAL _____

GENERATOR SIGN BELOW, Subject to terms and conditions as specified on reverse side of form.

Generator Signature <u>[Signature]</u>	Transporter Signature <u>[Signature]</u>	Receiver Signature <u>[Signature]</u>
Name <u>[Name]</u>	Name <u>[Name]</u>	Name <u>[Name]</u>
Date <u>7-2-10</u>	Date <u>7-2-10</u>	Date <u>[Date]</u>

REMIT TO: THERMO FLUIDS INC.
PO BOX 30837
LOS ANGELES, CA 90030-0837

METHOD OF PAYMENT:
CASH/CREDIT/
CHECK # _____

AGENCY DRAFT

1046019



INVOICE/Bill of Lading - D

PO # W/A

Next Delivery W/A

Truck Gross Wt _____
Tare Wt _____
Truck Net Wt _____
Truck # 22560-102

FED ID 59-3210374 US DOT # 641752

CUST LOC # 122715

Generator Name <u>Thermo Fluids Inc</u>	Transporter Name <u>Thermo Fluids Inc</u>	Receiving Facility <u>Concrete General</u>
Address <u>122715</u>	Address <u>422 27th St E Suielo</u>	Address <u>255 N. Drexel Ave</u>
City, St Zip <u>Spokane WA 99201</u>	City, St Zip <u>Spokane WA 99303</u>	City, St Zip <u>Spokane WA 99217</u>
Phone <u>509 351 9449</u>	Phone <u>509 353 3300</u>	Phone <u>509 285 1111</u>
EPA # (if required) <u>WA 8999</u>	EPA # (if required) <u>WA 8999</u>	EPA # (if required) <u>WA 8999</u>

Billing Address (if Different) _____

Materials	Inventory/ Tank Size	QTY		U of M	Rate	Total
		P/U	DEL			
*On Spec Used Oil ___ High Flash ___ Low Flash (if low flash, use shipping name #1 on reverse)					APA	
AF Premix/Conc/Extended Life (Circle) (>RO use shipping name #2 on reverse)					APA	
Other <u>Non regulated liquid</u> <u>Oil/Water</u> <u>PAE NTE 2744</u>		<u>8000</u>		<u>gallons</u>		
Other <u>Truck Transport</u>		<u>10</u>		<u>hours</u>		
Other						

SHIPPING NAME FOR OTHER: _____ TOTAL _____

GENERATOR SIGN BELOW, Subject to terms and conditions as specified on reverse side of form.

Generator Signature <u>[Signature]</u>	Transporter Signature <u>[Signature]</u>	Receiver Signature <u>[Signature]</u>
Name <u>[Name]</u>	Name <u>[Name]</u>	Name <u>[Name]</u>
Date <u>7-2-10</u>	Date <u>7-2-10</u>	Date <u>[Date]</u>

REMIT TO: THERMO FLUIDS INC.
PO BOX 30837
LOS ANGELES, CA 90030-0837

METHOD OF PAYMENT:
CASH/CREDIT/
CHECK # _____

AGENCY DRAFT

1046020



INVOICE/Bill of Lading - D

PO # _____

Next Delivery N/A

Truck Gross Wt _____
Tare Wt _____
Truck Net Wt _____
Truck # 71

FED ID 59-3210374 US DOT # 641752

CUST LOC # 122715

Generator Name <u>ExxonMobil</u>	Transporter Name <u>T.F.F.</u>	Receiving Facility <u>Cascade General</u>
Address <u>112713 Federal Ave</u>	Address <u>1221397 St E</u>	Address <u>5335 McCombs Ave</u>
City, St Zip <u>Portland OR 97217</u>	City, St Zip <u>Portland OR 97217</u>	City, St Zip <u>Portland OR 97217</u>
Phone <u>503-287-1111</u>	Phone <u>503-287-1111</u>	Phone <u>503-287-1111</u>
EPA # (if required) <u>WA 00180761934</u>	EPA # (if required) <u>WA 00180761934</u>	EPA # (if required) <u>WA 00180761934</u>

Billing Address (if Different) _____

Materials	Inventory/ Tank Size	QTY		U of M	Rate	Total
		P/U	DEL			
*On Spec Used Oil ____ High Flash ____ Low Flash (if low flash, use shipping name #1 on reverse)					APA	
AF Premix/Conc/Extended Life (Circle) (->RO use shipping name #2 on reverse)					APA	
Other <u>Non-Regulated</u> <u>ExxonMobil</u> <u>Product = ATF 2794</u>		<u>4000</u> <u>gal</u>		<u>gal</u>		<u>APA</u>
Other <u>Exxon</u>		<u>5</u>		<u>hr</u>		
Other						

SHIPPING NAME FOR OTHER: _____ TOTAL _____

GENERATOR SIGN BELOW, Subject to terms and conditions as specified on reverse side of form.

Generator Signature <u>[Signature]</u>	Transporter Signature <u>[Signature]</u>	Receiver Signature <u>[Signature]</u>
Name <u>[Name]</u>	Name <u>[Name]</u>	Name <u>[Name]</u>
Date <u>7-2-10</u>	Date <u>7/2/10</u>	Date <u>[Date]</u>

REMIT TO: THERMO FLUIDS INC.
PO BOX 30837
LOS ANGELES, CA 90030-0837

METHOD OF PAYMENT:
CASH/CREDIT/
CHECK # _____

AGENCY DRAFT

1046021



INVOICE/Bill of Lading - D

PO # _____

Next Delivery NA

Truck Gross Wt _____
Tare Wt _____
Truck Net Wt _____
Truck # 71

FED ID 59-3210374 US DOT # 641752

CUST LOC # 122715

Generator Name <u>Exxon Mobil</u>	Transporter Name <u>TFI</u>	Receiving Facility <u>California General</u>
Address <u>2717135 Columbia Ave</u>	Address <u>15221 29th St E</u>	Address <u>5555 N. Commerce Ave</u>
City, St Zip <u>Los Angeles CA 90044</u>	City, St Zip <u>Shoreline WA 98148</u>	City, St Zip <u>Meridian ID 83217</u>
Phone <u>760-251-9442</u>	Phone <u>206-453-3310</u>	Phone <u>208-231-285-1111</u>
EPA # (if required) <u>1120599-9977</u>	EPA # (if required) <u>WA 475323</u>	EPA # (if required) <u>180761939</u>

Billing Address (if Different) _____

Materials	Inventory/ Tank Size	QTY		U of M	Rate	Total
		P/U	DEL			
*On Spec Used Oil ___ High Flash ___ Low Flash (if low flash, use shipping name #1 on reverse)					APA	
AF Premix/Conc/Extended Life (Circle) (>RQ use shipping name #2 on reverse)					APA	
Other <u>Non Regulated Water</u> <u>Volume # AT = 2744</u>		<u>4000</u>		<u>Gal</u>		<u>APA</u>
Other <u>Lab</u>		<u>5</u>		<u>Hr</u>		
Other						

SHIPPING NAME FOR OTHER: _____ TOTAL _____

GENERATOR SIGN BELOW. Subject to terms and conditions as specified on reverse side of form.

Generator Signature <u>[Signature]</u>	Transporter Signature <u>[Signature]</u>	Receiver Signature <u>[Signature]</u>
Name <u>Frank Wagner on behalf of Exxon</u>	Name <u>Thermo Fluids Inc</u>	Name
Date <u>1/2/10</u>	Date <u>1/2/10</u>	Date

REMIT TO: THERMO FLUIDS INC.
PO BOX 30337
LOS ANGELES, CA 90030-0337

METHOD OF PAYMENT:
CASH/CREDIT/
CHECK # _____

AGENCY DRAFT

1045977



INVOICE/Bill of Lading - D

PO # _____

Next Delivery 7-10

Truck Gross Wt _____
 Tare Wt _____
 Truck Net Wt _____
 Truck # 277 70 277 70 277 70

FED ID 59-3210374 US DOT # 641752
 CUST LOC # 7770

Generator Name <u>Thermo Fluids Inc.</u>	Transporter Name <u>Thermo Fluids Inc.</u>	Receiving Facility <u>Thermo Fluids Inc.</u>
Address <u>Thermo Fluids Inc.</u>	Address <u>Thermo Fluids Inc.</u>	Address <u>Thermo Fluids Inc.</u>
City, St Zip <u>Thermo Fluids Inc.</u>	City, St Zip <u>Thermo Fluids Inc.</u>	City, St Zip <u>Thermo Fluids Inc.</u>
Phone <u>766 211 2447</u>	Phone <u>766 211 2447</u>	Phone <u>766 211 2447</u>
EPA # (if required) <u>766 211 2447</u>	EPA # (if required) <u>766 211 2447</u>	EPA # (if required) <u>766 211 2447</u>

Billing Address (if Different) _____

Materials	Inventory/ Tank Size	QTY		U of M	Rate	Total
		P/U	DEL			
*On Spec Used Oil <input type="checkbox"/> High Flash <input type="checkbox"/> Low Flash (if low flash, use shipping name #1 on reverse)					APA	
AF Premix/Conc/Extended Life (Circle) (>RQ use shipping name #2 on reverse)					APA	
Other <u>None Available</u> <u>100% ATF</u> <u>Mobile # 2770</u>			<u>8029</u>	<u>ATF</u>		
Other <u>Laber 4 1015</u>						
Other						

SHIPPING NAME FOR OTHER: _____ TOTAL _____

GENERATOR SIGN BELOW, Subject to terms and conditions as specified on reverse side of form.

Generator Signature <u>[Signature]</u>	Transporter Signature <u>[Signature]</u>	Receiver Signature <u>[Signature]</u>
Name <u>Loan R. [Name]</u>	Name <u>[Name]</u>	Name <u>[Name]</u>
Date <u>7-6-10</u>	Date <u>[Date]</u>	Date <u>[Date]</u>

REMIT TO: THERMO FLUIDS INC.
 PO BOX 30837
 LOS ANGELES, CA 90030-0837

METHOD OF PAYMENT:
 CASH/CREDIT/
 CHECK # _____

PO # _____

Next Delivery 365

Truck Gross Wt _____
Tare Wt _____
Truck Net Wt _____
Truck # 00773/102

FED ID 59-3210374

US DOT # 641752

CUST LOC # 122715

Generator Name <u>Non Mobile/ABC</u>	Transporter Name <u>Thermo Fluids Inc</u>	Receiving Facility <u>Casual General</u>
Address <u>171273 Cabal Ave</u>	Address <u>14321 29th St</u>	Address <u>5555 N. Chino Ave</u>
City, St Zip <u>Westport WA 98201</u>	City, St Zip <u>Everett WA 98390</u>	City, St Zip <u>Bellevue WA 98007</u>
Phone <u>206 39 9119</u>	Phone <u>206 863-3300</u>	Phone <u>206 285 1111</u>
EPA # (if required) <u>WA 552999</u>	EPA # (if required) <u>WA 483 475323</u>	EPA # (if required) <u>CRD 8076 H34</u>

Billing Address (if Different) _____

Materials	Inventory/ Tank Size	QTY		U of M	Rate	Total
		P/U	DEL			
*On Spec Used Oil ___ High Flash ___ Low Flash (if low flash, use shipping name #1 on reverse)					APA	
AF Premix/Conc/Extended Life (Circle) (>RQ use shipping name #2 on reverse)					APA	
Other <u>Non Regulated water</u> <u>Prod # MTE 2741</u>			<u>6200</u> 6200	<u>gallons</u>		
Other						
Other						

SHIPPING NAME FOR OTHER: _____ TOTAL _____

GENERATOR SIGN BELOW, Subject to terms and conditions as specified on reverse side of form.

Generator Signature <u>[Signature]</u>	Transporter Signature <u>[Signature]</u>	Receiver Signature <u>[Signature]</u>
Name <u>[Name]</u>	Name <u>[Name]</u>	Name <u>[Name]</u>
Date <u>[Date]</u>	Date <u>[Date]</u>	Date <u>[Date]</u>

REMIT TO: THERMO FLUIDS INC.
PO BOX 30837
LOS ANGELES, CA 90030-0837

METHOD OF PAYMENT:
CASH/CREDIT/
CHECK # _____

AGENCY DRAFT

1045737



INVOICE/Bill of Lading - D

PO # _____

Next Delivery 11/18/11

Truck Gross Wt _____
Tare Wt _____
Truck Net Wt _____
Truck # 71

FED ID 59-3210374 US DOT # 641752

CUST LOC # 172715

Generator Name <u>Ryxon Mobile/AJC</u>	Transporter Name <u>Thermo Fluids Inc</u>	Receiving Facility <u>Cascade Fire Dept</u>
Address <u>172715 Industrial Ave</u>	Address <u>19231 19th St E</u>	Address <u>6655 Mechanical Ave</u>
City, St Zip <u>Spokane WA 99201</u>	City, St Zip <u>Spokane WA 99290</u>	City, St Zip <u>Portland OR 97217</u>
Phone <u>509-351-9549</u>	Phone <u>(509) 863-3310</u>	Phone <u>503-539-9859</u>
EPA # (if required) <u>WA 22599 9999</u>	EPA # (if required) <u>WA 228475323</u>	EPA # (if required) <u>OR 0180761934</u>

Billing Address (if Different) _____

Materials	Inventory/ Tank Size	QTY		U of M	Rate	Total
		P/U	DEL			
*On Spec Used Oil ___ High Flash ___ Low Flash (if low flash, use shipping name #1 on reverse)					APA	
AF Premix/Conc/Extended Life (Circle) (>RQ use shipping name #2 on reverse)					APA	
Other <u>non regulated water Product: NTF-2749</u>		<u>1627</u>		<u>500</u>		
Other						
Other						

SHIPPING NAME FOR OTHER: _____ TOTAL _____

GENERATOR SIGN BELOW, Subject to terms and conditions as specified on reverse side of form.

Generator Signature <u>[Signature]</u>	Transporter Signature <u>[Signature]</u>	Receiver Signature <u>[Signature]</u>
Name <u>[Name]</u>	Name <u>[Name]</u>	Name <u>[Name]</u>
Date <u>1-7-10</u>	Date <u>11/10</u>	Date <u>[Date]</u>

REMIT TO: THERMO FLUIDS INC.
PO BOX 30837
LOS ANGELES, CA 90030-0837

METHOD OF PAYMENT:
CASH/CREDIT/
CHECK # _____

AGENCY DRAFT

1897713



The Responsible Solution
(800) 350-7565

INVOICE/BILL of Lading - C

PO # _____

Next Delivery W/C

Uniform Hazardous Waste Manifest _____

Truck Gross Wt _____

Tare Wt _____

Truck Net Wt _____

Truck # 101-83

FED ID 59-3210374

US DOT # 641752

CUST LOC #

Cust/Gen Name <u>Exxon Mobile / ADX</u>	Transporter Name <u>135</u>	Receiving Facility <u>Asmode General</u>
Address <u>1717 Federal Ave</u>	Address	Address <u>115 W. Channel Ave</u>
City, St Zip <u>Wichita KS 67201</u>	City, St Zip	City, St Zip <u>Wood Dale IL 60191</u>
Phone	Phone	Phone
EPA # (if Required) <u>WAAC0579-985</u>	EPA # (if Required) <u>WAAC0579-985</u>	EPA # (if Required) <u>WAAC0579-985</u>

Billing Address (if Different) _____

Field Screen Test (Circle One): HydroChlor, Q-4000 Result: _____

Quantity		U of M	RQ	Shipping Description	Inventory/Rate	Tank Size	Total
P/U	DEL						
				UN1993, Flammable Liquid, N.O.S., Class 3, PG III, ERG 128 (Unused Fuel) Circle One: Jet Fuel, Gasoline			
				UN1993, Combustible Liquid, N.O.S., Class 3, PG III, ERG 128 (Unused Fuel) Circle One: Diesel, Jet Fuel			
				UN1268, Petroleum Products, N.O.S., Class 3, PG III, ERG 128 (New Solvent)			
				UN1268, Petroleum Products, N.O.S., Class 3, PG III, ERG 128 (Used Solvent)			
				UN3082, Environmentally Hazardous Substance, Liquid, N.O.S. (Ethylene Glycol), Class 9, PG III, ERG 171 (Used Antifreeze)			
				UN3082, Environmentally Hazardous Substance, Liquid, N.O.S. (Ethylene Glycol), Class 9, PG III, ERG 171 (New Antifreeze) Circle One: Premix, Conc, Ext Life			
				Non-Regulated Liquid, Used Oil			
				Non-Regulated Liquid, Used Oil Filters			
				Non-Regulated Solid, Specialty Filters			
				Non-Regulated Solid: Circle One: Dirt, Sludge, Absorbent Profile:			
<u>280</u>				Non-Regulated Liquid, Circle One: Grit Trap Separator, Storm Drain, Mop Water, Other Profile: <u>1-213-063</u>			<u>5.70</u>
	<u>12</u>			Service Fee	<u>85.00</u>		<u>1090.10</u>
	<u>1</u>			Other: <u>Fuel Charge</u>	<u>9.7%</u>		<u>99.49</u>
	<u>1</u>			Other: <u>Tax</u>	<u>9.2%</u>		<u>103.58</u>
						Total	<u>1293.17</u>

GENERATOR SIGN BELOW, Subject to terms and conditions as specified on reverse side of form.

Generator Signature <u>[Signature]</u>	Transporter Signature <u>[Signature]</u>	Receiver Signature <u>[Signature]</u>
Name <u>[Name]</u>	Name <u>[Name]</u>	Name <u>[Name]</u>
Date <u>12-9-10</u>	Date <u>12-9-10</u>	Date <u>12-9-10</u>

In Case of Emergency, Call: Chemtrec 1-800-424-9300

EMIT TO: THERMO FLUIDS INC.
34 TREASURY CENTER
CHICAGO, IL 60694-9300

METHOD OF PAYMENT:
CASH / CREDIT CARD / TERMS
CHECK # _____



APPENDIX G

Data Validation Reports

AGENCY DRAFT

**DATA QUALITY REVIEW and VALIDATION REPORT
FOR
ExxonMobil/ADC Property**

Organic and Inorganic Analysis Data
Samples Collected between
June 21 and August 18, 2010

Sample Delivery Groups:
NTH1954, NTF2364, NTF2469, NTF2651, NTF2659

Submitted to:

ExxonMobil Environmental Services
East Providence Terminal
1001 Wampanoag Trail
Riverside, Rhode Island 02915

and

American Distributing Company
13618 45th Avenue NE
Marysville, Washington 98271

Prepared by:

AMEC Earth & Environmental, Inc.
221 S 218th St, Suite 102
Tacoma, Washington 98422

091515716D 02TM

October 2010

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ACRONYMS AND ABBREVIATIONS

°C	degrees Celsius
%D	percent deviation or percent drift in relative response
%RSD	percent relative standard deviation
AMEC	AMEC Earth & Environmental, Inc.
BS	blank spike
BSD	blank spike duplicate
CCAL	continuing calibration
CCB	continuing calibration blank
CCV	continuing calibration verification
CLP	EPA Contract Laboratory Program
COC	chain of custody
EPA	United States Environmental Protection Agency
ICAL	initial calibration
ICB	initial calibration blank
ICV	initial calibration verification
ID	sample identification
IDL	instrument detection limit
IS	internal standard
LCS	laboratory control sample
LCSD	laboratory control sample duplicate
MDL	method detection limit
MRL	method reporting limit
MS	matrix spike
MSD	matrix spike duplicate
OSRTI	EPA Office of Superfund Remediation and Technology Innovation
QC	quality control
PDS	post digestion spike
PAH	polycyclic aromatic hydrocarbons
RCRA	Resource Conservation and Recovery Act

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RF	response factor
RPD	relative percent difference
SDG	sample delivery group
SM	standard methods
SPCC	system performance check compounds
SSCV	secondary source calibration verification
ug/L	microgram per liter
VOCs	volatile organic compounds

1.0 INTRODUCTION

This data validation report covers 19 aqueous samples (including 8 trip blanks and 1 field duplicate) and 21 soil samples (including 2 field duplicates) from the ExxonMobil/ADC Property in Everett, Washington. Samples were collected between June 21 and August 18, 2010. The samples were submitted to TestAmerica in Nashville, Tennessee (TestAmerica) between June 24 and August 20, 2010 and assigned sample delivery group (SDG) numbers NTF2364, NTF2469, NTF2651, NTF2659, and NTH1954. A list of these samples by field sample identification (ID) and TestAmerica sample ID is presented in Table 1. Analyses performed on these samples are listed as follows:

- Total petroleum hydrocarbons by Washington State's Department of Ecology's (Ecology) NWTPH-Dx method;
- Total petroleum hydrocarbons by Ecology's NWTPH-Gx method;
- Extractable petroleum hydrocarbons by Ecology's NWTPH-EPH;
- Purgeable petroleum hydrocarbons by Ecology's NWTPH-VPH;
- Volatile organic compounds (VOCs) by United States Environmental Protection Agency (EPA) SW-846 Method 8260B;
- Polyaromatic hydrocarbons (PAH) by EPA SW-846 Method 8270C Select Ion Monitoring (SIM); and
- Dissolved lead by EPA SW-846 Methods 6020.

2.0 EXECUTIVE SUMMARY

AMEC's review indicates the data from this event are generally usable and of good quality.

The detected anthracene and phenanthrene results from sample AB1A 3.5-4.5 was qualified as nondetected because of contamination in the associated method blank. Portions of the NWTPH-Gx, NWTPH-VPH, VOC, NWTPH-Dx, NWTPH-EPH, and PAH data were qualified as estimated because of calibration issues, matrix spike, matrix spike duplicate recoveries and relative percent differences outside of acceptance limits, surrogates outside of acceptance limits, internal standards outside acceptance limits, and samples analyzed outside of holding time.

The 90% project data quality objective for valid measurements was met for this project.

3.0 DATA VALIDATION AND DATA QUALITY REVIEW METHODOLOGY

This data validation and data quality review has been performed by AMEC Earth & Environmental (AMEC) with reference to the EPA Office of Superfund Remediation and Technology Innovation (OSRTI) National Functional Guidelines for Superfund Inorganic Data Review (January 2010) and National Functional Guidelines for Superfund Organic Data Review (June 2008). These EPA guidelines were written specifically for the Contract Laboratory Program (CLP), and have been modified for the purposes of this data validation where they differ from EPA Method SW-846 quality control (QC) requirements.

The data review, and validation process comprised 25% full validation of the raw analytical data and 75% data quality review based on information provided by the laboratory as summary reporting forms. Data that underwent full validation are indicated on Table 1.

The laboratory's raw analytical data packages were reviewed to assess the following: chain of custody (COC) compliance; holding time compliance; sensitivity; presence or absence of contamination as demonstrated by method and trip blanks; accuracy and bias as demonstrated by recovery of surrogate spikes, internal standards (ISs), laboratory control samples (LCSs), matrix spikes (MSs); analytical precision as relative percent difference (RPD) of analyte concentration between replicate samples (i.e., laboratory and field duplicates) or MSs and matrix spike duplicates (MSDs); calibration and instrument performance; and insofar as possible, the degree of conformance to method requirements and good laboratory practices.

In general, it is important to recognize that no analytical data are guaranteed to be correct, even if all QC audits are passed. Strict QC serves to increase confidence in data, but any reported value may potentially contain error.

4.0 EXPLANATION OF DATA QUALITY INDICATORS

Data quality indicators of the review and validation process are defined below.

Laboratory Control Sample Recoveries

LCSs and laboratory control sample duplicates (LCSDs) are aliquots of analyte-free water or solid matrix that are spiked with the analytes of interest for an analytical method or a representative subset of those analytes. The spiked water or solid matrix is then processed through the same extraction, concentration, cleanup, and analytical

procedures as the samples they accompany. LCS recovery and precision are an indication of the ability of a laboratory to successfully perform an analytical method in an interference-free matrix.

Matrix Spike Recoveries

MSs and MSDs are prepared by adding known amounts of the analytes of interest for an analytical method, or a representative subset of those analytes, to an aliquot of sample. The spiked sample is then processed through the same extraction, concentration, cleanup, and analytical procedures as the unspiked samples in an analytical batch.

MS recovery and precision are an indication of the ability of a laboratory to successfully recover an analyte in the matrix of a specific sample or closely related sample matrices. It is important not to apply MS results for any specific sample to other samples without understanding how the sample matrices are related.

Blank Samples

Blank samples are aliquots of water or solid matrix that are used as negative controls to verify that the sample collection, storage, preparation, and analysis system does not produce false positive results. Two types of blanks were employed for this project.

- Laboratory blanks are aliquots of water or solid matrix that are processed by the laboratory using exactly the same procedures as the field samples. Laboratory blanks are used to monitor for contamination introduced by the laboratory during sample preparation and analysis.
- Trip blanks are aliquots of analyte-free water that are placed in sample containers at the analytical laboratory and are then sent into the field with the sample containers that are used to collect field samples. Trip blanks are not opened in the field, but accompany the field samples back to the laboratory where they are analyzed as samples. Trip blanks are used to monitor for contamination that results from sample shipping and storage.

Target analytes should not be found in blank samples. When target analytes are detected in blanks, analyte concentrations in associated samples greater than the method reporting limit (MRL) but less than 5 times the concentration detected in the blank, or 10 times the concentration detected in the blank for common laboratory contaminants, will be U qualified by AMEC. Analyte concentrations between the instrument detection limit (IDL) or method detection limit (MDL) and MRL, and less than 5 times (or again, 10 times for common lab contaminants) the concentration detected in the blank will be U qualified at the MRL concentration. Because negative

results for a blank may indicate a low instrument bias, if the absolute concentration detected in the blank is greater than the MRL, concentrations in associated samples greater than the MRL but less than 10 times the absolute concentration detected in the blank are J qualified and nondetected results are UJ qualified.

Internal Standard Recoveries

IS are compounds that are added to a sample extract after all preparatory steps are completed and before instrumental analysis. These compounds serve as standards for qualitative analysis using relative retention time and quantitative analysis using relative response factors (RFs). Methods that use IS calibration include requirements for changes in response to the IS relative to the initial calibration (ICAL).

For EPA Method 8260B and 8270C, IS response must fall between 50% and 200% of the response in the ICAL. Because the area of the IS is used in the denominator of the equation for calculation of results using internal standardization, a response below 50% may indicate a possible high bias, and a response above 200% may indicate a possible low bias.

For EPA Method 6020 IS intensities must fall between 30 and 120% of the intensity of that IS in the ICAL standard. The intensity of the ISs for the calibration blank and instrument check standard must fall between 80 and 120% of the intensity of the IS of the ICAL standard.

Surrogate Spike Recoveries

Surrogate spikes are used to evaluate accuracy, method performance, and extraction efficiency in each individual sample. Surrogate compounds are compounds not normally found in environmental samples, but are similar to target analytes in chemical composition and behavior in the analytical process.

5.0 CHAIN OF CUSTODY AND SAMPLE RECEIPT CONDITION DOCUMENTATION

All samples were received at TestAmerica in good condition at a temperature less than the EPA-recommended 6 degrees Celsius (°C) with the following exception.

Samples AB4-17, AB2-14, DUP1, and TB were received at 13.2 °C. All detected results were qualified as estimated and flagged with a "J", all nondetected results were qualified as estimated and flagged with a "UJ".

Samples AB5-5, AB5-22, MWA6-12, and MWA6-20 were received at 9.6 °C. All detected results were qualified as estimated and flagged with a “J”, all nondetected results were qualified as estimated and flagged with a “UJ”.

Sample MWA4-81810 was received in a preserved vial; however, the sample pH was not less than 2. The sample was analyzed within the 7-day holding time for unpreserved samples, therefore no qualification was necessary.

6.0 SPECIFIC DATA VALIDATION FINDINGS FOR EACH ANALYTICAL METHOD

Sections 6.1 to 6.7 contain narrative descriptions of data quality review and data validation findings and data quality limitations. Definitions of data qualifiers added during data quality review and validation and summaries of specific qualifiers added to each affected sample as a result of the data quality review and validation findings are presented in Table 2.

6.1 Total Petroleum Hydrocarbons by Ecology Method NWTPH-Gx

NWTPH-Gx results generated by TestAmerica for the samples covered in this report may be considered usable with the limitations described in Sections 6.1.1 through 6.1.8.

6.1.1 Holding Times

All samples were extracted and analyzed within the method-specified maximum holding time of 7 days for unpreserved aqueous or 14 days for preserved aqueous and solid analyses.

6.1.2 Initial Calibration

ICALs outside the method-specified criteria of %RSD \leq 15%, or correlation coefficients \geq 0.995 are described as follows:

The GRO (C4-C12) NW %RSD of 19.1% was greater than the NWTPH method-specified 15% acceptance limit in the ICAL performed on instrument HP52 on July 7, 2010. AMEC UJ qualified the nondetected GRO (C4-C12) NW result from sample AP1-62410 because of possible bias.

6.1.3 Continuing Calibration

CCV recoveries were within the 80% to 120% method-specified control limits.

6.1.4 Laboratory Blanks

GRO (C4-C12) detected in the laboratory blanks are described as follows.

GRO (C4-C12) were detected in method blanks 10F4830-BLK1, 10F4830-BLK2, 10F5298-BLK1, and 10F5298-BLK2. GRO (C4-C12) were either not detected in the associated samples or the GRO concentrations were greater than five times the blank concentration and therefore, were not qualified based on the method blank contamination.

6.1.5 Laboratory Control Sample/Laboratory Control Sample Duplicate Recoveries

LCS/LCSD recoveries were within the laboratory-specified control limits.

6.1.6 Matrix Spike/Matrix Spike Duplicate Recovery

Samples on which MS/MSD analyses were performed are listed in Table 1. Recoveries were within the laboratory-specified control limits.

Some MS/MSDs results were reported by the laboratory using samples that aren't associated with project samples. These results were included by the laboratory, but precision and accuracy of project samples is not evaluated based on these results. In cases where project specific samples were not used for the MS/MSD analysis, samples were evaluated based on LCS/LCSD results.

6.1.7 Surrogate Recoveries

Surrogate recoveries were within the laboratory-specified control limits.

6.1.8 Analytical Procedures and Data Reporting

The laboratory case narrative states that the %RSD in the ICAL performed on instrument HP52 on July 7, 2010 that exceeded the NWTPH method-specified %RSD limit was within EPA Method 8021 limits. The laboratory did not reanalyze the affected sample. Effects on data usability are addressed in Section 6.1.2

6.2 Purgeable Petroleum Hydrocarbons by Ecology Method NWTPH-VPH

NWTPH-VPH results generated by TestAmerica for the samples covered in this report may be considered usable with the limitations described in Sections 6.2.1 through 6.2.6.

6.2.1 Holding Times

All samples were extracted and analyzed within the method-recommended maximum holding time of 14 days for aqueous and solid analysis.

6.2.2 Initial Calibration

ICALs met the method specified criteria of $\%RSD \leq 15\%$, or correlation coefficients ≥ 0.995 .

6.2.3 Continuing Calibration

CCAL performance is evaluated in terms of percent drift (%D), which corresponds to percent difference (average RF models) or %D (regression fit models) from the average ICAL response.

The >C10 to C12 Ali (31.7%), >C6 to C8 Ali (21.9%), and C5-C6 Aliphatic Hydrocarbons (27.0%) responses were greater than the method-specified control limit of 20% in the CCV analyzed on July 4, 2010 at 13:11 on instrument HP49. The detected analytes were J qualified as estimated and the nondetected analytes were UJ qualified as estimated in associated sample AB5-5 due to possible bias.

6.2.4 Laboratory Blanks

NWTPH-VPH was not detected in the laboratory blanks.

6.2.5 Laboratory Control Sample/Laboratory Control Sample Duplicate Recoveries

LCS/LCSD recoveries were within of the laboratory-specified acceptance limits.

6.2.6 Surrogate Recoveries

Surrogate recoveries outside the laboratory-specified control limits are addressed below.

2,5-Dibromotoluene (FID) (55%) and 2,5-dibromotoluene (PID) (59%) recoveries in sample AB5-5 were less than the laboratory-specified 60% to 140% control limits. The detected analytes were J qualified as estimated J and the nondetected analytes were UJ qualified as estimated due to possible low bias.

6.3 Volatile Organic Compounds by EPA Method 8260B

VOC results generated by TestAmerica for the samples covered in this report may be considered usable with the limitations described in Sections 6.3.1 through 6.3.9.

6.3.1 Holding Times

All samples were extracted and analyzed within the EPA-recommended maximum holding time of 14 days for preserved aqueous and solid analysis.

6.3.2 Initial Calibration

ICALs met the method-specified criteria of system performance check compounds (SPCCs) average RF ≥ 0.050 , %RSD $\leq 30\%$, or correlation coefficients ≥ 0.995 .

ICAL relative response factor (RRF) met the method specified criteria of greater than 0.010 for poor response target compounds and greater than 0.050 for all other compounds.

6.3.3 Secondary Source Calibration Verification

SSCV standard recoveries were within of the method-specified 75%-125% acceptance limits.

6.3.4 Continuing Calibration

CCAL performance is evaluated in terms of %D, which corresponds to percent difference (average RF models) or %D (regression fit models) from the average ICAL response.

The 1,2-Dibromoethane (EDB) and methyl tert-butyl ether responses in the CCAL analyzed on July 3, 2010 at 12:47 on instrument HP65 were greater than the method specified control limit of 20% at 36.3% and 32.4%, respectively. The high RSDs equates to a high bias. All associated samples were non-detected for methyl tert-butyl ether; therefore, data usability was not affected. The detected EDB result in sample AB5-5 was J qualified as estimated due to a possible high bias.

6.3.5 Laboratory and Trip Blanks

VOCs were not detected in the laboratory or trip blanks.

6.3.6 Laboratory Control Sample/Laboratory Control Sample Duplicate Recoveries

LCS/LCSD recoveries were within of the laboratory-specified acceptance limits.

6.3.7 Matrix Spike/Matrix Spike Duplicate Recovery

Samples on which MS/MSD analyses were performed are listed in Table 1. Recoveries outside of the laboratory-specified control limits are listed below.

The RPD of 27% between the methyl tert-butyl ether results from the MS/MSD analysis of sample AB5-5 was greater than the acceptance limit of 25%. Methyl tert-butyl ether was not detected in sample AB5-5; therefore, data usability was not affected by the imprecision.

6.3.8 Internal Standard Recoveries

IS recoveries outside the method-specified 50% to 200% acceptance limits are described as follows.

1,4-Dichlorobenzene-d₄ area counts in samples AB2 4.5-5 (49%) and AB1A 3.5-4.5 (12%) were less than the acceptance limits. All detected analytes were J qualified as estimated due to possible high bias.

6.3.9 Surrogate Recoveries

Surrogate recoveries outside the laboratory-specified control limits are described as follows.

The recovery for toluene-d₈ (165%) in sample AB5A 3-3.5 was greater than the laboratory-specified control limits of 76% to 129%. The high surrogate recovery equates to a high bias; therefore, detected analytes were J qualified as estimated and nondetected analytes were not qualified.

The recoveries for toluene-d₈ (237%) and 4-bromofluorobenzene (1020%) in sample AB1A 3.5-4.5 were greater than the laboratory-specified control limits of 76% to 129% and 67% and 147%, respectively. The high surrogate recoveries equate to a high bias; therefore, detected analytes were J qualified as estimated and nondetected analytes were not qualified.

The recoveries for toluene-d₈ (150%) and 4-bromofluorobenzene (158%) in sample AB5-5 were greater than the laboratory specified control limits of 76% to 129% and 67% and 147%, respectively. The high surrogate recoveries equate to a high bias; therefore, detected analytes were J qualified as estimated and nondetected analytes were not qualified.

6.4 Total Petroleum Hydrocarbons by Ecology's NWTPH-Dx

NWTPH-Dx results generated by TestAmerica for the samples covered in this report may be considered usable with the limitations described in Sections 6.4.1 through 6.4.7.

6.4.1 Holding Times

All samples were extracted and analyzed within the method recommended maximum holding time of 7 days for aqueous extraction, 14 days for solid extraction, and 40 days from extraction to analysis with the following exceptions.

Sample MWA6-12 was re-extracted one day outside of the recommended holding time. All detected results were qualified as estimated and flagged with a J.

Sample AP1-15 was re-analyzed one day outside the recommended holding time. The results of the re-analysis were qualified as estimated and flagged with a J.

6.4.2 Initial Calibration

ICALs met the method-specified criteria of average RF ≥ 0.050 , %RSD $\leq 30\%$, or correlation coefficients ≥ 0.995 .

6.4.3 Continuing Calibration

CCAL performance is evaluated in terms of %D, which corresponds to percent difference (average RF models) or %D (regression fit models) from the average ICAL response.

CCV recoveries outside the 15%D limits are described as follows.

The Motor Oil %D of 17.1% was outside the method acceptance limits in the CCV performed on instrument PE11 on July 1, 2010. AMEC J qualified the detected Motor Oil results from sample Dup 2 because of possible high bias.

6.4.4 Laboratory Blanks

TPH detected in the laboratory blanks are described as follows.

Motor Oil was detected in method blank 10F4974-BLK1 at a concentration of 1.03 mg/kg. The Motor Oil result in associated sample AB5-22 was qualified as nondetected, U, because the concentration detected in the sample was less than five times the blank concentration. All other Motor Oil results were either not detected in the associated samples or were detected at concentrations greater than five times the blank contamination and therefore, were not qualified based on the method blank contamination.

Motor Oil was detected in method blanks 10F4914-BLK1 (1.31 mg/kg), 10G1494-BLK1 (1.63 mg/kg), and 10G1298-BLK1 (0.819 mg/kg). Diesel was detected in method blank 10H3675-BLK1 at a concentration of 29.0 µg/L. Diesel and Motor Oil were detected in method blanks 10F5077-BLK1 (18.0 µg/L diesel and 32.1 µg/L motor oil) and 10F5255-BLK1 (0.791 mg/kg diesel 0.818 mg/kg motor oil). All Diesel and/or Motor Oil results were either not detected in the associated samples or were detected at concentrations greater than five times the blank contamination and therefore, were not qualified based on the method blank contamination.

6.4.5 Laboratory Control Sample/Laboratory Control Sample Duplicate Recoveries

LCS/LCSD recoveries were within the laboratory-specified acceptance limits.

6.4.6 Matrix Spike/Matrix Spike Duplicate Recovery

Samples on which MS/MSD analyses were performed are listed in Table 1. Recoveries outside of the laboratory-specified control limits are described as follows.

The Diesel RPD of 45% between the AP1-15-MS and AP1-15-MSD was greater than the acceptance limit of 43%. The Diesel result from sample AP1-15 was J qualified as estimated due to the imprecision.

6.4.7 Surrogate Recoveries

Surrogate recoveries outside the laboratory-specified control limits are described as follows.

The NWTPH-Dx surrogate o-terphenyl recovery of 38% in sample AP1-15 was less than the 50% to 150% control limit. The DRO and RRO results in sample AP1-15 were J qualified as estimated due to possible low bias.

The NWTPH-Dx surrogate o-terphenyl was not recovered in samples AB2 4.5-5, AB1A 3.5-4.5, AB5A 3-3.5, AP1-5, MW40R-81810, and AB5-5 because the samples were

diluted due to the high concentrations of target analytes and data usability could not be fully evaluated. Qualification of data is not warranted.

6.5 Extractable Petroleum Hydrocarbons by Ecology's NWTPH-EPH

NWTPH-EPH results generated by TestAmerica for the samples covered in this report may be considered usable with the limitations described in Sections 6.5.1 through 6.5.7.

6.5.1 Holding Times

All samples were extracted and analyzed within the method-recommended maximum holding time of 7 days for aqueous extraction, 14 days for solid extraction, and 40 days from extraction to analysis.

6.5.2 Initial Calibration

ICALs were within the method-specified criteria of average RF ≥ 0.050 , %RSD $\leq 30\%$, or correlation coefficients ≥ 0.995 .

6.5.3 Continuing Calibration

CCAL performance is evaluated in terms of %D, which corresponds to percent difference (average RF models) or %D (regression fit models) from the average ICAL response.

CCV %Ds were within method-specified 20% acceptance limit.

6.5.4 Laboratory Blanks

EPH was not detected in the laboratory blanks.

6.5.5 Laboratory Control Sample/Laboratory Control Sample Duplicate Recoveries

LCS/LCSD recoveries were within of the laboratory-specified control limits.

6.5.6 Matrix Spike/Matrix Spike Duplicate Recovery

Samples on which MS/MSD analyses were performed are listed in Table 1. Recoveries outside of the laboratory-specified control limits are listed below.

- The >C10 to C12 Ali recovery of 62% in the MS analysis of sample AB5-5 was less than the 70% to 130% acceptance limit. The nondetected >C10 to C12 Ali result from sample AB5-5 was UJ qualified as estimated due to low matrix spike recovery.
- The >C10 to C12 Aro recovery of 135% in the MSD analysis of sample AB5-5 was greater than the 70% to 130% acceptance limit. The detected >C10 to C12 Aro result from sample AB5-5 was J qualified as estimated due to high matrix spike recovery.

6.5.7 Surrogate Recoveries

Surrogate recoveries outside the laboratory-specified control limits are addressed below.

The 2-fluorobiphenyl (240%) and 2-bromonaphthalene (178%) recoveries in sample AB5-5 were greater than the laboratory-specified 60% to 140% control limits. The high surrogate recoveries equate to a high bias; therefore, detected analytes were J qualified as estimated and non-detected analytes were not qualified.

6.6 Polycyclic Aromatic Hydrocarbons by EPA Method 8270C

PAH results generated by TestAmerica for the samples covered in this report may be considered usable with the limitations described in Sections 6.6.1 through 6.6.9.

6.6.1 Holding Times

All samples were extracted and analyzed within the EPA-recommended maximum holding time of 7 days for aqueous extraction, 14 days for solid extraction, and 40 days from extraction to analysis.

6.6.2 Initial Calibration

ICALs met the method specified criteria of SPCCs average RF ≥ 0.050 , %RSD $\leq 30\%$, or correlation coefficients ≥ 0.995 .

ICAL RRFs met the method specified criteria of greater than 0.010 for poor response target compounds and greater than 0.050 for all other compounds.

6.6.3 Secondary Source Calibration Verification

SSCV standard recoveries were within the EPA-specified 75%-125% acceptance limits.

6.6.4 Continuing Calibration

CCAL performance is evaluated in terms %D, which corresponds to percent difference (average RF models) or %D (regression fit models) from the average ICAL response.

CCV %Ds were within the 20% acceptance limits.

6.6.5 Laboratory and Rinsate Blanks

PAHs detected in the laboratory blanks are described as follows

Anthracene and phenanthrene were detected in method blank 10F4798-BLK1. The anthracene result in sample AB1A 3.5-4.5 and the phenanthrene result in sample AB3-20 were U qualified as nondetected, because the concentrations detected in the samples were less than five times the blank concentration. All other anthracene or phenanthrene results in the associated samples were either not detected or were detected at concentrations greater than five times the blank concentration and therefore were not qualified based on the method blank concentrations.

6.6.6 Laboratory Control Sample/Laboratory Control Sample Duplicate Recoveries

LCS/LCSD recoveries were within of the laboratory specified control limits.

6.6.7 Matrix Spike/Matrix Spike Duplicate Recovery

Samples on which MS/MSD analyses were performed are listed in Table 1. Recoveries outside of the laboratory specified control limits are described as follows.

The phenanthrene recovery of 151% in the MS analysis of sample AB4-17 was greater than the 33% to 134% acceptance limit. The detected phenanthrene result from sample AB4-17 was J qualified as estimated due to high matrix spike recovery.

The RPD of 36% between the anthracene results in the MS/MSD analysis of sample AB4-17 was greater than the 34% acceptance limit. Anthracene was not detected in sample AB4-17; therefore, data usability was not impacted by the imprecision.

6.6.8 Internal Standard Recoveries

IS recoveries outside the method specified 50% to 200% acceptance limits are described as follows.

The acenaphthene recovery of 207% was high in sample AB5A 3-3.5. The detected acenaphthylene result from this sample was J qualified as estimated due to possible low bias.

6.6.9 Surrogate Recoveries

Surrogate recoveries outside the laboratory specified limits are addressed below.

The 2-fluorobiphenyl (28%) and terphenyl (11%) recoveries in sample AP1-62410 were less than the laboratory-specified control limits of 29% to 120% and 13% to 120%, respectively. The low surrogate recoveries equate to a low bias; therefore, detected analytes were J qualified as estimated and nondetected analytes were UJ qualified as estimated.

The nitrobenzene recoveries in samples AB2-4.5-5 (123%) and AB5A 3-3.5 (735%) were greater than the laboratory-specified 17% to 120% control limits. The high surrogate recoveries equate to a high bias; therefore, detected analytes were J qualified as estimated and, nondetected analytes were not qualified.

The recoveries for 2-fluorobiphenyl (13%) and terphenyl (14%) in sample AB5-5 were less than the laboratory-specified control limits of 14% to 120% and 18% to 120%, respectively. The low surrogate recoveries equate to a low bias; therefore, detected analytes were J qualified as estimated and nondetected analytes were UJ qualified as estimated.

6.7 Lead by EPA 6010B and 6020

The lead results may be considered usable without qualification.

6.7.1 Holding Times

All samples were analyzed for lead within the method-recommended technical holding time of 180 days.

6.7.2 Initial Calibration

All ICALs associated were acceptable.

6.7.3 Initial and Continuing Calibration Verification

The method specified criteria of 90% to 110% recovery were met for the initial calibration verifications (ICVs) and CCVs.

6.7.4 Low Level Calibration Check Standard

All low-level check standards associated with the analysis of these samples met the method-specified acceptance limits of $\pm 50\%$ of the true value.

6.7.5 Inductively Coupled Plasma Interference Check Sample

All interference check samples exhibited recoveries within the method-specified acceptance limits of 80% to 120%.

6.7.6 Blanks

Target analytes were not detected at concentrations greater than the MRL in laboratory, initial or continuing calibration blanks (ICB or CCBs) associated with metals analysis.

6.7.7 Laboratory Control Sample Recovery

LCS recoveries were within of the method-specified 80% to 120% acceptance limits.

6.7.8 Matrix Spike/Matrix Spike Duplicate Recovery

Samples on which MS/MSD analyses were performed are listed in Table 1. The MS/MSD recoveries were within the method specified acceptance limits of 75% to 125%, unless the metal concentration detected in the original sample is greater than four times the spike concentration.

6.7.9 Post Digestion Spike Recovery

The metals post digestion spike (PDS) recoveries were within the method-specified acceptance limits of 75% to 125% unless the metal concentration detected in the original sample was greater than four times the spike concentration.

6.7.10 Laboratory Duplicates

Laboratory duplicate RPDs were within the method-specified acceptance limits for laboratory duplicates is $\leq 20\%$ for aqueous samples and $\leq 30\%$ for soils and sediments.

6.7.11 Serial Dilution

All serial dilution recoveries met the method-specified criteria of less than 10% difference for analytes with concentrations greater than 50 times the MDL.

6.7.12 Internal Standard Recoveries

IS recoveries for method 6020B were within the method specified 30% to 120% acceptance limits.

7.0 FIELD DUPLICATES

Samples collected as field duplicates are listed in Table 1. Primary and duplicate results and the RPDs for the field duplicates are summarized in Table 3. Precision values not meeting the EPA-specified acceptance limits of less than 30% RPD for water and less than 40% RPD for soil for concentrations greater than five times their MRL or \pm the MRL for sample concentrations less than the MRL are described indicated on Table 3.

AMEC J qualified the detected acenaphthylene, anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, fluoranthene, fluorene, indeno(1,2,3-cd)pyrene, phenanthrene, pyrene, diesel, and motor oil results from samples MWA4-15 and Dup2 because of field duplicate imprecision.

AMEC J qualified the detected Diesel and Motor Oil results from samples MW19-81810 and DUP1-81810 because of field duplicate imprecision.

8.0 SUMMARY AND CONCLUSIONS

AMEC's review indicates the data from this event are generally usable and of good quality. The types of qualifications applied to the dataset include nondetected (U) and estimated results (UJ, J).

Nondetected Qualified Data. The detected anthracene and phenanthrene results from one sample were U qualified as nondetected because of contamination in the associated rinsate or method blanks.

Estimated Data. Portions of the NWTPH-Gx, NWTPH-VPH, VOC, NWTPH-Dx, NWTPH-EPH, and SVOC data were qualified as estimated because of calibration issues, field duplicate imprecision, MS/MSD recoveries and RPDs outside of acceptance limits, surrogates outside of acceptance limits, and internal standards outside acceptance limits samples analyzed outside of holding time.

Data Completeness Assessment. AMEC reviewed 922 data records during the data validation and data quality review. AMEC J or UJ qualified 297 (32%) records as estimated concentrations and U qualified 3 (0.3%) records as nondetected because of detection of a target analyte in an associated blank(s). No data were rejected and the 90% project data quality objective for valid measurements was met for this project.

AGENCY DRAFT

ExxonMobil/ADC Property
Data Quality Review and Validation Report

ExxonMobil/ADC Property
Data Quality Review and Validation Report

REFERENCES

EPA, 2010. *EPA Contract Laboratory Program National Functional Guidelines for Inorganic Data Review*, EPA-540-R-10-011.

EPA, 2008. *EPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review*, EPA-540-R-08-01.

LIMITATIONS

This report was prepared exclusively for ExxonMobil by AMEC. The quality of information, conclusions, and estimates contained herein is consistent with the level of effort involved in AMEC services and based on: i) information available at the time of preparation, ii) data supplied by outside sources, and iii) the assumptions, conditions, and qualifications set forth in this report. This Data Validation/Review Report is intended to be used by ExxonMobil for the ExxonMobil/ADC Property only, subject to the terms and conditions of its contract with AMEC. Any other use of, or reliance on, this report by any third party is at that party's sole risk.

TABLES

AGENCY DRAFT

TABLE 1

Field Samples Submitted to TestAmerica ExxonMobil/ADC Property Everett, WA

Sample Location	Collection Date	Matrix	TestAmerica Sample ID	NTWPH-Gx/BTEXM	NWTPH-VPH	VOCs	NWTPH-Dx	NWTPH-EPH	PAHs	Lead	Notes
AB3 4.5-5	06/21/2010	Soil	NTF2364-01	x			x		x		Full validation
AB2 4.5-5	06/21/2010	Soil	NTF2364-04	x			x		x		
AB3-20	06/22/2010	Soil	NTF2364-05	x			x		x		
AB1A 3.5-4.5	06/22/2010	Soil	NTF2364-06	x			x		x		Full Validation
AB5A 3-3.5	06/22/2010	Soil	NTF2364-07	x			x		x		
Trip Blank	06/21/2010	Water	NTF2364-09			x					
AB4-17	06/23/2010	Soil	NTF2469-01	x			x		x		MS/MSD
AB2-14	06/23/2010	Soil	NTF2469-04	x			x		x		
DUP1	06/23/2010	Soil	NTF2469-07	x			x		x		Field Duplicate of AB2-14
TB	06/23/2010	Water	NTF2469-08			x					
MWA5-10	06/24/2010	Soil	NTF2659-01	x			x		x		Full validation
MWA5-20	06/24/2010	Soil	NTF2659-02	x			x		x		
AP1-5	06/24/2010	Soil	NTF2659-03	x			x		x		
AP1-15	06/24/2010	Soil	NTF2659-04	x			x		x		
AP1-62410	06/24/2010	Water	NTF2659-05	x		x	x		x	x	MS/MSD Full validation
MWA4-15	06/24/2010	Soil	NTF2659-07	x			x		x		
MWA4-20	06/24/2010	Soil	NTF2659-08	x			x		x		
Dup 2	06/24/2010	Soil	NTF2659-09	x			x		x		Field Duplicate of MWA4-15
MWA3-10	06/24/2010	Soil	NTF2659-10	x			x		x		Full validation
MWA3-20	06/24/2010	Soil	NTF2659-11	x			x		x		
Trip Blank	06/24/2010	Water	NTF2659-13			x					
AB5-5	06/25/2010	Soil	NTF2651-01	x	x		x	x	x		Full Validation
AB5-22	06/25/2010	Soil	NTF2651-02	x			x		x		
MWA6-12	06/25/2010	Soil	NTF2651-04	x			x		x		
MWA6-20	06/25/2010	Soil	NTF2651-05	x			x		x		
MW11-81810	08/18/2010	Water	NTH1954-01	x			x		x	x	MS/MSD, Full validation
MWA5-81810	08/18/2010	Water	NTH1954-02	x			x		x	x	
MWA6-81810	08/18/2010	Water	NTH1954-03	x			x		x	x	
MWA4-818-10	08/18/2010	Water	NTH1954-04	x			x		x	x	Full Validation
MWA3-81810	08/18/2010	Water	NTH1954-05	x			x		x	x	
MWA2-81810	08/18/2010	Water	NTH1954-06	x		x	x		x	x	Full validation
MWA1-81810	08/18/2010	Water	NTH1954-07	x		x	x		x	x	
MW19-81810	08/18/2010	Water	NTH1954-08	x			x		x	x	
MW40R-81810	08/18/2010	Water	NTH1954-09	x			x		x	x	
Dup-1-81810	08/18/2010	Water	NTH1954-10	x			x		x	x	Field Duplicate of MW19-81810
Trip Blank 1	08/18/2010	Water	NTH1954-11			x					
Trip Blank 2	08/18/2010	Water	NTH1954-12			x					Full validation
Trip Blank 3	08/18/2010	Water	NTH1954-13			x					
Trip Blank 4	08/18/2010	Water	NTH1954-14			x					
Trip Blank 5	08/18/2010	Water	NTH1954-15			x					

Notes: MS/MSD= Matrix Spike and Matrix Spike Duplicate sample

AGENCY DRAFT

TABLE 2
Data Validation Qualifiers
ExxonMobil/ADC Property
Everett, WA

Field Sample ID	Date Sampled	Parameter Name	Analytical Method	Report Result	Report Units	Report Detection Limit	Data Validation Qualifier	Reason Code
AB1A 3.5-4.5_06222010	06/22/2010	Ethylbenzene	SW846 8260B	0.0187	mg/kg	0.00221	J	LI, HS
AB1A 3.5-4.5_06222010	06/22/2010	Toluene	SW846 8260B	0.00754	mg/kg	0.00221	J	LI, HS
AB1A 3.5-4.5_06222010	06/22/2010	ANTHRACENE	SIM	0.112	mg/kg	0.00448	U	MB
AB1A 3.5-4.5_06222010	06/22/2010	Total Xylene	SW846 8260B	0.0418	mg/kg	0.00551	J	LI, HS
AB1A 3.5-4.5_06222010	06/22/2010	Benzene	SW846 8260B	0.0056	mg/kg	0.00221	J	LI, HS
AB2 4.5-5_06212010	06/21/2010	ANTHRACENE	SIM	0.0141	mg/kg	0.00878	J	HS
AB2 4.5-5_06212010	06/21/2010	PYRENE	SIM	0.0721	mg/kg	0.00878	J	HS
AB2 4.5-5_06212010	06/21/2010	Total Xylene	SW846 8260B	0.0249	mg/kg	0.012	J	LI
AB2 4.5-5_06212010	06/21/2010	BENZO(G,H,I)PERYLENE	SIM	0.0202	mg/kg	0.00878	J	HS
AB2 4.5-5_06212010	06/21/2010	INDENO(1,2,3-CD)PYRENE	SIM	0.0106	mg/kg	0.00878	J	HS
AB2 4.5-5_06212010	06/21/2010	BENZO(B)FLUORANTHENE	SIM	0.0176	mg/kg	0.00878	J	HS
AB2 4.5-5_06212010	06/21/2010	FLUORANTHENE	SIM	0.0739	mg/kg	0.00878	J	HS
AB2 4.5-5_06212010	06/21/2010	BENZO(K)FLUORANTHENE	SIM	0.0132	mg/kg	0.00878	J	HS
AB2 4.5-5_06212010	06/21/2010	CHRYSENE	SIM	0.0273	mg/kg	0.00878	J	HS
AB2 4.5-5_06212010	06/21/2010	BENZO(A)PYRENE	SIM	0.0211	mg/kg	0.00878	J	HS
AB2 4.5-5_06212010	06/21/2010	BENZO(A)ANTHRACENE	SIM	0.0193	mg/kg	0.00878	J	HS
AB2 4.5-5_06212010	06/21/2010	ACENAPHTHENE	SIM	0.0193	mg/kg	0.00878	J	HS
AB2 4.5-5_06212010	06/21/2010	PHENANTHRENE	SIM	0.0853	mg/kg	0.00878	J	HS
AB2 4.5-5_06212010	06/21/2010	FLUORENE	SIM	0.0308	mg/kg	0.00878	J	HS
AB2 4.5-5_06212010	06/21/2010	1-METHYLNAPHTHALENE	SIM	0.343	mg/kg	0.00878	J	HS
AB2 4.5-5_06212010	06/21/2010	NAPHTHALENE	SIM	0.0466	mg/kg	0.00878	J	HS
AB2 4.5-5_06212010	06/21/2010	2-METHYLNAPHTHALENE	SIM	0.0598	mg/kg	0.00878	J	HS
AB2-14_06232010	06/23/2010	Ethylbenzene	SW846 8260B	0.00209	mg/kg	0.00209	UJ	RT
AB2-14_06232010	06/23/2010	Toluene	SW846 8260B	0.00209	mg/kg	0.00209	UJ	RT
AB2-14_06232010	06/23/2010	ANTHRACENE	SIM	0.00379	mg/kg	0.00379	UJ	RT
AB2-14_06232010	06/23/2010	PYRENE	SIM	0.00379	mg/kg	0.00379	UJ	RT
AB2-14_06232010	06/23/2010	Total Xylene	SW846 8260B	0.00523	mg/kg	0.00523	UJ	RT
AB2-14_06232010	06/23/2010	METHYL TERT-BUTYL ETHER	SW846 8260B	0.00209	mg/kg	0.00209	UJ	RT
AB2-14_06232010	06/23/2010	BENZO(G,H,I)PERYLENE	SIM	0.00379	mg/kg	0.00379	UJ	RT
AB2-14_06232010	06/23/2010	INDENO(1,2,3-CD)PYRENE	SIM	0.00379	mg/kg	0.00379	UJ	RT
AB2-14_06232010	06/23/2010	BENZO(B)FLUORANTHENE	SIM	0.00379	mg/kg	0.00379	UJ	RT
AB2-14_06232010	06/23/2010	FLUORANTHENE	SIM	0.00379	mg/kg	0.00379	UJ	RT
AB2-14_06232010	06/23/2010	BENZO(K)FLUORANTHENE	SIM	0.00379	mg/kg	0.00379	UJ	RT
AB2-14_06232010	06/23/2010	ACENAPHTHYLENE	SIM	0.00379	mg/kg	0.00379	UJ	RT
AB2-14_06232010	06/23/2010	CHRYSENE	SIM	0.00379	mg/kg	0.00379	UJ	RT
AB2-14_06232010	06/23/2010	BENZO(A)PYRENE	SIM	0.00379	mg/kg	0.00379	UJ	RT
AB2-14_06232010	06/23/2010	DIBENZO(A,H)ANTHRACENE	SIM	0.00379	mg/kg	0.00379	UJ	RT
AB2-14_06232010	06/23/2010	BENZO(A)ANTHRACENE	SIM	0.00379	mg/kg	0.00379	UJ	RT
AB2-14_06232010	06/23/2010	Benzene	SW846 8260B	0.00209	mg/kg	0.00209	UJ	RT
AB2-14_06232010	06/23/2010	ACENAPHTHENE	SIM	0.00379	mg/kg	0.00379	UJ	RT
AB2-14_06232010	06/23/2010	PHENANTHRENE	SIM	0.00417	mg/kg	0.00379	J	RT
AB2-14_06232010	06/23/2010	FLUORENE	SIM	0.00379	mg/kg	0.00379	UJ	RT
AB2-14_06232010	06/23/2010	1-METHYLNAPHTHALENE	SIM	0.00379	mg/kg	0.00379	UJ	RT
AB2-14_06232010	06/23/2010	NAPHTHALENE	SIM	0.00379	mg/kg	0.00379	UJ	RT
AB2-14_06232010	06/23/2010	2-METHYLNAPHTHALENE	SIM	0.00379	mg/kg	0.00379	UJ	RT
AB2-14_06232010	06/23/2010	Gasoline Range Organics (C4-C12)	NWTPH-Gx	6.39	mg/kg	6.39	UJ	RT
AB2-14_06232010	06/23/2010	MOTOR OILS	NWTPH-Dx	6.54	mg/kg	4.49	J	RT
AB2-14_06232010	06/23/2010	C28	NWTPH-Dx	4.49	mg/kg	4.49	UJ	RT
DUP1_06232010	06/23/2010	Ethylbenzene	SW846 8260B	0.00192	mg/kg	0.00192	UJ	RT
DUP1_06232010	06/23/2010	Toluene	SW846 8260B	0.00192	mg/kg	0.00192	UJ	RT
DUP1_06232010	06/23/2010	ANTHRACENE	SIM	0.00379	mg/kg	0.00379	UJ	RT
DUP1_06232010	06/23/2010	PYRENE	SIM	0.00379	mg/kg	0.00379	UJ	RT
DUP1_06232010	06/23/2010	Total Xylene	SW846 8260B	0.00479	mg/kg	0.00479	UJ	RT
DUP1_06232010	06/23/2010	METHYL TERT-BUTYL ETHER	SW846 8260B	0.00192	mg/kg	0.00192	UJ	RT
DUP1_06232010	06/23/2010	BENZO(G,H,I)PERYLENE	SIM	0.00379	mg/kg	0.00379	UJ	RT
DUP1_06232010	06/23/2010	INDENO(1,2,3-CD)PYRENE	SIM	0.00379	mg/kg	0.00379	UJ	RT
DUP1_06232010	06/23/2010	BENZO(B)FLUORANTHENE	SIM	0.00379	mg/kg	0.00379	UJ	RT
DUP1_06232010	06/23/2010	FLUORANTHENE	SIM	0.00379	mg/kg	0.00379	UJ	RT
DUP1_06232010	06/23/2010	BENZO(K)FLUORANTHENE	SIM	0.00379	mg/kg	0.00379	UJ	RT
DUP1_06232010	06/23/2010	ACENAPHTHYLENE	SIM	0.00379	mg/kg	0.00379	UJ	RT
DUP1_06232010	06/23/2010	CHRYSENE	SIM	0.00379	mg/kg	0.00379	UJ	RT
DUP1_06232010	06/23/2010	BENZO(A)PYRENE	SIM	0.00379	mg/kg	0.00379	UJ	RT
DUP1_06232010	06/23/2010	DIBENZO(A,H)ANTHRACENE	SIM	0.00379	mg/kg	0.00379	UJ	RT
DUP1_06232010	06/23/2010	BENZO(A)ANTHRACENE	SIM	0.00379	mg/kg	0.00379	UJ	RT
DUP1_06232010	06/23/2010	Benzene	SW846 8260B	0.00192	mg/kg	0.00192	UJ	RT
DUP1_06232010	06/23/2010	ACENAPHTHENE	SIM	0.00379	mg/kg	0.00379	UJ	RT
DUP1_06232010	06/23/2010	PHENANTHRENE	SIM	0.00494	mg/kg	0.00379	J	RT
DUP1_06232010	06/23/2010	FLUORENE	SIM	0.00379	mg/kg	0.00379	UJ	RT
DUP1_06232010	06/23/2010	1-METHYLNAPHTHALENE	SIM	0.00379	mg/kg	0.00379	UJ	RT
DUP1_06232010	06/23/2010	NAPHTHALENE	SIM	0.00379	mg/kg	0.00379	UJ	RT
DUP1_06232010	06/23/2010	2-METHYLNAPHTHALENE	SIM	0.00379	mg/kg	0.00379	UJ	RT
DUP1_06232010	06/23/2010	Gasoline Range Organics (C4-C12)	NWTPH-Gx	5.27	mg/kg	5.27	UJ	RT
DUP1_06232010	06/23/2010	MOTOR OILS	NWTPH-Dx	4.65	mg/kg	4.65	UJ	RT
DUP1_06232010	06/23/2010	C28	NWTPH-Dx	4.65	mg/kg	4.65	UJ	RT

AGENCY DRAFT

TABLE 2
Data Validation Qualifiers
ExxonMobil/ADC Property
Everett, WA

Field Sample ID	Date Sampled	Parameter Name	Analytical Method	Report Result	Report Units	Report Detection Limit	Data Validation Qualifier	Reason Code
AB3-20_06222010	06/22/2010	PHENANTHRENE	SIM	0.0072	mg/kg	0.0048	U	MB
AB4-17_06232010	06/23/2010	Ethylbenzene	SW846 8260B	0.0145	mg/kg	0.00213	J	RT
AB4-17_06232010	06/23/2010	Toluene	SW846 8260B	0.00213	mg/kg	0.00213	UJ	RT
AB4-17_06232010	06/23/2010	ANTHRACENE	SIM	0.00422	mg/kg	0.00422	UJ	RT
AB4-17_06232010	06/23/2010	PYRENE	SIM	0.00464	mg/kg	0.00422	J	RT
AB4-17_06232010	06/23/2010	Total Xylene	SW846 8260B	0.0313	mg/kg	0.00532	J	RT
AB4-17_06232010	06/23/2010	METHYL TERT-BUTYL ETHER	SW846 8260B	0.00213	mg/kg	0.00213	UJ	RT
AB4-17_06232010	06/23/2010	BENZO(G,H,I)PERYLENE	SIM	0.00422	mg/kg	0.00422	UJ	RT
AB4-17_06232010	06/23/2010	INDENO(1,2,3-CD)PYRENE	SIM	0.00422	mg/kg	0.00422	UJ	RT
AB4-17_06232010	06/23/2010	BENZO(B)FLUORANTHENE	SIM	0.00422	mg/kg	0.00422	UJ	RT
AB4-17_06232010	06/23/2010	FLUORANTHENE	SIM	0.0076	mg/kg	0.00422	J	RT
AB4-17_06232010	06/23/2010	BENZO(K)FLUORANTHENE	SIM	0.00422	mg/kg	0.00422	UJ	RT
AB4-17_06232010	06/23/2010	ACENAPHTHYLENE	SIM	0.00422	mg/kg	0.00422	UJ	RT
AB4-17_06232010	06/23/2010	CHRYSENE	SIM	0.00422	mg/kg	0.00422	UJ	RT
AB4-17_06232010	06/23/2010	BENZO(A)PYRENE	SIM	0.00422	mg/kg	0.00422	UJ	RT
AB4-17_06232010	06/23/2010	DIBENZO(A,H)ANTHRACENE	SIM	0.00422	mg/kg	0.00422	UJ	RT
AB4-17_06232010	06/23/2010	BENZO(A)ANTHRACENE	SIM	0.00422	mg/kg	0.00422	UJ	RT
AB4-17_06232010	06/23/2010	Benzene	SW846 8260B	0.0293	mg/kg	0.00213	J	RT
AB4-17_06232010	06/23/2010	ACENAPHTHENE	SIM	0.00422	mg/kg	0.00422	UJ	RT
AB4-17_06232010	06/23/2010	PHENANTHRENE	SIM	0.0106	mg/kg	0.00422	J	HM, RT
AB4-17_06232010	06/23/2010	FLUORENE	SIM	0.00422	mg/kg	0.00422	UJ	RT
AB4-17_06232010	06/23/2010	1-METHYLNAPHTHALENE	SIM	0.00422	mg/kg	0.00422	UJ	RT
AB4-17_06232010	06/23/2010	NAPHTHALENE	SIM	0.00422	mg/kg	0.00422	UJ	RT
AB4-17_06232010	06/23/2010	2-METHYLNAPHTHALENE	SIM	0.00422	mg/kg	0.00422	UJ	RT
AB4-17_06232010	06/23/2010	Gasoline Range Organics (C4-C12)	NWTPH-Gx	5.3	mg/kg	5.3	UJ	RT
AB4-17_06232010	06/23/2010	MOTOR OILS	NWTPH-Dx	8.36	mg/kg	4.95	J	RT
AB4-17_06232010	06/23/2010	C28	NWTPH-Dx	4.95	mg/kg	4.95	UJ	RT
AB5-22_06252010	06/25/2010	Ethylbenzene	SW846 8260B	0.0969	mg/kg	0.0969	UJ	RT
AB5-22_06252010	06/25/2010	Toluene	SW846 8260B	0.0969	mg/kg	0.0969	UJ	RT
AB5-22_06252010	06/25/2010	ANTHRACENE	SIM	0.00394	mg/kg	0.00394	UJ	RT
AB5-22_06252010	06/25/2010	PYRENE	SIM	0.00394	mg/kg	0.00394	UJ	RT
AB5-22_06252010	06/25/2010	Total Xylene	SW846 8260B	0.242	mg/kg	0.242	UJ	RT
AB5-22_06252010	06/25/2010	METHYL TERT-BUTYL ETHER	SW846 8260B	0.0969	mg/kg	0.0969	UJ	RT
AB5-22_06252010	06/25/2010	BENZO(G,H,I)PERYLENE	SIM	0.00394	mg/kg	0.00394	UJ	RT
AB5-22_06252010	06/25/2010	INDENO(1,2,3-CD)PYRENE	SIM	0.00394	mg/kg	0.00394	UJ	RT
AB5-22_06252010	06/25/2010	BENZO(B)FLUORANTHENE	SIM	0.00394	mg/kg	0.00394	UJ	RT
AB5-22_06252010	06/25/2010	FLUORANTHENE	SIM	0.00394	mg/kg	0.00394	UJ	RT
AB5-22_06252010	06/25/2010	BENZO(K)FLUORANTHENE	SIM	0.00394	mg/kg	0.00394	UJ	RT
AB5-22_06252010	06/25/2010	ACENAPHTHYLENE	SIM	0.00394	mg/kg	0.00394	UJ	RT
AB5-22_06252010	06/25/2010	CHRYSENE	SIM	0.00394	mg/kg	0.00394	UJ	RT
AB5-22_06252010	06/25/2010	BENZO(A)PYRENE	SIM	0.00394	mg/kg	0.00394	UJ	RT
AB5-22_06252010	06/25/2010	DIBENZO(A,H)ANTHRACENE	SIM	0.00394	mg/kg	0.00394	UJ	RT
AB5-22_06252010	06/25/2010	BENZO(A)ANTHRACENE	SIM	0.00394	mg/kg	0.00394	UJ	RT
AB5-22_06252010	06/25/2010	Benzene	SW846 8260B	0.0969	mg/kg	0.0969	UJ	RT
AB5-22_06252010	06/25/2010	ACENAPHTHENE	SIM	0.00394	mg/kg	0.00394	UJ	RT
AB5-22_06252010	06/25/2010	PHENANTHRENE	SIM	0.00433	mg/kg	0.00394	J	RT
AB5-22_06252010	06/25/2010	FLUORENE	SIM	0.00394	mg/kg	0.00394	UJ	RT
AB5-22_06252010	06/25/2010	1-METHYLNAPHTHALENE	SIM	0.00394	mg/kg	0.00394	UJ	RT
AB5-22_06252010	06/25/2010	NAPHTHALENE	SIM	0.00394	mg/kg	0.00394	UJ	RT
AB5-22_06252010	06/25/2010	2-METHYLNAPHTHALENE	SIM	0.00394	mg/kg	0.00394	UJ	RT
AB5-22_06252010	06/25/2010	Gasoline Range Organics (C4-C12)	NWTPH-Gx	5.41	mg/kg	5.41	UJ	RT
AB5-22_06252010	06/25/2010	MOTOR OILS	NWTPH-Dx	5.45	mg/kg	4.01	U	MB
AB5-22_06252010	06/25/2010	C28	NWTPH-Dx	4.01	mg/kg	4.01	UJ	RT

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TABLE 2
Data Validation Qualifiers
ExxonMobil/ADC Property
Everett, WA

Field Sample ID	Date Sampled	Parameter Name	Analytical Method	Report Result	Report Units	Report Detection Limit	Data Validation Qualifier	Reason Code
AB5-5_06252010	06/25/2010	Ethylbenzene	SW846 8260B	0.00967	mg/kg	0.00229	J	HS, RT
AB5-5_06252010	06/25/2010	1,2-DIBROMOETHANE	SW846 8260B	0.00372	mg/kg	0.00229	J	CH, HS, RT
AB5-5_06252010	06/25/2010	1,2-DICHLOROETHANE	SW846 8260B	0.00282	mg/kg	0.00229	J	HS, RT
AB5-5_06252010	06/25/2010	Toluene	SW846 8260B	0.00711	mg/kg	0.00229	J	HS, RT
AB5-5_06252010	06/25/2010	N-HEXANE	SW846 8260B	0.615	mg/kg	0.615	UJ	RT
AB5-5_06252010	06/25/2010	ANTHRACENE	SIM	0.0141	mg/kg	0.00413	J	LS, RT
AB5-5_06252010	06/25/2010	PYRENE	SIM	0.0633	mg/kg	0.00413	J	LS, RT
AB5-5_06252010	06/25/2010	Total Xylene	SW846 8260B	0.0284	mg/kg	0.00571	J	HS, RT
AB5-5_06252010	06/25/2010	METHYL TERT-BUTYL ETHER	SW846 8260B	0.00229	mg/kg	0.00229	UJ	RT
AB5-5_06252010	06/25/2010	BENZO(G,H,I)PERYLENE	SIM	0.012	mg/kg	0.00413	J	LS, RT
AB5-5_06252010	06/25/2010	INDENO(1,2,3-CD)PYRENE	SIM	0.00538	mg/kg	0.00413	J	LS, RT
AB5-5_06252010	06/25/2010	BENZO(B)FLUORANTHENE	SIM	0.00827	mg/kg	0.00413	J	LS, RT
AB5-5_06252010	06/25/2010	FLUORANTHENE	SIM	0.0186	mg/kg	0.00413	J	LS, RT
AB5-5_06252010	06/25/2010	BENZO(K)FLUORANTHENE	SIM	0.00496	mg/kg	0.00413	J	LS, RT
AB5-5_06252010	06/25/2010	ACENAPHTHYLENE	SIM	0.00662	mg/kg	0.00413	J	LS, RT
AB5-5_06252010	06/25/2010	CHRYSENE	SIM	0.0314	mg/kg	0.00413	J	LS, RT
AB5-5_06252010	06/25/2010	BENZO(A)PYRENE	SIM	0.0157	mg/kg	0.00413	J	LS, RT
AB5-5_06252010	06/25/2010	DIBENZO(A,H)ANTHRACENE	SIM	0.00413	mg/kg	0.00413	UJ	LS, RT
AB5-5_06252010	06/25/2010	BENZO(A)ANTHRACENE	SIM	0.0194	mg/kg	0.00413	J	LS, RT
AB5-5_06252010	06/25/2010	Benzene	SW846 8260B	0.0949	mg/kg	0.00229	J	HS, RT
AB5-5_06252010	06/25/2010	ACENAPHTHENE	SIM	0.0198	mg/kg	0.00413	J	LS, RT
AB5-5_06252010	06/25/2010	PHENANTHRENE	SIM	0.0926	mg/kg	0.00413	J	LS, RT
AB5-5_06252010	06/25/2010	FLUORENE	SIM	0.0294	mg/kg	0.00413	J	LS, RT
AB5-5_06252010	06/25/2010	1-METHYLNAPHTHALENE	SIM	0.191	mg/kg	0.00413	J	LS, RT
AB5-5_06252010	06/25/2010	NAPHTHALENE	SIM	0.0128	mg/kg	0.00413	J	LS, RT
AB5-5_06252010	06/25/2010	2-METHYLNAPHTHALENE	SIM	0.246	mg/kg	0.00413	J	LS, RT
AB5-5_06252010	06/25/2010	Gasoline Range Organics (C4-C12)	NWTPH-Gx	131	mg/kg	6.47	J	RT
AB5-5_06252010	06/25/2010	MOTOR OILS	NWTPH-Dx	11000	mg/kg	411	J	RT
AB5-5_06252010	06/25/2010	HYDROCARBONS, ALIPHATIC	NWTPH EPH	303	mg/kg	303	UJ	RT
AB5-5_06252010	06/25/2010	HYDROCARBONS, AROMATIC	NWTPH EPH	475	mg/kg	121	J	HS, RT
AB5-5_06252010	06/25/2010	HYDROCARBONS, ALIPHATIC	NWTPH EPH	422	mg/kg	303	J	HS, RT
AB5-5_06252010	06/25/2010	HYDROCARBONS, AROMATIC	NWTPH EPH	430	mg/kg	121	J	HS, RT
AB5-5_06252010	06/25/2010	HYDROCARBONS, ALIPHATIC	NWTPH EPH	129	mg/kg	30.3	J	HS, RT, LM
AB5-5_06252010	06/25/2010	HYDROCARBONS, ALIPHATIC	NWTPH VPH	61.2	mg/kg	57.6	J	LS, RT, CC
AB5-5_06252010	06/25/2010	HYDROCARBONS, AROMATIC	NWTPH EPH	38.8	mg/kg	6.0	J	HS, RT, HM
AB5-5_06252010	06/25/2010	HYDROCARBONS, AROMATIC	NWTPH VPH	21.2	mg/kg	11.5	J	LS, RT
AB5-5_06252010	06/25/2010	C28	NWTPH-Dx	8840	mg/kg	2060	J	RT
AB5-5_06252010	06/25/2010	HYDROCARBONS, AROMATIC	NWTPH VPH	43.8	mg/kg	5.76	J	LS, RT
AB5-5_06252010	06/25/2010	HYDROCARBONS, ALIPHATIC	NWTPH EPH	148	mg/kg	6.07	J	RT
AB5-5_06252010	06/25/2010	HYDROCARBONS, AROMATIC	NWTPH EPH	70.1	mg/kg	30.3	J	HS, RT
AB5-5_06252010	06/25/2010	HYDROCARBONS, ALIPHATIC	NWTPH VPH	5.76	mg/kg	5.76	UJ	LS, RT, CC
AB5-5_06252010	06/25/2010	HYDROCARBONS, ALIPHATIC	NWTPH VPH	10.4	mg/kg	5.76	J	CC, LS, RT
AB5-5_06252010	06/25/2010	HYDROCARBONS, ALIPHATIC	NWTPH EPH	31.5	mg/kg	6.07	J	HS, RT
AB5-5_06252010	06/25/2010	HYDROCARBONS, ALIPHATIC	NWTPH VPH	17.3	mg/kg	5.76	J	LS, RT
AB5-5_06252010	06/25/2010	HYDROCARBONS, AROMATIC	NWTPH EPH	6.07	mg/kg	6.07	UJ	HS, RT
AB5-5_06252010	06/25/2010	HYDROCARBONS, AROMATIC	NWTPH VPH	13	mg/kg	5.76	J	LS, RT
AB5A 3-3.5_06222010	06/22/2010	Ethylbenzene	SW846 8260B	0.105	mg/kg	0.104	J	HS
AB5A 3-3.5_06222010	06/22/2010	ANTHRACENE	SIM	0.38	mg/kg	0.004	J	HS
AB5A 3-3.5_06222010	06/22/2010	PYRENE	SIM	1.07	mg/kg	0.02	J	HS
AB5A 3-3.5_06222010	06/22/2010	Total Xylene	SW846 8260B	0.745	mg/kg	0.26	J	HS
AB5A 3-3.5_06222010	06/22/2010	BENZO(G,H,I)PERYLENE	SIM	0.0624	mg/kg	0.004	J	HS
AB5A 3-3.5_06222010	06/22/2010	INDENO(1,2,3-CD)PYRENE	SIM	0.0488	mg/kg	0.004	J	HS
AB5A 3-3.5_06222010	06/22/2010	BENZO(B)FLUORANTHENE	SIM	0.11	mg/kg	0.004	J	HS
AB5A 3-3.5_06222010	06/22/2010	FLUORANTHENE	SIM	0.792	mg/kg	0.02	J	HS
AB5A 3-3.5_06222010	06/22/2010	BENZO(K)FLUORANTHENE	SIM	0.0612	mg/kg	0.004	J	HS
AB5A 3-3.5_06222010	06/22/2010	ACENAPHTHYLENE	SIM	0.258	mg/kg	0.004	J	HI, HS
AB5A 3-3.5_06222010	06/22/2010	CHRYSENE	SIM	0.223	mg/kg	0.004	J	HS
AB5A 3-3.5_06222010	06/22/2010	BENZO(A)PYRENE	SIM	0.114	mg/kg	0.004	J	HS
AB5A 3-3.5_06222010	06/22/2010	DIBENZO(A,H)ANTHRACENE	SIM	0.0236	mg/kg	0.004	J	HS
AB5A 3-3.5_06222010	06/22/2010	BENZO(A)ANTHRACENE	SIM	0.162	mg/kg	0.004	J	HS
AB5A 3-3.5_06222010	06/22/2010	Benzene	SW846 8260B	0.195	mg/kg	0.104	J	HS
AB5A 3-3.5_06222010	06/22/2010	ACENAPHTHENE	SIM	0.94	mg/kg	0.02	J	HS
AB5A 3-3.5_06222010	06/22/2010	PHENANTHRENE	SIM	4.84	mg/kg	0.4	J	HS
AB5A 3-3.5_06222010	06/22/2010	FLUORENE	SIM	1.77	mg/kg	0.02	J	HS
AB5A 3-3.5_06222010	06/22/2010	1-METHYLNAPHTHALENE	SIM	15.9	mg/kg	0.4	J	HS
AB5A 3-3.5_06222010	06/22/2010	NAPHTHALENE	SIM	0.24	mg/kg	0.02	J	HS
AB5A 3-3.5_06222010	06/22/2010	2-METHYLNAPHTHALENE	SIM	25.4	mg/kg	0.4	J	HS
AP1-15_06242010	06/24/2010	MOTOR OILS	NWTPH-Dx	35.5	mg/kg	10.7	J	LS, HT
AP1-15_06242010	06/24/2010	C28	NWTPH-Dx	14.2	mg/kg	10.7	J	HD, LS, HT

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TABLE 2
Data Validation Qualifiers
ExxonMobil/ADC Property
Everett, WA

Field Sample ID	Date Sampled	Parameter Name	Analytical Method	Report Result	Report Units	Report Detection Limit	Data Validation Qualifier	Reason Code
AP1-62410_06242010	06/24/2010	ANTHRACENE	SIM	0.219	ug/L	0.0952	J	LS
AP1-62410_06242010	06/24/2010	PYRENE	SIM	0.438	ug/L	0.0952	J	LS
AP1-62410_06242010	06/24/2010	BENZO(G,H,I)PERYLENE	SIM	0.0952	ug/L	0.0952	UJ	LS
AP1-62410_06242010	06/24/2010	INDENO(1,2,3-CD)PYRENE	SIM	0.0952	ug/L	0.0952	UJ	LS
AP1-62410_06242010	06/24/2010	BENZO(B)FLUORANTHENE	SIM	0.0952	ug/L	0.0952	UJ	LS
AP1-62410_06242010	06/24/2010	FLUORANTHENE	SIM	0.305	ug/L	0.0952	J	LS
AP1-62410_06242010	06/24/2010	BENZO(K)FLUORANTHENE	SIM	0.0952	ug/L	0.0952	UJ	LS
AP1-62410_06242010	06/24/2010	ACENAPHTHYLENE	SIM	0.362	ug/L	0.0952	J	LS
AP1-62410_06242010	06/24/2010	CHRYSENE	SIM	0.114	ug/L	0.0952	J	LS
AP1-62410_06242010	06/24/2010	BENZO(A)PYRENE	SIM	0.0952	ug/L	0.0952	UJ	LS
AP1-62410_06242010	06/24/2010	DIBENZO(A,H)ANTHRACENE	SIM	0.0952	ug/L	0.0952	UJ	LS
AP1-62410_06242010	06/24/2010	BENZO(A)ANTHRACENE	SIM	0.0952	ug/L	0.0952	UJ	LS
AP1-62410_06242010	06/24/2010	ACENAPHTHENE	SIM	0.895	ug/L	0.0952	J	LS
AP1-62410_06242010	06/24/2010	PHENANTHRENE	SIM	0.686	ug/L	0.0952	J	LS
AP1-62410_06242010	06/24/2010	FLUORENE	SIM	1.64	ug/L	0.0952	J	LS
AP1-62410_06242010	06/24/2010	1-METHYLNAPHTHALENE	SIM	6.42	ug/L	0.0952	J	LS
AP1-62410_06242010	06/24/2010	NAPHTHALENE	SIM	0.276	ug/L	0.0952	J	LS
AP1-62410_06242010	06/24/2010	2-METHYLNAPHTHALENE	SIM	0.171	ug/L	0.0952	J	LS
AP1-62410_06242010	06/24/2010	Gasoline Range Organics (C4-C12)	NWTPH-Gx	100	ug/l	100	UJ	BC
MW19-81810_08182010	08/18/2010	MOTOR OILS	NWTPH-Dx	137	ug/L	100	J	FD
MW19-81810_08182010	08/18/2010	C28	NWTPH-Dx	346	ug/L	100	J	FD
Dup-1-81810_08182010	08/18/2010	MOTOR OILS	NWTPH-Dx	323	ug/L	95.2	J	FD
Dup-1-81810_08182010	08/18/2010	C28	NWTPH-Dx	508	ug/L	95.2	J	FD
MWA4-15_06242010	06/24/2010	ANTHRACENE	SIM	0.19	mg/kg	0.0042	J	FD
MWA4-15_06242010	06/24/2010	PYRENE	SIM	0.358	mg/kg	0.0042	J	FD
MWA4-15_06242010	06/24/2010	INDENO(1,2,3-CD)PYRENE	SIM	0.016	mg/kg	0.0042	J	FD
MWA4-15_06242010	06/24/2010	BENZO(B)FLUORANTHENE	SIM	0.0437	mg/kg	0.0042	J	FD
MWA4-15_06242010	06/24/2010	FLUORANTHENE	SIM	0.588	mg/kg	0.042	J	FD
MWA4-15_06242010	06/24/2010	BENZO(K)FLUORANTHENE	SIM	0.029	mg/kg	0.0042	J	FD
MWA4-15_06242010	06/24/2010	BENZO(A)PYRENE	SIM	0.0361	mg/kg	0.0042	J	FD
MWA4-15_06242010	06/24/2010	ACENAPHTHENE	SIM	0.672	mg/kg	0.042	J	FD
MWA4-15_06242010	06/24/2010	PHENANTHRENE	SIM	1.7	mg/kg	0.042	J	FD
MWA4-15_06242010	06/24/2010	FLUORENE	SIM	0.731	mg/kg	0.042	J	FD
MWA4-15_06242010	06/24/2010	MOTOR OILS	NWTPH-Dx	12.2	mg/kg	4.97	J	FD
MWA4-15_06242010	06/24/2010	C28	NWTPH-Dx	12.1	mg/kg	4.97	J	FD
Dup_2_06242010	06/24/2010	ANTHRACENE	SIM	0.373	mg/kg	0.00396	J	FD
Dup_2_06242010	06/24/2010	PYRENE	SIM	0.754	mg/kg	0.0396	J	FD
Dup_2_06242010	06/24/2010	INDENO(1,2,3-CD)PYRENE	SIM	0.0103	mg/kg	0.00396	J	FD
Dup_2_06242010	06/24/2010	BENZO(B)FLUORANTHENE	SIM	0.0242	mg/kg	0.00396	J	FD
Dup_2_06242010	06/24/2010	FLUORANTHENE	SIM	1.25	mg/kg	0.0396	J	FD
Dup_2_06242010	06/24/2010	BENZO(K)FLUORANTHENE	SIM	0.0167	mg/kg	0.00396	J	FD
Dup_2_06242010	06/24/2010	BENZO(A)PYRENE	SIM	0.0218	mg/kg	0.00396	J	FD
Dup_2_06242010	06/24/2010	ACENAPHTHENE	SIM	1.02	mg/kg	0.0396	J	FD
Dup_2_06242010	06/24/2010	PHENANTHRENE	SIM	3.74	mg/kg	0.0396	J	FD
Dup_2_06242010	06/24/2010	FLUORENE	SIM	1.23	mg/kg	0.0396	J	FD
Dup_2_06242010	06/24/2010	MOTOR OILS	NWTPH-Dx	81.1	mg/kg	4.71	J	CH, FD
Dup_2_06242010	06/24/2010	C28	NWTPH-Dx	46.1	mg/kg	4.71	J	FD
MWA6-12_06252010	06/25/2010	Ethylbenzene	SW846 8260B	0.00225	mg/kg	0.00225	UJ	RT
MWA6-12_06252010	06/25/2010	Toluene	SW846 8260B	0.00225	mg/kg	0.00225	UJ	RT
MWA6-12_06252010	06/25/2010	ANTHRACENE	SIM	0.00479	mg/kg	0.00435	J	RT
MWA6-12_06252010	06/25/2010	PYRENE	SIM	0.0292	mg/kg	0.00435	J	RT
MWA6-12_06252010	06/25/2010	Total Xylene	SW846 8260B	0.00563	mg/kg	0.00563	UJ	RT
MWA6-12_06252010	06/25/2010	METHYL TERT-BUTYL ETHER	SW846 8260B	0.00225	mg/kg	0.00225	UJ	RT
MWA6-12_06252010	06/25/2010	BENZO(G,H,I)PERYLENE	SIM	0.00435	mg/kg	0.00435	J	RT
MWA6-12_06252010	06/25/2010	INDENO(1,2,3-CD)PYRENE	SIM	0.00435	mg/kg	0.00435	UJ	RT
MWA6-12_06252010	06/25/2010	BENZO(B)FLUORANTHENE	SIM	0.01	mg/kg	0.00435	J	RT
MWA6-12_06252010	06/25/2010	FLUORANTHENE	SIM	0.0344	mg/kg	0.00435	J	RT
MWA6-12_06252010	06/25/2010	BENZO(K)FLUORANTHENE	SIM	0.0074	mg/kg	0.00435	J	RT
MWA6-12_06252010	06/25/2010	ACENAPHTHYLENE	SIM	0.00435	mg/kg	0.00435	UJ	RT
MWA6-12_06252010	06/25/2010	CHRYSENE	SIM	0.0135	mg/kg	0.00435	J	RT
MWA6-12_06252010	06/25/2010	BENZO(A)PYRENE	SIM	0.00522	mg/kg	0.00435	J	RT
MWA6-12_06252010	06/25/2010	DIBENZO(A,H)ANTHRACENE	SIM	0.00435	mg/kg	0.00435	UJ	RT
MWA6-12_06252010	06/25/2010	BENZO(A)ANTHRACENE	SIM	0.00871	mg/kg	0.00435	J	RT
MWA6-12_06252010	06/25/2010	Benzene	SW846 8260B	0.00225	mg/kg	0.00225	UJ	RT
MWA6-12_06252010	06/25/2010	ACENAPHTHENE	SIM	0.00435	mg/kg	0.00435	UJ	RT
MWA6-12_06252010	06/25/2010	PHENANTHRENE	SIM	0.017	mg/kg	0.00435	J	RT
MWA6-12_06252010	06/25/2010	FLUORENE	SIM	0.00435	mg/kg	0.00435	J	RT
MWA6-12_06252010	06/25/2010	1-METHYLNAPHTHALENE	SIM	0.00435	mg/kg	0.00435	UJ	RT
MWA6-12_06252010	06/25/2010	NAPHTHALENE	SIM	0.00435	mg/kg	0.00435	UJ	RT
MWA6-12_06252010	06/25/2010	2-METHYLNAPHTHALENE	SIM	0.00435	mg/kg	0.00435	UJ	RT
MWA6-12_06252010	06/25/2010	Gasoline Range Organics (C4-C12)	NWTPH-Gx	5.74	mg/kg	5.74	UJ	RT
MWA6-12_06252010	06/25/2010	MOTOR OILS	NWTPH-Dx	119	mg/kg	5.18	J	HT, RT
MWA6-12_06252010	06/25/2010	C28	NWTPH-Dx	23.8	mg/kg	5.18	J	HT, RT

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TABLE 2
Data Validation Qualifiers
ExxonMobil/ADC Property
Everett, WA

Field Sample ID	Date Sampled	Parameter Name	Analytical Method	Report Result	Report Units	Report Detection Limit	Data Validation Qualifier	Reason Code
MWA6-20_06252010	06/25/2010	Ethylbenzene	SW846 8260B	0.00318	mg/kg	0.00318	UJ	RT
MWA6-20_06252010	06/25/2010	Toluene	SW846 8260B	0.00318	mg/kg	0.00318	UJ	RT
MWA6-20_06252010	06/25/2010	ANTHRACENE	SIM	0.022	mg/kg	0.00468	J	RT
MWA6-20_06252010	06/25/2010	PYRENE	SIM	0.199	mg/kg	0.00468	J	RT
MWA6-20_06252010	06/25/2010	Total Xylene	SW846 8260B	0.00795	mg/kg	0.00795	UJ	RT
MWA6-20_06252010	06/25/2010	METHYL TERT-BUTYL ETHER	SW846 8260B	0.00318	mg/kg	0.00318	UJ	RT
MWA6-20_06252010	06/25/2010	BENZO(G,H,I)PERYLENE	SIM	0.0585	mg/kg	0.00468	J	RT
MWA6-20_06252010	06/25/2010	INDENO(1,2,3-CD)PYRENE	SIM	0.0505	mg/kg	0.00468	J	RT
MWA6-20_06252010	06/25/2010	BENZO(B)FLUORANTHENE	SIM	0.0796	mg/kg	0.00468	J	RT
MWA6-20_06252010	06/25/2010	FLUORANTHENE	SIM	0.169	mg/kg	0.00468	J	RT
MWA6-20_06252010	06/25/2010	BENZO(K)FLUORANTHENE	SIM	0.0636	mg/kg	0.00468	J	RT
MWA6-20_06252010	06/25/2010	ACENAPHTHYLENE	SIM	0.0164	mg/kg	0.00468	J	RT
MWA6-20_06252010	06/25/2010	CHRYSENE	SIM	0.087	mg/kg	0.00468	J	RT
MWA6-20_06252010	06/25/2010	BENZO(A)PYRENE	SIM	0.0861	mg/kg	0.00468	J	RT
MWA6-20_06252010	06/25/2010	DIBENZO(A,H)ANTHRACENE	SIM	0.0154	mg/kg	0.00468	J	RT
MWA6-20_06252010	06/25/2010	BENZO(A)ANTHRACENE	SIM	0.0744	mg/kg	0.00468	J	RT
MWA6-20_06252010	06/25/2010	Benzene	SW846 8260B	0.00318	mg/kg	0.00318	UJ	RT
MWA6-20_06252010	06/25/2010	ACENAPHTHENE	SIM	0.0206	mg/kg	0.00468	J	RT
MWA6-20_06252010	06/25/2010	PHENANTHRENE	SIM	0.095	mg/kg	0.00468	J	RT
MWA6-20_06252010	06/25/2010	FLUORENE	SIM	0.0159	mg/kg	0.00468	J	RT
MWA6-20_06252010	06/25/2010	1-METHYLNAPHTHALENE	SIM	0.0117	mg/kg	0.00468	J	RT
MWA6-20_06252010	06/25/2010	NAPHTHALENE	SIM	0.0239	mg/kg	0.00468	J	RT
MWA6-20_06252010	06/25/2010	2-METHYLNAPHTHALENE	SIM	0.0187	mg/kg	0.00468	J	RT
MWA6-20_06252010	06/25/2010	Gasoline Range Organics (C4-C12)	NWTPH-Gx	6.29	mg/kg	6.29	UJ	RT
MWA6-20_06252010	06/25/2010	MOTOR OILS	NWTPH-Dx	482	mg/kg	23.6	J	RT
MWA6-20_06252010	06/25/2010	C28	NWTPH-Dx	273	mg/kg	23.6	J	RT
TB_06232010	06/23/2010	Ethylbenzene	SW846 8260B	0.1	mg/kg	0.1	UJ	RT
TB_06232010	06/23/2010	Toluene	SW846 8260B	0.1	mg/kg	0.1	UJ	RT
TB_06232010	06/23/2010	Total Xylene	SW846 8260B	0.25	mg/kg	0.25	UJ	RT
TB_06232010	06/23/2010	METHYL TERT-BUTYL ETHER	SW846 8260B	0.1	mg/kg	0.1	UJ	RT
TB_06232010	06/23/2010	Benzene	SW846 8260B	0.1	mg/kg	0.1	UJ	RT

Notes:

µg/L = micrograms per liter
mg/kg = milligrams per kilogram

Qualifier Definitions:

J = The result is an estimated value.
U = The analyte should be considered not detected at or above the stated value.
UJ = The analyte was not detected and the associated limit is an estimated value.

Reason Code Definitions:

CC = Continuing calibration check percent difference greater than acceptance limits
CH = High continuing calibration verification recovery
FD = Field duplicate imprecision
HI = High internal standard recovery
HM = High matrix spike recovery
HS = High surrogate recovery
HT = Holding time exceedence
LI = Low internal standard recovery
LS = Low surrogate recovery
MB = Method blank contamination
RT = Samples received at temperatures > 6°C

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TABLE 3
Field Duplicate Detected Results
ExxonMobil/ADC Property
Everett, WA

Analyte	Primary Result	Duplicate Result	MRL	RPD	Qualifier
DUP1/AB2-14	mg/Kg	mg/Kg	mg/Kg		
Phenanthrene	0.00417	0.00494	0.00379	17%	none
Motor Oil	6.54	ND	4.49	NC	none
Dup2/MWA4-15	mg/Kg	mg/Kg	mg/Kg		
Acenaphthene	0.672	1.02	0.042	41%	FD
Acenaphthylene	0.0105	0.0139	0.0042	28%	none
Anthracene	0.19	0.373	0.0042	65%	FD
Benzo(a)anthracene	0.0803	0.0659	0.0042	20%	none
Benzo(a)pyrene	0.0361	0.0218	0.0042	49%	FD
Benzo(b)fluoranthene	0.0437	0.0242	0.0042	57%	FD
Benzo(g,h,i)perylene	0.016	0.0107	0.0042	40%	none
Benzo(k)fluoranthene	0.029	0.0167	0.0042	54%	FD
Chrysene	0.0584	0.0472	0.0042	21%	none
Dibenzo(a,h)anthracene	0.0063	ND	0.0042	NC	none
Fluoranthene	0.588	1.25	0.042	72%	FD
Fluorene	0.731	1.23	0.042	51%	FD
Indeno(1,2,3-cd)pyrene	0.016	0.0103	0.0042	43%	FD
1-Methylnaphthalene	0.148	0.181	0.0042	20%	none
2-Methylnaphthalene	0.192	0.268	0.0042	33%	none
Naphthalene	0.118	0.155	0.0042	27%	none
Phenanthrene	1.7	3.74	0.042	75%	FD
Pyrene	0.358	0.754	0.0042	71%	FD
Diesel	12.1	46.1	4.97	117%	FD
Motor Oil	12.2	81.1	4.97	148%	FD
DUP 1-81810/MW19-81810	ug/L	ug/L	ug/L		
Acenaphthene	0.194	0.152	0.0971	24%	none
Fluorene	0.126	0.0952	0.0971	28%	none
1-Methylnaphthalene	0.194	0.105	0.0971	60%	none
Naphthalene	0.388	0.286	0.0971	30%	none
GRO	371	388	100	4%	none
Diesel	346	508	100	38%	FD
Motor Oil	137	323	100	81%	FD

Notes: FD = Field Duplicate imprecision
mg/Kg = milligrams per kilograms
MRL = Method Reporting Limit
RPD = Relative Percent Difference
ug/L = microgram per liter

AGENCY DRAFT

**DATA QUALITY REVIEW and VALIDATION REPORT
FOR
ExxonMobil/ADC Property**

Organic and Inorganic Analysis Data
Samples Collected between
November 17 and December 2, 2010

Sample Delivery Groups:
NTK2295, NTK2303, NTK2483, NTL0082, NTL0445

Submitted to:

ExxonMobil Environmental Services
East Providence Terminal
1001 Wampanoag Trail
Riverside, Rhode Island 02915

and

American Distributing Company
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January 2011

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ACRONYMS AND ABBREVIATIONS

°C	degrees Celsius
µg/L	microgram per liter
AMEC	AMEC Earth & Environmental, Inc.
CLP	EPA Contract Laboratory Program
COC	chain of custody
Ecology	Washington State's Department of Ecology
EPA	United States Environmental Protection Agency
GRO	gasoline range organics
ICAL	initial calibration
ID	identification
IDL	instrument detection limit
IS	internal standard
LCS	laboratory control sample
LCSD	laboratory control sample duplicate
MDL	method detection limit
mg/kg	milligrams per kilogram
MRL	method reporting limit
MS	matrix spike
MSD	matrix spike duplicate
OSRTI	EPA Office of Superfund Remediation and Technology Innovation
QC	quality control
PAH	polycyclic aromatic hydrocarbons
RF	response factor
RPD	relative percent difference
SDG	sample delivery group
SIM	selective ion monitoring
SM	Standard Methods
TestAmerica	TestAmerica Laboratories, Inc.

AGENCY DRAFT

VOCs

volatile organic compounds

1.0 INTRODUCTION

This data validation report covers 19 aqueous samples (including 8 trip blanks and 1 field duplicate) and 10 soil samples (including 1 field duplicate) collected from the ExxonMobil/ADC Property in Everett, Washington between November 17 and December 2, 2010. The samples were submitted to TestAmerica Laboratories, Inc in Nashville, Tennessee (TestAmerica) between November 19 and December 3, 2010 and assigned sample delivery group (SDG) numbers NTK2295, NTK2303, NTK2483, NTL0082, and NTL0445. A list of these samples by field sample identification (ID) and TestAmerica sample ID is presented in Table 1. Analyses performed on these samples are listed as follows:

- Extractable petroleum hydrocarbons with silica gel treatment by Washington State's Department of Ecology's (Ecology) NWTPH-Dx method;
- Purgeable petroleum hydrocarbons by Ecology's NWTPH-Gx method;
- Methane, ethane, and ethene by RSK Method 175;
- Alkalinity by Standard Method (SM) 2320B;
- Nitrate and sulfate by United States Environmental Protection Agency (EPA) SW-846 Method 300.0;
- Volatile organic compounds (VOCs) by EPA SW-846 Method 8260B;
- Polycyclic aromatic hydrocarbons (PAHs) by EPA SW-846 Method 8270C Select Ion Monitoring (SIM); and
- Dissolved metals by EPA SW-846 Method 6020.

2.0 EXECUTIVE SUMMARY

AMEC's review indicates the data from this event are generally usable and of good quality.

The detected motor oil results from samples MWA2-111710, DUP-1-111710, MWA5-111710, MWA1-111810, MWA3-111810, and W6-111810; the detected diesel (petroleum hydrocarbons C10-C28) results from samples MW11-111810, W6-111810 and AP2-1 ; and the detected GRO results from samples AP2-1, AP3-1, AP4-1, MW7A-1, MW-7A-12, AP6-23, AP6-30, and DUP5-120210 were qualified as nondetected because of apparent contamination.

Please note that a few results, while considered usable, were qualified due to minor quality control (QC) anomalies. Specifically, portions of the VOC, NWTPH-Dx, PAH, and general chemistry parameter data were qualified as estimated because of surrogate recoveries outside of acceptance limits, field duplicate imprecision, samples analyzed outside of holding time, and results reported between the MDL and MRL.

As stated above, these minor QC anomalies did not render the data unusable for use in site characterization or cleanup, but should be considered in the context of a data quality assessment if the data do not fall within expected ranges.

The 90% project data quality objective for valid measurements was met for this project.

3.0 DATA VALIDATION AND DATA QUALITY REVIEW METHODOLOGY

This data validation and data quality review has been performed by AMEC Earth & Environmental (AMEC) with reference to the EPA Office of Superfund Remediation and Technology Innovation (OSRTI) National Functional Guidelines for Superfund Inorganic Data Review (January 2010), and National Functional Guidelines for Superfund Organic Data Review (June 2008). These EPA guidelines were written specifically for the Contract Laboratory Program (CLP), and have been modified for the purposes of this data validation and data quality review where they differ from EPA Method SW-846 quality control (QC) requirements.

The data review, and validation process comprised 25% full validation of the raw analytical data and 75% data quality review based on information provided by the laboratory as summary reporting forms. Data that underwent full validation are indicated on Table 1.

The laboratory's raw analytical data packages were reviewed to assess the following: chain of custody (COC) compliance; holding time compliance; sensitivity; presence or absence of contamination as demonstrated by method and trip blanks; accuracy and bias as demonstrated by recovery of surrogate spikes, internal standards (ISs), laboratory control samples (LCSs), matrix spikes (MSs); analytical precision as relative percent difference (RPD) of analyte concentration between replicate samples (i.e., laboratory and field duplicates) or MSs and matrix spike duplicates (MSDs); calibration and instrument performance; and insofar as possible, the degree of conformance to method requirements and good laboratory practices.

In general, it is important to recognize that no analytical data are guaranteed to be correct, even if all QC audits are passed. Strict QC serves to increase confidence in data, but any reported value may potentially contain error.

4.0 EXPLANATION OF DATA QUALITY INDICATORS

Data quality indicators of the review and validation process are defined below.

Laboratory Control Sample Recoveries

LCSs and laboratory control sample duplicates (LCSDs) are aliquots of analyte-free water or solid matrix that are spiked with the analytes of interest for an analytical method or a representative subset of those analytes. The spiked water or solid matrix is then processed through the same extraction, concentration, cleanup, and analytical procedures as the samples they accompany. LCS recovery and precision are an indication of the ability of a laboratory to successfully perform an analytical method in an interference-free matrix.

Matrix Spike Recoveries

MSs and MSDs are prepared by adding known amounts of the analytes of interest for an analytical method, or a representative subset of those analytes, to an aliquot of sample. The spiked sample is then processed through the same extraction, concentration, cleanup, and analytical procedures as the unspiked samples in an analytical batch.

MS recovery and precision are an indication of the ability of a laboratory to successfully recover an analyte in the matrix of a specific sample or closely related sample matrices. It is important not to apply MS results for any specific sample to other samples without understanding how the sample matrices are related.

Blank Samples

Blank samples are aliquots of water or solid matrix that are used as negative controls to verify that the sample collection, storage, preparation, and analysis system does not produce false positive results. Two types of blanks were employed for this project.

- Laboratory blanks are aliquots of water or solid matrix that are processed by the laboratory using exactly the same procedures as the field samples. Laboratory blanks are used to monitor for contamination introduced by the laboratory during sample preparation and analysis.
- Trip blanks are aliquots of analyte-free water that are placed in sample containers at the analytical laboratory and are then sent into the field with the sample containers that are used to collect field samples. Trip blanks are not opened in the field, but accompany the field samples back to the laboratory

where they are analyzed as samples. Trip blanks are used to monitor for contamination that may result from sample shipping and storage.

Target analytes should not be found in blank samples. When target analytes are detected in blanks, analyte concentrations in associated samples greater than the method reporting limit (MRL) but less than 5 times the concentration detected in the blank, or 10 times the concentration detected in the blank for common laboratory contaminants, will be U qualified by AMEC. Analyte concentrations between the instrument detection limit (IDL) or method detection limit (MDL) and MRL, and less than 5 times (or again, 10 times for common lab contaminants) the concentration detected in the blank will be U qualified at the MRL concentration. Because negative results for a blank may indicate a low instrument bias, if the absolute concentration detected in the blank is greater than the MRL, concentrations in associated samples greater than the MRL but less than 10 times the absolute concentration detected in the blank are J qualified and nondetected results are UJ qualified.

Internal Standard Recoveries

IS are compounds that are added to a sample extract after all preparatory steps are completed and before instrumental analysis. These compounds serve as standards for qualitative analysis using relative retention time and quantitative analysis using relative response factors (RFs). Methods that use IS calibration include requirements for changes in response to the IS relative to the initial calibration (ICAL).

For EPA Method 8260B and 8270C, IS response must fall between 50% and 200% of the response in the ICAL. Because the area of the IS is used in the denominator of the equation for calculation of results using internal standardization, a response below 50% may indicate a possible high bias, and a response above 200% may indicate a possible low bias.

For EPA Method 6020 IS intensities must fall between 30% and 120% of the intensity of that IS in the ICAL standard. The intensity of the ISs for the calibration blank and instrument check standard must fall between 80% and 120% of the intensity of the IS of the ICAL standard.

Surrogate Spike Recoveries

Surrogate spikes are used to evaluate accuracy, method performance, and extraction efficiency in each individual sample. Surrogate compounds are compounds not normally found in environmental samples, but are similar to target analytes in chemical composition and behavior in the analytical process.

5.0 CHAIN OF CUSTODY AND SAMPLE RECEIPT CONDITION DOCUMENTATION

All samples were received at TestAmerica in good condition temperatures less than the EPA-recommended 6 degrees Celsius (°C) maximum.

According to the associated COC nitrate by N, sulfate, alkalinity, methane, and dissolved manganese analyses were requested for samples MWA4-111710, MWA6-111710, MWA1-111810, and W6-111810. However, the laboratory failed to analyze for these requested parameters.

6.0 SPECIFIC DATA VALIDATION FINDINGS FOR EACH ANALYTICAL METHOD

Sections 6.1 to 6.7 contain narrative descriptions of data quality review and data validation findings and data quality limitations. Definitions of data qualifiers added during data quality review and validation and summaries of specific qualifiers added to each affected sample as a result of the data quality review and validation findings are presented in Table 2.

6.1 Total Petroleum Hydrocarbons by Ecology Method NWTPH-Gx

NWTPH-Gx results generated by TestAmerica for the samples covered in this report may be considered usable with the limitations described below.

GRO (gasoline range organics) [C4-C12) NW were detected in method blank 10L0210-BLK1 at a concentration of 0.606 milligrams per kilogram (mg/kg). The GRO (C4-C12) NW results in the associated samples MW7A-1, AP4-1, AP3-1, and AP2-1 were qualified as non-detect and flagged with a U, because the sample concentrations were less than five times the blank concentration. All other associated sample results were at concentrations greater than five times the blank concentration and therefore, did not require qualification.

GRO (C4-C12) NW was detected in method blanks 10L0917-BLK1 (0.0468 mg/kg wet), 10L0917-BLK2 (0.0270 mg/kg wet), 10L0917-BLK3 (0.0353 mg/kg wet), and 10L0917-BLK4 (0.0224 mg/kg wet). The GRO (C4-C12) NW result in associated samples AP6-23, and AP6-30 were qualified as non-detect and flagged with a U, because the concentrations detected in the samples were less than five times the blank concentration.

GRO (C4-C12) NW was detected in method blanks 10L1772-BLK1 (0.0109 mg/kg wet), 10L1772-BLK2 (0.0341 mg/kg wet), and 10L1772-BLK3 (0.0320 mg/kg wet). The GRO (C4-C12) NW results in associated samples MW-7A-12 and DUP5-120210 were qualified as non-detect and flagged with a U, because the concentrations detected in the samples were less than five times the blank concentration.

The GRO (C4-C12) NW recovery of 139% in LCS 10K4953-BS1 was greater than the laboratory-established 130% upper control limit. GRO (C4-C12) NW was not detected in associated samples MWA5-111710, MWA6-111710, MWA4-111710, Trip Blank 1, Trip Blank 2, Trip Blank 3, and W6-111810; therefore, the high bias does not affect data usability.

The RPD of 50% between the GRO (C4-C12) NW results from laboratory duplicate analysis of sample MW7A-1 was greater than the 195% acceptance limit. The detected GRO (C4-C12) NW result in sample MW7A-1 was previously U qualified and further qualification is not warranted.

Some MS/MSDs results reported by the laboratory aren't associated with project samples. These results were not evaluated. In cases where project specific samples were not used for the MS/MSD analysis, precision and accuracy were evaluated based on associated LCS/LCSD results.

The laboratory qualified results that were above the MDL but below the MRL as estimated and flagged these results with a J. AMEC concurs these results are quantitative estimates and J qualified the results on the Analytical Data Tables unless previously U qualified.

6.2 Volatile Organic Compounds by EPA Method 8260B

VOC results generated by TestAmerica for the samples covered in this report may be considered usable with the limitations described in below.

The hexane result for sample MWA2-111710 was analyzed 2 days outside of the method recommended holding time. The nondetected result was qualified as estimated with a UJ.

The hexane result for sample MWA1-111810 was analyzed 1 day outside of the method recommended holding time. The nondetected result was qualified as estimated with a UJ.

The hexane recovery of 131% in LCS 10L0710-BS1, was above the laboratory established control limit of 130%. The associated samples MWA4-111710 and

MWA1-111810 were nondetected; therefore, the high bias does not affect data usability.

Toluene (212%) and 4-bromofluorobenzene (156%) recoveries in sample AP6-1 were greater than the laboratory-specified control limits of 76% to 129% and 67% and 147%, respectively. The high surrogate recoveries equate to a high bias; therefore, detected analytes were qualified as estimated and flagged with a J and non-detected analytes were not qualified.

4-Bromofluorobenzene recoveries were less than the laboratory-specified 79% to 125% control limits in samples W6-111810 (70%), MW40R-111810 (71%), MW19-111810 (75%), and Trip Blank_11182010 (68%). The low surrogate recoveries equate to a low bias; therefore, nondetected analytes were qualified as estimated and flagged with a UJ, and the detected results were qualified as estimated and flagged with a J.

Some MS/MSDs results were reported by the laboratory using samples that aren't associated with project samples. These results were included by the laboratory, but precision and accuracy of project samples is not evaluated based on these results. In cases where project specific samples were not used for the MS/MSD analysis, samples were evaluated based on LCS/LCSD results.

The laboratory qualified results that were above the MDL but below the MRL as estimated and flagged these results with a J. AMEC concurs these results are quantitative estimates and J qualified the results on the Analytical Data Tables unless previously U qualified.

6.3 Total Petroleum Hydrocarbons by Ecology's NWTPH-Dx

NWTPH-Dx results generated by TestAmerica for the samples covered in this report may be considered usable with the limitations described in below.

Diesel (petroleum hydrocarbons C10-C28, 30.3 mg/kg) and motor oil (14.1 mg/kg) were detected in method blank 10K5251-BLK1. The motor oil result in associated samples MWA5-11170, MWA2-111710, and DUP-1-111710 were qualified as non-detect and flagged with a U, because the concentrations detected in the samples were less than five times the blank concentration. All other associated motor oil results and all associated diesel (petroleum hydrocarbons C10-C28) results were either not detected in the associated samples or were detected at concentrations greater than five times the blank concentration and therefore were not qualified based on the method blank result.

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Diesel (petroleum hydrocarbons C10-C28, 37.8 µg/L) and motor oil (18.1 µg/L) were detected in method blank 10L0042-BLK1. The motor oil result in associated samples MWA3-111810, MWA1-111810, were qualified as nondetected and flagged with a U, because the concentration detected in the sample was less than five times the blank concentration. The diesel (petroleum hydrocarbons C10-C28) result in associated sample MW11-111810 was qualified as nondetected and flagged with a U, because the concentration detected in the sample was less than five times the blank concentration. All other results for motor oil and diesel (petroleum hydrocarbons C10-C28) were either not detected in the associated samples or were detected at concentrations greater than five times the blank contamination and therefore, were not qualified based on the method blank contamination.

Diesel (petroleum hydrocarbons C10-C28, 33.4 mg/kg) and motor oil (30.4 mg/kg) were detected in method blank 10K5249-BLK1. The motor oil and diesel (petroleum hydrocarbons C10-C28) results in associated sample W6-111810 were qualified as nondetected and flagged with a U, because the concentration detected in the sample was less than five times the blank concentration. All other results for motor oil and diesel (petroleum hydrocarbons C10-C28) were either not detected in the associated samples or were detected at concentrations greater than five times the blank contamination and therefore were not qualified based on the method blank contamination.

Diesel (petroleum hydrocarbons C10-C28, 32.0 mg/kg) and motor oil (27.9 mg/kg) were detected in method blank 10K5246-BLK1 had detections for. The associated samples for motor oil and diesel (petroleum hydrocarbons C10-C28) were detected at concentrations greater than five times the blank contamination and therefore, were not qualified based on the method blank contamination.

Diesel (petroleum hydrocarbons C10-C28, 1.25 mg/kg) and motor oil (0.825 mg/kg) were detected in method blank 10L0224-BLK1. The diesel (petroleum hydrocarbons C10-C28) result in associated sample AP2-1 was qualified as non-detect and flagged with a U, because the concentration detected in the sample was less than five times the blank concentration. All other results for motor oil and diesel (petroleum hydrocarbons C10-C28) were either not detected in the associated samples or were detected at concentrations greater than five times the blank contamination and therefore were not qualified based on the method blank contamination.

The NWTPH-Dx surrogate o-terphenyl recover of 38% recovery was less than the control limit of 50% to 150% in sample MWA5-111710. The detected diesel (petroleum hydrocarbons C10-C28) and motor oil results from this sample were qualified as estimated and flagged with a J due to possible low bias.

The NWTPH-Dx surrogate o-terphenyl was not recovered in sample AP6-1. Due to the high concentrations of target analytes in the sample the sample was diluted. Consequently, the surrogate was diminished to where it could not be recovered; therefore, data usability could not be fully evaluated. Qualification of data is not warranted.

Some MS/MSDs results were reported by the laboratory using samples that aren't associated with project samples. These results were included by the laboratory, but precision and accuracy of project samples are not evaluated based on these results. In cases where project specific samples were not used for the MS/MSD analysis, samples were evaluated based on LCS/LCSD results.

The laboratory qualified results that were above the MDL but below the RL as estimated and flagged these results with a J. AMEC concurs these results are quantitative estimates and J qualified the results on the Analytical Data Tables unless previously U qualified.

6.4 Polycyclic Aromatic Hydrocarbons by EPA Method 8270C

PAH results generated by TestAmerica for the samples covered in this report may be considered usable with the limitations described below.

The nitrobenzene-d₅ recovery of 200% was greater than the laboratory-specified 17% to 120% control limits in the PAH analysis of sample AP6-1. The high surrogate recovery equates to a high bias; therefore, detected analytes were qualified as estimated and flagged with a J, non-detected analytes were not qualified.

Some MS/MSDs results were reported by the laboratory using samples that aren't associated with project samples. These results were included by the laboratory, but precision and accuracy of project samples are not evaluated based on these results. In cases where project specific samples were not used for the MS/MSD analysis, samples were evaluated based on LCS/LCSD results.

The laboratory qualified results that were above the MDL but below the RL as estimated and flagged these results with a J. AMEC concurs these results are quantitative estimates and J qualified the results on the Analytical Data Tables unless previously U qualified.

6.5 Methane, Ethane, and Ethene by RSK 175

Methane, ethane, and ethene results generated by TestAmerica for the samples covered in this report may be considered usable without qualification.

Acetylene surrogate recoveries from samples MWA5-111710, MWA2-111710, DUP-1-111710, and MWA3-111810 were less than the laboratory-specified control limits. Because of necessary dilutions due to the high target analytes in the samples qualification of data is not warranted.

Some MS/MSDs results were reported by the laboratory using samples that aren't associated with project samples. These results were included by the laboratory, but precision and accuracy of project samples are not evaluated based on these results. In cases where project specific samples were not used for the MS/MSD analysis, samples were evaluated based on LCS/LCSD results.

6.6 General Chemistry Parameters

General chemistry parameter results generated by TestAmerica for the samples covered in this report may be considered usable with the limitations described below.

Samples MWA5-111710 and DUP-1-111710 were analyzed for nitrate as N several hours outside of the method-recommended 48 hour holding time. The non-detected nitrate as N results were qualified as estimated and flagged with a UJ.

Some MS/MSDs results were reported by the laboratory using samples that aren't associated with project samples. These results were included by the laboratory, but precision and accuracy of project samples are not evaluated based on these results. In cases where project specific samples were not used for the MS/MSD analysis, samples were evaluated based on LCS/LCSD results.

The laboratory qualified results that were above the MDL but below the RL as estimated and flagged these results with a J. AMEC concurs these results are quantitative estimates and J qualified the results on the Analytical Data Tables unless previously U qualified.

6.7 Lead and Manganese by EPA 6020

Samples covered in this report underwent metals analysis by EPA Method 6020 at TestAmerica. The results may be considered usable with the limitations described below.

Some MS/MSDs results were reported by the laboratory using samples that aren't associated with project samples. These results were included by the laboratory, but precision and accuracy of project samples are not evaluated based on these results. In cases where project specific samples were not used for the MS/MSD analysis, samples were evaluated based on LCS/LCSD results.

The laboratory qualified results that were above the MDL but below the RL as estimated and flagged these results with a J. AMEC concurs these results are quantitative estimates and J qualified the results on the Analytical Data Tables unless previously U qualified.

7.0 FIELD DUPLICATES

Samples collected as field duplicates are listed in Table 1. Primary and duplicate results and the RPDs for the field duplicates are summarized in Table 3. Precision values not meeting the default acceptance limits of less than 30% RPD for water and less than 40% RPD for soil for concentrations greater than five times their MRL or \pm the MRL for sample concentrations less than five times the MRL are described indicated on Table 3.

AMEC J qualified the detected 1-methylnaphthalene results from samples Dup-1-111710 and MWA2-111710 because of field duplicate imprecision.

AMEC J qualified the detected diesel (petroleum hydrocarbons C10-C28) and motor oil results from samples DUP5-120210 and AP6-23 because of field duplicate imprecision.

8.0 SUMMARY AND CONCLUSIONS

AMEC's review indicates the data from this event are generally usable and of good quality. The types of qualifications applied to the dataset include nondetected (U) and estimated results (UJ, J).

Nondetected Qualified Data. The detected GRO, diesel (petroleum hydrocarbons C10-C28), and motor oil results from several samples were U qualified as nondetected because of apparent contamination in the associated method blanks.

Estimated Data. Portions of the VOC, NWTPH-Dx, PAH, and general chemistry data were qualified as estimated because of field duplicate imprecision, surrogates outside of acceptance limits, samples analyzed outside of holding time, and results reported between the MDL and MRL.

Data Completeness Assessment. AMEC reviewed 695 data records during the data validation and data quality review. AMEC J or UJ qualified 123 (187%) records as estimated concentrations and U qualified 17 (2.4%) records as nondetected because of detection of a target analyte in an associated blank(s). No data were rejected and the 90% project data quality objective for valid measurements was met.

ExxonMobil/ADC Property
Data Quality Review and Validation Report

REFERENCES

EPA, 2010. *EPA Contract Laboratory Program National Functional Guidelines for Inorganic Data Review*, EPA-540-R-10-011.

EPA, 2008. *EPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review*, EPA-540-R-08-01.

ExxonMobil/ADC Property
Data Quality Review and Validation Report

LIMITATIONS

This report was prepared exclusively for ExxonMobil by AMEC. The quality of information, conclusions, and estimates contained herein is consistent with the level of effort involved in AMEC services and based on: i) information available at the time of preparation, ii) data supplied by outside sources, and iii) the assumptions, conditions, and qualifications set forth in this report. This Data Validation/Review Report is intended to be used by ExxonMobil for the ExxonMobil/ADC Property only, subject to the terms and conditions of its contract with AMEC. Any other use of, or reliance on, this report by any third party is at that party's sole risk.

TABLES

AGENCY DRAFT

TABLE 1

Field Samples Submitted to TestAmerica ExxonMobil/ADC Property Everett, WA

Sample Location	Collection Date	Matrix	TestAmerica Sample ID	NTWPH-Gx/BTEXM	VOCs	NWTPH-Dx	PAHs	RSK 175	Alkalinity/ Nitrate/ Sulfate	Metals	Notes
MWA5-111710	11/17/2010	Water	NTK2295-01	x	x	x	x	x	x	x	
MWA6-111710	11/17/2010	Water	NTK2295-02	x	x	x	x	x	x	x	Full validation
MWA4-111710	11/17/2010	Water	NTK2295-03	x	x	x	x	x	x	x	
MWA2-111710	11/17/2010	Water	NTK2295-04	x	x	x	x	x	x	x	Full validation
Dup-1-111710	11/17/2010	Water	NTK2295-05	x	x	x	x	x	x	x	Field Duplicate of MWA2-111710
Trip Blank 1	11/17/2010	Water	NTK2295-06	x	x						
Trip Blank 2	11/17/2010	Water	NTK2295-07	x	x						
Trip Blank 3	11/17/2010	Water	NTK2295-08	x	x						
MWA3-111810	11/18/2010	Water	NTF2469-04	x	x	x	x	x	x	x	
MWA1-111810	11/18/2010	Water	NTF2469-07	x	x	x	x	x	x	x	Full validation
MW11-111810	11/18/2010	Water	NTF2469-08	x	x	x	x	x	x	x	
Trip Blank 1	11/18/2010	Water	NTF2659-01	x	x						
Trip Blank 2	11/18/2010	Water	NTF2659-02	x	x						
W6-111810	11/18/2010	Water	NTF2659-03	x	x	x	x	x	x	x	Full validation
MW40R-111810	11/18/2010	Water	NTF2659-04	x	x	x	x	x	x	x	
MW19-111810	11/18/2010	Water	NTF2659-05	x	x	x	x	x	x	x	MS/MSD
Trip Blank	11/18/2010	Water	NTF2659-07	x	x						
MW7A-1	11/30/2010	Soil	NTF2659-08	x	x	x	x				
AP4-1	11/30/2010	Soil	NTF2659-09	x	x	x	x				
AP3-1	11/30/2010	Soil	NTF2659-10	x	x	x	x				Full validation
AP2-1	11/30/2010	Soil	NTF2659-11	x	x	x	x				
AP5-1	11/30/2010	Soil	NTF2659-13	x	x	x	x				Full validation
AP6-1	11/30/2010	Soil	NTF2651-01	x	x	x	x				
Trip Blank	11/30/2010	Water	NTF2651-02	x	x						
MW-7A-12	12/01/2010	Soil	NTF2651-04	x	x	x	x				
AP6-23	12/02/2010	Soil	NTF2651-05	x	x	x	x				Full validation
DUP5-120210	12/02/2010	Soil	NTH1954-01	x	x	x	x				Field Duplicate of AP6-23
AP6-30	12/02/2010	Soil	NTH1954-02	x	x	x	x				
Trip Blank	12/02/2010	Water	NTH1954-03	x	x						

Notes: MS/MSD= Matrix Spike and Matrix Spike Duplicate sample

AGENCY DRAFT

TABLE 2

Data Validation Qualifiers
ExxonMobil/ADC Property
Everett, WA

Field Sample ID	Date Sampled	Analytical Method	Parameter Name	Report Result	Report Units	Validation Qualifier	Reason Codes
AP2-1_11302010	11/30/2010	NWTPH-Dx	PETROLEUM HYDROCARBONS C10-C28	4.39	mg/kg	U	MB
AP2-1_11302010	11/30/2010	NWTPH-Gx	Gasoline Range Organics (C4-C12)	4.12	mg/kg	U	MB
AP2-1_11302010	11/30/2010	SIM	Anthracene	0.00223	mg/kg	J	DL
AP2-1_11302010	11/30/2010	SIM	Fluorene	0.00186	mg/kg	J	DL
AP3-1_11302010	11/30/2010	NWTPH-Gx	Gasoline Range Organics (C4-C12)	4.81	mg/kg	U	MB
AP3-1_11302010	11/30/2010	SIM	Anthracene	0.0031	mg/kg	J	DL
AP3-1_11302010	11/30/2010	SIM	Acenaphthylene	0.00233	mg/kg	J	DL
AP3-1_11302010	11/30/2010	SIM	Dibenzo(a,h)anthracene	0.00271	mg/kg	J	DL
AP4-1_11302010	11/30/2010	NWTPH-Gx	Gasoline Range Organics (C4-C12)	6.04	mg/kg	U	MB
AP4-1_11302010	11/30/2010	SIM	Anthracene	0.00241	mg/kg	J	DL
AP4-1_11302010	11/30/2010	SIM	Acenaphthylene	0.00201	mg/kg	J	DL
AP4-1_11302010	11/30/2010	SIM	Dibenzo(a,h)anthracene	0.00201	mg/kg	J	DL
AP4-1_11302010	11/30/2010	SIM	1-METHYLNAPHTHALENE	0.00201	mg/kg	J	DL
AP4-1_11302010	11/30/2010	SIM	Naphthalene	0.00281	mg/kg	J	DL
AP5-1_11302010	11/30/2010	SIM	Acenaphthene	0.00261	mg/kg	J	DL
AP5-1_11302010	11/30/2010	SIM	Naphthalene	0.00261	mg/kg	J	DL
AP6-1_11302010	11/30/2010	SW846 8260B	Ethylbenzene	0.00128	mg/kg	J	HS, DL
AP6-1_11302010	11/30/2010	SW846 8260B	Toluene	0.00288	mg/kg	J	HS
AP6-1_11302010	11/30/2010	SW846 8260B	N-HEXANE	0.0567	mg/kg	J	HS
AP6-1_11302010	11/30/2010	SW846 8260B	XYLENES, TOTAL	0.00588	mg/kg	J	HS
AP6-1_11302010	11/30/2010	SW846 8260B	Benzene	0.00156	mg/kg	J	HS, DL
AP6-1_11302010	11/30/2010	SIM	Anthracene	0.544	mg/kg	J	HS
AP6-1_11302010	11/30/2010	SIM	Pyrene	0.231	mg/kg	J	HS
AP6-1_11302010	11/30/2010	SIM	Benzo(g,h,i)perylene	0.0238	mg/kg	J	HS, DL
AP6-1_11302010	11/30/2010	SIM	Indeno(1,2,3-CD)pyrene	0.0278	mg/kg	J	HS, DL
AP6-1_11302010	11/30/2010	SIM	Benzo(b)fluoranthene	0.0477	mg/kg	J	HS
AP6-1_11302010	11/30/2010	SIM	Fluoranthene	0.191	mg/kg	J	HS
AP6-1_11302010	11/30/2010	SIM	Acenaphthylene	0.167	mg/kg	J	HS
AP6-1_11302010	11/30/2010	SIM	Chrysene	0.0358	mg/kg	J	HS, DL
AP6-1_11302010	11/30/2010	SIM	Benzo(a)pyrene	0.0318	mg/kg	J	HS, DL
AP6-1_11302010	11/30/2010	SIM	Dibenzo(a,h)anthracene	0.0238	mg/kg	J	HS, DL
AP6-1_11302010	11/30/2010	SIM	Benzo(a)anthracene	0.0397	mg/kg	J	HS
AP6-1_11302010	11/30/2010	SIM	Acenaphthene	0.409	mg/kg	J	HS
AP6-1_11302010	11/30/2010	SIM	Phenanthrene	2.14	mg/kg	J	HS
AP6-1_11302010	11/30/2010	SIM	Fluorene	0.779	mg/kg	J	HS
AP6-1_11302010	11/30/2010	SIM	1-METHYLNAPHTHALENE	2.44	mg/kg	J	HS
AP6-1_11302010	11/30/2010	SIM	Naphthalene	0.0397	mg/kg	J	HS
AP6-1_11302010	11/30/2010	SIM	2-METHYLNAPHTHALENE	0.219	mg/kg	J	HS

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TABLE 2

Data Validation Qualifiers
ExxonMobil/ADC Property
Everett, WA

Field Sample ID	Date Sampled	Analytical Method	Parameter Name	Report Result	Report Units	Validation Qualifier	Reason Codes
AP6-23_12022010	12/02/2010	NWTPH-Dx	MOTOR OILS	37.1	mg/kg	J	FD
AP6-23_12022010	12/02/2010	NWTPH-Dx	PETROLEUM HYDROCARBONS C10-C28	45.3	mg/kg	J	FD
AP6-23_12022010	12/02/2010	NWTPH-Gx	Gasoline Range Organics (C4-C12)	5.12	mg/kg	U	MB
AP6-23_12022010	12/02/2010	SIM	Anthracene	0.00363	mg/kg	J	DL
AP6-23_12022010	12/02/2010	SIM	Benzo(g,h,i)perylene	0.00242	mg/kg	J	DL
AP6-23_12022010	12/02/2010	SIM	Indeno(1,2,3-CD)pyrene	0.00283	mg/kg	J	DL
AP6-23_12022010	12/02/2010	SIM	Benzo(b)fluoranthene	0.00363	mg/kg	J	DL
AP6-23_12022010	12/02/2010	SIM	Chrysene	0.00283	mg/kg	J	DL
AP6-23_12022010	12/02/2010	SIM	Benzo(a)pyrene	0.00323	mg/kg	J	DL
AP6-23_12022010	12/02/2010	SIM	Dibenzo(a,h)anthracene	0.00242	mg/kg	J	DL
AP6-23_12022010	12/02/2010	SIM	Benzo(a)anthracene	0.00283	mg/kg	J	DL
AP6-23_12022010	12/02/2010	SIM	Acenaphthene	0.00242	mg/kg	J	DL
AP6-30_12022010	12/02/2010	NWTPH-Dx	MOTOR OILS	2.39	mg/kg	J	DL
AP6-30_12022010	12/02/2010	NWTPH-Dx	PETROLEUM HYDROCARBONS C10-C28	3.43	mg/kg	J	DL
AP6-30_12022010	12/02/2010	NWTPH-Gx	Gasoline Range Organics (C4-C12)	4.63	mg/kg	U	MB
111710_11172010	11/17/2010	EPA 300.0	NITRATE	0.01	mg/L	UJ	HT
111710_11172010	11/17/2010	EPA 300.0	SULFATE	0.902	mg/L	J	DL
111710_11172010	11/17/2010	NWTPH-Dx	MOTOR OILS	95.2	ug/L	U	MB
111710_11172010	11/17/2010	SIM	Acenaphthylene	0.0762	ug/L	J	DL
111710_11172010	11/17/2010	SIM	1-METHYLNAPHTHALENE	0.495	ug/L	J	FD
120210_12022010	12/02/2010	NWTPH-Dx	MOTOR OILS	10.5	mg/kg	J	FD
120210_12022010	12/02/2010	NWTPH-Dx	PETROLEUM HYDROCARBONS C10-C28	13.2	mg/kg	J	FD
120210_12022010	12/02/2010	NWTPH-Gx	Gasoline Range Organics (C4-C12)	5.65	mg/kg	U	MB
120210_12022010	12/02/2010	SIM	Anthracene	0.00358	mg/kg	J	DL
120210_12022010	12/02/2010	SIM	Benzo(g,h,i)perylene	0.00279	mg/kg	J	DL
120210_12022010	12/02/2010	SIM	Indeno(1,2,3-CD)pyrene	0.00279	mg/kg	J	DL
120210_12022010	12/02/2010	SIM	Benzo(b)fluoranthene	0.00358	mg/kg	J	DL
120210_12022010	12/02/2010	SIM	Chrysene	0.00279	mg/kg	J	DL
120210_12022010	12/02/2010	SIM	Benzo(a)pyrene	0.00319	mg/kg	J	DL
120210_12022010	12/02/2010	SIM	Dibenzo(a,h)anthracene	0.00239	mg/kg	J	DL
120210_12022010	12/02/2010	SIM	Benzo(a)anthracene	0.00319	mg/kg	J	DL
120210_12022010	12/02/2010	SIM	Acenaphthene	0.00239	mg/kg	J	DL
111810_11182010	11/18/2010	NWTPH-Dx	MOTOR OILS	23.1	ug/L	J	DL
111810_11182010	11/18/2010	NWTPH-Dx	PETROLEUM HYDROCARBONS C10-C28	94.3	ug/L	U	MB
111810_11182010	11/18/2010	SW846 8260B	Ethylbenzene	0.17	ug/L	UJ	LS
111810_11182010	11/18/2010	SW846 8260B	Toluene	0.17	ug/L	UJ	LS
111810_11182010	11/18/2010	SW846 8260B	XYLENES, TOTAL	0.57	ug/L	J	LS
111810_11182010	11/18/2010	SW846 8260B	METHYL TERT-BUTYL ETHER	0.17	ug/L	UJ	LS
111810_11182010	11/18/2010	SW846 8260B	Benzene	0.17	ug/L	UJ	LS
111810_11182010	11/18/2010	SIM	Fluorene	0.08	ug/L	J	DL
111810_11182010	11/18/2010	SW846 8260B	Ethylbenzene	0.36	ug/L	J	LS, DL
111810_11182010	11/18/2010	SW846 8260B	Toluene	0.86	ug/L	J	LS
111810_11182010	11/18/2010	SW846 8260B	XYLENES, TOTAL	2.95	ug/L	J	LS
111810_11182010	11/18/2010	SW846 8260B	METHYL TERT-BUTYL ETHER	0.17	ug/L	UJ	LS
111810_11182010	11/18/2010	SW846 8260B	Benzene	1.18	ug/L	J	LS
111810_11182010	11/18/2010	SIM	Anthracene	0.0571	ug/L	J	DL
111810_11182010	11/18/2010	SIM	Pyrene	0.0667	ug/L	J	DL
111810_11182010	11/18/2010	SIM	Fluoranthene	0.0476	ug/L	J	DL

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TABLE 2 Data Validation Qualifiers ExxonMobil/ADC Property Everett, WA

Field Sample ID	Date Sampled	Analytical Method	Parameter Name	Report Result	Report Units	Validation Qualifier	Reason Codes
MW7A-1_11302010	11/30/2010	NWTPH-Gx	Gasoline Range Organics (C4-C12)	4.41	mg/kg	U	MB
MW7A-1_11302010	11/30/2010	SIM	Anthracene	0.00544	mg/kg	J	DL
MW7A-1_11302010	11/30/2010	SIM	Benzo(k)fluoranthene	0.00466	mg/kg	J	DL
MW7A-1_11302010	11/30/2010	SIM	Acenaphthylene	0.00621	mg/kg	J	DL
MW7A-1_11302010	11/30/2010	SIM	1-METHYLNAPHTHALENE	0.00466	mg/kg	J	DL
MW7A-1_11302010	11/30/2010	SIM	Naphthalene	0.00544	mg/kg	J	DL
MW-7A-12_12012010	12/01/2010	NWTPH-Dx	MOTOR OILS	2.93	mg/kg	J	DL
MW-7A-12_12012010	12/01/2010	NWTPH-Dx	PETROLEUM HYDROCARBONS C10-C28	2.36	mg/kg	J	DL
MW-7A-12_12012010	12/01/2010	NWTPH-Gx	Gasoline Range Organics (C4-C12)	5.85	mg/kg	U	MB
MW-7A-12_12012010	12/01/2010	SIM	Indeno(1,2,3-CD)pyrene	0.00248	mg/kg	J	DL
MW-7A-12_12012010	12/01/2010	SIM	Benzo(b)fluoranthene	0.00248	mg/kg	J	DL
MW-7A-12_12012010	12/01/2010	SIM	Benzo(a)pyrene	0.00248	mg/kg	J	DL
MW-7A-12_12012010	12/01/2010	SIM	Dibenzo(a,h)anthracene	0.00248	mg/kg	J	DL
MW-7A-12_12012010	12/01/2010	SIM	Phenanthrene	0.00207	mg/kg	J	DL
111810_11182010	11/18/2010	NWTPH-Dx	MOTOR OILS	95.2	ug/L	U	MB
111810_11182010	11/18/2010	NWTPH-Gx	Gasoline Range Organics (C4-C12)	48.2	ug/l	J	DL
111810_11182010	11/18/2010	SW846 8260B	N-HEXANE	0.22	ug/L	UJ	HT
111810_11182010	11/18/2010	SIM	Anthracene	0.0874	ug/L	J	DL
111810_11182010	11/18/2010	SIM	Pyrene	0.0583	ug/L	J	DL
111810_11182010	11/18/2010	SIM	Fluoranthene	0.0777	ug/L	J	DL
111810_11182010	11/18/2010	SIM	Acenaphthylene	0.0583	ug/L	J	DL
111810_11182010	11/18/2010	SIM	Naphthalene	0.0874	ug/L	J	DL
111710_11172010	11/17/2010	NWTPH-Dx	MOTOR OILS	97.1	ug/L	U	MB
111710_11172010	11/17/2010	SW846 8260B	N-HEXANE	0.22	ug/L	UJ	HT
111710_11172010	11/17/2010	SIM	Acenaphthylene	0.0476	ug/L	J	DL
111710_11172010	11/17/2010	SIM	1-METHYLNAPHTHALENE	0.286	ug/L	J	FD
111810_11182010	11/18/2010	NWTPH-Dx	MOTOR OILS	96.2	ug/L	U	MB
111810_11182010	11/18/2010	SIM	Anthracene	0.068	ug/L	J	DL
111810_11182010	11/18/2010	SIM	Naphthalene	0.0485	ug/L	J	DL
111710_11172010	11/17/2010	EPA 300.0	NITRATE	0.01	mg/L	UJ	HT
111710_11172010	11/17/2010	EPA 300.0	SULFATE	0.804	mg/L	J	DL
111710_11172010	11/17/2010	NWTPH-Dx	MOTOR OILS	98	ug/L	U	MB
111710_11172010	11/17/2010	NWTPH-Dx	PETROLEUM HYDROCARBONS C10-C28	1250	ug/L	J	LS
111710_11172010	11/17/2010	SW846 6020	Lead	9.00E-05	mg/L	J	DL
111710_11172010	11/17/2010	SIM	Fluoranthene	0.05	ug/L	J	DL
111710_11172010	11/17/2010	NWTPH-Dx	MOTOR OILS	94.3	ug/L	J	DL
111710_11172010	11/17/2010	SW846 6020	Lead	0.00011	mg/L	J	DL
111710_11172010	11/17/2010	SIM	Phenanthrene	0.09	ug/L	J	DL
111710_11172010	11/17/2010	SIM	Fluorene	0.04	ug/L	J	DL
Trip Blank_11182010	11/18/2010	SW846 8260B	Ethylbenzene	0.17	ug/L	UJ	LS
Trip Blank_11182010	11/18/2010	SW846 8260B	Toluene	0.17	ug/L	UJ	LS
Trip Blank_11182010	11/18/2010	SW846 8260B	XYLENES, TOTAL	0.39	ug/L	UJ	LS
Trip Blank_11182010	11/18/2010	SW846 8260B	METHYL TERT-BUTYL ETHER	0.17	ug/L	UJ	LS
Trip Blank_11182010	11/18/2010	SW846 8260B	Benzene	0.17	ug/L	UJ	LS

AGENCY DRAFT

TABLE 2 Data Validation Qualifiers ExxonMobil/ADC Property Everett, WA

Field Sample ID	Date Sampled	Analytical Method	Parameter Name	Report Result	Report Units	Validation Qualifier	Reason Codes
W6-111810_11182010	11/18/2010	NWTPH-Dx	MOTOR OILS	97.1	ug/L	U	MB
W6-111810_11182010	11/18/2010	NWTPH-Dx	PETROLEUM HYDROCARBONS C10-C28	144	ug/L	U	MB
W6-111810_11182010	11/18/2010	SW846 6020	Lead	9.00E-05	mg/L	J	DL
W6-111810_11182010	11/18/2010	SW846 8260B	Ethylbenzene	0.17	ug/L	UJ	LS
W6-111810_11182010	11/18/2010	SW846 8260B	Toluene	0.17	ug/L	UJ	LS
W6-111810_11182010	11/18/2010	SW846 8260B	XYLENES, TOTAL	0.39	ug/L	UJ	LS
W6-111810_11182010	11/18/2010	SW846 8260B	METHYL TERT-BUTYL ETHER	0.17	ug/L	UJ	LS
W6-111810_11182010	11/18/2010	SW846 8260B	Benzene	0.17	ug/L	UJ	LS
W6-111810_11182010	11/18/2010	SIM	Acenaphthene	0.0667	ug/L	J	DL
W6-111810_11182010	11/18/2010	SIM	Phenanthrene	0.0667	ug/L	J	DL

Notes:

ug/L = micrograms per liter
 mg/kg = milligrams per kilogram
 mg/L = milligrams per liter

Qualifier Definitions:

J = The result is an estimated value.
 U = The analyte should be considered not detected at or above the stated value.
 UJ = The analyte was not detected and the associated limit is an estimated value.

Reason Code Definitions:

DL = The analyte concentration is between the method detection limit and the reporting limit.
 FD = Field duplicate imprecision.
 HS = High surrogate recovery. Analytical result may be biased high.
 HT = Holding time exceedance.
 LS = Low surrogate recovery. Analytical result may be biased low.
 MB = Analyte was detected in the associated laboratory blank.

AGENCY DRAFT

TABLE 3

Field Duplicate Detected Results
ExxonMobil/ADC Property
Everett, WA

Analyte	Primary Result	Duplicate Result	MRL	RPD	Qualifier
Dup-1-111710/MWA2-111710	mg/L	mg/L	mg/Kg		
Alkalinity	279	288	10	3%	none
Sulfate	1.31	0.902	1	37%	none
Methane	9940	9660	300	3%	none
Manganese	2160	2270	2	5%	none
Acenaphthene	1.06	1.36	0.0952	25%	none
Acenaphthylene	0.0476	0.0762	0.0952	46%	none
Fluorene	0.314	0.419	0.0952	29%	none
1-Methylnaphthalene	0.286	0.495	0.0952	54%	FD
Naphthalene	0.229	0.314	0.0952	31%	none
Phenanthrene	0.105	0.0952	0.0952	10%	none
GRO (C4-C12) NW	171	196	100	14%	none
Diesel	2010	1880	95.2	7%	none
Motor Oil	48.5	20.4	95.2	82%	none
DUP5-120210/AP6-23	mg/kg	mg/kg	ug/L		
Acenaphthene	0.00242	0.00239	0.00398	1%	none
Anthracene	0.00363	0.00358	0.00398	1%	none
Benzo(a)anthracene	0.00283	0.00319	0.00398	12%	none
Benzo(a)pyrene	0.00323	0.00319	0.00398	1%	none
Benzo(b)fluoranthene	0.00363	0.00358	0.00398	1%	none
Benzo(g,h,i)perylene	0.00242	0.00279	0.00398	14%	none
Chrysene	0.00283	0.00279	0.00398	1%	none
Dibenzo(a,h)anthracene	0.00242	0.00239	0.00398	1%	none
Fluoranthene	0.00565	0.00558	0.00398	1%	none
Fluorene	0.00565	0.00558	0.00398	1%	none
Indeno(1,2,3-cd) pyrene	0.00283	0.00279	0.00398	1%	none
1-Methylnaphthalene	0.00888	0.00558	0.00398	46%	none
Phenanthrene	0.00969	0.00956	0.00398	1%	none
Pyrene	0.00969	0.0104	0.00398	7%	none
GRO (C4-C12) NW	2.59	1.76	5.65	38%	none
Diesel	45.3	13.2	4.81	110%	FD
Motor Oil	37.1	10.5	4.81	112%	FD

Notes: FD = Field Duplicate imprecision
mg/Kg = milligrams per kilograms
MRL = Method Reporting Limit
RPD = Relative Percent Difference
ug/L = microgram per liter

AGENCY DRAFT

**DATA VALIDATION REPORT
FOR
ExxonMobil / ADC Property**

Submitted to:

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Riverside, Rhode Island 02915

and

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ACRONYMS AND ABBREVIATIONS

%D	percent difference or percent drift in relative response
%RSD	percent relative standard deviation
µg/L	micrograms per liter
AMEC	AMEC Earth & Environmental, Inc.
CCAL	continuing calibration
CCV	continuing calibration verification
CLP	Contract Laboratory Program
COC	chain of custody
CRDL	contract-required detection limit
Ecology	Washington Department of Ecology
EPA	United States Environmental Protection Agency
GRO	Gasoline Range Organics
ICAL	initial calibration
ID	identification
IS	internal standard
LCS	laboratory control sample
LCSD	laboratory control sample duplicate
MDL	method detection limit
MS	matrix spike
MSD	matrix spike duplicate
QC	quality control
PAH	polycyclic aromatic hydrocarbon
RL	reporting limit
RRF	relative response factor
RPD	relative percent difference
SIM	select ion monitoring
TestAmerica	TestAmerica Laboratories, Inc.
VOCs	volatile organic compounds

1.0 INTRODUCTION

On behalf of Exxon/Mobil, AMEC Earth & Environmental (AMEC) collected 12 water samples (including 1 trip blank and 1 field duplicate) between February 16 and 18, 2011 from the ExxonMobil/ADC Property in Everett, Washington. AMEC submitted the samples to TestAmerica Laboratories, Inc. (TestAmerica) in Nashville, Tennessee, where they were received on February 19, 2011. At TestAmerica the samples were assigned sample delivery group number NUB3024, and analyzed for gasoline-range organics (GRO) by Washington Department of Ecology (Ecology) Method NWTPH-Gx, diesel and motor oil by Ecology Method NWTPH-Dx, lead by United States Environmental protection Agency (EPA) Method 6020, selected volatile organic compounds (VOCs) by EPA Method 8260B, and polycyclic aromatic hydrocarbons (PAHs) by EPA Method 8270D-Selective Ion Monitoring (SIM). A list of these samples by field sample identification (ID) and TestAmerica sample ID is presented in Table 1.

2.0 DATA VALIDATION METHODOLOGY

This data validation has been performed by AMEC with reference to the EPA Office of Superfund Remediation and Technology Innovation National Functional Guidelines for Superfund Organic Data Review (EPA, 2008) and National Functional Guidelines for Inorganic Data Review (EPA, 2010). These EPA guidelines were written specifically for the Contract Laboratory Program (CLP) and have been modified for the purposes of this data validation where they differ from Ecology and EPA SW-846 Method quality control (QC) requirements.

The laboratory's raw analytical data packages were reviewed to assess the following: chain of custody (COC) compliance; holding time compliance; sensitivity; presence or absence of contamination as demonstrated by method and trip blanks; accuracy and bias as demonstrated by recovery of surrogate spikes, internal standards (ISs), laboratory control samples (LCSs), matrix spikes (MSs); analytical precision as relative percent difference (RPD) of analyte concentration between replicate samples (i.e., laboratory and field duplicates) or MSs and MS duplicates (MSDs); calibration and instrument performance; and insofar as possible, the degree of conformance to method requirements and good laboratory practices.

In general, it is important to recognize that no analytical data are guaranteed to be correct, even if all QC audits are passed. Strict QC serves to increase confidence in data, but any reported value may potentially contain error.

3.0 EXPLANATION OF DATA QUALITY INDICATORS

Data quality indicators of the review and validation process are defined below.

Laboratory Control Sample Recoveries

LCSs and LCS duplicates (LCSDs) are aliquots of analyte-free water or solid matrix that are spiked with the analytes of interest for an analytical method, or a representative subset of those analytes. The spiked water or solid matrix is then processed through the same extraction, concentration, cleanup, and analytical procedures as the samples they accompany. LCS recovery and precision are an indication of the laboratory's ability to successfully perform an analytical method in an interference-free matrix.

Matrix Spike Recoveries

MSs and MSDs are prepared by adding known amounts of the analytes of interest for an analytical method, or a representative subset of those analytes, to an aliquot of sample. The spiked sample is then processed through the same extraction, concentration, cleanup, and analytical procedures as the unspiked samples in an analytical batch.

MS and MSD recovery and precision are an indication of the laboratory's ability to successfully recover an analyte in the matrix of a specific sample or closely related sample matrices. It is important not to apply MS results for any specific sample to other samples without understanding how the sample matrices are related.

Blank Samples

Blank samples are aliquots of water or solid matrix that are used as negative controls to verify that the sample collection, storage, preparation, and analysis system does not produce false positive results. Two types of blanks were employed for this project.

- Laboratory blanks are aliquots of water or solid matrix that are processed by the laboratory using exactly the same procedures as the field samples. Laboratory blanks are used to monitor for contamination introduced by the laboratory during sample preparation and analysis.
- Trip blanks are aliquots of analyte-free water that are placed in sample containers at the analytical laboratory and are then sent into the field with the sample containers that are used to collect field samples. Trip blanks are not opened in the field, but accompany the field samples back to the laboratory

where they are analyzed as samples. Trip blanks are used to monitor for contamination that may result from sample shipping and storage.

Target analytes should not be found in blank samples. When target analytes are detected in blanks, analyte concentrations in associated samples greater than the RL but less than 5 times the concentration detected in the blank, or 10 times the concentration detected in the blank, for common laboratory contaminants, will be U qualified by AMEC. Analyte concentrations between the instrument detection limit or MDL and RL, and less than 5 times (or again, 10 times for common lab contaminants) the concentration detected in the blank will be U qualified at the RL concentration.

Internal Standard Recoveries

IS are compounds that are added to a sample extract after all preparatory steps are completed and before instrumental analysis. These compounds serve as standards for qualitative analysis using relative retention time and quantitative analysis using relative response factors (RRFs). Methods that use IS calibration include requirements for changes in response to the IS relative to the initial calibration (ICAL).

For EPA Method 8260B and 8270D, IS response must fall between 50% and 200% of the response from the ICAL. For EPA Method 6020, IS response must fall between 60% and 125% of the response from the calibration blank. Because the area of the IS is used in the denominator of the equation for calculation of results using internal standardization, a response below the minimum range may indicate a possible high bias, and a response above the maximum range may indicate a possible low bias.

Surrogate Spike Recoveries

Surrogate spikes are used to evaluate accuracy, method performance, and extraction efficiency in each individual sample. Surrogate compounds are compounds not normally found in environmental samples, but are similar to target analytes in chemical composition and behavior in the analytical process.

4.0 CHAIN OF CUSTODY AND SAMPLE RECEIPT CONDITION DOCUMENTATION

All samples were received at TestAmerica with acceptable COC documentation, in good condition, at temperatures less than the EPA-recommended maximum of 6 degrees Celsius, except as described below:

- According to TestAmerica's sample receipt documentation, a single liter of sample MW3A was broken during transit. There was sufficient sample volume

left in the intact containers to complete all requested analyses, and data usability is not adversely affected.

- A single acid-preserved liter was received at TestAmerica with a blank label. There was sufficient volume to perform all requested analyses, and data usability is not adversely affected.

5.0 SPECIFIC DATA VALIDATION FINDINGS FOR EACH ANALYTICAL METHOD

Sections 5.1 to 5.5 contain narrative descriptions of data validation findings and data quality limitations. Qualifiers added to the data during validation are presented in Table 2.

5.1 Gasoline Range Organics by Ecology Method NWTPH-Gx

GRO results generated by TestAmerica for the samples covered in this report may be considered usable with the limitations described in Sections 5.1.1 through 5.1.7.

5.1.1 Holding Times

The pH of sample MWA4 was greater than 2, but the sample was analyzed within the EPA-recommended maximum holding time of 7 days for unpreserved aqueous samples. All other samples were analyzed within the EPA-recommended maximum holding time of 14 days for preserved aqueous samples.

5.1.2 Initial Calibration

ICALs percent relative standard deviations (%RSDs) were less than the default 20% criteria. Individual standards outside $\pm 15\%$ of their true value are described as follows:

GRO recovery was low at 82% in the 50 $\mu\text{g/L}$ ICAL standard. There were no samples with concentrations between this calibration level and the next passing calibration level, and in AMEC's professional opinion, data usability is not adversely affected.

5.1.3 Continuing Calibration

Continuing calibration verification (CCV) percent drifts or percent differences (%Ds) were within the method-specified $\leq 15\%$ criteria.

5.1.4 Laboratory and Trip Blanks

GRO was not detected in the laboratory or trip blanks associated with the analysis of these samples.

5.1.5 Laboratory Control Sample/Laboratory Control Sample Duplicate Recoveries

LCS/LCSD recoveries were within the laboratory-specified control limits.

5.1.6 Matrix Spike/Matrix Spike Duplicate Recovery

MS/MSD analysis was not performed on a project sample.

5.1.7 Surrogate Recoveries

Surrogate recoveries were within the method-specified 50% to 150% control limits.

5.2 Diesel and Motor Oil by Ecology Method NWTPH-Dx

Diesel and motor oil results generated by TestAmerica for the samples covered in this report may be considered usable with the limitations described in Sections 5.2.1 through 5.2.7.

5.2.1 Holding Times

All samples were extracted within the method-recommended maximum holding time of 7 days for aqueous samples, and analyzed within 40 days of extraction.

5.2.2 Initial Calibration

ICALs met the method-specified criteria of $\leq 20\%$ RSD, and none of the standards varied from their true concentrations by more than 15%.

5.2.3 Continuing Calibration

CCV %Ds were within the method-specified $\leq 15\%$ criteria.

5.2.4 Laboratory Blank

Diesel and motor oil were detected in the laboratory blank associated with the analysis of samples MWA1, MWA6, MWA7, and Dup at concentrations of 12.2 micrograms per liter ($\mu\text{g/L}$) and 46.1 $\mu\text{g/L}$, respectively. AMEC U qualified the detected diesel and

motor oil results from samples MWA7 and Dup at the RL concentrations because the concentrations detected in the samples were less than five times the concentrations detected in the blank. (U-MB)

Diesel and motor oil were detected in the laboratory blank associated with the analysis of samples MWA2, MWA3, MWA4, MWA5, MW11, MW19, and MW40R at concentrations of 18.1 µg/L and 24.5 µg/L, respectively. AMEC U qualified the diesel and motor oil results from sample MW11 at the RL concentrations because the concentrations detected in the sample were less than five times the concentrations detected in the blank. (U-MB)

5.2.5 Laboratory Control Sample Recoveries

LCS recoveries associated with the analysis of these samples were within the recommended 70% to 130% limits.

5.2.6 Surrogate Recoveries

Surrogate recoveries were within the method-specified 50% to 150% limits.

5.2.7 Data Reporting

Chromatograms from samples MWA2, MW19, and MW40R resemble mixtures of weathered gasoline and diesel. The reported diesel results may be biased high due to gasoline co-elution, and the reported motor oil results appear to be due to diesel eluting in the motor oil retention time range. AMEC J qualified the diesel results as being estimated values, and N qualified the motor oil results as being presumptively identified. (J/N-BC)

Chromatogram from samples MWA1, MWA3, MWA4, MWA5, and MWA6 resemble highly weathered diesel. AMEC N qualified the motor oil results from these samples because the reported motor oil results are due to diesel eluting in the motor oil retention time range. (N-BC)

5.3 Lead by EPA Method 6020

Lead data from this event may be considered usable with the limitations and exceptions described in Sections 5.3.1 through 5.3.8.

5.3.1 Holding Times

These samples were analyzed for lead within the recommended 6 month technical holding time.

5.3.2 Initial Calibration

All ICALs associated with the analysis of these samples for lead met method specified guidance limits for fully usable data.

5.3.3 Initial Calibration Verification and Continuing Calibration Verification

Initial calibration verification (ICV) and CCV recoveries were within the EPA-recommended 90% to 110% guidance limits for fully usable data.

5.3.4 Contract Required Detection Limit Standard

While not required by EPA SW 846 Method, CLP contract-required detection limit standards (CRDLs) provide a check on a laboratory's ability to achieve results near their stated reporting limit. CLP guidance limits for CRDL standards are 70% to 130% for lead by inductively coupled plasma mass spectrometry.

All criteria were met for the CRDL standards associated with the analysis of these samples.

5.3.5 Inductively Coupled Plasma Interference Check Sample

Non-interferent elements were not detected and interferent element recoveries were within the method-specified 80% to 120% guidance limits for fully usable data.

5.3.6 Blanks

Lead was detected at a concentration of 0.0800 µg/L in the initial calibration blank, and at concentrations of 0.100 µg/L, 0.0600 µg/L, 0.120 µg/L, and 0.0600 µg/L in the continuing calibration blanks associated with the analysis of these samples. AMEC U qualified the lead results from samples MWA3, MWA6, and MW40R at the RL concentration because the concentrations detected in the samples were less than ten times the concentrations detected in the blank. (U-CB)

5.3.7 LCS Recovery

All LCS recoveries associated with the lead analysis were within the EPA-recommended 80% to 120% guidance limits for fully usable data.

5.3.8 Matrix Spikes

MSs were performed on sample MW11. Recoveries were within the EPA-recommended 75% to 125% limits for fully usable data.

5.4 Volatile Organic Compounds by EPA Method 8260B

VOC results generated by TestAmerica for the samples covered in this report may be considered usable with the limitations described in Sections 5.4.1 through 5.4.9.

5.4.1 Holding Times

The pH of sample MWA4 was greater than 2, but the sample was analyzed within the EPA-recommended maximum holding time of 7 days for unpreserved aqueous samples. All other samples were analyzed within the EPA-recommended maximum holding time of 14 days for preserved aqueous samples.

5.4.2 Initial Calibration

ICALs met the method-specified criteria of $\%RSD \leq 15\%$, or correlation coefficients ≥ 0.995 .

ICAL RRFs met the method-specified criteria of greater than 0.50 for all target analytes.

5.4.3 Continuing Calibration

Continuing calibration (CCAL) performance is evaluated in terms of %D, which corresponds to percent difference for average RF models or percent drift in regression fit models, from the average ICAL response.

CCAL %Ds were within the method-specified 20% acceptance limits.

5.4.4 Laboratory and Trip Blanks

Target analytes were not detected in the laboratory or trip blanks.

5.4.5 Laboratory Control Sample Recoveries

LCS recoveries were within laboratory-specified control limits.

5.4.6 Matrix Spike/Matrix Spike Duplicate Accuracy and Precision

MS/MSD analysis was performed on sample MW19. Accuracy and precision values were within laboratory-specified control limits.

5.4.7 Internal Standard Recoveries

IS recoveries were within the method-specified 50% to 200% acceptance limits.

5.4.8 Surrogate Recoveries

Surrogate recoveries were within the laboratory-specified control limits

5.4.9 Data Reporting

TestAmerica J qualified results between the MDL and the RL. AMEC agrees that these results are estimated values and retained the J qualifiers. (J-DL)

5.5 Polycyclic Aromatic Hydrocarbons by EPA Method 8270D SIM

PAH results generated by TestAmerica for the samples covered in this report may be considered usable with the limitations described in Sections 5.5.1 through 5.5.9.

5.5.1 Holding Times

All samples were extracted within the EPA-recommended maximum holding time 7 days for aqueous extraction and analyzed within the EPA-recommended maximum holding time of 40 days from extraction to analysis.

5.5.2 Initial Calibration

ICALs met the method specified criteria of %RSD \leq 20%, or correlation coefficients \geq 0.995.

5.5.3 Continuing Calibration

CCAL performance is evaluated in terms %D, which corresponds to percent difference (average RF models) or %D (regression fit models) from the average ICAL response.

CCAL %Ds were within the method-specified 20% acceptance limits.

5.5.4 Laboratory Blank

PAHs were not detected in the associated laboratory blank.

5.5.5 Laboratory Control Sample Recoveries

LCS recoveries were within of the laboratory-specified control limits.

5.5.6 Matrix Spike/Matrix Spike Duplicate Recovery

The sample on which MS/MSD analyses were performed is listed in Table 1. Recoveries and RPDs were within the laboratory-specified control limits.

5.5.7 Internal Standard Recoveries

IS recoveries were within the method-specified 50% to 200% acceptance limits.

5.5.8 Surrogate Recoveries

Surrogate recoveries were within the laboratory-specified limits.

5.5.9 Data Reporting and Analytical Procedure

The ion abundance ratios for the naphthalene detection in sample MW19 were outside method-specified criteria. This naphthalene result was N qualified during validation as being presumptively identified. (N-SB)

TestAmerica J qualified results between the MDL and the RL. AMEC agrees that these results are estimated values and retained the J qualifiers. (J-DL)

6.0 FIELD DUPLICATES

Sample Dup is the field duplicate of sample MWA7. Target analytes were not detected in either sample.

7.0 SUMMARY AND CONCLUSIONS

AMEC's review indicates the data from this event are fully usable with the addition of the qualifiers specified in this report.

AMEC U qualified the diesel and motor oil results from samples MWA7, Dup, and MW11 because the concentrations detected in the samples were less than five times the concentrations detected in the associated laboratory blanks. (Section 5.2.4)

AMEC J qualified the diesel results from samples MWA2, MW19, and MW40R; and N qualified the motor oil results from samples MWA1, MWA2, MWA3, MWA4, MWA5,

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MWA6, MW19, and MW40R because the samples' chromatograms did not match the standards' chromatograms. (Section 5.2.7)

AMEC U qualified the lead results from samples MWA3, MWA6, and MW40R because the concentrations detected in the samples were less than five times the concentrations detected in the associated calibration blanks. (Section 5.3.6)

AMEC J qualified results when the reported concentrations were between the MDL and the RL. (Sections 5.4.9 and 5.5.9)

AMEC N qualified the naphthalene result from sample MW19 because ion abundance ratios were outside the method-specified limits. (Section 5.5.9)

Data Completeness Assessment. AMEC reviewed 301 data records during the data validation. AMEC J qualified 14 records (4.6%) as estimated concentrations, U qualified 9 records (3.0%) as being not detected, and N qualified 9 records (3.0%) as being presumptively identified. No data were rejected and the 90% project data quality objective for valid measurements was met for this project.

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REFERENCES

EPA, 2010. *EPA Contract Laboratory Program National Functional Guidelines for Inorganic Data Review*, EPA-540-R-10-011.

EPA, 2008. *EPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review*, EPA-540-R-08-01.

LIMITATIONS

This report was prepared exclusively for ExxonMobil by AMEC. The quality of information, conclusions, and estimates contained herein is consistent with the level of effort involved in AMEC services and based on: i) information available at the time of preparation, ii) data supplied by outside sources, and iii) the assumptions, conditions, and qualifications set forth in this report. This Data Validation/Review Report is intended to be used by ExxonMobil for the ExxonMobil/ADC Property only, subject to the terms and conditions of its contract with AMEC. Any other use of, or reliance on, this report by any third party is at that party's sole risk.

TABLES

AGENCY DRAFT**TABLE 1****Field Samples submitted to TestAmerica
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Field Sample ID	Sample Collection Date	TestAmerica Sample ID	Notes
MW11	02/16/2011	NUB3024-01	
MW40R	02/17/2011	NUB3024-02	
MW19	02/17/2011	NUB3024-03	
MWA4	02/17/2011	NUB3024-04	
MWA3	02/17/2011	NUB3024-05	
MWA2	02/17/2011	NUB3024-06	
MWA5	02/18/2011	NUB3024-07	
MWA6	02/18/2011	NUB3024-08	
MWA1	02/18/2011	NUB3024-09	
MWA7	02/18/2011	NUB3024-10	
Dup	02/18/2011	NUB3024-11	Field duplicate of MWA7
Trip Blank	02/17/2011	NUB3024-12	

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TABLE 2

Data Validation Qualifiers Exxon Mobil/ADC Property Data Validation Report

	MWA1	MWA2	MWA3	MWA4	MWA5	MWA6	MWA7
GRO	--	--	--	--	--	--	--
Diesel	--	1720 J (BC)	--	--	--	--	94.3 U (MB)
Motor Oil	529 N (BC)	421 N (BC)	220 N (BC)	515 N (BC)	523 N (BC)	273 N (BC)	94.3 U (MB)
Lead	--	--	2.00 U (CB)	--	--	2.00 U (CB)	--
Benzene	--	--	--	--	0.27 J (DL)	--	--
Toluene	--	--	--	--	--	--	--
Ethylbenzene	--	--	--	--	--	--	--
Total Xylenes	--	--	--	--	--	--	--
Methyl tert-Butyl ether	--	--	--	--	--	--	--
1,2-Dibromoethane	--	--	NA	NA	NA	NA	NA
1,2-Dichloroethane	--	--	NA	NA	NA	NA	NA
Acenaphthene	--	--	--	--	--	--	--
Acenaphthylene	--	--	--	--	--	--	--
Anthracene	--	--	--	--	--	--	--
Benzo(a)anthracene	--	--	--	--	--	--	--
Benzo(a)pyrene	--	--	--	--	--	--	--
Benzo(b)fluoranthene	--	--	--	--	--	--	--
Benzo(ghi)perylene	--	--	--	--	--	--	--
Benzo(k)fluoranthene	--	--	--	--	--	--	--
Chrysene	--	--	--	--	--	--	--
Dibenz(a,h)anthracene	--	--	--	--	--	--	--
Fluoranthene	--	--	0.0485 J (DL)	--	--	0.068 J (DL)	--
Fluorene	--	--	--	--	--	--	--
Indeno(1,2,3-cd)pyrene	--	--	--	--	--	--	--
1-Methylnaphthylene	0.0588 J (DL)	--	--	--	--	--	--
2-Methylnaphthylene	--	--	--	--	--	--	--
Naphthalene	--	--	0.068 J (DL)	--	--	--	--
Phenanthrene	0.0784 J (DL)	--	--	--	--	--	--
Pyrene	--	--	--	--	--	0.0485 J (DL)	--

Notes:

NA = not applicable

-- = The result did not require qualification.

Qualifier Definitions:

J = The associated result is quantitatively uncertain.

U = The analyte should be considered not detected at or above the reported concentration.

N = The analyte is presumptively identified. The associated result is qualitatively and quantitatively uncertain.

Qualification Rationale Abbreviations:

BC = Poor match between sample chromatograms and reference chromatograms.

CB = Concentration detected in the sample was less than 5 times the concentration detected in the associated calibration blank.

DL = Analyte concentration is between the method detection limit and the reporting limit.

MB = Concentration detected in the sample was less than 5 times the concentration detected in the associated laboratory blank.

SB = Ion abundance ratios were outside the method-specified limits for fully usable data.

AGENCY DRAFT**TABLE 2**

**Data Validation Qualifiers
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	Dup	MW11	MW19	MW40R
GRO	--	--	--	--
Diesel	99.0 U (MB)	105 U (MB)	570 J (BC)	2,030 J (BC)
Motor Oil	99.0 U (MB)	105 U (MB)	128 N (BC)	638 N (BC)
Lead	--	--	--	2.00 U (CB)
Benzene	--	--	--	--
Toluene	--	--	--	--
Ethylbenzene	--	--	--	--
Total Xylenes	--	--	--	--
Methyl tert-Butyl ether	--	--	--	--
1,2-Dibromoethane	NA	NA	NA	NA
1,2-Dichloroethane	NA	NA	NA	NA
Acenaphthene	--	--	--	--
Acenaphthylene	--	--	--	--
Anthracene	--	--	--	0.0583 J (DL)
Benzo(a)anthracene	--	--	--	--
Benzo(a)pyrene	--	--	--	--
Benzo(b)fluoranthene	--	--	--	--
Benzo(ghi)perylene	--	--	--	--
Benzo(k)fluoranthene	--	--	--	--
Chrysene	--	--	--	--
Dibenz(a,h)anthracene	--	--	--	--
Fluoranthene	--	--	--	0.0583 J (DL)
Fluorene	--	--	--	--
Indeno(1,2,3-cd)pyrene	--	--	--	--
1-Methylnaphthylene	--	--	--	--
2-Methylnaphthylene	--	--	0.0777 J (DL)	--
Naphthalene	--	--	0.456 N (SB)	--
Phenanthrene	--	--	--	--
Pyrene	--	--	--	0.0777 J (DL)



APPENDIX H

Analytical Laboratory Data Reports

July 08, 2010 10:52:16AM

Client: AMEC Earth & Environmental (13993)
600 University Street, Suite 1020
Seattle, WA 98101
Attn: Leah Vigoren

Work Order: NTF2364
Project Name: Everett Terminal(46108)
Project Nbr: [none]
P/O Nbr: 4512293714
Date Received: 06/24/10

SAMPLE IDENTIFICATION	LAB NUMBER	COLLECTION DATE AND TIME
AB3 4.5-5	NTF2364-01	06/21/10 09:40
AB2 4.5-5	NTF2364-04	06/21/10 11:00
AB3-20	NTF2364-05	06/22/10 12:45
AB1A 3.5-4.5	NTF2364-06	06/22/10 10:50
AB5A 3-3.5	NTF2364-07	06/22/10 09:50
Trip Blank	NTF2364-09	06/21/10 00:01

An executed copy of the chain of custody, the project quality control data, and the sample receipt form are also included as an addendum to this report. If you have any questions relating to this analytical report, please contact your Laboratory Project Manager at 1-800-765-0980. Any opinions, if expressed, are outside the scope of the Laboratory's accreditation.

This material is intended only for the use of the individual(s) or entity to whom it is addressed, and may contain information that is privileged and confidential. If you are not the intended recipient, or the employee or agent responsible for delivering this material to the intended recipient, you are hereby notified that any dissemination, distribution, or copying of this material is strictly prohibited. If you have received this material in error, please notify us immediately at 615-726-0177.

Washington Certification Number: C1712

The Chain(s) of Custody, 2 pages, are included and are an integral part of this report.

These results relate only to the items tested. This report shall not be reproduced except in full and with permission of the laboratory.

All solids results are reported in wet weight unless specifically stated.

Estimated uncertainty is available upon request.

This report has been electronically signed.

Report Approved By:



Leah R. Klingensmith

Senior Project Management

Client AMEC Earth & Environmental (13993)
600 University Street, Suite 1020
Seattle, WA 98101
Attn Leah Vigoren

Work Order: NTF2364
Project Name: Everett Terminal(46108)
Project Number: [none]
Received: 06/24/10 08:00

ANALYTICAL REPORT

Analyte	Result	Flag	Units	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
Sample ID: NTF2364-01 (AB3 4.5-5 - Soil) Sampled: 06/21/10 09:40								
General Chemistry Parameters								
% Dry Solids	89.2		%	0.500	1	06/28/10 09:16	SW-846	10F4480
Volatile Organic Compounds by EPA Method 8260B								
Benzene	ND		mg/kg dry	0.00149	1	07/04/10 19:45	SW846 8260B	10F4375
Ethylbenzene	ND		mg/kg dry	0.00149	1	07/04/10 19:45	SW846 8260B	10F4375
Methyl tert-Butyl Ether	ND		mg/kg dry	0.00149	1	07/04/10 19:45	SW846 8260B	10F4375
Toluene	ND		mg/kg dry	0.00149	1	07/04/10 19:45	SW846 8260B	10F4375
Xylenes, total	ND		mg/kg dry	0.00372	1	07/04/10 19:45	SW846 8260B	10F4375
<i>Surr: 1,2-Dichloroethane-d4 (67-138%)</i>	102 %					07/04/10 19:45	SW846 8260B	10F4375
<i>Surr: Dibromofluoromethane (75-125%)</i>	89 %					07/04/10 19:45	SW846 8260B	10F4375
<i>Surr: Toluene-d8 (76-129%)</i>	100 %					07/04/10 19:45	SW846 8260B	10F4375
<i>Surr: 4-Bromofluorobenzene (67-147%)</i>	97 %					07/04/10 19:45	SW846 8260B	10F4375
Polyaromatic Hydrocarbons by EPA 8270D SIM								
Acenaphthene	ND		mg/kg dry	0.00373	1	07/03/10 22:30	SW846 8270D SIM	10F4798
Acenaphthylene	ND		mg/kg dry	0.00373	1	07/03/10 22:30	SW846 8270D SIM	10F4798
Anthracene	ND		mg/kg dry	0.00373	1	07/03/10 22:30	SW846 8270D SIM	10F4798
Benzo (a) anthracene	ND		mg/kg dry	0.00373	1	07/03/10 22:30	SW846 8270D SIM	10F4798
Benzo (a) pyrene	ND		mg/kg dry	0.00373	1	07/03/10 22:30	SW846 8270D SIM	10F4798
Benzo (b) fluoranthene	ND		mg/kg dry	0.00373	1	07/03/10 22:30	SW846 8270D SIM	10F4798
Benzo (g,h,i) perylene	ND		mg/kg dry	0.00373	1	07/03/10 22:30	SW846 8270D SIM	10F4798
Benzo (k) fluoranthene	ND		mg/kg dry	0.00373	1	07/03/10 22:30	SW846 8270D SIM	10F4798
Chrysene	ND		mg/kg dry	0.00373	1	07/03/10 22:30	SW846 8270D SIM	10F4798
Dibenz (a,h) anthracene	ND		mg/kg dry	0.00373	1	07/03/10 22:30	SW846 8270D SIM	10F4798
Fluoranthene	ND		mg/kg dry	0.00373	1	07/03/10 22:30	SW846 8270D SIM	10F4798
Fluorene	ND		mg/kg dry	0.00373	1	07/03/10 22:30	SW846 8270D SIM	10F4798
Indeno (1,2,3-cd) pyrene	ND		mg/kg dry	0.00373	1	07/03/10 22:30	SW846 8270D SIM	10F4798
1-Methylnaphthalene	ND		mg/kg dry	0.00373	1	07/03/10 22:30	SW846 8270D SIM	10F4798
2-Methylnaphthalene	ND		mg/kg dry	0.00373	1	07/03/10 22:30	SW846 8270D SIM	10F4798
Naphthalene	ND		mg/kg dry	0.00373	1	07/03/10 22:30	SW846 8270D SIM	10F4798
Phenanthrene	ND		mg/kg dry	0.00373	1	07/03/10 22:30	SW846 8270D SIM	10F4798
Pyrene	ND		mg/kg dry	0.00373	1	07/03/10 22:30	SW846 8270D SIM	10F4798
<i>Surr: Nitrobenzene-d5 (17-120%)</i>	61 %					07/03/10 22:30	SW846 8270D SIM	10F4798
<i>Surr: 2-Fluorobiphenyl (14-120%)</i>	72 %					07/03/10 22:30	SW846 8270D SIM	10F4798
<i>Surr: Terphenyl-d14 (18-120%)</i>	77 %					07/03/10 22:30	SW846 8270D SIM	10F4798
Purgeable Petroleum Hydrocarbons								
GRO (C4-C12) NW	ND		mg/kg dry	3.85	50	06/27/10 18:11	NWTPH-Gx	10F4359
<i>Surr: a,a,a-Trifluorotoluene (50-150%)</i>	89 %					06/27/10 18:11	NWTPH-Gx	10F4359
Extractable Petroleum Hydrocarbons with Silica Gel Treatment								
Diesel	ND		mg/kg dry	4.35	1	06/30/10 12:18	NWTPH-Dx	10F4914
Motor Oil	ND		mg/kg dry	4.35	1	06/30/10 12:18	NWTPH-Dx	10F4914
<i>Surr: o-Terphenyl (50-150%)</i>	63 %					06/30/10 12:18	NWTPH-Dx	10F4914

Client AMEC Earth & Environmental (13993)
 600 University Street, Suite 1020
 Seattle, WA 98101
 Attn Leah Vigoren

Work Order: NTF2364
 Project Name: Everett Terminal(46108)
 Project Number: [none]
 Received: 06/24/10 08:00

ANALYTICAL REPORT

Analyte	Result	Flag	Units	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
Sample ID: NTF2364-04 (AB2 4.5-5 - Soil) Sampled: 06/21/10 11:00								
General Chemistry Parameters								
% Dry Solids	37.0		%	0.500	1	06/28/10 09:16	SW-846	10F4480
Volatile Organic Compounds by EPA Method 8260B								
Benzene	ND		mg/kg dry	0.00480	1	07/04/10 20:16	SW846 8260B	10F4375
Ethylbenzene	ND		mg/kg dry	0.00480	1	07/04/10 20:16	SW846 8260B	10F4375
Methyl tert-Butyl Ether	ND		mg/kg dry	0.00480	1	07/04/10 20:16	SW846 8260B	10F4375
Toluene	ND		mg/kg dry	0.00480	1	07/04/10 20:16	SW846 8260B	10F4375
Xylenes, total	0.0249		mg/kg dry	0.0120	1	07/04/10 20:16	SW846 8260B	10F4375
Surr: 1,2-Dichloroethane-d4 (67-138%)	105 %					07/04/10 20:16	SW846 8260B	10F4375
Surr: Dibromofluoromethane (75-125%)	94 %					07/04/10 20:16	SW846 8260B	10F4375
Surr: Toluene-d8 (76-129%)	129 %					07/04/10 20:16	SW846 8260B	10F4375
Surr: 4-Bromofluorobenzene (67-147%)	96 %					07/04/10 20:16	SW846 8260B	10F4375
Polyaromatic Hydrocarbons by EPA 8270D SIM								
Acenaphthene	0.0193		mg/kg dry	0.00878	1	07/03/10 22:52	SW846 8270D SIM	10F4798
Acenaphthylene	ND		mg/kg dry	0.00878	1	07/03/10 22:52	SW846 8270D SIM	10F4798
Anthracene	0.0141		mg/kg dry	0.00878	1	07/03/10 22:52	SW846 8270D SIM	10F4798
Benzo (a) anthracene	0.0193		mg/kg dry	0.00878	1	07/03/10 22:52	SW846 8270D SIM	10F4798
Benzo (a) pyrene	0.0211		mg/kg dry	0.00878	1	07/03/10 22:52	SW846 8270D SIM	10F4798
Benzo (b) fluoranthene	0.0176		mg/kg dry	0.00878	1	07/03/10 22:52	SW846 8270D SIM	10F4798
Benzo (g,h,i) perylene	0.0202		mg/kg dry	0.00878	1	07/03/10 22:52	SW846 8270D SIM	10F4798
Benzo (k) fluoranthene	0.0132		mg/kg dry	0.00878	1	07/03/10 22:52	SW846 8270D SIM	10F4798
Chrysene	0.0273		mg/kg dry	0.00878	1	07/03/10 22:52	SW846 8270D SIM	10F4798
Dibenz (a,h) anthracene	ND		mg/kg dry	0.00878	1	07/03/10 22:52	SW846 8270D SIM	10F4798
Fluoranthene	0.0739		mg/kg dry	0.00878	1	07/03/10 22:52	SW846 8270D SIM	10F4798
Fluorene	0.0308		mg/kg dry	0.00878	1	07/03/10 22:52	SW846 8270D SIM	10F4798
Indeno (1,2,3-cd) pyrene	0.0106		mg/kg dry	0.00878	1	07/03/10 22:52	SW846 8270D SIM	10F4798
1-Methylnaphthalene	0.343		mg/kg dry	0.00878	1	07/03/10 22:52	SW846 8270D SIM	10F4798
2-Methylnaphthalene	0.0598		mg/kg dry	0.00878	1	07/03/10 22:52	SW846 8270D SIM	10F4798
Naphthalene	0.0466		mg/kg dry	0.00878	1	07/03/10 22:52	SW846 8270D SIM	10F4798
Phenanthrene	0.0853		mg/kg dry	0.00878	1	07/03/10 22:52	SW846 8270D SIM	10F4798
Pyrene	0.0721		mg/kg dry	0.00878	1	07/03/10 22:52	SW846 8270D SIM	10F4798
Surr: Nitrobenzene-d5 (17-120%)	123 %	ZX				07/03/10 22:52	W846 8270D SIA	10F4798
Surr: 2-Fluorobiphenyl (14-120%)	55 %					07/03/10 22:52	W846 8270D SIA	10F4798
Surr: Terphenyl-d14 (18-120%)	54 %					07/03/10 22:52	W846 8270D SIA	10F4798
Purgeable Petroleum Hydrocarbons								
GRO (C4-C12) NW	354		mg/kg dry	16.7	50	06/27/10 19:13	NWTPH-Gx	10F4359
Surr: a,a,a-Trifluorotoluene (50-150%)	97 %					06/27/10 19:13	NWTPH-Gx	10F4359
Extractable Petroleum Hydrocarbons with Silica Gel Treatment								
Diesel	752	QP6	mg/kg dry	106	10	06/30/10 14:27	NWTPH-Dx	10F4914
Motor Oil	803	QP6	mg/kg dry	106	10	06/30/10 14:27	NWTPH-Dx	10F4914
Surr: o-Terphenyl (50-150%)	*	Z3				06/30/10 14:27	NWTPH-Dx	10F4914

Client AMEC Earth & Environmental (13993)
600 University Street, Suite 1020
Seattle, WA 98101
Attn Leah Vigoren

Work Order: NTF2364
Project Name: Everett Terminal(46108)
Project Number: [none]
Received: 06/24/10 08:00

ANALYTICAL REPORT

Analyte	Result	Flag	Units	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
Sample ID: NTF2364-05 (AB3-20 - Soil) Sampled: 06/22/10 12:45								
General Chemistry Parameters								
% Dry Solids	69.3		%	0.500	1	06/28/10 09:16	SW-846	10F4480
Volatile Organic Compounds by EPA Method 8260B								
Benzene	ND		mg/kg dry	0.00277	1	07/06/10 17:52	SW846 8260B	10G0115
Ethylbenzene	ND		mg/kg dry	0.00277	1	07/06/10 17:52	SW846 8260B	10G0115
Methyl tert-Butyl Ether	ND		mg/kg dry	0.00277	1	07/06/10 17:52	SW846 8260B	10G0115
Toluene	ND		mg/kg dry	0.00277	1	07/06/10 17:52	SW846 8260B	10G0115
Xylenes, total	ND		mg/kg dry	0.00692	1	07/06/10 17:52	SW846 8260B	10G0115
<i>Surr: 1,2-Dichloroethane-d4 (67-138%)</i>	93 %					07/06/10 17:52	SW846 8260B	10G0115
<i>Surr: Dibromofluoromethane (75-125%)</i>	93 %					07/06/10 17:52	SW846 8260B	10G0115
<i>Surr: Toluene-d8 (76-129%)</i>	112 %					07/06/10 17:52	SW846 8260B	10G0115
<i>Surr: 4-Bromofluorobenzene (67-147%)</i>	142 %					07/06/10 17:52	SW846 8260B	10G0115
Polyaromatic Hydrocarbons by EPA 8270D SIM								
Acenaphthene	ND		mg/kg dry	0.00480	1	07/03/10 23:15	SW846 8270D SIM	10F4798
Acenaphthylene	ND		mg/kg dry	0.00480	1	07/03/10 23:15	SW846 8270D SIM	10F4798
Anthracene	ND		mg/kg dry	0.00480	1	07/03/10 23:15	SW846 8270D SIM	10F4798
Benzo (a) anthracene	ND		mg/kg dry	0.00480	1	07/03/10 23:15	SW846 8270D SIM	10F4798
Benzo (a) pyrene	ND		mg/kg dry	0.00480	1	07/03/10 23:15	SW846 8270D SIM	10F4798
Benzo (b) fluoranthene	ND		mg/kg dry	0.00480	1	07/03/10 23:15	SW846 8270D SIM	10F4798
Benzo (g,h,i) perylene	ND		mg/kg dry	0.00480	1	07/03/10 23:15	SW846 8270D SIM	10F4798
Benzo (k) fluoranthene	ND		mg/kg dry	0.00480	1	07/03/10 23:15	SW846 8270D SIM	10F4798
Chrysene	ND		mg/kg dry	0.00480	1	07/03/10 23:15	SW846 8270D SIM	10F4798
Dibenz (a,h) anthracene	ND		mg/kg dry	0.00480	1	07/03/10 23:15	SW846 8270D SIM	10F4798
Fluoranthene	0.00672		mg/kg dry	0.00480	1	07/03/10 23:15	SW846 8270D SIM	10F4798
Fluorene	ND		mg/kg dry	0.00480	1	07/03/10 23:15	SW846 8270D SIM	10F4798
Indeno (1,2,3-cd) pyrene	ND		mg/kg dry	0.00480	1	07/03/10 23:15	SW846 8270D SIM	10F4798
1-Methylnaphthalene	ND		mg/kg dry	0.00480	1	07/03/10 23:15	SW846 8270D SIM	10F4798
2-Methylnaphthalene	ND		mg/kg dry	0.00480	1	07/03/10 23:15	SW846 8270D SIM	10F4798
Naphthalene	ND		mg/kg dry	0.00480	1	07/03/10 23:15	SW846 8270D SIM	10F4798
Phenanthrene	0.00720		mg/kg dry	0.00480	1	07/03/10 23:15	SW846 8270D SIM	10F4798
Pyrene	0.00816		mg/kg dry	0.00480	1	07/03/10 23:15	SW846 8270D SIM	10F4798
<i>Surr: Nitrobenzene-d5 (17-120%)</i>	52 %					07/03/10 23:15	W846 8270D SIA	10F4798
<i>Surr: 2-Fluorobiphenyl (14-120%)</i>	41 %					07/03/10 23:15	W846 8270D SIA	10F4798
<i>Surr: Terphenyl-d14 (18-120%)</i>	33 %					07/03/10 23:15	W846 8270D SIA	10F4798
Purgeable Petroleum Hydrocarbons								
GRO (C4-C12) NW	ND		mg/kg dry	7.64	50	06/27/10 19:44	NWTPH-Gx	10F4359
<i>Surr: a,a,a-Trifluorotoluene (50-150%)</i>	102 %					06/27/10 19:44	NWTPH-Gx	10F4359
Extractable Petroleum Hydrocarbons with Silica Gel Treatment								
Diesel	ND		mg/kg dry	5.61	1	06/30/10 12:38	NWTPH-Dx	10F4914
Motor Oil	9.40	QP5	mg/kg dry	5.61	1	06/30/10 12:38	NWTPH-Dx	10F4914
<i>Surr: o-Terphenyl (50-150%)</i>	58 %					06/30/10 12:38	NWTPH-Dx	10F4914

Client AMEC Earth & Environmental (13993)
600 University Street, Suite 1020
Seattle, WA 98101
Attn Leah Vigoren

Work Order: NTF2364
Project Name: Everett Terminal(46108)
Project Number: [none]
Received: 06/24/10 08:00

ANALYTICAL REPORT

Analyte	Result	Flag	Units	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
Sample ID: NTF2364-06 (AB1A 3.5-4.5 - Soil) Sampled: 06/22/10 10:50								
General Chemistry Parameters								
% Dry Solids	74.1		%	0.500	1	06/28/10 09:16	SW-846	10F4480
Volatile Organic Compounds by EPA Method 8260B								
Benzene	0.00560		mg/kg dry	0.00221	1	07/06/10 18:23	SW846 8260B	10G0115
Ethylbenzene	0.0187		mg/kg dry	0.00221	1	07/06/10 18:23	SW846 8260B	10G0115
Methyl tert-Butyl Ether	ND		mg/kg dry	0.00221	1	07/06/10 18:23	SW846 8260B	10G0115
Toluene	0.00754		mg/kg dry	0.00221	1	07/06/10 18:23	SW846 8260B	10G0115
Xylenes, total	0.0418		mg/kg dry	0.00551	1	07/06/10 18:23	SW846 8260B	10G0115
<i>Surr: 1,2-Dichloroethane-d4 (67-138%)</i>	107 %					07/06/10 18:23	SW846 8260B	10G0115
<i>Surr: Dibromofluoromethane (75-125%)</i>	96 %					07/06/10 18:23	SW846 8260B	10G0115
<i>Surr: Toluene-d8 (76-129%)</i>	237 %	ZX				07/06/10 18:23	SW846 8260B	10G0115
<i>Surr: 4-Bromofluorobenzene (67-147%)</i>	1020 %	ZX				07/06/10 18:23	SW846 8260B	10G0115
Polyaromatic Hydrocarbons by EPA 8270D SIM								
Acenaphthene	0.182		mg/kg dry	0.00448	1	07/03/10 23:38	SW846 8270D SIM	10F4798
Acenaphthylene	0.113		mg/kg dry	0.00448	1	07/03/10 23:38	SW846 8270D SIM	10F4798
Anthracene	0.112		mg/kg dry	0.00448	1	07/03/10 23:38	SW846 8270D SIM	10F4798
Benzo (a) anthracene	0.115		mg/kg dry	0.00448	1	07/03/10 23:38	SW846 8270D SIM	10F4798
Benzo (a) pyrene	0.155		mg/kg dry	0.00448	1	07/03/10 23:38	SW846 8270D SIM	10F4798
Benzo (b) fluoranthene	0.122		mg/kg dry	0.00448	1	07/03/10 23:38	SW846 8270D SIM	10F4798
Benzo (g,h,i) perylene	0.0950		mg/kg dry	0.00448	1	07/03/10 23:38	SW846 8270D SIM	10F4798
Benzo (k) fluoranthene	0.0937		mg/kg dry	0.00448	1	07/03/10 23:38	SW846 8270D SIM	10F4798
Chrysene	0.163		mg/kg dry	0.00448	1	07/03/10 23:38	SW846 8270D SIM	10F4798
Dibenz (a,h) anthracene	0.0363		mg/kg dry	0.00448	1	07/03/10 23:38	SW846 8270D SIM	10F4798
Fluoranthene	0.278		mg/kg dry	0.00448	1	07/03/10 23:38	SW846 8270D SIM	10F4798
Fluorene	0.404		mg/kg dry	0.00448	1	07/03/10 23:38	SW846 8270D SIM	10F4798
Indeno (1,2,3-cd) pyrene	0.0847		mg/kg dry	0.00448	1	07/03/10 23:38	SW846 8270D SIM	10F4798
1-Methylnaphthalene	2.52		mg/kg dry	0.0448	10	07/04/10 18:56	SW846 8270D SIM	10F4798
2-Methylnaphthalene	1.22		mg/kg dry	0.0448	10	07/04/10 18:56	SW846 8270D SIM	10F4798
Naphthalene	0.0560		mg/kg dry	0.00448	1	07/03/10 23:38	SW846 8270D SIM	10F4798
Phenanthrene	1.22		mg/kg dry	0.0448	10	07/04/10 18:56	SW846 8270D SIM	10F4798
Pyrene	0.391		mg/kg dry	0.00448	1	07/03/10 23:38	SW846 8270D SIM	10F4798
<i>Surr: Nitrobenzene-d5 (17-120%)</i>	97 %					07/03/10 23:38	SW846 8270D SIM	10F4798
<i>Surr: 2-Fluorobiphenyl (14-120%)</i>	57 %					07/03/10 23:38	SW846 8270D SIM	10F4798
<i>Surr: Terphenyl-d14 (18-120%)</i>	65 %					07/03/10 23:38	SW846 8270D SIM	10F4798
Purgeable Petroleum Hydrocarbons								
GRO (C4-C12) NW	73.9		mg/kg dry	5.48	50	06/27/10 20:15	NWTPH-Gx	10F4359
<i>Surr: a,a,a-Trifluorotoluene (50-150%)</i>	87 %					06/27/10 20:15	NWTPH-Gx	10F4359
Extractable Petroleum Hydrocarbons with Silica Gel Treatment								
Diesel	2100	QP7	mg/kg dry	53.0	10	06/30/10 14:44	NWTPH-Dx	10F4914
Motor Oil	470	QP7	mg/kg dry	53.0	10	06/30/10 14:44	NWTPH-Dx	10F4914
<i>Surr: o-Terphenyl (50-150%)</i>	*	Z3				06/30/10 14:44	NWTPH-Dx	10F4914

Client AMEC Earth & Environmental (13993)
600 University Street, Suite 1020
Seattle, WA 98101
Attn Leah Vigoren

Work Order: NTF2364
Project Name: Everett Terminal(46108)
Project Number: [none]
Received: 06/24/10 08:00

ANALYTICAL REPORT

Analyte	Result	Flag	Units	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
Sample ID: NTF2364-07 (AB5A 3-3.5 - Soil) Sampled: 06/22/10 09:50								
General Chemistry Parameters								
% Dry Solids	82.9		%	0.500	1	06/28/10 09:16	SW-846	10F4480
Volatile Organic Compounds by EPA Method 8260B								
Benzene	0.195		mg/kg dry	0.104	50	07/06/10 16:50	SW846 8260B	10G0115
Ethylbenzene	0.105		mg/kg dry	0.104	50	07/06/10 16:50	SW846 8260B	10G0115
Methyl tert-Butyl Ether	ND		mg/kg dry	0.104	50	07/06/10 16:50	SW846 8260B	10G0115
Toluene	ND		mg/kg dry	0.104	50	07/06/10 16:50	SW846 8260B	10G0115
Xylenes, total	0.745		mg/kg dry	0.260	50	07/06/10 16:50	SW846 8260B	10G0115
Surr: 1,2-Dichloroethane-d4 (67-138%)	84 %					07/06/10 16:50	SW846 8260B	10G0115
Surr: Dibromofluoromethane (75-125%)	83 %					07/06/10 16:50	SW846 8260B	10G0115
Surr: Toluene-d8 (76-129%)	165 %	ZX				07/06/10 16:50	SW846 8260B	10G0115
Surr: 4-Bromofluorobenzene (67-147%)	130 %					07/06/10 16:50	SW846 8260B	10G0115
Polyaromatic Hydrocarbons by EPA 8270D SIM								
Acenaphthene	0.940		mg/kg dry	0.0200	5	07/04/10 19:19	SW846 8270D SIM	10F4798
Acenaphthylene	0.258		mg/kg dry	0.00400	1	07/04/10 00:00	SW846 8270D SIM	10F4798
Anthracene	0.380		mg/kg dry	0.00400	1	07/04/10 00:00	SW846 8270D SIM	10F4798
Benzo (a) anthracene	0.162		mg/kg dry	0.00400	1	07/04/10 00:00	SW846 8270D SIM	10F4798
Benzo (a) pyrene	0.114		mg/kg dry	0.00400	1	07/04/10 00:00	SW846 8270D SIM	10F4798
Benzo (b) fluoranthene	0.110		mg/kg dry	0.00400	1	07/04/10 00:00	SW846 8270D SIM	10F4798
Benzo (g,h,i) perylene	0.0624		mg/kg dry	0.00400	1	07/04/10 00:00	SW846 8270D SIM	10F4798
Benzo (k) fluoranthene	0.0612		mg/kg dry	0.00400	1	07/04/10 00:00	SW846 8270D SIM	10F4798
Chrysene	0.223		mg/kg dry	0.00400	1	07/04/10 00:00	SW846 8270D SIM	10F4798
Dibenz (a,h) anthracene	0.0236		mg/kg dry	0.00400	1	07/04/10 00:00	SW846 8270D SIM	10F4798
Fluoranthene	0.792		mg/kg dry	0.0200	5	07/04/10 19:19	SW846 8270D SIM	10F4798
Fluorene	1.77		mg/kg dry	0.0200	5	07/04/10 19:19	SW846 8270D SIM	10F4798
Indeno (1,2,3-cd) pyrene	0.0488		mg/kg dry	0.00400	1	07/04/10 00:00	SW846 8270D SIM	10F4798
1-Methylnaphthalene	15.9		mg/kg dry	0.400	100	07/04/10 21:58	SW846 8270D SIM	10F4798
2-Methylnaphthalene	25.4		mg/kg dry	0.400	100	07/04/10 21:58	SW846 8270D SIM	10F4798
Naphthalene	0.240		mg/kg dry	0.0200	5	07/04/10 19:19	SW846 8270D SIM	10F4798
Phenanthrene	4.84		mg/kg dry	0.400	100	07/04/10 21:58	SW846 8270D SIM	10F4798
Pyrene	1.07		mg/kg dry	0.0200	5	07/04/10 19:19	SW846 8270D SIM	10F4798
Surr: Nitrobenzene-d5 (17-120%)	735 %	ZX				07/04/10 00:00	W846 8270D SIA	10F4798
Surr: 2-Fluorobiphenyl (14-120%)	71 %					07/04/10 00:00	W846 8270D SIA	10F4798
Surr: Terphenyl-d14 (18-120%)	85 %					07/04/10 00:00	W846 8270D SIA	10F4798
Purgeable Petroleum Hydrocarbons								
GRO (C4-C12) NW	804		mg/kg dry	5.77	50	06/27/10 20:46	NWTPH-Gx	10F4359
Surr: a,a,a-Trifluorotoluene (50-150%)	104 %					06/27/10 20:46	NWTPH-Gx	10F4359
Extractable Petroleum Hydrocarbons with Silica Gel Treatment								
Diesel	7580	QP7	mg/kg dry	464	100	07/01/10 11:14	NWTPH-Dx	10F4914
Motor Oil	ND	RL1	mg/kg dry	464	100	07/01/10 11:14	NWTPH-Dx	10F4914
Surr: o-Terphenyl (50-150%)	*	Z3				07/01/10 11:14	NWTPH-Dx	10F4914

Sample ID: NTF2364-09 (Trip Blank - Soil) Sampled: 06/21/10 00:01

Client AMEC Earth & Environmental (13993)
 600 University Street, Suite 1020
 Seattle, WA 98101
 Attn Leah Vigoren

Work Order: NTF2364
 Project Name: Everett Terminal(46108)
 Project Number: [none]
 Received: 06/24/10 08:00

ANALYTICAL REPORT

Analyte	Result	Flag	Units	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
Sample ID: NTF2364-09 (Trip Blank - Soil) - cont. Sampled: 06/21/10 00:01								
Volatile Organic Compounds by EPA Method 8260B								
Benzene	0.0404	I, S10	mg/kg wet	0.0175	1	07/04/10 19:14	SW846 8260B	10F4375
Ethylbenzene	ND	I, S10	mg/kg wet	0.0175	1	07/04/10 19:14	SW846 8260B	10F4375
Methyl tert-Butyl Ether	ND	I, S10	mg/kg wet	0.0175	1	07/04/10 19:14	SW846 8260B	10F4375
Toluene	ND	I, S10	mg/kg wet	0.0175	1	07/04/10 19:14	SW846 8260B	10F4375
Xylenes, total	ND	I, S10	mg/kg wet	0.0439	1	07/04/10 19:14	SW846 8260B	10F4375
Surr: 1,2-Dichloroethane-d4 (67-138%)	77 %	I, S10				07/04/10 19:14	SW846 8260B	10F4375
Surr: Dibromofluoromethane (75-125%)	*	I, S10				07/04/10 19:14	SW846 8260B	10F4375
Surr: Toluene-d8 (76-129%)	*	I, S10				07/04/10 19:14	SW846 8260B	10F4375
Surr: 4-Bromofluorobenzene (67-147%)	41 %	I, S10				07/04/10 19:14	SW846 8260B	10F4375

Client AMEC Earth & Environmental (13993)
 600 University Street, Suite 1020
 Seattle, WA 98101
 Attn Leah Vigoren

Work Order: NTF2364
 Project Name: Everett Terminal(46108)
 Project Number: [none]
 Received: 06/24/10 08:00

SAMPLE EXTRACTION DATA

Parameter	Batch	Lab Number	Wt/Vol Extracted	Extracted Vol	Date	Analyst	Extraction Method
Extractable Petroleum Hydrocarbons with Silica Gel Treatment							
NWTPH-Dx	10F4914	NTF2364-01	25.78	1.00	06/29/10 10:45	SAS	EPA 3550B
NWTPH-Dx	10F4914	NTF2364-04	25.60	1.00	06/29/10 10:45	SAS	EPA 3550B
NWTPH-Dx	10F4914	NTF2364-05	25.72	1.00	06/29/10 10:45	SAS	EPA 3550B
NWTPH-Dx	10F4914	NTF2364-06	25.48	1.00	06/29/10 10:45	SAS	EPA 3550B
NWTPH-Dx	10F4914	NTF2364-07	25.99	1.00	06/29/10 10:45	SAS	EPA 3550B
NWTPH-Dx	10F4914	NTF2364-07RE1	25.99	1.00	06/29/10 10:45	SAS	EPA 3550B
Polyaromatic Hydrocarbons by EPA 8270D SIM							
SW846 8270D SIM	10F4798	NTF2364-01	30.00	1.00	07/02/10 13:25	DMG	EPA 3550B
SW846 8270D SIM	10F4798	NTF2364-04	30.74	1.00	07/02/10 13:25	DMG	EPA 3550B
SW846 8270D SIM	10F4798	NTF2364-05	30.05	1.00	07/02/10 13:25	DMG	EPA 3550B
SW846 8270D SIM	10F4798	NTF2364-06	30.10	1.00	07/02/10 13:25	DMG	EPA 3550B
SW846 8270D SIM	10F4798	NTF2364-06RE1	30.10	1.00	07/02/10 13:25	DMG	EPA 3550B
SW846 8270D SIM	10F4798	NTF2364-07	30.16	1.00	07/02/10 13:25	DMG	EPA 3550B
SW846 8270D SIM	10F4798	NTF2364-07RE1	30.16	1.00	07/02/10 13:25	DMG	EPA 3550B
SW846 8270D SIM	10F4798	NTF2364-07RE2	30.16	1.00	07/02/10 13:25	DMG	EPA 3550B
Purgeable Petroleum Hydrocarbons							
NWTPH-Gx	10F4359	NTF2364-01	7.28	5.00	06/21/10 09:40	CHH	EPA 5035A (GC)
NWTPH-Gx	10F4359	NTF2364-04	4.04	5.00	06/21/10 11:00	CHH	EPA 5035A (GC)
NWTPH-Gx	10F4359	NTF2364-05	4.72	5.00	06/22/10 12:45	CHH	EPA 5035A (GC)
NWTPH-Gx	10F4359	NTF2364-06	6.16	5.00	06/22/10 10:50	CHH	EPA 5035A (GC)
NWTPH-Gx	10F4359	NTF2364-07	5.23	5.00	06/22/10 09:50	CHH	EPA 5035A (GC)
Volatile Organic Compounds by EPA Method 8260B							
SW846 8260B	10F4375	NTF2364-01	7.54	5.00	06/21/10 09:40	CHH	EPA 5035
SW846 8260B	10F4375	NTF2364-04	5.63	5.00	06/21/10 11:00	CHH	EPA 5035
SW846 8260B	10G0115	NTF2364-05	5.21	5.00	06/22/10 12:45	KKK	EPA 5035
SW846 8260B	10G0115	NTF2364-06	6.12	5.00	06/22/10 10:50	KKK	EPA 5035
SW846 8260B	10G0115	NTF2364-06RE1	6.91	5.00	06/22/10 10:50	KKK	EPA 5035
SW846 8260B	10F4375	NTF2364-07	6.29	5.00	06/22/10 09:50	CHH	EPA 5035
SW846 8260B	10G0115	NTF2364-07RE1	5.79	5.00	06/22/10 09:50	KKK	EPA 5035
SW846 8260B	10G0115	NTF2364-07RE2	5.79	5.00	06/22/10 09:50	KKK	EPA 5035
SW846 8260B	10F4375	NTF2364-09	0.57	5.00	06/21/10 00:01	CHH	EPA 5035

Client AMEC Earth & Environmental (13993)
 600 University Street, Suite 1020
 Seattle, WA 98101
 Attn Leah Vigoren

Work Order: NTF2364
 Project Name: Everett Terminal(46108)
 Project Number: [none]
 Received: 06/24/10 08:00

PROJECT QUALITY CONTROL DATA

Blank

Analyte	Blank Value	Q	Units	Q.C. Batch	Lab Number	Analyzed Date/Time
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Volatile Organic Compounds by EPA Method 8260B

10F4375-BLK1

Benzene	<0.00110		mg/kg wet	10F4375	10F4375-BLK1	07/04/10 16:37
Ethylbenzene	<0.000980		mg/kg wet	10F4375	10F4375-BLK1	07/04/10 16:37
Methyl tert-Butyl Ether	<0.000670		mg/kg wet	10F4375	10F4375-BLK1	07/04/10 16:37
Toluene	<0.000890		mg/kg wet	10F4375	10F4375-BLK1	07/04/10 16:37
Xylenes, total	<0.00190		mg/kg wet	10F4375	10F4375-BLK1	07/04/10 16:37
Surrogate: 1,2-Dichloroethane-d4	96%			10F4375	10F4375-BLK1	07/04/10 16:37
Surrogate: Dibromofluoromethane	96%			10F4375	10F4375-BLK1	07/04/10 16:37
Surrogate: Toluene-d8	102%			10F4375	10F4375-BLK1	07/04/10 16:37
Surrogate: 4-Bromofluorobenzene	99%			10F4375	10F4375-BLK1	07/04/10 16:37

10F4375-BLK2

Benzene	<0.0550		mg/kg wet	10F4375	10F4375-BLK2	07/04/10 17:08
Ethylbenzene	<0.0490		mg/kg wet	10F4375	10F4375-BLK2	07/04/10 17:08
Methyl tert-Butyl Ether	<0.0335		mg/kg wet	10F4375	10F4375-BLK2	07/04/10 17:08
Toluene	<0.0445		mg/kg wet	10F4375	10F4375-BLK2	07/04/10 17:08
Xylenes, total	<0.0950		mg/kg wet	10F4375	10F4375-BLK2	07/04/10 17:08
Surrogate: 1,2-Dichloroethane-d4	89%			10F4375	10F4375-BLK2	07/04/10 17:08
Surrogate: Dibromofluoromethane	92%			10F4375	10F4375-BLK2	07/04/10 17:08
Surrogate: Toluene-d8	103%			10F4375	10F4375-BLK2	07/04/10 17:08
Surrogate: 4-Bromofluorobenzene	97%			10F4375	10F4375-BLK2	07/04/10 17:08

10G0115-BLK1

Benzene	<0.00110		mg/kg wet	10G0115	10G0115-BLK1	07/06/10 13:18
Ethylbenzene	<0.000980		mg/kg wet	10G0115	10G0115-BLK1	07/06/10 13:18
Methyl tert-Butyl Ether	<0.000670		mg/kg wet	10G0115	10G0115-BLK1	07/06/10 13:18
Toluene	<0.000890		mg/kg wet	10G0115	10G0115-BLK1	07/06/10 13:18
Xylenes, total	<0.00190		mg/kg wet	10G0115	10G0115-BLK1	07/06/10 13:18
Surrogate: 1,2-Dichloroethane-d4	97%			10G0115	10G0115-BLK1	07/06/10 13:18
Surrogate: Dibromofluoromethane	94%			10G0115	10G0115-BLK1	07/06/10 13:18
Surrogate: Toluene-d8	100%			10G0115	10G0115-BLK1	07/06/10 13:18
Surrogate: 4-Bromofluorobenzene	111%			10G0115	10G0115-BLK1	07/06/10 13:18

Polyaromatic Hydrocarbons by EPA 8270D SIM

10F4798-BLK1

Acenaphthene	<0.000700		mg/kg wet	10F4798	10F4798-BLK1	07/03/10 14:02
Acenaphthylene	<0.000600		mg/kg wet	10F4798	10F4798-BLK1	07/03/10 14:02
Anthracene	0.00233		mg/kg wet	10F4798	10F4798-BLK1	07/03/10 14:02
Benzo (a) anthracene	<0.000600		mg/kg wet	10F4798	10F4798-BLK1	07/03/10 14:02
Benzo (a) pyrene	<0.000600		mg/kg wet	10F4798	10F4798-BLK1	07/03/10 14:02
Benzo (b) fluoranthene	<0.000700		mg/kg wet	10F4798	10F4798-BLK1	07/03/10 14:02
Benzo (g,h,i) perylene	<0.000700		mg/kg wet	10F4798	10F4798-BLK1	07/03/10 14:02
Benzo (k) fluoranthene	<0.000700		mg/kg wet	10F4798	10F4798-BLK1	07/03/10 14:02

Client AMEC Earth & Environmental (13993)
 600 University Street, Suite 1020
 Seattle, WA 98101
 Attn Leah Vigoren

Work Order: NTF2364
 Project Name: Everett Terminal(46108)
 Project Number: [none]
 Received: 06/24/10 08:00

PROJECT QUALITY CONTROL DATA
Blank - Cont.

Analyte	Blank Value	Q	Units	Q.C. Batch	Lab Number	Analyzed Date/Time
Polyaromatic Hydrocarbons by EPA 8270D SIM						
10F4798-BLK1						
Chrysene	<0.00100		mg/kg wet	10F4798	10F4798-BLK1	07/03/10 14:02
Dibenz (a,h) anthracene	<0.000900		mg/kg wet	10F4798	10F4798-BLK1	07/03/10 14:02
Fluoranthene	<0.000500		mg/kg wet	10F4798	10F4798-BLK1	07/03/10 14:02
Fluorene	<0.00100		mg/kg wet	10F4798	10F4798-BLK1	07/03/10 14:02
Indeno (1,2,3-cd) pyrene	<0.000600		mg/kg wet	10F4798	10F4798-BLK1	07/03/10 14:02
1-Methylnaphthalene	<0.000600		mg/kg wet	10F4798	10F4798-BLK1	07/03/10 14:02
2-Methylnaphthalene	<0.000800		mg/kg wet	10F4798	10F4798-BLK1	07/03/10 14:02
Naphthalene	<0.000600		mg/kg wet	10F4798	10F4798-BLK1	07/03/10 14:02
Phenanthrene	0.00167		mg/kg wet	10F4798	10F4798-BLK1	07/03/10 14:02
Pyrene	<0.000800		mg/kg wet	10F4798	10F4798-BLK1	07/03/10 14:02
Surrogate: Nitrobenzene-d5	48%			10F4798	10F4798-BLK1	07/03/10 14:02
Surrogate: 2-Fluorobiphenyl	61%			10F4798	10F4798-BLK1	07/03/10 14:02
Surrogate: Terphenyl-d14	80%			10F4798	10F4798-BLK1	07/03/10 14:02
Purgeable Petroleum Hydrocarbons						
10F4359-BLK1						
GRO (C4-C12) NW	1.51		mg/kg wet	10F4359	10F4359-BLK1	06/27/10 16:07
Surrogate: a,a,a-Trifluorotoluene	94%			10F4359	10F4359-BLK1	06/27/10 16:07
Extractable Petroleum Hydrocarbons with Silica Gel Treatment						
10F4914-BLK1						
Diesel	<0.700		mg/kg wet	10F4914	10F4914-BLK1	06/30/10 11:09
Motor Oil	1.31		mg/kg wet	10F4914	10F4914-BLK1	06/30/10 11:09
Surrogate: o-Terphenyl	81%			10F4914	10F4914-BLK1	06/30/10 11:09

Client AMEC Earth & Environmental (13993)
 600 University Street, Suite 1020
 Seattle, WA 98101
 Attn Leah Vigoren

Work Order: NTF2364
 Project Name: Everett Terminal(46108)
 Project Number: [none]
 Received: 06/24/10 08:00

PROJECT QUALITY CONTROL DATA

Duplicate

Analyte	Orig. Val.	Duplicate	Q	Units	RPD	Limit	Batch	Sample Duplicated	% Rec.	Analyzed Date/Time
General Chemistry Parameters										
10F4480-DUP1										
% Dry Solids	89.2	88.8		%	0.4	20	10F4480	NTF2364-01		06/28/10 09:16
Purgeable Petroleum Hydrocarbons										
10F4359-DUP1										
GRO (C4-C12) NW	ND	0.428		mg/kg dry		50	10F4359	NTF2364-01		06/27/10 18:42
<i>Surrogate: a,a,a-Trifluorotoluene</i>		20.3		ug/L			10F4359	NTF2364-01	102%	06/27/10 18:42

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Work Order: NTF2364
 Project Name: Everett Terminal(46108)
 Project Number: [none]
 Received: 06/24/10 08:00

PROJECT QUALITY CONTROL DATA LCS

Analyte	Known Val.	Analyzed Val	Q	Units	% Rec.	Target Range	Batch	Analyzed Date/Time
Volatile Organic Compounds by EPA Method 8260B								
10F4375-BS1								
Benzene	50.0	42.0	A-01	ug/kg	84%	78 - 126	10F4375	07/04/10 15:32
Ethylbenzene	50.0	47.7		ug/kg	95%	79 - 130	10F4375	07/04/10 15:32
Methyl tert-Butyl Ether	50.0	42.0		ug/kg	84%	70 - 128	10F4375	07/04/10 15:32
Toluene	50.0	46.0		ug/kg	92%	76 - 126	10F4375	07/04/10 15:32
Xylenes, total	150	142		ug/kg	95%	80 - 130	10F4375	07/04/10 15:32
<i>Surrogate: 1,2-Dichloroethane-d4</i>	50.0	49.6			99%	67 - 138	10F4375	07/04/10 15:32
<i>Surrogate: Dibromofluoromethane</i>	50.0	48.5			97%	75 - 125	10F4375	07/04/10 15:32
<i>Surrogate: Toluene-d8</i>	50.0	50.8			102%	76 - 129	10F4375	07/04/10 15:32
<i>Surrogate: 4-Bromofluorobenzene</i>	50.0	50.8			102%	67 - 147	10F4375	07/04/10 15:32
10G0115-BS1								
Benzene	50.0	47.2		ug/kg	94%	78 - 126	10G0115	07/06/10 10:58
Ethylbenzene	50.0	52.0		ug/kg	104%	79 - 130	10G0115	07/06/10 10:58
Methyl tert-Butyl Ether	50.0	61.3		ug/kg	123%	70 - 128	10G0115	07/06/10 10:58
Toluene	50.0	49.5		ug/kg	99%	76 - 126	10G0115	07/06/10 10:58
Xylenes, total	150	154		ug/kg	103%	80 - 130	10G0115	07/06/10 10:58
<i>Surrogate: 1,2-Dichloroethane-d4</i>	50.0	47.9			96%	67 - 138	10G0115	07/06/10 10:58
<i>Surrogate: Dibromofluoromethane</i>	50.0	49.4			99%	75 - 125	10G0115	07/06/10 10:58
<i>Surrogate: Toluene-d8</i>	50.0	49.8			100%	76 - 129	10G0115	07/06/10 10:58
<i>Surrogate: 4-Bromofluorobenzene</i>	50.0	55.4			111%	67 - 147	10G0115	07/06/10 10:58
Polyaromatic Hydrocarbons by EPA 8270D SIM								
10F4798-BS1								
Acenaphthene	0.0333	0.0267		mg/kg wet	80%	44 - 120	10F4798	07/03/10 14:25
Acenaphthylene	0.0333	0.0310		mg/kg wet	93%	46 - 127	10F4798	07/03/10 14:25
Anthracene	0.0333	0.0323		mg/kg wet	97%	49 - 139	10F4798	07/03/10 14:25
Benzo (a) anthracene	0.0333	0.0323		mg/kg wet	97%	53 - 132	10F4798	07/03/10 14:25
Benzo (a) pyrene	0.0333	0.0293		mg/kg wet	88%	57 - 125	10F4798	07/03/10 14:25
Benzo (b) fluoranthene	0.0333	0.0303		mg/kg wet	91%	36 - 140	10F4798	07/03/10 14:25
Benzo (g,h,i) perylene	0.0333	0.0290		mg/kg wet	87%	54 - 139	10F4798	07/03/10 14:25
Benzo (k) fluoranthene	0.0333	0.0270		mg/kg wet	81%	49 - 140	10F4798	07/03/10 14:25
Chrysene	0.0333	0.0267		mg/kg wet	80%	47 - 139	10F4798	07/03/10 14:25
Dibenz (a,h) anthracene	0.0333	0.0303		mg/kg wet	91%	58 - 141	10F4798	07/03/10 14:25
Fluoranthene	0.0333	0.0313		mg/kg wet	94%	34 - 135	10F4798	07/03/10 14:25
Fluorene	0.0333	0.0277		mg/kg wet	83%	47 - 129	10F4798	07/03/10 14:25
Indeno (1,2,3-cd) pyrene	0.0333	0.0307		mg/kg wet	92%	53 - 142	10F4798	07/03/10 14:25
1-Methylnaphthalene	0.0333	0.0243		mg/kg wet	73%	41 - 120	10F4798	07/03/10 14:25
2-Methylnaphthalene	0.0333	0.0270		mg/kg wet	81%	48 - 121	10F4798	07/03/10 14:25
Naphthalene	0.0333	0.0253		mg/kg wet	76%	42 - 120	10F4798	07/03/10 14:25
Phenanthrene	0.0333	0.0293		mg/kg wet	88%	52 - 134	10F4798	07/03/10 14:25
Pyrene	0.0333	0.0357		mg/kg wet	107%	56 - 144	10F4798	07/03/10 14:25

Client AMEC Earth & Environmental (13993)
 600 University Street, Suite 1020
 Seattle, WA 98101
 Attn Leah Vigoren

Work Order: NTF2364
 Project Name: Everett Terminal(46108)
 Project Number: [none]
 Received: 06/24/10 08:00

PROJECT QUALITY CONTROL DATA
LCS - Cont.

Analyte	Known Val.	Analyzed Val	Q	Units	% Rec.	Target Range	Batch	Analyzed Date/Time
Polyaromatic Hydrocarbons by EPA 8270D SIM								
10F4798-BS1								
<i>Surrogate: Nitrobenzene-d5</i>	0.0333	0.0200			60%	17 - 120	10F4798	07/03/10 14:25
<i>Surrogate: 2-Fluorobiphenyl</i>	0.0333	0.0207			62%	14 - 120	10F4798	07/03/10 14:25
<i>Surrogate: Terphenyl-d14</i>	0.0333	0.0240			72%	18 - 120	10F4798	07/03/10 14:25
Purgeable Petroleum Hydrocarbons								
10F4359-BS1								
GRO (C4-C12) NW	10.0	9.35		mg/kg wet	94%	60 - 123	10F4359	06/27/10 21:17
<i>Surrogate: a,a,a-Trifluorotoluene</i>	20.0	17.8			89%	50 - 150	10F4359	06/27/10 21:17
Extractable Petroleum Hydrocarbons with Silica Gel Treatment								
10F4914-BS1								
Diesel	40.0	34.5		mg/kg wet	86%	55 - 123	10F4914	06/30/10 11:25
<i>Surrogate: o-Terphenyl</i>	0.800	0.732			92%	50 - 150	10F4914	06/30/10 11:25

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Work Order: NTF2364
 Project Name: Everett Terminal(46108)
 Project Number: [none]
 Received: 06/24/10 08:00

PROJECT QUALITY CONTROL DATA

LCS Dup

Analyte	Orig. Val.	Duplicate	Q	Units	Spike Conc	% Rec.	Target Range	RPD	Limit	Batch	Sample Duplicated	Analyzed Date/Time
Volatile Organic Compounds by EPA Method 8260B												
10G0115-BSD1												
Benzene		47.5		ug/kg	50.0	95%	78 - 126	0.7	50	10G0115		07/06/10 11:29
Ethylbenzene		52.5		ug/kg	50.0	105%	79 - 130	0.9	50	10G0115		07/06/10 11:29
Methyl tert-Butyl Ether		62.2		ug/kg	50.0	124%	70 - 128	1	50	10G0115		07/06/10 11:29
Toluene		50.0		ug/kg	50.0	100%	76 - 126	1	50	10G0115		07/06/10 11:29
Xylenes, total		157		ug/kg	150	105%	80 - 130	2	50	10G0115		07/06/10 11:29
Surrogate: 1,2-Dichloroethane-d4		48.2		ug/kg	50.0	96%	67 - 138			10G0115		07/06/10 11:29
Surrogate: Dibromofluoromethane		49.2		ug/kg	50.0	98%	75 - 125			10G0115		07/06/10 11:29
Surrogate: Toluene-d8		50.4		ug/kg	50.0	101%	76 - 129			10G0115		07/06/10 11:29
Surrogate: 4-Bromofluorobenzene		54.5		ug/kg	50.0	109%	67 - 147			10G0115		07/06/10 11:29

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600 University Street, Suite 1020
Seattle, WA 98101
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Work Order: NTF2364
Project Name: Everett Terminal(46108)
Project Number: [none]
Received: 06/24/10 08:00

PROJECT QUALITY CONTROL DATA Matrix Spike

Analyte	Orig. Val.	MS Val	Q	Units	Spike Conc	% Rec.	Target Range	Batch	Sample Spiked	Analyzed Date/Time
Volatile Organic Compounds by EPA Method 8260B										
10F4375-MS1										
Benzene	0.00716	0.0205		mg/kg dry	0.0234	57%	42 - 141	10F4375	NTF2384-39	07/05/10 00:58
Ethylbenzene	0.00353	0.00662	M8	mg/kg dry	0.0234	13%	21 - 165	10F4375	NTF2384-39	07/05/10 00:58
Methyl tert-Butyl Ether	ND	0.0279		mg/kg dry	0.0234	119%	34 - 154	10F4375	NTF2384-39	07/05/10 00:58
Toluene	0.0154	0.0135	M8	mg/kg dry	0.0234	-8%	45 - 145	10F4375	NTF2384-39	07/05/10 00:58
Xylenes, total	0.0165	0.0187	M8	mg/kg dry	0.0701	3%	31 - 159	10F4375	NTF2384-39	07/05/10 00:58
Surrogate: 1,2-Dichloroethane-d4		57.2		ug/kg	50.0	114%	67 - 138	10F4375	NTF2384-39	07/05/10 00:58
Surrogate: Dibromofluoromethane		49.2		ug/kg	50.0	98%	75 - 125	10F4375	NTF2384-39	07/05/10 00:58
Surrogate: Toluene-d8		52.5		ug/kg	50.0	105%	76 - 129	10F4375	NTF2384-39	07/05/10 00:58
Surrogate: 4-Bromofluorobenzene		57.5		ug/kg	50.0	115%	67 - 147	10F4375	NTF2384-39	07/05/10 00:58
10G0115-MS1										
Benzene	ND	2.65		mg/kg dry	2.76	96%	42 - 141	10G0115	NTF2364-06RE 1	07/06/10 19:25
Ethylbenzene	ND	2.96		mg/kg dry	2.76	107%	21 - 165	10G0115	NTF2364-06RE 1	07/06/10 19:25
Methyl tert-Butyl Ether	ND	3.24		mg/kg dry	2.76	118%	34 - 154	10G0115	NTF2364-06RE 1	07/06/10 19:25
Toluene	0.0513	2.77		mg/kg dry	2.76	99%	45 - 145	10G0115	NTF2364-06RE 1	07/06/10 19:25
Xylenes, total	0.113	8.66		mg/kg dry	8.27	103%	31 - 159	10G0115	NTF2364-06RE 1	07/06/10 19:25
Surrogate: 1,2-Dichloroethane-d4		46.5		ug/kg	50.0	93%	67 - 138	10G0115	NTF2364-06RE 1	07/06/10 19:25
Surrogate: Dibromofluoromethane		46.9		ug/kg	50.0	94%	75 - 125	10G0115	NTF2364-06RE 1	07/06/10 19:25
Surrogate: Toluene-d8		50.5		ug/kg	50.0	101%	76 - 129	10G0115	NTF2364-06RE 1	07/06/10 19:25
Surrogate: 4-Bromofluorobenzene		50.4		ug/kg	50.0	101%	67 - 147	10G0115	NTF2364-06RE 1	07/06/10 19:25
Polyaromatic Hydrocarbons by EPA 8270D SIM										
10F4798-MS1										
Acenaphthene	ND	0.0302		mg/kg dry	0.0368	82%	42 - 120	10F4798	NTF2364-01	07/03/10 14:47
Acenaphthylene	ND	0.0354		mg/kg dry	0.0368	96%	39 - 127	10F4798	NTF2364-01	07/03/10 14:47
Anthracene	ND	0.0357		mg/kg dry	0.0368	97%	39 - 139	10F4798	NTF2364-01	07/03/10 14:47
Benzo (a) anthracene	ND	0.0394		mg/kg dry	0.0368	107%	31 - 132	10F4798	NTF2364-01	07/03/10 14:47
Benzo (a) pyrene	ND	0.0357		mg/kg dry	0.0368	97%	22 - 125	10F4798	NTF2364-01	07/03/10 14:47
Benzo (b) fluoranthene	ND	0.0368		mg/kg dry	0.0368	100%	10 - 147	10F4798	NTF2364-01	07/03/10 14:47
Benzo (g,h,i) perylene	ND	0.0350		mg/kg dry	0.0368	95%	10 - 151	10F4798	NTF2364-01	07/03/10 14:47
Benzo (k) fluoranthene	ND	0.0328		mg/kg dry	0.0368	89%	23 - 140	10F4798	NTF2364-01	07/03/10 14:47
Chrysene	ND	0.0324		mg/kg dry	0.0368	88%	20 - 139	10F4798	NTF2364-01	07/03/10 14:47
Dibenz (a,h) anthracene	ND	0.0346		mg/kg dry	0.0368	94%	18 - 150	10F4798	NTF2364-01	07/03/10 14:47

Client AMEC Earth & Environmental (13993)
 600 University Street, Suite 1020
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 Attn Leah Vigoren

Work Order: NTF2364
 Project Name: Everett Terminal(46108)
 Project Number: [none]
 Received: 06/24/10 08:00

PROJECT QUALITY CONTROL DATA
Matrix Spike - Cont.

Analyte	Orig. Val.	MS Val	Q	Units	Spike Conc	% Rec.	Target Range	Batch	Sample Spiked	Analyzed Date/Time
Polyaromatic Hydrocarbons by EPA 8270D SIM										
10F4798-MS1										
Fluoranthene	0.00224	0.0435		mg/kg dry	0.0368	112%	29 - 135	10F4798	NTF2364-01	07/03/10 14:47
Fluorene	ND	0.0320		mg/kg dry	0.0368	87%	38 - 129	10F4798	NTF2364-01	07/03/10 14:47
Indeno (1,2,3-cd) pyrene	ND	0.0368		mg/kg dry	0.0368	100%	13 - 146	10F4798	NTF2364-01	07/03/10 14:47
1-Methylnaphthalene	ND	0.0273		mg/kg dry	0.0368	74%	20 - 120	10F4798	NTF2364-01	07/03/10 14:47
2-Methylnaphthalene	ND	0.0306		mg/kg dry	0.0368	83%	28 - 124	10F4798	NTF2364-01	07/03/10 14:47
Naphthalene	ND	0.0287		mg/kg dry	0.0368	78%	10 - 135	10F4798	NTF2364-01	07/03/10 14:47
Phenanthrene	0.00336	0.0372		mg/kg dry	0.0368	92%	33 - 134	10F4798	NTF2364-01	07/03/10 14:47
Pyrene	0.00187	0.0464		mg/kg dry	0.0368	121%	26 - 153	10F4798	NTF2364-01	07/03/10 14:47
<i>Surrogate: Nitrobenzene-d5</i>		0.0236		mg/kg dry	0.0368	64%	17 - 120	10F4798	NTF2364-01	07/03/10 14:47
<i>Surrogate: 2-Fluorobiphenyl</i>		0.0228		mg/kg dry	0.0368	62%	14 - 120	10F4798	NTF2364-01	07/03/10 14:47
<i>Surrogate: Terphenyl-d14</i>		0.0243		mg/kg dry	0.0368	66%	18 - 120	10F4798	NTF2364-01	07/03/10 14:47
Purgeable Petroleum Hydrocarbons										
10F4359-MS1										
GRO (C4-C12) NW	804	1410		mg/kg dry	577	106%	59 - 130	10F4359	NTF2364-07	06/27/10 22:19
<i>Surrogate: a,a,a-Trifluorotoluene</i>		19.2		ug/L	20.0	96%	50 - 150	10F4359	NTF2364-07	06/27/10 22:19
Extractable Petroleum Hydrocarbons with Silica Gel Treatment										
10F4914-MS1										
Diesel	1.52	34.6		mg/kg dry	44.2	75%	34 - 138	10F4914	NTF2364-01	06/30/10 11:42
<i>Surrogate: o-Terphenyl</i>		0.648		mg/kg dry	0.883	73%	50 - 150	10F4914	NTF2364-01	06/30/10 11:42

Client AMEC Earth & Environmental (13993)
600 University Street, Suite 1020
Seattle, WA 98101
Attn Leah Vigoren

Work Order: NTF2364
Project Name: Everett Terminal(46108)
Project Number: [none]
Received: 06/24/10 08:00

PROJECT QUALITY CONTROL DATA Matrix Spike Dup

Analyte	Orig. Val.	Duplicate	Q	Units	Spike Conc	% Rec.	Target Range	RPD	Limit	Batch	Sample Duplicated	Analyzed Date/Time
Volatile Organic Compounds by EPA Method 8260B												
10F4375-MSD1												
Benzene	0.00716	0.0250		mg/kg dry	0.0223	80%	42 - 141	20	50	10F4375	NTF2384-39	07/05/10 01:29
Ethylbenzene	0.00353	0.00812		mg/kg dry	0.0223	21%	21 - 165	20	50	10F4375	NTF2384-39	07/05/10 01:29
Methyl tert-Butyl Ether	ND	0.0352	M7	mg/kg dry	0.0223	158%	34 - 154	23	50	10F4375	NTF2384-39	07/05/10 01:29
Toluene	0.0154	0.0162	M8	mg/kg dry	0.0223	4%	45 - 145	18	50	10F4375	NTF2384-39	07/05/10 01:29
Xylenes, total	0.0165	0.0234	M8	mg/kg dry	0.0668	10%	31 - 159	22	50	10F4375	NTF2384-39	07/05/10 01:29
Surrogate: 1,2-Dichloroethane-d4		58.0		ug/kg	50.0	116%	67 - 138			10F4375	NTF2384-39	07/05/10 01:29
Surrogate: Dibromofluoromethane		49.6		ug/kg	50.0	99%	75 - 125			10F4375	NTF2384-39	07/05/10 01:29
Surrogate: Toluene-d8		52.3		ug/kg	50.0	105%	76 - 129			10F4375	NTF2384-39	07/05/10 01:29
Surrogate: 4-Bromofluorobenzene		58.9		ug/kg	50.0	118%	67 - 147			10F4375	NTF2384-39	07/05/10 01:29
10G0115-MSD1												
Benzene	ND	2.59		mg/kg dry	2.76	94%	42 - 141	2	50	10G0115	NTF2364-06RE	07/06/10 19:56
Ethylbenzene	ND	2.89		mg/kg dry	2.76	105%	21 - 165	2	50	10G0115	NTF2364-06RE	07/06/10 19:56
Methyl tert-Butyl Ether	ND	3.17		mg/kg dry	2.76	115%	34 - 154	2	50	10G0115	NTF2364-06RE	07/06/10 19:56
Toluene	0.0513	2.74		mg/kg dry	2.76	97%	45 - 145	1	50	10G0115	NTF2364-06RE	07/06/10 19:56
Xylenes, total	0.113	8.49		mg/kg dry	8.27	101%	31 - 159	2	50	10G0115	NTF2364-06RE	07/06/10 19:56
Surrogate: 1,2-Dichloroethane-d4		45.7		ug/kg	50.0	91%	67 - 138			10G0115	NTF2364-06RE	07/06/10 19:56
Surrogate: Dibromofluoromethane		46.7		ug/kg	50.0	93%	75 - 125			10G0115	NTF2364-06RE	07/06/10 19:56
Surrogate: Toluene-d8		50.7		ug/kg	50.0	101%	76 - 129			10G0115	NTF2364-06RE	07/06/10 19:56
Surrogate: 4-Bromofluorobenzene		51.1		ug/kg	50.0	102%	67 - 147			10G0115	NTF2364-06RE	07/06/10 19:56
Polyaromatic Hydrocarbons by EPA 8270D SIM												
10F4798-MSD1												
Acenaphthene	ND	0.0267		mg/kg dry	0.0366	73%	42 - 120	12	32	10F4798	NTF2364-01	07/03/10 22:07
Acenaphthylene	ND	0.0275		mg/kg dry	0.0366	75%	39 - 127	25	34	10F4798	NTF2364-01	07/03/10 22:07
Anthracene	ND	0.0289		mg/kg dry	0.0366	79%	39 - 139	21	31	10F4798	NTF2364-01	07/03/10 22:07
Benzo (a) anthracene	ND	0.0304		mg/kg dry	0.0366	83%	31 - 132	26	43	10F4798	NTF2364-01	07/03/10 22:07
Benzo (a) pyrene	ND	0.0322		mg/kg dry	0.0366	88%	22 - 125	10	41	10F4798	NTF2364-01	07/03/10 22:07
Benzo (b) fluoranthene	ND	0.0326		mg/kg dry	0.0366	89%	10 - 147	12	50	10F4798	NTF2364-01	07/03/10 22:07
Benzo (g,h,i) perylene	ND	0.0311		mg/kg dry	0.0366	85%	10 - 151	12	50	10F4798	NTF2364-01	07/03/10 22:07
Benzo (k) fluoranthene	ND	0.0315		mg/kg dry	0.0366	86%	23 - 140	4	38	10F4798	NTF2364-01	07/03/10 22:07
Chrysene	ND	0.0297		mg/kg dry	0.0366	81%	20 - 139	9	40	10F4798	NTF2364-01	07/03/10 22:07
Dibenz (a,h) anthracene	ND	0.0300		mg/kg dry	0.0366	82%	18 - 150	14	50	10F4798	NTF2364-01	07/03/10 22:07
Fluoranthene	0.00224	0.0322		mg/kg dry	0.0366	82%	29 - 135	30	47	10F4798	NTF2364-01	07/03/10 22:07
Fluorene	ND	0.0297		mg/kg dry	0.0366	81%	38 - 129	8	38	10F4798	NTF2364-01	07/03/10 22:07
Indeno (1,2,3-cd) pyrene	ND	0.0308		mg/kg dry	0.0366	84%	13 - 146	18	46	10F4798	NTF2364-01	07/03/10 22:07

Client AMEC Earth & Environmental (13993)
 600 University Street, Suite 1020
 Seattle, WA 98101
 Attn Leah Vigoren

Work Order: NTF2364
 Project Name: Everett Terminal(46108)
 Project Number: [none]
 Received: 06/24/10 08:00

PROJECT QUALITY CONTROL DATA
Matrix Spike Dup - Cont.

Analyte	Orig. Val.	Duplicate	Q	Units	Spike Conc	% Rec.	Target Range	RPD	Limit	Batch	Sample Duplicated	Analyzed Date/Time
Polyaromatic Hydrocarbons by EPA 8270D SIM												
10F4798-MSD1												
1-Methylnaphthalene	ND	0.0223		mg/kg dry	0.0366	61%	20 - 120	20	35	10F4798	NTF2364-01	07/03/10 22:07
2-Methylnaphthalene	ND	0.0260		mg/kg dry	0.0366	71%	28 - 124	16	38	10F4798	NTF2364-01	07/03/10 22:07
Naphthalene	ND	0.0231		mg/kg dry	0.0366	63%	10 - 135	22	36	10F4798	NTF2364-01	07/03/10 22:07
Phenanthrene	0.00336	0.0315		mg/kg dry	0.0366	77%	33 - 134	17	46	10F4798	NTF2364-01	07/03/10 22:07
Pyrene	0.00187	0.0326		mg/kg dry	0.0366	84%	26 - 153	35	50	10F4798	NTF2364-01	07/03/10 22:07
Surrogate: Nitrobenzene-d5		0.0168		mg/kg dry	0.0366	46%	17 - 120			10F4798	NTF2364-01	07/03/10 22:07
Surrogate: 2-Fluorobiphenyl		0.0205		mg/kg dry	0.0366	56%	14 - 120			10F4798	NTF2364-01	07/03/10 22:07
Surrogate: Terphenyl-d14		0.0238		mg/kg dry	0.0366	65%	18 - 120			10F4798	NTF2364-01	07/03/10 22:07
Purgeable Petroleum Hydrocarbons												
10F4359-MSD1												
GRO (C4-C12) NW	804	1340		mg/kg dry	577	92%	59 - 130	6	50	10F4359	NTF2364-07	06/27/10 22:50
Surrogate: a,a,a-Trifluorotoluene		20.6		ug/L	20.0	103%	50 - 150			10F4359	NTF2364-07	06/27/10 22:50
Extractable Petroleum Hydrocarbons with Silica Gel Treatment												
10F4914-MSD1												
Diesel	1.52	34.7		mg/kg dry	44.3	75%	34 - 138	0.2	43	10F4914	NTF2364-01	06/30/10 12:02
Surrogate: o-Terphenyl		0.670		mg/kg dry	0.885	76%	50 - 150			10F4914	NTF2364-01	06/30/10 12:02

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Work Order: NTF2364
Project Name: Everett Terminal(46108)
Project Number: [none]
Received: 06/24/10 08:00

CERTIFICATION SUMMARY

TestAmerica Nashville

Method	Matrix	AIHA	Nelac	Washington
NWTPH-Dx	Soil	N/A		X
NWTPH-Gx	Soil	N/A	X	X
SW846 8260B	Soil	N/A	X	X
SW846 8270D SIM	Soil		X	
SW-846	Soil			

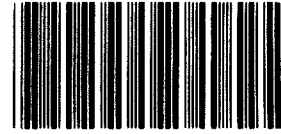
Client AMEC Earth & Environmental (13993)
600 University Street, Suite 1020
Seattle, WA 98101
Attn Leah Vigoren

Work Order: NTF2364
Project Name: Everett Terminal(46108)
Project Number: [none]
Received: 06/24/10 08:00

DATA QUALIFIERS AND DEFINITIONS

A-01 ms/msd not reported due to istd failure
I Internal Standard recovery was outside of method limits. Matrix interference was confirmed by reanalysis.
M7 The MS and/or MSD were above the acceptance limits. See Blank Spike (LCS).
M8 The MS and/or MSD were below the acceptance limits. See Blank Spike (LCS).
QP5 There was insufficient contamination present to perform a pattern match.
QP6 The contamination did not match any standards in our library.
QP7 The hydrocarbon pattern most closely resembles a diesel product.
RL1 Reporting limit raised due to sample matrix effects.
S10 Insufficient sample available for reanalysis.
Z3 The sample required a dilution due to the nature of the sample matrix. Because of this dilution, the surrogate spike concentration in the sample was reduced to a level where the recovery calculation does not provide useful information.
ZX Due to sample matrix effects, the surrogate recovery was outside the acceptance limits.
ND Not detected at the reporting limit (or method detection limit if shown)

METHOD MODIFICATION NOTES



COOLER RECEIPT

Cooler Received/Opened On_06/24/10 @ 08:00

NTF2364

1. Tracking # 4309 (last 4 digits, F)

Courier: FED-EX IR Gun ID 97310166

2. Temperature of rep. sample or temp blank when opened: 5.9 Degrees Celsius

3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES NO NA

4. Were custody seals on outside of cooler? YES...NO...NA

If yes, how many and where: 1-FEELT

5. Were the seals intact, signed, and dated correctly? YES...NO...NA

6. Were custody papers inside cooler? YES...NO...NA

I certify that I opened the cooler and answered questions 1-6 (initial) [Signature]

7. Were custody seals on containers: YES NO and intact YES...NO...NA

Were these signed and dated correctly? YES...NO...NA

8. Packing mat'l used? Bubblewrap Plastic bag Peanuts Vermiculite Foam Insert Paper Other None

9. Cooling process: Water Ice Ice-pack Ice (direct contact) Dry ice Other None

10. Did all containers arrive in good condition (unbroken)? YES...NO...NA

11. Were all container labels complete (#, date, signed, pres., etc)? YES...NO...NA

12. Did all container labels and tags agree with custody papers? YES...NO...NA

13a. Were VOA vials received? YES...NO...NA

b. Was there any observable headspace present in any VOA vial? YES...NO...NA

14. Was there a Trip Blank in this cooler? YES...NO...NA If multiple coolers, sequence # P-11

I certify that I unloaded the cooler and answered questions 7-14 (initial) [Signature]

15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES...NO...NA

b. Did the bottle labels indicate that the correct preservatives were used YES...NO...NA

16. Was residual chlorine present? YES...NO...NA

I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (initial) [Signature]

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

18. Did you sign the custody papers in the appropriate place? YES...NO...NA

19. Were correct containers used for the analysis requested? YES...NO...NA

20. Was sufficient amount of sample sent in each container? YES...NO...NA

I certify that I entered this project into LIMS and answered questions 17-20 (initial) [Signature]

I certify that I attached a label with the unique LIMS number to each container (initial) [Signature]

21. Were there Non-Conformance issues at login? YES...NO Was a PIPE generated? YES...NO...# 57342

VOG = 1
Trip Blank
Broken
AB3-20 =
5 VOG'S
Not
marked,
Process
OF
Elimination

Consultant: AMEC Earth & Environmental (13993)
 Address: 11335 Northeast 122nd Way, Suite 100 WA 98034
 City, State, Zip: Kirkland
ExxonMobil Project Mgr: Joseph A. Abel (inv)
Consultant Project Mgr: Leah Vigoren
 Consultant Telephone #: (425) 820-4669
 Sampler Name (Print) *A. Spensky*
 Sampler Signature: *A. Spensky*
TA Account #: _____ PO #: 4512293714
Invoice to: ExxonMobil Corporation (80110)
Report to: Leah Vigoren
Project Name: Everett Terminal(46108)
Project Project (MIRN): 46108
Retail Project (AFE): E2.1985.95X94.V.01.08
Major Project (AFE): E2.1985.95X94.V.01.08
Site Address: _____
City, State, Zip: Everett Washington

Sample ID	Date Sampled	Time Sampled	# Containers Shipped	Grab	Composite	Field Filtered	Preservative							Matrix					Soil (specify)	Other								
							(Blue Label) HCL	Sodium Bisulfate	(Orange Label) NaOH	(Yellow Label) Plastic H2SO4	(Yellow Label) Glass H2SO4	(Red Label) HNO3	(Black Label) None	Groundwater	Wastewater	Drinking Water	Sludge	Soil			W	NWTPH - DX	NWTPH - GX	RTX + HTE 82608	PARKS 8230D SH	EDX EDB, n-hexane 82608	EPH	VPH
AB 3 4.5-5	6/21/10	940	7	✓			2	2									X											
AB 5 1-1.5	↓	1150	1	✓			3	2									X											
AB 5 5-6	↓	1220	10	✓			3	2									X											
AB 2 4.5-5	↓	1100	7	✓			2	2									X											
AB 3 - 20	6/21/10	1245	7	✓			2	2									X											
AB 1A 3.5-4.5	↓	1050	7	✓			2	2									X											
AB 5A 3-3.5	↓	950	7	✓			2	2									X											
AB 1A 2.5-3.5	6/21/10	1030	7	✓			3	2									X											
Trip blanks							3	2									X											

AGENCY DRAFT

COMMENTS: All turn around times are calculated from the time of receipt at TestAmerica.
 * It will be the responsibility of Exxon Mobil or its consultant to notify the TestAmerica Project Manager by phone or fax that a rush sample will be submitted. TA Project manager Date: _____
 There may be a charge assessed for TestAmerica disposing of sample remainders.

Notes/Special Instructions: BO # 18387
 silica gel cleanup DX
 Standand TAT

Relinquished by: _____ Date: _____ Time: _____
Received by: _____ Date: _____ Time: _____
Shipped Via: _____
 Temperature Upon Receipt: 5.9
 Date: 6/21/10

QC Deliverables (Please Circle One):
 Level 2 Level 3 Level 4 Site Specific
 (If site specific, please pre-schedule w/ TestAmerica Project Manager or attach specific instructions)

Date Due of Report: _____
Date: _____
Time: _____

July 08, 2010 2:54:19PM

Client: AMEC Earth & Environmental (13993)
600 University Street, Suite 1020
Seattle, WA 98101
Attn: Leah Vigoren

Work Order: NTF2469
Project Name: Everett Terminal(46108)
Project Nbr: [none]
P/O Nbr: 4512293714
Date Received: 06/25/10

SAMPLE IDENTIFICATION	LAB NUMBER	COLLECTION DATE AND TIME
AB4-17	NTF2469-01	06/23/10 09:00
AB2-14	NTF2469-04	06/23/10 12:45
DUP1	NTF2469-07	06/23/10 13:00
TB	NTF2469-08	06/23/10 00:01

An executed copy of the chain of custody, the project quality control data, and the sample receipt form are also included as an addendum to this report. If you have any questions relating to this analytical report, please contact your Laboratory Project Manager at 1-800-765-0980. Any opinions, if expressed, are outside the scope of the Laboratory's accreditation.

This material is intended only for the use of the individual(s) or entity to whom it is addressed, and may contain information that is privileged and confidential. If you are not the intended recipient, or the employee or agent responsible for delivering this material to the intended recipient, you are hereby notified that any dissemination, distribution, or copying of this material is strictly prohibited. If you have received this material in error, please notify us immediately at 615-726-0177.

Washington Certification Number: C1712

The Chain(s) of Custody, 3 pages, are included and are an integral part of this report.

These results relate only to the items tested. This report shall not be reproduced except in full and with permission of the laboratory.

All solids results are reported in wet weight unless specifically stated.

Estimated uncertainty is available upon request.

This report has been electronically signed.

Report Approved By:



Leah R. Klingensmith

Senior Project Management

Client AMEC Earth & Environmental (13993)
600 University Street, Suite 1020
Seattle, WA 98101
Attn Leah Vigoren

Work Order: NTF2469
Project Name: Everett Terminal(46108)
Project Number: [none]
Received: 06/25/10 08:00

ANALYTICAL REPORT

Analyte	Result	Flag	Units	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
Sample ID: NTF2469-01 (AB4-17 - Soil) Sampled: 06/23/10 09:00								
General Chemistry Parameters								
% Dry Solids	78.3	P3	%	0.500	1	06/30/10 09:30	SW-846	10F5107
Volatile Organic Compounds by EPA Method 8260B								
Benzene	0.0293	P3	mg/kg dry	0.00213	1	07/06/10 19:17	SW846 8260B	10G0437
Ethylbenzene	0.0145	P3	mg/kg dry	0.00213	1	07/06/10 19:17	SW846 8260B	10G0437
Methyl tert-Butyl Ether	ND	P3	mg/kg dry	0.00213	1	07/06/10 19:17	SW846 8260B	10G0437
Toluene	ND	P3	mg/kg dry	0.00213	1	07/06/10 19:17	SW846 8260B	10G0437
Xylenes, total	0.0313	P3	mg/kg dry	0.00532	1	07/06/10 19:17	SW846 8260B	10G0437
Surr: 1,2-Dichloroethane-d4 (67-138%)	95 %					07/06/10 19:17	SW846 8260B	10G0437
Surr: Dibromofluoromethane (75-125%)	94 %					07/06/10 19:17	SW846 8260B	10G0437
Surr: Toluene-d8 (76-129%)	110 %					07/06/10 19:17	SW846 8260B	10G0437
Surr: 4-Bromofluorobenzene (67-147%)	105 %					07/06/10 19:17	SW846 8260B	10G0437
Polyaromatic Hydrocarbons by EPA 8270D SIM								
Acenaphthene	ND	P3	mg/kg dry	0.00422	1	07/08/10 03:40	SW846 8270D SIM	10G0092
Acenaphthylene	ND	P3	mg/kg dry	0.00422	1	07/08/10 03:40	SW846 8270D SIM	10G0092
Anthracene	ND	P3	mg/kg dry	0.00422	1	07/08/10 03:40	SW846 8270D SIM	10G0092
Benzo (a) anthracene	ND	P3	mg/kg dry	0.00422	1	07/08/10 03:40	SW846 8270D SIM	10G0092
Benzo (a) pyrene	ND	P3	mg/kg dry	0.00422	1	07/08/10 03:40	SW846 8270D SIM	10G0092
Benzo (b) fluoranthene	ND	P3	mg/kg dry	0.00422	1	07/08/10 03:40	SW846 8270D SIM	10G0092
Benzo (g,h,i) perylene	ND	P3	mg/kg dry	0.00422	1	07/08/10 03:40	SW846 8270D SIM	10G0092
Benzo (k) fluoranthene	ND	P3	mg/kg dry	0.00422	1	07/08/10 03:40	SW846 8270D SIM	10G0092
Chrysene	ND	P3	mg/kg dry	0.00422	1	07/08/10 03:40	SW846 8270D SIM	10G0092
Dibenz (a,h) anthracene	ND	P3	mg/kg dry	0.00422	1	07/08/10 03:40	SW846 8270D SIM	10G0092
Fluoranthene	0.00760	P3	mg/kg dry	0.00422	1	07/08/10 03:40	SW846 8270D SIM	10G0092
Fluorene	ND	P3	mg/kg dry	0.00422	1	07/08/10 03:40	SW846 8270D SIM	10G0092
Indeno (1,2,3-cd) pyrene	ND	P3	mg/kg dry	0.00422	1	07/08/10 03:40	SW846 8270D SIM	10G0092
1-Methylnaphthalene	ND	P3	mg/kg dry	0.00422	1	07/08/10 03:40	SW846 8270D SIM	10G0092
2-Methylnaphthalene	ND	P3	mg/kg dry	0.00422	1	07/08/10 03:40	SW846 8270D SIM	10G0092
Naphthalene	ND	P3	mg/kg dry	0.00422	1	07/08/10 03:40	SW846 8270D SIM	10G0092
Phenanthrene	0.0106	M7, P3	mg/kg dry	0.00422	1	07/08/10 03:40	SW846 8270D SIM	10G0092
Pyrene	0.00464	P3	mg/kg dry	0.00422	1	07/08/10 03:40	SW846 8270D SIM	10G0092
Surr: Nitrobenzene-d5 (17-120%)	48 %					07/08/10 03:40	W846 8270D SIA	10G0092
Surr: 2-Fluorobiphenyl (14-120%)	44 %					07/08/10 03:40	W846 8270D SIA	10G0092
Surr: Terphenyl-d14 (18-120%)	51 %					07/08/10 03:40	W846 8270D SIA	10G0092
Purgeable Petroleum Hydrocarbons								
GRO (C4-C12) NW	ND	P3	mg/kg dry	5.30	50	06/29/10 17:10	NWTPH-Gx	10F4830
Surr: a,a,a-Trifluorotoluene (50-150%)	101 %					06/29/10 17:10	NWTPH-Gx	10F4830
Extractable Petroleum Hydrocarbons with Silica Gel Treatment								
Diesel	ND	P3	mg/kg dry	4.95	1	06/30/10 12:58	NWTPH-Dx	10F4914
Motor Oil	8.36	P3, QP5	mg/kg dry	4.95	1	06/30/10 12:58	NWTPH-Dx	10F4914
Surr: o-Terphenyl (50-150%)	61 %					06/30/10 12:58	NWTPH-Dx	10F4914

Client AMEC Earth & Environmental (13993)
600 University Street, Suite 1020
Seattle, WA 98101
Attn Leah Vigoren

Work Order: NTF2469
Project Name: Everett Terminal(46108)
Project Number: [none]
Received: 06/25/10 08:00

ANALYTICAL REPORT

Analyte	Result	Flag	Units	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
Sample ID: NTF2469-04 (AB2-14 - Soil) Sampled: 06/23/10 12:45								
General Chemistry Parameters								
% Dry Solids	86.6	P3	%	0.500	1	06/30/10 09:30	SW-846	10F5107
Volatile Organic Compounds by EPA Method 8260B								
Benzene	ND	P3	mg/kg dry	0.00209	1	07/06/10 19:48	SW846 8260B	10G0437
Ethylbenzene	ND	P3	mg/kg dry	0.00209	1	07/06/10 19:48	SW846 8260B	10G0437
Methyl tert-Butyl Ether	ND	P3	mg/kg dry	0.00209	1	07/06/10 19:48	SW846 8260B	10G0437
Toluene	ND	P3	mg/kg dry	0.00209	1	07/06/10 19:48	SW846 8260B	10G0437
Xylenes, total	ND	P3	mg/kg dry	0.00523	1	07/06/10 19:48	SW846 8260B	10G0437
<i>Surr: 1,2-Dichloroethane-d4 (67-138%)</i>	94 %					07/06/10 19:48	SW846 8260B	10G0437
<i>Surr: Dibromofluoromethane (75-125%)</i>	93 %					07/06/10 19:48	SW846 8260B	10G0437
<i>Surr: Toluene-d8 (76-129%)</i>	105 %					07/06/10 19:48	SW846 8260B	10G0437
<i>Surr: 4-Bromofluorobenzene (67-147%)</i>	104 %					07/06/10 19:48	SW846 8260B	10G0437
Polyaromatic Hydrocarbons by EPA 8270D SIM								
Acenaphthene	ND	P3	mg/kg dry	0.00379	1	07/08/10 04:03	SW846 8270D SIM	10G0092
Acenaphthylene	ND	P3	mg/kg dry	0.00379	1	07/08/10 04:03	SW846 8270D SIM	10G0092
Anthracene	ND	P3	mg/kg dry	0.00379	1	07/08/10 04:03	SW846 8270D SIM	10G0092
Benzo (a) anthracene	ND	P3	mg/kg dry	0.00379	1	07/08/10 04:03	SW846 8270D SIM	10G0092
Benzo (a) pyrene	ND	P3	mg/kg dry	0.00379	1	07/08/10 04:03	SW846 8270D SIM	10G0092
Benzo (b) fluoranthene	ND	P3	mg/kg dry	0.00379	1	07/08/10 04:03	SW846 8270D SIM	10G0092
Benzo (g,h,i) perylene	ND	P3	mg/kg dry	0.00379	1	07/08/10 04:03	SW846 8270D SIM	10G0092
Benzo (k) fluoranthene	ND	P3	mg/kg dry	0.00379	1	07/08/10 04:03	SW846 8270D SIM	10G0092
Chrysene	ND	P3	mg/kg dry	0.00379	1	07/08/10 04:03	SW846 8270D SIM	10G0092
Dibenz (a,h) anthracene	ND	P3	mg/kg dry	0.00379	1	07/08/10 04:03	SW846 8270D SIM	10G0092
Fluoranthene	ND	P3	mg/kg dry	0.00379	1	07/08/10 04:03	SW846 8270D SIM	10G0092
Fluorene	ND	P3	mg/kg dry	0.00379	1	07/08/10 04:03	SW846 8270D SIM	10G0092
Indeno (1,2,3-cd) pyrene	ND	P3	mg/kg dry	0.00379	1	07/08/10 04:03	SW846 8270D SIM	10G0092
1-Methylnaphthalene	ND	P3	mg/kg dry	0.00379	1	07/08/10 04:03	SW846 8270D SIM	10G0092
2-Methylnaphthalene	ND	P3	mg/kg dry	0.00379	1	07/08/10 04:03	SW846 8270D SIM	10G0092
Naphthalene	ND	P3	mg/kg dry	0.00379	1	07/08/10 04:03	SW846 8270D SIM	10G0092
Phenanthrene	0.00417	P3	mg/kg dry	0.00379	1	07/08/10 04:03	SW846 8270D SIM	10G0092
Pyrene	ND	P3	mg/kg dry	0.00379	1	07/08/10 04:03	SW846 8270D SIM	10G0092
<i>Surr: Nitrobenzene-d5 (17-120%)</i>	61 %					07/08/10 04:03	W846 8270D SIA	10G0092
<i>Surr: 2-Fluorobiphenyl (14-120%)</i>	63 %					07/08/10 04:03	W846 8270D SIA	10G0092
<i>Surr: Terphenyl-d14 (18-120%)</i>	67 %					07/08/10 04:03	W846 8270D SIA	10G0092
Purgeable Petroleum Hydrocarbons								
GRO (C4-C12) NW	ND	P3	mg/kg dry	6.39	50	06/29/10 17:41	NWTPH-Gx	10F4830
<i>Surr: a,a,a-Trifluorotoluene (50-150%)</i>	103 %					06/29/10 17:41	NWTPH-Gx	10F4830
Extractable Petroleum Hydrocarbons with Silica Gel Treatment								
Diesel	ND	P3	mg/kg dry	4.49	1	06/30/10 13:14	NWTPH-Dx	10F4914
Motor Oil	6.54	P3, QP5	mg/kg dry	4.49	1	06/30/10 13:14	NWTPH-Dx	10F4914
<i>Surr: o-Terphenyl (50-150%)</i>	72 %					06/30/10 13:14	NWTPH-Dx	10F4914

Client AMEC Earth & Environmental (13993)
600 University Street, Suite 1020
Seattle, WA 98101
Attn Leah Vigoren

Work Order: NTF2469
Project Name: Everett Terminal(46108)
Project Number: [none]
Received: 06/25/10 08:00

ANALYTICAL REPORT

Analyte	Result	Flag	Units	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
Sample ID: NTF2469-07 (DUP1 - Soil) Sampled: 06/23/10 13:00								
General Chemistry Parameters								
% Dry Solids	85.4	P3	%	0.500	1	06/30/10 09:30	SW-846	10F5107
Volatile Organic Compounds by EPA Method 8260B								
Benzene	ND	P3	mg/kg dry	0.00192	1	07/06/10 20:18	SW846 8260B	10G0437
Ethylbenzene	ND	P3	mg/kg dry	0.00192	1	07/06/10 20:18	SW846 8260B	10G0437
Methyl tert-Butyl Ether	ND	P3	mg/kg dry	0.00192	1	07/06/10 20:18	SW846 8260B	10G0437
Toluene	ND	P3	mg/kg dry	0.00192	1	07/06/10 20:18	SW846 8260B	10G0437
Xylenes, total	ND	P3	mg/kg dry	0.00479	1	07/06/10 20:18	SW846 8260B	10G0437
<i>Surr: 1,2-Dichloroethane-d4 (67-138%)</i>	95 %					07/06/10 20:18	SW846 8260B	10G0437
<i>Surr: Dibromofluoromethane (75-125%)</i>	96 %					07/06/10 20:18	SW846 8260B	10G0437
<i>Surr: Toluene-d8 (76-129%)</i>	104 %					07/06/10 20:18	SW846 8260B	10G0437
<i>Surr: 4-Bromofluorobenzene (67-147%)</i>	102 %					07/06/10 20:18	SW846 8260B	10G0437
Polyaromatic Hydrocarbons by EPA 8270D SIM								
Acenaphthene	ND	P3	mg/kg dry	0.00379	1	07/08/10 04:26	SW846 8270D SIM	10G0092
Acenaphthylene	ND	P3	mg/kg dry	0.00379	1	07/08/10 04:26	SW846 8270D SIM	10G0092
Anthracene	ND	P3	mg/kg dry	0.00379	1	07/08/10 04:26	SW846 8270D SIM	10G0092
Benzo (a) anthracene	ND	P3	mg/kg dry	0.00379	1	07/08/10 04:26	SW846 8270D SIM	10G0092
Benzo (a) pyrene	ND	P3	mg/kg dry	0.00379	1	07/08/10 04:26	SW846 8270D SIM	10G0092
Benzo (b) fluoranthene	ND	P3	mg/kg dry	0.00379	1	07/08/10 04:26	SW846 8270D SIM	10G0092
Benzo (g,h,i) perylene	ND	P3	mg/kg dry	0.00379	1	07/08/10 04:26	SW846 8270D SIM	10G0092
Benzo (k) fluoranthene	ND	P3	mg/kg dry	0.00379	1	07/08/10 04:26	SW846 8270D SIM	10G0092
Chrysene	ND	P3	mg/kg dry	0.00379	1	07/08/10 04:26	SW846 8270D SIM	10G0092
Dibenz (a,h) anthracene	ND	P3	mg/kg dry	0.00379	1	07/08/10 04:26	SW846 8270D SIM	10G0092
Fluoranthene	ND	P3	mg/kg dry	0.00379	1	07/08/10 04:26	SW846 8270D SIM	10G0092
Fluorene	ND	P3	mg/kg dry	0.00379	1	07/08/10 04:26	SW846 8270D SIM	10G0092
Indeno (1,2,3-cd) pyrene	ND	P3	mg/kg dry	0.00379	1	07/08/10 04:26	SW846 8270D SIM	10G0092
1-Methylnaphthalene	ND	P3	mg/kg dry	0.00379	1	07/08/10 04:26	SW846 8270D SIM	10G0092
2-Methylnaphthalene	ND	P3	mg/kg dry	0.00379	1	07/08/10 04:26	SW846 8270D SIM	10G0092
Naphthalene	ND	P3	mg/kg dry	0.00379	1	07/08/10 04:26	SW846 8270D SIM	10G0092
Phenanthrene	0.00494	P3	mg/kg dry	0.00379	1	07/08/10 04:26	SW846 8270D SIM	10G0092
Pyrene	ND	P3	mg/kg dry	0.00379	1	07/08/10 04:26	SW846 8270D SIM	10G0092
<i>Surr: Nitrobenzene-d5 (17-120%)</i>	48 %					07/08/10 04:26	W846 8270D SIM	10G0092
<i>Surr: 2-Fluorobiphenyl (14-120%)</i>	50 %					07/08/10 04:26	W846 8270D SIM	10G0092
<i>Surr: Terphenyl-d14 (18-120%)</i>	61 %					07/08/10 04:26	W846 8270D SIM	10G0092
Purgeable Petroleum Hydrocarbons								
GRO (C4-C12) NW	ND	P3	mg/kg dry	5.27	50	06/29/10 18:13	NWTPH-Gx	10F4830
<i>Surr: a,a,a-Trifluorotoluene (50-150%)</i>	105 %					06/29/10 18:13	NWTPH-Gx	10F4830
Extractable Petroleum Hydrocarbons with Silica Gel Treatment								
Diesel	ND	P3	mg/kg dry	4.65	1	06/30/10 13:32	NWTPH-Dx	10F4914
Motor Oil	ND	P3	mg/kg dry	4.65	1	06/30/10 13:32	NWTPH-Dx	10F4914
<i>Surr: o-Terphenyl (50-150%)</i>	59 %					06/30/10 13:32	NWTPH-Dx	10F4914

Client AMEC Earth & Environmental (13993)
 600 University Street, Suite 1020
 Seattle, WA 98101
 Attn Leah Vigoren

Work Order: NTF2469
 Project Name: Everett Terminal(46108)
 Project Number: [none]
 Received: 06/25/10 08:00

ANALYTICAL REPORT

Analyte	Result	Flag	Units	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
Sample ID: NTF2469-08 (TB - Soil) Sampled: 06/23/10 00:01								
Volatile Organic Compounds by EPA Method 8260B								
Benzene	ND	P3	mg/kg wet	0.100	50	07/01/10 15:06	SW846 8260B	10F5293
Ethylbenzene	ND	P3	mg/kg wet	0.100	50	07/01/10 15:06	SW846 8260B	10F5293
Methyl tert-Butyl Ether	ND	P3	mg/kg wet	0.100	50	07/01/10 15:06	SW846 8260B	10F5293
Toluene	ND	P3	mg/kg wet	0.100	50	07/01/10 15:06	SW846 8260B	10F5293
Xylenes, total	ND	P3	mg/kg wet	0.250	50	07/01/10 15:06	SW846 8260B	10F5293
<i>Surr: 1,2-Dichloroethane-d4 (67-138%)</i>	<i>91 %</i>					<i>07/01/10 15:06</i>	<i>SW846 8260B</i>	<i>10F5293</i>
<i>Surr: Dibromofluoromethane (75-125%)</i>	<i>94 %</i>					<i>07/01/10 15:06</i>	<i>SW846 8260B</i>	<i>10F5293</i>
<i>Surr: Toluene-d8 (76-129%)</i>	<i>93 %</i>					<i>07/01/10 15:06</i>	<i>SW846 8260B</i>	<i>10F5293</i>
<i>Surr: 4-Bromofluorobenzene (67-147%)</i>	<i>72 %</i>					<i>07/01/10 15:06</i>	<i>SW846 8260B</i>	<i>10F5293</i>

Client AMEC Earth & Environmental (13993)
 600 University Street, Suite 1020
 Seattle, WA 98101
 Attn Leah Vigoren

Work Order: NTF2469
 Project Name: Everett Terminal(46108)
 Project Number: [none]
 Received: 06/25/10 08:00

SAMPLE EXTRACTION DATA

Parameter	Batch	Lab Number	Wt/Vol Extracted	Extracted Vol	Date	Analyst	Extraction Method
Extractable Petroleum Hydrocarbons with Silica Gel Treatment							
NWTPH-Dx	10F4914	NTF2469-01	25.79	1.00	06/29/10 10:45	SAS	EPA 3550B
NWTPH-Dx	10F4914	NTF2469-04	25.73	1.00	06/29/10 10:45	SAS	EPA 3550B
NWTPH-Dx	10F4914	NTF2469-07	25.20	1.00	06/29/10 10:45	SAS	EPA 3550B
Polyaromatic Hydrocarbons by EPA 8270D SIM							
SW846 8270D SIM	10G0092	NTF2469-01	30.25	1.00	07/05/10 11:05	DMG	EPA 3550C
SW846 8270D SIM	10G0092	NTF2469-04	30.44	1.00	07/05/10 11:05	DMG	EPA 3550C
SW846 8270D SIM	10G0092	NTF2469-07	30.83	1.00	07/05/10 11:05	DMG	EPA 3550C
Purgeable Petroleum Hydrocarbons							
NWTPH-Gx	10F4830	NTF2469-01	6.02	5.00	06/23/10 09:00	JRL	EPA 5035A (GC)
NWTPH-Gx	10F4830	NTF2469-04	4.52	5.00	06/23/10 12:45	JRL	EPA 5035A (GC)
NWTPH-Gx	10F4830	NTF2469-07	5.56	5.00	06/23/10 13:00	JRL	EPA 5035A (GC)
Volatile Organic Compounds by EPA Method 8260B							
SW846 8260B	10G0437	NTF2469-01	6.00	5.00	06/23/10 09:00	JRL	EPA 5035
SW846 8260B	10G0437	NTF2469-04	5.52	5.00	06/23/10 12:45	JRL	EPA 5035
SW846 8260B	10G0437	NTF2469-07	6.11	5.00	06/23/10 13:00	JRL	EPA 5035
SW846 8260B	10F5293	NTF2469-08	5.00	5.00	06/23/10 00:01	CHH	EPA 5035

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PROJECT QUALITY CONTROL DATA
Blank

Analyte	Blank Value	Q	Units	Q.C. Batch	Lab Number	Analyzed Date/Time
Volatile Organic Compounds by EPA Method 8260B						
10F5293-BLK1						
Benzene	<0.0550		mg/kg wet	10F5293	10F5293-BLK1	07/01/10 11:17
Ethylbenzene	<0.0490		mg/kg wet	10F5293	10F5293-BLK1	07/01/10 11:17
Methyl tert-Butyl Ether	<0.0335		mg/kg wet	10F5293	10F5293-BLK1	07/01/10 11:17
Toluene	<0.0445		mg/kg wet	10F5293	10F5293-BLK1	07/01/10 11:17
Xylenes, total	<0.0950		mg/kg wet	10F5293	10F5293-BLK1	07/01/10 11:17
Surrogate: 1,2-Dichloroethane-d4	97%			10F5293	10F5293-BLK1	07/01/10 11:17
Surrogate: Dibromofluoromethane	100%			10F5293	10F5293-BLK1	07/01/10 11:17
Surrogate: Toluene-d8	94%			10F5293	10F5293-BLK1	07/01/10 11:17
Surrogate: 4-Bromofluorobenzene	82%			10F5293	10F5293-BLK1	07/01/10 11:17

10G0437-BLK1						
Benzene	<0.00110		mg/kg wet	10G0437	10G0437-BLK1	07/06/10 16:33
Ethylbenzene	<0.000980		mg/kg wet	10G0437	10G0437-BLK1	07/06/10 16:33
Methyl tert-Butyl Ether	<0.000670		mg/kg wet	10G0437	10G0437-BLK1	07/06/10 16:33
Toluene	<0.000890		mg/kg wet	10G0437	10G0437-BLK1	07/06/10 16:33
Xylenes, total	<0.00190		mg/kg wet	10G0437	10G0437-BLK1	07/06/10 16:33
Surrogate: 1,2-Dichloroethane-d4	94%			10G0437	10G0437-BLK1	07/06/10 16:33
Surrogate: Dibromofluoromethane	95%			10G0437	10G0437-BLK1	07/06/10 16:33
Surrogate: Toluene-d8	102%			10G0437	10G0437-BLK1	07/06/10 16:33
Surrogate: 4-Bromofluorobenzene	103%			10G0437	10G0437-BLK1	07/06/10 16:33

Polyaromatic Hydrocarbons by EPA 8270D SIM

10G0092-BLK1						
Acenaphthene	<0.000700		mg/kg wet	10G0092	10G0092-BLK1	07/08/10 01:30
Acenaphthylene	<0.000600		mg/kg wet	10G0092	10G0092-BLK1	07/08/10 01:30
Anthracene	<0.000500		mg/kg wet	10G0092	10G0092-BLK1	07/08/10 01:30
Benzo (a) anthracene	<0.000600		mg/kg wet	10G0092	10G0092-BLK1	07/08/10 01:30
Benzo (a) pyrene	<0.000600		mg/kg wet	10G0092	10G0092-BLK1	07/08/10 01:30
Benzo (b) fluoranthene	<0.000700		mg/kg wet	10G0092	10G0092-BLK1	07/08/10 01:30
Benzo (g,h,i) perylene	<0.000700		mg/kg wet	10G0092	10G0092-BLK1	07/08/10 01:30
Benzo (k) fluoranthene	<0.000700		mg/kg wet	10G0092	10G0092-BLK1	07/08/10 01:30
Chrysene	<0.00100		mg/kg wet	10G0092	10G0092-BLK1	07/08/10 01:30
Dibenz (a,h) anthracene	<0.000900		mg/kg wet	10G0092	10G0092-BLK1	07/08/10 01:30
Fluoranthene	<0.000500		mg/kg wet	10G0092	10G0092-BLK1	07/08/10 01:30
Fluorene	<0.00100		mg/kg wet	10G0092	10G0092-BLK1	07/08/10 01:30
Indeno (1,2,3-cd) pyrene	<0.000600		mg/kg wet	10G0092	10G0092-BLK1	07/08/10 01:30
1-Methylnaphthalene	<0.000600		mg/kg wet	10G0092	10G0092-BLK1	07/08/10 01:30
2-Methylnaphthalene	<0.000800		mg/kg wet	10G0092	10G0092-BLK1	07/08/10 01:30
Naphthalene	<0.000600		mg/kg wet	10G0092	10G0092-BLK1	07/08/10 01:30
Phenanthrene	<0.000800		mg/kg wet	10G0092	10G0092-BLK1	07/08/10 01:30
Pyrene	<0.000800		mg/kg wet	10G0092	10G0092-BLK1	07/08/10 01:30

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 Received: 06/25/10 08:00

PROJECT QUALITY CONTROL DATA
Blank - Cont.

Analyte	Blank Value	Q	Units	Q.C. Batch	Lab Number	Analyzed Date/Time
Polyaromatic Hydrocarbons by EPA 8270D SIM						
10G0092-BLK1						
<i>Surrogate: Nitrobenzene-d5</i>	76%			10G0092	10G0092-BLK1	07/08/10 01:30
<i>Surrogate: 2-Fluorobiphenyl</i>	72%			10G0092	10G0092-BLK1	07/08/10 01:30
<i>Surrogate: Terphenyl-d14</i>	83%			10G0092	10G0092-BLK1	07/08/10 01:30
Purgeable Petroleum Hydrocarbons						
10F4830-BLK1						
GRO (C4-C12) NW	0.645		mg/kg wet	10F4830	10F4830-BLK1	06/29/10 12:28
<i>Surrogate: a,a,a-Trifluorotoluene</i>	94%			10F4830	10F4830-BLK1	06/29/10 12:28
10F4830-BLK2						
GRO (C4-C12) NW	1.29		mg/kg wet	10F4830	10F4830-BLK2	06/30/10 01:26
<i>Surrogate: a,a,a-Trifluorotoluene</i>	98%			10F4830	10F4830-BLK2	06/30/10 01:26
Extractable Petroleum Hydrocarbons with Silica Gel Treatment						
10F4914-BLK1						
Diesel	<0.700		mg/kg wet	10F4914	10F4914-BLK1	06/30/10 11:09
Motor Oil	1.31		mg/kg wet	10F4914	10F4914-BLK1	06/30/10 11:09
<i>Surrogate: o-Terphenyl</i>	81%			10F4914	10F4914-BLK1	06/30/10 11:09

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PROJECT QUALITY CONTROL DATA
Duplicate

Analyte	Orig. Val.	Duplicate	Q	Units	RPD	Limit	Batch	Sample Duplicated	% Rec.	Analyzed Date/Time
General Chemistry Parameters										
10F5107-DUP1										
% Dry Solids	78.3	77.0		%	2	20	10F5107	NTF2469-01		06/30/10 09:30
Purgeable Petroleum Hydrocarbons										
10F4830-DUP1										
GRO (C4-C12) NW	ND	ND		mg/kg dry		50	10F4830	NTF2469-07		06/29/10 18:44
<i>Surrogate: a,a,a-Trifluorotoluene</i>		19.9		ug/L			10F4830	NTF2469-07	99%	06/29/10 18:44
10F4830-DUP2										
GRO (C4-C12) NW	ND	ND		mg/kg wet		50	10F4830	NTF2659-11		06/29/10 23:53
<i>Surrogate: a,a,a-Trifluorotoluene</i>		20.3		ug/L			10F4830	NTF2659-11	102%	06/29/10 23:53

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 Project Number: [none]
 Received: 06/25/10 08:00

PROJECT QUALITY CONTROL DATA LCS

Analyte	Known Val.	Analyzed Val	Q	Units	% Rec.	Target Range	Batch	Analyzed Date/Time
Volatile Organic Compounds by EPA Method 8260B								
10F5293-BS1								
Benzene	50.0	55.9		ug/kg	112%	78 - 126	10F5293	07/01/10 10:17
Ethylbenzene	50.0	56.1		ug/kg	112%	79 - 130	10F5293	07/01/10 10:17
Methyl tert-Butyl Ether	50.0	56.4		ug/kg	113%	70 - 128	10F5293	07/01/10 10:17
Toluene	50.0	55.8		ug/kg	112%	76 - 126	10F5293	07/01/10 10:17
Xylenes, total	150	168		ug/kg	112%	80 - 130	10F5293	07/01/10 10:17
<i>Surrogate: 1,2-Dichloroethane-d4</i>	50.0	48.3			97%	67 - 138	10F5293	07/01/10 10:17
<i>Surrogate: Dibromofluoromethane</i>	50.0	54.3			109%	75 - 125	10F5293	07/01/10 10:17
<i>Surrogate: Toluene-d8</i>	50.0	48.9			98%	76 - 129	10F5293	07/01/10 10:17
<i>Surrogate: 4-Bromofluorobenzene</i>	50.0	41.3			83%	67 - 147	10F5293	07/01/10 10:17
10G0437-BS1								
Benzene	50.0	42.2		ug/kg	84%	78 - 126	10G0437	07/06/10 12:09
Ethylbenzene	50.0	43.9		ug/kg	88%	79 - 130	10G0437	07/06/10 12:09
Methyl tert-Butyl Ether	50.0	56.2		ug/kg	112%	70 - 128	10G0437	07/06/10 12:09
Toluene	50.0	43.4		ug/kg	87%	76 - 126	10G0437	07/06/10 12:09
Xylenes, total	150	135		ug/kg	90%	80 - 130	10G0437	07/06/10 12:09
<i>Surrogate: 1,2-Dichloroethane-d4</i>	50.0	45.8			92%	67 - 138	10G0437	07/06/10 12:09
<i>Surrogate: Dibromofluoromethane</i>	50.0	48.2			96%	75 - 125	10G0437	07/06/10 12:09
<i>Surrogate: Toluene-d8</i>	50.0	49.9			100%	76 - 129	10G0437	07/06/10 12:09
<i>Surrogate: 4-Bromofluorobenzene</i>	50.0	51.8			104%	67 - 147	10G0437	07/06/10 12:09
Polyaromatic Hydrocarbons by EPA 8270D SIM								
10G0092-BS1								
Acenaphthene	0.0333	0.0237		mg/kg wet	71%	44 - 120	10G0092	07/08/10 01:53
Acenaphthylene	0.0333	0.0230		mg/kg wet	69%	46 - 127	10G0092	07/08/10 01:53
Anthracene	0.0333	0.0260		mg/kg wet	78%	49 - 139	10G0092	07/08/10 01:53
Benzo (a) anthracene	0.0333	0.0293		mg/kg wet	88%	53 - 132	10G0092	07/08/10 01:53
Benzo (a) pyrene	0.0333	0.0283		mg/kg wet	85%	57 - 125	10G0092	07/08/10 01:53
Benzo (b) fluoranthene	0.0333	0.0310		mg/kg wet	93%	36 - 140	10G0092	07/08/10 01:53
Benzo (g,h,i) perylene	0.0333	0.0287		mg/kg wet	86%	54 - 139	10G0092	07/08/10 01:53
Benzo (k) fluoranthene	0.0333	0.0293		mg/kg wet	88%	49 - 140	10G0092	07/08/10 01:53
Chrysene	0.0333	0.0293		mg/kg wet	88%	47 - 139	10G0092	07/08/10 01:53
Dibenz (a,h) anthracene	0.0333	0.0270		mg/kg wet	81%	58 - 141	10G0092	07/08/10 01:53
Fluoranthene	0.0333	0.0297		mg/kg wet	89%	34 - 135	10G0092	07/08/10 01:53
Fluorene	0.0333	0.0250		mg/kg wet	75%	47 - 129	10G0092	07/08/10 01:53
Indeno (1,2,3-cd) pyrene	0.0333	0.0287		mg/kg wet	86%	53 - 142	10G0092	07/08/10 01:53
1-Methylnaphthalene	0.0333	0.0237		mg/kg wet	71%	41 - 120	10G0092	07/08/10 01:53
2-Methylnaphthalene	0.0333	0.0240		mg/kg wet	72%	48 - 121	10G0092	07/08/10 01:53
Naphthalene	0.0333	0.0223		mg/kg wet	67%	42 - 120	10G0092	07/08/10 01:53
Phenanthrene	0.0333	0.0267		mg/kg wet	80%	52 - 134	10G0092	07/08/10 01:53
Pyrene	0.0333	0.0313		mg/kg wet	94%	56 - 144	10G0092	07/08/10 01:53

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 Received: 06/25/10 08:00

PROJECT QUALITY CONTROL DATA
LCS - Cont.

Analyte	Known Val.	Analyzed Val	Q	Units	% Rec.	Target Range	Batch	Analyzed Date/Time
Polyaromatic Hydrocarbons by EPA 8270D SIM								
10G0092-BS1								
<i>Surrogate: Nitrobenzene-d5</i>	0.0333	0.0163			49%	17 - 120	10G0092	07/08/10 01:53
<i>Surrogate: 2-Fluorobiphenyl</i>	0.0333	0.0207			62%	14 - 120	10G0092	07/08/10 01:53
<i>Surrogate: Terphenyl-d14</i>	0.0333	0.0247			74%	18 - 120	10G0092	07/08/10 01:53
Purgeable Petroleum Hydrocarbons								
10F4830-BS1								
GRO (C4-C12) NW	10.0	9.92		mg/kg wet	99%	60 - 123	10F4830	06/30/10 00:24
<i>Surrogate: a,a,a-Trifluorotoluene</i>	20.0	16.9			85%	50 - 150	10F4830	06/30/10 00:24
10F4830-BS2								
GRO (C4-C12) NW	10.0	10.0		mg/kg wet	100%	60 - 123	10F4830	06/30/10 07:04
<i>Surrogate: a,a,a-Trifluorotoluene</i>	20.0	17.0			85%	50 - 150	10F4830	06/30/10 07:04
Extractable Petroleum Hydrocarbons with Silica Gel Treatment								
10F4914-BS1								
Diesel	40.0	34.5		mg/kg wet	86%	55 - 123	10F4914	06/30/10 11:25
<i>Surrogate: o-Terphenyl</i>	0.800	0.732			92%	50 - 150	10F4914	06/30/10 11:25

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PROJECT QUALITY CONTROL DATA

LCS Dup

Analyte	Orig. Val.	Duplicate	Q	Units	Spike Conc	% Rec.	Target Range	RPD	Limit	Batch	Sample Duplicated	Analyzed Date/Time
Volatile Organic Compounds by EPA Method 8260B												
10G0437-BSD1												
Benzene		41.4		ug/kg	50.0	83%	78 - 126	2	50	10G0437		07/06/10 12:39
Ethylbenzene		43.3		ug/kg	50.0	87%	79 - 130	1	50	10G0437		07/06/10 12:39
Methyl tert-Butyl Ether		49.9		ug/kg	50.0	100%	70 - 128	12	50	10G0437		07/06/10 12:39
Toluene		42.7		ug/kg	50.0	85%	76 - 126	1	50	10G0437		07/06/10 12:39
Xylenes, total		132		ug/kg	150	88%	80 - 130	2	50	10G0437		07/06/10 12:39
Surrogate: 1,2-Dichloroethane-d4		44.2		ug/kg	50.0	88%	67 - 138			10G0437		07/06/10 12:39
Surrogate: Dibromofluoromethane		47.2		ug/kg	50.0	94%	75 - 125			10G0437		07/06/10 12:39
Surrogate: Toluene-d8		50.2		ug/kg	50.0	100%	76 - 129			10G0437		07/06/10 12:39
Surrogate: 4-Bromofluorobenzene		51.5		ug/kg	50.0	103%	67 - 147			10G0437		07/06/10 12:39

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PROJECT QUALITY CONTROL DATA Matrix Spike

Analyte	Orig. Val.	MS Val	Q	Units	Spike Conc	% Rec.	Target Range	Batch	Sample Spiked	Analyzed Date/Time
Volatile Organic Compounds by EPA Method 8260B										
10F5293-MS1										
Benzene	ND	2.22		mg/kg dry	2.38	93%	42 - 141	10F5293	NTF2965-04	07/01/10 19:53
Ethylbenzene	ND	2.26		mg/kg dry	2.38	95%	21 - 165	10F5293	NTF2965-04	07/01/10 19:53
Methyl tert-Butyl Ether	ND	2.30		mg/kg dry	2.38	96%	34 - 154	10F5293	NTF2965-04	07/01/10 19:53
Toluene	ND	2.20		mg/kg dry	2.38	92%	45 - 145	10F5293	NTF2965-04	07/01/10 19:53
Xylenes, total	ND	6.71		mg/kg dry	7.15	94%	31 - 159	10F5293	NTF2965-04	07/01/10 19:53
Surrogate: 1,2-Dichloroethane-d4		45.6		ug/kg	50.0	91%	67 - 138	10F5293	NTF2965-04	07/01/10 19:53
Surrogate: Dibromofluoromethane		51.6		ug/kg	50.0	103%	75 - 125	10F5293	NTF2965-04	07/01/10 19:53
Surrogate: Toluene-d8		46.8		ug/kg	50.0	94%	76 - 129	10F5293	NTF2965-04	07/01/10 19:53
Surrogate: 4-Bromofluorobenzene		40.6		ug/kg	50.0	81%	67 - 147	10F5293	NTF2965-04	07/01/10 19:53
10G0437-MS1										
Benzene	1.41	0.225		mg/kg wet	0.0469	-2520%	42 - 141	10G0437	NTF2630-05	07/07/10 01:04
Ethylbenzene	1.37	5.23		mg/kg wet	0.0469	8230%	21 - 165	10G0437	NTF2630-05	07/07/10 01:04
Methyl tert-Butyl Ether	ND	0.00503		mg/kg wet	0.0469	11%	34 - 154	10G0437	NTF2630-05	07/07/10 01:04
Toluene	0.357	0.601		mg/kg wet	0.0469	521%	45 - 145	10G0437	NTF2630-05	07/07/10 01:04
Xylenes, total	2.52	12.7		mg/kg wet	0.141	7220%	31 - 159	10G0437	NTF2630-05	07/07/10 01:04
Surrogate: 1,2-Dichloroethane-d4		5.91		ug/kg	50.0	12%	67 - 138	10G0437	NTF2630-05	07/07/10 01:04
Surrogate: Dibromofluoromethane		6.33		ug/kg	50.0	13%	75 - 125	10G0437	NTF2630-05	07/07/10 01:04
Surrogate: Toluene-d8		14.4		ug/kg	50.0	29%	76 - 129	10G0437	NTF2630-05	07/07/10 01:04
Surrogate: 4-Bromofluorobenzene		364		ug/kg	50.0	728%	67 - 147	10G0437	NTF2630-05	07/07/10 01:04
Polyaromatic Hydrocarbons by EPA 8270D SIM										
10G0092-MS1										
Acenaphthene	ND	0.0269		mg/kg dry	0.0421	64%	42 - 120	10G0092	NTF2469-01	07/08/10 02:16
Acenaphthylene	ND	0.0248		mg/kg dry	0.0421	59%	39 - 127	10G0092	NTF2469-01	07/08/10 02:16
Anthracene	ND	0.0311		mg/kg dry	0.0421	74%	39 - 139	10G0092	NTF2469-01	07/08/10 02:16
Benzo (a) anthracene	ND	0.0341		mg/kg dry	0.0421	81%	31 - 132	10G0092	NTF2469-01	07/08/10 02:16
Benzo (a) pyrene	ND	0.0316		mg/kg dry	0.0421	75%	22 - 125	10G0092	NTF2469-01	07/08/10 02:16
Benzo (b) fluoranthene	ND	0.0307		mg/kg dry	0.0421	73%	10 - 147	10G0092	NTF2469-01	07/08/10 02:16
Benzo (g,h,i) perylene	ND	0.0290		mg/kg dry	0.0421	69%	10 - 151	10G0092	NTF2469-01	07/08/10 02:16
Benzo (k) fluoranthene	ND	0.0320		mg/kg dry	0.0421	76%	23 - 140	10G0092	NTF2469-01	07/08/10 02:16
Chrysene	ND	0.0337		mg/kg dry	0.0421	80%	20 - 139	10G0092	NTF2469-01	07/08/10 02:16
Dibenz (a,h) anthracene	ND	0.0282		mg/kg dry	0.0421	67%	18 - 150	10G0092	NTF2469-01	07/08/10 02:16
Fluoranthene	0.00760	0.0631		mg/kg dry	0.0421	132%	29 - 135	10G0092	NTF2469-01	07/08/10 02:16
Fluorene	ND	0.0337		mg/kg dry	0.0421	80%	38 - 129	10G0092	NTF2469-01	07/08/10 02:16
Indeno (1,2,3-cd) pyrene	ND	0.0295		mg/kg dry	0.0421	70%	13 - 146	10G0092	NTF2469-01	07/08/10 02:16
1-Methylnaphthalene	ND	0.0261		mg/kg dry	0.0421	62%	20 - 120	10G0092	NTF2469-01	07/08/10 02:16
2-Methylnaphthalene	ND	0.0303		mg/kg dry	0.0421	72%	28 - 124	10G0092	NTF2469-01	07/08/10 02:16

Client AMEC Earth & Environmental (13993)
 600 University Street, Suite 1020
 Seattle, WA 98101
 Attn Leah Vigoren

Work Order: NTF2469
 Project Name: Everett Terminal(46108)
 Project Number: [none]
 Received: 06/25/10 08:00

PROJECT QUALITY CONTROL DATA
Matrix Spike - Cont.

Analyte	Orig. Val.	MS Val	Q	Units	Spike Conc	% Rec.	Target Range	Batch	Sample Spiked	Analyzed Date/Time
Polyaromatic Hydrocarbons by EPA 8270D SIM										
10G0092-MS1										
Naphthalene	ND	0.0265		mg/kg dry	0.0421	63%	10 - 135	10G0092	NTF2469-01	07/08/10 02:16
Phenanthrene	0.0106	0.0741	M7	mg/kg dry	0.0421	151%	33 - 134	10G0092	NTF2469-01	07/08/10 02:16
Pyrene	0.00464	0.0530		mg/kg dry	0.0421	115%	26 - 153	10G0092	NTF2469-01	07/08/10 02:16
Surrogate: Nitrobenzene-d5		0.0173		mg/kg dry	0.0421	41%	17 - 120	10G0092	NTF2469-01	07/08/10 02:16
Surrogate: 2-Fluorobiphenyl		0.0164		mg/kg dry	0.0421	39%	14 - 120	10G0092	NTF2469-01	07/08/10 02:16
Surrogate: Terphenyl-d14		0.0177		mg/kg dry	0.0421	42%	18 - 120	10G0092	NTF2469-01	07/08/10 02:16
Purgeable Petroleum Hydrocarbons										
10F4830-MS1										
GRO (C4-C12) NW	ND	396		mg/kg wet	398	100%	59 - 130	10F4830	NTF2659-11	06/30/10 08:05
Surrogate: a,a,a-Trifluorotoluene		18.8		ug/L	20.0	94%	50 - 150	10F4830	NTF2659-11	06/30/10 08:05
10F4830-MS2										
GRO (C4-C12) NW	104	531		mg/kg wet	442	97%	59 - 130	10F4830	NTF1969-22	06/30/10 09:06
Surrogate: a,a,a-Trifluorotoluene		17.5		ug/L	20.0	87%	50 - 150	10F4830	NTF1969-22	06/30/10 09:06
Extractable Petroleum Hydrocarbons with Silica Gel Treatment										
10F4914-MS1										
Diesel	1.52	34.6		mg/kg dry	44.2	75%	34 - 138	10F4914	NTF2364-01	06/30/10 11:42
Surrogate: o-Terphenyl		0.648		mg/kg dry	0.883	73%	50 - 150	10F4914	NTF2364-01	06/30/10 11:42

Client AMEC Earth & Environmental (13993)
 600 University Street, Suite 1020
 Seattle, WA 98101
 Attn Leah Vigoren

Work Order: NTF2469
 Project Name: Everett Terminal(46108)
 Project Number: [none]
 Received: 06/25/10 08:00

PROJECT QUALITY CONTROL DATA Matrix Spike Dup

Analyte	Orig. Val.	Duplicate	Q	Units	Spike Conc	% Rec.	Target Range	RPD	Limit	Batch	Sample Duplicated	Analyzed Date/Time
Volatile Organic Compounds by EPA Method 8260B												
10F5293-MSD1												
Benzene	ND	1.96		mg/kg dry	2.38	82%	42 - 141	12	50	10F5293	NTF2965-04	07/01/10 20:21
Ethylbenzene	ND	2.00		mg/kg dry	2.38	84%	21 - 165	12	50	10F5293	NTF2965-04	07/01/10 20:21
Methyl tert-Butyl Ether	ND	2.02		mg/kg dry	2.38	85%	34 - 154	13	50	10F5293	NTF2965-04	07/01/10 20:21
Toluene	ND	1.94		mg/kg dry	2.38	81%	45 - 145	12	50	10F5293	NTF2965-04	07/01/10 20:21
Xylenes, total	ND	5.90		mg/kg dry	7.15	82%	31 - 159	13	50	10F5293	NTF2965-04	07/01/10 20:21
Surrogate: 1,2-Dichloroethane-d4		44.8		ug/kg	50.0	90%	67 - 138			10F5293	NTF2965-04	07/01/10 20:21
Surrogate: Dibromofluoromethane		51.4		ug/kg	50.0	103%	75 - 125			10F5293	NTF2965-04	07/01/10 20:21
Surrogate: Toluene-d8		47.4		ug/kg	50.0	95%	76 - 129			10F5293	NTF2965-04	07/01/10 20:21
Surrogate: 4-Bromofluorobenzene		40.6		ug/kg	50.0	81%	67 - 147			10F5293	NTF2965-04	07/01/10 20:21
10G0437-MSD1												
Benzene	1.41	3.43		mg/kg wet	0.0491	4120%	42 - 141	175	50	10G0437	NTF2630-05	07/07/10 01:34
Ethylbenzene	1.37	ND		mg/kg wet	0.0491	-2790%	21 - 165		50	10G0437	NTF2630-05	07/07/10 01:34
Methyl tert-Butyl Ether	ND	0.0616		mg/kg wet	0.0491	125%	34 - 154	170	50	10G0437	NTF2630-05	07/07/10 01:34
Toluene	0.357	0.953		mg/kg wet	0.0491	1210%	45 - 145	45	50	10G0437	NTF2630-05	07/07/10 01:34
Xylenes, total	2.52	8.47		mg/kg wet	0.147	4040%	31 - 159	40	50	10G0437	NTF2630-05	07/07/10 01:34
Surrogate: 1,2-Dichloroethane-d4		116		ug/kg	50.0	233%	67 - 138			10G0437	NTF2630-05	07/07/10 01:34
Surrogate: Dibromofluoromethane		58.7		ug/kg	50.0	117%	75 - 125			10G0437	NTF2630-05	07/07/10 01:34
Surrogate: Toluene-d8		624		ug/kg	50.0	1250%	76 - 129			10G0437	NTF2630-05	07/07/10 01:34
Surrogate: 4-Bromofluorobenzene		121		ug/kg	50.0	242%	67 - 147			10G0437	NTF2630-05	07/07/10 01:34
Polyaromatic Hydrocarbons by EPA 8270D SIM												
10G0092-MSD1												
Acenaphthene	ND	0.0352		mg/kg dry	0.0418	84%	42 - 120	26	32	10G0092	NTF2469-01	07/08/10 02:39
Acenaphthylene	ND	0.0356	R2	mg/kg dry	0.0418	85%	39 - 127	36	34	10G0092	NTF2469-01	07/08/10 02:39
Anthracene	ND	0.0377		mg/kg dry	0.0418	90%	39 - 139	19	31	10G0092	NTF2469-01	07/08/10 02:39
Benzo (a) anthracene	ND	0.0418		mg/kg dry	0.0418	100%	31 - 132	20	43	10G0092	NTF2469-01	07/08/10 02:39
Benzo (a) pyrene	ND	0.0406		mg/kg dry	0.0418	97%	22 - 125	25	41	10G0092	NTF2469-01	07/08/10 02:39
Benzo (b) fluoranthene	ND	0.0423		mg/kg dry	0.0418	101%	10 - 147	32	50	10G0092	NTF2469-01	07/08/10 02:39
Benzo (g,h,i) perylene	ND	0.0372		mg/kg dry	0.0418	89%	10 - 151	25	50	10G0092	NTF2469-01	07/08/10 02:39
Benzo (k) fluoranthene	ND	0.0393		mg/kg dry	0.0418	94%	23 - 140	21	38	10G0092	NTF2469-01	07/08/10 02:39
Chrysene	ND	0.0402		mg/kg dry	0.0418	96%	20 - 139	18	40	10G0092	NTF2469-01	07/08/10 02:39
Dibenz (a,h) anthracene	ND	0.0347		mg/kg dry	0.0418	83%	18 - 150	21	50	10G0092	NTF2469-01	07/08/10 02:39
Fluoranthene	0.00760	0.0603		mg/kg dry	0.0418	126%	29 - 135	5	47	10G0092	NTF2469-01	07/08/10 02:39
Fluorene	ND	0.0398		mg/kg dry	0.0418	95%	38 - 129	17	38	10G0092	NTF2469-01	07/08/10 02:39
Indeno (1,2,3-cd) pyrene	ND	0.0381		mg/kg dry	0.0418	91%	13 - 146	26	46	10G0092	NTF2469-01	07/08/10 02:39
1-Methylnaphthalene	ND	0.0318		mg/kg dry	0.0418	76%	20 - 120	20	35	10G0092	NTF2469-01	07/08/10 02:39
2-Methylnaphthalene	ND	0.0368		mg/kg dry	0.0418	88%	28 - 124	19	38	10G0092	NTF2469-01	07/08/10 02:39
Naphthalene	ND	0.0322		mg/kg dry	0.0418	77%	10 - 135	19	36	10G0092	NTF2469-01	07/08/10 02:39
Phenanthrene	0.0106	0.0582		mg/kg dry	0.0418	114%	33 - 134	24	46	10G0092	NTF2469-01	07/08/10 02:39
Pyrene	0.00464	0.0548		mg/kg dry	0.0418	120%	26 - 153	3	50	10G0092	NTF2469-01	07/08/10 02:39

Client AMEC Earth & Environmental (13993)
 600 University Street, Suite 1020
 Seattle, WA 98101
 Attn Leah Vigoren

Work Order: NTF2469
 Project Name: Everett Terminal(46108)
 Project Number: [none]
 Received: 06/25/10 08:00

PROJECT QUALITY CONTROL DATA

Matrix Spike Dup - Cont.

Analyte	Orig. Val.	Duplicate	Q	Units	Spike Conc	% Rec.	Target Range	RPD	Limit	Batch	Sample Duplicated	Analyzed Date/Time
Polyaromatic Hydrocarbons by EPA 8270D SIM												
10G0092-MSD1												
<i>Surrogate: Nitrobenzene-d5</i>		0.0243		mg/kg dry	0.0418	58%	17 - 120			10G0092	NTF2469-01	07/08/10 02:39
<i>Surrogate: 2-Fluorobiphenyl</i>		0.0247		mg/kg dry	0.0418	59%	14 - 120			10G0092	NTF2469-01	07/08/10 02:39
<i>Surrogate: Terphenyl-d14</i>		0.0264		mg/kg dry	0.0418	63%	18 - 120			10G0092	NTF2469-01	07/08/10 02:39
Purgeable Petroleum Hydrocarbons												
10F4830-MSD1												
GRO (C4-C12) NW	ND	378		mg/kg wet	398	95%	59 - 130	5	50	10F4830	NTF2659-11	06/30/10 08:36
<i>Surrogate: a,a,a-Trifluorotoluene</i>		17.8		ug/L	20.0	89%	50 - 150			10F4830	NTF2659-11	06/30/10 08:36
10F4830-MSD2												
GRO (C4-C12) NW	104	510		mg/kg wet	442	92%	59 - 130	4	50	10F4830	NTF1969-22	06/30/10 09:37
<i>Surrogate: a,a,a-Trifluorotoluene</i>		17.6		ug/L	20.0	88%	50 - 150			10F4830	NTF1969-22	06/30/10 09:37
Extractable Petroleum Hydrocarbons with Silica Gel Treatment												
10F4914-MSD1												
Diesel	1.52	34.7		mg/kg dry	44.3	75%	34 - 138	0.2	43	10F4914	NTF2364-01	06/30/10 12:02
<i>Surrogate: o-Terphenyl</i>		0.670		mg/kg dry	0.885	76%	50 - 150			10F4914	NTF2364-01	06/30/10 12:02

Client AMEC Earth & Environmental (13993)
600 University Street, Suite 1020
Seattle, WA 98101
Attn Leah Vigoren

Work Order: NTF2469
Project Name: Everett Terminal(46108)
Project Number: [none]
Received: 06/25/10 08:00

CERTIFICATION SUMMARY

TestAmerica Nashville

Method	Matrix	AIHA	Nelac	Washington
NWTPH-Dx	Soil	N/A		X
NWTPH-Gx	Soil	N/A	X	X
SW846 8260B	Soil	N/A	X	X
SW846 8270D SIM	Soil		X	
SW-846	Soil			

Client AMEC Earth & Environmental (13993)
600 University Street, Suite 1020
Seattle, WA 98101
Attn Leah Vigoren

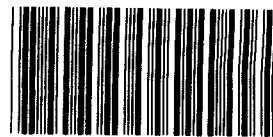
Work Order: NTF2469
Project Name: Everett Terminal(46108)
Project Number: [none]
Received: 06/25/10 08:00

DATA QUALIFIERS AND DEFINITIONS

M7 The MS and/or MSD were above the acceptance limits. See Blank Spike (LCS).
P3 Sample was received above recommended temperature.
QP5 There was insufficient contamination present to perform a pattern match.
R2 The RPD exceeded the acceptance limit.
ND Not detected at the reporting limit (or method detection limit if shown)

METHOD MODIFICATION NOTES

AGENCY DRAFT



COOLER RECE

NTF2469

Cooler Received/Opened On: 6/25/2010 @ 8:00

Fed-ex Tracking number 4391

IR Gun ID: 9560068

- 1. Temperature of rep. sample or temp blank when opened: 13.2 Degrees Celsius
- 3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES NO...NA
- 4. Were custody seals on outside of cooler? YES...NO...NA
If yes, how many and where: 1 front
- 5. Were the seals intact, signed, and dated correctly? YES...NO...NA
- 6. Were custody papers inside cooler? YES...NO...NA

I certify that I opened the cooler and answered questions 1-6 (initial) W

- 7. Were custody seals on containers: YES NO and Intact YES...NO...NA
Were these signed and dated correctly? YES...NO...NA
- 8. Packing mat'l used? Bubblewrap Plastic bag Peanuts Vermiculite Foam Insert Paper Other None
- 9. Cooling process: Ice Ice-pack Ice (direct contact) Dry ice Other None
- 10. Did all containers arrive in good condition (unbroken)? YES...NO...NA
- 11. Were all container labels complete (#, date, signed, pres., etc)? YES...NO...NA
- 12. Did all container labels and tags agree with custody papers? YES...NO...NA
- 13a. Were VOA vials received? YES...NO...NA
- b. Was there any observable headspace present in any VOA vial? YES...NO...NA SOIL

14. Was there a Trip Blank in this cooler? YES...NO...NA If multiple coolers, sequence # P.H.

I certify that I unloaded the cooler and answered questions 7-14 (initial) P.H.

- 15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES...NO...NA
- b. Did the bottle labels indicate that the correct preservatives were used YES...NO...NA
- 16. Was residual chlorine present? YES...NO...NA

I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (initial) W

- 17. Were custody papers properly filled out (ink, signed, etc)? YES...NO...NA
- 18. Did you sign the custody papers in the appropriate place? YES...NO...NA
- 19. Were correct containers used for the analysis requested? YES...NO...NA
- 20. Was sufficient amount of sample sent in each container? YES...NO...NA

I certify that I entered this project into LIMS and answered questions 17-20 (initial) W

I certify that I attached a label with the unique LIMS number to each container (initial) W

21. Were there Non-Conformance issues at login? YES...NO... Was a PIPE generated? YES...NO...# 57354

temp is 13.2°C
3/25/10

AGENCY DRAFT

Jones, Andi

From: Vigoren, Leah R [Leah.Vigoren@amec.com]
Sent: Sunday, June 27, 2010 10:12 AM
To: Jones, Andi
Cc: Speransky, Anastasia; Klingensmith, Leah; Strong, Meg
Subject: FW: Everett Terminal (NTF2469)

Attachments: NTF2469.pdf



NTF2469.pdf (177
KB)

Andi

Thank you for the email. Please run the samples shown on the attached COC. For future when questions like this arise could someone at Test America please give me a call on my cell (206-351-9449), so I can answer the question(s) immediately. Sometimes I do not receive my emails until 2 or 3 days later.

Thank you again. Leah

From: Jones, Andi [Andi.Jones@testamericainc.com]
Sent: Friday, June 25, 2010 4:07 PM
To: Vigoren, Leah R
Cc: Klingensmith, Leah
Subject: Everett Terminal (NTF2469)

Hi Leah. Leah Klingensmith is out today, and we received these samples for the Everett Terminal at 13.2 degrees Celsius. Do you still want us to run them?
Andi

Please be aware that the Nashville laboratory will be closed on Monday, July 5th for sample receiving and third party couriers (FedEx, UPS, DHL, etc.) will not be delivering that day.

Third party couriers will be delivering samples on Saturday, July 3rd and the laboratory will be staffed to accept sample drop-offs.

ANDI JONES
Senior Project Manager

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

2960 Foster Creighton Drive
Nashville, TN 37204
Tel 800-765-0980 x1111 | Dir 615.301.5033
www.testamericainc.com<<http://www.testamericainc.com>>

Please let us know if we met your expectations by rating the service you received from TestAmerica on this project by visiting our website at: Project Feedback<BLOCKED::<https://secure.testamericainc.com/snaponline/surveylogin.asp?k=121632876991>>

The information contained in this e-mail is intended only for the individual or entity to whom it is addressed.
Its contents (including any attachments) may contain confidential and/or privileged

July 14, 2010 3:46:30PM

Client: AMEC Earth & Environmental (13993)
600 University Street, Suite 1020
Seattle, WA 98101
Attn: Leah Vigoren

Work Order: NTF2651
Project Name: Everett Terminal(46108) - AMEC
Project Nbr: [none]
P/O Nbr:
Date Received: 06/26/10

SAMPLE IDENTIFICATION	LAB NUMBER	COLLECTION DATE AND TIME
AB5-5	NTF2651-01	06/25/10 08:00
AB5-22	NTF2651-02	06/25/10 09:30
MWA6-12	NTF2651-04	06/25/10 12:15
MWA6-20	NTF2651-05	06/25/10 12:30

An executed copy of the chain of custody, the project quality control data, and the sample receipt form are also included as an addendum to this report. If you have any questions relating to this analytical report, please contact your Laboratory Project Manager at 1-800-765-0980. Any opinions, if expressed, are outside the scope of the Laboratory's accreditation.

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Additional Laboratory Comments:

There was insufficient sodium bisulfate preservation in the vials for the BTEX/MTBE analysis for AB5-22(NTF2651-02). The analysis was performed from the methanol vial.
Washington Certification Number: C1712

The Chain(s) of Custody, 3 pages, are included and are an integral part of this report.

These results relate only to the items tested. This report shall not be reproduced except in full and with permission of the laboratory.

All solids results are reported in wet weight unless specifically stated.

Estimated uncertainty is available upon request.

This report has been electronically signed.

Report Approved By:



Leah R. Klingensmith

Senior Project Management

Client AMEC Earth & Environmental (13993)
 600 University Street, Suite 1020
 Seattle, WA 98101
 Attn Leah Vigoren

Work Order: NTF2651
 Project Name: Everett Terminal(46108) - AMEC
 Project Number: [none]
 Received: 06/26/10 08:30

ANALYTICAL REPORT

Analyte	Result	Flag	Units	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
Sample ID: NTF2651-01 (AB5-5 - Soil) Sampled: 06/25/10 08:00								
General Chemistry Parameters								
% Dry Solids	80.0		%	0.500	1	06/30/10 09:30	SW-846	10F5107
Volatile Organic Compounds by EPA Method 8260B								
1,2-Dibromoethane (EDB)	0.00372	P3	mg/kg dry	0.00229	1	07/03/10 17:52	SW846 8260B	10G0381
1,2-Dichloroethane	0.00282	P3	mg/kg dry	0.00229	1	07/03/10 17:52	SW846 8260B	10G0381
Benzene	0.0949	P3	mg/kg dry	0.00229	1	07/03/10 17:52	SW846 8260B	10G0381
Hexane	ND	P3, RL1	mg/kg dry	0.615	50	07/05/10 15:46	SW846 8260B	10G0618
Ethylbenzene	0.00967	P3	mg/kg dry	0.00229	1	07/03/10 17:52	SW846 8260B	10G0381
Methyl tert-Butyl Ether	ND	P3	mg/kg dry	0.00229	1	07/03/10 17:52	SW846 8260B	10G0381
Toluene	0.00711	P3	mg/kg dry	0.00229	1	07/03/10 17:52	SW846 8260B	10G0381
Xylenes, total	0.0284	P3	mg/kg dry	0.00571	1	07/03/10 17:52	SW846 8260B	10G0381
<i>Surr: 1,2-Dichloroethane-d4 (67-138%)</i>	87 %					07/03/10 17:52	SW846 8260B	10G0381
<i>Surr: 1,2-Dichloroethane-d4 (67-138%)</i>	97 %					07/05/10 15:46	SW846 8260B	10G0618
<i>Surr: Dibromofluoromethane (75-125%)</i>	87 %					07/03/10 17:52	SW846 8260B	10G0381
<i>Surr: Dibromofluoromethane (75-125%)</i>	92 %					07/05/10 15:46	SW846 8260B	10G0618
<i>Surr: Toluene-d8 (76-129%)</i>	150 %	ZX				07/03/10 17:52	SW846 8260B	10G0381
<i>Surr: Toluene-d8 (76-129%)</i>	100 %					07/05/10 15:46	SW846 8260B	10G0618
<i>Surr: 4-Bromofluorobenzene (67-147%)</i>	158 %	ZX				07/03/10 17:52	SW846 8260B	10G0381
<i>Surr: 4-Bromofluorobenzene (67-147%)</i>	99 %					07/05/10 15:46	SW846 8260B	10G0618
Polyaromatic Hydrocarbons by EPA 8270D SIM								
Acenaphthene	0.0198	P3	mg/kg dry	0.00413	1	07/08/10 06:41	SW846 8270D SIM	10G0092
Acenaphthylene	0.00662	P3	mg/kg dry	0.00413	1	07/08/10 06:41	SW846 8270D SIM	10G0092
Anthracene	0.0141	P3	mg/kg dry	0.00413	1	07/08/10 06:41	SW846 8270D SIM	10G0092
Benzo (a) anthracene	0.0194	P3	mg/kg dry	0.00413	1	07/08/10 06:41	SW846 8270D SIM	10G0092
Benzo (a) pyrene	0.0157	P3	mg/kg dry	0.00413	1	07/08/10 06:41	SW846 8270D SIM	10G0092
Benzo (b) fluoranthene	0.00827	P3	mg/kg dry	0.00413	1	07/08/10 06:41	SW846 8270D SIM	10G0092
Benzo (g,h,i) perylene	0.0120	P3	mg/kg dry	0.00413	1	07/08/10 06:41	SW846 8270D SIM	10G0092
Benzo (k) fluoranthene	0.00496	P3	mg/kg dry	0.00413	1	07/08/10 06:41	SW846 8270D SIM	10G0092
Chrysene	0.0314	P3	mg/kg dry	0.00413	1	07/08/10 06:41	SW846 8270D SIM	10G0092
Dibenz (a,h) anthracene	ND	P3	mg/kg dry	0.00413	1	07/08/10 06:41	SW846 8270D SIM	10G0092
Fluoranthene	0.0186	P3	mg/kg dry	0.00413	1	07/08/10 06:41	SW846 8270D SIM	10G0092
Fluorene	0.0294	P3	mg/kg dry	0.00413	1	07/08/10 06:41	SW846 8270D SIM	10G0092
Indeno (1,2,3-cd) pyrene	0.00538	P3	mg/kg dry	0.00413	1	07/08/10 06:41	SW846 8270D SIM	10G0092
1-Methylnaphthalene	0.191	P3	mg/kg dry	0.00413	1	07/08/10 06:41	SW846 8270D SIM	10G0092
2-Methylnaphthalene	0.246	P3	mg/kg dry	0.00413	1	07/08/10 06:41	SW846 8270D SIM	10G0092
Naphthalene	0.0128	P3	mg/kg dry	0.00413	1	07/08/10 06:41	SW846 8270D SIM	10G0092
Phenanthrene	0.0926	P3	mg/kg dry	0.00413	1	07/08/10 06:41	SW846 8270D SIM	10G0092
Pyrene	0.0633	P3	mg/kg dry	0.00413	1	07/08/10 06:41	SW846 8270D SIM	10G0092
<i>Surr: Nitrobenzene-d5 (17-120%)</i>	24 %					07/08/10 06:41	W846 8270D SIM	10G0092
<i>Surr: 2-Fluorobiphenyl (14-120%)</i>	13 %	ZX				07/08/10 06:41	W846 8270D SIM	10G0092
<i>Surr: Terphenyl-d14 (18-120%)</i>	14 %	ZX				07/08/10 06:41	W846 8270D SIM	10G0092
Extractable Petroleum Hydrocarbons								
C8-C10 Aliphatics	31.5	P3	mg/kg dry	6.07	1	07/02/10 01:52	NWTPH EPH	10F4804
C8-C10 Aromatics	ND	P3	mg/kg dry	6.07	1	07/02/10 02:21	NWTPH EPH	10F4804

Client AMEC Earth & Environmental (13993)
600 University Street, Suite 1020
Seattle, WA 98101
Attn Leah Vigoren

Work Order: NTF2651
Project Name: Everett Terminal(46108) - AMEC
Project Number: [none]
Received: 06/26/10 08:30

ANALYTICAL REPORT

Analyte	Result	Flag	Units	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
Sample ID: NTF2651-01 (AB5-5 - Soil) - cont. Sampled: 06/25/10 08:00								
Extractable Petroleum Hydrocarbons - cont.								
>C10 to C12 Ali	129	P3	mg/kg dry	30.3	5	07/02/10 21:24	NWTPH EPH	10F4804
>C10 to C12 Aro	38.8	P3	mg/kg dry	6.07	1	07/02/10 02:21	NWTPH EPH	10F4804
>C12 to C16 Ali	ND	P3	mg/kg dry	303	50	07/02/10 20:55	NWTPH EPH	10F4804
>C12 to C16 Aro	475	P3	mg/kg dry	121	20	07/02/10 21:54	NWTPH EPH	10F4804
>C16 to C21 Ali	422	P3	mg/kg dry	303	50	07/02/10 20:55	NWTPH EPH	10F4804
>C16 to C21 Aro	430	P3	mg/kg dry	121	20	07/02/10 21:54	NWTPH EPH	10F4804
>C21 to C34 Ali	148	P3	mg/kg dry	6.07	1	07/02/10 01:52	NWTPH EPH	10F4804
>C21 to C34 Aro	70.1	P3	mg/kg dry	30.3	5	07/02/10 22:53	NWTPH EPH	10F4804
Surr: o-Terphenyl (60-140%)	240 %	ZX				07/02/10 02:21	NWTPH EPH	10F4804
Surr: 2-Fluorobiphenyl (60-140%)	107 %					07/02/10 02:21	NWTPH EPH	10F4804
Surr: 2-Bromonaphthalene (60-140%)	178 %	ZX				07/02/10 02:21	NWTPH EPH	10F4804
Surr: 1-Chlorooctadecane (60-140%)	109 %					07/02/10 01:52	NWTPH EPH	10F4804
Purgeable Petroleum Hydrocarbons								
C5 - C6 Aliphatic Hydrocarbons	ND	P3	mg/kg dry	5.76	50	07/04/10 00:29	NWTPH VPH	10G0550
>C6 to C8 Ali	10.4	P3	mg/kg dry	5.76	50	07/04/10 00:29	NWTPH VPH	10G0550
>C8 to C10 Ali	17.3	P3	mg/kg dry	5.76	50	07/04/10 00:29	NWTPH VPH	10G0550
>C10 to C12 Ali	61.2	M8, P3	mg/kg dry	57.6	500	07/04/10 21:41	NWTPH VPH	10G0603
>C8 to C10 Aro	13.0	P3	mg/kg dry	5.76	50	07/04/10 00:29	NWTPH VPH	10G0550
>C10 to C12 Aro	21.2	M7, P3	mg/kg dry	11.5	100	07/06/10 16:32	NWTPH VPH	10G0785
>C12 to C13 Aro	43.8	P3	mg/kg dry	5.76	50	07/04/10 00:29	NWTPH VPH	10G0550
GRO (C4-C12) NW	131	P3	mg/kg dry	6.47	50	06/30/10 19:27	NWTPH-Gx	10F5298
Surr: 2,5-Dibromotoluene (FID) (70-130%)	55 %	ZX				07/04/10 00:29	NWTPH VPH	10G0550
Surr: 2,5-Dibromotoluene (FID) (70-130%)	78 %					07/04/10 21:41	NWTPH VPH	10G0603
Surr: a,a,a-Trifluorotoluene (50-150%)	105 %					06/30/10 19:27	NWTPH-Gx	10F5298
Surr: 2,5-Dibromotoluene (PID) (70-130%)	59 %	ZX				07/04/10 00:29	NWTPH VPH	10G0550
Surr: 2,5-Dibromotoluene (PID) (70-130%)	99 %					07/04/10 21:41	NWTPH VPH	10G0603
Surr: 2,5-Dibromotoluene (PID) (70-130%)	85 %					07/06/10 16:32	NWTPH VPH	10G0785
Extractable Petroleum Hydrocarbons with Silica Gel Treatment								
Diesel	8840	P3, QP7	mg/kg dry	2060	500	07/13/10 15:58	NWTPH-Dx	10F4974
Motor Oil	11000	P3, QP7a	mg/kg dry	411	100	07/09/10 21:35	NWTPH-Dx	10F4974
Surr: o-Terphenyl (50-150%)	*	Z3				07/09/10 21:35	NWTPH-Dx	10F4974
Sample ID: NTF2651-02 (AB5-22 - Soil) Sampled: 06/25/10 09:30								
General Chemistry Parameters								
% Dry Solids	82.4		%	0.500	1	06/30/10 09:30	SW-846	10F5107
Volatile Organic Compounds by EPA Method 8260B								
Benzene	ND	P3	mg/kg dry	0.0969	50	07/03/10 18:22	SW846 8260B	10G0381
Ethylbenzene	ND	P3	mg/kg dry	0.0969	50	07/03/10 18:22	SW846 8260B	10G0381
Methyl tert-Butyl Ether	ND	P3	mg/kg dry	0.0969	50	07/03/10 18:22	SW846 8260B	10G0381
Toluene	ND	P3	mg/kg dry	0.0969	50	07/03/10 18:22	SW846 8260B	10G0381
Xylenes, total	ND	P3	mg/kg dry	0.242	50	07/03/10 18:22	SW846 8260B	10G0381
Surr: 1,2-Dichloroethane-d4 (67-138%)	85 %					07/03/10 18:22	SW846 8260B	10G0381
Surr: Dibromofluoromethane (75-125%)	81 %					07/03/10 18:22	SW846 8260B	10G0381

Client AMEC Earth & Environmental (13993)
 600 University Street, Suite 1020
 Seattle, WA 98101
 Attn Leah Vigoren

Work Order: NTF2651
 Project Name: Everett Terminal(46108) - AMEC
 Project Number: [none]
 Received: 06/26/10 08:30

ANALYTICAL REPORT

Analyte	Result	Flag	Units	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
Sample ID: NTF2651-02 (AB5-22 - Soil) - cont. Sampled: 06/25/10 09:30								
Volatile Organic Compounds by EPA Method 8260B - cont.								
Surr: Toluene-d8 (76-129%)	104 %					07/03/10 18:22	SW846 8260B	10G0381
Surr: 4-Bromofluorobenzene (67-147%)	101 %					07/03/10 18:22	SW846 8260B	10G0381
Polyaromatic Hydrocarbons by EPA 8270D SIM								
Acenaphthene	ND	P3	mg/kg dry	0.00394	1	07/08/10 07:04	SW846 8270D SIM	10G0092
Acenaphthylene	ND	P3	mg/kg dry	0.00394	1	07/08/10 07:04	SW846 8270D SIM	10G0092
Anthracene	ND	P3	mg/kg dry	0.00394	1	07/08/10 07:04	SW846 8270D SIM	10G0092
Benzo (a) anthracene	ND	P3	mg/kg dry	0.00394	1	07/08/10 07:04	SW846 8270D SIM	10G0092
Benzo (a) pyrene	ND	P3	mg/kg dry	0.00394	1	07/08/10 07:04	SW846 8270D SIM	10G0092
Benzo (b) fluoranthene	ND	P3	mg/kg dry	0.00394	1	07/08/10 07:04	SW846 8270D SIM	10G0092
Benzo (g,h,i) perylene	ND	P3	mg/kg dry	0.00394	1	07/08/10 07:04	SW846 8270D SIM	10G0092
Benzo (k) fluoranthene	ND	P3	mg/kg dry	0.00394	1	07/08/10 07:04	SW846 8270D SIM	10G0092
Chrysene	ND	P3	mg/kg dry	0.00394	1	07/08/10 07:04	SW846 8270D SIM	10G0092
Dibenz (a,h) anthracene	ND	P3	mg/kg dry	0.00394	1	07/08/10 07:04	SW846 8270D SIM	10G0092
Fluoranthene	ND	P3	mg/kg dry	0.00394	1	07/08/10 07:04	SW846 8270D SIM	10G0092
Fluorene	ND	P3	mg/kg dry	0.00394	1	07/08/10 07:04	SW846 8270D SIM	10G0092
Indeno (1,2,3-cd) pyrene	ND	P3	mg/kg dry	0.00394	1	07/08/10 07:04	SW846 8270D SIM	10G0092
1-Methylnaphthalene	ND	P3	mg/kg dry	0.00394	1	07/08/10 07:04	SW846 8270D SIM	10G0092
2-Methylnaphthalene	ND	P3	mg/kg dry	0.00394	1	07/08/10 07:04	SW846 8270D SIM	10G0092
Naphthalene	ND	P3	mg/kg dry	0.00394	1	07/08/10 07:04	SW846 8270D SIM	10G0092
Phenanthrene	0.00433	P3	mg/kg dry	0.00394	1	07/08/10 07:04	SW846 8270D SIM	10G0092
Pyrene	ND	P3	mg/kg dry	0.00394	1	07/08/10 07:04	SW846 8270D SIM	10G0092
Surr: Nitrobenzene-d5 (17-120%)	61 %					07/08/10 07:04	W846 8270D SIA	10G0092
Surr: 2-Fluorobiphenyl (14-120%)	66 %					07/08/10 07:04	W846 8270D SIA	10G0092
Surr: Terphenyl-d14 (18-120%)	79 %					07/08/10 07:04	W846 8270D SIA	10G0092
Purgeable Petroleum Hydrocarbons								
GRO (C4-C12) NW	ND	P3	mg/kg dry	5.41	50	06/30/10 19:45	NWTPH-Gx	10F5298
Surr: a,a,a-Trifluorotoluene (50-150%)	93 %					06/30/10 19:45	NWTPH-Gx	10F5298
Extractable Petroleum Hydrocarbons with Silica Gel Treatment								
Diesel	ND	P3	mg/kg dry	4.01	1	07/08/10 19:22	NWTPH-Dx	10F4974
Motor Oil	5.45	P3, QP5	mg/kg dry	4.01	1	07/08/10 19:22	NWTPH-Dx	10F4974
Surr: o-Terphenyl (50-150%)	79 %					07/08/10 19:22	NWTPH-Dx	10F4974

Client AMEC Earth & Environmental (13993)
 600 University Street, Suite 1020
 Seattle, WA 98101
 Attn Leah Vigoren

Work Order: NTF2651
 Project Name: Everett Terminal(46108) - AMEC
 Project Number: [none]
 Received: 06/26/10 08:30

ANALYTICAL REPORT

Analyte	Result	Flag	Units	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
Sample ID: NTF2651-04 (MWA6-12 - Soil) Sampled: 06/25/10 12:15								
General Chemistry Parameters								
% Dry Solids	76.2		%	0.500	1	06/30/10 09:30	SW-846	10F5107
Volatile Organic Compounds by EPA Method 8260B								
Benzene	ND	P3	mg/kg dry	0.00225	1	07/03/10 18:52	SW846 8260B	10G0381
Ethylbenzene	ND	P3	mg/kg dry	0.00225	1	07/03/10 18:52	SW846 8260B	10G0381
Methyl tert-Butyl Ether	ND	P3	mg/kg dry	0.00225	1	07/03/10 18:52	SW846 8260B	10G0381
Toluene	ND	P3	mg/kg dry	0.00225	1	07/03/10 18:52	SW846 8260B	10G0381
Xylenes, total	ND	P3	mg/kg dry	0.00563	1	07/03/10 18:52	SW846 8260B	10G0381
<i>Surr: 1,2-Dichloroethane-d4 (67-138%)</i>	88 %					07/03/10 18:52	SW846 8260B	10G0381
<i>Surr: Dibromofluoromethane (75-125%)</i>	88 %					07/03/10 18:52	SW846 8260B	10G0381
<i>Surr: Toluene-d8 (76-129%)</i>	106 %					07/03/10 18:52	SW846 8260B	10G0381
<i>Surr: 4-Bromofluorobenzene (67-147%)</i>	110 %					07/03/10 18:52	SW846 8260B	10G0381
Polyaromatic Hydrocarbons by EPA 8270D SIM								
Acenaphthene	ND	P3	mg/kg dry	0.00435	1	07/08/10 07:27	SW846 8270D SIM	10G0092
Acenaphthylene	ND	P3	mg/kg dry	0.00435	1	07/08/10 07:27	SW846 8270D SIM	10G0092
Anthracene	0.00479	P3	mg/kg dry	0.00435	1	07/08/10 07:27	SW846 8270D SIM	10G0092
Benzo (a) anthracene	0.00871	P3	mg/kg dry	0.00435	1	07/08/10 07:27	SW846 8270D SIM	10G0092
Benzo (a) pyrene	0.00522	P3	mg/kg dry	0.00435	1	07/08/10 07:27	SW846 8270D SIM	10G0092
Benzo (b) fluoranthene	0.0100	P3	mg/kg dry	0.00435	1	07/08/10 07:27	SW846 8270D SIM	10G0092
Benzo (g,h,i) perylene	0.00435	P3	mg/kg dry	0.00435	1	07/08/10 07:27	SW846 8270D SIM	10G0092
Benzo (k) fluoranthene	0.00740	P3	mg/kg dry	0.00435	1	07/08/10 07:27	SW846 8270D SIM	10G0092
Chrysene	0.0135	P3	mg/kg dry	0.00435	1	07/08/10 07:27	SW846 8270D SIM	10G0092
Dibenz (a,h) anthracene	ND	P3	mg/kg dry	0.00435	1	07/08/10 07:27	SW846 8270D SIM	10G0092
Fluoranthene	0.0344	P3	mg/kg dry	0.00435	1	07/08/10 07:27	SW846 8270D SIM	10G0092
Fluorene	0.00435	P3	mg/kg dry	0.00435	1	07/08/10 07:27	SW846 8270D SIM	10G0092
Indeno (1,2,3-cd) pyrene	ND	P3	mg/kg dry	0.00435	1	07/08/10 07:27	SW846 8270D SIM	10G0092
1-Methylnaphthalene	ND	P3	mg/kg dry	0.00435	1	07/08/10 07:27	SW846 8270D SIM	10G0092
2-Methylnaphthalene	ND	P3	mg/kg dry	0.00435	1	07/08/10 07:27	SW846 8270D SIM	10G0092
Naphthalene	ND	P3	mg/kg dry	0.00435	1	07/08/10 07:27	SW846 8270D SIM	10G0092
Phenanthrene	0.0170	P3	mg/kg dry	0.00435	1	07/08/10 07:27	SW846 8270D SIM	10G0092
Pyrene	0.0292	P3	mg/kg dry	0.00435	1	07/08/10 07:27	SW846 8270D SIM	10G0092
<i>Surr: Nitrobenzene-d5 (17-120%)</i>	34 %					07/08/10 07:27	W846 8270D SIA	10G0092
<i>Surr: 2-Fluorobiphenyl (14-120%)</i>	29 %					07/08/10 07:27	W846 8270D SIA	10G0092
<i>Surr: Terphenyl-d14 (18-120%)</i>	40 %					07/08/10 07:27	W846 8270D SIA	10G0092
Purgeable Petroleum Hydrocarbons								
GRO (C4-C12) NW	ND	P3	mg/kg dry	5.74	50	06/30/10 20:02	NWTPH-Gx	10F5298
<i>Surr: a,a,a-Trifluorotoluene (50-150%)</i>	99 %					06/30/10 20:02	NWTPH-Gx	10F5298
Extractable Petroleum Hydrocarbons with Silica Gel Treatment								
Diesel	23.8	P3, QP5	mg/kg dry	5.18	1	07/13/10 00:03	NWTPH-Dx	10G1494
Motor Oil	119	P3, QP7a	mg/kg dry	5.18	1	07/13/10 00:03	NWTPH-Dx	10G1494
<i>Surr: o-Terphenyl (50-150%)</i>	53 %					07/13/10 00:03	NWTPH-Dx	10G1494

Sample ID: NTF2651-05 (MWA6-20 - Soil) Sampled: 06/25/10 12:30

Client AMEC Earth & Environmental (13993)
600 University Street, Suite 1020
Seattle, WA 98101
Attn Leah Vigoren

Work Order: NTF2651
Project Name: Everett Terminal(46108) - AMEC
Project Number: [none]
Received: 06/26/10 08:30

ANALYTICAL REPORT

Analyte	Result	Flag	Units	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
Sample ID: NTF2651-05 (MWA6-20 - Soil) - cont. Sampled: 06/25/10 12:30								
General Chemistry Parameters								
% Dry Solids	69.4		%	0.500	1	06/30/10 09:30	SW-846	10F5107
Volatile Organic Compounds by EPA Method 8260B								
Benzene	ND	P3	mg/kg dry	0.00318	1	07/05/10 16:17	SW846 8260B	10G0618
Ethylbenzene	ND	P3	mg/kg dry	0.00318	1	07/05/10 16:17	SW846 8260B	10G0618
Methyl tert-Butyl Ether	ND	P3	mg/kg dry	0.00318	1	07/05/10 16:17	SW846 8260B	10G0618
Toluene	ND	P3	mg/kg dry	0.00318	1	07/05/10 16:17	SW846 8260B	10G0618
Xylenes, total	ND	P3	mg/kg dry	0.00795	1	07/05/10 16:17	SW846 8260B	10G0618
<i>Surr: 1,2-Dichloroethane-d4 (67-138%)</i>	98 %					07/05/10 16:17	SW846 8260B	10G0618
<i>Surr: Dibromofluoromethane (75-125%)</i>	96 %					07/05/10 16:17	SW846 8260B	10G0618
<i>Surr: Toluene-d8 (76-129%)</i>	107 %					07/05/10 16:17	SW846 8260B	10G0618
<i>Surr: 4-Bromofluorobenzene (67-147%)</i>	120 %					07/05/10 16:17	SW846 8260B	10G0618
Polyaromatic Hydrocarbons by EPA 8270D SIM								
Acenaphthene	0.0206	P3	mg/kg dry	0.00468	1	07/08/10 07:49	SW846 8270D SIM	10G0092
Acenaphthylene	0.0164	P3	mg/kg dry	0.00468	1	07/08/10 07:49	SW846 8270D SIM	10G0092
Anthracene	0.0220	P3	mg/kg dry	0.00468	1	07/08/10 07:49	SW846 8270D SIM	10G0092
Benzo (a) anthracene	0.0744	P3	mg/kg dry	0.00468	1	07/08/10 07:49	SW846 8270D SIM	10G0092
Benzo (a) pyrene	0.0861	P3	mg/kg dry	0.00468	1	07/08/10 07:49	SW846 8270D SIM	10G0092
Benzo (b) fluoranthene	0.0796	P3	mg/kg dry	0.00468	1	07/08/10 07:49	SW846 8270D SIM	10G0092
Benzo (g,h,i) perylene	0.0585	P3	mg/kg dry	0.00468	1	07/08/10 07:49	SW846 8270D SIM	10G0092
Benzo (k) fluoranthene	0.0636	P3	mg/kg dry	0.00468	1	07/08/10 07:49	SW846 8270D SIM	10G0092
Chrysene	0.0870	P3	mg/kg dry	0.00468	1	07/08/10 07:49	SW846 8270D SIM	10G0092
Dibenz (a,h) anthracene	0.0154	P3	mg/kg dry	0.00468	1	07/08/10 07:49	SW846 8270D SIM	10G0092
Fluoranthene	0.169	P3	mg/kg dry	0.00468	1	07/08/10 07:49	SW846 8270D SIM	10G0092
Fluorene	0.0159	P3	mg/kg dry	0.00468	1	07/08/10 07:49	SW846 8270D SIM	10G0092
Indeno (1,2,3-cd) pyrene	0.0505	P3	mg/kg dry	0.00468	1	07/08/10 07:49	SW846 8270D SIM	10G0092
1-Methylnaphthalene	0.0117	P3	mg/kg dry	0.00468	1	07/08/10 07:49	SW846 8270D SIM	10G0092
2-Methylnaphthalene	0.0187	P3	mg/kg dry	0.00468	1	07/08/10 07:49	SW846 8270D SIM	10G0092
Naphthalene	0.0239	P3	mg/kg dry	0.00468	1	07/08/10 07:49	SW846 8270D SIM	10G0092
Phenanthrene	0.0950	P3	mg/kg dry	0.00468	1	07/08/10 07:49	SW846 8270D SIM	10G0092
Pyrene	0.199	P3	mg/kg dry	0.00468	1	07/08/10 07:49	SW846 8270D SIM	10G0092
<i>Surr: Nitrobenzene-d5 (17-120%)</i>	79 %					07/08/10 07:49	W846 8270D SIA	10G0092
<i>Surr: 2-Fluorobiphenyl (14-120%)</i>	61 %					07/08/10 07:49	W846 8270D SIA	10G0092
<i>Surr: Terphenyl-d14 (18-120%)</i>	61 %					07/08/10 07:49	W846 8270D SIA	10G0092
Purgeable Petroleum Hydrocarbons								
GRO (C4-C12) NW	ND	P3	mg/kg dry	6.29	50	06/30/10 20:20	NWTPH-Gx	10F5298
<i>Surr: a,a,a-Trifluorotoluene (50-150%)</i>	94 %					06/30/10 20:20	NWTPH-Gx	10F5298
Extractable Petroleum Hydrocarbons with Silica Gel Treatment								
Diesel	273	P3, QP6	mg/kg dry	23.6	5	07/10/10 22:49	NWTPH-Dx	10F4974
Motor Oil	482	P3, QP7a	mg/kg dry	23.6	5	07/10/10 22:49	NWTPH-Dx	10F4974
<i>Surr: o-Terphenyl (50-150%)</i>	94 %					07/10/10 22:49	NWTPH-Dx	10F4974

Client AMEC Earth & Environmental (13993)
 600 University Street, Suite 1020
 Seattle, WA 98101
 Attn Leah Vigoren

Work Order: NTF2651
 Project Name: Everett Terminal(46108) - AMEC
 Project Number: [none]
 Received: 06/26/10 08:30

SAMPLE EXTRACTION DATA

Parameter	Batch	Lab Number	Wt/Vol Extracted	Extracted Vol	Date	Analyst	Extraction Method
Extractable Petroleum Hydrocarbons							
NWTPH EPH	10F4804	NTF2651-01	10.30	2.00	06/30/10 06:50	CAG	MADEP soil
NWTPH EPH	10F4804	NTF2651-01RE1	10.30	2.00	06/30/10 06:50	CAG	MADEP soil
NWTPH EPH	10F4804	NTF2651-01RE2	10.30	2.00	06/30/10 06:50	CAG	MADEP soil
NWTPH EPH	10F4804	NTF2651-01RE3	10.30	2.00	06/30/10 06:50	CAG	MADEP soil
Extractable Petroleum Hydrocarbons with Silica Gel Treatment							
NWTPH-Dx	10F4974	NTF2651-01	30.41	1.00	07/06/10 08:30	SAS	EPA 3550B
NWTPH-Dx	10F4974	NTF2651-01RE1	30.41	1.00	07/06/10 08:30	SAS	EPA 3550B
NWTPH-Dx	10F4974	NTF2651-01RE2	30.41	1.00	07/06/10 08:30	SAS	EPA 3550B
NWTPH-Dx	10F4974	NTF2651-01RE3	30.41	1.00	07/06/10 08:30	SAS	EPA 3550B
NWTPH-Dx	10F4974	NTF2651-01RE4	30.41	1.00	07/06/10 08:30	SAS	EPA 3550B
NWTPH-Dx	10F4974	NTF2651-02	30.27	1.00	07/06/10 08:30	SAS	EPA 3550B
NWTPH-Dx	10F4974	NTF2651-04	30.24	1.00	07/06/10 08:30	SAS	EPA 3550B
NWTPH-Dx	10G1494	NTF2651-04RE1	25.33	1.00	07/10/10 10:20	CAG	EPA 3550B
NWTPH-Dx	10F4974	NTF2651-05	30.53	1.00	07/06/10 08:30	SAS	EPA 3550B
NWTPH-Dx	10F4974	NTF2651-05RE1	30.53	1.00	07/06/10 08:30	SAS	EPA 3550B
Polyaromatic Hydrocarbons by EPA 8270D SIM							
SW846 8270D SIM	10G0092	NTF2651-01	30.23	1.00	07/05/10 11:05	DMG	EPA 3550C
SW846 8270D SIM	10G0092	NTF2651-02	30.81	1.00	07/05/10 11:05	DMG	EPA 3550C
SW846 8270D SIM	10G0092	NTF2651-04	30.15	1.00	07/05/10 11:05	DMG	EPA 3550C
SW846 8270D SIM	10G0092	NTF2651-05	30.79	1.00	07/05/10 11:05	DMG	EPA 3550C
Purgeable Petroleum Hydrocarbons							
NWTPH VPH	10G0550	NTF2651-01	5.43	5.00	06/25/10 08:00	MWS	NWTPH VPH
NWTPH VPH	10G0603	NTF2651-01RE1	5.43	5.00	06/25/10 08:00	MWS	NWTPH VPH
NWTPH VPH	10G0603	NTF2651-01RE2	5.43	5.00	06/25/10 08:00	MWS	NWTPH VPH
NWTPH VPH	10G0785	NTF2651-01RE3	5.43	5.00	07/04/10 13:09	MWS	NWTPH VPH
NWTPH-Gx	10F5298	NTF2651-01	4.83	5.00	06/25/10 08:00	CHH	EPA 5035A (GC)
NWTPH-Gx	10F5298	NTF2651-02	5.61	5.00	06/25/10 09:30	CHH	EPA 5035A (GC)
NWTPH-Gx	10F5298	NTF2651-04	5.72	5.00	06/25/10 12:15	CHH	EPA 5035A (GC)
NWTPH-Gx	10F5298	NTF2651-05	5.73	5.00	06/25/10 12:30	CHH	EPA 5035A (GC)
Volatile Organic Compounds by EPA Method 8260B							
SW846 8260B	10G0244	NTF2651-01	5.03	5.00	06/25/10 08:00	CHH	EPA 5035
SW846 8260B	10G0244	NTF2651-01	5.03	5.00	06/25/10 08:00	CHH	EPA 5035
SW846 8260B	10G0244	NTF2651-01	5.03	5.00	06/25/10 08:00	CHH	EPA 5035
SW846 8260B	10G0244	NTF2651-01	5.03	5.00	06/25/10 08:00	CHH	EPA 5035
SW846 8260B	10G0381	NTF2651-01RE1	5.47	5.00	07/02/10 11:42	CHH	EPA 5035
SW846 8260B	10G0381	NTF2651-01RE1	5.47	5.00	07/02/10 11:42	CHH	EPA 5035
SW846 8260B	10G0381	NTF2651-01RE1	5.47	5.00	07/02/10 11:42	CHH	EPA 5035
SW846 8260B	10G0381	NTF2651-01RE1	5.47	5.00	07/02/10 11:42	CHH	EPA 5035
SW846 8260B	10G0381	NTF2651-01RE1	5.47	5.00	07/02/10 11:42	CHH	EPA 5035
SW846 8260B	10G0618	NTF2651-01RE2	5.08	5.00	07/02/10 11:42	CHH	EPA 5035
SW846 8260B	10G0244	NTF2651-02	5.49	5.00	06/25/10 09:30	CHH	EPA 5035
SW846 8260B	10G0381	NTF2651-02RE1	6.26	5.00	07/02/10 11:42	CHH	EPA 5035
SW846 8260B	10G0244	NTF2651-04	5.25	5.00	06/25/10 12:15	CHH	EPA 5035
SW846 8260B	10G0381	NTF2651-04RE1	5.83	5.00	07/02/10 11:42	CHH	EPA 5035
SW846 8260B	10G0244	NTF2651-05	4.89	5.00	06/25/10 12:30	CHH	EPA 5035

Client AMEC Earth & Environmental (13993)
600 University Street, Suite 1020
Seattle, WA 98101
Attn Leah Vigoren

Work Order: NTF2651
Project Name: Everett Terminal(46108) - AMEC
Project Number: [none]
Received: 06/26/10 08:30

SAMPLE EXTRACTION DATA

Parameter	Batch	Lab Number	Wt/Vol Extracted	Extracted Vol	Date	Analyst	Extraction Method
SW846 8260B	10G0618	NTF2651-05RE1	4.53	5.00	07/02/10 11:42	CHH	EPA 5035

Client AMEC Earth & Environmental (13993)
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 Seattle, WA 98101
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PROJECT QUALITY CONTROL DATA
Blank

Analyte	Blank Value	Q	Units	Q.C. Batch	Lab Number	Analyzed Date/Time
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Volatile Organic Compounds by EPA Method 8260B

10G0381-BLK1

1,2-Dibromoethane (EDB)	<0.000670		mg/kg wet	10G0381	10G0381-BLK1	07/03/10 15:51
1,2-Dichloroethane	<0.000510		mg/kg wet	10G0381	10G0381-BLK1	07/03/10 15:51
Benzene	<0.00110		mg/kg wet	10G0381	10G0381-BLK1	07/03/10 15:51
Hexane	<0.00110		mg/kg wet	10G0381	10G0381-BLK1	07/03/10 15:51
Ethylbenzene	<0.000980		mg/kg wet	10G0381	10G0381-BLK1	07/03/10 15:51
Methyl tert-Butyl Ether	<0.000670		mg/kg wet	10G0381	10G0381-BLK1	07/03/10 15:51
Toluene	<0.000890		mg/kg wet	10G0381	10G0381-BLK1	07/03/10 15:51
Xylenes, total	<0.00190		mg/kg wet	10G0381	10G0381-BLK1	07/03/10 15:51
Surrogate: 1,2-Dichloroethane-d4	91%			10G0381	10G0381-BLK1	07/03/10 15:51
Surrogate: Dibromofluoromethane	93%			10G0381	10G0381-BLK1	07/03/10 15:51
Surrogate: Toluene-d8	102%			10G0381	10G0381-BLK1	07/03/10 15:51
Surrogate: 4-Bromofluorobenzene	103%			10G0381	10G0381-BLK1	07/03/10 15:51

10G0618-BLK1

Benzene	<0.00110		mg/kg wet	10G0618	10G0618-BLK1	07/05/10 15:16
Hexane	<0.00110		mg/kg wet	10G0618	10G0618-BLK1	07/05/10 15:16
Ethylbenzene	<0.000980		mg/kg wet	10G0618	10G0618-BLK1	07/05/10 15:16
Methyl tert-Butyl Ether	<0.000670		mg/kg wet	10G0618	10G0618-BLK1	07/05/10 15:16
Toluene	<0.000890		mg/kg wet	10G0618	10G0618-BLK1	07/05/10 15:16
Xylenes, total	<0.00190		mg/kg wet	10G0618	10G0618-BLK1	07/05/10 15:16
Surrogate: 1,2-Dichloroethane-d4	100%			10G0618	10G0618-BLK1	07/05/10 15:16
Surrogate: Dibromofluoromethane	100%			10G0618	10G0618-BLK1	07/05/10 15:16
Surrogate: Toluene-d8	100%			10G0618	10G0618-BLK1	07/05/10 15:16
Surrogate: 4-Bromofluorobenzene	109%			10G0618	10G0618-BLK1	07/05/10 15:16

Polyaromatic Hydrocarbons by EPA 8270D SIM

10G0092-BLK1

Acenaphthene	<0.000700		mg/kg wet	10G0092	10G0092-BLK1	07/08/10 01:30
Acenaphthylene	<0.000600		mg/kg wet	10G0092	10G0092-BLK1	07/08/10 01:30
Anthracene	<0.000500		mg/kg wet	10G0092	10G0092-BLK1	07/08/10 01:30
Benzo (a) anthracene	<0.000600		mg/kg wet	10G0092	10G0092-BLK1	07/08/10 01:30
Benzo (a) pyrene	<0.000600		mg/kg wet	10G0092	10G0092-BLK1	07/08/10 01:30
Benzo (b) fluoranthene	<0.000700		mg/kg wet	10G0092	10G0092-BLK1	07/08/10 01:30
Benzo (g,h,i) perylene	<0.000700		mg/kg wet	10G0092	10G0092-BLK1	07/08/10 01:30
Benzo (k) fluoranthene	<0.000700		mg/kg wet	10G0092	10G0092-BLK1	07/08/10 01:30
Chrysene	<0.00100		mg/kg wet	10G0092	10G0092-BLK1	07/08/10 01:30
Dibenz (a,h) anthracene	<0.000900		mg/kg wet	10G0092	10G0092-BLK1	07/08/10 01:30
Fluoranthene	<0.000500		mg/kg wet	10G0092	10G0092-BLK1	07/08/10 01:30
Fluorene	<0.00100		mg/kg wet	10G0092	10G0092-BLK1	07/08/10 01:30
Indeno (1,2,3-cd) pyrene	<0.000600		mg/kg wet	10G0092	10G0092-BLK1	07/08/10 01:30
1-Methylnaphthalene	<0.000600		mg/kg wet	10G0092	10G0092-BLK1	07/08/10 01:30

Client AMEC Earth & Environmental (13993)
 600 University Street, Suite 1020
 Seattle, WA 98101
 Attn Leah Vigoren

Work Order: NTF2651
 Project Name: Everett Terminal(46108) - AMEC
 Project Number: [none]
 Received: 06/26/10 08:30

PROJECT QUALITY CONTROL DATA
Blank - Cont.

Analyte	Blank Value	Q	Units	Q.C. Batch	Lab Number	Analyzed Date/Time
Polyaromatic Hydrocarbons by EPA 8270D SIM						
10G0092-BLK1						
2-Methylnaphthalene	<0.000800		mg/kg wet	10G0092	10G0092-BLK1	07/08/10 01:30
Naphthalene	<0.000600		mg/kg wet	10G0092	10G0092-BLK1	07/08/10 01:30
Phenanthrene	<0.000800		mg/kg wet	10G0092	10G0092-BLK1	07/08/10 01:30
Pyrene	<0.000800		mg/kg wet	10G0092	10G0092-BLK1	07/08/10 01:30
Surrogate: Nitrobenzene-d5	76%			10G0092	10G0092-BLK1	07/08/10 01:30
Surrogate: 2-Fluorobiphenyl	72%			10G0092	10G0092-BLK1	07/08/10 01:30
Surrogate: Terphenyl-d14	83%			10G0092	10G0092-BLK1	07/08/10 01:30
Extractable Petroleum Hydrocarbons						
10F4804-BLK1						
C8-C10 Aliphatics	<1.90		mg/kg wet	10F4804	10F4804-BLK1	07/01/10 18:01
>C10 to C12 Ali	<1.00		mg/kg wet	10F4804	10F4804-BLK1	07/01/10 18:01
>C10 to C12 Aro	<0.600		mg/kg wet	10F4804	10F4804-BLK1	07/01/10 18:31
>C12 to C16 Ali	<1.40		mg/kg wet	10F4804	10F4804-BLK1	07/01/10 18:01
>C12 to C16 Aro	<1.70		mg/kg wet	10F4804	10F4804-BLK1	07/01/10 18:31
>C16 to C21 Ali	<2.00		mg/kg wet	10F4804	10F4804-BLK1	07/01/10 18:01
>C16 to C21 Aro	<3.10		mg/kg wet	10F4804	10F4804-BLK1	07/01/10 18:31
>C21 to C34 Ali	<3.20		mg/kg wet	10F4804	10F4804-BLK1	07/01/10 18:01
>C21 to C34 Aro	<4.40		mg/kg wet	10F4804	10F4804-BLK1	07/01/10 18:31
Surrogate: o-Terphenyl	111%			10F4804	10F4804-BLK1	07/01/10 18:31
Surrogate: 2-Fluorobiphenyl	112%			10F4804	10F4804-BLK1	07/01/10 18:31
Surrogate: 2-Bromonaphthalene	108%			10F4804	10F4804-BLK1	07/01/10 18:31
Surrogate: 1-Chlorooctadecane	105%			10F4804	10F4804-BLK1	07/01/10 18:01
Purgeable Petroleum Hydrocarbons						
10F5298-BLK1						
GRO (C4-C12) NW	1.10		mg/kg wet	10F5298	10F5298-BLK1	06/30/10 16:09
Surrogate: a,a,a-Trifluorotoluene	96%			10F5298	10F5298-BLK1	06/30/10 16:09
10F5298-BLK2						
GRO (C4-C12) NW	1.70		mg/kg wet	10F5298	10F5298-BLK2	06/30/10 16:27
Surrogate: a,a,a-Trifluorotoluene	97%			10F5298	10F5298-BLK2	06/30/10 16:27
10G0550-BLK1						
Benzene	<0.0200		mg/kg wet	10G0550	10G0550-BLK1	07/03/10 16:14
Ethylbenzene	<0.0250		mg/kg wet	10G0550	10G0550-BLK1	07/03/10 16:14
Methyl tert-Butyl Ether	<0.0350		mg/kg wet	10G0550	10G0550-BLK1	07/03/10 16:14
Naphthalene	0.149		mg/kg wet	10G0550	10G0550-BLK1	07/03/10 16:14
Toluene	<0.0250		mg/kg wet	10G0550	10G0550-BLK1	07/03/10 16:14
Xylenes, total	<0.0950		mg/kg wet	10G0550	10G0550-BLK1	07/03/10 16:14
C5 - C6 Aliphatic Hydrocarbons	<1.00		mg/kg wet	10G0550	10G0550-BLK1	07/03/10 16:14

Client AMEC Earth & Environmental (13993)
 600 University Street, Suite 1020
 Seattle, WA 98101
 Attn Leah Vigoren

Work Order: NTF2651
 Project Name: Everett Terminal(46108) - AMEC
 Project Number: [none]
 Received: 06/26/10 08:30

PROJECT QUALITY CONTROL DATA
Blank - Cont.

Analyte	Blank Value	Q	Units	Q.C. Batch	Lab Number	Analyzed Date/Time
Purgeable Petroleum Hydrocarbons						
10G0550-BLK1						
>C6 to C8 Ali	<1.50		mg/kg wet	10G0550	10G0550-BLK1	07/03/10 16:14
>C8 to C10 Ali	<5.00		mg/kg wet	10G0550	10G0550-BLK1	07/03/10 16:14
>C10 to C12 Ali	1.75		mg/kg wet	10G0550	10G0550-BLK1	07/03/10 16:14
>C8 to C10 Aro	<2.00		mg/kg wet	10G0550	10G0550-BLK1	07/03/10 16:14
>C10 to C12 Aro	<1.50		mg/kg wet	10G0550	10G0550-BLK1	07/03/10 16:14
>C12 to C13 Aro	<0.500		mg/kg wet	10G0550	10G0550-BLK1	07/03/10 16:14
Surrogate: 2,5-Dibromotoluene (FID)	103%			10G0550	10G0550-BLK1	07/03/10 16:14
Surrogate: 2,5-Dibromotoluene (PID)	109%			10G0550	10G0550-BLK1	07/03/10 16:14
10G0603-BLK1						
Benzene	<0.0200		mg/kg wet	10G0603	10G0603-BLK1	07/04/10 16:44
Ethylbenzene	<0.0250		mg/kg wet	10G0603	10G0603-BLK1	07/04/10 16:44
Methyl tert-Butyl Ether	<0.0350		mg/kg wet	10G0603	10G0603-BLK1	07/04/10 16:44
Naphthalene	0.0618		mg/kg wet	10G0603	10G0603-BLK1	07/04/10 16:44
Toluene	<0.0250		mg/kg wet	10G0603	10G0603-BLK1	07/04/10 16:44
Xylenes, total	<0.0950		mg/kg wet	10G0603	10G0603-BLK1	07/04/10 16:44
C5 - C6 Aliphatic Hydrocarbons	<1.00		mg/kg wet	10G0603	10G0603-BLK1	07/04/10 16:44
>C6 to C8 Ali	<1.50		mg/kg wet	10G0603	10G0603-BLK1	07/04/10 16:44
>C8 to C10 Ali	<5.00		mg/kg wet	10G0603	10G0603-BLK1	07/04/10 16:44
>C10 to C12 Ali	<1.00		mg/kg wet	10G0603	10G0603-BLK1	07/04/10 16:44
>C8 to C10 Aro	<2.00		mg/kg wet	10G0603	10G0603-BLK1	07/04/10 16:44
>C10 to C12 Aro	<1.50		mg/kg wet	10G0603	10G0603-BLK1	07/04/10 16:44
>C12 to C13 Aro	<0.500		mg/kg wet	10G0603	10G0603-BLK1	07/04/10 16:44
Surrogate: 2,5-Dibromotoluene (FID)	113%			10G0603	10G0603-BLK1	07/04/10 16:44
Surrogate: 2,5-Dibromotoluene (PID)	119%			10G0603	10G0603-BLK1	07/04/10 16:44
10G0785-BLK1						
Benzene	<0.0200		mg/kg wet	10G0785	10G0785-BLK1	07/06/10 15:25
Ethylbenzene	<0.0250		mg/kg wet	10G0785	10G0785-BLK1	07/06/10 15:25
Methyl tert-Butyl Ether	<0.0350		mg/kg wet	10G0785	10G0785-BLK1	07/06/10 15:25
Naphthalene	0.144		mg/kg wet	10G0785	10G0785-BLK1	07/06/10 15:25
Toluene	<0.0250		mg/kg wet	10G0785	10G0785-BLK1	07/06/10 15:25
Xylenes, total	<0.0950		mg/kg wet	10G0785	10G0785-BLK1	07/06/10 15:25
C5 - C6 Aliphatic Hydrocarbons	<1.00		mg/kg wet	10G0785	10G0785-BLK1	07/06/10 15:25
>C6 to C8 Ali	<1.50		mg/kg wet	10G0785	10G0785-BLK1	07/06/10 15:25
>C8 to C10 Ali	<5.00		mg/kg wet	10G0785	10G0785-BLK1	07/06/10 15:25
>C10 to C12 Ali	<1.00		mg/kg wet	10G0785	10G0785-BLK1	07/06/10 15:25
>C8 to C10 Aro	<2.00		mg/kg wet	10G0785	10G0785-BLK1	07/06/10 15:25
>C10 to C12 Aro	<1.50		mg/kg wet	10G0785	10G0785-BLK1	07/06/10 15:25
>C12 to C13 Aro	<0.500		mg/kg wet	10G0785	10G0785-BLK1	07/06/10 15:25
Surrogate: 2,5-Dibromotoluene (FID)	112%			10G0785	10G0785-BLK1	07/06/10 15:25
Surrogate: 2,5-Dibromotoluene (PID)	118%			10G0785	10G0785-BLK1	07/06/10 15:25

Client AMEC Earth & Environmental (13993)
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Work Order: NTF2651
 Project Name: Everett Terminal(46108) - AMEC
 Project Number: [none]
 Received: 06/26/10 08:30

PROJECT QUALITY CONTROL DATA
Blank - Cont.

Analyte	Blank Value	Q	Units	Q.C. Batch	Lab Number	Analyzed Date/Time
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Purgeable Petroleum Hydrocarbons

Extractable Petroleum Hydrocarbons with Silica Gel Treatment

10F4974-BLK1

Diesel	<0.583		mg/kg wet	10F4974	10F4974-BLK1	07/08/10 02:02
Motor Oil	1.03		mg/kg wet	10F4974	10F4974-BLK1	07/08/10 02:02
Surrogate: <i>o</i> -Terphenyl	66%			10F4974	10F4974-BLK1	07/08/10 02:02

10G1494-BLK1

Diesel	<0.700		mg/kg wet	10G1494	10G1494-BLK1	07/14/10 12:22
Motor Oil	1.63		mg/kg wet	10G1494	10G1494-BLK1	07/14/10 12:22
Surrogate: <i>o</i> -Terphenyl	94%			10G1494	10G1494-BLK1	07/14/10 12:22

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Work Order: NTF2651
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 Project Number: [none]
 Received: 06/26/10 08:30

PROJECT QUALITY CONTROL DATA

Duplicate

Analyte	Orig. Val.	Duplicate	Q	Units	RPD	Limit	Batch	Sample Duplicated	% Rec.	Analyzed Date/Time
General Chemistry Parameters										
10F5107-DUP1										
% Dry Solids	78.3	77.0		%	2	20	10F5107	NTF2469-01		06/30/10 09:30
Purgeable Petroleum Hydrocarbons										
10F5298-DUP1										
GRO (C4-C12) NW	34.5	30.0		mg/kg dry	14	50	10F5298	NTF2842-01		06/30/10 17:39
<i>Surrogate: a,a,a-Trifluorotoluene</i>		19.8		ug/L			10F5298	NTF2842-01	99%	06/30/10 17:39

Client AMEC Earth & Environmental (13993)
 600 University Street, Suite 1020
 Seattle, WA 98101
 Attn Leah Vigoren

Work Order: NTF2651
 Project Name: Everett Terminal(46108) - AMEC
 Project Number: [none]
 Received: 06/26/10 08:30

PROJECT QUALITY CONTROL DATA LCS

Analyte	Known Val.	Analyzed Val	Q	Units	% Rec.	Target Range	Batch	Analyzed Date/Time
Volatile Organic Compounds by EPA Method 8260B								
10G0381-BS1								
1,2-Dibromoethane (EDB)	50.0	52.3		ug/kg	105%	80 - 131	10G0381	07/03/10 13:50
1,2-Dichloroethane	50.0	39.5		ug/kg	79%	70 - 139	10G0381	07/03/10 13:50
Benzene	50.0	45.2		ug/kg	90%	78 - 126	10G0381	07/03/10 13:50
Hexane	50.0	50.5		ug/kg	101%	55 - 136	10G0381	07/03/10 13:50
Ethylbenzene	50.0	49.8		ug/kg	100%	79 - 130	10G0381	07/03/10 13:50
Methyl tert-Butyl Ether	50.0	51.4		ug/kg	103%	70 - 128	10G0381	07/03/10 13:50
Toluene	50.0	47.6		ug/kg	95%	76 - 126	10G0381	07/03/10 13:50
Xylenes, total	150	151		ug/kg	100%	80 - 130	10G0381	07/03/10 13:50
<i>Surrogate: 1,2-Dichloroethane-d4</i>	50.0	44.2			88%	67 - 138	10G0381	07/03/10 13:50
<i>Surrogate: Dibromofluoromethane</i>	50.0	46.2			92%	75 - 125	10G0381	07/03/10 13:50
<i>Surrogate: Toluene-d8</i>	50.0	50.4			101%	76 - 129	10G0381	07/03/10 13:50
<i>Surrogate: 4-Bromofluorobenzene</i>	50.0	52.0			104%	67 - 147	10G0381	07/03/10 13:50
10G0618-BS1								
Benzene	50.0	46.6		ug/kg	93%	78 - 126	10G0618	07/05/10 13:05
Hexane	50.0	46.0		ug/kg	92%	55 - 136	10G0618	07/05/10 13:05
Ethylbenzene	50.0	50.6		ug/kg	101%	79 - 130	10G0618	07/05/10 13:05
Methyl tert-Butyl Ether	50.0	49.6		ug/kg	99%	70 - 128	10G0618	07/05/10 13:05
Toluene	50.0	49.1		ug/kg	98%	76 - 126	10G0618	07/05/10 13:05
Xylenes, total	150	151		ug/kg	101%	80 - 130	10G0618	07/05/10 13:05
<i>Surrogate: 1,2-Dichloroethane-d4</i>	50.0	49.4			99%	67 - 138	10G0618	07/05/10 13:05
<i>Surrogate: Dibromofluoromethane</i>	50.0	49.8			100%	75 - 125	10G0618	07/05/10 13:05
<i>Surrogate: Toluene-d8</i>	50.0	50.9			102%	76 - 129	10G0618	07/05/10 13:05
<i>Surrogate: 4-Bromofluorobenzene</i>	50.0	49.2			98%	67 - 147	10G0618	07/05/10 13:05
Polyaromatic Hydrocarbons by EPA 8270D SIM								
10G0092-BS1								
Acenaphthene	0.0333	0.0237		mg/kg wet	71%	44 - 120	10G0092	07/08/10 01:53
Acenaphthylene	0.0333	0.0230		mg/kg wet	69%	46 - 127	10G0092	07/08/10 01:53
Anthracene	0.0333	0.0260		mg/kg wet	78%	49 - 139	10G0092	07/08/10 01:53
Benzo (a) anthracene	0.0333	0.0293		mg/kg wet	88%	53 - 132	10G0092	07/08/10 01:53
Benzo (a) pyrene	0.0333	0.0283		mg/kg wet	85%	57 - 125	10G0092	07/08/10 01:53
Benzo (b) fluoranthene	0.0333	0.0310		mg/kg wet	93%	36 - 140	10G0092	07/08/10 01:53
Benzo (g,h,i) perylene	0.0333	0.0287		mg/kg wet	86%	54 - 139	10G0092	07/08/10 01:53
Benzo (k) fluoranthene	0.0333	0.0293		mg/kg wet	88%	49 - 140	10G0092	07/08/10 01:53
Chrysene	0.0333	0.0293		mg/kg wet	88%	47 - 139	10G0092	07/08/10 01:53
Dibenz (a,h) anthracene	0.0333	0.0270		mg/kg wet	81%	58 - 141	10G0092	07/08/10 01:53
Fluoranthene	0.0333	0.0297		mg/kg wet	89%	34 - 135	10G0092	07/08/10 01:53
Fluorene	0.0333	0.0250		mg/kg wet	75%	47 - 129	10G0092	07/08/10 01:53
Indeno (1,2,3-cd) pyrene	0.0333	0.0287		mg/kg wet	86%	53 - 142	10G0092	07/08/10 01:53
1-Methylnaphthalene	0.0333	0.0237		mg/kg wet	71%	41 - 120	10G0092	07/08/10 01:53

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Work Order: NTF2651
 Project Name: Everett Terminal(46108) - AMEC
 Project Number: [none]
 Received: 06/26/10 08:30

PROJECT QUALITY CONTROL DATA
LCS - Cont.

Analyte	Known Val.	Analyzed Val	Q	Units	% Rec.	Target Range	Batch	Analyzed Date/Time
Polyaromatic Hydrocarbons by EPA 8270D SIM								
10G0092-BS1								
2-Methylnaphthalene	0.0333	0.0240		mg/kg wet	72%	48 - 121	10G0092	07/08/10 01:53
Naphthalene	0.0333	0.0223		mg/kg wet	67%	42 - 120	10G0092	07/08/10 01:53
Phenanthrene	0.0333	0.0267		mg/kg wet	80%	52 - 134	10G0092	07/08/10 01:53
Pyrene	0.0333	0.0313		mg/kg wet	94%	56 - 144	10G0092	07/08/10 01:53
Surrogate: Nitrobenzene-d5	0.0333	0.0163			49%	17 - 120	10G0092	07/08/10 01:53
Surrogate: 2-Fluorobiphenyl	0.0333	0.0207			62%	14 - 120	10G0092	07/08/10 01:53
Surrogate: Terphenyl-d14	0.0333	0.0247			74%	18 - 120	10G0092	07/08/10 01:53
Extractable Petroleum Hydrocarbons								
10F4804-BS1								
C8-C10 Aliphatics	10.0	5.95		mg/kg wet	59%	50 - 150	10F4804	07/01/10 19:01
>C10 to C12 Ali	5.00	4.07		mg/kg wet	81%	70 - 130	10F4804	07/01/10 19:01
>C10 to C12 Aro	5.00	5.04		mg/kg wet	101%	70 - 130	10F4804	07/01/10 19:31
>C12 to C16 Ali	10.0	9.02		mg/kg wet	90%	70 - 130	10F4804	07/01/10 19:01
>C12 to C16 Aro	15.0	14.7		mg/kg wet	98%	70 - 130	10F4804	07/01/10 19:31
>C16 to C21 Ali	15.0	14.1		mg/kg wet	94%	70 - 130	10F4804	07/01/10 19:01
>C16 to C21 Aro	25.0	24.8		mg/kg wet	99%	70 - 130	10F4804	07/01/10 19:31
>C21 to C34 Ali	25.0	23.0		mg/kg wet	92%	70 - 130	10F4804	07/01/10 19:01
>C21 to C34 Aro	40.0	37.7		mg/kg wet	94%	70 - 130	10F4804	07/01/10 19:31
Surrogate: o-Terphenyl	8.00	9.35			117%	60 - 140	10F4804	07/01/10 19:31
Surrogate: 2-Fluorobiphenyl	8.00	9.32			117%	60 - 140	10F4804	07/01/10 19:31
Surrogate: 2-Bromonaphthalene	8.00	9.40			118%	60 - 140	10F4804	07/01/10 19:31
Surrogate: 1-Chlorooctadecane	8.00	8.81			110%	60 - 140	10F4804	07/01/10 19:01
Purgeable Petroleum Hydrocarbons								
10F5298-BS2								
GRO (C4-C12) NW	10.0	9.45		mg/kg wet	94%	60 - 123	10F5298	06/30/10 23:16
Surrogate: a,a,a-Trifluorotoluene	20.0	21.8			109%	50 - 150	10F5298	06/30/10 23:16
10G0550-BS1								
Benzene	0.0500	0.0513		mg/kg wet	103%	70 - 130	10G0550	07/04/10 12:37
Ethylbenzene	0.0500	0.0514		mg/kg wet	103%	70 - 130	10G0550	07/04/10 12:37
Methyl tert-Butyl Ether	0.0500	0.0615		mg/kg wet	123%	70 - 130	10G0550	07/04/10 12:37
Naphthalene	0.0500	0.0541		mg/kg wet	108%	70 - 130	10G0550	07/04/10 12:37
Toluene	0.0500	0.0514		mg/kg wet	103%	70 - 130	10G0550	07/04/10 12:37
Xylenes, total	0.150	0.156		mg/kg wet	104%	70 - 130	10G0550	07/04/10 12:37
C5 - C6 Aliphatic Hydrocarbons	0.150	0.186		mg/kg wet	124%	70 - 130	10G0550	07/04/10 12:37
>C6 to C8 Ali	0.100	0.116		mg/kg wet	116%	70 - 130	10G0550	07/04/10 12:37
>C8 to C10 Ali	0.300	0.328		mg/kg wet	109%	70 - 130	10G0550	07/04/10 12:37
>C10 to C12 Ali	0.100	0.127		mg/kg wet	127%	70 - 130	10G0550	07/04/10 12:37
>C8 to C10 Aro	0.250	0.255		mg/kg wet	102%	70 - 130	10G0550	07/04/10 12:37

Client AMEC Earth & Environmental (13993)
 600 University Street, Suite 1020
 Seattle, WA 98101
 Attn Leah Vigoren

Work Order: NTF2651
 Project Name: Everett Terminal(46108) - AMEC
 Project Number: [none]
 Received: 06/26/10 08:30

PROJECT QUALITY CONTROL DATA
LCS - Cont.

Analyte	Known Val.	Analyzed Val	Q	Units	% Rec.	Target Range	Batch	Analyzed Date/Time
Purgeable Petroleum Hydrocarbons								
10G0550-BS1								
>C10 to C12 Aro	0.0500	0.0600		mg/kg wet	120%	70 - 130	10G0550	07/04/10 12:37
>C12 to C13 Aro	0.0500	0.0583		mg/kg wet	117%	70 - 130	10G0550	07/04/10 12:37
Surrogate: 2,5-Dibromotoluene (FID)	40.0	47.0			117%	70 - 130	10G0550	07/04/10 12:37
Surrogate: 2,5-Dibromotoluene (PID)	40.0	46.0			115%	70 - 130	10G0550	07/04/10 12:37
10G0603-BS1								
Benzene	0.0500	0.0513		mg/kg wet	103%	70 - 130	10G0603	07/04/10 12:37
Ethylbenzene	0.0500	0.0514		mg/kg wet	103%	70 - 130	10G0603	07/04/10 12:37
Methyl tert-Butyl Ether	0.0500	0.0615		mg/kg wet	123%	70 - 130	10G0603	07/04/10 12:37
Naphthalene	0.0500	0.0541		mg/kg wet	108%	70 - 130	10G0603	07/04/10 12:37
Toluene	0.0500	0.0514		mg/kg wet	103%	70 - 130	10G0603	07/04/10 12:37
Xylenes, total	0.150	0.156		mg/kg wet	104%	70 - 130	10G0603	07/04/10 12:37
C5 - C6 Aliphatic Hydrocarbons	0.150	0.186		mg/kg wet	124%	70 - 130	10G0603	07/04/10 12:37
>C6 to C8 Ali	0.100	0.116		mg/kg wet	116%	70 - 130	10G0603	07/04/10 12:37
>C8 to C10 Ali	0.300	0.328		mg/kg wet	109%	70 - 130	10G0603	07/04/10 12:37
>C10 to C12 Ali	0.100	0.127		mg/kg wet	127%	70 - 130	10G0603	07/04/10 12:37
>C8 to C10 Aro	0.250	0.255		mg/kg wet	102%	70 - 130	10G0603	07/04/10 12:37
>C10 to C12 Aro	0.0500	0.0600		mg/kg wet	120%	70 - 130	10G0603	07/04/10 12:37
>C12 to C13 Aro	0.0500	0.0583		mg/kg wet	117%	70 - 130	10G0603	07/04/10 12:37
Surrogate: 2,5-Dibromotoluene (FID)	40.0	47.0			117%	70 - 130	10G0603	07/04/10 12:37
Surrogate: 2,5-Dibromotoluene (PID)	40.0	46.0			115%	70 - 130	10G0603	07/04/10 12:37
10G0785-BS1								
Benzene	0.0500	0.0508		mg/kg wet	102%	70 - 130	10G0785	07/06/10 09:56
Ethylbenzene	0.0500	0.0508		mg/kg wet	102%	70 - 130	10G0785	07/06/10 09:56
Methyl tert-Butyl Ether	0.0500	0.0555		mg/kg wet	111%	70 - 130	10G0785	07/06/10 09:56
Naphthalene	0.0500	0.0500		mg/kg wet	100%	70 - 130	10G0785	07/06/10 09:56
Toluene	0.0500	0.0509		mg/kg wet	102%	70 - 130	10G0785	07/06/10 09:56
Xylenes, total	0.150	0.153		mg/kg wet	102%	70 - 130	10G0785	07/06/10 09:56
C5 - C6 Aliphatic Hydrocarbons	0.150	0.176		mg/kg wet	117%	70 - 130	10G0785	07/06/10 09:56
>C6 to C8 Ali	0.100	0.103		mg/kg wet	103%	70 - 130	10G0785	07/06/10 09:56
>C8 to C10 Ali	0.300	0.317		mg/kg wet	106%	70 - 130	10G0785	07/06/10 09:56
>C10 to C12 Ali	0.100	0.118		mg/kg wet	118%	70 - 130	10G0785	07/06/10 09:56
>C8 to C10 Aro	0.250	0.251		mg/kg wet	101%	70 - 130	10G0785	07/06/10 09:56
>C10 to C12 Aro	0.0500	0.0578		mg/kg wet	116%	70 - 130	10G0785	07/06/10 09:56
>C12 to C13 Aro	0.0500	0.0523		mg/kg wet	105%	70 - 130	10G0785	07/06/10 09:56
Surrogate: 2,5-Dibromotoluene (FID)	40.0	43.4			108%	70 - 130	10G0785	07/06/10 09:56
Surrogate: 2,5-Dibromotoluene (PID)	40.0	43.9			110%	70 - 130	10G0785	07/06/10 09:56

Extractable Petroleum Hydrocarbons with Silica Gel Treatment

10F4974-BS1

Diesel	33.3	22.6	MNR	mg/kg wet	68%	55 - 123	10F4974	07/08/10 02:21
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Client AMEC Earth & Environmental (13993)
 600 University Street, Suite 1020
 Seattle, WA 98101
 Attn Leah Vigoren

Work Order: NTF2651
 Project Name: Everett Terminal(46108) - AMEC
 Project Number: [none]
 Received: 06/26/10 08:30

PROJECT QUALITY CONTROL DATA
LCS - Cont.

Analyte	Known Val.	Analyzed Val	Q	Units	% Rec.	Target Range	Batch	Analyzed Date/Time
Extractable Petroleum Hydrocarbons with Silica Gel Treatment								
10F4974-BS1								
<i>Surrogate: o-Terphenyl</i>	0.667	0.447			67%	50 - 150	10F4974	07/08/10 02:21
10G1494-BS1								
Diesel	40.0	40.8		mg/kg wet	102%	55 - 123	10G1494	07/12/10 23:06
<i>Surrogate: o-Terphenyl</i>	0.800	0.869			109%	50 - 150	10G1494	07/12/10 23:06

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PROJECT QUALITY CONTROL DATA
LCS Dup

Analyte	Orig. Val.	Duplicate	Q	Units	Spike Conc	% Rec.	Target Range	RPD	Limit	Batch	Sample Duplicated	Analyzed Date/Time
Volatile Organic Compounds by EPA Method 8260B												
10G0381-BSD1												
1,2-Dibromoethane (EDB)		55.2		ug/kg	50.0	110%	80 - 131	5	45	10G0381		07/03/10 14:20
1,2-Dichloroethane		42.1		ug/kg	50.0	84%	70 - 139	6	50	10G0381		07/03/10 14:20
Benzene		49.4		ug/kg	50.0	99%	78 - 126	9	50	10G0381		07/03/10 14:20
Hexane		55.6		ug/kg	50.0	111%	55 - 136	10	48	10G0381		07/03/10 14:20
Ethylbenzene		53.8		ug/kg	50.0	108%	79 - 130	8	50	10G0381		07/03/10 14:20
Methyl tert-Butyl Ether		55.1		ug/kg	50.0	110%	70 - 128	7	50	10G0381		07/03/10 14:20
Toluene		51.9		ug/kg	50.0	104%	76 - 126	9	50	10G0381		07/03/10 14:20
Xylenes, total		163		ug/kg	150	108%	80 - 130	8	50	10G0381		07/03/10 14:20
Surrogate: 1,2-Dichloroethane-d4		44.1		ug/kg	50.0	88%	67 - 138			10G0381		07/03/10 14:20
Surrogate: Dibromofluoromethane		45.7		ug/kg	50.0	91%	75 - 125			10G0381		07/03/10 14:20
Surrogate: Toluene-d8		50.6		ug/kg	50.0	101%	76 - 129			10G0381		07/03/10 14:20
Surrogate: 4-Bromofluorobenzene		52.8		ug/kg	50.0	106%	67 - 147			10G0381		07/03/10 14:20
10G0618-BSD1												
Benzene		46.1		ug/kg	50.0	92%	78 - 126	1	50	10G0618		07/05/10 13:36
Hexane		47.5		ug/kg	50.0	95%	55 - 136	3	48	10G0618		07/05/10 13:36
Ethylbenzene		50.3		ug/kg	50.0	101%	79 - 130	0.5	50	10G0618		07/05/10 13:36
Methyl tert-Butyl Ether		48.3		ug/kg	50.0	97%	70 - 128	2	50	10G0618		07/05/10 13:36
Toluene		49.0		ug/kg	50.0	98%	76 - 126	0.2	50	10G0618		07/05/10 13:36
Xylenes, total		150		ug/kg	150	100%	80 - 130	0.8	50	10G0618		07/05/10 13:36
Surrogate: 1,2-Dichloroethane-d4		48.4		ug/kg	50.0	97%	67 - 138			10G0618		07/05/10 13:36
Surrogate: Dibromofluoromethane		49.3		ug/kg	50.0	99%	75 - 125			10G0618		07/05/10 13:36
Surrogate: Toluene-d8		50.7		ug/kg	50.0	101%	76 - 129			10G0618		07/05/10 13:36
Surrogate: 4-Bromofluorobenzene		49.1		ug/kg	50.0	98%	67 - 147			10G0618		07/05/10 13:36

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Project Name: Everett Terminal(46108) - AMEC
Project Number: [none]
Received: 06/26/10 08:30

PROJECT QUALITY CONTROL DATA Matrix Spike

Analyte	Orig. Val.	MS Val	Q	Units	Spike Conc	% Rec.	Target Range	Batch	Sample Spiked	Analyzed Date/Time
Volatile Organic Compounds by EPA Method 8260B										
10G0618-MS1										
Benzene	0.00179	0.0606		mg/kg dry	0.0632	93%	42 - 141	10G0618	NTF2352-02	07/05/10 23:38
Hexane	0.00184	0.0316		mg/kg dry	0.0632	47%	10 - 180	10G0618	NTF2352-02	07/05/10 23:38
Ethylbenzene	0.0464	0.0950		mg/kg dry	0.0632	77%	21 - 165	10G0618	NTF2352-02	07/05/10 23:38
Methyl tert-Butyl Ether	ND	0.0747		mg/kg dry	0.0632	118%	34 - 154	10G0618	NTF2352-02	07/05/10 23:38
Toluene	0.00413	0.0721		mg/kg dry	0.0632	108%	45 - 145	10G0618	NTF2352-02	07/05/10 23:38
Xylenes, total	0.0449	0.183		mg/kg dry	0.190	73%	31 - 159	10G0618	NTF2352-02	07/05/10 23:38
Surrogate: 1,2-Dichloroethane-d4		47.9		ug/kg	50.0	96%	67 - 138	10G0618	NTF2352-02	07/05/10 23:38
Surrogate: Dibromofluoromethane		50.8		ug/kg	50.0	102%	75 - 125	10G0618	NTF2352-02	07/05/10 23:38
Surrogate: Toluene-d8		72.2	ZX	ug/kg	50.0	144%	76 - 129	10G0618	NTF2352-02	07/05/10 23:38
Surrogate: 4-Bromofluorobenzene		175	ZX	ug/kg	50.0	350%	67 - 147	10G0618	NTF2352-02	07/05/10 23:38
Polyaromatic Hydrocarbons by EPA 8270D SIM										
10G0092-MS1										
Acenaphthene	ND	0.0269		mg/kg dry	0.0421	64%	42 - 120	10G0092	NTF2469-01	07/08/10 02:16
Acenaphthylene	ND	0.0248		mg/kg dry	0.0421	59%	39 - 127	10G0092	NTF2469-01	07/08/10 02:16
Anthracene	ND	0.0311		mg/kg dry	0.0421	74%	39 - 139	10G0092	NTF2469-01	07/08/10 02:16
Benzo (a) anthracene	ND	0.0341		mg/kg dry	0.0421	81%	31 - 132	10G0092	NTF2469-01	07/08/10 02:16
Benzo (a) pyrene	ND	0.0316		mg/kg dry	0.0421	75%	22 - 125	10G0092	NTF2469-01	07/08/10 02:16
Benzo (b) fluoranthene	ND	0.0307		mg/kg dry	0.0421	73%	10 - 147	10G0092	NTF2469-01	07/08/10 02:16
Benzo (g,h,i) perylene	ND	0.0290		mg/kg dry	0.0421	69%	10 - 151	10G0092	NTF2469-01	07/08/10 02:16
Benzo (k) fluoranthene	ND	0.0320		mg/kg dry	0.0421	76%	23 - 140	10G0092	NTF2469-01	07/08/10 02:16
Chrysene	ND	0.0337		mg/kg dry	0.0421	80%	20 - 139	10G0092	NTF2469-01	07/08/10 02:16
Dibenz (a,h) anthracene	ND	0.0282		mg/kg dry	0.0421	67%	18 - 150	10G0092	NTF2469-01	07/08/10 02:16
Fluoranthene	0.00760	0.0631		mg/kg dry	0.0421	132%	29 - 135	10G0092	NTF2469-01	07/08/10 02:16
Fluorene	ND	0.0337		mg/kg dry	0.0421	80%	38 - 129	10G0092	NTF2469-01	07/08/10 02:16
Indeno (1,2,3-cd) pyrene	ND	0.0295		mg/kg dry	0.0421	70%	13 - 146	10G0092	NTF2469-01	07/08/10 02:16
1-Methylnaphthalene	ND	0.0261		mg/kg dry	0.0421	62%	20 - 120	10G0092	NTF2469-01	07/08/10 02:16
2-Methylnaphthalene	ND	0.0303		mg/kg dry	0.0421	72%	28 - 124	10G0092	NTF2469-01	07/08/10 02:16
Naphthalene	ND	0.0265		mg/kg dry	0.0421	63%	10 - 135	10G0092	NTF2469-01	07/08/10 02:16
Phenanthrene	0.0106	0.0741	M7	mg/kg dry	0.0421	151%	33 - 134	10G0092	NTF2469-01	07/08/10 02:16
Pyrene	0.00464	0.0530		mg/kg dry	0.0421	115%	26 - 153	10G0092	NTF2469-01	07/08/10 02:16
Surrogate: Nitrobenzene-d5		0.0173		mg/kg dry	0.0421	41%	17 - 120	10G0092	NTF2469-01	07/08/10 02:16
Surrogate: 2-Fluorobiphenyl		0.0164		mg/kg dry	0.0421	39%	14 - 120	10G0092	NTF2469-01	07/08/10 02:16
Surrogate: Terphenyl-d14		0.0177		mg/kg dry	0.0421	42%	18 - 120	10G0092	NTF2469-01	07/08/10 02:16
Extractable Petroleum Hydrocarbons										
10F4804-MS1										
C8-C10 Aliphatics	ND	5.72		mg/kg dry	10.5	55%	50 - 150	10F4804	NTF2447-01	07/01/10 20:01

Client AMEC Earth & Environmental (13993)
 600 University Street, Suite 1020
 Seattle, WA 98101
 Attn Leah Vigoren

Work Order: NTF2651
 Project Name: Everett Terminal(46108) - AMEC
 Project Number: [none]
 Received: 06/26/10 08:30

PROJECT QUALITY CONTROL DATA Matrix Spike - Cont.

Analyte	Orig. Val.	MS Val	Q	Units	Spike Conc	% Rec.	Target Range	Batch	Sample Spiked	Analyzed Date/Time
Extractable Petroleum Hydrocarbons										
10F4804-MS1										
>C10 to C12 Ali	ND	4.02		mg/kg dry	5.23	77%	70 - 130	10F4804	NTF2447-01	07/01/10 20:01
>C10 to C12 Aro	ND	5.09		mg/kg dry	5.23	97%	70 - 130	10F4804	NTF2447-01	07/01/10 20:31
>C12 to C16 Ali	ND	9.17		mg/kg dry	10.5	88%	70 - 130	10F4804	NTF2447-01	07/01/10 20:01
>C12 to C16 Aro	ND	14.8		mg/kg dry	15.7	94%	70 - 130	10F4804	NTF2447-01	07/01/10 20:31
>C16 to C21 Ali	ND	14.4		mg/kg dry	15.7	92%	70 - 130	10F4804	NTF2447-01	07/01/10 20:01
>C16 to C21 Aro	ND	25.1		mg/kg dry	26.1	96%	70 - 130	10F4804	NTF2447-01	07/01/10 20:31
>C21 to C34 Ali	ND	23.6		mg/kg dry	26.1	90%	70 - 130	10F4804	NTF2447-01	07/01/10 20:01
>C21 to C34 Aro	ND	38.2		mg/kg dry	41.8	91%	70 - 130	10F4804	NTF2447-01	07/01/10 20:31
Surrogate: <i>o</i> -Terphenyl		9.62		mg/kg dry	8.36	115%	60 - 140	10F4804	NTF2447-01	07/01/10 20:31
Surrogate: 2-Fluorobiphenyl		9.74		mg/kg dry	8.36	116%	60 - 140	10F4804	NTF2447-01	07/01/10 20:31
Surrogate: 2-Bromonaphthalene		10.0		mg/kg dry	8.36	120%	60 - 140	10F4804	NTF2447-01	07/01/10 20:31
Surrogate: 1-Chlorooctadecane		8.74		mg/kg dry	8.36	104%	60 - 140	10F4804	NTF2447-01	07/01/10 20:01
Purgeable Petroleum Hydrocarbons										
10F5298-MS1										
GRO (C4-C12) NW	4.13	548		mg/kg dry	630	86%	59 - 130	10F5298	NTF2842-06	07/01/10 00:08
Surrogate: <i>a,a,a</i> -Trifluorotoluene		21.8		ug/L	20.0	109%	50 - 150	10F5298	NTF2842-06	07/01/10 00:08
10G0550-MS1										
Benzene	ND	0.0668		mg/kg dry	0.0535	125%	70 - 130	10G0550	NTF2447-01	07/04/10 15:05
Ethylbenzene	ND	0.0669		mg/kg dry	0.0535	125%	70 - 130	10G0550	NTF2447-01	07/04/10 15:05
Methyl tert-Butyl Ether	ND	0.0734	M7	mg/kg dry	0.0535	137%	70 - 130	10G0550	NTF2447-01	07/04/10 15:05
Naphthalene	0.0345	0.0602	M8	mg/kg dry	0.0535	48%	70 - 130	10G0550	NTF2447-01	07/04/10 15:05
Toluene	ND	0.0669		mg/kg dry	0.0535	125%	70 - 130	10G0550	NTF2447-01	07/04/10 15:05
Xylenes, total	ND	0.202		mg/kg dry	0.160	126%	70 - 130	10G0550	NTF2447-01	07/04/10 15:05
C5 - C6 Aliphatic Hydrocarbons	ND	0.232	M7	mg/kg dry	0.160	144%	70 - 130	10G0550	NTF2447-01	07/04/10 15:05
>C6 to C8 Ali	ND	0.139		mg/kg dry	0.107	130%	70 - 130	10G0550	NTF2447-01	07/04/10 15:05
>C8 to C10 Ali	ND	0.426	M7	mg/kg dry	0.321	133%	70 - 130	10G0550	NTF2447-01	07/04/10 15:05
>C10 to C12 Ali	1.50	0.152	M7	mg/kg dry	0.107	-1260%	70 - 130	10G0550	NTF2447-01	07/04/10 15:05
>C8 to C10 Aro	ND	0.329		mg/kg dry	0.267	123%	70 - 130	10G0550	NTF2447-01	07/04/10 15:05
>C10 to C12 Aro	ND	0.0564		mg/kg dry	0.0535	105%	70 - 130	10G0550	NTF2447-01	07/04/10 15:05
>C12 to C13 Aro	ND	0.0643		mg/kg dry	0.0535	120%	70 - 130	10G0550	NTF2447-01	07/04/10 15:05
Surrogate: 2,5-Dibromotoluene (FID)		46.2		ug/L	40.0	116%	70 - 130	10G0550	NTF2447-01	07/04/10 15:05
Surrogate: 2,5-Dibromotoluene (PID)		46.8		ug/L	40.0	117%	70 - 130	10G0550	NTF2447-01	07/04/10 15:05
10G0603-MS1										
Benzene	ND	140		mg/kg dry	156	90%	70 - 130	10G0603	NTF2651-01RE	07/04/10 23:19

Client AMEC Earth & Environmental (13993)
 600 University Street, Suite 1020
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 Attn Leah Vigoren

Work Order: NTF2651
 Project Name: Everett Terminal(46108) - AMEC
 Project Number: [none]
 Received: 06/26/10 08:30

PROJECT QUALITY CONTROL DATA
Matrix Spike - Cont.

Analyte	Orig. Val.	MS Val	Q	Units	Spike Conc	% Rec.	Target Range	Batch	Sample Spiked	Analyzed Date/Time
Purgeable Petroleum Hydrocarbons										
10G0603-MS1										
Ethylbenzene	ND	137		mg/kg dry	156	88%	70 - 130	10G0603	NTF2651-01RE 2	07/04/10 23:19
Methyl tert-Butyl Ether	ND	145		mg/kg dry	156	93%	70 - 130	10G0603	NTF2651-01RE 2	07/04/10 23:19
Naphthalene	2.69	130		mg/kg dry	156	81%	70 - 130	10G0603	NTF2651-01RE 2	07/04/10 23:19
Toluene	ND	138		mg/kg dry	156	89%	70 - 130	10G0603	NTF2651-01RE 2	07/04/10 23:19
Xylenes, total	ND	412		mg/kg dry	469	88%	70 - 130	10G0603	NTF2651-01RE 2	07/04/10 23:19
C5 - C6 Aliphatic Hydrocarbons	ND	453		mg/kg dry	469	97%	70 - 130	10G0603	NTF2651-01RE 2	07/04/10 23:19
>C6 to C8 Ali	ND	274		mg/kg dry	312	88%	70 - 130	10G0603	NTF2651-01RE 2	07/04/10 23:19
>C8 to C10 Ali	ND	851		mg/kg dry	938	91%	70 - 130	10G0603	NTF2651-01RE 2	07/04/10 23:19
>C10 to C12 Ali	112	306	M8	mg/kg dry	312	62%	70 - 130	10G0603	NTF2651-01RE 2	07/04/10 23:19
>C8 to C10 Aro	ND	678		mg/kg dry	781	87%	70 - 130	10G0603	NTF2651-01RE 2	07/04/10 23:19
>C10 to C12 Aro	ND	176		mg/kg dry	156	113%	70 - 130	10G0603	NTF2651-01RE 2	07/04/10 23:19
>C12 to C13 Aro	54.8	192		mg/kg dry	156	88%	70 - 130	10G0603	NTF2651-01RE 2	07/04/10 23:19
Surrogate: 2,5-Dibromotoluene (FID)		43.3		ug/L	40.0	108%	70 - 130	10G0603	NTF2651-01RE 2	07/04/10 23:19
Surrogate: 2,5-Dibromotoluene (PID)		41.9		ug/L	40.0	105%	70 - 130	10G0603	NTF2651-01RE 2	07/04/10 23:19
Extractable Petroleum Hydrocarbons with Silica Gel Treatment										
10G1494-MS1										
Diesel	23.8	49.4		mg/kg dry	51.8	50%	34 - 138	10G1494	NTF2651-04RE 1	07/12/10 23:26
Surrogate: o-Terphenyl		0.564		mg/kg dry	1.04	54%	50 - 150	10G1494	NTF2651-04RE 1	07/12/10 23:26

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Work Order: NTF2651
 Project Name: Everett Terminal(46108) - AMEC
 Project Number: [none]
 Received: 06/26/10 08:30

PROJECT QUALITY CONTROL DATA Matrix Spike Dup

Analyte	Orig. Val.	Duplicate	Q	Units	Spike Conc	% Rec.	Target Range	RPD	Limit	Batch	Sample Duplicated	Analyzed Date/Time
Volatile Organic Compounds by EPA Method 8260B												
10G0618-MSD1												
Benzene	0.00179	0.0539		mg/kg dry	0.0608	86%	42 - 141	12	50	10G0618	NTF2352-02	07/06/10 00:09
Hexane	0.00184	0.0213		mg/kg dry	0.0608	32%	10 - 180	39	48	10G0618	NTF2352-02	07/06/10 00:09
Ethylbenzene	0.0464	0.0806		mg/kg dry	0.0608	56%	21 - 165	16	50	10G0618	NTF2352-02	07/06/10 00:09
Methyl tert-Butyl Ether	ND	0.0660		mg/kg dry	0.0608	108%	34 - 154	12	50	10G0618	NTF2352-02	07/06/10 00:09
Toluene	0.00413	0.0552		mg/kg dry	0.0608	84%	45 - 145	27	50	10G0618	NTF2352-02	07/06/10 00:09
Xylenes, total	0.0449	0.136		mg/kg dry	0.182	50%	31 - 159	30	50	10G0618	NTF2352-02	07/06/10 00:09
Surrogate: 1,2-Dichloroethane-d4		47.0		ug/kg	50.0	94%	67 - 138			10G0618	NTF2352-02	07/06/10 00:09
Surrogate: Dibromofluoromethane		50.0		ug/kg	50.0	100%	75 - 125			10G0618	NTF2352-02	07/06/10 00:09
Surrogate: Toluene-d8		69.5	ZX	ug/kg	50.0	139%	76 - 129			10G0618	NTF2352-02	07/06/10 00:09
Surrogate: 4-Bromofluorobenzene		1290	ZX	ug/kg	50.0	2590%	67 - 147			10G0618	NTF2352-02	07/06/10 00:09

Polyaromatic Hydrocarbons by EPA 8270D SIM

10G0092-MSD1

Acenaphthene	ND	0.0352		mg/kg dry	0.0418	84%	42 - 120	26	32	10G0092	NTF2469-01	07/08/10 02:39
Acenaphthylene	ND	0.0356	R2	mg/kg dry	0.0418	85%	39 - 127	36	34	10G0092	NTF2469-01	07/08/10 02:39
Anthracene	ND	0.0377		mg/kg dry	0.0418	90%	39 - 139	19	31	10G0092	NTF2469-01	07/08/10 02:39
Benzo (a) anthracene	ND	0.0418		mg/kg dry	0.0418	100%	31 - 132	20	43	10G0092	NTF2469-01	07/08/10 02:39
Benzo (a) pyrene	ND	0.0406		mg/kg dry	0.0418	97%	22 - 125	25	41	10G0092	NTF2469-01	07/08/10 02:39
Benzo (b) fluoranthene	ND	0.0423		mg/kg dry	0.0418	101%	10 - 147	32	50	10G0092	NTF2469-01	07/08/10 02:39
Benzo (g,h,i) perylene	ND	0.0372		mg/kg dry	0.0418	89%	10 - 151	25	50	10G0092	NTF2469-01	07/08/10 02:39
Benzo (k) fluoranthene	ND	0.0393		mg/kg dry	0.0418	94%	23 - 140	21	38	10G0092	NTF2469-01	07/08/10 02:39
Chrysene	ND	0.0402		mg/kg dry	0.0418	96%	20 - 139	18	40	10G0092	NTF2469-01	07/08/10 02:39
Dibenz (a,h) anthracene	ND	0.0347		mg/kg dry	0.0418	83%	18 - 150	21	50	10G0092	NTF2469-01	07/08/10 02:39
Fluoranthene	0.00760	0.0603		mg/kg dry	0.0418	126%	29 - 135	5	47	10G0092	NTF2469-01	07/08/10 02:39
Fluorene	ND	0.0398		mg/kg dry	0.0418	95%	38 - 129	17	38	10G0092	NTF2469-01	07/08/10 02:39
Indeno (1,2,3-cd) pyrene	ND	0.0381		mg/kg dry	0.0418	91%	13 - 146	26	46	10G0092	NTF2469-01	07/08/10 02:39
1-Methylnaphthalene	ND	0.0318		mg/kg dry	0.0418	76%	20 - 120	20	35	10G0092	NTF2469-01	07/08/10 02:39
2-Methylnaphthalene	ND	0.0368		mg/kg dry	0.0418	88%	28 - 124	19	38	10G0092	NTF2469-01	07/08/10 02:39
Naphthalene	ND	0.0322		mg/kg dry	0.0418	77%	10 - 135	19	36	10G0092	NTF2469-01	07/08/10 02:39
Phenanthrene	0.0106	0.0582		mg/kg dry	0.0418	114%	33 - 134	24	46	10G0092	NTF2469-01	07/08/10 02:39
Pyrene	0.00464	0.0548		mg/kg dry	0.0418	120%	26 - 153	3	50	10G0092	NTF2469-01	07/08/10 02:39
Surrogate: Nitrobenzene-d5		0.0243		mg/kg dry	0.0418	58%	17 - 120			10G0092	NTF2469-01	07/08/10 02:39
Surrogate: 2-Fluorobiphenyl		0.0247		mg/kg dry	0.0418	59%	14 - 120			10G0092	NTF2469-01	07/08/10 02:39
Surrogate: Terphenyl-d14		0.0264		mg/kg dry	0.0418	63%	18 - 120			10G0092	NTF2469-01	07/08/10 02:39

Extractable Petroleum Hydrocarbons

10F4804-MSD1

C8-C10 Aliphatics	ND	6.04		mg/kg dry	9.90	61%	50 - 150	5	25	10F4804	NTF2447-01	07/01/10 21:01
>C10 to C12 Ali	ND	4.18		mg/kg dry	4.95	84%	70 - 130	4	25	10F4804	NTF2447-01	07/01/10 21:01
>C10 to C12 Aro	ND	5.09		mg/kg dry	4.95	103%	70 - 130	0.05	25	10F4804	NTF2447-01	07/01/10 21:30
>C12 to C16 Ali	ND	9.26		mg/kg dry	9.90	94%	70 - 130	1	25	10F4804	NTF2447-01	07/01/10 21:01

Client AMEC Earth & Environmental (13993)
 600 University Street, Suite 1020
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Work Order: NTF2651
 Project Name: Everett Terminal(46108) - AMEC
 Project Number: [none]
 Received: 06/26/10 08:30

PROJECT QUALITY CONTROL DATA
Matrix Spike Dup - Cont.

Analyte	Orig. Val.	Duplicate	Q	Units	Spike Conc	% Rec.	Target Range	RPD	Limit	Batch	Sample Duplicated	Analyzed Date/Time
Extractable Petroleum Hydrocarbons												
10F4804-MSD1												
>C12 to C16 Aro	ND	14.9		mg/kg dry	14.9	100%	70 - 130	0.9	25	10F4804	NTF2447-01	07/01/10 21:30
>C16 to C21 Ali	ND	14.6		mg/kg dry	14.9	98%	70 - 130	1	25	10F4804	NTF2447-01	07/01/10 21:01
>C16 to C21 Aro	ND	25.3		mg/kg dry	24.8	102%	70 - 130	0.7	25	10F4804	NTF2447-01	07/01/10 21:30
>C21 to C34 Ali	ND	23.7		mg/kg dry	24.8	96%	70 - 130	0.6	25	10F4804	NTF2447-01	07/01/10 21:01
>C21 to C34 Aro	ND	38.4		mg/kg dry	39.6	97%	70 - 130	0.5	25	10F4804	NTF2447-01	07/01/10 21:30
Surrogate: <i>o</i> -Terphenyl		9.57		mg/kg dry	7.92	121%	60 - 140			10F4804	NTF2447-01	07/01/10 21:30
Surrogate: 2-Fluorobiphenyl		9.55		mg/kg dry	7.92	121%	60 - 140			10F4804	NTF2447-01	07/01/10 21:30
Surrogate: 2-Bromonaphthalene		9.12		mg/kg dry	7.92	115%	60 - 140			10F4804	NTF2447-01	07/01/10 21:30
Surrogate: 1-Chlorooctadecane		8.94		mg/kg dry	7.92	113%	60 - 140			10F4804	NTF2447-01	07/01/10 21:01
Purgeable Petroleum Hydrocarbons												
10F5298-MSD1												
GRO (C4-C12) NW	4.13	561		mg/kg dry	630	88%	59 - 130	2	50	10F5298	NTF2842-06	07/01/10 00:25
Surrogate: <i>a,a,a</i> -Trifluorotoluene		22.0		ug/L	20.0	110%	50 - 150			10F5298	NTF2842-06	07/01/10 00:25
10G0550-MSD1												
Benzene	ND	0.0486	R2	mg/kg dry	0.0535	91%	70 - 130	31	25	10G0550	NTF2447-01	07/04/10 15:38
Ethylbenzene	ND	0.0480	R2	mg/kg dry	0.0535	90%	70 - 130	33	25	10G0550	NTF2447-01	07/04/10 15:38
Methyl tert-Butyl Ether	ND	0.0575		mg/kg dry	0.0535	108%	70 - 130	24	25	10G0550	NTF2447-01	07/04/10 15:38
Naphthalene	0.0345	0.0465	M8, R2	mg/kg dry	0.0535	22%	70 - 130	26	25	10G0550	NTF2447-01	07/04/10 15:38
Toluene	ND	0.0481	R2	mg/kg dry	0.0535	90%	70 - 130	33	25	10G0550	NTF2447-01	07/04/10 15:38
Xylenes, total	ND	0.146	R2	mg/kg dry	0.160	91%	70 - 130	32	25	10G0550	NTF2447-01	07/04/10 15:38
C5 - C6 Aliphatic Hydrocarbons	ND	0.180		mg/kg dry	0.160	112%	70 - 130	25	25	10G0550	NTF2447-01	07/04/10 15:38
>C6 to C8 Ali	ND	0.100	R2	mg/kg dry	0.107	94%	70 - 130	33	25	10G0550	NTF2447-01	07/04/10 15:38
>C8 to C10 Ali	ND	0.307	R2	mg/kg dry	0.321	96%	70 - 130	33	25	10G0550	NTF2447-01	07/04/10 15:38
>C10 to C12 Ali	1.50	0.111	M8, R2	mg/kg dry	0.107	-1300%	70 - 130	31	25	10G0550	NTF2447-01	07/04/10 15:38
>C8 to C10 Aro	ND	0.238	R2	mg/kg dry	0.267	89%	70 - 130	32	25	10G0550	NTF2447-01	07/04/10 15:38
>C10 to C12 Aro	ND	0.0519		mg/kg dry	0.0535	97%	70 - 130	8	25	10G0550	NTF2447-01	07/04/10 15:38
>C12 to C13 Aro	ND	0.0499		mg/kg dry	0.0535	93%	70 - 130	25	25	10G0550	NTF2447-01	07/04/10 15:38
Surrogate: 2,5-Dibromotoluene (FID)		48.0		ug/L	40.0	120%	70 - 130			10G0550	NTF2447-01	07/04/10 15:38
Surrogate: 2,5-Dibromotoluene (PID)		47.3		ug/L	40.0	118%	70 - 130			10G0550	NTF2447-01	07/04/10 15:38
10G0603-MSD1												
Benzene	ND	181	R2	mg/kg dry	156	116%	70 - 130	25	25	10G0603	NTF2651-01RE 2	07/04/10 23:52
Ethylbenzene	ND	175		mg/kg dry	156	112%	70 - 130	24	25	10G0603	NTF2651-01RE 2	07/04/10 23:52
Methyl tert-Butyl Ether	ND	190	R2	mg/kg dry	156	122%	70 - 130	27	25	10G0603	NTF2651-01RE 2	07/04/10 23:52
Naphthalene	2.69	174	R2	mg/kg dry	156	110%	70 - 130	29	25	10G0603	NTF2651-01RE 2	07/04/10 23:52
Toluene	ND	178	R2	mg/kg dry	156	114%	70 - 130	25	25	10G0603	NTF2651-01RE 2	07/04/10 23:52

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Work Order: NTF2651
 Project Name: Everett Terminal(46108) - AMEC
 Project Number: [none]
 Received: 06/26/10 08:30

PROJECT QUALITY CONTROL DATA
Matrix Spike Dup - Cont.

Analyte	Orig. Val.	Duplicate	Q	Units	Spike Conc	% Rec.	Target Range	RPD	Limit	Batch	Sample Duplicated	Analyzed Date/Time
Purgeable Petroleum Hydrocarbons												
10G0603-MSD1												
Xylenes, total	ND	528		mg/kg dry	469	113%	70 - 130	25	25	10G0603	NTF2651-01RE 2	07/04/10 23:52
C5 - C6 Aliphatic Hydrocarbons	ND	541		mg/kg dry	469	115%	70 - 130	18	25	10G0603	NTF2651-01RE 2	07/04/10 23:52
>C6 to C8 Ali	ND	347		mg/kg dry	312	111%	70 - 130	24	25	10G0603	NTF2651-01RE 2	07/04/10 23:52
>C8 to C10 Ali	ND	1090		mg/kg dry	938	116%	70 - 130	25	25	10G0603	NTF2651-01RE 2	07/04/10 23:52
>C10 to C12 Ali	112	353		mg/kg dry	312	77%	70 - 130	14	25	10G0603	NTF2651-01RE 2	07/04/10 23:52
>C8 to C10 Aro	ND	868		mg/kg dry	781	111%	70 - 130	25	25	10G0603	NTF2651-01RE 2	07/04/10 23:52
>C10 to C12 Aro	ND	211	M7	mg/kg dry	156	135%	70 - 130	18	25	10G0603	NTF2651-01RE 2	07/04/10 23:52
>C12 to C13 Aro	54.8	245		mg/kg dry	156	122%	70 - 130	24	25	10G0603	NTF2651-01RE 2	07/04/10 23:52
Surrogate: 2,5-Dibromotoluene (FID)		43.3		ug/L	40.0	108%	70 - 130			10G0603	NTF2651-01RE 2	07/04/10 23:52
Surrogate: 2,5-Dibromotoluene (PID)		42.1		ug/L	40.0	105%	70 - 130			10G0603	NTF2651-01RE 2	07/04/10 23:52
Extractable Petroleum Hydrocarbons with Silica Gel Treatment												
10G1494-MSD1												
Diesel	23.8	41.1		mg/kg dry	51.3	34%	34 - 138	18	43	10G1494	NTF2651-04RE 1	07/12/10 23:46
Surrogate: o-Terphenyl		0.574		mg/kg dry	1.03	56%	50 - 150			10G1494	NTF2651-04RE 1	07/12/10 23:46

Client AMEC Earth & Environmental (13993)
600 University Street, Suite 1020
Seattle, WA 98101
Attn Leah Vigoren

Work Order: NTF2651
Project Name: Everett Terminal(46108) - AMEC
Project Number: [none]
Received: 06/26/10 08:30

CERTIFICATION SUMMARY

TestAmerica Nashville

Method	Matrix	AIHA	Nelac	Washington
NWTPH EPH	Soil	N/A	X	X
NWTPH VPH	Soil	N/A	X	X
NWTPH-Dx	Soil	N/A		X
NWTPH-Gx	Soil	N/A	X	X
SW846 8260B	Soil	N/A	X	X
SW846 8270D SIM	Soil		X	
SW-846	Soil			

Client AMEC Earth & Environmental (13993)
600 University Street, Suite 1020
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Work Order: NTF2651
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Received: 06/26/10 08:30

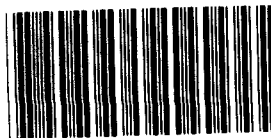
DATA QUALIFIERS AND DEFINITIONS

M7 The MS and/or MSD were above the acceptance limits. See Blank Spike (LCS).
M8 The MS and/or MSD were below the acceptance limits. See Blank Spike (LCS).
MNR No results were reported for the MS/MSD. The sample used for the MS/MSD required dilution due to the sample matrix. Because of this, the spike compounds were diluted below the detection limit.
P3 Sample was received above recommended temperature.
QP5 There was insufficient contamination present to perform a pattern match.
QP6 The contamination did not match any standards in our library.
QP7 The hydrocarbon pattern most closely resembles a diesel product.
QP7a The hydrocarbon pattern most closely resembles a motor oil product.
R2 The RPD exceeded the acceptance limit.
RL1 Reporting limit raised due to sample matrix effects.
Z3 The sample required a dilution due to the nature of the sample matrix. Because of this dilution, the surrogate spike concentration in the sample was reduced to a level where the recovery calculation does not provide useful information.
ZX Due to sample matrix effects, the surrogate recovery was outside the acceptance limits.
ND Not detected at the reporting limit (or method detection limit if shown)

METHOD MODIFICATION NOTES

AGENCY DRAFT

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
Nashville, TN



COOLER RECEIPT

NTF2651

Cooler Received/Opened On 6/26/2010 @ 0830

1. Tracking # 4370 (last 4 digits, FedEx)

Courier: FedEx IR Gun ID Raynger

2. Temperature of rep. sample or temp blank when opened: 9-10 Degrees Celsius

3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES NO... NA

4. Were custody seals on outside of cooler? YES...NO...NA

If yes, how many and where: 1 front

5. Were the seals intact, signed, and dated correctly? YES...NO...NA

6. Were custody papers inside cooler? YES...NO...NA

I certify that I opened the cooler and answered questions 1-6 (initial) MS

7. Were custody seals on containers: YES NO and Intact YES...NO... NA

Were these signed and dated correctly? YES...NO... NA

8. Packing mat'l used? Bubblewrap Plastic bag Peanuts Vermiculite Foam Insert Paper Other None

9. Cooling process: Ice Ice-pack Ice (direct contact) Dry ice Other None

10. Did all containers arrive in good condition (unbroken)? YES...NO...NA

11. Were all container labels complete (#, date, signed, pres., etc)? YES...NO...NA

12. Did all container labels and tags agree with custody papers? YES...NO...NA

13a. Were VOA vials received? YES...NO...NA

b. Was there any observable headspace present in any VOA vial? YES... NO...NA

14. Was there a Trip Blank in this cooler? YES... NO...NA If multiple coolers, sequence # P.H.

I certify that I unloaded the cooler and answered questions 7-14 (initial) P.H.

15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES..NO.. NA

b. Did the bottle labels indicate that the correct preservatives were used YES...NO...NA

16. Was residual chlorine present? YES...NO... NA

I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (initial) MS

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

18. Did you sign the custody papers in the appropriate place? YES...NO...NA

19. Were correct containers used for the analysis requested? YES...NO...NA

20. Was sufficient amount of sample sent in each container? YES...NO...NA

I certify that I entered this project into LIMS and answered questions 17-20 (initial) MS

I certify that I attached a label with the unique LIMS number to each container (initial) MS

21. Were there Non-Conformance issues at login? YES... NO Was a PIPE generated? YES... NO # 57382

MS 6/26 MS 6/26

-01
5 methanol
2 salts

Nashville Division
 2960 Foster Creighton Drive * Nashville TN 37204
 Phone: (800) 765-0980 / (615) 726-0177 Fax:(615) 726-3404

Consultant: AMEC Earth & Environmental (13993)

Address: 600 University Street, Suite 1020

City, State, Zip: Seattle WA 98101

ExxonMobil Project Mgr: Joseph A. Abel (inv)

Consultant Project Mgr: Leah Vigoren

Consultant Telephone #: (206) 342-1760

Fax: (206) 342-1761

Major Project (AFEE): E2.1985.95X94.V.01.08

Sampler Name (Print): A. Spensky

Sampler Signature: *A. Spensky*

City, State, Zip: Everett Washington

2379 Federal Avenue

TA Account #:

Invoice to: ExxonMobil Corporation (80110)

Report to: Leah Vigoren

Project Name: Everett Terminal (46108)

Retail Project (MRN): 46108

PO #: 4512293714

NOTE 26511
 07/13/10 23:59

Sample ID	Date Sampled	Time Sampled	# Containers Shipped	Grab	Composite	Field Filtered	Methano	Sodium Bisulfate	(Blue Label) HCL	(Orange Label) NaOH	(Yellow Label) Plastic H2SO4	(Yellow Label) Glass H2SO4	(Red Label) HNO3	(Black Label) None	Groundwater	Wastewater	Drinking Water	Sludge	Soil	(specify) Other	Analyze for	Fax Results (Yes or No)
1 AB 5-5	8/25/10	800	10	✓			3	2					3	2					X	X	NWTPH-DX	
2 AB 5-22	9/30	7	7	✓			3	2					2	2					X	X	NWTPH-8X	
3 BB 5-35	11/00	7	7	✓			3	2					2	2					X	X	BTE X & NTBE 8260B	
4 NW 6-12	12/15	7	7	✓			3	2					2	2					X	X	PAH 8270D SIM	
5 NW 6-20	12/30	6	6	✓			3	2					1	1					X	X	EDB, EDC, h-hexane	
																					EPH	
																					VPH	

COMMENTS: All turn around times are calculated from the time of receipt at TestAmerica.
 * It will be the responsibility of Exxon Mobil or its consultant to notify the TestAmerica Project Manager by phone or fax that a rush sample will be submitted. TA Project manager _____ Date: _____
 There may be a charge assessed for TestAmerica disposing of sample remainders.

NOTES/SPECIAL INSTRUCTIONS: BO # 20026
 BICIDA GLE Cleanup RTFX by 8260 B
 Standard TAT RTBE

Relinquished by: _____ Date: _____ Time: _____

Received by: _____ Date: _____ Time: _____

Shipped Via: _____

Received for TestAmerica by: *NY* Date: *10/26/10* Time: *0830*

Temperature Upon Receipt: _____

Sample Containers Intact? Y N

VOCs Free of Headspace? Y N

QC Deliverables (Please Circle One):
 Level 2 Level 3 Level 4 Site Specific
 (If site specific, please pre-schedule w/ TestAmerica Project Manager or attach specific instructions)

Date Due of Report: _____ Time: _____

AGENCY DRAFT

AGENCY DRAFT**Jones, Andi**

From: Vigoren, Leah R [Leah.Vigoren@amec.com]
Sent: Monday, June 28, 2010 11:52 AM
To: Jones, Andi
Cc: Klingensmith, Leah; Speransky, Anastasia; Strong, Meg
Subject: RE: Everett Terminal (NTF2651)

Andi

Please run the samples.

I will pass this information onto our field crew.

Thank you, Leah

From: Jones, Andi [mailto:Andi.Jones@testamericainc.com]
Sent: Monday, June 28, 2010 9:46 AM
To: Vigoren, Leah R
Cc: Klingensmith, Leah
Subject: Everett Terminal (NTF2651)

Hi Leah. We received another set of samples on Saturday outside of temperature at 9.6 degrees C. The COC for these is attached. Our login tech noted that there was a single bag of ice at the bottom of the cooler which was just not enough to keep the samples cold. We recommend, especially during the summer, to use loose ice in the coolers so the samples are completely surrounded. As long as the loose ice is all tied up with the samples in the trash liner there should be no leaking issues. Please let me know if you want us to run these. If I do not hear from you shortly, I will follow-up with a phone call.

Thanks.

Please be aware that the Nashville laboratory will be closed on Monday, July 5th for sample receiving and third party couriers (FedEx, UPS, DHL, etc.) will not be delivering that day. Third party couriers will be delivering samples on Saturday, July 3rd and the laboratory will be staffed to accept sample drop-offs.

ANDI JONES
Senior Project Manager

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

2960 Foster Creighton Drive
Nashville, TN 37204
Tel 800-765-0980 x1111 | Dir 615.301.5033

6/28/2010

July 14, 2010 3:27:17PM

Client: AMEC Earth & Environmental (13993)
600 University Street, Suite 1020
Seattle, WA 98101
Attn: Leah Vigoren

Work Order: NTF2659
Project Name: Everett Terminal(46108) - AMEC
Project Nbr: [none]
P/O Nbr:
Date Received: 06/26/10

SAMPLE IDENTIFICATION	LAB NUMBER	COLLECTION DATE AND TIME
MWA5-10	NTF2659-01	06/24/10 12:20
MWA5-20	NTF2659-02	06/24/10 12:30
AP1-5	NTF2659-03	06/24/10 14:05
AP1-15	NTF2659-04	06/24/10 14:20
AP1-62410	NTF2659-05	06/24/10 15:00
MWA4-15	NTF2659-07	06/24/10 16:15
MWA4-20	NTF2659-08	06/24/10 16:30
Dup 2	NTF2659-09	06/24/10 16:20
MWA3-10	NTF2659-10	06/24/10 17:15
MWA3-20	NTF2659-11	06/24/10 17:20
Trip Blank	NTF2659-13	06/24/10 00:01

An executed copy of the chain of custody, the project quality control data, and the sample receipt form are also included as an addendum to this report. If you have any questions relating to this analytical report, please contact your Laboratory Project Manager at 1-800-765-0980. Any opinions, if expressed, are outside the scope of the Laboratory's accreditation.

This material is intended only for the use of the individual(s) or entity to whom it is addressed, and may contain information that is privileged and confidential. If you are not the intended recipient, or the employee or agent responsible for delivering this material to the intended recipient, you are hereby notified that any dissemination, distribution, or copying of this material is strictly prohibited. If you have received this material in error, please notify us immediately at 615-726-0177.

Washington Certification Number: C1712

The Chain(s) of Custody, 4 pages, are included and are an integral part of this report.

These results relate only to the items tested. This report shall not be reproduced except in full and with permission of the laboratory.

All solids results are reported in wet weight unless specifically stated.

Estimated uncertainty is available upon request.

This report has been electronically signed.

Report Approved By:



Leah R. Klingensmith

Senior Project Management

Client AMEC Earth & Environmental (13993)
 600 University Street, Suite 1020
 Seattle, WA 98101
 Attn Leah Vigoren

Work Order: NTF2659
 Project Name: Everett Terminal(46108) - AMEC
 Project Number: [none]
 Received: 06/26/10 08:30

ANALYTICAL REPORT

Analyte	Result	Flag	Units	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
Sample ID: NTF2659-01 (MWA5-10 - Soil) Sampled: 06/24/10 12:20								
General Chemistry Parameters								
% Dry Solids	88.1		%	0.500	1	07/14/10 09:00	SW-846	10G1965
Volatile Organic Compounds by EPA Method 8260B								
Benzene	ND		mg/kg dry	0.00236	1	07/07/10 23:35	SW846 8260B	10G1206
Ethylbenzene	ND		mg/kg dry	0.00236	1	07/07/10 23:35	SW846 8260B	10G1206
Methyl tert-Butyl Ether	ND		mg/kg dry	0.00236	1	07/07/10 23:35	SW846 8260B	10G1206
Toluene	ND		mg/kg dry	0.00236	1	07/07/10 23:35	SW846 8260B	10G1206
Xylenes, total	ND		mg/kg dry	0.00590	1	07/07/10 23:35	SW846 8260B	10G1206
<i>Surr: 1,2-Dichloroethane-d4 (67-138%)</i>	<i>108 %</i>					<i>07/07/10 23:35</i>	<i>SW846 8260B</i>	<i>10G1206</i>
<i>Surr: Dibromofluoromethane (75-125%)</i>	<i>104 %</i>					<i>07/07/10 23:35</i>	<i>SW846 8260B</i>	<i>10G1206</i>
<i>Surr: Toluene-d8 (76-129%)</i>	<i>107 %</i>					<i>07/07/10 23:35</i>	<i>SW846 8260B</i>	<i>10G1206</i>
<i>Surr: 4-Bromofluorobenzene (67-147%)</i>	<i>95 %</i>					<i>07/07/10 23:35</i>	<i>SW846 8260B</i>	<i>10G1206</i>
Polyaromatic Hydrocarbons by EPA 8270D SIM								
Acenaphthene	0.0157		mg/kg dry	0.00374	1	07/04/10 01:53	SW846 8270D SIM	10F4798
Acenaphthylene	0.00450		mg/kg dry	0.00374	1	07/04/10 01:53	SW846 8270D SIM	10F4798
Anthracene	0.0161		mg/kg dry	0.00374	1	07/04/10 01:53	SW846 8270D SIM	10F4798
Benzo (a) anthracene	0.00862		mg/kg dry	0.00374	1	07/04/10 01:53	SW846 8270D SIM	10F4798
Benzo (a) pyrene	0.00937		mg/kg dry	0.00374	1	07/04/10 01:53	SW846 8270D SIM	10F4798
Benzo (b) fluoranthene	0.00675		mg/kg dry	0.00374	1	07/04/10 01:53	SW846 8270D SIM	10F4798
Benzo (g,h,i) perylene	0.00525		mg/kg dry	0.00374	1	07/04/10 01:53	SW846 8270D SIM	10F4798
Benzo (k) fluoranthene	0.00712		mg/kg dry	0.00374	1	07/04/10 01:53	SW846 8270D SIM	10F4798
Chrysene	0.0109		mg/kg dry	0.00374	1	07/04/10 01:53	SW846 8270D SIM	10F4798
Dibenz (a,h) anthracene	ND		mg/kg dry	0.00374	1	07/04/10 01:53	SW846 8270D SIM	10F4798
Fluoranthene	0.0345		mg/kg dry	0.00374	1	07/04/10 01:53	SW846 8270D SIM	10F4798
Fluorene	0.0131		mg/kg dry	0.00374	1	07/04/10 01:53	SW846 8270D SIM	10F4798
Indeno (1,2,3-cd) pyrene	0.00487		mg/kg dry	0.00374	1	07/04/10 01:53	SW846 8270D SIM	10F4798
1-Methylnaphthalene	0.00375		mg/kg dry	0.00374	1	07/04/10 01:53	SW846 8270D SIM	10F4798
2-Methylnaphthalene	0.00412		mg/kg dry	0.00374	1	07/04/10 01:53	SW846 8270D SIM	10F4798
Naphthalene	0.0112		mg/kg dry	0.00374	1	07/04/10 01:53	SW846 8270D SIM	10F4798
Phenanthrene	0.0663		mg/kg dry	0.00374	1	07/04/10 01:53	SW846 8270D SIM	10F4798
Pyrene	0.0379		mg/kg dry	0.00374	1	07/04/10 01:53	SW846 8270D SIM	10F4798
<i>Surr: Nitrobenzene-d5 (17-120%)</i>	<i>55 %</i>					<i>07/04/10 01:53</i>	<i>W846 8270D SIA</i>	<i>10F4798</i>
<i>Surr: 2-Fluorobiphenyl (14-120%)</i>	<i>57 %</i>					<i>07/04/10 01:53</i>	<i>W846 8270D SIA</i>	<i>10F4798</i>
<i>Surr: Terphenyl-d14 (18-120%)</i>	<i>78 %</i>					<i>07/04/10 01:53</i>	<i>W846 8270D SIA</i>	<i>10F4798</i>
Purgeable Petroleum Hydrocarbons								
GRO (C4-C12) NW	ND		mg/kg dry	7.16	50	06/29/10 19:15	NWTPH-Gx	10F4830
<i>Surr: a,a,a-Trifluorotoluene (50-150%)</i>	<i>98 %</i>					<i>06/29/10 19:15</i>	<i>NWTPH-Gx</i>	<i>10F4830</i>
Extractable Petroleum Hydrocarbons with Silica Gel Treatment								
Diesel	ND		mg/kg dry	3.74	1	07/08/10 20:03	NWTPH-Dx	10F4974
Motor Oil	4.70	QP5	mg/kg dry	3.74	1	07/08/10 20:03	NWTPH-Dx	10F4974
<i>Surr: o-Terphenyl (50-150%)</i>	<i>68 %</i>					<i>07/08/10 20:03</i>	<i>NWTPH-Dx</i>	<i>10F4974</i>

Client AMEC Earth & Environmental (13993)
 600 University Street, Suite 1020
 Seattle, WA 98101
 Attn Leah Vigoren

Work Order: NTF2659
 Project Name: Everett Terminal(46108) - AMEC
 Project Number: [none]
 Received: 06/26/10 08:30

ANALYTICAL REPORT

Analyte	Result	Flag	Units	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
Sample ID: NTF2659-02 (MWA5-20 - Soil) Sampled: 06/24/10 12:30								
General Chemistry Parameters								
% Dry Solids	83.8		%	0.500	1	07/14/10 09:00	SW-846	10G1965
Volatile Organic Compounds by EPA Method 8260B								
Benzene	ND		mg/kg dry	0.00191	1	07/08/10 00:06	SW846 8260B	10G1206
Ethylbenzene	ND		mg/kg dry	0.00191	1	07/08/10 00:06	SW846 8260B	10G1206
Methyl tert-Butyl Ether	ND		mg/kg dry	0.00191	1	07/08/10 00:06	SW846 8260B	10G1206
Toluene	ND		mg/kg dry	0.00191	1	07/08/10 00:06	SW846 8260B	10G1206
Xylenes, total	ND		mg/kg dry	0.00477	1	07/08/10 00:06	SW846 8260B	10G1206
<i>Surr: 1,2-Dichloroethane-d4 (67-138%)</i>	<i>108 %</i>					<i>07/08/10 00:06</i>	<i>SW846 8260B</i>	<i>10G1206</i>
<i>Surr: Dibromofluoromethane (75-125%)</i>	<i>103 %</i>					<i>07/08/10 00:06</i>	<i>SW846 8260B</i>	<i>10G1206</i>
<i>Surr: Toluene-d8 (76-129%)</i>	<i>108 %</i>					<i>07/08/10 00:06</i>	<i>SW846 8260B</i>	<i>10G1206</i>
<i>Surr: 4-Bromofluorobenzene (67-147%)</i>	<i>97 %</i>					<i>07/08/10 00:06</i>	<i>SW846 8260B</i>	<i>10G1206</i>
Polyaromatic Hydrocarbons by EPA 8270D SIM								
Acenaphthene	ND		mg/kg dry	0.00387	1	07/04/10 02:16	SW846 8270D SIM	10F4798
Acenaphthylene	ND		mg/kg dry	0.00387	1	07/04/10 02:16	SW846 8270D SIM	10F4798
Anthracene	ND		mg/kg dry	0.00387	1	07/04/10 02:16	SW846 8270D SIM	10F4798
Benzo (a) anthracene	ND		mg/kg dry	0.00387	1	07/04/10 02:16	SW846 8270D SIM	10F4798
Benzo (a) pyrene	ND		mg/kg dry	0.00387	1	07/04/10 02:16	SW846 8270D SIM	10F4798
Benzo (b) fluoranthene	ND		mg/kg dry	0.00387	1	07/04/10 02:16	SW846 8270D SIM	10F4798
Benzo (g,h,i) perylene	ND		mg/kg dry	0.00387	1	07/04/10 02:16	SW846 8270D SIM	10F4798
Benzo (k) fluoranthene	ND		mg/kg dry	0.00387	1	07/04/10 02:16	SW846 8270D SIM	10F4798
Chrysene	ND		mg/kg dry	0.00387	1	07/04/10 02:16	SW846 8270D SIM	10F4798
Dibenz (a,h) anthracene	ND		mg/kg dry	0.00387	1	07/04/10 02:16	SW846 8270D SIM	10F4798
Fluoranthene	0.00813		mg/kg dry	0.00387	1	07/04/10 02:16	SW846 8270D SIM	10F4798
Fluorene	ND		mg/kg dry	0.00387	1	07/04/10 02:16	SW846 8270D SIM	10F4798
Indeno (1,2,3-cd) pyrene	ND		mg/kg dry	0.00387	1	07/04/10 02:16	SW846 8270D SIM	10F4798
1-Methylnaphthalene	ND		mg/kg dry	0.00387	1	07/04/10 02:16	SW846 8270D SIM	10F4798
2-Methylnaphthalene	ND		mg/kg dry	0.00387	1	07/04/10 02:16	SW846 8270D SIM	10F4798
Naphthalene	ND		mg/kg dry	0.00387	1	07/04/10 02:16	SW846 8270D SIM	10F4798
Phenanthrene	0.00852		mg/kg dry	0.00387	1	07/04/10 02:16	SW846 8270D SIM	10F4798
Pyrene	0.00929		mg/kg dry	0.00387	1	07/04/10 02:16	SW846 8270D SIM	10F4798
<i>Surr: Nitrobenzene-d5 (17-120%)</i>	<i>57 %</i>					<i>07/04/10 02:16</i>	<i>W846 8270D SIA</i>	<i>10F4798</i>
<i>Surr: 2-Fluorobiphenyl (14-120%)</i>	<i>51 %</i>					<i>07/04/10 02:16</i>	<i>W846 8270D SIA</i>	<i>10F4798</i>
<i>Surr: Terphenyl-d14 (18-120%)</i>	<i>66 %</i>					<i>07/04/10 02:16</i>	<i>W846 8270D SIA</i>	<i>10F4798</i>
Purgeable Petroleum Hydrocarbons								
GRO (C4-C12) NW	ND		mg/kg dry	5.39	50	06/29/10 19:46	NWTPH-Gx	10F4830
<i>Surr: a,a,a-Trifluorotoluene (50-150%)</i>	<i>100 %</i>					<i>06/29/10 19:46</i>	<i>NWTPH-Gx</i>	<i>10F4830</i>
Extractable Petroleum Hydrocarbons with Silica Gel Treatment								
Diesel	ND		mg/kg dry	3.95	1	07/08/10 20:23	NWTPH-Dx	10F4974
Motor Oil	4.06	QP5	mg/kg dry	3.95	1	07/08/10 20:23	NWTPH-Dx	10F4974
<i>Surr: o-Terphenyl (50-150%)</i>	<i>62 %</i>					<i>07/08/10 20:23</i>	<i>NWTPH-Dx</i>	<i>10F4974</i>

Client AMEC Earth & Environmental (13993)
600 University Street, Suite 1020
Seattle, WA 98101
Attn Leah Vigoren

Work Order: NTF2659
Project Name: Everett Terminal(46108) - AMEC
Project Number: [none]
Received: 06/26/10 08:30

ANALYTICAL REPORT

Analyte	Result	Flag	Units	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
Sample ID: NTF2659-03 (AP1-5 - Soil) Sampled: 06/24/10 14:05								
General Chemistry Parameters								
% Dry Solids	86.5		%	0.500	1	07/14/10 09:00	SW-846	10G1965
Volatile Organic Compounds by EPA Method 8260B								
Benzene	ND		mg/kg dry	0.00222	1	07/08/10 00:37	SW846 8260B	10G1206
Ethylbenzene	ND		mg/kg dry	0.00222	1	07/08/10 00:37	SW846 8260B	10G1206
Methyl tert-Butyl Ether	ND		mg/kg dry	0.00222	1	07/08/10 00:37	SW846 8260B	10G1206
Toluene	ND		mg/kg dry	0.00222	1	07/08/10 00:37	SW846 8260B	10G1206
Xylenes, total	ND		mg/kg dry	0.00555	1	07/08/10 00:37	SW846 8260B	10G1206
<i>Surr: 1,2-Dichloroethane-d4 (67-138%)</i>	111 %					07/08/10 00:37	SW846 8260B	10G1206
<i>Surr: Dibromofluoromethane (75-125%)</i>	110 %					07/08/10 00:37	SW846 8260B	10G1206
<i>Surr: Toluene-d8 (76-129%)</i>	118 %					07/08/10 00:37	SW846 8260B	10G1206
<i>Surr: 4-Bromofluorobenzene (67-147%)</i>	116 %					07/08/10 00:37	SW846 8260B	10G1206
Polyaromatic Hydrocarbons by EPA 8270D SIM								
Acenaphthene	0.261		mg/kg dry	0.0383	10	07/04/10 20:27	SW846 8270D SIM	10F4798
Acenaphthylene	ND	RL1	mg/kg dry	0.0383	10	07/04/10 20:27	SW846 8270D SIM	10F4798
Anthracene	0.150		mg/kg dry	0.0383	10	07/04/10 20:27	SW846 8270D SIM	10F4798
Benzo (a) anthracene	0.196		mg/kg dry	0.0383	10	07/04/10 20:27	SW846 8270D SIM	10F4798
Benzo (a) pyrene	0.130		mg/kg dry	0.0383	10	07/04/10 20:27	SW846 8270D SIM	10F4798
Benzo (b) fluoranthene	0.142		mg/kg dry	0.0383	10	07/04/10 20:27	SW846 8270D SIM	10F4798
Benzo (g,h,i) perylene	0.0958		mg/kg dry	0.0383	10	07/04/10 20:27	SW846 8270D SIM	10F4798
Benzo (k) fluoranthene	0.0767		mg/kg dry	0.0383	10	07/04/10 20:27	SW846 8270D SIM	10F4798
Chrysene	0.245		mg/kg dry	0.0383	10	07/04/10 20:27	SW846 8270D SIM	10F4798
Dibenz (a,h) anthracene	0.0383		mg/kg dry	0.0383	10	07/04/10 20:27	SW846 8270D SIM	10F4798
Fluoranthene	0.518		mg/kg dry	0.0383	10	07/04/10 20:27	SW846 8270D SIM	10F4798
Fluorene	0.383		mg/kg dry	0.0383	10	07/04/10 20:27	SW846 8270D SIM	10F4798
Indeno (1,2,3-cd) pyrene	0.0728		mg/kg dry	0.0383	10	07/04/10 20:27	SW846 8270D SIM	10F4798
1-Methylnaphthalene	0.529		mg/kg dry	0.0383	10	07/04/10 20:27	SW846 8270D SIM	10F4798
2-Methylnaphthalene	0.0843		mg/kg dry	0.0383	10	07/04/10 20:27	SW846 8270D SIM	10F4798
Naphthalene	0.0767		mg/kg dry	0.0383	10	07/04/10 20:27	SW846 8270D SIM	10F4798
Phenanthrene	0.686		mg/kg dry	0.0383	10	07/04/10 20:27	SW846 8270D SIM	10F4798
Pyrene	0.709		mg/kg dry	0.0383	10	07/04/10 20:27	SW846 8270D SIM	10F4798
<i>Surr: Nitrobenzene-d5 (17-120%)</i>	80 %					07/04/10 20:27	SW846 8270D SIM	10F4798
<i>Surr: 2-Fluorobiphenyl (14-120%)</i>	80 %					07/04/10 20:27	SW846 8270D SIM	10F4798
<i>Surr: Terphenyl-d14 (18-120%)</i>	90 %					07/04/10 20:27	SW846 8270D SIM	10F4798
Purgeable Petroleum Hydrocarbons								
GRO (C4-C12) NW	44.1		mg/kg dry	5.32	50	06/29/10 20:17	NWTPH-Gx	10F4830
<i>Surr: a,a,a-Trifluorotoluene (50-150%)</i>	88 %					06/29/10 20:17	NWTPH-Gx	10F4830
Extractable Petroleum Hydrocarbons with Silica Gel Treatment								
Diesel	989	QP7	mg/kg dry	94.5	25	07/08/10 23:00	NWTPH-Dx	10F4974
Motor Oil	1360	QP7a	mg/kg dry	94.5	25	07/08/10 23:00	NWTPH-Dx	10F4974
<i>Surr: o-Terphenyl (50-150%)</i>	*	Z3				07/08/10 23:00	NWTPH-Dx	10F4974

Sample ID: NTF2659-04 (AP1-15 - Soil) Sampled: 06/24/10 14:20

Client AMEC Earth & Environmental (13993)
600 University Street, Suite 1020
Seattle, WA 98101
Attn Leah Vigoren

Work Order: NTF2659
Project Name: Everett Terminal(46108) - AMEC
Project Number: [none]
Received: 06/26/10 08:30

ANALYTICAL REPORT

Analyte	Result	Flag	Units	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
Sample ID: NTF2659-04 (AP1-15 - Soil) - cont. Sampled: 06/24/10 14:20								
General Chemistry Parameters								
% Dry Solids	36.7		%	0.500	1	07/14/10 09:00	SW-846	10G1965
Volatile Organic Compounds by EPA Method 8260B								
Benzene	ND		mg/kg dry	0.00631	1	07/08/10 01:08	SW846 8260B	10G1206
Ethylbenzene	ND		mg/kg dry	0.00631	1	07/08/10 01:08	SW846 8260B	10G1206
Methyl tert-Butyl Ether	ND		mg/kg dry	0.00631	1	07/08/10 01:08	SW846 8260B	10G1206
Toluene	ND		mg/kg dry	0.00631	1	07/08/10 01:08	SW846 8260B	10G1206
Xylenes, total	ND		mg/kg dry	0.0158	1	07/08/10 01:08	SW846 8260B	10G1206
<i>Surr: 1,2-Dichloroethane-d4 (67-138%)</i>	104 %					07/08/10 01:08	SW846 8260B	10G1206
<i>Surr: Dibromofluoromethane (75-125%)</i>	98 %					07/08/10 01:08	SW846 8260B	10G1206
<i>Surr: Toluene-d8 (76-129%)</i>	111 %					07/08/10 01:08	SW846 8260B	10G1206
<i>Surr: 4-Bromofluorobenzene (67-147%)</i>	114 %					07/08/10 01:08	SW846 8260B	10G1206
Polyaromatic Hydrocarbons by EPA 8270D SIM								
Acenaphthene	ND		mg/kg dry	0.00906	1	07/04/10 03:01	SW846 8270D SIM	10F4798
Acenaphthylene	ND		mg/kg dry	0.00906	1	07/04/10 03:01	SW846 8270D SIM	10F4798
Anthracene	ND		mg/kg dry	0.00906	1	07/04/10 03:01	SW846 8270D SIM	10F4798
Benzo (a) anthracene	ND		mg/kg dry	0.00906	1	07/04/10 03:01	SW846 8270D SIM	10F4798
Benzo (a) pyrene	ND		mg/kg dry	0.00906	1	07/04/10 03:01	SW846 8270D SIM	10F4798
Benzo (b) fluoranthene	ND		mg/kg dry	0.00906	1	07/04/10 03:01	SW846 8270D SIM	10F4798
Benzo (g,h,i) perylene	ND		mg/kg dry	0.00906	1	07/04/10 03:01	SW846 8270D SIM	10F4798
Benzo (k) fluoranthene	ND		mg/kg dry	0.00906	1	07/04/10 03:01	SW846 8270D SIM	10F4798
Chrysene	ND		mg/kg dry	0.00906	1	07/04/10 03:01	SW846 8270D SIM	10F4798
Dibenz (a,h) anthracene	ND		mg/kg dry	0.00906	1	07/04/10 03:01	SW846 8270D SIM	10F4798
Fluoranthene	ND		mg/kg dry	0.00906	1	07/04/10 03:01	SW846 8270D SIM	10F4798
Fluorene	ND		mg/kg dry	0.00906	1	07/04/10 03:01	SW846 8270D SIM	10F4798
Indeno (1,2,3-cd) pyrene	ND		mg/kg dry	0.00906	1	07/04/10 03:01	SW846 8270D SIM	10F4798
1-Methylnaphthalene	ND		mg/kg dry	0.00906	1	07/04/10 03:01	SW846 8270D SIM	10F4798
2-Methylnaphthalene	ND		mg/kg dry	0.00906	1	07/04/10 03:01	SW846 8270D SIM	10F4798
Naphthalene	ND		mg/kg dry	0.00906	1	07/04/10 03:01	SW846 8270D SIM	10F4798
Phenanthrene	0.00907		mg/kg dry	0.00906	1	07/04/10 03:01	SW846 8270D SIM	10F4798
Pyrene	ND		mg/kg dry	0.00906	1	07/04/10 03:01	SW846 8270D SIM	10F4798
<i>Surr: Nitrobenzene-d5 (17-120%)</i>	71 %					07/04/10 03:01	W846 8270D SIA	10F4798
<i>Surr: 2-Fluorobiphenyl (14-120%)</i>	55 %					07/04/10 03:01	W846 8270D SIA	10F4798
<i>Surr: Terphenyl-d14 (18-120%)</i>	44 %					07/04/10 03:01	W846 8270D SIA	10F4798
Purgeable Petroleum Hydrocarbons								
GRO (C4-C12) NW	ND		mg/kg dry	18.6	50	06/29/10 20:48	NWTPH-Gx	10F4830
<i>Surr: a,a,a-Trifluorotoluene (50-150%)</i>	101 %					06/29/10 20:48	NWTPH-Gx	10F4830
Extractable Petroleum Hydrocarbons with Silica Gel Treatment								
Diesel	14.2	H2, QP5	mg/kg dry	10.7	1	07/09/10 14:07	NWTPH-Dx	10G1298
Motor Oil	35.5	H2, QP6	mg/kg dry	10.7	1	07/09/10 14:07	NWTPH-Dx	10G1298
<i>Surr: o-Terphenyl (50-150%)</i>	38 %	ZX				07/09/10 14:07	NWTPH-Dx	10G1298

Sample ID: NTF2659-05 (AP1-62410 - Ground Water) Sampled: 06/24/10 15:00

Client AMEC Earth & Environmental (13993)
600 University Street, Suite 1020
Seattle, WA 98101
Attn Leah Vigoren

Work Order: NTF2659
Project Name: Everett Terminal(46108) - AMEC
Project Number: [none]
Received: 06/26/10 08:30

ANALYTICAL REPORT

Analyte	Result	Flag	Units	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
Sample ID: NTF2659-05 (API-62410 - Ground Water) - cont. Sampled: 06/24/10 15:00								
Dissolved Metals by EPA Method 6010B								
Lead	ND	P7	mg/L	0.00500	1	07/03/10 20:17	SW846 6010B	10F4815
Volatile Organic Compounds by EPA Method 8260B								
Benzene	ND		ug/L	0.500	1	07/08/10 13:14	SW846 8260B	10G1167
Hexane	ND		ug/L	2.00	1	07/08/10 13:14	SW846 8260B	10G1167
Ethylbenzene	ND		ug/L	0.500	1	07/08/10 13:14	SW846 8260B	10G1167
Methyl tert-Butyl Ether	ND		ug/L	0.500	1	07/08/10 13:14	SW846 8260B	10G1167
Toluene	ND		ug/L	0.500	1	07/08/10 13:14	SW846 8260B	10G1167
Xylenes, total	ND		ug/L	0.500	1	07/08/10 13:14	SW846 8260B	10G1167
1,2-Dibromoethane (EDB)	ND		ug/L	0.500	1	07/08/10 13:14	SW846 8260B	10G1167
1,2-Dichloroethane	ND		ug/L	0.500	1	07/08/10 13:14	SW846 8260B	10G1167
Surr: 1,2-Dichloroethane-d4 (63-140%)	94 %					07/08/10 13:14	SW846 8260B	10G1167
Surr: Dibromofluoromethane (73-131%)	95 %					07/08/10 13:14	SW846 8260B	10G1167
Surr: Toluene-d8 (80-120%)	101 %					07/08/10 13:14	SW846 8260B	10G1167
Surr: 4-Bromofluorobenzene (79-125%)	99 %					07/08/10 13:14	SW846 8260B	10G1167
Polyaromatic Hydrocarbons by EPA 8270D SIM								
Acenaphthene	0.895		ug/L	0.0952	1	06/29/10 20:46	SW846 8270D SIM	10F4923
Acenaphthylene	0.362		ug/L	0.0952	1	06/29/10 20:46	SW846 8270D SIM	10F4923
Anthracene	0.219		ug/L	0.0952	1	06/29/10 20:46	SW846 8270D SIM	10F4923
Benzo (a) anthracene	ND		ug/L	0.0952	1	06/29/10 20:46	SW846 8270D SIM	10F4923
Benzo (a) pyrene	ND		ug/L	0.0952	1	06/29/10 20:46	SW846 8270D SIM	10F4923
Benzo (b) fluoranthene	ND		ug/L	0.0952	1	06/29/10 20:46	SW846 8270D SIM	10F4923
Benzo (g,h,i) perylene	ND		ug/L	0.0952	1	06/29/10 20:46	SW846 8270D SIM	10F4923
Benzo (k) fluoranthene	ND		ug/L	0.0952	1	06/29/10 20:46	SW846 8270D SIM	10F4923
Chrysene	0.114		ug/L	0.0952	1	06/29/10 20:46	SW846 8270D SIM	10F4923
Dibenz (a,h) anthracene	ND		ug/L	0.0952	1	06/29/10 20:46	SW846 8270D SIM	10F4923
Fluoranthene	0.305		ug/L	0.0952	1	06/29/10 20:46	SW846 8270D SIM	10F4923
Fluorene	1.64		ug/L	0.0952	1	06/29/10 20:46	SW846 8270D SIM	10F4923
Indeno (1,2,3-cd) pyrene	ND		ug/L	0.0952	1	06/29/10 20:46	SW846 8270D SIM	10F4923
1-Methylnaphthalene	6.42		ug/L	0.0952	1	06/29/10 20:46	SW846 8270D SIM	10F4923
2-Methylnaphthalene	0.171		ug/L	0.0952	1	06/29/10 20:46	SW846 8270D SIM	10F4923
Naphthalene	0.276		ug/L	0.0952	1	06/29/10 20:46	SW846 8270D SIM	10F4923
Phenanthrene	0.686		ug/L	0.0952	1	06/29/10 20:46	SW846 8270D SIM	10F4923
Pyrene	0.438		ug/L	0.0952	1	07/06/10 17:00	SW846 8270D SIM	10F4923
Surr: Nitrobenzene-d5 (27-120%)	36 %					06/29/10 20:46	W846 8270D SIA	10F4923
Surr: 2-Fluorobiphenyl (29-120%)	28 %	ZX				06/29/10 20:46	W846 8270D SIA	10F4923
Surr: Terphenyl-d14 (13-120%)	11 %	ZX				06/29/10 20:46	W846 8270D SIA	10F4923
Purgeable Petroleum Hydrocarbons								
GRO (C4-C12) NW	ND		ug/L	100	1	07/07/10 17:10	NWTPH-Gx	10G0895
Surr: a,a,a-Trifluorotoluene (50-150%)	98 %					07/07/10 17:10	NWTPH-Gx	10G0895
Extractable Petroleum Hydrocarbons with Silica Gel Treatment								
Diesel	2700	QP7	ug/L	100	1	06/29/10 20:02	NWTPH-Dx	10F5077
Motor Oil	785	QP7	ug/L	100	1	06/29/10 20:02	NWTPH-Dx	10F5077

Client AMEC Earth & Environmental (13993)
 600 University Street, Suite 1020
 Seattle, WA 98101
 Attn Leah Vigoren

Work Order: NTF2659
 Project Name: Everett Terminal(46108) - AMEC
 Project Number: [none]
 Received: 06/26/10 08:30

ANALYTICAL REPORT

Analyte	Result	Flag	Units	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
Sample ID: NTF2659-05 (AP1-62410 - Ground Water) - cont. Sampled: 06/24/10 15:00								
Extractable Petroleum Hydrocarbons with Silica Gel Treatment - cont.								
<i>Surr: o-Terphenyl (50-150%)</i>	75 %					06/29/10 20:02	NWTPH-Dx	10F5077
Sample ID: NTF2659-07 (MWA4-15 - Soil) Sampled: 06/24/10 16:15								
General Chemistry Parameters								
% Dry Solids	79.0		%	0.500	1	07/14/10 09:00	SW-846	10G1965
Volatile Organic Compounds by EPA Method 8260B								
Benzene	ND		mg/kg dry	0.00215	1	07/08/10 01:40	SW846 8260B	10G1206
Ethylbenzene	ND		mg/kg dry	0.00215	1	07/08/10 01:40	SW846 8260B	10G1206
Methyl tert-Butyl Ether	ND		mg/kg dry	0.00215	1	07/08/10 01:40	SW846 8260B	10G1206
Toluene	ND		mg/kg dry	0.00215	1	07/08/10 01:40	SW846 8260B	10G1206
Xylenes, total	ND		mg/kg dry	0.00537	1	07/08/10 01:40	SW846 8260B	10G1206
<i>Surr: 1,2-Dichloroethane-d4 (67-138%)</i>	106 %					07/08/10 01:40	SW846 8260B	10G1206
<i>Surr: Dibromofluoromethane (75-125%)</i>	97 %					07/08/10 01:40	SW846 8260B	10G1206
<i>Surr: Toluene-d8 (76-129%)</i>	103 %					07/08/10 01:40	SW846 8260B	10G1206
<i>Surr: 4-Bromofluorobenzene (67-147%)</i>	98 %					07/08/10 01:40	SW846 8260B	10G1206
Polyaromatic Hydrocarbons by EPA 8270D SIM								
Acenaphthene	0.672		mg/kg dry	0.0420	10	07/04/10 21:12	SW846 8270D SIM	10F4798
Acenaphthylene	0.0105		mg/kg dry	0.00420	1	07/04/10 03:23	SW846 8270D SIM	10F4798
Anthracene	0.190		mg/kg dry	0.00420	1	07/04/10 03:23	SW846 8270D SIM	10F4798
Benzo (a) anthracene	0.0803		mg/kg dry	0.00420	1	07/04/10 03:23	SW846 8270D SIM	10F4798
Benzo (a) pyrene	0.0361		mg/kg dry	0.00420	1	07/04/10 03:23	SW846 8270D SIM	10F4798
Benzo (b) fluoranthene	0.0437		mg/kg dry	0.00420	1	07/04/10 03:23	SW846 8270D SIM	10F4798
Benzo (g,h,i) perylene	0.0160		mg/kg dry	0.00420	1	07/04/10 03:23	SW846 8270D SIM	10F4798
Benzo (k) fluoranthene	0.0290		mg/kg dry	0.00420	1	07/04/10 03:23	SW846 8270D SIM	10F4798
Chrysene	0.0584		mg/kg dry	0.00420	1	07/04/10 03:23	SW846 8270D SIM	10F4798
Dibenz (a,h) anthracene	0.00630		mg/kg dry	0.00420	1	07/04/10 03:23	SW846 8270D SIM	10F4798
Fluoranthene	0.588		mg/kg dry	0.0420	10	07/04/10 21:12	SW846 8270D SIM	10F4798
Fluorene	0.731		mg/kg dry	0.0420	10	07/04/10 21:12	SW846 8270D SIM	10F4798
Indeno (1,2,3-cd) pyrene	0.0160		mg/kg dry	0.00420	1	07/04/10 03:23	SW846 8270D SIM	10F4798
1-Methylnaphthalene	0.148		mg/kg dry	0.00420	1	07/04/10 03:23	SW846 8270D SIM	10F4798
2-Methylnaphthalene	0.192		mg/kg dry	0.00420	1	07/04/10 03:23	SW846 8270D SIM	10F4798
Naphthalene	0.118		mg/kg dry	0.00420	1	07/04/10 03:23	SW846 8270D SIM	10F4798
Phenanthrene	1.70		mg/kg dry	0.0420	10	07/04/10 21:12	SW846 8270D SIM	10F4798
Pyrene	0.358		mg/kg dry	0.00420	1	07/04/10 03:23	SW846 8270D SIM	10F4798
<i>Surr: Nitrobenzene-d5 (17-120%)</i>	60 %					07/04/10 03:23	W846 8270D SIA	10F4798
<i>Surr: 2-Fluorobiphenyl (14-120%)</i>	54 %					07/04/10 03:23	W846 8270D SIA	10F4798
<i>Surr: Terphenyl-d14 (18-120%)</i>	61 %					07/04/10 03:23	W846 8270D SIA	10F4798
Purgeable Petroleum Hydrocarbons								
GRO (C4-C12) NW	ND		mg/kg dry	4.74	50	06/29/10 21:19	NWTPH-Gx	10F4830
<i>Surr: a,a,a-Trifluorotoluene (50-150%)</i>	53 %					06/29/10 21:19	NWTPH-Gx	10F4830
Extractable Petroleum Hydrocarbons with Silica Gel Treatment								
Diesel	12.1	QP6	mg/kg dry	4.97	1	07/08/10 07:15	NWTPH-Dx	10F4974

Client AMEC Earth & Environmental (13993)
 600 University Street, Suite 1020
 Seattle, WA 98101
 Attn Leah Vigoren

Work Order: NTF2659
 Project Name: Everett Terminal(46108) - AMEC
 Project Number: [none]
 Received: 06/26/10 08:30

ANALYTICAL REPORT

Analyte	Result	Flag	Units	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
Sample ID: NTF2659-07 (MWA4-15 - Soil) - cont. Sampled: 06/24/10 16:15								
Extractable Petroleum Hydrocarbons with Silica Gel Treatment - cont.								
Motor Oil	12.2	QP6	mg/kg dry	4.97	1	07/08/10 07:15	NWTPH-Dx	10F4974
<i>Surr: o-Terphenyl (50-150%)</i>	<i>82 %</i>					<i>07/08/10 07:15</i>	<i>NWTPH-Dx</i>	<i>10F4974</i>
Sample ID: NTF2659-08 (MWA4-20 - Soil) Sampled: 06/24/10 16:30								
General Chemistry Parameters								
% Dry Solids	87.2		%	0.500	1	07/14/10 09:00	SW-846	10G1965
Volatile Organic Compounds by EPA Method 8260B								
Benzene	ND		mg/kg dry	0.00192	1	07/08/10 02:11	SW846 8260B	10G1206
Ethylbenzene	ND		mg/kg dry	0.00192	1	07/08/10 02:11	SW846 8260B	10G1206
Methyl tert-Butyl Ether	ND		mg/kg dry	0.00192	1	07/08/10 02:11	SW846 8260B	10G1206
Toluene	ND		mg/kg dry	0.00192	1	07/08/10 02:11	SW846 8260B	10G1206
Xylenes, total	ND		mg/kg dry	0.00480	1	07/08/10 02:11	SW846 8260B	10G1206
<i>Surr: 1,2-Dichloroethane-d4 (67-138%)</i>	<i>108 %</i>					<i>07/08/10 02:11</i>	<i>SW846 8260B</i>	<i>10G1206</i>
<i>Surr: Dibromofluoromethane (75-125%)</i>	<i>99 %</i>					<i>07/08/10 02:11</i>	<i>SW846 8260B</i>	<i>10G1206</i>
<i>Surr: Toluene-d8 (76-129%)</i>	<i>104 %</i>					<i>07/08/10 02:11</i>	<i>SW846 8260B</i>	<i>10G1206</i>
<i>Surr: 4-Bromofluorobenzene (67-147%)</i>	<i>96 %</i>					<i>07/08/10 02:11</i>	<i>SW846 8260B</i>	<i>10G1206</i>
Polyaromatic Hydrocarbons by EPA 8270D SIM								
Acenaphthene	0.0323		mg/kg dry	0.00380	1	07/04/10 03:46	SW846 8270D SIM	10F4798
Acenaphthylene	ND		mg/kg dry	0.00380	1	07/04/10 03:46	SW846 8270D SIM	10F4798
Anthracene	0.0731		mg/kg dry	0.00380	1	07/04/10 03:46	SW846 8270D SIM	10F4798
Benzo (a) anthracene	0.0114		mg/kg dry	0.00380	1	07/04/10 03:46	SW846 8270D SIM	10F4798
Benzo (a) pyrene	0.00419		mg/kg dry	0.00380	1	07/04/10 03:46	SW846 8270D SIM	10F4798
Benzo (b) fluoranthene	0.00457		mg/kg dry	0.00380	1	07/04/10 03:46	SW846 8270D SIM	10F4798
Benzo (g,h,i) perylene	ND		mg/kg dry	0.00380	1	07/04/10 03:46	SW846 8270D SIM	10F4798
Benzo (k) fluoranthene	0.00381		mg/kg dry	0.00380	1	07/04/10 03:46	SW846 8270D SIM	10F4798
Chrysene	0.0126		mg/kg dry	0.00380	1	07/04/10 03:46	SW846 8270D SIM	10F4798
Dibenz (a,h) anthracene	ND		mg/kg dry	0.00380	1	07/04/10 03:46	SW846 8270D SIM	10F4798
Fluoranthene	0.0617		mg/kg dry	0.00380	1	07/04/10 03:46	SW846 8270D SIM	10F4798
Fluorene	0.0464		mg/kg dry	0.00380	1	07/04/10 03:46	SW846 8270D SIM	10F4798
Indeno (1,2,3-cd) pyrene	ND		mg/kg dry	0.00380	1	07/04/10 03:46	SW846 8270D SIM	10F4798
1-Methylnaphthalene	0.00533		mg/kg dry	0.00380	1	07/04/10 03:46	SW846 8270D SIM	10F4798
2-Methylnaphthalene	0.0110		mg/kg dry	0.00380	1	07/04/10 03:46	SW846 8270D SIM	10F4798
Naphthalene	0.0114		mg/kg dry	0.00380	1	07/04/10 03:46	SW846 8270D SIM	10F4798
Phenanthrene	0.135		mg/kg dry	0.00380	1	07/04/10 03:46	SW846 8270D SIM	10F4798
Pyrene	0.0472		mg/kg dry	0.00380	1	07/04/10 03:46	SW846 8270D SIM	10F4798
<i>Surr: Nitrobenzene-d5 (17-120%)</i>	<i>47 %</i>					<i>07/04/10 03:46</i>	<i>W846 8270D SIA</i>	<i>10F4798</i>
<i>Surr: 2-Fluorobiphenyl (14-120%)</i>	<i>47 %</i>					<i>07/04/10 03:46</i>	<i>W846 8270D SIA</i>	<i>10F4798</i>
<i>Surr: Terphenyl-d14 (18-120%)</i>	<i>59 %</i>					<i>07/04/10 03:46</i>	<i>W846 8270D SIA</i>	<i>10F4798</i>
Purgeable Petroleum Hydrocarbons								
GRO (C4-C12) NW	ND		mg/kg dry	4.74	50	06/29/10 21:50	NWTPH-Gx	10F4830
<i>Surr: a,a,a-Trifluorotoluene (50-150%)</i>	<i>98 %</i>					<i>06/29/10 21:50</i>	<i>NWTPH-Gx</i>	<i>10F4830</i>
Extractable Petroleum Hydrocarbons with Silica Gel Treatment								

Client AMEC Earth & Environmental (13993)
600 University Street, Suite 1020
Seattle, WA 98101
Attn Leah Vigoren

Work Order: NTF2659
Project Name: Everett Terminal(46108) - AMEC
Project Number: [none]
Received: 06/26/10 08:30

ANALYTICAL REPORT

Analyte	Result	Flag	Units	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
Sample ID: NTF2659-08 (MWA4-20 - Soil) - cont. Sampled: 06/24/10 16:30								
Extractable Petroleum Hydrocarbons with Silica Gel Treatment - cont.								
Diesel	7.25	H2, QP5	mg/kg dry	4.51	1	07/09/10 14:26	NWTPH-Dx	10G1298
Motor Oil	17.0	H2, QP6	mg/kg dry	4.51	1	07/09/10 14:26	NWTPH-Dx	10G1298
<i>Surr: o-Terphenyl (50-150%)</i>	59 %					07/09/10 14:26	NWTPH-Dx	10G1298
Sample ID: NTF2659-09 (Dup 2 - Soil) Sampled: 06/24/10 16:20								
General Chemistry Parameters								
% Dry Solids	82.3		%	0.500	1	07/14/10 09:00	SW-846	10G1965
Volatile Organic Compounds by EPA Method 8260B								
Benzene	ND		mg/kg dry	0.00200	1	07/08/10 02:42	SW846 8260B	10G1206
Ethylbenzene	ND		mg/kg dry	0.00200	1	07/08/10 02:42	SW846 8260B	10G1206
Methyl tert-Butyl Ether	ND		mg/kg dry	0.00200	1	07/08/10 02:42	SW846 8260B	10G1206
Toluene	ND		mg/kg dry	0.00200	1	07/08/10 02:42	SW846 8260B	10G1206
Xylenes, total	ND		mg/kg dry	0.00500	1	07/08/10 02:42	SW846 8260B	10G1206
<i>Surr: 1,2-Dichloroethane-d4 (67-138%)</i>	106 %					07/08/10 02:42	SW846 8260B	10G1206
<i>Surr: Dibromofluoromethane (75-125%)</i>	92 %					07/08/10 02:42	SW846 8260B	10G1206
<i>Surr: Toluene-d8 (76-129%)</i>	106 %					07/08/10 02:42	SW846 8260B	10G1206
<i>Surr: 4-Bromofluorobenzene (67-147%)</i>	100 %					07/08/10 02:42	SW846 8260B	10G1206
Polyaromatic Hydrocarbons by EPA 8270D SIM								
Acenaphthene	1.02		mg/kg dry	0.0396	10	07/04/10 22:21	SW846 8270D SIM	10F4798
Acenaphthylene	0.0139		mg/kg dry	0.00396	1	07/04/10 04:08	SW846 8270D SIM	10F4798
Anthracene	0.373		mg/kg dry	0.00396	1	07/04/10 04:08	SW846 8270D SIM	10F4798
Benzo (a) anthracene	0.0659		mg/kg dry	0.00396	1	07/04/10 04:08	SW846 8270D SIM	10F4798
Benzo (a) pyrene	0.0218		mg/kg dry	0.00396	1	07/04/10 04:08	SW846 8270D SIM	10F4798
Benzo (b) fluoranthene	0.0242		mg/kg dry	0.00396	1	07/04/10 04:08	SW846 8270D SIM	10F4798
Benzo (g,h,i) perylene	0.0107		mg/kg dry	0.00396	1	07/04/10 04:08	SW846 8270D SIM	10F4798
Benzo (k) fluoranthene	0.0167		mg/kg dry	0.00396	1	07/04/10 04:08	SW846 8270D SIM	10F4798
Chrysene	0.0472		mg/kg dry	0.00396	1	07/04/10 04:08	SW846 8270D SIM	10F4798
Dibenz (a,h) anthracene	ND		mg/kg dry	0.00396	1	07/04/10 04:08	SW846 8270D SIM	10F4798
Fluoranthene	1.25		mg/kg dry	0.0396	10	07/04/10 22:21	SW846 8270D SIM	10F4798
Fluorene	1.23		mg/kg dry	0.0396	10	07/04/10 22:21	SW846 8270D SIM	10F4798
Indeno (1,2,3-cd) pyrene	0.0103		mg/kg dry	0.00396	1	07/04/10 04:08	SW846 8270D SIM	10F4798
1-Methylnaphthalene	0.181		mg/kg dry	0.00396	1	07/04/10 04:08	SW846 8270D SIM	10F4798
2-Methylnaphthalene	0.268		mg/kg dry	0.00396	1	07/04/10 04:08	SW846 8270D SIM	10F4798
Naphthalene	0.155		mg/kg dry	0.00396	1	07/04/10 04:08	SW846 8270D SIM	10F4798
Phenanthrene	3.74		mg/kg dry	0.0396	10	07/04/10 22:21	SW846 8270D SIM	10F4798
Pyrene	0.754		mg/kg dry	0.0396	10	07/04/10 22:21	SW846 8270D SIM	10F4798
<i>Surr: Nitrobenzene-d5 (17-120%)</i>	59 %					07/04/10 04:08	W846 8270D SIA	10F4798
<i>Surr: 2-Fluorobiphenyl (14-120%)</i>	53 %					07/04/10 04:08	W846 8270D SIA	10F4798
<i>Surr: Terphenyl-d14 (18-120%)</i>	62 %					07/04/10 04:08	W846 8270D SIA	10F4798
Purgeable Petroleum Hydrocarbons								
GRO (C4-C12) NW	ND		mg/kg dry	7.50	50	06/29/10 22:21	NWTPH-Gx	10F4830
<i>Surr: a,a,a-Trifluorotoluene (50-150%)</i>	101 %					06/29/10 22:21	NWTPH-Gx	10F4830

Client AMEC Earth & Environmental (13993)
600 University Street, Suite 1020
Seattle, WA 98101
Attn Leah Vigoren

Work Order: NTF2659
Project Name: Everett Terminal(46108) - AMEC
Project Number: [none]
Received: 06/26/10 08:30

ANALYTICAL REPORT

Analyte	Result	Flag	Units	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
Sample ID: NTF2659-09 (Dup 2 - Soil) - cont. Sampled: 06/24/10 16:20								
Extractable Petroleum Hydrocarbons with Silica Gel Treatment								
Diesel	46.1	QP6	mg/kg dry	4.71	1	07/01/10 02:52	NWTPH-Dx	10F5255
Motor Oil	81.1	QP6	mg/kg dry	4.71	1	07/01/10 02:52	NWTPH-Dx	10F5255
<i>Surr: o-Terphenyl (50-150%)</i>	51 %					07/01/10 02:52	NWTPH-Dx	10F5255
Sample ID: NTF2659-10 (MWA3-10 - Soil) Sampled: 06/24/10 17:15								
General Chemistry Parameters								
% Dry Solids	82.4		%	0.500	1	07/14/10 09:00	SW-846	10G1965
Volatile Organic Compounds by EPA Method 8260B								
Benzene	ND		mg/kg dry	0.00212	1	07/08/10 03:13	SW846 8260B	10G1206
Ethylbenzene	ND		mg/kg dry	0.00212	1	07/08/10 03:13	SW846 8260B	10G1206
Methyl tert-Butyl Ether	ND		mg/kg dry	0.00212	1	07/08/10 03:13	SW846 8260B	10G1206
Toluene	ND		mg/kg dry	0.00212	1	07/08/10 03:13	SW846 8260B	10G1206
Xylenes, total	ND		mg/kg dry	0.00529	1	07/08/10 03:13	SW846 8260B	10G1206
<i>Surr: 1,2-Dichloroethane-d4 (67-138%)</i>	106 %					07/08/10 03:13	SW846 8260B	10G1206
<i>Surr: Dibromofluoromethane (75-125%)</i>	101 %					07/08/10 03:13	SW846 8260B	10G1206
<i>Surr: Toluene-d8 (76-129%)</i>	105 %					07/08/10 03:13	SW846 8260B	10G1206
<i>Surr: 4-Bromofluorobenzene (67-147%)</i>	98 %					07/08/10 03:13	SW846 8260B	10G1206
Polyaromatic Hydrocarbons by EPA 8270D SIM								
Acenaphthene	0.0343		mg/kg dry	0.00394	1	07/04/10 04:31	SW846 8270D SIM	10F4798
Acenaphthylene	ND		mg/kg dry	0.00394	1	07/04/10 04:31	SW846 8270D SIM	10F4798
Anthracene	0.00631		mg/kg dry	0.00394	1	07/04/10 04:31	SW846 8270D SIM	10F4798
Benzo (a) anthracene	0.00907		mg/kg dry	0.00394	1	07/04/10 04:31	SW846 8270D SIM	10F4798
Benzo (a) pyrene	0.00710		mg/kg dry	0.00394	1	07/04/10 04:31	SW846 8270D SIM	10F4798
Benzo (b) fluoranthene	0.00592		mg/kg dry	0.00394	1	07/04/10 04:31	SW846 8270D SIM	10F4798
Benzo (g,h,i) perylene	0.00434		mg/kg dry	0.00394	1	07/04/10 04:31	SW846 8270D SIM	10F4798
Benzo (k) fluoranthene	0.00670		mg/kg dry	0.00394	1	07/04/10 04:31	SW846 8270D SIM	10F4798
Chrysene	0.0103		mg/kg dry	0.00394	1	07/04/10 04:31	SW846 8270D SIM	10F4798
Dibenz (a,h) anthracene	ND		mg/kg dry	0.00394	1	07/04/10 04:31	SW846 8270D SIM	10F4798
Fluoranthene	0.0205		mg/kg dry	0.00394	1	07/04/10 04:31	SW846 8270D SIM	10F4798
Fluorene	0.0170		mg/kg dry	0.00394	1	07/04/10 04:31	SW846 8270D SIM	10F4798
Indeno (1,2,3-cd) pyrene	0.00394		mg/kg dry	0.00394	1	07/04/10 04:31	SW846 8270D SIM	10F4798
1-Methylnaphthalene	0.00434		mg/kg dry	0.00394	1	07/04/10 04:31	SW846 8270D SIM	10F4798
2-Methylnaphthalene	ND		mg/kg dry	0.00394	1	07/04/10 04:31	SW846 8270D SIM	10F4798
Naphthalene	0.00828		mg/kg dry	0.00394	1	07/04/10 04:31	SW846 8270D SIM	10F4798
Phenanthrene	0.0296		mg/kg dry	0.00394	1	07/04/10 04:31	SW846 8270D SIM	10F4798
Pyrene	0.0229		mg/kg dry	0.00394	1	07/04/10 04:31	SW846 8270D SIM	10F4798
<i>Surr: Nitrobenzene-d5 (17-120%)</i>	55 %					07/04/10 04:31	W846 8270D SIA	10F4798
<i>Surr: 2-Fluorobiphenyl (14-120%)</i>	57 %					07/04/10 04:31	W846 8270D SIA	10F4798
<i>Surr: Terphenyl-d14 (18-120%)</i>	71 %					07/04/10 04:31	W846 8270D SIA	10F4798
Purgeable Petroleum Hydrocarbons								
GRO (C4-C12) NW	ND		mg/kg dry	5.98	50	06/29/10 22:52	NWTPH-Gx	10F4830
<i>Surr: a,a,a-Trifluorotoluene (50-150%)</i>	96 %					06/29/10 22:52	NWTPH-Gx	10F4830

Client AMEC Earth & Environmental (13993)
600 University Street, Suite 1020
Seattle, WA 98101
Attn Leah Vigoren

Work Order: NTF2659
Project Name: Everett Terminal(46108) - AMEC
Project Number: [none]
Received: 06/26/10 08:30

ANALYTICAL REPORT

Analyte	Result	Flag	Units	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
Sample ID: NTF2659-10 (MWA3-10 - Soil) - cont. Sampled: 06/24/10 17:15								
Extractable Petroleum Hydrocarbons with Silica Gel Treatment								
Diesel	7.63	QP5	mg/kg dry	4.75	1	06/30/10 13:49	NWTPH-Dx	10F4914
Motor Oil	22.1	QP7a	mg/kg dry	4.75	1	06/30/10 13:49	NWTPH-Dx	10F4914
<i>Surr: o-Terphenyl (50-150%)</i>	63 %					06/30/10 13:49	NWTPH-Dx	10F4914
Sample ID: NTF2659-11 (MWA3-20 - Soil) Sampled: 06/24/10 17:20								
General Chemistry Parameters								
% Dry Solids	85.0		%	0.500	1	07/14/10 09:00	SW-846	10G1965
Volatile Organic Compounds by EPA Method 8260B								
Benzene	ND		mg/kg dry	0.00200	1	07/08/10 03:44	SW846 8260B	10G1206
Ethylbenzene	ND		mg/kg dry	0.00200	1	07/08/10 03:44	SW846 8260B	10G1206
Methyl tert-Butyl Ether	ND		mg/kg dry	0.00200	1	07/08/10 03:44	SW846 8260B	10G1206
Toluene	ND		mg/kg dry	0.00200	1	07/08/10 03:44	SW846 8260B	10G1206
Xylenes, total	ND		mg/kg dry	0.00499	1	07/08/10 03:44	SW846 8260B	10G1206
<i>Surr: 1,2-Dichloroethane-d4 (67-138%)</i>	107 %					07/08/10 03:44	SW846 8260B	10G1206
<i>Surr: Dibromofluoromethane (75-125%)</i>	102 %					07/08/10 03:44	SW846 8260B	10G1206
<i>Surr: Toluene-d8 (76-129%)</i>	105 %					07/08/10 03:44	SW846 8260B	10G1206
<i>Surr: 4-Bromofluorobenzene (67-147%)</i>	97 %					07/08/10 03:44	SW846 8260B	10G1206
Polyaromatic Hydrocarbons by EPA 8270D SIM								
Acenaphthene	0.00967		mg/kg dry	0.00386	1	07/04/10 04:53	SW846 8270D SIM	10F4798
Acenaphthylene	0.0116		mg/kg dry	0.00386	1	07/04/10 04:53	SW846 8270D SIM	10F4798
Anthracene	0.0228		mg/kg dry	0.00386	1	07/04/10 04:53	SW846 8270D SIM	10F4798
Benzo (a) anthracene	0.0460		mg/kg dry	0.00386	1	07/04/10 04:53	SW846 8270D SIM	10F4798
Benzo (a) pyrene	0.0441		mg/kg dry	0.00386	1	07/04/10 04:53	SW846 8270D SIM	10F4798
Benzo (b) fluoranthene	0.0263		mg/kg dry	0.00386	1	07/04/10 04:53	SW846 8270D SIM	10F4798
Benzo (g,h,i) perylene	0.0197		mg/kg dry	0.00386	1	07/04/10 04:53	SW846 8270D SIM	10F4798
Benzo (k) fluoranthene	0.0313		mg/kg dry	0.00386	1	07/04/10 04:53	SW846 8270D SIM	10F4798
Chrysene	0.0460		mg/kg dry	0.00386	1	07/04/10 04:53	SW846 8270D SIM	10F4798
Dibenz (a,h) anthracene	0.00696		mg/kg dry	0.00386	1	07/04/10 04:53	SW846 8270D SIM	10F4798
Fluoranthene	0.0804		mg/kg dry	0.00386	1	07/04/10 04:53	SW846 8270D SIM	10F4798
Fluorene	0.0162		mg/kg dry	0.00386	1	07/04/10 04:53	SW846 8270D SIM	10F4798
Indeno (1,2,3-cd) pyrene	0.0186		mg/kg dry	0.00386	1	07/04/10 04:53	SW846 8270D SIM	10F4798
1-Methylnaphthalene	0.00580		mg/kg dry	0.00386	1	07/04/10 04:53	SW846 8270D SIM	10F4798
2-Methylnaphthalene	ND		mg/kg dry	0.00386	1	07/04/10 04:53	SW846 8270D SIM	10F4798
Naphthalene	ND		mg/kg dry	0.00386	1	07/04/10 04:53	SW846 8270D SIM	10F4798
Phenanthrene	0.0858		mg/kg dry	0.00386	1	07/04/10 04:53	SW846 8270D SIM	10F4798
Pyrene	0.0978		mg/kg dry	0.00386	1	07/04/10 04:53	SW846 8270D SIM	10F4798
<i>Surr: Nitrobenzene-d5 (17-120%)</i>	57 %					07/04/10 04:53	W846 8270D SIA	10F4798
<i>Surr: 2-Fluorobiphenyl (14-120%)</i>	59 %					07/04/10 04:53	W846 8270D SIA	10F4798
<i>Surr: Terphenyl-d14 (18-120%)</i>	66 %					07/04/10 04:53	W846 8270D SIA	10F4798
Purgeable Petroleum Hydrocarbons								
GRO (C4-C12) NW	ND		mg/kg dry	4.69	50	06/29/10 23:23	NWTPH-Gx	10F4830
<i>Surr: a,a,a-Trifluorotoluene (50-150%)</i>	107 %					06/29/10 23:23	NWTPH-Gx	10F4830

Client AMEC Earth & Environmental (13993)
 600 University Street, Suite 1020
 Seattle, WA 98101
 Attn Leah Vigoren

Work Order: NTF2659
 Project Name: Everett Terminal(46108) - AMEC
 Project Number: [none]
 Received: 06/26/10 08:30

ANALYTICAL REPORT

Analyte	Result	Flag	Units	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
Sample ID: NTF2659-11 (MWA3-20 - Soil) - cont. Sampled: 06/24/10 17:20								
Extractable Petroleum Hydrocarbons with Silica Gel Treatment								
Diesel	ND		mg/kg dry	4.57	1	06/30/10 14:09	NWTPH-Dx	10F4914
Motor Oil	6.81	QP5	mg/kg dry	4.57	1	06/30/10 14:09	NWTPH-Dx	10F4914
<i>Surr: o-Terphenyl (50-150%)</i>	<i>55 %</i>					<i>06/30/10 14:09</i>	<i>NWTPH-Dx</i>	<i>10F4914</i>

Sample ID: NTF2659-13 (Trip Blank - Water) Sampled: 06/24/10 00:01

Volatile Organic Compounds by EPA Method 8260B								
Benzene	ND		ug/L	0.500	1	07/08/10 12:46	SW846 8260B	10G1167
Ethylbenzene	ND		ug/L	0.500	1	07/08/10 12:46	SW846 8260B	10G1167
Methyl tert-Butyl Ether	ND		ug/L	0.500	1	07/08/10 12:46	SW846 8260B	10G1167
Toluene	ND		ug/L	0.500	1	07/08/10 12:46	SW846 8260B	10G1167
Xylenes, total	ND		ug/L	0.500	1	07/08/10 12:46	SW846 8260B	10G1167
<i>Surr: 1,2-Dichloroethane-d4 (63-140%)</i>	<i>94 %</i>					<i>07/08/10 12:46</i>	<i>SW846 8260B</i>	<i>10G1167</i>
<i>Surr: Dibromofluoromethane (73-131%)</i>	<i>93 %</i>					<i>07/08/10 12:46</i>	<i>SW846 8260B</i>	<i>10G1167</i>
<i>Surr: Toluene-d8 (80-120%)</i>	<i>100 %</i>					<i>07/08/10 12:46</i>	<i>SW846 8260B</i>	<i>10G1167</i>
<i>Surr: 4-Bromofluorobenzene (79-125%)</i>	<i>95 %</i>					<i>07/08/10 12:46</i>	<i>SW846 8260B</i>	<i>10G1167</i>

Client AMEC Earth & Environmental (13993)
 600 University Street, Suite 1020
 Seattle, WA 98101
 Attn Leah Vigoren

Work Order: NTF2659
 Project Name: Everett Terminal(46108) - AMEC
 Project Number: [none]
 Received: 06/26/10 08:30

SAMPLE EXTRACTION DATA

Parameter	Batch	Lab Number	Wt/Vol Extracted	Extracted Vol	Date	Analyst	Extraction Method
Dissolved Metals by EPA Method 6010B							
SW846 6010B	10F4815	NTF2659-05	50.00	50.00	07/02/10 01:30	LTB	EPA 3010A / 6010 D
Extractable Petroleum Hydrocarbons with Silica Gel Treatment							
NWTPH-Dx	10F4974	NTF2659-01	30.35	1.00	07/06/10 08:30	SAS	EPA 3550B
NWTPH-Dx	10F4974	NTF2659-02	30.23	1.00	07/06/10 08:30	SAS	EPA 3550B
NWTPH-Dx	10F4974	NTF2659-03	30.59	1.00	07/06/10 08:30	SAS	EPA 3550B
NWTPH-Dx	10F4974	NTF2659-03RE1	30.59	1.00	07/06/10 08:30	SAS	EPA 3550B
NWTPH-Dx	10F4974	NTF2659-04	25.47	1.00	07/06/10 08:30	SAS	EPA 3550B
NWTPH-Dx	10G1298	NTF2659-04RE1	25.52	1.00	07/09/10 07:30	CAG	EPA 3550B
NWTPH-Dx	10F5077	NTF2659-05	1000.00	1.00	06/29/10 12:25	MAH	EPA 3510C
NWTPH-Dx	10F4974	NTF2659-07	25.47	1.00	07/06/10 08:30	SAS	EPA 3550B
NWTPH-Dx	10F4974	NTF2659-08	25.29	1.00	07/06/10 08:30	SAS	EPA 3550B
NWTPH-Dx	10G1298	NTF2659-08RE1	25.42	1.00	07/09/10 07:30	CAG	EPA 3550B
NWTPH-Dx	10F5255	NTF2659-09	25.82	1.00	06/30/10 11:10	SAS	EPA 3550B
NWTPH-Dx	10F4914	NTF2659-10	25.52	1.00	06/29/10 10:45	SAS	EPA 3550B
NWTPH-Dx	10F4914	NTF2659-11	25.75	1.00	06/29/10 10:45	SAS	EPA 3550B
Polyaromatic Hydrocarbons by EPA 8270D SIM							
SW846 8270D SIM	10F4798	NTF2659-01	30.27	1.00	07/02/10 13:25	DMG	EPA 3550B
SW846 8270D SIM	10F4798	NTF2659-02	30.82	1.00	07/02/10 13:25	DMG	EPA 3550B
SW846 8270D SIM	10F4798	NTF2659-03	30.16	1.00	07/02/10 13:25	DMG	EPA 3550B
SW846 8270D SIM	10F4798	NTF2659-03RE1	30.16	1.00	07/02/10 13:25	DMG	EPA 3550B
SW846 8270D SIM	10F4798	NTF2659-04	30.04	1.00	07/02/10 13:25	DMG	EPA 3550B
SW846 8270D SIM	10F4923	NTF2659-05	1050.00	1.00	06/29/10 08:25	DXP	EPA 3510C
SW846 8270D SIM	10F4923	NTF2659-05RE1	1050.00	1.00	06/29/10 08:25	DXP	EPA 3510C
SW846 8270D SIM	10F4798	NTF2659-07	30.11	1.00	07/02/10 13:25	DMG	EPA 3550B
SW846 8270D SIM	10F4798	NTF2659-07RE1	30.11	1.00	07/02/10 13:25	DMG	EPA 3550B
SW846 8270D SIM	10F4798	NTF2659-08	30.14	1.00	07/02/10 13:25	DMG	EPA 3550B
SW846 8270D SIM	10F4798	NTF2659-09	30.64	1.00	07/02/10 13:25	DMG	EPA 3550B
SW846 8270D SIM	10F4798	NTF2659-09RE1	30.64	1.00	07/02/10 13:25	DMG	EPA 3550B
SW846 8270D SIM	10F4798	NTF2659-10	30.77	1.00	07/02/10 13:25	DMG	EPA 3550B
SW846 8270D SIM	10F4798	NTF2659-11	30.44	1.00	07/02/10 13:25	DMG	EPA 3550B
Purgeable Petroleum Hydrocarbons							
NWTPH-Gx	10F4830	NTF2659-01	3.96	5.00	06/24/10 12:20	JRL	EPA 5035A (GC)
NWTPH-Gx	10F4830	NTF2659-02	5.53	5.00	06/24/10 12:30	JRL	EPA 5035A (GC)
NWTPH-Gx	10F4830	NTF2659-03	5.43	5.00	06/24/10 14:05	JRL	EPA 5035A (GC)
NWTPH-Gx	10F4830	NTF2659-04	3.67	5.00	06/24/10 14:20	JRL	EPA 5035A (GC)
NWTPH-Gx	10F4830	NTF2659-07	6.68	5.00	06/24/10 16:15	JRL	EPA 5035A (GC)
NWTPH-Gx	10F4830	NTF2659-08	6.05	5.00	06/24/10 16:30	JRL	EPA 5035A (GC)
NWTPH-Gx	10F4830	NTF2659-09	4.05	5.00	06/24/10 16:20	JRL	EPA 5035A (GC)
NWTPH-Gx	10F4830	NTF2659-10	5.07	5.00	06/24/10 17:15	JRL	EPA 5035A (GC)
NWTPH-Gx	10F4830	NTF2659-11	6.28	5.00	06/24/10 17:20	JRL	EPA 5035A (GC)
Volatile Organic Compounds by EPA Method 8260B							
SW846 8260B	10G1206	NTF2659-01	4.81	5.00	06/24/10 12:20	JRL	EPA 5035
SW846 8260B	10G1206	NTF2659-02	6.25	5.00	06/24/10 12:30	JRL	EPA 5035
SW846 8260B	10G1206	NTF2659-03	5.21	5.00	06/24/10 14:05	JRL	EPA 5035

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 Received: 06/26/10 08:30

SAMPLE EXTRACTION DATA

Parameter	Batch	Lab Number	Wt/Vol		Date	Analyst	Extraction Method
			Extracted	Extracted Vol			
SW846 8260B	10G1206	NTF2659-04	4.32	5.00	06/24/10 14:20	JRL	EPA 5035
SW846 8260B	10G1206	NTF2659-07	5.89	5.00	06/24/10 16:15	JRL	EPA 5035
SW846 8260B	10G1206	NTF2659-08	5.98	5.00	06/24/10 16:30	JRL	EPA 5035
SW846 8260B	10G1206	NTF2659-09	6.08	5.00	06/24/10 16:20	JRL	EPA 5035
SW846 8260B	10G1206	NTF2659-10	5.73	5.00	06/24/10 17:15	JRL	EPA 5035
SW846 8260B	10G1206	NTF2659-11	5.90	5.00	06/24/10 17:20	JRL	EPA 5035

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 Received: 06/26/10 08:30

PROJECT QUALITY CONTROL DATA
Blank

Analyte	Blank Value	Q	Units	Q.C. Batch	Lab Number	Analyzed Date/Time
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Dissolved Metals by EPA Method 6010B

10F4815-BLK1

Lead	<0.00290		mg/L	10F4815	10F4815-BLK1	07/03/10 18:41
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Volatile Organic Compounds by EPA Method 8260B

10G1167-BLK1

Benzene	<0.170		ug/L	10G1167	10G1167-BLK1	07/08/10 10:53
Hexane	<0.220		ug/L	10G1167	10G1167-BLK1	07/08/10 10:53
Ethylbenzene	<0.170		ug/L	10G1167	10G1167-BLK1	07/08/10 10:53
Methyl tert-Butyl Ether	<0.170		ug/L	10G1167	10G1167-BLK1	07/08/10 10:53
Toluene	<0.170		ug/L	10G1167	10G1167-BLK1	07/08/10 10:53
Xylenes, total	<0.390		ug/L	10G1167	10G1167-BLK1	07/08/10 10:53
1,2-Dibromoethane (EDB)	<0.180		ug/L	10G1167	10G1167-BLK1	07/08/10 10:53
1,2-Dichloroethane	<0.410		ug/L	10G1167	10G1167-BLK1	07/08/10 10:53
Surrogate: 1,2-Dichloroethane-d4	92%			10G1167	10G1167-BLK1	07/08/10 10:53
Surrogate: Dibromofluoromethane	94%			10G1167	10G1167-BLK1	07/08/10 10:53
Surrogate: Toluene-d8	100%			10G1167	10G1167-BLK1	07/08/10 10:53
Surrogate: 4-Bromofluorobenzene	96%			10G1167	10G1167-BLK1	07/08/10 10:53

10G1206-BLK1

Benzene	<0.00110		mg/kg wet	10G1206	10G1206-BLK1	07/07/10 18:23
Ethylbenzene	<0.000980		mg/kg wet	10G1206	10G1206-BLK1	07/07/10 18:23
Methyl tert-Butyl Ether	<0.000670		mg/kg wet	10G1206	10G1206-BLK1	07/07/10 18:23
Toluene	<0.000890		mg/kg wet	10G1206	10G1206-BLK1	07/07/10 18:23
Xylenes, total	<0.00190		mg/kg wet	10G1206	10G1206-BLK1	07/07/10 18:23
Surrogate: 1,2-Dichloroethane-d4	107%			10G1206	10G1206-BLK1	07/07/10 18:23
Surrogate: Dibromofluoromethane	105%			10G1206	10G1206-BLK1	07/07/10 18:23
Surrogate: Toluene-d8	105%			10G1206	10G1206-BLK1	07/07/10 18:23
Surrogate: 4-Bromofluorobenzene	95%			10G1206	10G1206-BLK1	07/07/10 18:23

Polyaromatic Hydrocarbons by EPA 8270D SIM

10F4798-BLK1

Acenaphthene	<0.000700		mg/kg wet	10F4798	10F4798-BLK1	07/03/10 14:02
Acenaphthylene	<0.000600		mg/kg wet	10F4798	10F4798-BLK1	07/03/10 14:02
Anthracene	0.00233		mg/kg wet	10F4798	10F4798-BLK1	07/03/10 14:02
Benzo (a) anthracene	<0.000600		mg/kg wet	10F4798	10F4798-BLK1	07/03/10 14:02
Benzo (a) pyrene	<0.000600		mg/kg wet	10F4798	10F4798-BLK1	07/03/10 14:02
Benzo (b) fluoranthene	<0.000700		mg/kg wet	10F4798	10F4798-BLK1	07/03/10 14:02
Benzo (g,h,i) perylene	<0.000700		mg/kg wet	10F4798	10F4798-BLK1	07/03/10 14:02
Benzo (k) fluoranthene	<0.000700		mg/kg wet	10F4798	10F4798-BLK1	07/03/10 14:02
Chrysene	<0.00100		mg/kg wet	10F4798	10F4798-BLK1	07/03/10 14:02
Dibenz (a,h) anthracene	<0.000900		mg/kg wet	10F4798	10F4798-BLK1	07/03/10 14:02
Fluoranthene	<0.000500		mg/kg wet	10F4798	10F4798-BLK1	07/03/10 14:02

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Work Order: NTF2659
 Project Name: Everett Terminal(46108) - AMEC
 Project Number: [none]
 Received: 06/26/10 08:30

PROJECT QUALITY CONTROL DATA
Blank - Cont.

Analyte	Blank Value	Q	Units	Q.C. Batch	Lab Number	Analyzed Date/Time
Polyaromatic Hydrocarbons by EPA 8270D SIM						
10F4798-BLK1						
Fluorene	<0.00100		mg/kg wet	10F4798	10F4798-BLK1	07/03/10 14:02
Indeno (1,2,3-cd) pyrene	<0.000600		mg/kg wet	10F4798	10F4798-BLK1	07/03/10 14:02
1-Methylnaphthalene	<0.000600		mg/kg wet	10F4798	10F4798-BLK1	07/03/10 14:02
2-Methylnaphthalene	<0.000800		mg/kg wet	10F4798	10F4798-BLK1	07/03/10 14:02
Naphthalene	<0.000600		mg/kg wet	10F4798	10F4798-BLK1	07/03/10 14:02
Phenanthrene	0.00167		mg/kg wet	10F4798	10F4798-BLK1	07/03/10 14:02
Pyrene	<0.000800		mg/kg wet	10F4798	10F4798-BLK1	07/03/10 14:02
Surrogate: Nitrobenzene-d5	48%			10F4798	10F4798-BLK1	07/03/10 14:02
Surrogate: 2-Fluorobiphenyl	61%			10F4798	10F4798-BLK1	07/03/10 14:02
Surrogate: Terphenyl-d14	80%			10F4798	10F4798-BLK1	07/03/10 14:02

10F4923-BLK1						
Acenaphthene	<0.0280		ug/L	10F4923	10F4923-BLK1	06/29/10 16:32
Acenaphthylene	<0.0250		ug/L	10F4923	10F4923-BLK1	06/29/10 16:32
Anthracene	<0.0310		ug/L	10F4923	10F4923-BLK1	06/29/10 16:32
Benzo (a) anthracene	<0.0180		ug/L	10F4923	10F4923-BLK1	06/29/10 16:32
Benzo (a) pyrene	<0.0320		ug/L	10F4923	10F4923-BLK1	06/29/10 16:32
Benzo (b) fluoranthene	<0.0260		ug/L	10F4923	10F4923-BLK1	06/29/10 16:32
Benzo (g,h,i) perylene	<0.0240		ug/L	10F4923	10F4923-BLK1	06/29/10 16:32
Benzo (k) fluoranthene	<0.0400		ug/L	10F4923	10F4923-BLK1	06/29/10 16:32
Chrysene	<0.0350		ug/L	10F4923	10F4923-BLK1	06/29/10 16:32
Dibenz (a,h) anthracene	<0.0240		ug/L	10F4923	10F4923-BLK1	06/29/10 16:32
Fluoranthene	<0.0340		ug/L	10F4923	10F4923-BLK1	06/29/10 16:32
Fluorene	<0.0250		ug/L	10F4923	10F4923-BLK1	06/29/10 16:32
Indeno (1,2,3-cd) pyrene	<0.0280		ug/L	10F4923	10F4923-BLK1	06/29/10 16:32
1-Methylnaphthalene	<0.0220		ug/L	10F4923	10F4923-BLK1	06/29/10 16:32
2-Methylnaphthalene	<0.0340		ug/L	10F4923	10F4923-BLK1	06/29/10 16:32
Naphthalene	<0.0250		ug/L	10F4923	10F4923-BLK1	06/29/10 16:32
Phenanthrene	<0.0630		ug/L	10F4923	10F4923-BLK1	06/29/10 16:32
Pyrene	<0.0250		ug/L	10F4923	10F4923-BLK1	06/29/10 16:32
Surrogate: Nitrobenzene-d5	43%			10F4923	10F4923-BLK1	06/29/10 16:32
Surrogate: 2-Fluorobiphenyl	57%			10F4923	10F4923-BLK1	06/29/10 16:32
Surrogate: Terphenyl-d14	78%			10F4923	10F4923-BLK1	06/29/10 16:32

Purgeable Petroleum Hydrocarbons

10F4830-BLK1						
GRO (C4-C12) NW	0.645		mg/kg wet	10F4830	10F4830-BLK1	06/29/10 12:28
Surrogate: a,a,a-Trifluorotoluene	94%			10F4830	10F4830-BLK1	06/29/10 12:28
10F4830-BLK2						
GRO (C4-C12) NW	1.29		mg/kg wet	10F4830	10F4830-BLK2	06/30/10 01:26
Surrogate: a,a,a-Trifluorotoluene	98%			10F4830	10F4830-BLK2	06/30/10 01:26

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Work Order: NTF2659
 Project Name: Everett Terminal(46108) - AMEC
 Project Number: [none]
 Received: 06/26/10 08:30

PROJECT QUALITY CONTROL DATA
Blank - Cont.

Analyte	Blank Value	Q	Units	Q.C. Batch	Lab Number	Analyzed Date/Time
Purgeable Petroleum Hydrocarbons						
10G0895-BLK1						
GRO (C4-C12) NW	<33.0		ug/L	10G0895	10G0895-BLK1	07/07/10 15:00
<i>Surrogate: a,a,a-Trifluorotoluene</i>	102%			10G0895	10G0895-BLK1	07/07/10 15:00
Extractable Petroleum Hydrocarbons with Silica Gel Treatment						
10F4914-BLK1						
Diesel	<0.700		mg/kg wet	10F4914	10F4914-BLK1	06/30/10 11:09
Motor Oil	1.31		mg/kg wet	10F4914	10F4914-BLK1	06/30/10 11:09
<i>Surrogate: o-Terphenyl</i>	81%			10F4914	10F4914-BLK1	06/30/10 11:09
10F4974-BLK1						
Diesel	<0.583		mg/kg wet	10F4974	10F4974-BLK1	07/08/10 02:02
Motor Oil	1.03		mg/kg wet	10F4974	10F4974-BLK1	07/08/10 02:02
<i>Surrogate: o-Terphenyl</i>	66%			10F4974	10F4974-BLK1	07/08/10 02:02
10F5077-BLK1						
Diesel	18.0		ug/L	10F5077	10F5077-BLK1	06/29/10 18:29
Motor Oil	32.1		ug/L	10F5077	10F5077-BLK1	06/29/10 18:29
<i>Surrogate: o-Terphenyl</i>	77%			10F5077	10F5077-BLK1	06/29/10 18:29
10F5255-BLK1						
Diesel	0.791		mg/kg wet	10F5255	10F5255-BLK1	07/01/10 01:40
Motor Oil	0.818		mg/kg wet	10F5255	10F5255-BLK1	07/01/10 01:40
<i>Surrogate: o-Terphenyl</i>	67%			10F5255	10F5255-BLK1	07/01/10 01:40
10G1298-BLK1						
Diesel	<0.700		mg/kg wet	10G1298	10G1298-BLK1	07/09/10 12:51
Motor Oil	0.819		mg/kg wet	10G1298	10G1298-BLK1	07/09/10 12:51
<i>Surrogate: o-Terphenyl</i>	78%			10G1298	10G1298-BLK1	07/09/10 12:51

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PROJECT QUALITY CONTROL DATA

Duplicate

Analyte	Orig. Val.	Duplicate	Q	Units	RPD	Limit	Batch	Sample Duplicated	% Rec.	Analyzed Date/Time
General Chemistry Parameters										
10G1965-DUP1										
% Dry Solids	88.1	86.9		%	1	20	10G1965	NTF2659-01		07/14/10 09:00
Purgeable Petroleum Hydrocarbons										
10F4830-DUP1										
GRO (C4-C12) NW	ND	ND		mg/kg dry		50	10F4830	NTF2469-07		06/29/10 18:44
<i>Surrogate: a,a,a-Trifluorotoluene</i>		19.9		ug/L			10F4830	NTF2469-07	99%	06/29/10 18:44
10F4830-DUP2										
GRO (C4-C12) NW	ND	ND		mg/kg dry		50	10F4830	NTF2659-11		06/29/10 23:53
<i>Surrogate: a,a,a-Trifluorotoluene</i>		20.3		ug/L			10F4830	NTF2659-11	102%	06/29/10 23:53
10G0895-DUP1										
GRO (C4-C12) NW	92.7	65.3		ug/L	35	37	10G0895	NTF2659-05		07/08/10 09:49
<i>Surrogate: a,a,a-Trifluorotoluene</i>		18.4		ug/L			10G0895	NTF2659-05	92%	07/08/10 09:49

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PROJECT QUALITY CONTROL DATA LCS

Analyte	Known Val.	Analyzed Val	Q	Units	% Rec.	Target Range	Batch	Analyzed Date/Time
Dissolved Metals by EPA Method 6010B								
10F4815-BS1								
Lead	0.0500	0.0471		mg/L	94%	80 - 120	10F4815	07/03/10 18:45
Volatile Organic Compounds by EPA Method 8260B								
10G1167-BS1								
Benzene	50.0	49.4		ug/L	99%	80 - 121	10G1167	07/08/10 09:01
Hexane	50.0	45.8		ug/L	92%	70 - 130	10G1167	07/08/10 09:01
Ethylbenzene	50.0	49.0		ug/L	98%	78 - 133	10G1167	07/08/10 09:01
Methyl tert-Butyl Ether	50.0	48.1		ug/L	96%	76 - 120	10G1167	07/08/10 09:01
Toluene	50.0	50.3		ug/L	101%	78 - 125	10G1167	07/08/10 09:01
Xylenes, total	150	144		ug/L	96%	78 - 134	10G1167	07/08/10 09:01
1,2-Dibromoethane (EDB)	50.0	51.9		ug/L	104%	80 - 125	10G1167	07/08/10 09:01
1,2-Dichloroethane	50.0	44.1		ug/L	88%	69 - 136	10G1167	07/08/10 09:01
Surrogate: 1,2-Dichloroethane-d4	25.0	22.4			90%	63 - 140	10G1167	07/08/10 09:01
Surrogate: Dibromofluoromethane	25.0	24.1			96%	73 - 131	10G1167	07/08/10 09:01
Surrogate: Toluene-d8	25.0	25.5			102%	80 - 120	10G1167	07/08/10 09:01
Surrogate: 4-Bromofluorobenzene	25.0	23.4			94%	79 - 125	10G1167	07/08/10 09:01
10G1206-BS1								
Benzene	50.0	47.3		ug/kg	95%	78 - 126	10G1206	07/07/10 17:21
Ethylbenzene	50.0	53.4		ug/kg	107%	79 - 130	10G1206	07/07/10 17:21
Methyl tert-Butyl Ether	50.0	54.3		ug/kg	109%	70 - 128	10G1206	07/07/10 17:21
Toluene	50.0	52.0		ug/kg	104%	76 - 126	10G1206	07/07/10 17:21
Xylenes, total	150	160		ug/kg	107%	80 - 130	10G1206	07/07/10 17:21
Surrogate: 1,2-Dichloroethane-d4	50.0	53.2			106%	67 - 138	10G1206	07/07/10 17:21
Surrogate: Dibromofluoromethane	50.0	53.6			107%	75 - 125	10G1206	07/07/10 17:21
Surrogate: Toluene-d8	50.0	52.2			104%	76 - 129	10G1206	07/07/10 17:21
Surrogate: 4-Bromofluorobenzene	50.0	48.8			98%	67 - 147	10G1206	07/07/10 17:21
Polyaromatic Hydrocarbons by EPA 8270D SIM								
10F4798-BS1								
Acenaphthene	0.0333	0.0267		mg/kg wet	80%	44 - 120	10F4798	07/03/10 14:25
Acenaphthylene	0.0333	0.0310		mg/kg wet	93%	46 - 127	10F4798	07/03/10 14:25
Anthracene	0.0333	0.0323		mg/kg wet	97%	49 - 139	10F4798	07/03/10 14:25
Benzo (a) anthracene	0.0333	0.0323		mg/kg wet	97%	53 - 132	10F4798	07/03/10 14:25
Benzo (a) pyrene	0.0333	0.0293		mg/kg wet	88%	57 - 125	10F4798	07/03/10 14:25
Benzo (b) fluoranthene	0.0333	0.0303		mg/kg wet	91%	36 - 140	10F4798	07/03/10 14:25
Benzo (g,h,i) perylene	0.0333	0.0290		mg/kg wet	87%	54 - 139	10F4798	07/03/10 14:25
Benzo (k) fluoranthene	0.0333	0.0270		mg/kg wet	81%	49 - 140	10F4798	07/03/10 14:25
Chrysene	0.0333	0.0267		mg/kg wet	80%	47 - 139	10F4798	07/03/10 14:25
Dibenz (a,h) anthracene	0.0333	0.0303		mg/kg wet	91%	58 - 141	10F4798	07/03/10 14:25
Fluoranthene	0.0333	0.0313		mg/kg wet	94%	34 - 135	10F4798	07/03/10 14:25

Client AMEC Earth & Environmental (13993)
 600 University Street, Suite 1020
 Seattle, WA 98101
 Attn Leah Vigoren

Work Order: NTF2659
 Project Name: Everett Terminal(46108) - AMEC
 Project Number: [none]
 Received: 06/26/10 08:30

PROJECT QUALITY CONTROL DATA
LCS - Cont.

Analyte	Known Val.	Analyzed Val	Q	Units	% Rec.	Target Range	Batch	Analyzed Date/Time
Polyaromatic Hydrocarbons by EPA 8270D SIM								
10F4798-BS1								
Fluorene	0.0333	0.0277		mg/kg wet	83%	47 - 129	10F4798	07/03/10 14:25
Indeno (1,2,3-cd) pyrene	0.0333	0.0307		mg/kg wet	92%	53 - 142	10F4798	07/03/10 14:25
1-Methylnaphthalene	0.0333	0.0243		mg/kg wet	73%	41 - 120	10F4798	07/03/10 14:25
2-Methylnaphthalene	0.0333	0.0270		mg/kg wet	81%	48 - 121	10F4798	07/03/10 14:25
Naphthalene	0.0333	0.0253		mg/kg wet	76%	42 - 120	10F4798	07/03/10 14:25
Phenanthrene	0.0333	0.0293		mg/kg wet	88%	52 - 134	10F4798	07/03/10 14:25
Pyrene	0.0333	0.0357		mg/kg wet	107%	56 - 144	10F4798	07/03/10 14:25
<i>Surrogate: Nitrobenzene-d5</i>	0.0333	0.0200			60%	17 - 120	10F4798	07/03/10 14:25
<i>Surrogate: 2-Fluorobiphenyl</i>	0.0333	0.0207			62%	14 - 120	10F4798	07/03/10 14:25
<i>Surrogate: Terphenyl-d14</i>	0.0333	0.0240			72%	18 - 120	10F4798	07/03/10 14:25
10F4923-BS1								
Acenaphthene	1.00	0.670	MNR1	ug/L	67%	43 - 122	10F4923	06/29/10 17:19
Acenaphthylene	1.00	0.780	MNR1	ug/L	78%	43 - 129	10F4923	06/29/10 17:19
Anthracene	1.00	0.850	MNR1	ug/L	85%	50 - 138	10F4923	06/29/10 17:19
Benzo (a) anthracene	1.00	0.890	MNR1	ug/L	89%	50 - 135	10F4923	06/29/10 17:19
Benzo (a) pyrene	1.00	0.830	MNR1	ug/L	83%	46 - 136	10F4923	06/29/10 17:19
Benzo (b) fluoranthene	1.00	0.850	MNR1	ug/L	85%	37 - 147	10F4923	06/29/10 17:19
Benzo (g,h,i) perylene	1.00	0.800	MNR1	ug/L	80%	30 - 145	10F4923	06/29/10 17:19
Benzo (k) fluoranthene	1.00	0.800	MNR1	ug/L	80%	47 - 135	10F4923	06/29/10 17:19
Chrysene	1.00	0.770	MNR1	ug/L	77%	47 - 138	10F4923	06/29/10 17:19
Dibenz (a,h) anthracene	1.00	0.820	MNR1	ug/L	82%	36 - 144	10F4923	06/29/10 17:19
Fluoranthene	1.00	0.870	MNR1	ug/L	87%	51 - 139	10F4923	06/29/10 17:19
Fluorene	1.00	0.720	MNR1	ug/L	72%	47 - 128	10F4923	06/29/10 17:19
Indeno (1,2,3-cd) pyrene	1.00	0.860	MNR1	ug/L	86%	32 - 142	10F4923	06/29/10 17:19
1-Methylnaphthalene	1.00	0.610	MNR1	ug/L	61%	37 - 126	10F4923	06/29/10 17:19
2-Methylnaphthalene	1.00	0.680	MNR1	ug/L	68%	41 - 121	10F4923	06/29/10 17:19
Naphthalene	1.00	0.640	MNR1	ug/L	64%	38 - 120	10F4923	06/29/10 17:19
Phenanthrene	1.00	0.770	MNR1	ug/L	77%	45 - 133	10F4923	06/29/10 17:19
Pyrene	1.00	0.850	MNR1	ug/L	85%	50 - 146	10F4923	07/06/10 15:23
<i>Surrogate: Nitrobenzene-d5</i>	1.00	0.450			45%	27 - 120	10F4923	06/29/10 17:19
<i>Surrogate: 2-Fluorobiphenyl</i>	1.00	0.560			56%	29 - 120	10F4923	06/29/10 17:19
<i>Surrogate: Terphenyl-d14</i>	1.00	0.780			78%	13 - 120	10F4923	06/29/10 17:19
Purgeable Petroleum Hydrocarbons								
10F4830-BS1								
GRO (C4-C12) NW	10.0	9.92		mg/kg wet	99%	60 - 123	10F4830	06/30/10 00:24
<i>Surrogate: a,a,a-Trifluorotoluene</i>	20.0	16.9			85%	50 - 150	10F4830	06/30/10 00:24
10F4830-BS2								
GRO (C4-C12) NW	10.0	10.0		mg/kg wet	100%	60 - 123	10F4830	06/30/10 07:04
<i>Surrogate: a,a,a-Trifluorotoluene</i>	20.0	17.0			85%	50 - 150	10F4830	06/30/10 07:04

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Work Order: NTF2659
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 Project Number: [none]
 Received: 06/26/10 08:30

PROJECT QUALITY CONTROL DATA
LCS - Cont.

Analyte	Known Val.	Analyzed Val	Q	Units	% Rec.	Target Range	Batch	Analyzed Date/Time
Purgeable Petroleum Hydrocarbons								
10G0895-BS1								
GRO (C4-C12) NW	1000	1140		ug/L	114%	70 - 130	10G0895	07/08/10 02:18
Surrogate: <i>a,a,a-Trifluorotoluene</i>	20.0	25.0			125%	50 - 150	10G0895	07/08/10 02:18
Extractable Petroleum Hydrocarbons with Silica Gel Treatment								
10F4914-BS1								
Diesel	40.0	34.5		mg/kg wet	86%	55 - 123	10F4914	06/30/10 11:25
Surrogate: <i>o-Terphenyl</i>	0.800	0.732			92%	50 - 150	10F4914	06/30/10 11:25
10F4974-BS1								
Diesel	33.3	22.6	MNR	mg/kg wet	68%	55 - 123	10F4974	07/08/10 02:21
Surrogate: <i>o-Terphenyl</i>	0.667	0.447			67%	50 - 150	10F4974	07/08/10 02:21
10F5077-BS1								
Diesel	1000	775	MNR1	ug/L	77%	57 - 132	10F5077	06/29/10 18:48
Surrogate: <i>o-Terphenyl</i>	20.0	14.8			74%	50 - 150	10F5077	06/29/10 18:48
10F5255-BS1								
Diesel	40.0	30.4		mg/kg wet	76%	55 - 123	10F5255	07/01/10 01:58
Surrogate: <i>o-Terphenyl</i>	0.800	0.574			72%	50 - 150	10F5255	07/01/10 01:58
10G1298-BS1								
Diesel	40.0	46.4		mg/kg wet	116%	55 - 123	10G1298	07/09/10 13:10
Surrogate: <i>o-Terphenyl</i>	0.800	0.663			83%	50 - 150	10G1298	07/09/10 13:10

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 Received: 06/26/10 08:30

PROJECT QUALITY CONTROL DATA

LCS Dup

Analyte	Orig. Val.	Duplicate	Q	Units	Spike Conc	% Rec.	Target Range	RPD	Limit	Batch	Sample Duplicated	Analyzed Date/Time
Volatile Organic Compounds by EPA Method 8260B												
10G1167-BSD1												
Benzene		49.9		ug/L	50.0	100%	80 - 121	1	12	10G1167		07/08/10 09:29
Hexane		45.8		ug/L	50.0	92%	70 - 130	0.2	13	10G1167		07/08/10 09:29
Ethylbenzene		48.7		ug/L	50.0	97%	78 - 133	0.8	12	10G1167		07/08/10 09:29
Methyl tert-Butyl Ether		48.1		ug/L	50.0	96%	76 - 120	0.02	32	10G1167		07/08/10 09:29
Toluene		50.1		ug/L	50.0	100%	78 - 125	0.4	35	10G1167		07/08/10 09:29
Xylenes, total		143		ug/L	150	95%	78 - 134	0.9	18	10G1167		07/08/10 09:29
1,2-Dibromoethane (EDB)		51.3		ug/L	50.0	103%	80 - 125	1	21	10G1167		07/08/10 09:29
1,2-Dichloroethane		44.6		ug/L	50.0	89%	69 - 136	1	26	10G1167		07/08/10 09:29
Surrogate: 1,2-Dichloroethane-d4		22.6		ug/L	25.0	91%	63 - 140			10G1167		07/08/10 09:29
Surrogate: Dibromofluoromethane		23.8		ug/L	25.0	95%	73 - 131			10G1167		07/08/10 09:29
Surrogate: Toluene-d8		25.3		ug/L	25.0	101%	80 - 120			10G1167		07/08/10 09:29
Surrogate: 4-Bromofluorobenzene		23.5		ug/L	25.0	94%	79 - 125			10G1167		07/08/10 09:29
Purgeable Petroleum Hydrocarbons												
10G0895-BSD1												
GRO (C4-C12) NW		1130		ug/L	1000	113%	70 - 130	1	37	10G0895		07/08/10 02:48
Surrogate: a,a,a-Trifluorotoluene		24.8		ug/L	20.0	124%	50 - 150			10G0895		07/08/10 02:48

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 Received: 06/26/10 08:30

PROJECT QUALITY CONTROL DATA Matrix Spike

Analyte	Orig. Val.	MS Val	Q	Units	Spike Conc	% Rec.	Target Range	Batch	Sample Spiked	Analyzed Date/Time
Dissolved Metals by EPA Method 6010B										
10F4815-MS1										
Lead	ND	0.0496		mg/L	0.0500	99%	75 - 125	10F4815	NTF2606-01	07/03/10 18:51
Volatile Organic Compounds by EPA Method 8260B										
10G1167-MS1										
Benzene	ND	52.5		ug/L	50.0	105%	65 - 151	10G1167	NTG0084-03	07/09/10 19:19
Hexane	ND	48.4		ug/L	50.0	97%	39 - 167	10G1167	NTG0084-03	07/09/10 19:19
Ethylbenzene	ND	51.8		ug/L	50.0	104%	68 - 157	10G1167	NTG0084-03	07/09/10 19:19
Methyl tert-Butyl Ether	ND	50.6		ug/L	50.0	101%	56 - 152	10G1167	NTG0084-03	07/09/10 19:19
Toluene	ND	53.2		ug/L	50.0	106%	61 - 153	10G1167	NTG0084-03	07/09/10 19:19
Xylenes, total	ND	152		ug/L	150	101%	68 - 158	10G1167	NTG0084-03	07/09/10 19:19
1,2-Dibromoethane (EDB)	ND	53.6		ug/L	50.0	107%	80 - 132	10G1167	NTG0084-03	07/09/10 19:19
1,2-Dichloroethane	ND	46.8		ug/L	50.0	94%	53 - 146	10G1167	NTG0084-03	07/09/10 19:19
<i>Surrogate: 1,2-Dichloroethane-d4</i>		22.5		ug/L	25.0	90%	63 - 140	10G1167	NTG0084-03	07/09/10 19:19
<i>Surrogate: Dibromofluoromethane</i>		23.8		ug/L	25.0	95%	73 - 131	10G1167	NTG0084-03	07/09/10 19:19
<i>Surrogate: Toluene-d8</i>		25.3		ug/L	25.0	101%	80 - 120	10G1167	NTG0084-03	07/09/10 19:19
<i>Surrogate: 4-Bromofluorobenzene</i>		22.8		ug/L	25.0	91%	79 - 125	10G1167	NTG0084-03	07/09/10 19:19
10G1206-MS1										
Benzene	ND	0.0367		mg/kg wet	0.0480	77%	42 - 141	10G1206	NTF2481-03	07/08/10 04:15
Ethylbenzene	ND	0.0345		mg/kg wet	0.0480	72%	21 - 165	10G1206	NTF2481-03	07/08/10 04:15
Methyl tert-Butyl Ether	ND	0.0431		mg/kg wet	0.0480	90%	34 - 154	10G1206	NTF2481-03	07/08/10 04:15
Toluene	0.00101	0.0377		mg/kg wet	0.0480	77%	45 - 145	10G1206	NTF2481-03	07/08/10 04:15
Xylenes, total	ND	0.100		mg/kg wet	0.144	70%	31 - 159	10G1206	NTF2481-03	07/08/10 04:15
<i>Surrogate: 1,2-Dichloroethane-d4</i>		55.0		ug/kg	50.0	110%	67 - 138	10G1206	NTF2481-03	07/08/10 04:15
<i>Surrogate: Dibromofluoromethane</i>		53.6		ug/kg	50.0	107%	75 - 125	10G1206	NTF2481-03	07/08/10 04:15
<i>Surrogate: Toluene-d8</i>		52.4		ug/kg	50.0	105%	76 - 129	10G1206	NTF2481-03	07/08/10 04:15
<i>Surrogate: 4-Bromofluorobenzene</i>		48.3		ug/kg	50.0	97%	67 - 147	10G1206	NTF2481-03	07/08/10 04:15
Polyaromatic Hydrocarbons by EPA 8270D SIM										
10F4798-MS1										
Acenaphthene	ND	0.0302		mg/kg dry	0.0368	82%	42 - 120	10F4798	NTF2364-01	07/03/10 14:47
Acenaphthylene	ND	0.0354		mg/kg dry	0.0368	96%	39 - 127	10F4798	NTF2364-01	07/03/10 14:47
Anthracene	ND	0.0357		mg/kg dry	0.0368	97%	39 - 139	10F4798	NTF2364-01	07/03/10 14:47
Benzo (a) anthracene	ND	0.0394		mg/kg dry	0.0368	107%	31 - 132	10F4798	NTF2364-01	07/03/10 14:47
Benzo (a) pyrene	ND	0.0357		mg/kg dry	0.0368	97%	22 - 125	10F4798	NTF2364-01	07/03/10 14:47
Benzo (b) fluoranthene	ND	0.0368		mg/kg dry	0.0368	100%	10 - 147	10F4798	NTF2364-01	07/03/10 14:47
Benzo (g,h,i) perylene	ND	0.0350		mg/kg dry	0.0368	95%	10 - 151	10F4798	NTF2364-01	07/03/10 14:47
Benzo (k) fluoranthene	ND	0.0328		mg/kg dry	0.0368	89%	23 - 140	10F4798	NTF2364-01	07/03/10 14:47

Client AMEC Earth & Environmental (13993)
600 University Street, Suite 1020
Seattle, WA 98101
Attn Leah Vigoren

Work Order: NTF2659
Project Name: Everett Terminal(46108) - AMEC
Project Number: [none]
Received: 06/26/10 08:30

PROJECT QUALITY CONTROL DATA
Matrix Spike - Cont.

Analyte	Orig. Val.	MS Val	Q	Units	Spike Conc	% Rec.	Target Range	Batch	Sample Spiked	Analyzed Date/Time
Polyaromatic Hydrocarbons by EPA 8270D SIM										
10F4798-MS1										
Chrysene	ND	0.0324		mg/kg dry	0.0368	88%	20 - 139	10F4798	NTF2364-01	07/03/10 14:47
Dibenz (a,h) anthracene	ND	0.0346		mg/kg dry	0.0368	94%	18 - 150	10F4798	NTF2364-01	07/03/10 14:47
Fluoranthene	0.00224	0.0435		mg/kg dry	0.0368	112%	29 - 135	10F4798	NTF2364-01	07/03/10 14:47
Fluorene	ND	0.0320		mg/kg dry	0.0368	87%	38 - 129	10F4798	NTF2364-01	07/03/10 14:47
Indeno (1,2,3-cd) pyrene	ND	0.0368		mg/kg dry	0.0368	100%	13 - 146	10F4798	NTF2364-01	07/03/10 14:47
1-Methylnaphthalene	ND	0.0273		mg/kg dry	0.0368	74%	20 - 120	10F4798	NTF2364-01	07/03/10 14:47
2-Methylnaphthalene	ND	0.0306		mg/kg dry	0.0368	83%	28 - 124	10F4798	NTF2364-01	07/03/10 14:47
Naphthalene	ND	0.0287		mg/kg dry	0.0368	78%	10 - 135	10F4798	NTF2364-01	07/03/10 14:47
Phenanthrene	0.00336	0.0372		mg/kg dry	0.0368	92%	33 - 134	10F4798	NTF2364-01	07/03/10 14:47
Pyrene	0.00187	0.0464		mg/kg dry	0.0368	121%	26 - 153	10F4798	NTF2364-01	07/03/10 14:47
Surrogate: Nitrobenzene-d5		0.0236		mg/kg dry	0.0368	64%	17 - 120	10F4798	NTF2364-01	07/03/10 14:47
Surrogate: 2-Fluorobiphenyl		0.0228		mg/kg dry	0.0368	62%	14 - 120	10F4798	NTF2364-01	07/03/10 14:47
Surrogate: Terphenyl-d14		0.0243		mg/kg dry	0.0368	66%	18 - 120	10F4798	NTF2364-01	07/03/10 14:47
Purgeable Petroleum Hydrocarbons										
10F4830-MS1										
GRO (C4-C12) NW	ND	466		mg/kg dry	469	100%	59 - 130	10F4830	NTF2659-11	06/30/10 08:05
Surrogate: a,a,a-Trifluorotoluene		18.8		ug/L	20.0	94%	50 - 150	10F4830	NTF2659-11	06/30/10 08:05
10F4830-MS2										
GRO (C4-C12) NW	104	531		mg/kg wet	442	97%	59 - 130	10F4830	NTF1969-22	06/30/10 09:06
Surrogate: a,a,a-Trifluorotoluene		17.5		ug/L	20.0	87%	50 - 150	10F4830	NTF1969-22	06/30/10 09:06
10G0895-MS1										
GRO (C4-C12) NW	80.8	1270		ug/L	1000	119%	58 - 139	10G0895	NTF2637-01	07/08/10 10:19
Surrogate: a,a,a-Trifluorotoluene		15.3		ug/L	20.0	76%	50 - 150	10G0895	NTF2637-01	07/08/10 10:19
Extractable Petroleum Hydrocarbons with Silica Gel Treatment										
10F4914-MS1										
Diesel	1.52	34.6		mg/kg dry	44.2	75%	34 - 138	10F4914	NTF2364-01	06/30/10 11:42
Surrogate: o-Terphenyl		0.648		mg/kg dry	0.883	73%	50 - 150	10F4914	NTF2364-01	06/30/10 11:42
10F5255-MS1										
Diesel	46.1	83.8		mg/kg dry	48.1	79%	34 - 138	10F5255	NTF2659-09	07/01/10 02:16
Surrogate: o-Terphenyl		0.554		mg/kg dry	0.962	58%	50 - 150	10F5255	NTF2659-09	07/01/10 02:16
10G1298-MS1										
Diesel	14.2	89.0		mg/kg dry	106	70%	34 - 138	10G1298	NTF2659-04RE	07/09/10 13:29

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PROJECT QUALITY CONTROL DATA
Matrix Spike - Cont.

Analyte	Orig. Val.	MS Val	Q	Units	Spike Conc	% Rec.	Target Range	Batch	Sample Spiked	Analyzed Date/Time
Extractable Petroleum Hydrocarbons with Silica Gel Treatment										
10G1298-MS1										
<i>Surrogate: o-Terphenyl</i>		0.751	Z6	mg/kg dry	2.13	35%	50 - 150	10G1298	NTF2659-04RE	07/09/10 13:29

Client AMEC Earth & Environmental (13993)
 600 University Street, Suite 1020
 Seattle, WA 98101
 Attn Leah Vigoren

Work Order: NTF2659
 Project Name: Everett Terminal(46108) - AMEC
 Project Number: [none]
 Received: 06/26/10 08:30

PROJECT QUALITY CONTROL DATA Matrix Spike Dup

Analyte	Orig. Val.	Duplicate	Q	Units	Spike Conc	% Rec.	Target Range	RPD	Limit	Batch	Sample Duplicated	Analyzed Date/Time
Dissolved Metals by EPA Method 6010B												
10F4815-MSD1												
Lead	ND	0.0502		mg/L	0.0500	100%	75 - 125	1	20	10F4815	NTF2606-01	07/03/10 18:54
Volatile Organic Compounds by EPA Method 8260B												
10G1167-MSD1												
Benzene	ND	55.4		ug/L	50.0	111%	65 - 151	5	12	10G1167	NTG0084-03	07/09/10 19:47
Hexane	ND	46.8		ug/L	50.0	94%	39 - 167	3	13	10G1167	NTG0084-03	07/09/10 19:47
Ethylbenzene	ND	53.8		ug/L	50.0	108%	68 - 157	4	12	10G1167	NTG0084-03	07/09/10 19:47
Methyl tert-Butyl Ether	ND	52.5		ug/L	50.0	105%	56 - 152	4	32	10G1167	NTG0084-03	07/09/10 19:47
Toluene	ND	55.7		ug/L	50.0	111%	61 - 153	5	35	10G1167	NTG0084-03	07/09/10 19:47
Xylenes, total	ND	157		ug/L	150	104%	68 - 158	3	18	10G1167	NTG0084-03	07/09/10 19:47
1,2-Dibromoethane (EDB)	ND	56.3		ug/L	50.0	113%	80 - 132	5	21	10G1167	NTG0084-03	07/09/10 19:47
1,2-Dichloroethane	ND	49.1		ug/L	50.0	98%	53 - 146	5	26	10G1167	NTG0084-03	07/09/10 19:47
Surrogate: 1,2-Dichloroethane-d4		22.4		ug/L	25.0	90%	63 - 140			10G1167	NTG0084-03	07/09/10 19:47
Surrogate: Dibromofluoromethane		23.5		ug/L	25.0	94%	73 - 131			10G1167	NTG0084-03	07/09/10 19:47
Surrogate: Toluene-d8		25.3		ug/L	25.0	101%	80 - 120			10G1167	NTG0084-03	07/09/10 19:47
Surrogate: 4-Bromofluorobenzene		23.0		ug/L	25.0	92%	79 - 125			10G1167	NTG0084-03	07/09/10 19:47
10G1206-MSD1												
Benzene	ND	0.0396		mg/kg wet	0.0471	84%	42 - 141	8	50	10G1206	NTF2481-03	07/08/10 04:46
Ethylbenzene	ND	0.0426		mg/kg wet	0.0471	90%	21 - 165	21	50	10G1206	NTF2481-03	07/08/10 04:46
Methyl tert-Butyl Ether	ND	0.0479		mg/kg wet	0.0471	102%	34 - 154	11	50	10G1206	NTF2481-03	07/08/10 04:46
Toluene	0.00101	0.0446		mg/kg wet	0.0471	93%	45 - 145	17	50	10G1206	NTF2481-03	07/08/10 04:46
Xylenes, total	ND	0.125		mg/kg wet	0.141	88%	31 - 159	22	50	10G1206	NTF2481-03	07/08/10 04:46
Surrogate: 1,2-Dichloroethane-d4		50.6		ug/kg	50.0	101%	67 - 138			10G1206	NTF2481-03	07/08/10 04:46
Surrogate: Dibromofluoromethane		51.3		ug/kg	50.0	103%	75 - 125			10G1206	NTF2481-03	07/08/10 04:46
Surrogate: Toluene-d8		54.0		ug/kg	50.0	108%	76 - 129			10G1206	NTF2481-03	07/08/10 04:46
Surrogate: 4-Bromofluorobenzene		52.8		ug/kg	50.0	106%	67 - 147			10G1206	NTF2481-03	07/08/10 04:46
Polyaromatic Hydrocarbons by EPA 8270D SIM												
10F4798-MSD1												
Acenaphthene	ND	0.0267		mg/kg dry	0.0366	73%	42 - 120	12	32	10F4798	NTF2364-01	07/03/10 22:07
Acenaphthylene	ND	0.0275		mg/kg dry	0.0366	75%	39 - 127	25	34	10F4798	NTF2364-01	07/03/10 22:07
Anthracene	ND	0.0289		mg/kg dry	0.0366	79%	39 - 139	21	31	10F4798	NTF2364-01	07/03/10 22:07
Benzo (a) anthracene	ND	0.0304		mg/kg dry	0.0366	83%	31 - 132	26	43	10F4798	NTF2364-01	07/03/10 22:07
Benzo (a) pyrene	ND	0.0322		mg/kg dry	0.0366	88%	22 - 125	10	41	10F4798	NTF2364-01	07/03/10 22:07
Benzo (b) fluoranthene	ND	0.0326		mg/kg dry	0.0366	89%	10 - 147	12	50	10F4798	NTF2364-01	07/03/10 22:07
Benzo (g,h,i) perylene	ND	0.0311		mg/kg dry	0.0366	85%	10 - 151	12	50	10F4798	NTF2364-01	07/03/10 22:07
Benzo (k) fluoranthene	ND	0.0315		mg/kg dry	0.0366	86%	23 - 140	4	38	10F4798	NTF2364-01	07/03/10 22:07
Chrysene	ND	0.0297		mg/kg dry	0.0366	81%	20 - 139	9	40	10F4798	NTF2364-01	07/03/10 22:07
Dibenz (a,h) anthracene	ND	0.0300		mg/kg dry	0.0366	82%	18 - 150	14	50	10F4798	NTF2364-01	07/03/10 22:07
Fluoranthene	0.00224	0.0322		mg/kg dry	0.0366	82%	29 - 135	30	47	10F4798	NTF2364-01	07/03/10 22:07

Client AMEC Earth & Environmental (13993)
 600 University Street, Suite 1020
 Seattle, WA 98101
 Attn Leah Vigoren

Work Order: NTF2659
 Project Name: Everett Terminal(46108) - AMEC
 Project Number: [none]
 Received: 06/26/10 08:30

PROJECT QUALITY CONTROL DATA

Matrix Spike Dup - Cont.

Analyte	Orig. Val.	Duplicate	Q	Units	Spike Conc	% Rec.	Target Range	RPD	Limit	Batch	Sample Duplicated	Analyzed Date/Time
Polyaromatic Hydrocarbons by EPA 8270D SIM												
10F4798-MSD1												
Fluorene	ND	0.0297		mg/kg dry	0.0366	81%	38 - 129	8	38	10F4798	NTF2364-01	07/03/10 22:07
Indeno (1,2,3-cd) pyrene	ND	0.0308		mg/kg dry	0.0366	84%	13 - 146	18	46	10F4798	NTF2364-01	07/03/10 22:07
1-Methylnaphthalene	ND	0.0223		mg/kg dry	0.0366	61%	20 - 120	20	35	10F4798	NTF2364-01	07/03/10 22:07
2-Methylnaphthalene	ND	0.0260		mg/kg dry	0.0366	71%	28 - 124	16	38	10F4798	NTF2364-01	07/03/10 22:07
Naphthalene	ND	0.0231		mg/kg dry	0.0366	63%	10 - 135	22	36	10F4798	NTF2364-01	07/03/10 22:07
Phenanthrene	0.00336	0.0315		mg/kg dry	0.0366	77%	33 - 134	17	46	10F4798	NTF2364-01	07/03/10 22:07
Pyrene	0.00187	0.0326		mg/kg dry	0.0366	84%	26 - 153	35	50	10F4798	NTF2364-01	07/03/10 22:07
Surrogate: Nitrobenzene-d5		0.0168		mg/kg dry	0.0366	46%	17 - 120			10F4798	NTF2364-01	07/03/10 22:07
Surrogate: 2-Fluorobiphenyl		0.0205		mg/kg dry	0.0366	56%	14 - 120			10F4798	NTF2364-01	07/03/10 22:07
Surrogate: Terphenyl-d14		0.0238		mg/kg dry	0.0366	65%	18 - 120			10F4798	NTF2364-01	07/03/10 22:07
Purgeable Petroleum Hydrocarbons												
10F4830-MSD1												
GRO (C4-C12) NW	ND	445		mg/kg dry	469	95%	59 - 130	5	50	10F4830	NTF2659-11	06/30/10 08:36
Surrogate: a,a,a-Trifluorotoluene		17.8		ug/L	20.0	89%	50 - 150			10F4830	NTF2659-11	06/30/10 08:36
10F4830-MSD2												
GRO (C4-C12) NW	104	510		mg/kg wet	442	92%	59 - 130	4	50	10F4830	NTF1969-22	06/30/10 09:37
Surrogate: a,a,a-Trifluorotoluene		17.6		ug/L	20.0	88%	50 - 150			10F4830	NTF1969-22	06/30/10 09:37
10G0895-MSD1												
GRO (C4-C12) NW	80.8	1510	M1	ug/L	1000	143%	58 - 139	17	37	10G0895	NTF2637-01	07/08/10 10:48
Surrogate: a,a,a-Trifluorotoluene		16.0		ug/L	20.0	80%	50 - 150			10G0895	NTF2637-01	07/08/10 10:48
Extractable Petroleum Hydrocarbons with Silica Gel Treatment												
10F4914-MSD1												
Diesel	1.52	34.7		mg/kg dry	44.3	75%	34 - 138	0.2	43	10F4914	NTF2364-01	06/30/10 12:02
Surrogate: o-Terphenyl		0.670		mg/kg dry	0.885	76%	50 - 150			10F4914	NTF2364-01	06/30/10 12:02
10F5255-MSD1												
Diesel	46.1	84.5		mg/kg dry	47.3	81%	34 - 138	0.8	43	10F5255	NTF2659-09	07/01/10 02:34
Surrogate: o-Terphenyl		0.395	ZX	mg/kg dry	0.946	42%	50 - 150			10F5255	NTF2659-09	07/01/10 02:34
10G1298-MSD1												
Diesel	14.2	140	R2	mg/kg dry	108	117%	34 - 138	45	43	10G1298	NTF2659-04RE	07/09/10 13:48
Surrogate: o-Terphenyl		0.956	Z6	mg/kg dry	2.16	44%	50 - 150			10G1298	NTF2659-04RE	07/09/10 13:48

Client AMEC Earth & Environmental (13993)
 600 University Street, Suite 1020
 Seattle, WA 98101
 Attn Leah Vigoren

Work Order: NTF2659
 Project Name: Everett Terminal(46108) - AMEC
 Project Number: [none]
 Received: 06/26/10 08:30

CERTIFICATION SUMMARY

TestAmerica Nashville

Method	Matrix	AIHA	Nelac	Washington
NWTPH-Dx	Soil	N/A		X
NWTPH-Dx	Water	N/A		X
NWTPH-Gx	Soil	N/A	X	X
NWTPH-Gx	Water	N/A	X	X
SW846 6010B	Water	N/A	X	X
SW846 8260B	Soil	N/A	X	X
SW846 8260B	Water	N/A	X	X
SW846 8270D SIM	Soil		X	
SW846 8270D SIM	Water		X	
SW-846	Soil			

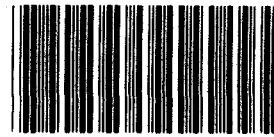
Client AMEC Earth & Environmental (13993)
 600 University Street, Suite 1020
 Seattle, WA 98101
 Attn Leah Vigoren

Work Order: NTF2659
 Project Name: Everett Terminal(46108) - AMEC
 Project Number: [none]
 Received: 06/26/10 08:30

DATA QUALIFIERS AND DEFINITIONS

- H2** Initial analysis within holding time. Reanalysis for the required dilution or confirmation was past holding time.
- M1** The MS and/or MSD were above the acceptance limits due to sample matrix interference. See Blank Spike (LCS).
- MNR** No results were reported for the MS/MSD. The sample used for the MS/MSD required dilution due to the sample matrix. Because of this, the spike compounds were diluted below the detection limit.
- MNR1** There was no MS/MSD analyzed with this batch due to insufficient sample volume. See Blank Spike.
- P7** Sample filtered in lab.
- QP5** There was insufficient contamination present to perform a pattern match.
- QP6** The contamination did not match any standards in our library.
- QP7** The hydrocarbon pattern most closely resembles a diesel product.
- QP7a** The hydrocarbon pattern most closely resembles a motor oil product.
- R2** The RPD exceeded the acceptance limit.
- RL1** Reporting limit raised due to sample matrix effects.
- Z3** The sample required a dilution due to the nature of the sample matrix. Because of this dilution, the surrogate spike concentration in the sample was reduced to a level where the recovery calculation does not provide useful information.
- Z6** Surrogate recovery was below acceptance limits.
- ZX** Due to sample matrix effects, the surrogate recovery was outside the acceptance limits.
- ND** Not detected at the reporting limit (or method detection limit if shown)

METHOD MODIFICATION NOTES



COOLER RE

NTF2659

Cooler Received/Opened On 6/26/2010 @ 0830

1. Tracking # 4380 (last 4 digits, FedEx)

Courier: FedEx IR Gun ID 97460373

2. Temperature of rep. sample or temp blank when opened: 4.8 Degrees Celsius

3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES NO...NA

4. Were custody seals on outside of cooler? YES...NO...NA

If yes, how many and where: 1 (Front)

5. Were the seals intact, signed, and dated correctly? YES...NO...NA

6. Were custody papers inside cooler? YES...NO...NA

I certify that I opened the cooler and answered questions 1-6 (initial) [Signature]

7. Were custody seals on containers: YES NO and Intact YES...NO...NA

Were these signed and dated correctly? YES...NO...NA

8. Packing mat'l used? Bubblewrap Plastic bag Peanuts Vermiculite Foam Insert Paper Other None

9. Cooling process: Ice Ice-pack Ice (direct contact) Dry ice Other None

10. Did all containers arrive in good condition (unbroken)? YES...NO...NA

11. Were all container labels complete (#, date, signed, pres., etc)? YES...NO...NA

12. Did all container labels and tags agree with custody papers? YES...NO...NA

13a. Were VOA vials received? YES...NO...NA

b. Was there any observable headspace present in any VOA vial? YES...NO...NA

14. Was there a Trip Blank in this cooler? YES...NO...NA If multiple coolers, sequence # 1

I certify that I unloaded the cooler and answered questions 7-14 (initial) P-A

15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES...NO...NA

b. Did the bottle labels indicate that the correct preservatives were used YES...NO...NA

16. Was residual chlorine present? YES...NO...NA

I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (initial) [Signature]

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

18. Did you sign the custody papers in the appropriate place? YES...NO...NA

19. Were correct containers used for the analysis requested? YES...NO...NA

20. Was sufficient amount of sample sent in each container? YES...NO...NA

I certify that I entered this project into LIMS and answered questions 17-20 (initial) [Signature]

I certify that I attached a label with the unique LIMS number to each container (initial) [Signature]

21. Were there Non-Conformance issues at login? YES...NO Was a PIPE generated? YES...NO...#

AGENCY DRAFT



THE LEADER IN ENVIRONMENTAL TESTING
Nashville, TN

COOLER RECEIPT FORM

NTF2659
07/13/10 23:59

Cooler Received/Opened On 6/26/2010 @ 0830

1. Tracking # 4380 (last 4 digits, FedEx)

Courier: FedEx IR Gun ID Raynger

2. Temperature of rep. sample or temp blank when opened: 3.7 Degrees Celsius

3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES NO...NA

4. Were custody seals on outside of cooler? 1 seal YES...NO...NA

If yes, how many and where: _____

5. Were the seals intact, signed, and dated correctly? YES...NO...NA

6. Were custody papers inside cooler? YES...NO...NA

I certify that I opened the cooler and answered questions 1-6 (initial) _____

7. Were custody seals on containers: YES NO and Intact YES...NO...NA

Were these signed and dated correctly? YES...NO...NA

8. Packing mat'l used? Bubblewrap Plastic bag Peanuts Vermiculite Foam Insert Paper Other None

9. Cooling process: Ice Ice-pack Ice (direct contact) Dry ice Other None

10. Did all containers arrive in good condition (unbroken)? YES...NO...NA

11. Were all container labels complete (#, date, signed, pres., etc)? YES...NO...NA

12. Did all container labels and tags agree with custody papers? YES...NO...NA

13a. Were VOA vials received? YES...NO...NA

b. Was there any observable headspace present in any VOA vial? YES...NO...NA

14. Was there a Trip Blank in this cooler? YES...NO...NA If multiple coolers, sequence # 2

I certify that I unloaded the cooler and answered questions 7-14 (initial) P.H.

15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES...NO...NA

b. Did the bottle labels indicate that the correct preservatives were used YES...NO...NA

16. Was residual chlorine present? YES...NO...NA

I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (initial) _____

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

18. Did you sign the custody papers in the appropriate place? YES...NO...NA

19. Were correct containers used for the analysis requested? YES...NO...NA

20. Was sufficient amount of sample sent in each container? YES...NO...NA

I certify that I entered this project into LIMS and answered questions 17-20 (initial) _____

I certify that I attached a label with the unique LIMS number to each container (initial) _____

21. Were there Non-Conformance issues at login? YES...NO Was a PIPE generated? YES...NO...# _____

August 31, 2010 4:27:20PM

Client: AMEC Earth & Environmental (13993)
 600 University Street, Suite 1020
 Seattle, WA 98101
 Attn: Leah Vigoren

Work Order: NTH1954
 Project Name: Everett Terminal(46108) - AMEC
 Project Nbr: [none]
 P/O Nbr:
 Date Received: 08/20/10

SAMPLE IDENTIFICATION	LAB NUMBER	COLLECTION DATE AND TIME
MW11-81810	NTH1954-01	08/18/10 10:30
MWA5-81810	NTH1954-02	08/18/10 13:10
MWA6-81810	NTH1954-03	08/18/10 14:12
MWA4-81810	NTH1954-04	08/18/10 15:30
MWA3-81810	NTH1954-05	08/18/10 16:40
MWA2-81810	NTH1954-06	08/18/10 17:45
MWA1-81810	NTH1954-07	08/18/10 18:30
MW19-81810	NTH1954-08	08/18/10 19:25
MW40R-81810	NTH1954-09	08/18/10 21:15
Dup-1-81810	NTH1954-10	08/18/10 00:01
Trip Blank 1	NTH1954-11	08/18/10 00:01
Trip Blank 2	NTH1954-12	08/18/10 00:01
Trip Blank 3	NTH1954-13	08/18/10 00:01
Trip Blank 4	NTH1954-14	08/18/10 00:01
Trip Blank 5	NTH1954-15	08/18/10 00:01

An executed copy of the chain of custody, the project quality control data, and the sample receipt form are also included as an addendum to this report. If you have any questions relating to this analytical report, please contact your Laboratory Project Manager at 1-800-765-0980. Any opinions, if expressed, are outside the scope of the Laboratory's accreditation.

This material is intended only for the use of the individual(s) or entity to whom it is addressed, and may contain information that is privileged and confidential. If you are not the intended recipient, or the employee or agent responsible for delivering this material to the intended recipient, you are hereby notified that any dissemination, distribution, or copying of this material is strictly prohibited. If you have received this material in error, please notify us immediately at 615-726-0177.

Washington Certification Number: C1712

The Chain(s) of Custody, 7 pages, are included and are an integral part of this report.

These results relate only to the items tested. This report shall not be reproduced except in full and with permission of the laboratory.

All solids results are reported in wet weight unless specifically stated.

Estimated uncertainty is available upon request.

This report has been electronically signed.

Report Approved By:



Leah R. Klingensmith
 Senior Project Management

Client AMEC Earth & Environmental (13993)
600 University Street, Suite 1020
Seattle, WA 98101
Attn Leah Vigoren

Work Order: NTH1954
Project Name: Everett Terminal(46108) - AMEC
Project Number: [none]
Received: 08/20/10 08:00

ANALYTICAL REPORT

Analyte	Result	Flag	Units	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
Sample ID: NTH1954-01 (MW11-81810 - Ground Water) Sampled: 08/18/10 10:30								
Dissolved Metals by Method 6020								
Lead	ND	P7	ug/L	2.00	1	08/27/10 19:17	SW846 6020	10H3884
Volatile Organic Compounds by EPA Method 8260B								
Benzene	ND		ug/L	0.500	1	08/25/10 13:15	SW846 8260B	10H3704
Ethylbenzene	ND		ug/L	0.500	1	08/25/10 13:15	SW846 8260B	10H3704
Methyl tert-Butyl Ether	ND		ug/L	0.500	1	08/25/10 13:15	SW846 8260B	10H3704
Toluene	ND		ug/L	0.500	1	08/25/10 13:15	SW846 8260B	10H3704
Xylenes, total	ND		ug/L	0.500	1	08/25/10 13:15	SW846 8260B	10H3704
<i>Surr: 1,2-Dichloroethane-d4 (63-140%)</i>	<i>89 %</i>					<i>08/25/10 13:15</i>	<i>SW846 8260B</i>	<i>10H3704</i>
<i>Surr: Dibromofluoromethane (73-131%)</i>	<i>85 %</i>					<i>08/25/10 13:15</i>	<i>SW846 8260B</i>	<i>10H3704</i>
<i>Surr: Toluene-d8 (80-120%)</i>	<i>91 %</i>					<i>08/25/10 13:15</i>	<i>SW846 8260B</i>	<i>10H3704</i>
<i>Surr: 4-Bromofluorobenzene (79-125%)</i>	<i>95 %</i>					<i>08/25/10 13:15</i>	<i>SW846 8260B</i>	<i>10H3704</i>
Polyaromatic Hydrocarbons by EPA 8270D SIM								
Acenaphthene	ND		ug/L	0.0962	1	08/27/10 20:08	SW846 8270D SIM	10H3669
Acenaphthylene	ND		ug/L	0.0962	1	08/27/10 20:08	SW846 8270D SIM	10H3669
Anthracene	ND		ug/L	0.0962	1	08/27/10 20:08	SW846 8270D SIM	10H3669
Benzo (a) anthracene	ND		ug/L	0.0962	1	08/27/10 20:08	SW846 8270D SIM	10H3669
Benzo (a) pyrene	ND		ug/L	0.0962	1	08/27/10 20:08	SW846 8270D SIM	10H3669
Benzo (b) fluoranthene	ND		ug/L	0.0962	1	08/27/10 20:08	SW846 8270D SIM	10H3669
Benzo (g,h,i) perylene	ND		ug/L	0.0962	1	08/27/10 20:08	SW846 8270D SIM	10H3669
Benzo (k) fluoranthene	ND		ug/L	0.0962	1	08/27/10 20:08	SW846 8270D SIM	10H3669
Chrysene	ND		ug/L	0.0962	1	08/27/10 20:08	SW846 8270D SIM	10H3669
Dibenz (a,h) anthracene	ND		ug/L	0.0962	1	08/27/10 20:08	SW846 8270D SIM	10H3669
Fluoranthene	ND		ug/L	0.0962	1	08/27/10 20:08	SW846 8270D SIM	10H3669
Fluorene	ND		ug/L	0.0962	1	08/27/10 20:08	SW846 8270D SIM	10H3669
Indeno (1,2,3-cd) pyrene	ND		ug/L	0.0962	1	08/27/10 20:08	SW846 8270D SIM	10H3669
1-Methylnaphthalene	ND		ug/L	0.0962	1	08/27/10 20:08	SW846 8270D SIM	10H3669
2-Methylnaphthalene	ND		ug/L	0.0962	1	08/27/10 20:08	SW846 8270D SIM	10H3669
Naphthalene	ND		ug/L	0.0962	1	08/27/10 20:08	SW846 8270D SIM	10H3669
Phenanthrene	ND		ug/L	0.0962	1	08/27/10 20:08	SW846 8270D SIM	10H3669
Pyrene	ND		ug/L	0.0962	1	08/27/10 20:08	SW846 8270D SIM	10H3669
<i>Surr: Nitrobenzene-d5 (27-120%)</i>	<i>49 %</i>					<i>08/27/10 20:08</i>	<i>W846 8270D SIM</i>	<i>10H3669</i>
<i>Surr: 2-Fluorobiphenyl (29-120%)</i>	<i>53 %</i>					<i>08/27/10 20:08</i>	<i>W846 8270D SIM</i>	<i>10H3669</i>
<i>Surr: Terphenyl-d14 (13-120%)</i>	<i>64 %</i>					<i>08/27/10 20:08</i>	<i>W846 8270D SIM</i>	<i>10H3669</i>
Purgeable Petroleum Hydrocarbons								
GRO (C4-C12) NW	ND		ug/L	100	1	08/25/10 06:53	NWTPH-Gx	10H4185
<i>Surr: a,a,a-Trifluorotoluene (50-150%)</i>	<i>100 %</i>					<i>08/25/10 06:53</i>	<i>NWTPH-Gx</i>	<i>10H4185</i>
Extractable Petroleum Hydrocarbons with Silica Gel Treatment								
Diesel	ND		ug/L	100	1	08/26/10 04:35	NWTPH-Dx	10H3675
Motor Oil	ND		ug/L	100	1	08/26/10 04:35	NWTPH-Dx	10H3675
<i>Surr: o-Terphenyl (50-150%)</i>	<i>85 %</i>					<i>08/26/10 04:35</i>	<i>NWTPH-Dx</i>	<i>10H3675</i>

Client AMEC Earth & Environmental (13993)
600 University Street, Suite 1020
Seattle, WA 98101
Attn Leah Vigoren

Work Order: NTH1954
Project Name: Everett Terminal(46108) - AMEC
Project Number: [none]
Received: 08/20/10 08:00

ANALYTICAL REPORT

Analyte	Result	Flag	Units	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
Sample ID: NTH1954-02 (MWA5-81810 - Ground Water) Sampled: 08/18/10 13:10								
Dissolved Metals by Method 6020								
Lead	ND	P7	ug/L	2.00	1	08/27/10 19:27	SW846 6020	10H3884
Volatile Organic Compounds by EPA Method 8260B								
Benzene	ND		ug/L	0.500	1	08/25/10 13:42	SW846 8260B	10H3704
Ethylbenzene	ND		ug/L	0.500	1	08/25/10 13:42	SW846 8260B	10H3704
Methyl tert-Butyl Ether	ND		ug/L	0.500	1	08/25/10 13:42	SW846 8260B	10H3704
Toluene	ND		ug/L	0.500	1	08/25/10 13:42	SW846 8260B	10H3704
Xylenes, total	ND		ug/L	0.500	1	08/25/10 13:42	SW846 8260B	10H3704
<i>Surr: 1,2-Dichloroethane-d4 (63-140%)</i>	90 %					08/25/10 13:42	SW846 8260B	10H3704
<i>Surr: Dibromofluoromethane (73-131%)</i>	83 %					08/25/10 13:42	SW846 8260B	10H3704
<i>Surr: Toluene-d8 (80-120%)</i>	90 %					08/25/10 13:42	SW846 8260B	10H3704
<i>Surr: 4-Bromofluorobenzene (79-125%)</i>	95 %					08/25/10 13:42	SW846 8260B	10H3704
Polyaromatic Hydrocarbons by EPA 8270D SIM								
Acenaphthene	1.61		ug/L	0.0962	1	08/27/10 20:29	SW846 8270D SIM	10H3669
Acenaphthylene	ND		ug/L	0.0962	1	08/27/10 20:29	SW846 8270D SIM	10H3669
Anthracene	0.212		ug/L	0.0962	1	08/27/10 20:29	SW846 8270D SIM	10H3669
Benzo (a) anthracene	ND		ug/L	0.0962	1	08/27/10 20:29	SW846 8270D SIM	10H3669
Benzo (a) pyrene	ND		ug/L	0.0962	1	08/27/10 20:29	SW846 8270D SIM	10H3669
Benzo (b) fluoranthene	ND		ug/L	0.0962	1	08/27/10 20:29	SW846 8270D SIM	10H3669
Benzo (g,h,i) perylene	ND		ug/L	0.0962	1	08/27/10 20:29	SW846 8270D SIM	10H3669
Benzo (k) fluoranthene	ND		ug/L	0.0962	1	08/27/10 20:29	SW846 8270D SIM	10H3669
Chrysene	ND		ug/L	0.0962	1	08/27/10 20:29	SW846 8270D SIM	10H3669
Dibenz (a,h) anthracene	ND		ug/L	0.0962	1	08/27/10 20:29	SW846 8270D SIM	10H3669
Fluoranthene	0.394		ug/L	0.0962	1	08/27/10 20:29	SW846 8270D SIM	10H3669
Fluorene	0.154		ug/L	0.0962	1	08/27/10 20:29	SW846 8270D SIM	10H3669
Indeno (1,2,3-cd) pyrene	ND		ug/L	0.0962	1	08/27/10 20:29	SW846 8270D SIM	10H3669
1-Methylnaphthalene	ND		ug/L	0.0962	1	08/27/10 20:29	SW846 8270D SIM	10H3669
2-Methylnaphthalene	ND		ug/L	0.0962	1	08/27/10 20:29	SW846 8270D SIM	10H3669
Naphthalene	ND		ug/L	0.0962	1	08/27/10 20:29	SW846 8270D SIM	10H3669
Phenanthrene	0.442		ug/L	0.0962	1	08/27/10 20:29	SW846 8270D SIM	10H3669
Pyrene	0.260		ug/L	0.0962	1	08/27/10 20:29	SW846 8270D SIM	10H3669
<i>Surr: Nitrobenzene-d5 (27-120%)</i>	67 %					08/27/10 20:29	W846 8270D SIM	10H3669
<i>Surr: 2-Fluorobiphenyl (29-120%)</i>	65 %					08/27/10 20:29	W846 8270D SIM	10H3669
<i>Surr: Terphenyl-d14 (13-120%)</i>	79 %					08/27/10 20:29	W846 8270D SIM	10H3669
Purgeable Petroleum Hydrocarbons								
GRO (C4-C12) NW	ND		ug/L	100	1	08/25/10 07:26	NWTPH-Gx	10H4185
<i>Surr: a,a,a-Trifluorotoluene (50-150%)</i>	104 %					08/25/10 07:26	NWTPH-Gx	10H4185
Extractable Petroleum Hydrocarbons with Silica Gel Treatment								
Diesel	2070	QP7	ug/L	97.1	1	08/26/10 04:52	NWTPH-Dx	10H3675
Motor Oil	288	QP7	ug/L	97.1	1	08/26/10 04:52	NWTPH-Dx	10H3675
<i>Surr: o-Terphenyl (50-150%)</i>	80 %					08/26/10 04:52	NWTPH-Dx	10H3675

Client AMEC Earth & Environmental (13993)
600 University Street, Suite 1020
Seattle, WA 98101
Attn Leah Vigoren

Work Order: NTH1954
Project Name: Everett Terminal(46108) - AMEC
Project Number: [none]
Received: 08/20/10 08:00

ANALYTICAL REPORT

Analyte	Result	Flag	Units	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
Sample ID: NTH1954-03 (MWA6-81810 - Ground Water) Sampled: 08/18/10 14:12								
Dissolved Metals by Method 6020								
Lead	ND	P7	ug/L	2.00	1	08/27/10 19:30	SW846 6020	10H3884
Volatile Organic Compounds by EPA Method 8260B								
Benzene	ND		ug/L	0.500	1	08/25/10 14:09	SW846 8260B	10H3704
Ethylbenzene	ND		ug/L	0.500	1	08/25/10 14:09	SW846 8260B	10H3704
Methyl tert-Butyl Ether	ND		ug/L	0.500	1	08/25/10 14:09	SW846 8260B	10H3704
Toluene	ND		ug/L	0.500	1	08/25/10 14:09	SW846 8260B	10H3704
Xylenes, total	ND		ug/L	0.500	1	08/25/10 14:09	SW846 8260B	10H3704
<i>Surr: 1,2-Dichloroethane-d4 (63-140%)</i>	90 %					08/25/10 14:09	SW846 8260B	10H3704
<i>Surr: Dibromofluoromethane (73-131%)</i>	86 %					08/25/10 14:09	SW846 8260B	10H3704
<i>Surr: Toluene-d8 (80-120%)</i>	90 %					08/25/10 14:09	SW846 8260B	10H3704
<i>Surr: 4-Bromofluorobenzene (79-125%)</i>	96 %					08/25/10 14:09	SW846 8260B	10H3704
Polyaromatic Hydrocarbons by EPA 8270D SIM								
Acenaphthene	0.452		ug/L	0.0962	1	08/27/10 20:51	SW846 8270D SIM	10H3669
Acenaphthylene	ND		ug/L	0.0962	1	08/27/10 20:51	SW846 8270D SIM	10H3669
Anthracene	ND		ug/L	0.0962	1	08/27/10 20:51	SW846 8270D SIM	10H3669
Benzo (a) anthracene	ND		ug/L	0.0962	1	08/27/10 20:51	SW846 8270D SIM	10H3669
Benzo (a) pyrene	ND		ug/L	0.0962	1	08/27/10 20:51	SW846 8270D SIM	10H3669
Benzo (b) fluoranthene	ND		ug/L	0.0962	1	08/27/10 20:51	SW846 8270D SIM	10H3669
Benzo (g,h,i) perylene	ND		ug/L	0.0962	1	08/27/10 20:51	SW846 8270D SIM	10H3669
Benzo (k) fluoranthene	ND		ug/L	0.0962	1	08/27/10 20:51	SW846 8270D SIM	10H3669
Chrysene	ND		ug/L	0.0962	1	08/27/10 20:51	SW846 8270D SIM	10H3669
Dibenz (a,h) anthracene	ND		ug/L	0.0962	1	08/27/10 20:51	SW846 8270D SIM	10H3669
Fluoranthene	0.154		ug/L	0.0962	1	08/27/10 20:51	SW846 8270D SIM	10H3669
Fluorene	0.269		ug/L	0.0962	1	08/27/10 20:51	SW846 8270D SIM	10H3669
Indeno (1,2,3-cd) pyrene	ND		ug/L	0.0962	1	08/27/10 20:51	SW846 8270D SIM	10H3669
1-Methylnaphthalene	0.125		ug/L	0.0962	1	08/27/10 20:51	SW846 8270D SIM	10H3669
2-Methylnaphthalene	0.135		ug/L	0.0962	1	08/27/10 20:51	SW846 8270D SIM	10H3669
Naphthalene	0.308		ug/L	0.0962	1	08/27/10 20:51	SW846 8270D SIM	10H3669
Phenanthrene	0.596		ug/L	0.0962	1	08/27/10 20:51	SW846 8270D SIM	10H3669
Pyrene	ND		ug/L	0.0962	1	08/27/10 20:51	SW846 8270D SIM	10H3669
<i>Surr: Nitrobenzene-d5 (27-120%)</i>	49 %					08/27/10 20:51	W846 8270D SIM	10H3669
<i>Surr: 2-Fluorobiphenyl (29-120%)</i>	45 %					08/27/10 20:51	W846 8270D SIM	10H3669
<i>Surr: Terphenyl-d14 (13-120%)</i>	43 %					08/27/10 20:51	W846 8270D SIM	10H3669
Purgeable Petroleum Hydrocarbons								
GRO (C4-C12) NW	ND		ug/L	100	1	08/26/10 15:48	NWTPH-Gx	10H4524
<i>Surr: a,a,a-Trifluorotoluene (50-150%)</i>	113 %					08/26/10 15:48	NWTPH-Gx	10H4524
Extractable Petroleum Hydrocarbons with Silica Gel Treatment								
Diesel	513	QP7	ug/L	100	1	08/26/10 05:09	NWTPH-Dx	10H3675
Motor Oil	145	QP7	ug/L	100	1	08/26/10 05:09	NWTPH-Dx	10H3675
<i>Surr: o-Terphenyl (50-150%)</i>	61 %					08/26/10 05:09	NWTPH-Dx	10H3675

Client AMEC Earth & Environmental (13993)
600 University Street, Suite 1020
Seattle, WA 98101
Attn Leah Vigoren

Work Order: NTH1954
Project Name: Everett Terminal(46108) - AMEC
Project Number: [none]
Received: 08/20/10 08:00

ANALYTICAL REPORT

Analyte	Result	Flag	Units	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
Sample ID: NTH1954-04 (MWA4-81810 - Ground Water) Sampled: 08/18/10 15:30								
Dissolved Metals by Method 6020								
Lead	ND	P7	ug/L	40.0	20	08/30/10 22:23	SW846 6020	10H3884
Volatile Organic Compounds by EPA Method 8260B								
Benzene	ND	PV	ug/L	0.500	1	08/25/10 14:37	SW846 8260B	10H3704
Ethylbenzene	ND	PV	ug/L	0.500	1	08/25/10 14:37	SW846 8260B	10H3704
Methyl tert-Butyl Ether	ND	PV	ug/L	0.500	1	08/25/10 14:37	SW846 8260B	10H3704
Toluene	ND	PV	ug/L	0.500	1	08/25/10 14:37	SW846 8260B	10H3704
Xylenes, total	ND	PV	ug/L	0.500	1	08/25/10 14:37	SW846 8260B	10H3704
<i>Surr: 1,2-Dichloroethane-d4 (63-140%)</i>	98 %					08/25/10 14:37	SW846 8260B	10H3704
<i>Surr: Dibromofluoromethane (73-131%)</i>	87 %					08/25/10 14:37	SW846 8260B	10H3704
<i>Surr: Toluene-d8 (80-120%)</i>	90 %					08/25/10 14:37	SW846 8260B	10H3704
<i>Surr: 4-Bromofluorobenzene (79-125%)</i>	93 %					08/25/10 14:37	SW846 8260B	10H3704
Polyaromatic Hydrocarbons by EPA 8270D SIM								
Acenaphthene	3.16		ug/L	0.0962	1	08/27/10 21:12	SW846 8270D SIM	10H3669
Acenaphthylene	ND		ug/L	0.0962	1	08/27/10 21:12	SW846 8270D SIM	10H3669
Anthracene	0.173		ug/L	0.0962	1	08/27/10 21:12	SW846 8270D SIM	10H3669
Benzo (a) anthracene	ND		ug/L	0.0962	1	08/27/10 21:12	SW846 8270D SIM	10H3669
Benzo (a) pyrene	ND		ug/L	0.0962	1	08/27/10 21:12	SW846 8270D SIM	10H3669
Benzo (b) fluoranthene	ND		ug/L	0.0962	1	08/27/10 21:12	SW846 8270D SIM	10H3669
Benzo (g,h,i) perylene	ND		ug/L	0.0962	1	08/27/10 21:12	SW846 8270D SIM	10H3669
Benzo (k) fluoranthene	ND		ug/L	0.0962	1	08/27/10 21:12	SW846 8270D SIM	10H3669
Chrysene	ND		ug/L	0.0962	1	08/27/10 21:12	SW846 8270D SIM	10H3669
Dibenz (a,h) anthracene	ND		ug/L	0.0962	1	08/27/10 21:12	SW846 8270D SIM	10H3669
Fluoranthene	0.260		ug/L	0.0962	1	08/27/10 21:12	SW846 8270D SIM	10H3669
Fluorene	1.53		ug/L	0.0962	1	08/27/10 21:12	SW846 8270D SIM	10H3669
Indeno (1,2,3-cd) pyrene	ND		ug/L	0.0962	1	08/27/10 21:12	SW846 8270D SIM	10H3669
1-Methylnaphthalene	0.558		ug/L	0.0962	1	08/27/10 21:12	SW846 8270D SIM	10H3669
2-Methylnaphthalene	0.433		ug/L	0.0962	1	08/27/10 21:12	SW846 8270D SIM	10H3669
Naphthalene	1.68		ug/L	0.0962	1	08/27/10 21:12	SW846 8270D SIM	10H3669
Phenanthrene	1.90		ug/L	0.0962	1	08/27/10 21:12	SW846 8270D SIM	10H3669
Pyrene	0.144		ug/L	0.0962	1	08/27/10 21:12	SW846 8270D SIM	10H3669
<i>Surr: Nitrobenzene-d5 (27-120%)</i>	71 %					08/27/10 21:12	W846 8270D SIM	10H3669
<i>Surr: 2-Fluorobiphenyl (29-120%)</i>	72 %					08/27/10 21:12	W846 8270D SIM	10H3669
<i>Surr: Terphenyl-d14 (13-120%)</i>	71 %					08/27/10 21:12	W846 8270D SIM	10H3669
Purgeable Petroleum Hydrocarbons								
GRO (C4-C12) NW	ND		ug/L	100	1	08/26/10 16:24	NWTPH-Gx	10H4524
<i>Surr: a,a,a-Trifluorotoluene (50-150%)</i>	109 %					08/26/10 16:24	NWTPH-Gx	10H4524
Extractable Petroleum Hydrocarbons with Silica Gel Treatment								
Diesel	483	QP7	ug/L	111	1	08/26/10 05:27	NWTPH-Dx	10H3675
Motor Oil	516	QP7	ug/L	111	1	08/26/10 05:27	NWTPH-Dx	10H3675
<i>Surr: o-Terphenyl (50-150%)</i>	68 %					08/26/10 05:27	NWTPH-Dx	10H3675

Client AMEC Earth & Environmental (13993)
600 University Street, Suite 1020
Seattle, WA 98101
Attn Leah Vigoren

Work Order: NTH1954
Project Name: Everett Terminal(46108) - AMEC
Project Number: [none]
Received: 08/20/10 08:00

ANALYTICAL REPORT

Analyte	Result	Flag	Units	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
Sample ID: NTH1954-05 (MWA3-81810 - Ground Water) Sampled: 08/18/10 16:40								
Dissolved Metals by Method 6020								
Lead	ND	P7	ug/L	2.00	1	08/27/10 19:37	SW846 6020	10H3884
Volatile Organic Compounds by EPA Method 8260B								
Benzene	ND		ug/L	0.500	1	08/25/10 15:04	SW846 8260B	10H3704
Ethylbenzene	ND		ug/L	0.500	1	08/25/10 15:04	SW846 8260B	10H3704
Methyl tert-Butyl Ether	ND		ug/L	0.500	1	08/25/10 15:04	SW846 8260B	10H3704
Toluene	ND		ug/L	0.500	1	08/25/10 15:04	SW846 8260B	10H3704
Xylenes, total	ND		ug/L	0.500	1	08/25/10 15:04	SW846 8260B	10H3704
<i>Surr: 1,2-Dichloroethane-d4 (63-140%)</i>	89 %					08/25/10 15:04	SW846 8260B	10H3704
<i>Surr: Dibromofluoromethane (73-131%)</i>	85 %					08/25/10 15:04	SW846 8260B	10H3704
<i>Surr: Toluene-d8 (80-120%)</i>	90 %					08/25/10 15:04	SW846 8260B	10H3704
<i>Surr: 4-Bromofluorobenzene (79-125%)</i>	92 %					08/25/10 15:04	SW846 8260B	10H3704
Polyaromatic Hydrocarbons by EPA 8270D SIM								
Acenaphthene	0.695		ug/L	0.0952	1	08/27/10 21:33	SW846 8270D SIM	10H3669
Acenaphthylene	ND		ug/L	0.0952	1	08/27/10 21:33	SW846 8270D SIM	10H3669
Anthracene	0.0952		ug/L	0.0952	1	08/27/10 21:33	SW846 8270D SIM	10H3669
Benzo (a) anthracene	ND		ug/L	0.0952	1	08/27/10 21:33	SW846 8270D SIM	10H3669
Benzo (a) pyrene	ND		ug/L	0.0952	1	08/27/10 21:33	SW846 8270D SIM	10H3669
Benzo (b) fluoranthene	ND		ug/L	0.0952	1	08/27/10 21:33	SW846 8270D SIM	10H3669
Benzo (g,h,i) perylene	ND		ug/L	0.0952	1	08/27/10 21:33	SW846 8270D SIM	10H3669
Benzo (k) fluoranthene	ND		ug/L	0.0952	1	08/27/10 21:33	SW846 8270D SIM	10H3669
Chrysene	ND		ug/L	0.0952	1	08/27/10 21:33	SW846 8270D SIM	10H3669
Dibenz (a,h) anthracene	ND		ug/L	0.0952	1	08/27/10 21:33	SW846 8270D SIM	10H3669
Fluoranthene	0.200		ug/L	0.0952	1	08/27/10 21:33	SW846 8270D SIM	10H3669
Fluorene	0.619		ug/L	0.0952	1	08/27/10 21:33	SW846 8270D SIM	10H3669
Indeno (1,2,3-cd) pyrene	ND		ug/L	0.0952	1	08/27/10 21:33	SW846 8270D SIM	10H3669
1-Methylnaphthalene	ND		ug/L	0.0952	1	08/27/10 21:33	SW846 8270D SIM	10H3669
2-Methylnaphthalene	ND		ug/L	0.0952	1	08/27/10 21:33	SW846 8270D SIM	10H3669
Naphthalene	ND		ug/L	0.0952	1	08/27/10 21:33	SW846 8270D SIM	10H3669
Phenanthrene	1.03		ug/L	0.0952	1	08/27/10 21:33	SW846 8270D SIM	10H3669
Pyrene	0.162		ug/L	0.0952	1	08/27/10 21:33	SW846 8270D SIM	10H3669
<i>Surr: Nitrobenzene-d5 (27-120%)</i>	70 %					08/27/10 21:33	W846 8270D SIM	10H3669
<i>Surr: 2-Fluorobiphenyl (29-120%)</i>	68 %					08/27/10 21:33	W846 8270D SIM	10H3669
<i>Surr: Terphenyl-d14 (13-120%)</i>	72 %					08/27/10 21:33	W846 8270D SIM	10H3669
Purgeable Petroleum Hydrocarbons								
GRO (C4-C12) NW	ND		ug/L	100	1	08/26/10 17:00	NWTPH-Gx	10H4524
<i>Surr: a,a,a-Trifluorotoluene (50-150%)</i>	106 %					08/26/10 17:00	NWTPH-Gx	10H4524
Extractable Petroleum Hydrocarbons with Silica Gel Treatment								
Diesel	335	QP7	ug/L	97.1	1	08/26/10 05:44	NWTPH-Dx	10H3675
Motor Oil	226	QP7	ug/L	97.1	1	08/26/10 05:44	NWTPH-Dx	10H3675
<i>Surr: o-Terphenyl (50-150%)</i>	66 %					08/26/10 05:44	NWTPH-Dx	10H3675

Client AMEC Earth & Environmental (13993)
600 University Street, Suite 1020
Seattle, WA 98101
Attn Leah Vigoren

Work Order: NTH1954
Project Name: Everett Terminal(46108) - AMEC
Project Number: [none]
Received: 08/20/10 08:00

ANALYTICAL REPORT

Analyte	Result	Flag	Units	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
Sample ID: NTH1954-06 (MWA2-81810 - Ground Water) Sampled: 08/18/10 17:45								
Dissolved Metals by Method 6020								
Lead	ND	P7	ug/L	2.00	1	08/27/10 19:40	SW846 6020	10H3884
Volatile Organic Compounds by EPA Method 8260B								
Benzene	ND		ug/L	0.500	1	08/25/10 15:31	SW846 8260B	10H3704
Ethylbenzene	ND		ug/L	0.500	1	08/25/10 15:31	SW846 8260B	10H3704
Methyl tert-Butyl Ether	ND		ug/L	0.500	1	08/25/10 15:31	SW846 8260B	10H3704
Toluene	ND		ug/L	0.500	1	08/25/10 15:31	SW846 8260B	10H3704
Xylenes, total	ND		ug/L	0.500	1	08/25/10 15:31	SW846 8260B	10H3704
1,2-Dibromoethane (EDB)	ND		ug/L	0.500	1	08/25/10 15:31	SW846 8260B	10H3704
1,2-Dichloroethane	ND		ug/L	0.500	1	08/25/10 15:31	SW846 8260B	10H3704
<i>Surr: 1,2-Dichloroethane-d4 (63-140%)</i>	<i>91 %</i>					<i>08/25/10 15:31</i>	<i>SW846 8260B</i>	<i>10H3704</i>
<i>Surr: Dibromofluoromethane (73-131%)</i>	<i>86 %</i>					<i>08/25/10 15:31</i>	<i>SW846 8260B</i>	<i>10H3704</i>
<i>Surr: Toluene-d8 (80-120%)</i>	<i>90 %</i>					<i>08/25/10 15:31</i>	<i>SW846 8260B</i>	<i>10H3704</i>
<i>Surr: 4-Bromofluorobenzene (79-125%)</i>	<i>93 %</i>					<i>08/25/10 15:31</i>	<i>SW846 8260B</i>	<i>10H3704</i>
Polyaromatic Hydrocarbons by EPA 8270D SIM								
Acenaphthene	1.08		ug/L	0.0971	1	08/27/10 21:55	SW846 8270D SIM	10H3669
Acenaphthylene	ND		ug/L	0.0971	1	08/27/10 21:55	SW846 8270D SIM	10H3669
Anthracene	ND		ug/L	0.0971	1	08/27/10 21:55	SW846 8270D SIM	10H3669
Benzo (a) anthracene	ND		ug/L	0.0971	1	08/27/10 21:55	SW846 8270D SIM	10H3669
Benzo (a) pyrene	ND		ug/L	0.0971	1	08/27/10 21:55	SW846 8270D SIM	10H3669
Benzo (b) fluoranthene	ND		ug/L	0.0971	1	08/27/10 21:55	SW846 8270D SIM	10H3669
Benzo (g,h,i) perylene	ND		ug/L	0.0971	1	08/27/10 21:55	SW846 8270D SIM	10H3669
Benzo (k) fluoranthene	ND		ug/L	0.0971	1	08/27/10 21:55	SW846 8270D SIM	10H3669
Chrysene	ND		ug/L	0.0971	1	08/27/10 21:55	SW846 8270D SIM	10H3669
Dibenz (a,h) anthracene	ND		ug/L	0.0971	1	08/27/10 21:55	SW846 8270D SIM	10H3669
Fluoranthene	ND		ug/L	0.0971	1	08/27/10 21:55	SW846 8270D SIM	10H3669
Fluorene	0.359		ug/L	0.0971	1	08/27/10 21:55	SW846 8270D SIM	10H3669
Indeno (1,2,3-cd) pyrene	ND		ug/L	0.0971	1	08/27/10 21:55	SW846 8270D SIM	10H3669
1-Methylnaphthalene	0.311		ug/L	0.0971	1	08/27/10 21:55	SW846 8270D SIM	10H3669
2-Methylnaphthalene	ND		ug/L	0.0971	1	08/27/10 21:55	SW846 8270D SIM	10H3669
Naphthalene	0.272		ug/L	0.0971	1	08/27/10 21:55	SW846 8270D SIM	10H3669
Phenanthrene	0.146		ug/L	0.0971	1	08/27/10 21:55	SW846 8270D SIM	10H3669
Pyrene	ND		ug/L	0.0971	1	08/27/10 21:55	SW846 8270D SIM	10H3669
<i>Surr: Nitrobenzene-d5 (27-120%)</i>	<i>50 %</i>					<i>08/27/10 21:55</i>	<i>W846 8270D SIA</i>	<i>10H3669</i>
<i>Surr: 2-Fluorobiphenyl (29-120%)</i>	<i>52 %</i>					<i>08/27/10 21:55</i>	<i>W846 8270D SIA</i>	<i>10H3669</i>
<i>Surr: Terphenyl-d14 (13-120%)</i>	<i>59 %</i>					<i>08/27/10 21:55</i>	<i>W846 8270D SIA</i>	<i>10H3669</i>
Purgeable Petroleum Hydrocarbons								
GRO (C4-C12) NW	206		ug/L	100	1	08/26/10 17:35	NWTPH-Gx	10H4524
<i>Surr: a,a,a-Trifluorotoluene (50-150%)</i>	<i>95 %</i>					<i>08/26/10 17:35</i>	<i>NWTPH-Gx</i>	<i>10H4524</i>
Extractable Petroleum Hydrocarbons with Silica Gel Treatment								
Diesel	1720	QP7	ug/L	96.2	1	08/26/10 06:01	NWTPH-Dx	10H3675
Motor Oil	233	QP7	ug/L	96.2	1	08/26/10 06:01	NWTPH-Dx	10H3675
<i>Surr: o-Terphenyl (50-150%)</i>	<i>93 %</i>					<i>08/26/10 06:01</i>	<i>NWTPH-Dx</i>	<i>10H3675</i>

Client AMEC Earth & Environmental (13993)
600 University Street, Suite 1020
Seattle, WA 98101
Attn Leah Vigoren

Work Order: NTH1954
Project Name: Everett Terminal(46108) - AMEC
Project Number: [none]
Received: 08/20/10 08:00

ANALYTICAL REPORT

Analyte	Result	Flag	Units	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
Sample ID: NTH1954-07 (MWA1-81810 - Ground Water) Sampled: 08/18/10 18:30								
Dissolved Metals by Method 6020								
Lead	ND	P7	ug/L	2.00	1	08/27/10 19:50	SW846 6020	10H3884
Volatile Organic Compounds by EPA Method 8260B								
Benzene	ND		ug/L	0.500	1	08/25/10 15:59	SW846 8260B	10H3704
Ethylbenzene	ND		ug/L	0.500	1	08/25/10 15:59	SW846 8260B	10H3704
Methyl tert-Butyl Ether	ND		ug/L	0.500	1	08/25/10 15:59	SW846 8260B	10H3704
Toluene	ND		ug/L	0.500	1	08/25/10 15:59	SW846 8260B	10H3704
Xylenes, total	ND		ug/L	0.500	1	08/25/10 15:59	SW846 8260B	10H3704
1,2-Dibromoethane (EDB)	ND		ug/L	0.500	1	08/25/10 15:59	SW846 8260B	10H3704
1,2-Dichloroethane	ND		ug/L	0.500	1	08/25/10 15:59	SW846 8260B	10H3704
<i>Surr: 1,2-Dichloroethane-d4 (63-140%)</i>	89 %					08/25/10 15:59	SW846 8260B	10H3704
<i>Surr: Dibromofluoromethane (73-131%)</i>	85 %					08/25/10 15:59	SW846 8260B	10H3704
<i>Surr: Toluene-d8 (80-120%)</i>	90 %					08/25/10 15:59	SW846 8260B	10H3704
<i>Surr: 4-Bromofluorobenzene (79-125%)</i>	97 %					08/25/10 15:59	SW846 8260B	10H3704
Polyaromatic Hydrocarbons by EPA 8270D SIM								
Acenaphthene	0.176		ug/L	0.0980	1	08/27/10 22:53	SW846 8270D SIM	10H3669
Acenaphthylene	ND		ug/L	0.0980	1	08/27/10 22:53	SW846 8270D SIM	10H3669
Anthracene	ND		ug/L	0.0980	1	08/27/10 22:53	SW846 8270D SIM	10H3669
Benzo (a) anthracene	ND		ug/L	0.0980	1	08/27/10 22:53	SW846 8270D SIM	10H3669
Benzo (a) pyrene	ND		ug/L	0.0980	1	08/27/10 22:53	SW846 8270D SIM	10H3669
Benzo (b) fluoranthene	ND		ug/L	0.0980	1	08/27/10 22:53	SW846 8270D SIM	10H3669
Benzo (g,h,i) perylene	ND		ug/L	0.0980	1	08/27/10 22:53	SW846 8270D SIM	10H3669
Benzo (k) fluoranthene	ND		ug/L	0.0980	1	08/27/10 22:53	SW846 8270D SIM	10H3669
Chrysene	ND		ug/L	0.0980	1	08/27/10 22:53	SW846 8270D SIM	10H3669
Dibenz (a,h) anthracene	ND		ug/L	0.0980	1	08/27/10 22:53	SW846 8270D SIM	10H3669
Fluoranthene	ND		ug/L	0.0980	1	08/27/10 22:53	SW846 8270D SIM	10H3669
Fluorene	0.108		ug/L	0.0980	1	08/27/10 22:53	SW846 8270D SIM	10H3669
Indeno (1,2,3-cd) pyrene	ND		ug/L	0.0980	1	08/27/10 22:53	SW846 8270D SIM	10H3669
1-Methylnaphthalene	0.265		ug/L	0.0980	1	08/27/10 22:53	SW846 8270D SIM	10H3669
2-Methylnaphthalene	ND		ug/L	0.0980	1	08/27/10 22:53	SW846 8270D SIM	10H3669
Naphthalene	0.108		ug/L	0.0980	1	08/27/10 22:53	SW846 8270D SIM	10H3669
Phenanthrene	ND		ug/L	0.0980	1	08/27/10 22:53	SW846 8270D SIM	10H3669
Pyrene	ND		ug/L	0.0980	1	08/27/10 22:53	SW846 8270D SIM	10H3669
<i>Surr: Nitrobenzene-d5 (27-120%)</i>	65 %					08/27/10 22:53	W846 8270D SIA	10H3669
<i>Surr: 2-Fluorobiphenyl (29-120%)</i>	65 %					08/27/10 22:53	W846 8270D SIA	10H3669
<i>Surr: Terphenyl-d14 (13-120%)</i>	60 %					08/27/10 22:53	W846 8270D SIA	10H3669
Purgeable Petroleum Hydrocarbons								
GRO (C4-C12) NW	ND		ug/L	100	1	08/26/10 18:10	NWTPH-Gx	10H4524
<i>Surr: a,a,a-Trifluorotoluene (50-150%)</i>	92 %					08/26/10 18:10	NWTPH-Gx	10H4524
Extractable Petroleum Hydrocarbons with Silica Gel Treatment								
Diesel	2200	QP7	ug/L	97.1	1	08/26/10 06:18	NWTPH-Dx	10H3675
Motor Oil	276	QP7	ug/L	97.1	1	08/26/10 06:18	NWTPH-Dx	10H3675
<i>Surr: o-Terphenyl (50-150%)</i>	107 %					08/26/10 06:18	NWTPH-Dx	10H3675

Client AMEC Earth & Environmental (13993)
600 University Street, Suite 1020
Seattle, WA 98101
Attn Leah Vigoren

Work Order: NTH1954
Project Name: Everett Terminal(46108) - AMEC
Project Number: [none]
Received: 08/20/10 08:00

ANALYTICAL REPORT

Analyte	Result	Flag	Units	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
Sample ID: NTH1954-08 (MW19-81810 - Ground Water) Sampled: 08/18/10 19:25								
Dissolved Metals by Method 6020								
Lead	ND	P7	ug/L	2.00	1	08/27/10 19:53	SW846 6020	10H3884
Volatile Organic Compounds by EPA Method 8260B								
Benzene	ND		ug/L	0.500	1	08/25/10 16:26	SW846 8260B	10H3704
Ethylbenzene	ND		ug/L	0.500	1	08/25/10 16:26	SW846 8260B	10H3704
Methyl tert-Butyl Ether	ND		ug/L	0.500	1	08/25/10 16:26	SW846 8260B	10H3704
Toluene	ND		ug/L	0.500	1	08/25/10 16:26	SW846 8260B	10H3704
Xylenes, total	ND		ug/L	0.500	1	08/25/10 16:26	SW846 8260B	10H3704
<i>Surr: 1,2-Dichloroethane-d4 (63-140%)</i>	89 %					08/25/10 16:26	SW846 8260B	10H3704
<i>Surr: Dibromofluoromethane (73-131%)</i>	85 %					08/25/10 16:26	SW846 8260B	10H3704
<i>Surr: Toluene-d8 (80-120%)</i>	91 %					08/25/10 16:26	SW846 8260B	10H3704
<i>Surr: 4-Bromofluorobenzene (79-125%)</i>	96 %					08/25/10 16:26	SW846 8260B	10H3704
Polyaromatic Hydrocarbons by EPA 8270D SIM								
Acenaphthene	0.194		ug/L	0.0971	1	08/27/10 23:15	SW846 8270D SIM	10H3669
Acenaphthylene	ND		ug/L	0.0971	1	08/27/10 23:15	SW846 8270D SIM	10H3669
Anthracene	ND		ug/L	0.0971	1	08/27/10 23:15	SW846 8270D SIM	10H3669
Benzo (a) anthracene	ND		ug/L	0.0971	1	08/27/10 23:15	SW846 8270D SIM	10H3669
Benzo (a) pyrene	ND		ug/L	0.0971	1	08/27/10 23:15	SW846 8270D SIM	10H3669
Benzo (b) fluoranthene	ND		ug/L	0.0971	1	08/27/10 23:15	SW846 8270D SIM	10H3669
Benzo (g,h,i) perylene	ND		ug/L	0.0971	1	08/27/10 23:15	SW846 8270D SIM	10H3669
Benzo (k) fluoranthene	ND		ug/L	0.0971	1	08/27/10 23:15	SW846 8270D SIM	10H3669
Chrysene	ND		ug/L	0.0971	1	08/27/10 23:15	SW846 8270D SIM	10H3669
Dibenz (a,h) anthracene	ND		ug/L	0.0971	1	08/27/10 23:15	SW846 8270D SIM	10H3669
Fluoranthene	ND		ug/L	0.0971	1	08/27/10 23:15	SW846 8270D SIM	10H3669
Fluorene	0.126		ug/L	0.0971	1	08/27/10 23:15	SW846 8270D SIM	10H3669
Indeno (1,2,3-cd) pyrene	ND		ug/L	0.0971	1	08/27/10 23:15	SW846 8270D SIM	10H3669
1-Methylnaphthalene	0.194		ug/L	0.0971	1	08/27/10 23:15	SW846 8270D SIM	10H3669
2-Methylnaphthalene	ND		ug/L	0.0971	1	08/27/10 23:15	SW846 8270D SIM	10H3669
Naphthalene	0.388		ug/L	0.0971	1	08/27/10 23:15	SW846 8270D SIM	10H3669
Phenanthrene	ND		ug/L	0.0971	1	08/27/10 23:15	SW846 8270D SIM	10H3669
Pyrene	ND		ug/L	0.0971	1	08/27/10 23:15	SW846 8270D SIM	10H3669
<i>Surr: Nitrobenzene-d5 (27-120%)</i>	75 %					08/27/10 23:15	W846 8270D SIA	10H3669
<i>Surr: 2-Fluorobiphenyl (29-120%)</i>	71 %					08/27/10 23:15	W846 8270D SIA	10H3669
<i>Surr: Terphenyl-d14 (13-120%)</i>	74 %					08/27/10 23:15	W846 8270D SIA	10H3669
Purgeable Petroleum Hydrocarbons								
GRO (C4-C12) NW	371		ug/L	100	1	08/26/10 18:46	NWTPH-Gx	10H4524
<i>Surr: a,a,a-Trifluorotoluene (50-150%)</i>	93 %					08/26/10 18:46	NWTPH-Gx	10H4524
Extractable Petroleum Hydrocarbons with Silica Gel Treatment								
Diesel	346	QP7a	ug/L	100	1	08/26/10 06:36	NWTPH-Dx	10H3675
Motor Oil	137	QP5	ug/L	100	1	08/26/10 06:36	NWTPH-Dx	10H3675
<i>Surr: o-Terphenyl (50-150%)</i>	75 %					08/26/10 06:36	NWTPH-Dx	10H3675

Client AMEC Earth & Environmental (13993)
 600 University Street, Suite 1020
 Seattle, WA 98101
 Attn Leah Vigoren

Work Order: NTH1954
 Project Name: Everett Terminal(46108) - AMEC
 Project Number: [none]
 Received: 08/20/10 08:00

ANALYTICAL REPORT

Analyte	Result	Flag	Units	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
Sample ID: NTH1954-09 (MW40R-81810 - Ground Water) Sampled: 08/18/10 21:15								
Dissolved Metals by Method 6020								
Lead	ND	P7	ug/L	2.00	1	08/27/10 19:56	SW846 6020	10H3884
Volatile Organic Compounds by EPA Method 8260B								
Benzene	6.22		ug/L	0.500	1	08/25/10 16:54	SW846 8260B	10H3704
Ethylbenzene	1.05		ug/L	0.500	1	08/25/10 16:54	SW846 8260B	10H3704
Methyl tert-Butyl Ether	ND		ug/L	0.500	1	08/25/10 16:54	SW846 8260B	10H3704
Toluene	2.47		ug/L	0.500	1	08/25/10 16:54	SW846 8260B	10H3704
Xylenes, total	5.11		ug/L	0.500	1	08/25/10 16:54	SW846 8260B	10H3704
<i>Surr: 1,2-Dichloroethane-d4 (63-140%)</i>	90 %					08/25/10 16:54	SW846 8260B	10H3704
<i>Surr: Dibromofluoromethane (73-131%)</i>	85 %					08/25/10 16:54	SW846 8260B	10H3704
<i>Surr: Toluene-d8 (80-120%)</i>	90 %					08/25/10 16:54	SW846 8260B	10H3704
<i>Surr: 4-Bromofluorobenzene (79-125%)</i>	92 %					08/25/10 16:54	SW846 8260B	10H3704
Polyaromatic Hydrocarbons by EPA 8270D SIM								
Acenaphthene	1.06		ug/L	0.0943	1	08/27/10 23:36	SW846 8270D SIM	10H3669
Acenaphthylene	0.170		ug/L	0.0943	1	08/27/10 23:36	SW846 8270D SIM	10H3669
Anthracene	ND		ug/L	0.0943	1	08/27/10 23:36	SW846 8270D SIM	10H3669
Benzo (a) anthracene	ND		ug/L	0.0943	1	08/27/10 23:36	SW846 8270D SIM	10H3669
Benzo (a) pyrene	ND		ug/L	0.0943	1	08/27/10 23:36	SW846 8270D SIM	10H3669
Benzo (b) fluoranthene	ND		ug/L	0.0943	1	08/27/10 23:36	SW846 8270D SIM	10H3669
Benzo (g,h,i) perylene	ND		ug/L	0.0943	1	08/27/10 23:36	SW846 8270D SIM	10H3669
Benzo (k) fluoranthene	ND		ug/L	0.0943	1	08/27/10 23:36	SW846 8270D SIM	10H3669
Chrysene	ND		ug/L	0.0943	1	08/27/10 23:36	SW846 8270D SIM	10H3669
Dibenz (a,h) anthracene	ND		ug/L	0.0943	1	08/27/10 23:36	SW846 8270D SIM	10H3669
Fluoranthene	ND		ug/L	0.0943	1	08/27/10 23:36	SW846 8270D SIM	10H3669
Fluorene	1.12		ug/L	0.0943	1	08/27/10 23:36	SW846 8270D SIM	10H3669
Indeno (1,2,3-cd) pyrene	ND		ug/L	0.0943	1	08/27/10 23:36	SW846 8270D SIM	10H3669
1-Methylnaphthalene	22.1		ug/L	0.472	5	08/29/10 01:32	SW846 8270D SIM	10H3669
2-Methylnaphthalene	3.25		ug/L	0.0943	1	08/27/10 23:36	SW846 8270D SIM	10H3669
Naphthalene	1.20		ug/L	0.0943	1	08/27/10 23:36	SW846 8270D SIM	10H3669
Phenanthrene	0.642		ug/L	0.0943	1	08/27/10 23:36	SW846 8270D SIM	10H3669
Pyrene	ND		ug/L	0.0943	1	08/27/10 23:36	SW846 8270D SIM	10H3669
<i>Surr: Nitrobenzene-d5 (27-120%)</i>	62 %					08/27/10 23:36	W846 8270D SIA	10H3669
<i>Surr: 2-Fluorobiphenyl (29-120%)</i>	52 %					08/27/10 23:36	W846 8270D SIA	10H3669
<i>Surr: Terphenyl-d14 (13-120%)</i>	38 %					08/27/10 23:36	W846 8270D SIA	10H3669
Purgeable Petroleum Hydrocarbons								
GRO (C4-C12) NW	785		ug/L	100	1	08/26/10 19:21	NWTPH-Gx	10H4524
<i>Surr: a,a,a-Trifluorotoluene (50-150%)</i>	102 %					08/26/10 19:21	NWTPH-Gx	10H4524
Extractable Petroleum Hydrocarbons with Silica Gel Treatment								
Diesel	4390	QP7	ug/L	485	5	08/26/10 21:26	NWTPH-Dx	10H3675
Motor Oil	1620	QP7	ug/L	485	5	08/26/10 21:26	NWTPH-Dx	10H3675
<i>Surr: o-Terphenyl (50-150%)</i>	*	Z3				08/26/10 21:26	NWTPH-Dx	10H3675

Sample ID: NTH1954-10 (Dup-1-81810 - Ground Water) Sampled: 08/18/10 00:01

Client AMEC Earth & Environmental (13993)
600 University Street, Suite 1020
Seattle, WA 98101
Attn Leah Vigoren

Work Order: NTH1954
Project Name: Everett Terminal(46108) - AMEC
Project Number: [none]
Received: 08/20/10 08:00

ANALYTICAL REPORT

Analyte	Result	Flag	Units	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
Sample ID: NTH1954-10 (Dup-1-81810 - Ground Water) - cont. Sampled: 08/18/10 00:01								
Dissolved Metals by Method 6020								
Lead	ND	P7	ug/L	2.00	1	08/27/10 20:00	SW846 6020	10H3884
Volatile Organic Compounds by EPA Method 8260B								
Benzene	ND		ug/L	0.500	1	08/25/10 17:21	SW846 8260B	10H3704
Ethylbenzene	ND		ug/L	0.500	1	08/25/10 17:21	SW846 8260B	10H3704
Methyl tert-Butyl Ether	ND		ug/L	0.500	1	08/25/10 17:21	SW846 8260B	10H3704
Toluene	ND		ug/L	0.500	1	08/25/10 17:21	SW846 8260B	10H3704
Xylenes, total	ND		ug/L	0.500	1	08/25/10 17:21	SW846 8260B	10H3704
<i>Surr: 1,2-Dichloroethane-d4 (63-140%)</i>	<i>90 %</i>					<i>08/25/10 17:21</i>	<i>SW846 8260B</i>	<i>10H3704</i>
<i>Surr: Dibromofluoromethane (73-131%)</i>	<i>87 %</i>					<i>08/25/10 17:21</i>	<i>SW846 8260B</i>	<i>10H3704</i>
<i>Surr: Toluene-d8 (80-120%)</i>	<i>92 %</i>					<i>08/25/10 17:21</i>	<i>SW846 8260B</i>	<i>10H3704</i>
<i>Surr: 4-Bromofluorobenzene (79-125%)</i>	<i>94 %</i>					<i>08/25/10 17:21</i>	<i>SW846 8260B</i>	<i>10H3704</i>
Polyaromatic Hydrocarbons by EPA 8270D SIM								
Acenaphthene	0.152		ug/L	0.0952	1	08/27/10 23:58	SW846 8270D SIM	10H3669
Acenaphthylene	ND		ug/L	0.0952	1	08/27/10 23:58	SW846 8270D SIM	10H3669
Anthracene	ND		ug/L	0.0952	1	08/27/10 23:58	SW846 8270D SIM	10H3669
Benzo (a) anthracene	ND		ug/L	0.0952	1	08/27/10 23:58	SW846 8270D SIM	10H3669
Benzo (a) pyrene	ND		ug/L	0.0952	1	08/27/10 23:58	SW846 8270D SIM	10H3669
Benzo (b) fluoranthene	ND		ug/L	0.0952	1	08/27/10 23:58	SW846 8270D SIM	10H3669
Benzo (g,h,i) perylene	ND		ug/L	0.0952	1	08/27/10 23:58	SW846 8270D SIM	10H3669
Benzo (k) fluoranthene	ND		ug/L	0.0952	1	08/27/10 23:58	SW846 8270D SIM	10H3669
Chrysene	ND		ug/L	0.0952	1	08/27/10 23:58	SW846 8270D SIM	10H3669
Dibenz (a,h) anthracene	ND		ug/L	0.0952	1	08/27/10 23:58	SW846 8270D SIM	10H3669
Fluoranthene	ND		ug/L	0.0952	1	08/27/10 23:58	SW846 8270D SIM	10H3669
Fluorene	0.0952		ug/L	0.0952	1	08/27/10 23:58	SW846 8270D SIM	10H3669
Indeno (1,2,3-cd) pyrene	ND		ug/L	0.0952	1	08/27/10 23:58	SW846 8270D SIM	10H3669
1-Methylnaphthalene	0.105		ug/L	0.0952	1	08/27/10 23:58	SW846 8270D SIM	10H3669
2-Methylnaphthalene	ND		ug/L	0.0952	1	08/27/10 23:58	SW846 8270D SIM	10H3669
Naphthalene	0.286		ug/L	0.0952	1	08/27/10 23:58	SW846 8270D SIM	10H3669
Phenanthrene	ND		ug/L	0.0952	1	08/27/10 23:58	SW846 8270D SIM	10H3669
Pyrene	ND		ug/L	0.0952	1	08/27/10 23:58	SW846 8270D SIM	10H3669
<i>Surr: Nitrobenzene-d5 (27-120%)</i>	<i>59 %</i>					<i>08/27/10 23:58</i>	<i>W846 8270D SIM</i>	<i>10H3669</i>
<i>Surr: 2-Fluorobiphenyl (29-120%)</i>	<i>54 %</i>					<i>08/27/10 23:58</i>	<i>W846 8270D SIM</i>	<i>10H3669</i>
<i>Surr: Terphenyl-d14 (13-120%)</i>	<i>64 %</i>					<i>08/27/10 23:58</i>	<i>W846 8270D SIM</i>	<i>10H3669</i>
Purgeable Petroleum Hydrocarbons								
GRO (C4-C12) NW	388		ug/L	100	1	08/26/10 19:57	NWTPH-Gx	10H4524
<i>Surr: a,a,a-Trifluorotoluene (50-150%)</i>	<i>88 %</i>					<i>08/26/10 19:57</i>	<i>NWTPH-Gx</i>	<i>10H4524</i>
Extractable Petroleum Hydrocarbons with Silica Gel Treatment								
Diesel	508	QP7a	ug/L	95.2	1	08/26/10 07:10	NWTPH-Dx	10H3675
Motor Oil	323	QP7	ug/L	95.2	1	08/26/10 07:10	NWTPH-Dx	10H3675
<i>Surr: o-Terphenyl (50-150%)</i>	<i>81 %</i>					<i>08/26/10 07:10</i>	<i>NWTPH-Dx</i>	<i>10H3675</i>

Client AMEC Earth & Environmental (13993)
 600 University Street, Suite 1020
 Seattle, WA 98101
 Attn Leah Vigoren

Work Order: NTH1954
 Project Name: Everett Terminal(46108) - AMEC
 Project Number: [none]
 Received: 08/20/10 08:00

ANALYTICAL REPORT

Analyte	Result	Flag	Units	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
Sample ID: NTH1954-11 (Trip Blank 1 - Ground Water) Sampled: 08/18/10 00:01								
Volatile Organic Compounds by EPA Method 8260B								
Benzene	ND		ug/L	0.500	1	08/25/10 09:35	SW846 8260B	10H3704
Ethylbenzene	ND		ug/L	0.500	1	08/25/10 09:35	SW846 8260B	10H3704
Toluene	ND		ug/L	0.500	1	08/25/10 09:35	SW846 8260B	10H3704
Xylenes, total	ND		ug/L	0.500	1	08/25/10 09:35	SW846 8260B	10H3704
<i>Surr: 1,2-Dichloroethane-d4 (63-140%)</i>	<i>89 %</i>					<i>08/25/10 09:35</i>	<i>SW846 8260B</i>	<i>10H3704</i>
<i>Surr: Dibromofluoromethane (73-131%)</i>	<i>85 %</i>					<i>08/25/10 09:35</i>	<i>SW846 8260B</i>	<i>10H3704</i>
<i>Surr: Toluene-d8 (80-120%)</i>	<i>91 %</i>					<i>08/25/10 09:35</i>	<i>SW846 8260B</i>	<i>10H3704</i>
<i>Surr: 4-Bromofluorobenzene (79-125%)</i>	<i>93 %</i>					<i>08/25/10 09:35</i>	<i>SW846 8260B</i>	<i>10H3704</i>
Sample ID: NTH1954-12 (Trip Blank 2 - Ground Water) Sampled: 08/18/10 00:01								
Volatile Organic Compounds by EPA Method 8260B								
Benzene	ND		ug/L	0.500	1	08/25/10 10:03	SW846 8260B	10H3704
Ethylbenzene	ND		ug/L	0.500	1	08/25/10 10:03	SW846 8260B	10H3704
Toluene	ND		ug/L	0.500	1	08/25/10 10:03	SW846 8260B	10H3704
Xylenes, total	ND		ug/L	0.500	1	08/25/10 10:03	SW846 8260B	10H3704
<i>Surr: 1,2-Dichloroethane-d4 (63-140%)</i>	<i>89 %</i>					<i>08/25/10 10:03</i>	<i>SW846 8260B</i>	<i>10H3704</i>
<i>Surr: Dibromofluoromethane (73-131%)</i>	<i>86 %</i>					<i>08/25/10 10:03</i>	<i>SW846 8260B</i>	<i>10H3704</i>
<i>Surr: Toluene-d8 (80-120%)</i>	<i>89 %</i>					<i>08/25/10 10:03</i>	<i>SW846 8260B</i>	<i>10H3704</i>
<i>Surr: 4-Bromofluorobenzene (79-125%)</i>	<i>95 %</i>					<i>08/25/10 10:03</i>	<i>SW846 8260B</i>	<i>10H3704</i>
Sample ID: NTH1954-13 (Trip Blank 3 - Ground Water) Sampled: 08/18/10 00:01								
Volatile Organic Compounds by EPA Method 8260B								
Benzene	ND		ug/L	0.500	1	08/25/10 10:30	SW846 8260B	10H3704
Ethylbenzene	ND		ug/L	0.500	1	08/25/10 10:30	SW846 8260B	10H3704
Toluene	ND		ug/L	0.500	1	08/25/10 10:30	SW846 8260B	10H3704
Xylenes, total	ND		ug/L	0.500	1	08/25/10 10:30	SW846 8260B	10H3704
<i>Surr: 1,2-Dichloroethane-d4 (63-140%)</i>	<i>91 %</i>					<i>08/25/10 10:30</i>	<i>SW846 8260B</i>	<i>10H3704</i>
<i>Surr: Dibromofluoromethane (73-131%)</i>	<i>87 %</i>					<i>08/25/10 10:30</i>	<i>SW846 8260B</i>	<i>10H3704</i>
<i>Surr: Toluene-d8 (80-120%)</i>	<i>90 %</i>					<i>08/25/10 10:30</i>	<i>SW846 8260B</i>	<i>10H3704</i>
<i>Surr: 4-Bromofluorobenzene (79-125%)</i>	<i>95 %</i>					<i>08/25/10 10:30</i>	<i>SW846 8260B</i>	<i>10H3704</i>
Sample ID: NTH1954-14 (Trip Blank 4 - Ground Water) Sampled: 08/18/10 00:01								
Volatile Organic Compounds by EPA Method 8260B								
Benzene	ND		ug/L	0.500	1	08/25/10 10:58	SW846 8260B	10H3704
Ethylbenzene	ND		ug/L	0.500	1	08/25/10 10:58	SW846 8260B	10H3704
Toluene	ND		ug/L	0.500	1	08/25/10 10:58	SW846 8260B	10H3704
Xylenes, total	ND		ug/L	0.500	1	08/25/10 10:58	SW846 8260B	10H3704
<i>Surr: 1,2-Dichloroethane-d4 (63-140%)</i>	<i>90 %</i>					<i>08/25/10 10:58</i>	<i>SW846 8260B</i>	<i>10H3704</i>
<i>Surr: Dibromofluoromethane (73-131%)</i>	<i>85 %</i>					<i>08/25/10 10:58</i>	<i>SW846 8260B</i>	<i>10H3704</i>
<i>Surr: Toluene-d8 (80-120%)</i>	<i>89 %</i>					<i>08/25/10 10:58</i>	<i>SW846 8260B</i>	<i>10H3704</i>
<i>Surr: 4-Bromofluorobenzene (79-125%)</i>	<i>92 %</i>					<i>08/25/10 10:58</i>	<i>SW846 8260B</i>	<i>10H3704</i>

Client AMEC Earth & Environmental (13993)
 600 University Street, Suite 1020
 Seattle, WA 98101
 Attn Leah Vigoren

Work Order: NTH1954
 Project Name: Everett Terminal(46108) - AMEC
 Project Number: [none]
 Received: 08/20/10 08:00

ANALYTICAL REPORT

Analyte	Result	Flag	Units	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
Sample ID: NTH1954-15 (Trip Blank 5 - Ground Water) Sampled: 08/18/10 00:01								
Volatile Organic Compounds by EPA Method 8260B								
Benzene	ND		ug/L	0.500	1	08/25/10 11:25	SW846 8260B	10H3704
Ethylbenzene	ND		ug/L	0.500	1	08/25/10 11:25	SW846 8260B	10H3704
Toluene	ND		ug/L	0.500	1	08/25/10 11:25	SW846 8260B	10H3704
Xylenes, total	ND		ug/L	0.500	1	08/25/10 11:25	SW846 8260B	10H3704
<i>Surr: 1,2-Dichloroethane-d4 (63-140%)</i>	<i>90 %</i>					<i>08/25/10 11:25</i>	<i>SW846 8260B</i>	<i>10H3704</i>
<i>Surr: Dibromofluoromethane (73-131%)</i>	<i>88 %</i>					<i>08/25/10 11:25</i>	<i>SW846 8260B</i>	<i>10H3704</i>
<i>Surr: Toluene-d8 (80-120%)</i>	<i>92 %</i>					<i>08/25/10 11:25</i>	<i>SW846 8260B</i>	<i>10H3704</i>
<i>Surr: 4-Bromofluorobenzene (79-125%)</i>	<i>94 %</i>					<i>08/25/10 11:25</i>	<i>SW846 8260B</i>	<i>10H3704</i>

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Work Order: NTH1954
 Project Name: Everett Terminal(46108) - AMEC
 Project Number: [none]
 Received: 08/20/10 08:00

SAMPLE EXTRACTION DATA

Parameter	Batch	Lab Number	Wt/Vol		Date	Analyst	Extraction Method
			Extracted	Extracted Vol			
Dissolved Metals by Method 6020							
SW846 6020	10H3884	NTH1954-01	50.00	50.00	08/24/10 06:00	MET	EPA 3010A / 6020 D
SW846 6020	10H3884	NTH1954-02	50.00	50.00	08/24/10 06:00	MET	EPA 3010A / 6020 D
SW846 6020	10H3884	NTH1954-03	50.00	50.00	08/24/10 06:00	MET	EPA 3010A / 6020 D
SW846 6020	10H3884	NTH1954-04	50.00	50.00	08/24/10 06:00	MET	EPA 3010A / 6020 D
SW846 6020	10H3884	NTH1954-04RE1	50.00	50.00	08/24/10 06:00	MET	EPA 3010A / 6020 D
SW846 6020	10H3884	NTH1954-04RE2	50.00	50.00	08/24/10 06:00	MET	EPA 3010A / 6020 D
SW846 6020	10H3884	NTH1954-05	50.00	50.00	08/24/10 06:00	MET	EPA 3010A / 6020 D
SW846 6020	10H3884	NTH1954-06	50.00	50.00	08/24/10 06:00	MET	EPA 3010A / 6020 D
SW846 6020	10H3884	NTH1954-07	50.00	50.00	08/24/10 06:00	MET	EPA 3010A / 6020 D
SW846 6020	10H3884	NTH1954-08	50.00	50.00	08/24/10 06:00	MET	EPA 3010A / 6020 D
SW846 6020	10H3884	NTH1954-09	50.00	50.00	08/24/10 06:00	MET	EPA 3010A / 6020 D
SW846 6020	10H3884	NTH1954-10	50.00	50.00	08/24/10 06:00	MET	EPA 3010A / 6020 D
Extractable Petroleum Hydrocarbons with Silica Gel Treatment							
NWTPH-Dx	10H3675	NTH1954-01	1000.00	1.00	08/25/10 09:00	MAH	EPA 3510C
NWTPH-Dx	10H3675	NTH1954-02	1030.00	1.00	08/25/10 09:00	MAH	EPA 3510C
NWTPH-Dx	10H3675	NTH1954-03	1000.00	1.00	08/25/10 09:00	MAH	EPA 3510C
NWTPH-Dx	10H3675	NTH1954-04	900.00	1.00	08/25/10 09:00	MAH	EPA 3510C
NWTPH-Dx	10H3675	NTH1954-05	1030.00	1.00	08/25/10 09:00	MAH	EPA 3510C
NWTPH-Dx	10H3675	NTH1954-06	1040.00	1.00	08/25/10 09:00	MAH	EPA 3510C
NWTPH-Dx	10H3675	NTH1954-07	1030.00	1.00	08/25/10 09:00	MAH	EPA 3510C
NWTPH-Dx	10H3675	NTH1954-08	1000.00	1.00	08/25/10 09:00	MAH	EPA 3510C
NWTPH-Dx	10H3675	NTH1954-09	1030.00	1.00	08/25/10 09:00	MAH	EPA 3510C
NWTPH-Dx	10H3675	NTH1954-09RE1	1030.00	1.00	08/25/10 09:00	MAH	EPA 3510C
NWTPH-Dx	10H3675	NTH1954-10	1050.00	1.00	08/25/10 09:00	MAH	EPA 3510C
Polyaromatic Hydrocarbons by EPA 8270D SIM							
SW846 8270D SIM	10H3669	NTH1954-01	1040.00	1.00	08/23/10 10:15	DXP	EPA 3510C
SW846 8270D SIM	10H3669	NTH1954-02	1040.00	1.00	08/23/10 10:15	DXP	EPA 3510C
SW846 8270D SIM	10H3669	NTH1954-03	1040.00	1.00	08/23/10 10:15	DXP	EPA 3510C
SW846 8270D SIM	10H3669	NTH1954-04	1040.00	1.00	08/23/10 10:15	DXP	EPA 3510C
SW846 8270D SIM	10H3669	NTH1954-05	1050.00	1.00	08/23/10 10:15	DXP	EPA 3510C
SW846 8270D SIM	10H3669	NTH1954-06	1030.00	1.00	08/23/10 10:15	DXP	EPA 3510C
SW846 8270D SIM	10H3669	NTH1954-07	1020.00	1.00	08/23/10 10:15	DXP	EPA 3510C
SW846 8270D SIM	10H3669	NTH1954-08	1030.00	1.00	08/23/10 10:15	DXP	EPA 3510C
SW846 8270D SIM	10H3669	NTH1954-09	1060.00	1.00	08/23/10 10:15	DXP	EPA 3510C
SW846 8270D SIM	10H3669	NTH1954-09RE1	1060.00	1.00	08/23/10 10:15	DXP	EPA 3510C
SW846 8270D SIM	10H3669	NTH1954-10	1050.00	1.00	08/23/10 10:15	DXP	EPA 3510C

Client AMEC Earth & Environmental (13993)
 600 University Street, Suite 1020
 Seattle, WA 98101
 Attn Leah Vigoren

Work Order: NTH1954
 Project Name: Everett Terminal(46108) - AMEC
 Project Number: [none]
 Received: 08/20/10 08:00

PROJECT QUALITY CONTROL DATA

Blank

Analyte	Blank Value	Q	Units	Q.C. Batch	Lab Number	Analyzed Date/Time
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Dissolved Metals by Method 6020

10H3884-BLK1

Lead	<0.0900		ug/L	10H3884	10H3884-BLK1	08/27/10 19:13
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Volatile Organic Compounds by EPA Method 8260B

10H3704-BLK1

Benzene	<0.170		ug/L	10H3704	10H3704-BLK1	08/25/10 09:08
Ethylbenzene	<0.170		ug/L	10H3704	10H3704-BLK1	08/25/10 09:08
Methyl tert-Butyl Ether	<0.170		ug/L	10H3704	10H3704-BLK1	08/25/10 09:08
Toluene	<0.170		ug/L	10H3704	10H3704-BLK1	08/25/10 09:08
Xylenes, total	<0.390		ug/L	10H3704	10H3704-BLK1	08/25/10 09:08
1,2-Dibromoethane (EDB)	<0.180		ug/L	10H3704	10H3704-BLK1	08/25/10 09:08
1,2-Dichloroethane	<0.410		ug/L	10H3704	10H3704-BLK1	08/25/10 09:08
Surrogate: 1,2-Dichloroethane-d4	91%			10H3704	10H3704-BLK1	08/25/10 09:08
Surrogate: Dibromofluoromethane	88%			10H3704	10H3704-BLK1	08/25/10 09:08
Surrogate: Toluene-d8	91%			10H3704	10H3704-BLK1	08/25/10 09:08
Surrogate: 4-Bromofluorobenzene	95%			10H3704	10H3704-BLK1	08/25/10 09:08

Polyaromatic Hydrocarbons by EPA 8270D SIM

10H3669-BLK1

Acenaphthene	<0.0280		ug/L	10H3669	10H3669-BLK1	08/27/10 19:25
Acenaphthylene	<0.0250		ug/L	10H3669	10H3669-BLK1	08/27/10 19:25
Anthracene	<0.0310		ug/L	10H3669	10H3669-BLK1	08/27/10 19:25
Benzo (a) anthracene	<0.0180		ug/L	10H3669	10H3669-BLK1	08/27/10 19:25
Benzo (a) pyrene	<0.0320		ug/L	10H3669	10H3669-BLK1	08/27/10 19:25
Benzo (b) fluoranthene	<0.0260		ug/L	10H3669	10H3669-BLK1	08/27/10 19:25
Benzo (g,h,i) perylene	<0.0240		ug/L	10H3669	10H3669-BLK1	08/27/10 19:25
Benzo (k) fluoranthene	<0.0400		ug/L	10H3669	10H3669-BLK1	08/27/10 19:25
Chrysene	<0.0350		ug/L	10H3669	10H3669-BLK1	08/27/10 19:25
Dibenz (a,h) anthracene	<0.0240		ug/L	10H3669	10H3669-BLK1	08/27/10 19:25
Fluoranthene	<0.0340		ug/L	10H3669	10H3669-BLK1	08/27/10 19:25
Fluorene	<0.0250		ug/L	10H3669	10H3669-BLK1	08/27/10 19:25
Indeno (1,2,3-cd) pyrene	<0.0280		ug/L	10H3669	10H3669-BLK1	08/27/10 19:25
1-Methylnaphthalene	<0.0220		ug/L	10H3669	10H3669-BLK1	08/27/10 19:25
2-Methylnaphthalene	<0.0340		ug/L	10H3669	10H3669-BLK1	08/27/10 19:25
Naphthalene	<0.0250		ug/L	10H3669	10H3669-BLK1	08/27/10 19:25
Phenanthrene	<0.0630		ug/L	10H3669	10H3669-BLK1	08/27/10 19:25
Pyrene	<0.0250		ug/L	10H3669	10H3669-BLK1	08/27/10 19:25
Surrogate: Nitrobenzene-d5	62%			10H3669	10H3669-BLK1	08/27/10 19:25
Surrogate: 2-Fluorobiphenyl	64%			10H3669	10H3669-BLK1	08/27/10 19:25
Surrogate: Terphenyl-d14	81%			10H3669	10H3669-BLK1	08/27/10 19:25

Purgeable Petroleum Hydrocarbons

Client AMEC Earth & Environmental (13993)
 600 University Street, Suite 1020
 Seattle, WA 98101
 Attn Leah Vigoren

Work Order: NTH1954
 Project Name: Everett Terminal(46108) - AMEC
 Project Number: [none]
 Received: 08/20/10 08:00

PROJECT QUALITY CONTROL DATA
Blank - Cont.

Analyte	Blank Value	Q	Units	Q.C. Batch	Lab Number	Analyzed Date/Time
Purgeable Petroleum Hydrocarbons						
10H4185-BLK1						
GRO (C4-C12) NW	<33.0		ug/L	10H4185	10H4185-BLK1	08/24/10 13:17
<i>Surrogate: a,a,a-Trifluorotoluene</i>	100%			10H4185	10H4185-BLK1	08/24/10 13:17
10H4185-BLK2						
GRO (C4-C12) NW	<33.0		ug/L	10H4185	10H4185-BLK2	08/24/10 19:43
<i>Surrogate: a,a,a-Trifluorotoluene</i>	100%			10H4185	10H4185-BLK2	08/24/10 19:43
10H4524-BLK1						
GRO (C4-C12) NW	<33.0		ug/L	10H4524	10H4524-BLK1	08/26/10 14:37
<i>Surrogate: a,a,a-Trifluorotoluene</i>	114%			10H4524	10H4524-BLK1	08/26/10 14:37
Extractable Petroleum Hydrocarbons with Silica Gel Treatment						
10H3675-BLK1						
Diesel	29.0		ug/L	10H3675	10H3675-BLK1	08/26/10 04:00
Motor Oil	<10.0		ug/L	10H3675	10H3675-BLK1	08/26/10 04:00
<i>Surrogate: o-Terphenyl</i>	79%			10H3675	10H3675-BLK1	08/26/10 04:00

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 Project Number: [none]
 Received: 08/20/10 08:00

PROJECT QUALITY CONTROL DATA LCS

Analyte	Known Val.	Analyzed Val	Q	Units	% Rec.	Target Range	Batch	Analyzed Date/Time
Dissolved Metals by Method 6020								
10H3884-BS1								
Lead	100	105		ug/L	105%	80 - 120	10H3884	08/27/10 19:10
Volatile Organic Compounds by EPA Method 8260B								
10H3704-BS1								
Benzene	50.0	54.8		ug/L	110%	80 - 121	10H3704	08/25/10 08:13
Ethylbenzene	50.0	50.5		ug/L	101%	78 - 133	10H3704	08/25/10 08:13
Methyl tert-Butyl Ether	50.0	57.5		ug/L	115%	76 - 120	10H3704	08/25/10 08:13
Toluene	50.0	49.0		ug/L	98%	78 - 125	10H3704	08/25/10 08:13
Xylenes, total	150	152		ug/L	102%	78 - 134	10H3704	08/25/10 08:13
1,2-Dibromoethane (EDB)	50.0	52.6		ug/L	105%	80 - 125	10H3704	08/25/10 08:13
1,2-Dichloroethane	50.0	51.4		ug/L	103%	69 - 136	10H3704	08/25/10 08:13
Surrogate: 1,2-Dichloroethane-d4	25.0	24.6			98%	63 - 140	10H3704	08/25/10 08:13
Surrogate: Dibromofluoromethane	25.0	21.3			85%	73 - 131	10H3704	08/25/10 08:13
Surrogate: Toluene-d8	25.0	23.2			93%	80 - 120	10H3704	08/25/10 08:13
Surrogate: 4-Bromofluorobenzene	25.0	23.7			95%	79 - 125	10H3704	08/25/10 08:13
Polyaromatic Hydrocarbons by EPA 8270D SIM								
10H3669-BS1								
Acenaphthene	1.00	0.740		ug/L	74%	43 - 122	10H3669	08/27/10 19:46
Acenaphthylene	1.00	0.720		ug/L	72%	43 - 129	10H3669	08/27/10 19:46
Anthracene	1.00	0.820		ug/L	82%	50 - 138	10H3669	08/27/10 19:46
Benzo (a) anthracene	1.00	0.840		ug/L	84%	50 - 135	10H3669	08/27/10 19:46
Benzo (a) pyrene	1.00	0.860		ug/L	86%	46 - 136	10H3669	08/27/10 19:46
Benzo (b) fluoranthene	1.00	0.900		ug/L	90%	37 - 147	10H3669	08/27/10 19:46
Benzo (g,h,i) perylene	1.00	0.800		ug/L	80%	30 - 145	10H3669	08/27/10 19:46
Benzo (k) fluoranthene	1.00	0.860		ug/L	86%	47 - 135	10H3669	08/27/10 19:46
Chrysene	1.00	0.870		ug/L	87%	47 - 138	10H3669	08/27/10 19:46
Dibenz (a,h) anthracene	1.00	0.760		ug/L	76%	36 - 144	10H3669	08/27/10 19:46
Fluoranthene	1.00	0.890		ug/L	89%	51 - 139	10H3669	08/27/10 19:46
Fluorene	1.00	0.770		ug/L	77%	47 - 128	10H3669	08/27/10 19:46
Indeno (1,2,3-cd) pyrene	1.00	0.760		ug/L	76%	32 - 142	10H3669	08/27/10 19:46
1-Methylnaphthalene	1.00	0.630		ug/L	63%	37 - 126	10H3669	08/27/10 19:46
2-Methylnaphthalene	1.00	0.690		ug/L	69%	41 - 121	10H3669	08/27/10 19:46
Naphthalene	1.00	0.700		ug/L	70%	38 - 120	10H3669	08/27/10 19:46
Phenanthrene	1.00	0.870		ug/L	87%	45 - 133	10H3669	08/27/10 19:46
Pyrene	1.00	0.860		ug/L	86%	50 - 146	10H3669	08/27/10 19:46
Surrogate: Nitrobenzene-d5	1.00	0.560			56%	27 - 120	10H3669	08/27/10 19:46
Surrogate: 2-Fluorobiphenyl	1.00	0.610			61%	29 - 120	10H3669	08/27/10 19:46
Surrogate: Terphenyl-d14	1.00	0.710			71%	13 - 120	10H3669	08/27/10 19:46

Purgeable Petroleum Hydrocarbons

Client AMEC Earth & Environmental (13993)
 600 University Street, Suite 1020
 Seattle, WA 98101
 Attn Leah Vigoren

Work Order: NTH1954
 Project Name: Everett Terminal(46108) - AMEC
 Project Number: [none]
 Received: 08/20/10 08:00

PROJECT QUALITY CONTROL DATA
LCS - Cont.

Analyte	Known Val.	Analyzed Val	Q	Units	% Rec.	Target Range	Batch	Analyzed Date/Time
Purgeable Petroleum Hydrocarbons								
10H4185-BS2								
GRO (C4-C12) NW	1000	980	MNR1	ug/L	98%	70 - 130	10H4185	08/24/10 12:45
<i>Surrogate: a,a,a-Trifluorotoluene</i>	20.0	22.4			112%	50 - 150	10H4185	08/24/10 12:45
10H4524-BS1								
GRO (C4-C12) NW	1000	1130		ug/L	113%	70 - 130	10H4524	08/26/10 22:18
<i>Surrogate: a,a,a-Trifluorotoluene</i>	20.0	22.2			111%	50 - 150	10H4524	08/26/10 22:18
Extractable Petroleum Hydrocarbons with Silica Gel Treatment								
10H3675-BS1								
Diesel	1000	869	MNR1	ug/L	87%	57 - 132	10H3675	08/26/10 04:17
<i>Surrogate: o-Terphenyl</i>	20.0	16.3			81%	50 - 150	10H3675	08/26/10 04:17

Client AMEC Earth & Environmental (13993)
 600 University Street, Suite 1020
 Seattle, WA 98101
 Attn Leah Vigoren

Work Order: NTH1954
 Project Name: Everett Terminal(46108) - AMEC
 Project Number: [none]
 Received: 08/20/10 08:00

PROJECT QUALITY CONTROL DATA
Matrix Spike

Analyte	Orig. Val.	MS Val	Q	Units	Spike Conc	% Rec.	Target Range	Batch	Sample Spiked	Analyzed Date/Time
Dissolved Metals by Method 6020										
10H3884-MS1										
Lead	ND	104		ug/L	100	104%	75 - 125	10H3884	NTH1954-01	08/27/10 19:20
Volatile Organic Compounds by EPA Method 8260B										
10H3704-MS1										
Benzene	ND	60.1		ug/L	50.0	120%	65 - 151	10H3704	NTH1954-03	08/25/10 17:48
Ethylbenzene	ND	53.7		ug/L	50.0	107%	68 - 157	10H3704	NTH1954-03	08/25/10 17:48
Methyl tert-Butyl Ether	ND	58.2		ug/L	50.0	116%	56 - 152	10H3704	NTH1954-03	08/25/10 17:48
Toluene	ND	52.0		ug/L	50.0	104%	61 - 153	10H3704	NTH1954-03	08/25/10 17:48
Xylenes, total	ND	158		ug/L	150	106%	68 - 158	10H3704	NTH1954-03	08/25/10 17:48
1,2-Dibromoethane (EDB)	ND	53.2		ug/L	50.0	106%	80 - 132	10H3704	NTH1954-03	08/25/10 17:48
1,2-Dichloroethane	0.930	52.4		ug/L	50.0	103%	53 - 146	10H3704	NTH1954-03	08/25/10 17:48
<i>Surrogate: 1,2-Dichloroethane-d4</i>		24.4		ug/L	25.0	97%	63 - 140	10H3704	NTH1954-03	08/25/10 17:48
<i>Surrogate: Dibromofluoromethane</i>		21.2		ug/L	25.0	85%	73 - 131	10H3704	NTH1954-03	08/25/10 17:48
<i>Surrogate: Toluene-d8</i>		22.6		ug/L	25.0	90%	80 - 120	10H3704	NTH1954-03	08/25/10 17:48
<i>Surrogate: 4-Bromofluorobenzene</i>		24.3		ug/L	25.0	97%	79 - 125	10H3704	NTH1954-03	08/25/10 17:48
Purgeable Petroleum Hydrocarbons										
10H4524-MS1										
GRO (C4-C12) NW	ND	1140		ug/L	1000	114%	58 - 139	10H4524	NTH1954-03	08/27/10 12:41
<i>Surrogate: a,a,a-Trifluorotoluene</i>		30.9	Z2	ug/L	20.0	155%	50 - 150	10H4524	NTH1954-03	08/27/10 12:41

Client AMEC Earth & Environmental (13993)
 600 University Street, Suite 1020
 Seattle, WA 98101
 Attn Leah Vigoren

Work Order: NTH1954
 Project Name: Everett Terminal(46108) - AMEC
 Project Number: [none]
 Received: 08/20/10 08:00

PROJECT QUALITY CONTROL DATA
Matrix Spike Dup

Analyte	Orig. Val.	Duplicate	Q	Units	Spike Conc	% Rec.	Target Range	RPD	Limit	Batch	Sample Duplicated	Analyzed Date/Time
Dissolved Metals by Method 6020												
10H3884-MSD1												
Lead	ND	104		ug/L	100	104%	75 - 125	0	20	10H3884	NTH1954-01	08/27/10 19:23
Volatile Organic Compounds by EPA Method 8260B												
10H3704-MSD1												
Benzene	ND	62.0		ug/L	50.0	124%	65 - 151	3	12	10H3704	NTH1954-03	08/25/10 18:16
Ethylbenzene	ND	55.2		ug/L	50.0	110%	68 - 157	3	12	10H3704	NTH1954-03	08/25/10 18:16
Methyl tert-Butyl Ether	ND	61.0		ug/L	50.0	122%	56 - 152	5	32	10H3704	NTH1954-03	08/25/10 18:16
Toluene	ND	53.4		ug/L	50.0	107%	61 - 153	3	35	10H3704	NTH1954-03	08/25/10 18:16
Xylenes, total	ND	164		ug/L	150	109%	68 - 158	3	18	10H3704	NTH1954-03	08/25/10 18:16
1,2-Dibromoethane (EDB)	ND	55.5		ug/L	50.0	111%	80 - 132	4	21	10H3704	NTH1954-03	08/25/10 18:16
1,2-Dichloroethane	0.930	54.9		ug/L	50.0	108%	53 - 146	5	26	10H3704	NTH1954-03	08/25/10 18:16
Surrogate: 1,2-Dichloroethane-d4		24.1		ug/L	25.0	96%	63 - 140			10H3704	NTH1954-03	08/25/10 18:16
Surrogate: Dibromofluoromethane		20.8		ug/L	25.0	83%	73 - 131			10H3704	NTH1954-03	08/25/10 18:16
Surrogate: Toluene-d8		22.3		ug/L	25.0	89%	80 - 120			10H3704	NTH1954-03	08/25/10 18:16
Surrogate: 4-Bromofluorobenzene		24.1		ug/L	25.0	97%	79 - 125			10H3704	NTH1954-03	08/25/10 18:16
Purgeable Petroleum Hydrocarbons												
10H4524-MSD1												
GRO (C4-C12) NW	ND	1200		ug/L	1000	120%	58 - 139	5	37	10H4524	NTH1954-03	08/27/10 13:16
Surrogate: a,a,a-Trifluorotoluene		30.5	ZZ	ug/L	20.0	153%	50 - 150			10H4524	NTH1954-03	08/27/10 13:16

Client AMEC Earth & Environmental (13993)
600 University Street, Suite 1020
Seattle, WA 98101
Attn Leah Vigoren

Work Order: NTH1954
Project Name: Everett Terminal(46108) - AMEC
Project Number: [none]
Received: 08/20/10 08:00

CERTIFICATION SUMMARY

TestAmerica Nashville

Method	Matrix	AIHA	Nelac	Washington
NWTPH-Dx	Water	N/A		X
NWTPH-Gx	Water	N/A	X	X
SW846 6020	Water		X	X
SW846 8260B	Water	N/A	X	X
SW846 8270D SIM	Water		X	

Client AMEC Earth & Environmental (13993)
600 University Street, Suite 1020
Seattle, WA 98101
Attn Leah Vigoren

Work Order: NTH1954
Project Name: Everett Terminal(46108) - AMEC
Project Number: [none]
Received: 08/20/10 08:00

DATA QUALIFIERS AND DEFINITIONS

MNR1 There was no MS/MSD analyzed with this batch due to insufficient sample volume. See Blank Spike.
P7 Sample filtered in lab.
PV Acid preservation was indicated on the sample vial. However, a pH of <2 was not obtained.
QP5 There was insufficient contamination present to perform a pattern match.
QP7 The hydrocarbon pattern most closely resembles a diesel product.
QP7a The hydrocarbon pattern most closely resembles a gasoline product.
Z2 Surrogate recovery was above the acceptance limits. Data not impacted.
Z3 The sample required a dilution due to the nature of the sample matrix. Because of this dilution, the surrogate spike concentration in the sample was reduced to a level where the recovery calculation does not provide useful information.
ND Not detected at the reporting limit (or method detection limit if shown)

METHOD MODIFICATION NOTES

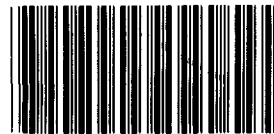
AGENCY DRAFT

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Nashville, TN

COOLER R]



NTH1954

Cooler Received/Opened On 8/20/2010 @ 0800

1. Tracking # 9045 (last 4 digits, FedE.)

Courier: FedEx IR Gun ID Raynger

2. Temperature of rep. sample or temp blank when opened: 2.7 Degrees Celsius

3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES NO NA

4. Were custody seals on outside of cooler? YES...NO...NA

If yes, how many and where: 1 Seal

5. Were the seals intact, signed, and dated correctly? YES...NO...NA

6. Were custody papers inside cooler? YES...NO...NA

I certify that I opened the cooler and answered questions 1-6 (initial)

7. Were custody seals on containers: YES NO and Intact YES...NO...NA

Were these signed and dated correctly? YES...NO...NA

8. Packing mat'l used? Bubblewrap Plastic bag Peanuts Vermiculite Foam Insert Paper Other None

9. Cooling process: Ice Ice-pack Ice (direct contact) Dry ice Other None

10. Did all containers arrive in good condition (unbroken)? YES...NO...NA

11. Were all container labels complete (#, date, signed, pres., etc)? YES...NO...NA

12. Did all container labels and tags agree with custody papers? YES...NO...NA

13a. Were VOA vials received? YES...NO...NA

b. Was there any observable headspace present in any VOA vial? YES...NO...NA

14. Was there a Trip Blank in this cooler? YES...NO...NA If multiple coolers, sequence # 1

I certify that I unloaded the cooler and answered questions 7-14 (initial)

15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES...NO...NA

b. Did the bottle labels indicate that the correct preservatives were used YES...NO...NA

16. Was residual chlorine present? YES...NO...NA

I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (initial)

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

18. Did you sign the custody papers in the appropriate place? YES...NO...NA

19. Were correct containers used for the analysis requested? YES...NO...NA

20. Was sufficient amount of sample sent in each container? YES...NO...NA

I certify that I entered this project into LIMS and answered questions 17-20 (initial)

I certify that I attached a label with the unique LIMS number to each container (initial)

21. Were there Non-Conformance issues at login? YES...NO...# Was a PIPE generated? YES...NO...#

AGENCY DRAFT



COOLER RECEIPT FORM

Cooler Received/Opened On: 8/20/2010 @ 8:00

Fed-ex Tracking number 9056

IR Gun ID: 9560068

- 1. Temperature of rep. sample or temp blank when opened: 2.2 Degrees Celsius
- 3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES NO (NA)
- 4. Were custody seals on outside of cooler? (YES)..NO...NA
If yes, how many and where: 1 front
- 5. Were the seals intact, signed, and dated correctly? (YES)..NO...NA
- 6. Were custody papers inside cooler? (YES)..NO...NA

I certify that I opened the cooler and answered questions 1-6 (initial) S

- 7. Were custody seals on containers: YES (NO) and Intact YES...NO...(NA)
Were these signed and dated correctly? YES...NO...(NA)
- 8. Packing mat'l used? (Bubblewrap) Plastic bag Peanuts Vermiculite Foam Insert Paper Other (None)
- 9. Cooling process: (Ice) Ice-pack (Ice (direct contact)) Dry ice Other None
- 10. Did all containers arrive in good condition (unbroken)? (YES)..NO...NA
- 11. Were all container labels complete (#, date, signed, pres., etc)? (YES)..NO...NA
- 12. Did all container labels and tags agree with custody papers? (YES)..NO...NA
- 13a. Were VOA vials received? (YES)..NO...NA
- b. Was there any observable headspace present in any VOA vial? YES (NO)..NA
- 14. Was there a Trip Blank in this cooler? (YES)..NO...NA If multiple coolers, sequence # 2

I certify that I unloaded the cooler and answered questions 7-14 (initial) M

- 15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES..NO...(NA)
- b. Did the bottle labels indicate that the correct preservatives were used (YES)..NO...NA
- 16. Was residual chlorine present? YES..NO...(NA)

I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (initial) S

- 17. Were custody papers properly filled out (ink, signed, etc)? (YES)..NO...NA
- 18. Did you sign the custody papers in the appropriate place? (YES)..NO...NA
- 19. Were correct containers used for the analysis requested? (YES)..NO...NA
- 20. Was sufficient amount of sample sent in each container? (YES)..NO...NA

I certify that I entered this project into LIMS and answered questions 17-20 (initial) S

I certify that I attached a label with the unique LIMS number to each container (initial) S

- 21. Were there Non-Conformance issues at login? YES..NO (NO) Was a PIPE generated? YES..NO..# (NA)

AGENCY DRAFT



THE LEADER IN ENVIRONMENTAL TESTING
Nashville, TN

COOLER RECEIPT FORM

Cooler Received/Opened On 8/20/2010 @ 0800

1. Tracking # 3200 (last 4 digits, FedEx)

Courier: FedEx IR Gun ID Raynger

2. Temperature of rep. sample or temp blank when opened: 1.9 Degrees Celsius

3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES NO..NA

4. Were custody seals on outside of cooler? YES..NO...NA
If yes, how many and where: 1 front

5. Were the seals intact, signed, and dated correctly? YES..NO...NA

6. Were custody papers inside cooler? YES..NO...NA

I certify that I opened the cooler and answered questions 1-6 (initial) M

7. Were custody seals on containers: YES NO and Intact YES..NO...NA

Were these signed and dated correctly? YES..NO...NA

8. Packing mat'l used? Bubblewrap Plastic bag Peanuts Vermiculite Foam Insert Paper Other (None)

9. Cooling process: Ice Ice-pack Ice (direct contact) Dry ice Other None

10. Did all containers arrive in good condition (unbroken)? YES..NO...NA

11. Were all container labels complete (#, date, signed, pres., etc)? YES..NO...NA

12. Did all container labels and tags agree with custody papers? YES..NO...NA

13a. Were VOA vials received? YES..NO...NA

b. Was there any observable headspace present in any VOA vial? YES..NO...NA

14. Was there a Trip Blank in this cooler? YES..NO...NA If multiple coolers, sequence # 3

I certify that I unloaded the cooler and answered questions 7-14 (initial)

15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES..NO..NA

b. Did the bottle labels indicate that the correct preservatives were used YES..NO...NA

16. Was residual chlorine present? YES..NO...NA

I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (initial)

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

18. Did you sign the custody papers in the appropriate place? YES..NO...NA

19. Were correct containers used for the analysis requested? YES..NO...NA

20. Was sufficient amount of sample sent in each container? YES..NO...NA

I certify that I entered this project into LIMS and answered questions 17-20 (initial)

I certify that I attached a label with the unique LIMS number to each container (initial)

21. Were there Non-Conformance issues at login? YES..NO Was a PIPE generated? YES..NO.#

AGENCY DRAFT



THE LEADER IN ENVIRONMENTAL TESTING

Nashville, TN

COOLER RECEIPT FORM

Cooler Received/Opened On 8/20/2010 @ 0800

1. Tracking # 9067 (last 4 digits, FedEx)

Courier: FedEx IR Gun ID Raynger

2. Temperature of rep. sample or temp blank when opened: 3.4 Degrees Celsius

3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES NO..NA

4. Were custody seals on outside of cooler? YES..NO...NA

If yes, how many and where: 1 front

5. Were the seals intact, signed, and dated correctly? YES..NO...NA

6. Were custody papers inside cooler? YES..NO...NA

I certify that I opened the cooler and answered questions 1-6 (initial)

7. Were custody seals on containers: YES NO and Intact YES..NO..NA

Were these signed and dated correctly? YES..NO..NA

8. Packing mat'l used? Bubblewrap Plastic bag Peanuts Vermiculite Foam Insert Paper Other None

9. Cooling process: Ice Ice-pack Ice (direct contact) Dry ice Other None

10. Did all containers arrive in good condition (unbroken)? YES..NO...NA

11. Were all container labels complete (#, date, signed, pres., etc)? YES..NO...NA

12. Did all container labels and tags agree with custody papers? YES..NO...NA

13a. Were VOA vials received? YES..NO...NA

b. Was there any observable headspace present in any VOA vial? YES..NO...NA

14. Was there a Trip Blank in this cooler? YES..NO...NA If multiple coolers, sequence # 4

I certify that I unloaded the cooler and answered questions 7-14 (initial)

15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES..NO..NA

b. Did the bottle labels indicate that the correct preservatives were used YES..NO...NA

16. Was residual chlorine present? YES..NO..NA

I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (initial)

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

18. Did you sign the custody papers in the appropriate place? YES..NO...NA

19. Were correct containers used for the analysis requested? YES..NO...NA

20. Was sufficient amount of sample sent in each container? YES..NO...NA

I certify that I entered this project into LIMS and answered questions 17-20 (initial)

I certify that I attached a label with the unique LIMS number to each container (initial)

21. Were there Non-Conformance issues at login? YES..NO Was a PIPE generated? YES..NO..#

AGENCY DRAFT



THE LEADER IN ENVIRONMENTAL TESTING

Nashville, TN

COOLER RECEIPT FORM

Cooler Received/Opened On 8/20/2010 @ 0800

1. Tracking # 3195 (last 4 digits, FedEx)

Courier: FedEx IR Gun ID Raynger

2. Temperature of rep. sample or temp blank when opened: 27 Degrees Celsius

3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES NO (NA)

4. Were custody seals on outside of cooler? YES (1 break) ...NO...NA

If yes, how many and where: 1 break

5. Were the seals intact, signed, and dated correctly? YES...NO...NA

6. Were custody papers inside cooler? YES...NO...NA

I certify that I opened the cooler and answered questions 1-6 (initial) M

7. Were custody seals on containers: YES NO and Intact YES...NO...NA

Were these signed and dated correctly? YES...NO...NA

8. Packing mat'l used? Bubblewrap Plastic bag Peanuts Vermiculite Foam Insert Paper Other None

9. Cooling process: Ice Ice-pack Ice (direct contact) Dry ice Other None

10. Did all containers arrive in good condition (unbroken)? YES...NO...NA

11. Were all container labels complete (#, date, signed, pres., etc)? YES...NO...NA

12. Did all container labels and tags agree with custody papers? YES...NO...NA

13a. Were VOA vials received? YES...NO...NA

b. Was there any observable headspace present in any VOA vial? YES...NO...NA

14. Was there a Trip Blank in this cooler? YES...NO...NA If multiple coolers, sequence # 5

I certify that I unloaded the cooler and answered questions 7-14 (initial) M

15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES...NO...NA

b. Did the bottle labels indicate that the correct preservatives were used? YES...NO...NA

16. Was residual chlorine present? YES...NO...NA

I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (initial) M

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

18. Did you sign the custody papers in the appropriate place? YES...NO...NA

19. Were correct containers used for the analysis requested? YES...NO...NA

20. Was sufficient amount of sample sent in each container? YES...NO...NA

I certify that I entered this project into LIMS and answered questions 17-20 (initial) M

I certify that I attached a label with the unique LIMS number to each container (initial) M

21. Were there Non-Conformance issues at login? YES (NO) Was a PIPE generated? YES...NO...#

November 12, 2010 1:35:03PM

Client: AMEC Earth & Environmental (13993)
600 University Street, Suite 1020
Seattle, WA 98101
Attn: Leah Vigoren

Work Order: NTJ3690
Project Name: Everett Terminal(46108) - AMEC
Project Nbr: [none]
P/O Nbr:
Date Received: 10/29/10

SAMPLE IDENTIFICATION	LAB NUMBER	COLLECTION DATE AND TIME
AP7-1	NTJ3690-01	10/28/10 09:50
Trip Blank	NTJ3690-02	10/29/10 00:01

An executed copy of the chain of custody, the project quality control data, and the sample receipt form are also included as an addendum to this report. If you have any questions relating to this analytical report, please contact your Laboratory Project Manager at 1-800-765-0980. Any opinions, if expressed, are outside the scope of the Laboratory's accreditation.

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Washington Certification Number: C1712

The Chain(s) of Custody, 2 pages, are included and are an integral part of this report.

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All solids results are reported in wet weight unless specifically stated.

Estimated uncertainty is available upon request.

This report has been electronically signed.

Report Approved By:



Leah R. Klingensmith

Senior Project Management

Client AMEC Earth & Environmental (13993)
600 University Street, Suite 1020
Seattle, WA 98101
Attn Leah Vigoren

Work Order: NTJ3690
Project Name: Everett Terminal(46108) - AMEC
Project Number: [none]
Received: 10/29/10 08:45

ANALYTICAL REPORT

Analyte	Result	Flag	Units	MDL	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
Sample ID: NTJ3690-01 (AP7-1 - Soil) Sampled: 10/28/10 09:50									
General Chemistry Parameters									
% Dry Solids	86.7		%	0.500	0.500	1	11/02/10 09:10	SW-846	10K0164
Volatile Organic Compounds by EPA Method 8260B									
Benzene	ND		mg/kg dry	0.00101	0.00185	1	11/10/10 13:37	SW846 8260B	10K0722
Ethylbenzene	ND		mg/kg dry	0.000904	0.00185	1	11/10/10 13:37	SW846 8260B	10K0722
Methyl tert-Butyl Ether	ND		mg/kg dry	0.000618	0.00185	1	11/10/10 13:37	SW846 8260B	10K0722
Toluene	ND		mg/kg dry	0.000821	0.00185	1	11/10/10 13:37	SW846 8260B	10K0722
Xylenes, total	ND		mg/kg dry	0.00175	0.00461	1	11/10/10 13:37	SW846 8260B	10K0722
Surr: 1,2-Dichloroethane-d4 (67-138%)	93 %					1	11/10/10 13:37	SW846 8260B	10K0722
Surr: Dibromofluoromethane (75-125%)	104 %					1	11/10/10 13:37	SW846 8260B	10K0722
Surr: Toluene-d8 (76-129%)	94 %					1	11/10/10 13:37	SW846 8260B	10K0722
Surr: 4-Bromofluorobenzene (67-147%)	112 %					1	11/10/10 13:37	SW846 8260B	10K0722
Polyaromatic Hydrocarbons by EPA 8270D SIM									
Acenaphthene	0.00801		mg/kg dry	0.000801	0.00381	1	11/08/10 21:09	SW846 8270D SIM	10K0663
Acenaphthylene	ND		mg/kg dry	0.000687	0.00381	1	11/08/10 21:09	SW846 8270D SIM	10K0663
Anthracene	ND		mg/kg dry	0.000572	0.00381	1	11/08/10 21:09	SW846 8270D SIM	10K0663
Benzo (a) anthracene	0.00458		mg/kg dry	0.000687	0.00381	1	11/08/10 21:09	SW846 8270D SIM	10K0663
Benzo (a) pyrene	0.00420		mg/kg dry	0.000687	0.00381	1	11/08/10 21:09	SW846 8270D SIM	10K0663
Benzo (b) fluoranthene	0.00458		mg/kg dry	0.000801	0.00381	1	11/08/10 21:09	SW846 8270D SIM	10K0663
Benzo (g,h,i) perylene	0.00496		mg/kg dry	0.000801	0.00381	1	11/08/10 21:09	SW846 8270D SIM	10K0663
Benzo (k) fluoranthene	0.00458		mg/kg dry	0.000801	0.00381	1	11/08/10 21:09	SW846 8270D SIM	10K0663
Chrysene	0.00458		mg/kg dry	0.00114	0.00381	1	11/08/10 21:09	SW846 8270D SIM	10K0663
Dibenz (a,h) anthracene	ND		mg/kg dry	0.00103	0.00381	1	11/08/10 21:09	SW846 8270D SIM	10K0663
Fluoranthene	0.00915		mg/kg dry	0.000572	0.00381	1	11/08/10 21:09	SW846 8270D SIM	10K0663
Fluorene	0.00305	J	mg/kg dry	0.00114	0.00381	1	11/08/10 21:09	SW846 8270D SIM	10K0663
Indeno (1,2,3-cd) pyrene	0.00343	J	mg/kg dry	0.000687	0.00381	1	11/08/10 21:09	SW846 8270D SIM	10K0663
1-Methylnaphthalene	ND		mg/kg dry	0.000687	0.00381	1	11/08/10 21:09	SW846 8270D SIM	10K0663
2-Methylnaphthalene	ND		mg/kg dry	0.000915	0.00381	1	11/08/10 21:09	SW846 8270D SIM	10K0663
Naphthalene	ND		mg/kg dry	0.000687	0.00381	1	11/08/10 21:09	SW846 8270D SIM	10K0663
Phenanthrene	0.00534		mg/kg dry	0.000915	0.00381	1	11/08/10 21:09	SW846 8270D SIM	10K0663
Pyrene	0.00877		mg/kg dry	0.000915	0.00381	1	11/08/10 21:09	SW846 8270D SIM	10K0663
Surr: Nitrobenzene-d5 (17-120%)	55 %					1	11/08/10 21:09	SW846 8270D SIM	10K0663
Surr: 2-Fluorobiphenyl (14-120%)	57 %					1	11/08/10 21:09	SW846 8270D SIM	10K0663
Surr: Terphenyl-d14 (18-120%)	62 %					1	11/08/10 21:09	SW846 8270D SIM	10K0663
Purgeable Petroleum Hydrocarbons									
GRO (C4-C12) NW	1.39	J, B	mg/kg dry	0.508	5.08	50	11/03/10 20:01	NWTPH-Gx	10J5695
Surr: a,a,a-Trifluorotoluene (50-150%)	81 %					50	11/03/10 20:01	NWTPH-Gx	10J5695
Extractable Petroleum Hydrocarbons with Silica Gel Treatment									
Diesel	3.04	J	mg/kg dry	0.781	4.47	1	11/09/10 18:27	NWTPH-Dx	10K1531
Motor Oil	119	QP7	mg/kg dry	0.781	4.47	1	11/09/10 18:27	NWTPH-Dx	10K1531
Surr: o-Terphenyl (50-150%)	82 %					1	11/09/10 18:27	NWTPH-Dx	10K1531

Client AMEC Earth & Environmental (13993)
 600 University Street, Suite 1020
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 Attn Leah Vigoren

Work Order: NTJ3690
 Project Name: Everett Terminal(46108) - AMEC
 Project Number: [none]
 Received: 10/29/10 08:45

ANALYTICAL REPORT

Analyte	Result	Flag	Units	MDL	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
Sample ID: NTJ3690-02 (Trip Blank - Water) Sampled: 10/29/10 00:01									
Volatile Organic Compounds by EPA Method 8260B									
Benzene	ND		ug/L	0.270	1.00	1	11/03/10 01:48	SW846 8260B	10K0304
Ethylbenzene	ND		ug/L	0.320	1.00	1	11/03/10 01:48	SW846 8260B	10K0304
Methyl tert-Butyl Ether	ND		ug/L	0.320	1.00	1	11/03/10 01:48	SW846 8260B	10K0304
Toluene	ND		ug/L	0.330	1.00	1	11/03/10 01:48	SW846 8260B	10K0304
Xylenes, total	ND		ug/L	0.870	3.00	1	11/03/10 01:48	SW846 8260B	10K0304
<i>Surr: 1,2-Dichloroethane-d4 (63-140%)</i>	<i>117 %</i>					<i>1</i>	<i>11/03/10 01:48</i>	<i>SW846 8260B</i>	<i>10K0304</i>
<i>Surr: Dibromofluoromethane (73-131%)</i>	<i>108 %</i>					<i>1</i>	<i>11/03/10 01:48</i>	<i>SW846 8260B</i>	<i>10K0304</i>
<i>Surr: Toluene-d8 (80-120%)</i>	<i>99 %</i>					<i>1</i>	<i>11/03/10 01:48</i>	<i>SW846 8260B</i>	<i>10K0304</i>
<i>Surr: 4-Bromofluorobenzene (79-125%)</i>	<i>98 %</i>					<i>1</i>	<i>11/03/10 01:48</i>	<i>SW846 8260B</i>	<i>10K0304</i>

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SAMPLE EXTRACTION DATA

Parameter	Batch	Lab Number	Wt/Vol Extracted	Extracted Vol	Date	Analyst	Extraction Method
Extractable Petroleum Hydrocarbons with Silica Gel Treatment							
NWTPH-Dx	10K0189	NTJ3690-01	25.15	1.00	11/05/10 10:35	MSR	EPA 3550B
NWTPH-Dx	10K1531	NTJ3690-01RE1	25.83	1.00	11/09/10 06:50	BJM	EPA 3550B
Polyaromatic Hydrocarbons by EPA 8270D SIM							
SW846 8270D SIM	10K0663	NTJ3690-01	30.24	1.00	11/06/10 13:50	BJM	EPA 3550B
Purgeable Petroleum Hydrocarbons							
NWTPH-Gx	10J5695	NTJ3690-01	5.68	5.00	10/28/10 09:50	CHH	EPA 5035A (GC)
Volatile Organic Compounds by EPA Method 8260B							
SW846 8260B	10K0722	NTJ3690-01	6.25	5.00	10/28/10 09:50	CHH	EPA 5035
SW846 8260B	10J5857	NTJ3690-01RE1	4.55	5.00	11/07/10 08:44	CHH	EPA 5035

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 Project Name: Everett Terminal(46108) - AMEC
 Project Number: [none]
 Received: 10/29/10 08:45

PROJECT QUALITY CONTROL DATA
Blank

Analyte	Blank Value	Q	Units	Q.C. Batch	Lab Number	Analyzed Date/Time
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Volatile Organic Compounds by EPA Method 8260B

10K0304-BLK1

Benzene	<0.270		ug/L	10K0304	10K0304-BLK1	11/03/10 00:29
Ethylbenzene	<0.320		ug/L	10K0304	10K0304-BLK1	11/03/10 00:29
Methyl tert-Butyl Ether	<0.320		ug/L	10K0304	10K0304-BLK1	11/03/10 00:29
Toluene	<0.330		ug/L	10K0304	10K0304-BLK1	11/03/10 00:29
Xylenes, total	<0.870		ug/L	10K0304	10K0304-BLK1	11/03/10 00:29
Surrogate: 1,2-Dichloroethane-d4	115%			10K0304	10K0304-BLK1	11/03/10 00:29
Surrogate: Dibromofluoromethane	108%			10K0304	10K0304-BLK1	11/03/10 00:29
Surrogate: Toluene-d8	98%			10K0304	10K0304-BLK1	11/03/10 00:29
Surrogate: 4-Bromofluorobenzene	97%			10K0304	10K0304-BLK1	11/03/10 00:29

10K0722-BLK1

Benzene	<0.00110		mg/kg wet	10K0722	10K0722-BLK1	11/10/10 12:29
Ethylbenzene	<0.000980		mg/kg wet	10K0722	10K0722-BLK1	11/10/10 12:29
Methyl tert-Butyl Ether	<0.000670		mg/kg wet	10K0722	10K0722-BLK1	11/10/10 12:29
Toluene	<0.000890		mg/kg wet	10K0722	10K0722-BLK1	11/10/10 12:29
Xylenes, total	<0.00190		mg/kg wet	10K0722	10K0722-BLK1	11/10/10 12:29
Surrogate: 1,2-Dichloroethane-d4	93%			10K0722	10K0722-BLK1	11/10/10 12:29
Surrogate: Dibromofluoromethane	105%			10K0722	10K0722-BLK1	11/10/10 12:29
Surrogate: Toluene-d8	92%			10K0722	10K0722-BLK1	11/10/10 12:29
Surrogate: 4-Bromofluorobenzene	109%			10K0722	10K0722-BLK1	11/10/10 12:29

Polyaromatic Hydrocarbons by EPA 8270D SIM

10K0663-BLK1

Acenaphthene	<0.000700		mg/kg wet	10K0663	10K0663-BLK1	11/08/10 16:31
Acenaphthylene	<0.000600		mg/kg wet	10K0663	10K0663-BLK1	11/08/10 16:31
Anthracene	<0.000500		mg/kg wet	10K0663	10K0663-BLK1	11/08/10 16:31
Benzo (a) anthracene	<0.000600		mg/kg wet	10K0663	10K0663-BLK1	11/08/10 16:31
Benzo (a) pyrene	<0.000600		mg/kg wet	10K0663	10K0663-BLK1	11/08/10 16:31
Benzo (b) fluoranthene	<0.000700		mg/kg wet	10K0663	10K0663-BLK1	11/08/10 16:31
Benzo (g,h,i) perylene	<0.000700		mg/kg wet	10K0663	10K0663-BLK1	11/08/10 16:31
Benzo (k) fluoranthene	<0.000700		mg/kg wet	10K0663	10K0663-BLK1	11/08/10 16:31
Chrysene	<0.00100		mg/kg wet	10K0663	10K0663-BLK1	11/08/10 16:31
Dibenz (a,h) anthracene	<0.000900		mg/kg wet	10K0663	10K0663-BLK1	11/08/10 16:31
Fluoranthene	<0.000500		mg/kg wet	10K0663	10K0663-BLK1	11/08/10 16:31
Fluorene	<0.00100		mg/kg wet	10K0663	10K0663-BLK1	11/08/10 16:31
Indeno (1,2,3-cd) pyrene	<0.000600		mg/kg wet	10K0663	10K0663-BLK1	11/08/10 16:31
1-Methylnaphthalene	<0.000600		mg/kg wet	10K0663	10K0663-BLK1	11/08/10 16:31
2-Methylnaphthalene	<0.000800		mg/kg wet	10K0663	10K0663-BLK1	11/08/10 16:31
Naphthalene	<0.000600		mg/kg wet	10K0663	10K0663-BLK1	11/08/10 16:31
Phenanthrene	<0.000800		mg/kg wet	10K0663	10K0663-BLK1	11/08/10 16:31
Pyrene	<0.000800		mg/kg wet	10K0663	10K0663-BLK1	11/08/10 16:31

Client AMEC Earth & Environmental (13993)
 600 University Street, Suite 1020
 Seattle, WA 98101
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Work Order: NTJ3690
 Project Name: Everett Terminal(46108) - AMEC
 Project Number: [none]
 Received: 10/29/10 08:45

PROJECT QUALITY CONTROL DATA
Blank - Cont.

Analyte	Blank Value	Q	Units	Q.C. Batch	Lab Number	Analyzed Date/Time
Polyaromatic Hydrocarbons by EPA 8270D SIM						
10K0663-BLK1						
<i>Surrogate: Nitrobenzene-d5</i>	46%			10K0663	10K0663-BLK1	11/08/10 16:31
<i>Surrogate: 2-Fluorobiphenyl</i>	57%			10K0663	10K0663-BLK1	11/08/10 16:31
<i>Surrogate: Terphenyl-d14</i>	66%			10K0663	10K0663-BLK1	11/08/10 16:31
Purgeable Petroleum Hydrocarbons						
10J5695-BLK1						
GRO (C4-C12) NW	1.63	J	mg/kg wet	10J5695	10J5695-BLK1	11/03/10 13:45
<i>Surrogate: a,a,a-Trifluorotoluene</i>	83%			10J5695	10J5695-BLK1	11/03/10 13:45
10J5695-BLK2						
GRO (C4-C12) NW	1.45	J	mg/kg wet	10J5695	10J5695-BLK2	11/03/10 14:02
<i>Surrogate: a,a,a-Trifluorotoluene</i>	86%			10J5695	10J5695-BLK2	11/03/10 14:02
Extractable Petroleum Hydrocarbons with Silica Gel Treatment						
10K1531-BLK1						
Diesel	<0.700		mg/kg wet	10K1531	10K1531-BLK1	11/09/10 17:17
Motor Oil	<0.700		mg/kg wet	10K1531	10K1531-BLK1	11/09/10 17:17
<i>Surrogate: o-Terphenyl</i>	82%			10K1531	10K1531-BLK1	11/09/10 17:17

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Work Order: NTJ3690
 Project Name: Everett Terminal(46108) - AMEC
 Project Number: [none]
 Received: 10/29/10 08:45

PROJECT QUALITY CONTROL DATA
Duplicate

Analyte	Orig. Val.	Duplicate	Q	Units	RPD	Limit	Batch	Sample Duplicated	% Rec.	Analyzed Date/Time
General Chemistry Parameters										
10K0164-DUP1										
% Dry Solids	79.1	80.3		%	2	20	10K0164	NTJ2788-04		11/02/10 09:10
Purgeable Petroleum Hydrocarbons										
10J5695-DUP1										
GRO (C4-C12) NW	1.39	1.65	J, B	mg/kg dry	17	50	10J5695	NTJ3690-01		11/03/10 20:18
<i>Surrogate: a,a,a-Trifluorotoluene</i>		15.5		ug/L			10J5695	NTJ3690-01	77%	11/03/10 20:18

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Work Order: NTJ3690
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 Project Number: [none]
 Received: 10/29/10 08:45

PROJECT QUALITY CONTROL DATA LCS

Analyte	Known Val.	Analyzed Val	Q	Units	% Rec.	Target Range	Batch	Analyzed Date/Time
Volatile Organic Compounds by EPA Method 8260B								
10K0304-BS1								
Benzene	50.0	51.6		ug/L	103%	80 - 121	10K0304	11/02/10 22:44
Ethylbenzene	50.0	54.9		ug/L	110%	78 - 133	10K0304	11/02/10 22:44
Methyl tert-Butyl Ether	50.0	55.4		ug/L	111%	76 - 120	10K0304	11/02/10 22:44
Toluene	50.0	51.7		ug/L	103%	78 - 125	10K0304	11/02/10 22:44
Xylenes, total	150	159		ug/L	106%	78 - 134	10K0304	11/02/10 22:44
<i>Surrogate: 1,2-Dichloroethane-d4</i>	25.0	25.4			102%	63 - 140	10K0304	11/02/10 22:44
<i>Surrogate: Dibromofluoromethane</i>	25.0	25.4			102%	73 - 131	10K0304	11/02/10 22:44
<i>Surrogate: Toluene-d8</i>	25.0	23.8			95%	80 - 120	10K0304	11/02/10 22:44
<i>Surrogate: 4-Bromofluorobenzene</i>	25.0	25.9			104%	79 - 125	10K0304	11/02/10 22:44
10K0304-BS2								
Benzene	50.0	49.6		ug/L	99%	80 - 121	10K0304	11/03/10 11:33
Ethylbenzene	50.0	53.2		ug/L	106%	78 - 133	10K0304	11/03/10 11:33
Methyl tert-Butyl Ether	50.0	53.7		ug/L	107%	76 - 120	10K0304	11/03/10 11:33
Toluene	50.0	50.4		ug/L	101%	78 - 125	10K0304	11/03/10 11:33
Xylenes, total	150	156		ug/L	104%	78 - 134	10K0304	11/03/10 11:33
<i>Surrogate: 1,2-Dichloroethane-d4</i>	25.0	26.3			105%	63 - 140	10K0304	11/03/10 11:33
<i>Surrogate: Dibromofluoromethane</i>	25.0	26.2			105%	73 - 131	10K0304	11/03/10 11:33
<i>Surrogate: Toluene-d8</i>	25.0	24.1			96%	80 - 120	10K0304	11/03/10 11:33
<i>Surrogate: 4-Bromofluorobenzene</i>	25.0	24.5			98%	79 - 125	10K0304	11/03/10 11:33
10K0722-BS1								
Benzene	50.0	46.3		ug/kg	93%	78 - 126	10K0722	11/10/10 09:59
Ethylbenzene	50.0	51.1		ug/kg	102%	79 - 130	10K0722	11/10/10 09:59
Methyl tert-Butyl Ether	50.0	41.4		ug/kg	83%	70 - 128	10K0722	11/10/10 09:59
Toluene	50.0	44.8		ug/kg	90%	76 - 126	10K0722	11/10/10 09:59
Xylenes, total	150	154		ug/kg	103%	80 - 130	10K0722	11/10/10 09:59
<i>Surrogate: 1,2-Dichloroethane-d4</i>	50.0	45.8			92%	67 - 138	10K0722	11/10/10 09:59
<i>Surrogate: Dibromofluoromethane</i>	50.0	52.5			105%	75 - 125	10K0722	11/10/10 09:59
<i>Surrogate: Toluene-d8</i>	50.0	45.9			92%	76 - 129	10K0722	11/10/10 09:59
<i>Surrogate: 4-Bromofluorobenzene</i>	50.0	50.6			101%	67 - 147	10K0722	11/10/10 09:59
Polyaromatic Hydrocarbons by EPA 8270D SIM								
10K0663-BS1								
Acenaphthene	0.0333	0.0213		mg/kg wet	64%	44 - 120	10K0663	11/08/10 16:52
Acenaphthylene	0.0333	0.0197		mg/kg wet	59%	46 - 127	10K0663	11/08/10 16:52
Anthracene	0.0333	0.0200		mg/kg wet	60%	49 - 139	10K0663	11/08/10 16:52
Benzo (a) anthracene	0.0333	0.0197		mg/kg wet	59%	53 - 132	10K0663	11/08/10 16:52
Benzo (a) pyrene	0.0333	0.0197		mg/kg wet	59%	57 - 125	10K0663	11/08/10 16:52
Benzo (b) fluoranthene	0.0333	0.0197		mg/kg wet	59%	36 - 140	10K0663	11/08/10 16:52
Benzo (g,h,i) perylene	0.0333	0.0213		mg/kg wet	64%	54 - 139	10K0663	11/08/10 16:52
Benzo (k) fluoranthene	0.0333	0.0227		mg/kg wet	68%	49 - 140	10K0663	11/08/10 16:52

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 Received: 10/29/10 08:45

PROJECT QUALITY CONTROL DATA
LCS - Cont.

Analyte	Known Val.	Analyzed Val	Q	Units	% Rec.	Target Range	Batch	Analyzed Date/Time
Polyaromatic Hydrocarbons by EPA 8270D SIM								
10K0663-BS1								
Chrysene	0.0333	0.0227		mg/kg wet	68%	47 - 139	10K0663	11/08/10 16:52
Dibenz (a,h) anthracene	0.0333	0.0213		mg/kg wet	64%	58 - 141	10K0663	11/08/10 16:52
Fluoranthene	0.0333	0.0207		mg/kg wet	62%	34 - 135	10K0663	11/08/10 16:52
Fluorene	0.0333	0.0207		mg/kg wet	62%	47 - 129	10K0663	11/08/10 16:52
Indeno (1,2,3-cd) pyrene	0.0333	0.0203		mg/kg wet	61%	53 - 142	10K0663	11/08/10 16:52
1-Methylnaphthalene	0.0333	0.0180		mg/kg wet	54%	41 - 120	10K0663	11/08/10 16:52
2-Methylnaphthalene	0.0333	0.0200		mg/kg wet	60%	48 - 121	10K0663	11/08/10 16:52
Naphthalene	0.0333	0.0207		mg/kg wet	62%	42 - 120	10K0663	11/08/10 16:52
Phenanthrene	0.0333	0.0220		mg/kg wet	66%	52 - 134	10K0663	11/08/10 16:52
Pyrene	0.0333	0.0220		mg/kg wet	66%	56 - 144	10K0663	11/08/10 16:52
Surrogate: Nitrobenzene-d5	0.0333	0.0173			52%	17 - 120	10K0663	11/08/10 16:52
Surrogate: 2-Fluorobiphenyl	0.0333	0.0207			62%	14 - 120	10K0663	11/08/10 16:52
Surrogate: Terphenyl-d14	0.0333	0.0213			64%	18 - 120	10K0663	11/08/10 16:52
Purgeable Petroleum Hydrocarbons								
10J5695-BS1								
GRO (C4-C12) NW	10.0	10.1	B	mg/kg wet	101%	60 - 123	10J5695	11/04/10 00:15
Surrogate: a,a,a-Trifluorotoluene	20.0	19.9			99%	50 - 150	10J5695	11/04/10 00:15
10J5695-BS2								
GRO (C4-C12) NW	10.0	10.4	B	mg/kg wet	104%	60 - 123	10J5695	11/04/10 00:49
Surrogate: a,a,a-Trifluorotoluene	20.0	21.2			106%	50 - 150	10J5695	11/04/10 00:49
Extractable Petroleum Hydrocarbons with Silica Gel Treatment								
10K1531-BS1								
Diesel	40.0	34.1		mg/kg wet	85%	55 - 123	10K1531	11/09/10 17:35
Surrogate: o-Terphenyl	0.800	0.687			86%	50 - 150	10K1531	11/09/10 17:35

Client AMEC Earth & Environmental (13993)
 600 University Street, Suite 1020
 Seattle, WA 98101
 Attn Leah Vigoren

Work Order: NTJ3690
 Project Name: Everett Terminal(46108) - AMEC
 Project Number: [none]
 Received: 10/29/10 08:45

PROJECT QUALITY CONTROL DATA

LCS Dup

Analyte	Orig. Val.	Duplicate	Q	Units	Spike Conc	% Rec.	Target Range	RPD	Limit	Batch	Sample Duplicated	Analyzed Date/Time
Volatile Organic Compounds by EPA Method 8260B												
10K0304-BSD1												
Benzene		50.3		ug/L	50.0	101%	80 - 121	3	12	10K0304		11/02/10 23:10
Ethylbenzene		53.4		ug/L	50.0	107%	78 - 133	3	12	10K0304		11/02/10 23:10
Methyl tert-Butyl Ether		53.6		ug/L	50.0	107%	76 - 120	3	32	10K0304		11/02/10 23:10
Toluene		51.0		ug/L	50.0	102%	78 - 125	1	35	10K0304		11/02/10 23:10
Xylenes, total		155		ug/L	150	103%	78 - 134	3	18	10K0304		11/02/10 23:10
Surrogate: 1,2-Dichloroethane-d4		25.4		ug/L	25.0	102%	63 - 140			10K0304		11/02/10 23:10
Surrogate: Dibromofluoromethane		25.7		ug/L	25.0	103%	73 - 131			10K0304		11/02/10 23:10
Surrogate: Toluene-d8		24.4		ug/L	25.0	98%	80 - 120			10K0304		11/02/10 23:10
Surrogate: 4-Bromofluorobenzene		26.2		ug/L	25.0	105%	79 - 125			10K0304		11/02/10 23:10
10K0304-BSD2												
Benzene		48.6		ug/L	50.0	97%	80 - 121	2	12	10K0304		11/03/10 11:59
Ethylbenzene		52.9		ug/L	50.0	106%	78 - 133	0.6	12	10K0304		11/03/10 11:59
Methyl tert-Butyl Ether		52.8		ug/L	50.0	106%	76 - 120	2	32	10K0304		11/03/10 11:59
Toluene		50.3		ug/L	50.0	101%	78 - 125	0.3	35	10K0304		11/03/10 11:59
Xylenes, total		156		ug/L	150	104%	78 - 134	0.2	18	10K0304		11/03/10 11:59
Surrogate: 1,2-Dichloroethane-d4		25.9		ug/L	25.0	104%	63 - 140			10K0304		11/03/10 11:59
Surrogate: Dibromofluoromethane		26.1		ug/L	25.0	104%	73 - 131			10K0304		11/03/10 11:59
Surrogate: Toluene-d8		24.4		ug/L	25.0	98%	80 - 120			10K0304		11/03/10 11:59
Surrogate: 4-Bromofluorobenzene		25.2		ug/L	25.0	101%	79 - 125			10K0304		11/03/10 11:59
10K0722-BSD1												
Benzene		47.6		ug/kg	50.0	95%	78 - 126	3	50	10K0722		11/10/10 10:29
Ethylbenzene		52.4		ug/kg	50.0	105%	79 - 130	3	50	10K0722		11/10/10 10:29
Methyl tert-Butyl Ether		41.1		ug/kg	50.0	82%	70 - 128	0.6	50	10K0722		11/10/10 10:29
Toluene		46.2		ug/kg	50.0	92%	76 - 126	3	50	10K0722		11/10/10 10:29
Xylenes, total		160		ug/kg	150	107%	80 - 130	3	50	10K0722		11/10/10 10:29
Surrogate: 1,2-Dichloroethane-d4		45.2		ug/kg	50.0	90%	67 - 138			10K0722		11/10/10 10:29
Surrogate: Dibromofluoromethane		52.3		ug/kg	50.0	105%	75 - 125			10K0722		11/10/10 10:29
Surrogate: Toluene-d8		45.5		ug/kg	50.0	91%	76 - 129			10K0722		11/10/10 10:29
Surrogate: 4-Bromofluorobenzene		51.3		ug/kg	50.0	103%	67 - 147			10K0722		11/10/10 10:29
Purgeable Petroleum Hydrocarbons												
10J5695-BSD1												
GRO (C4-C12) NW		10.1	B	mg/kg wet	10.0	101%	60 - 123	0.2	50	10J5695		11/04/10 00:32
Surrogate: a,a,a-Trifluorotoluene		20.0		ug/L	20.0	100%	50 - 150			10J5695		11/04/10 00:32
10J5695-BSD2												
GRO (C4-C12) NW		10.1	B	mg/kg wet	10.0	101%	60 - 123	3	50	10J5695		11/04/10 01:06
Surrogate: a,a,a-Trifluorotoluene		18.6		ug/L	20.0	93%	50 - 150			10J5695		11/04/10 01:06

Client AMEC Earth & Environmental (13993)
600 University Street, Suite 1020
Seattle, WA 98101
Attn Leah Vigoren

Work Order: NTJ3690
Project Name: Everett Terminal(46108) - AMEC
Project Number: [none]
Received: 10/29/10 08:45

PROJECT QUALITY CONTROL DATA Matrix Spike

Analyte	Orig. Val.	MS Val	Q	Units	Spike Conc	% Rec.	Target Range	Batch	Sample Spiked	Analyzed Date/Time
Volatile Organic Compounds by EPA Method 8260B										
10K0304-MS1										
Benzene	ND	54.0		ug/L	50.0	108%	65 - 151	10K0304	NTJ3667-02	11/03/10 20:51
Ethylbenzene	ND	58.6		ug/L	50.0	117%	68 - 157	10K0304	NTJ3667-02	11/03/10 20:51
Methyl tert-Butyl Ether	9.63	67.9		ug/L	50.0	117%	56 - 152	10K0304	NTJ3667-02	11/03/10 20:51
Toluene	ND	55.0		ug/L	50.0	110%	61 - 153	10K0304	NTJ3667-02	11/03/10 20:51
Xylenes, total	ND	167		ug/L	150	112%	68 - 158	10K0304	NTJ3667-02	11/03/10 20:51
<i>Surrogate: 1,2-Dichloroethane-d4</i>		25.0		ug/L	25.0	100%	63 - 140	10K0304	NTJ3667-02	11/03/10 20:51
<i>Surrogate: Dibromofluoromethane</i>		25.8		ug/L	25.0	103%	73 - 131	10K0304	NTJ3667-02	11/03/10 20:51
<i>Surrogate: Toluene-d8</i>		24.4		ug/L	25.0	98%	80 - 120	10K0304	NTJ3667-02	11/03/10 20:51
<i>Surrogate: 4-Bromofluorobenzene</i>		26.7		ug/L	25.0	107%	79 - 125	10K0304	NTJ3667-02	11/03/10 20:51
10K0722-MS1										
Benzene	0.00133	0.0469		mg/kg dry	0.0590	77%	42 - 141	10K0722	NTK0349-12	11/10/10 20:10
Ethylbenzene	ND	0.0507		mg/kg dry	0.0590	86%	21 - 165	10K0722	NTK0349-12	11/10/10 20:10
Methyl tert-Butyl Ether	ND	0.0456		mg/kg dry	0.0590	77%	34 - 154	10K0722	NTK0349-12	11/10/10 20:10
Toluene	ND	0.0446		mg/kg dry	0.0590	76%	45 - 145	10K0722	NTK0349-12	11/10/10 20:10
Xylenes, total	ND	0.158		mg/kg dry	0.177	89%	31 - 159	10K0722	NTK0349-12	11/10/10 20:10
<i>Surrogate: 1,2-Dichloroethane-d4</i>		45.1		ug/kg	50.0	90%	67 - 138	10K0722	NTK0349-12	11/10/10 20:10
<i>Surrogate: Dibromofluoromethane</i>		51.7		ug/kg	50.0	103%	75 - 125	10K0722	NTK0349-12	11/10/10 20:10
<i>Surrogate: Toluene-d8</i>		46.0		ug/kg	50.0	92%	76 - 129	10K0722	NTK0349-12	11/10/10 20:10
<i>Surrogate: 4-Bromofluorobenzene</i>		50.2		ug/kg	50.0	100%	67 - 147	10K0722	NTK0349-12	11/10/10 20:10
Polyaromatic Hydrocarbons by EPA 8270D SIM										
10K0663-MS1										
Acenaphthene	ND	0.0197		mg/kg dry	0.0372	53%	42 - 120	10K0663	NTJ3630-02	11/08/10 17:14
Acenaphthylene	ND	0.0182		mg/kg dry	0.0372	49%	39 - 127	10K0663	NTJ3630-02	11/08/10 17:14
Anthracene	ND	0.0194		mg/kg dry	0.0372	52%	39 - 139	10K0663	NTJ3630-02	11/08/10 17:14
Benzo (a) anthracene	ND	0.0186		mg/kg dry	0.0372	50%	31 - 132	10K0663	NTJ3630-02	11/08/10 17:14
Benzo (a) pyrene	ND	0.0186		mg/kg dry	0.0372	50%	22 - 125	10K0663	NTJ3630-02	11/08/10 17:14
Benzo (b) fluoranthene	ND	0.0205		mg/kg dry	0.0372	55%	10 - 147	10K0663	NTJ3630-02	11/08/10 17:14
Benzo (g,h,i) perylene	ND	0.0212		mg/kg dry	0.0372	57%	10 - 151	10K0663	NTJ3630-02	11/08/10 17:14
Benzo (k) fluoranthene	ND	0.0238		mg/kg dry	0.0372	64%	23 - 140	10K0663	NTJ3630-02	11/08/10 17:14
Chrysene	ND	0.0242		mg/kg dry	0.0372	65%	20 - 139	10K0663	NTJ3630-02	11/08/10 17:14
Dibenz (a,h) anthracene	ND	0.0201		mg/kg dry	0.0372	54%	18 - 150	10K0663	NTJ3630-02	11/08/10 17:14
Fluoranthene	ND	0.0205		mg/kg dry	0.0372	55%	29 - 135	10K0663	NTJ3630-02	11/08/10 17:14
Fluorene	ND	0.0201		mg/kg dry	0.0372	54%	38 - 129	10K0663	NTJ3630-02	11/08/10 17:14
Indeno (1,2,3-cd) pyrene	ND	0.0197		mg/kg dry	0.0372	53%	13 - 146	10K0663	NTJ3630-02	11/08/10 17:14
1-Methylnaphthalene	ND	0.0175		mg/kg dry	0.0372	47%	20 - 120	10K0663	NTJ3630-02	11/08/10 17:14
2-Methylnaphthalene	ND	0.0194		mg/kg dry	0.0372	52%	28 - 124	10K0663	NTJ3630-02	11/08/10 17:14

Client AMEC Earth & Environmental (13993)
 600 University Street, Suite 1020
 Seattle, WA 98101
 Attn Leah Vigoren

Work Order: NTJ3690
 Project Name: Everett Terminal(46108) - AMEC
 Project Number: [none]
 Received: 10/29/10 08:45

PROJECT QUALITY CONTROL DATA
Matrix Spike - Cont.

Analyte	Orig. Val.	MS Val	Q	Units	Spike Conc	% Rec.	Target Range	Batch	Sample Spiked	Analyzed Date/Time
Polyaromatic Hydrocarbons by EPA 8270D SIM										
10K0663-MS1										
Naphthalene	ND	0.0197		mg/kg dry	0.0372	53%	10 - 135	10K0663	NTJ3630-02	11/08/10 17:14
Phenanthrene	ND	0.0212		mg/kg dry	0.0372	57%	33 - 134	10K0663	NTJ3630-02	11/08/10 17:14
Pyrene	ND	0.0223		mg/kg dry	0.0372	60%	26 - 153	10K0663	NTJ3630-02	11/08/10 17:14
Surrogate: Nitrobenzene-d5		0.0168		mg/kg dry	0.0372	45%	17 - 120	10K0663	NTJ3630-02	11/08/10 17:14
Surrogate: 2-Fluorobiphenyl		0.0197		mg/kg dry	0.0372	53%	14 - 120	10K0663	NTJ3630-02	11/08/10 17:14
Surrogate: Terphenyl-d14		0.0209		mg/kg dry	0.0372	56%	18 - 120	10K0663	NTJ3630-02	11/08/10 17:14
Purgeable Petroleum Hydrocarbons										
10J5695-MS1										
GRO (C4-C12) NW	9.36	525	B	mg/kg wet	547	94%	59 - 130	10J5695	NTJ3535-11	11/04/10 01:58
Surrogate: a,a,a-Trifluorotoluene		19.1		ug/L	20.0	96%	50 - 150	10J5695	NTJ3535-11	11/04/10 01:58
10J5695-MS2										
GRO (C4-C12) NW	1.39	488	B	mg/kg dry	508	96%	59 - 130	10J5695	NTJ3690-01	11/04/10 02:32
Surrogate: a,a,a-Trifluorotoluene		19.8		ug/L	20.0	99%	50 - 150	10J5695	NTJ3690-01	11/04/10 02:32
Extractable Petroleum Hydrocarbons with Silica Gel Treatment										
10K1531-MS1										
Diesel	60.7	78.2		mg/kg dry	48.2	36%	34 - 138	10K1531	NTK0860-01	11/09/10 17:52
Surrogate: o-Terphenyl		0.650		mg/kg dry	0.964	67%	50 - 150	10K1531	NTK0860-01	11/09/10 17:52

Client AMEC Earth & Environmental (13993)
 600 University Street, Suite 1020
 Seattle, WA 98101
 Attn Leah Vigoren

Work Order: NTJ3690
 Project Name: Everett Terminal(46108) - AMEC
 Project Number: [none]
 Received: 10/29/10 08:45

PROJECT QUALITY CONTROL DATA Matrix Spike Dup

Analyte	Orig. Val.	Duplicate	Q	Units	Spike Conc	% Rec.	Target Range	RPD	Limit	Batch	Sample Duplicated	Analyzed Date/Time
Volatile Organic Compounds by EPA Method 8260B												
10K0304-MSD1												
Benzene	ND	54.6		ug/L	50.0	109%	65 - 151	1	12	10K0304	NTJ3667-02	11/03/10 21:18
Ethylbenzene	ND	58.1		ug/L	50.0	116%	68 - 157	0.8	12	10K0304	NTJ3667-02	11/03/10 21:18
Methyl tert-Butyl Ether	9.63	69.1		ug/L	50.0	119%	56 - 152	2	32	10K0304	NTJ3667-02	11/03/10 21:18
Toluene	ND	54.8		ug/L	50.0	110%	61 - 153	0.3	35	10K0304	NTJ3667-02	11/03/10 21:18
Xylenes, total	ND	165		ug/L	150	110%	68 - 158	1	18	10K0304	NTJ3667-02	11/03/10 21:18
<i>Surrogate: 1,2-Dichloroethane-d4</i>		24.2		ug/L	25.0	97%	63 - 140			10K0304	NTJ3667-02	11/03/10 21:18
<i>Surrogate: Dibromofluoromethane</i>		25.5		ug/L	25.0	102%	73 - 131			10K0304	NTJ3667-02	11/03/10 21:18
<i>Surrogate: Toluene-d8</i>		24.3		ug/L	25.0	97%	80 - 120			10K0304	NTJ3667-02	11/03/10 21:18
<i>Surrogate: 4-Bromofluorobenzene</i>		26.3		ug/L	25.0	105%	79 - 125			10K0304	NTJ3667-02	11/03/10 21:18
10K0722-MSD1												
Benzene	0.00133	0.0459		mg/kg dry	0.0585	76%	42 - 141	2	50	10K0722	NTK0349-12	11/10/10 20:40
Ethylbenzene	ND	0.0485		mg/kg dry	0.0585	83%	21 - 165	5	50	10K0722	NTK0349-12	11/10/10 20:40
Methyl tert-Butyl Ether	ND	0.0456		mg/kg dry	0.0585	78%	34 - 154	0.1	50	10K0722	NTK0349-12	11/10/10 20:40
Toluene	ND	0.0437		mg/kg dry	0.0585	75%	45 - 145	2	50	10K0722	NTK0349-12	11/10/10 20:40
Xylenes, total	ND	0.153		mg/kg dry	0.176	87%	31 - 159	3	50	10K0722	NTK0349-12	11/10/10 20:40
<i>Surrogate: 1,2-Dichloroethane-d4</i>		45.2		ug/kg	50.0	90%	67 - 138			10K0722	NTK0349-12	11/10/10 20:40
<i>Surrogate: Dibromofluoromethane</i>		53.1		ug/kg	50.0	106%	75 - 125			10K0722	NTK0349-12	11/10/10 20:40
<i>Surrogate: Toluene-d8</i>		46.3		ug/kg	50.0	93%	76 - 129			10K0722	NTK0349-12	11/10/10 20:40
<i>Surrogate: 4-Bromofluorobenzene</i>		50.5		ug/kg	50.0	101%	67 - 147			10K0722	NTK0349-12	11/10/10 20:40
Polyaromatic Hydrocarbons by EPA 8270D SIM												
10K0663-MSD1												
Acenaphthene	ND	0.0247		mg/kg dry	0.0374	66%	42 - 120	22	32	10K0663	NTJ3630-02	11/08/10 17:35
Acenaphthylene	ND	0.0232		mg/kg dry	0.0374	62%	39 - 127	24	34	10K0663	NTJ3630-02	11/08/10 17:35
Anthracene	ND	0.0250		mg/kg dry	0.0374	67%	39 - 139	26	31	10K0663	NTJ3630-02	11/08/10 17:35
Benzo (a) anthracene	ND	0.0243		mg/kg dry	0.0374	65%	31 - 132	26	43	10K0663	NTJ3630-02	11/08/10 17:35
Benzo (a) pyrene	ND	0.0247		mg/kg dry	0.0374	66%	22 - 125	28	41	10K0663	NTJ3630-02	11/08/10 17:35
Benzo (b) fluoranthene	ND	0.0250		mg/kg dry	0.0374	67%	10 - 147	20	50	10K0663	NTJ3630-02	11/08/10 17:35
Benzo (g,h,i) perylene	ND	0.0288		mg/kg dry	0.0374	77%	10 - 151	30	50	10K0663	NTJ3630-02	11/08/10 17:35
Benzo (k) fluoranthene	ND	0.0284		mg/kg dry	0.0374	76%	23 - 140	17	38	10K0663	NTJ3630-02	11/08/10 17:35
Chrysene	ND	0.0291		mg/kg dry	0.0374	78%	20 - 139	18	40	10K0663	NTJ3630-02	11/08/10 17:35
Dibenz (a,h) anthracene	ND	0.0273		mg/kg dry	0.0374	73%	18 - 150	30	50	10K0663	NTJ3630-02	11/08/10 17:35
Fluoranthene	ND	0.0265		mg/kg dry	0.0374	71%	29 - 135	26	47	10K0663	NTJ3630-02	11/08/10 17:35
Fluorene	ND	0.0258		mg/kg dry	0.0374	69%	38 - 129	25	38	10K0663	NTJ3630-02	11/08/10 17:35
Indeno (1,2,3-cd) pyrene	ND	0.0269		mg/kg dry	0.0374	72%	13 - 146	31	46	10K0663	NTJ3630-02	11/08/10 17:35
1-Methylnaphthalene	ND	0.0220		mg/kg dry	0.0374	59%	20 - 120	23	35	10K0663	NTJ3630-02	11/08/10 17:35
2-Methylnaphthalene	ND	0.0232		mg/kg dry	0.0374	62%	28 - 124	18	38	10K0663	NTJ3630-02	11/08/10 17:35
Naphthalene	ND	0.0239		mg/kg dry	0.0374	64%	10 - 135	19	36	10K0663	NTJ3630-02	11/08/10 17:35
Phenanthrene	ND	0.0280		mg/kg dry	0.0374	75%	33 - 134	28	46	10K0663	NTJ3630-02	11/08/10 17:35
Pyrene	ND	0.0284		mg/kg dry	0.0374	76%	26 - 153	24	50	10K0663	NTJ3630-02	11/08/10 17:35

Client AMEC Earth & Environmental (13993)
 600 University Street, Suite 1020
 Seattle, WA 98101
 Attn Leah Vigoren

Work Order: NTJ3690
 Project Name: Everett Terminal(46108) - AMEC
 Project Number: [none]
 Received: 10/29/10 08:45

PROJECT QUALITY CONTROL DATA

Matrix Spike Dup - Cont.

Analyte	Orig. Val.	Duplicate	Q	Units	Spike Conc	% Rec.	Target Range	RPD	Limit	Batch	Sample Duplicated	Analyzed Date/Time
Polyaromatic Hydrocarbons by EPA 8270D SIM												
10K0663-MSD1												
<i>Surrogate: Nitrobenzene-d5</i>		0.0202		mg/kg dry	0.0374	54%	17 - 120			10K0663	NTJ3630-02	11/08/10 17:35
<i>Surrogate: 2-Fluorobiphenyl</i>		0.0239		mg/kg dry	0.0374	64%	14 - 120			10K0663	NTJ3630-02	11/08/10 17:35
<i>Surrogate: Terphenyl-d14</i>		0.0273		mg/kg dry	0.0374	73%	18 - 120			10K0663	NTJ3630-02	11/08/10 17:35
Purgeable Petroleum Hydrocarbons												
10J5695-MSD1												
GRO (C4-C12) NW	9.36	510	B	mg/kg wet	547	91%	59 - 130	3	50	10J5695	NTJ3535-11	11/04/10 02:15
<i>Surrogate: a,a,a-Trifluorotoluene</i>		18.0		ug/L	20.0	90%	50 - 150			10J5695	NTJ3535-11	11/04/10 02:15
10J5695-MSD2												
GRO (C4-C12) NW	1.39	493	B	mg/kg dry	508	97%	59 - 130	1	50	10J5695	NTJ3690-01	11/04/10 02:49
<i>Surrogate: a,a,a-Trifluorotoluene</i>		19.1		ug/L	20.0	95%	50 - 150			10J5695	NTJ3690-01	11/04/10 02:49
Extractable Petroleum Hydrocarbons with Silica Gel Treatment												
10K1531-MSD1												
Diesel	60.7	57.3	M8	mg/kg dry	48.1	-7%	34 - 138	31	43	10K1531	NTK0860-01	11/09/10 18:10
<i>Surrogate: o-Terphenyl</i>		0.665		mg/kg dry	0.963	69%	50 - 150			10K1531	NTK0860-01	11/09/10 18:10

Client AMEC Earth & Environmental (13993)
 600 University Street, Suite 1020
 Seattle, WA 98101
 Attn Leah Vigoren

Work Order: NTJ3690
 Project Name: Everett Terminal(46108) - AMEC
 Project Number: [none]
 Received: 10/29/10 08:45

CERTIFICATION SUMMARY

TestAmerica Nashville

Method	Matrix	AIHA	Nelac	Washington
NWTPH-Dx	Soil	N/A		X
NWTPH-Gx	Soil	N/A	X	X
SW846 8260B	Soil	N/A	X	X
SW846 8260B	Water	N/A	X	X
SW846 8270D SIM	Soil		X	X
SW-846	Soil			

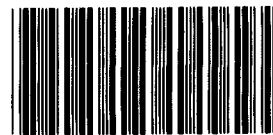
Client AMEC Earth & Environmental (13993)
600 University Street, Suite 1020
Seattle, WA 98101
Attn Leah Vigoren

Work Order: NTJ3690
Project Name: Everett Terminal(46108) - AMEC
Project Number: [none]
Received: 10/29/10 08:45

DATA QUALIFIERS AND DEFINITIONS

- B** Analyte was detected in the associated Method Blank.
- J** Analyte detected at a level less than the Reporting Limit (RL) and greater than or equal to the Method Detection Limit (MDL). Concentrations within this range are estimated.
- M8** The MS and/or MSD were below the acceptance limits. See Blank Spike (LCS).
- QP7** The hydrocarbon pattern most closely resembles a heavy petroleum product.
- ND** Not detected at the reporting limit (or method detection limit if shown)

METHOD MODIFICATION NOTES



COOLER RECEIPT

NTJ3690

Cooler Received/Opened On: 10/29/2010 @ 8:45

Fed-ex Tracking number 3753

IR Gun ID: 95610068

1. Temperature of rep. sample or temp blank when opened: 3.2 Degrees Celsius

3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES NO NA

4. Were custody seals on outside of cooler? YES...NO...NA

If yes, how many and where: 1 front

5. Were the seals intact, signed, and dated correctly? YES...NO...NA

6. Were custody papers inside cooler? YES...NO...NA

I certify that I opened the cooler and answered questions 1-6 (initial)

7. Were custody seals on containers: YES NO and Intact YES...NO...NA

Were these signed and dated correctly? YES...NO...NA

8. Packing mat'l used? Bubblewrap Plastic bag Peanuts Vermiculite Foam Insert Paper Other None

9. Cooling process: Ice Ice-pack Ice (direct contact) Dry ice Other None

10. Did all containers arrive in good condition (unbroken)? YES...NO...NA

11. Were all container labels complete (#, date, signed, pres., etc)? YES...NO...NA

12. Did all container labels and tags agree with custody papers? YES...NO...NA

13a. Were VOA vials received? YES...NO...NA

b. Was there any observable headspace present in any VOA vial? YES...NO...NA

14. Was there a Trip Blank in this cooler? YES...NO...NA If multiple coolers, sequence # _____

I certify that I unloaded the cooler and answered questions 7-14 (initial)

15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES..NO..NA

b. Did the bottle labels indicate that the correct preservatives were used YES...NO...NA

16. Was residual chlorine present? YES...NO...NA

I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (initial)

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

18. Did you sign the custody papers in the appropriate place? YES...NO...NA

19. Were correct containers used for the analysis requested? YES...NO...NA

20. Was sufficient amount of sample sent in each container? YES...NO...NA

I certify that I entered this project into LIMS and answered questions 17-20 (initial)

I certify that I attached a label with the unique LIMS number to each container (initial)

21. Were there Non-Conformance issues at login? YES...NO Was a PIPE generated? YES...NO..# _____

December 06, 2010 2:21:53PM

Client: AMEC Earth & Environmental (13993)
600 University Street, Suite 1020
Seattle, WA 98101
Attn: Leah Vigoren

Work Order: NTK2303
Project Name: Everett Terminal(46108) - AMEC
Project Nbr: [none]
P/O Nbr:
Date Received: 11/19/10

SAMPLE IDENTIFICATION	LAB NUMBER	COLLECTION DATE AND TIME
MWA3-111810	NTK2303-01	11/18/10 10:35
MWA1-111810	NTK2303-02	11/18/10 12:30
MW11-111810	NTK2303-03	11/18/10 14:45
Trip Blank 1	NTK2303-04	11/18/10 00:01
Trip Blank 2	NTK2303-05	11/18/10 00:01

An executed copy of the chain of custody, the project quality control data, and the sample receipt form are also included as an addendum to this report. If you have any questions relating to this analytical report, please contact your Laboratory Project Manager at 1-800-765-0980. Any opinions, if expressed, are outside the scope of the Laboratory's accreditation.

This material is intended only for the use of the individual(s) or entity to whom it is addressed, and may contain information that is privileged and confidential. If you are not the intended recipient, or the employee or agent responsible for delivering this material to the intended recipient, you are hereby notified that any dissemination, distribution, or copying of this material is strictly prohibited. If you have received this material in error, please notify us immediately at 615-726-0177.

Additional Laboratory Comments:

Due to laboratory error, the hexane analysis was not performed within hold time for sample MWA1-111710(NTK2303-02).
Washington Certification Number: C1712

The Chain(s) of Custody, 4 pages, are included and are an integral part of this report.

These results relate only to the items tested. This report shall not be reproduced except in full and with permission of the laboratory.

All solids results are reported in wet weight unless specifically stated.

Estimated uncertainty is available upon request.

This report has been electronically signed.

Report Approved By:



Leah R. Klingensmith

Senior Project Management

Client AMEC Earth & Environmental (13993)
600 University Street, Suite 1020
Seattle, WA 98101
Attn Leah Vigoren

Work Order: NTK2303
Project Name: Everett Terminal(46108) - AMEC
Project Number: [none]
Received: 11/19/10 08:30

ANALYTICAL REPORT

Analyte	Result	Flag	Units	MDL	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
Sample ID: NTK2303-01 (MWA3-111810 - Ground Water) Sampled: 11/18/10 10:35									
General Chemistry Parameters									
Alkalinity, Total (CaCO3)	331		mg/L	1.40	10.0	1	11/28/10 03:19	SM2320 B	10K5425
Nitrate as N	ND		mg/L	0.0100	0.100	1	11/19/10 17:36	EPA 300.0	10K4061
Sulfate	3.07		mg/L	0.110	1.00	1	11/19/10 17:36	EPA 300.0	10K4061
Methane, Ethane, and Ethene by GC									
Methane	9130		ug/L	300	520	20	11/29/10 18:26	RSK 175	10K5196
Surr: Acetylene (70-122%)	*	Z3				20	11/29/10 18:26	RSK 175	10K5196
Dissolved Metals by Method 6020									
Lead	ND		ug/L	0.0900	2.00	1	12/02/10 12:12	SW846 6020	10K4615
Manganese	1890		ug/L	2.00	50.0	10	12/02/10 13:24	SW846 6020	10K4615
Volatile Organic Compounds by EPA Method 8260B									
Benzene	ND		ug/L	0.170	0.500	1	11/27/10 09:58	SW846 8260B	10K5376
Ethylbenzene	ND		ug/L	0.170	0.500	1	11/27/10 09:58	SW846 8260B	10K5376
Methyl tert-Butyl Ether	ND		ug/L	0.170	0.500	1	11/27/10 09:58	SW846 8260B	10K5376
Toluene	ND		ug/L	0.170	0.500	1	11/27/10 09:58	SW846 8260B	10K5376
Xylenes, total	ND		ug/L	0.390	0.500	1	11/27/10 09:58	SW846 8260B	10K5376
Surr: 1,2-Dichloroethane-d4 (63-140%)	107 %					1	11/27/10 09:58	SW846 8260B	10K5376
Surr: Dibromofluoromethane (73-131%)	103 %					1	11/27/10 09:58	SW846 8260B	10K5376
Surr: Toluene-d8 (80-120%)	97 %					1	11/27/10 09:58	SW846 8260B	10K5376
Surr: 4-Bromofluorobenzene (79-125%)	92 %					1	11/27/10 09:58	SW846 8260B	10K5376
Polyaromatic Hydrocarbons by EPA 8270D SIM									
Acenaphthene	0.495		ug/L	0.0272	0.0971	1	12/01/10 16:24	SW846 8270D SIM	10K4272
Acenaphthylene	ND		ug/L	0.0243	0.0971	1	12/01/10 16:24	SW846 8270D SIM	10K4272
Anthracene	0.0680	J	ug/L	0.0301	0.0971	1	12/01/10 16:24	SW846 8270D SIM	10K4272
Benzo (a) anthracene	ND		ug/L	0.0175	0.0971	1	12/01/10 16:24	SW846 8270D SIM	10K4272
Benzo (a) pyrene	ND		ug/L	0.0311	0.0971	1	12/01/10 16:24	SW846 8270D SIM	10K4272
Benzo (b) fluoranthene	ND		ug/L	0.0252	0.0971	1	12/01/10 16:24	SW846 8270D SIM	10K4272
Benzo (g,h,i) perylene	ND		ug/L	0.0233	0.0971	1	12/01/10 16:24	SW846 8270D SIM	10K4272
Benzo (k) fluoranthene	ND		ug/L	0.0388	0.0971	1	12/01/10 16:24	SW846 8270D SIM	10K4272
Chrysene	ND		ug/L	0.0340	0.0971	1	12/01/10 16:24	SW846 8270D SIM	10K4272
Dibenz (a,h) anthracene	ND		ug/L	0.0233	0.0971	1	12/01/10 16:24	SW846 8270D SIM	10K4272
Fluoranthene	0.165		ug/L	0.0330	0.0971	1	12/01/10 16:24	SW846 8270D SIM	10K4272
Fluorene	0.456		ug/L	0.0243	0.0971	1	12/01/10 16:24	SW846 8270D SIM	10K4272
Indeno (1,2,3-cd) pyrene	ND		ug/L	0.0272	0.0971	1	12/01/10 16:24	SW846 8270D SIM	10K4272
1-Methylnaphthalene	ND		ug/L	0.0214	0.0971	1	12/01/10 16:24	SW846 8270D SIM	10K4272
2-Methylnaphthalene	ND		ug/L	0.0330	0.0971	1	12/01/10 16:24	SW846 8270D SIM	10K4272
Naphthalene	0.0485	J	ug/L	0.0243	0.0971	1	12/01/10 16:24	SW846 8270D SIM	10K4272
Phenanthrene	0.786		ug/L	0.0612	0.0971	1	12/01/10 16:24	SW846 8270D SIM	10K4272
Pyrene	0.126		ug/L	0.0243	0.0971	1	12/01/10 16:24	SW846 8270D SIM	10K4272
Surr: Nitrobenzene-d5 (27-120%)	57 %					1	12/01/10 16:24	SW846 8270D SIM	10K4272
Surr: 2-Fluorobiphenyl (29-120%)	58 %					1	12/01/10 16:24	SW846 8270D SIM	10K4272
Surr: Terphenyl-d14 (13-120%)	71 %					1	12/01/10 16:24	SW846 8270D SIM	10K4272

Client AMEC Earth & Environmental (13993)
600 University Street, Suite 1020
Seattle, WA 98101
Attn Leah Vigoren

Work Order: NTK2303
Project Name: Everett Terminal(46108) - AMEC
Project Number: [none]
Received: 11/19/10 08:30

ANALYTICAL REPORT

Analyte	Result	Flag	Units	MDL	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
Sample ID: NTK2303-01 (MWA3-111810 - Ground Water) - cont. Sampled: 11/18/10 10:35									
Purgeable Petroleum Hydrocarbons									
GRO (C4-C12) NW	ND		ug/L	33.0	100	1	11/25/10 01:39	NWTPH-Gx	10K4600
<i>Surr: a,a,a-Trifluorotoluene (50-150%)</i>	84 %					1	11/25/10 01:39	NWTPH-Gx	10K4600
Extractable Petroleum Hydrocarbons with Silica Gel Treatment									
Diesel	417	B1, QP7	ug/L	9.62	96.2	1	12/01/10 23:00	NWTPH-Dx	10L0042
Motor Oil	88.2	B, J	ug/L	9.62	96.2	1	12/01/10 23:00	NWTPH-Dx	10L0042
<i>Surr: o-Terphenyl (50-150%)</i>	51 %					1	12/01/10 23:00	NWTPH-Dx	10L0042
Sample ID: NTK2303-02 (MWA1-111810 - Ground Water) Sampled: 11/18/10 12:30									
Dissolved Metals by Method 6020									
Lead	ND		ug/L	0.0900	2.00	1	12/02/10 12:16	SW846 6020	10K4615
Volatile Organic Compounds by EPA Method 8260B									
Benzene	ND		ug/L	0.170	0.500	1	11/27/10 10:25	SW846 8260B	10K5376
Hexane	ND	H, L	ug/L	0.220	2.00	1	12/03/10 21:45	SW846 8260B	10L0710
Ethylbenzene	ND		ug/L	0.170	0.500	1	11/27/10 10:25	SW846 8260B	10K5376
Methyl tert-Butyl Ether	ND		ug/L	0.170	0.500	1	11/27/10 10:25	SW846 8260B	10K5376
Toluene	ND		ug/L	0.170	0.500	1	11/27/10 10:25	SW846 8260B	10K5376
Xylenes, total	ND		ug/L	0.390	0.500	1	11/27/10 10:25	SW846 8260B	10K5376
1,2-Dibromoethane (EDB)	ND		ug/L	0.180	0.500	1	11/27/10 10:25	SW846 8260B	10K5376
1,2-Dichloroethane	ND		ug/L	0.410	0.500	1	11/27/10 10:25	SW846 8260B	10K5376
<i>Surr: 1,2-Dichloroethane-d4 (63-140%)</i>	116 %					1	12/03/10 21:45	SW846 8260B	10L0710
<i>Surr: 1,2-Dichloroethane-d4 (63-140%)</i>	106 %					1	11/27/10 10:25	SW846 8260B	10K5376
<i>Surr: Dibromofluoromethane (73-131%)</i>	104 %					1	11/27/10 10:25	SW846 8260B	10K5376
<i>Surr: Dibromofluoromethane (73-131%)</i>	114 %					1	12/03/10 21:45	SW846 8260B	10L0710
<i>Surr: Toluene-d8 (80-120%)</i>	98 %					1	11/27/10 10:25	SW846 8260B	10K5376
<i>Surr: Toluene-d8 (80-120%)</i>	96 %					1	12/03/10 21:45	SW846 8260B	10L0710
<i>Surr: 4-Bromofluorobenzene (79-125%)</i>	96 %					1	12/03/10 21:45	SW846 8260B	10L0710
<i>Surr: 4-Bromofluorobenzene (79-125%)</i>	90 %					1	11/27/10 10:25	SW846 8260B	10K5376
Polyaromatic Hydrocarbons by EPA 8270D SIM									
Acenaphthene	0.388		ug/L	0.0272	0.0971	1	12/01/10 16:46	SW846 8270D SIM	10K4272
Acenaphthylene	0.0583	J	ug/L	0.0243	0.0971	1	12/01/10 16:46	SW846 8270D SIM	10K4272
Anthracene	0.0874	J	ug/L	0.0301	0.0971	1	12/01/10 16:46	SW846 8270D SIM	10K4272
Benzo (a) anthracene	ND		ug/L	0.0175	0.0971	1	12/01/10 16:46	SW846 8270D SIM	10K4272
Benzo (a) pyrene	ND		ug/L	0.0311	0.0971	1	12/01/10 16:46	SW846 8270D SIM	10K4272
Benzo (b) fluoranthene	ND		ug/L	0.0252	0.0971	1	12/01/10 16:46	SW846 8270D SIM	10K4272
Benzo (g,h,i) perylene	ND		ug/L	0.0233	0.0971	1	12/01/10 16:46	SW846 8270D SIM	10K4272
Benzo (k) fluoranthene	ND		ug/L	0.0388	0.0971	1	12/01/10 16:46	SW846 8270D SIM	10K4272
Chrysene	ND		ug/L	0.0340	0.0971	1	12/01/10 16:46	SW846 8270D SIM	10K4272
Dibenz (a,h) anthracene	ND		ug/L	0.0233	0.0971	1	12/01/10 16:46	SW846 8270D SIM	10K4272
Fluoranthene	0.0777	J	ug/L	0.0330	0.0971	1	12/01/10 16:46	SW846 8270D SIM	10K4272
Fluorene	0.718		ug/L	0.0243	0.0971	1	12/01/10 16:46	SW846 8270D SIM	10K4272
Indeno (1,2,3-cd) pyrene	ND		ug/L	0.0272	0.0971	1	12/01/10 16:46	SW846 8270D SIM	10K4272
1-Methylnaphthalene	1.06		ug/L	0.0214	0.0971	1	12/01/10 16:46	SW846 8270D SIM	10K4272

Client AMEC Earth & Environmental (13993)
600 University Street, Suite 1020
Seattle, WA 98101
Attn Leah Vigoren

Work Order: NTK2303
Project Name: Everett Terminal(46108) - AMEC
Project Number: [none]
Received: 11/19/10 08:30

ANALYTICAL REPORT

Analyte	Result	Flag	Units	MDL	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
Sample ID: NTK2303-02 (MWA1-111810 - Ground Water) - cont. Sampled: 11/18/10 12:30									
Polyaromatic Hydrocarbons by EPA 8270D SIM - cont.									
2-Methylnaphthalene	ND		ug/L	0.0330	0.0971	1	12/01/10 16:46	SW846 8270D SIM	10K4272
Naphthalene	0.0874	J	ug/L	0.0243	0.0971	1	12/01/10 16:46	SW846 8270D SIM	10K4272
Phenanthrene	ND		ug/L	0.0612	0.0971	1	12/01/10 16:46	SW846 8270D SIM	10K4272
Pyrene	0.0583	J	ug/L	0.0243	0.0971	1	12/01/10 16:46	SW846 8270D SIM	10K4272
Surr: Nitrobenzene-d5 (27-120%)	61 %					1	12/01/10 16:46	SW846 8270D SIM	10K4272
Surr: 2-Fluorobiphenyl (29-120%)	56 %					1	12/01/10 16:46	SW846 8270D SIM	10K4272
Surr: Terphenyl-d14 (13-120%)	61 %					1	12/01/10 16:46	SW846 8270D SIM	10K4272
Purgeable Petroleum Hydrocarbons									
GRO (C4-C12) NW	48.2	J	ug/L	33.0	100	1	11/25/10 02:08	NWTPH-Gx	10K4600
Surr: a,a,a-Trifluorotoluene (50-150%)	86 %					1	11/25/10 02:08	NWTPH-Gx	10K4600
Extractable Petroleum Hydrocarbons with Silica Gel Treatment									
Diesel	2140	B1, QP7	ug/L	9.52	95.2	1	11/29/10 23:55	NWTPH-Dx	10K5251
Motor Oil	18.2	B, J	ug/L	9.52	95.2	1	11/29/10 23:55	NWTPH-Dx	10K5251
Surr: o-Terphenyl (50-150%)	63 %					1	11/29/10 23:55	NWTPH-Dx	10K5251
Sample ID: NTK2303-03 (MW11-111810 - Ground Water) Sampled: 11/18/10 14:45									
General Chemistry Parameters									
Alkalinity, Total (CaCO3)	85.2		mg/L	1.40	10.0	1	11/28/10 03:25	SM2320 B	10K5425
Nitrate as N	ND		mg/L	0.0100	0.100	1	11/19/10 18:36	EPA 300.0	10K4061
Sulfate	23.1		mg/L	0.110	1.00	1	11/19/10 18:36	EPA 300.0	10K4061
Methane, Ethane, and Ethene by GC									
Methane	217		ug/L	15.0	26.0	1	11/29/10 18:28	RSK 175	10K5196
Surr: Acetylene (70-122%)	97 %					1	11/29/10 18:28	RSK 175	10K5196
Dissolved Metals by Method 6020									
Lead	ND		ug/L	0.0900	2.00	1	12/02/10 12:29	SW846 6020	10K4615
Manganese	167		ug/L	0.200	5.00	1	12/02/10 12:29	SW846 6020	10K4615
Volatile Organic Compounds by EPA Method 8260B									
Benzene	ND		ug/L	0.170	0.500	1	11/27/10 10:51	SW846 8260B	10K5376
Ethylbenzene	ND		ug/L	0.170	0.500	1	11/27/10 10:51	SW846 8260B	10K5376
Methyl tert-Butyl Ether	ND		ug/L	0.170	0.500	1	11/27/10 10:51	SW846 8260B	10K5376
Toluene	ND		ug/L	0.170	0.500	1	11/27/10 10:51	SW846 8260B	10K5376
Xylenes, total	ND		ug/L	0.390	0.500	1	11/27/10 10:51	SW846 8260B	10K5376
Surr: 1,2-Dichloroethane-d4 (63-140%)	106 %					1	11/27/10 10:51	SW846 8260B	10K5376
Surr: Dibromofluoromethane (73-131%)	102 %					1	11/27/10 10:51	SW846 8260B	10K5376
Surr: Toluene-d8 (80-120%)	98 %					1	11/27/10 10:51	SW846 8260B	10K5376
Surr: 4-Bromofluorobenzene (79-125%)	91 %					1	11/27/10 10:51	SW846 8260B	10K5376
Polyaromatic Hydrocarbons by EPA 8270D SIM									
Acenaphthene	ND		ug/L	0.0269	0.0962	1	12/01/10 17:07	SW846 8270D SIM	10K4272
Acenaphthylene	ND		ug/L	0.0240	0.0962	1	12/01/10 17:07	SW846 8270D SIM	10K4272
Anthracene	ND		ug/L	0.0298	0.0962	1	12/01/10 17:07	SW846 8270D SIM	10K4272

Client AMEC Earth & Environmental (13993)
600 University Street, Suite 1020
Seattle, WA 98101
Attn Leah Vigoren

Work Order: NTK2303
Project Name: Everett Terminal(46108) - AMEC
Project Number: [none]
Received: 11/19/10 08:30

ANALYTICAL REPORT

Analyte	Result	Flag	Units	MDL	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
Sample ID: NTK2303-03 (MW11-111810 - Ground Water) - cont. Sampled: 11/18/10 14:45									
Polyaromatic Hydrocarbons by EPA 8270D SIM - cont.									
Benzo (a) anthracene	ND		ug/L	0.0173	0.0962	1	12/01/10 17:07	SW846 8270D SIM	10K4272
Benzo (a) pyrene	ND		ug/L	0.0308	0.0962	1	12/01/10 17:07	SW846 8270D SIM	10K4272
Benzo (b) fluoranthene	ND		ug/L	0.0250	0.0962	1	12/01/10 17:07	SW846 8270D SIM	10K4272
Benzo (g,h,i) perylene	ND		ug/L	0.0231	0.0962	1	12/01/10 17:07	SW846 8270D SIM	10K4272
Benzo (k) fluoranthene	ND		ug/L	0.0385	0.0962	1	12/01/10 17:07	SW846 8270D SIM	10K4272
Chrysene	ND		ug/L	0.0337	0.0962	1	12/01/10 17:07	SW846 8270D SIM	10K4272
Dibenz (a,h) anthracene	ND		ug/L	0.0231	0.0962	1	12/01/10 17:07	SW846 8270D SIM	10K4272
Fluoranthene	ND		ug/L	0.0327	0.0962	1	12/01/10 17:07	SW846 8270D SIM	10K4272
Fluorene	ND		ug/L	0.0240	0.0962	1	12/01/10 17:07	SW846 8270D SIM	10K4272
Indeno (1,2,3-cd) pyrene	ND		ug/L	0.0269	0.0962	1	12/01/10 17:07	SW846 8270D SIM	10K4272
1-Methylnaphthalene	ND		ug/L	0.0212	0.0962	1	12/01/10 17:07	SW846 8270D SIM	10K4272
2-Methylnaphthalene	ND		ug/L	0.0327	0.0962	1	12/01/10 17:07	SW846 8270D SIM	10K4272
Naphthalene	ND		ug/L	0.0240	0.0962	1	12/01/10 17:07	SW846 8270D SIM	10K4272
Phenanthrene	ND		ug/L	0.0606	0.0962	1	12/01/10 17:07	SW846 8270D SIM	10K4272
Pyrene	ND		ug/L	0.0240	0.0962	1	12/01/10 17:07	SW846 8270D SIM	10K4272
<i>Surr: Nitrobenzene-d5 (27-120%)</i>	53 %					1	12/01/10 17:07	SW846 8270D SIM	10K4272
<i>Surr: 2-Fluorobiphenyl (29-120%)</i>	58 %					1	12/01/10 17:07	SW846 8270D SIM	10K4272
<i>Surr: Terphenyl-d14 (13-120%)</i>	74 %					1	12/01/10 17:07	SW846 8270D SIM	10K4272
Purgeable Petroleum Hydrocarbons									
GRO (C4-C12) NW	ND		ug/L	33.0	100	1	11/25/10 02:37	NWTPH-Gx	10K4600
<i>Surr: a,a,a-Trifluorotoluene (50-150%)</i>	83 %					1	11/25/10 02:37	NWTPH-Gx	10K4600
Extractable Petroleum Hydrocarbons with Silica Gel Treatment									
Diesel	42.7	B, J	ug/L	9.43	94.3	1	11/30/10 00:12	NWTPH-Dx	10K5251
Motor Oil	23.1	B, J	ug/L	9.43	94.3	1	11/30/10 00:12	NWTPH-Dx	10K5251
<i>Surr: o-Terphenyl (50-150%)</i>	86 %					1	11/30/10 00:12	NWTPH-Dx	10K5251
Sample ID: NTK2303-04 (Trip Blank 1 - Water) Sampled: 11/18/10 00:01									
Volatile Organic Compounds by EPA Method 8260B									
Benzene	ND		ug/L	0.170	0.500	1	11/27/10 03:45	SW846 8260B	10K5376
Ethylbenzene	ND		ug/L	0.170	0.500	1	11/27/10 03:45	SW846 8260B	10K5376
Methyl tert-Butyl Ether	ND		ug/L	0.170	0.500	1	11/27/10 03:45	SW846 8260B	10K5376
Toluene	ND		ug/L	0.170	0.500	1	11/27/10 03:45	SW846 8260B	10K5376
Xylenes, total	ND		ug/L	0.390	0.500	1	11/27/10 03:45	SW846 8260B	10K5376
<i>Surr: 1,2-Dichloroethane-d4 (63-140%)</i>	106 %					1	11/27/10 03:45	SW846 8260B	10K5376
<i>Surr: Dibromofluoromethane (73-131%)</i>	105 %					1	11/27/10 03:45	SW846 8260B	10K5376
<i>Surr: Toluene-d8 (80-120%)</i>	98 %					1	11/27/10 03:45	SW846 8260B	10K5376
<i>Surr: 4-Bromofluorobenzene (79-125%)</i>	94 %					1	11/27/10 03:45	SW846 8260B	10K5376
Sample ID: NTK2303-05 (Trip Blank 2 - Water) Sampled: 11/18/10 00:01									
Volatile Organic Compounds by EPA Method 8260B									
Benzene	ND		ug/L	0.170	0.500	1	11/27/10 04:12	SW846 8260B	10K5376
Ethylbenzene	ND		ug/L	0.170	0.500	1	11/27/10 04:12	SW846 8260B	10K5376

Client AMEC Earth & Environmental (13993)
 600 University Street, Suite 1020
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 Attn Leah Vigoren

Work Order: NTK2303
 Project Name: Everett Terminal(46108) - AMEC
 Project Number: [none]
 Received: 11/19/10 08:30

ANALYTICAL REPORT

Analyte	Result	Flag	Units	MDL	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
Sample ID: NTK2303-05 (Trip Blank 2 - Water) - cont. Sampled: 11/18/10 00:01									
Volatile Organic Compounds by EPA Method 8260B - cont.									
Methyl tert-Butyl Ether	ND		ug/L	0.170	0.500	1	11/27/10 04:12	SW846 8260B	10K5376
Toluene	ND		ug/L	0.170	0.500	1	11/27/10 04:12	SW846 8260B	10K5376
Xylenes, total	ND		ug/L	0.390	0.500	1	11/27/10 04:12	SW846 8260B	10K5376
<i>Surr: 1,2-Dichloroethane-d4 (63-140%)</i>	<i>105 %</i>					<i>1</i>	<i>11/27/10 04:12</i>	<i>SW846 8260B</i>	<i>10K5376</i>
<i>Surr: Dibromofluoromethane (73-131%)</i>	<i>102 %</i>					<i>1</i>	<i>11/27/10 04:12</i>	<i>SW846 8260B</i>	<i>10K5376</i>
<i>Surr: Toluene-d8 (80-120%)</i>	<i>98 %</i>					<i>1</i>	<i>11/27/10 04:12</i>	<i>SW846 8260B</i>	<i>10K5376</i>
<i>Surr: 4-Bromofluorobenzene (79-125%)</i>	<i>92 %</i>					<i>1</i>	<i>11/27/10 04:12</i>	<i>SW846 8260B</i>	<i>10K5376</i>

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 Received: 11/19/10 08:30

SAMPLE EXTRACTION DATA

Parameter	Batch	Lab Number	Wt/Vol Extracted	Extracted Vol	Date	Analyst	Extraction Method
Dissolved Metals by Method 6020							
SW846 6020	10K4615	NTK2303-01	50.00	50.00	11/30/10 16:46	MET	EPA 3010A / 6020 D
SW846 6020	10K4615	NTK2303-01	50.00	50.00	11/30/10 16:46	MET	EPA 3010A / 6020 D
SW846 6020	10K4615	NTK2303-01RE1	50.00	50.00	11/30/10 16:46	MET	EPA 3010A / 6020 D
SW846 6020	10K4615	NTK2303-02	50.00	50.00	11/30/10 16:46	MET	EPA 3010A / 6020 D
SW846 6020	10K4615	NTK2303-03	50.00	50.00	11/30/10 16:46	MET	EPA 3010A / 6020 D
SW846 6020	10K4615	NTK2303-03	50.00	50.00	11/30/10 16:46	MET	EPA 3010A / 6020 D
Extractable Petroleum Hydrocarbons with Silica Gel Treatment							
NWTPH-Dx	10K5251	NTK2303-01	1040.00	1.00	11/27/10 16:50	MAH	EPA 3510C
NWTPH-Dx	10L0042	NTK2303-01RE1	1040.00	1.00	12/01/10 10:25	DXP	EPA 3510C
NWTPH-Dx	10K5251	NTK2303-02	1050.00	1.00	11/27/10 16:50	MAH	EPA 3510C
NWTPH-Dx	10K5251	NTK2303-03	1060.00	1.00	11/27/10 16:50	MAH	EPA 3510C
Polyaromatic Hydrocarbons by EPA 8270D SIM							
SW846 8270D SIM	10K4272	NTK2303-01	1030.00	1.00	11/23/10 12:15	MAH	EPA 3510C
SW846 8270D SIM	10K4272	NTK2303-02	1030.00	1.00	11/23/10 12:15	MAH	EPA 3510C
SW846 8270D SIM	10K4272	NTK2303-03	1040.00	1.00	11/23/10 12:15	MAH	EPA 3510C

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 Received: 11/19/10 08:30

PROJECT QUALITY CONTROL DATA

Blank

Analyte	Blank Value	Q	Units	Q.C. Batch	Lab Number	Analyzed Date/Time
General Chemistry Parameters						
10K4061-BLK1						
Nitrate as N	<0.0100		mg/L	10K4061	10K4061-BLK1	11/19/10 16:55
Sulfate	<0.110		mg/L	10K4061	10K4061-BLK1	11/19/10 16:55
10K5425-BLK1						
Alkalinity, Total (CaCO3)	<1.40		mg/L	10K5425	10K5425-BLK1	11/28/10 00:10
Methane, Ethane, and Ethene by GC						
10K5196-BLK1						
Methane	<15.0		ug/L	10K5196	10K5196-BLK1	11/29/10 17:24
Surrogate: Acetylene	109%			10K5196	10K5196-BLK1	11/29/10 17:24
Dissolved Metals by Method 6020						
10K4615-BLK1						
Lead	<0.0900		ug/L	10K4615	10K4615-BLK1	12/02/10 11:48
Manganese	<0.200		ug/L	10K4615	10K4615-BLK1	12/02/10 11:48
Volatile Organic Compounds by EPA Method 8260B						
10K5376-BLK1						
Benzene	<0.170		ug/L	10K5376	10K5376-BLK1	11/27/10 03:18
Ethylbenzene	<0.170		ug/L	10K5376	10K5376-BLK1	11/27/10 03:18
Methyl tert-Butyl Ether	<0.170		ug/L	10K5376	10K5376-BLK1	11/27/10 03:18
Toluene	<0.170		ug/L	10K5376	10K5376-BLK1	11/27/10 03:18
Xylenes, total	<0.390		ug/L	10K5376	10K5376-BLK1	11/27/10 03:18
1,2-Dibromoethane (EDB)	<0.180		ug/L	10K5376	10K5376-BLK1	11/27/10 03:18
1,2-Dichloroethane	<0.410		ug/L	10K5376	10K5376-BLK1	11/27/10 03:18
Surrogate: 1,2-Dichloroethane-d4	107%			10K5376	10K5376-BLK1	11/27/10 03:18
Surrogate: Dibromofluoromethane	102%			10K5376	10K5376-BLK1	11/27/10 03:18
Surrogate: Toluene-d8	99%			10K5376	10K5376-BLK1	11/27/10 03:18
Surrogate: 4-Bromofluorobenzene	92%			10K5376	10K5376-BLK1	11/27/10 03:18
10L0710-BLK1						
Hexane	<0.220		ug/L	10L0710	10L0710-BLK1	12/03/10 13:27
Surrogate: 1,2-Dichloroethane-d4	121%			10L0710	10L0710-BLK1	12/03/10 13:27
Surrogate: Dibromofluoromethane	116%			10L0710	10L0710-BLK1	12/03/10 13:27
Surrogate: Toluene-d8	95%			10L0710	10L0710-BLK1	12/03/10 13:27
Surrogate: 4-Bromofluorobenzene	96%			10L0710	10L0710-BLK1	12/03/10 13:27
Polyaromatic Hydrocarbons by EPA 8270D SIM						
10K4272-BLK1						
Acenaphthene	<0.0280		ug/L	10K4272	10K4272-BLK1	12/01/10 14:36
Acenaphthylene	<0.0250		ug/L	10K4272	10K4272-BLK1	12/01/10 14:36

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Project Name: Everett Terminal(46108) - AMEC
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Received: 11/19/10 08:30

PROJECT QUALITY CONTROL DATA
Blank - Cont.

Analyte	Blank Value	Q	Units	Q.C. Batch	Lab Number	Analyzed Date/Time
Polyaromatic Hydrocarbons by EPA 8270D SIM						
10K4272-BLK1						
Anthracene	<0.0310		ug/L	10K4272	10K4272-BLK1	12/01/10 14:36
Benzo (a) anthracene	<0.0180		ug/L	10K4272	10K4272-BLK1	12/01/10 14:36
Benzo (a) pyrene	<0.0320		ug/L	10K4272	10K4272-BLK1	12/01/10 14:36
Benzo (b) fluoranthene	<0.0260		ug/L	10K4272	10K4272-BLK1	12/01/10 14:36
Benzo (g,h,i) perylene	<0.0240		ug/L	10K4272	10K4272-BLK1	12/01/10 14:36
Benzo (k) fluoranthene	<0.0400		ug/L	10K4272	10K4272-BLK1	12/01/10 14:36
Chrysene	<0.0350		ug/L	10K4272	10K4272-BLK1	12/01/10 14:36
Dibenz (a,h) anthracene	<0.0240		ug/L	10K4272	10K4272-BLK1	12/01/10 14:36
Fluoranthene	<0.0340		ug/L	10K4272	10K4272-BLK1	12/01/10 14:36
Fluorene	<0.0250		ug/L	10K4272	10K4272-BLK1	12/01/10 14:36
Indeno (1,2,3-cd) pyrene	<0.0280		ug/L	10K4272	10K4272-BLK1	12/01/10 14:36
1-Methylnaphthalene	<0.0220		ug/L	10K4272	10K4272-BLK1	12/01/10 14:36
2-Methylnaphthalene	<0.0340		ug/L	10K4272	10K4272-BLK1	12/01/10 14:36
Naphthalene	<0.0250		ug/L	10K4272	10K4272-BLK1	12/01/10 14:36
Phenanthrene	<0.0630		ug/L	10K4272	10K4272-BLK1	12/01/10 14:36
Pyrene	<0.0250		ug/L	10K4272	10K4272-BLK1	12/01/10 14:36
Surrogate: Nitrobenzene-d5	50%			10K4272	10K4272-BLK1	12/01/10 14:36
Surrogate: 2-Fluorobiphenyl	59%			10K4272	10K4272-BLK1	12/01/10 14:36
Surrogate: Terphenyl-d14	67%			10K4272	10K4272-BLK1	12/01/10 14:36
Purgeable Petroleum Hydrocarbons						
10K4600-BLK1						
GRO (C4-C12) NW	<33.0		ug/L	10K4600	10K4600-BLK1	11/24/10 14:48
Surrogate: a,a,a-Trifluorotoluene	87%			10K4600	10K4600-BLK1	11/24/10 14:48
10K4600-BLK2						
GRO (C4-C12) NW	<33.0		ug/L	10K4600	10K4600-BLK2	11/24/10 22:14
Surrogate: a,a,a-Trifluorotoluene	88%			10K4600	10K4600-BLK2	11/24/10 22:14
Extractable Petroleum Hydrocarbons with Silica Gel Treatment						
10K5251-BLK1						
Diesel	30.3	J	ug/L	10K5251	10K5251-BLK1	11/29/10 21:44
Motor Oil	14.1	J	ug/L	10K5251	10K5251-BLK1	11/29/10 21:44
Surrogate: o-Terphenyl	80%			10K5251	10K5251-BLK1	11/29/10 21:44
10L0042-BLK1						
Diesel	37.8	J	ug/L	10L0042	10L0042-BLK1	12/01/10 22:11
Motor Oil	18.1	J	ug/L	10L0042	10L0042-BLK1	12/01/10 22:11
Surrogate: o-Terphenyl	74%			10L0042	10L0042-BLK1	12/01/10 22:11

Client AMEC Earth & Environmental (13993)
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 Attn Leah Vigoren

Work Order: NTK2303
 Project Name: Everett Terminal(46108) - AMEC
 Project Number: [none]
 Received: 11/19/10 08:30

PROJECT QUALITY CONTROL DATA

Duplicate

Analyte	Orig. Val.	Duplicate	Q	Units	RPD	Limit	Batch	Sample Duplicated	% Rec.	Analyzed Date/Time
General Chemistry Parameters										
10K4061-DUP1										
Nitrate as N	ND	<0.0100		mg/L		20	10K4061	NTK2300-09		11/19/10 21:36
Sulfate	ND	<0.110		mg/L		20	10K4061	NTK2300-09		11/19/10 21:36
Purgeable Petroleum Hydrocarbons										
10K4600-DUP1										
GRO (C4-C12) NW	ND	<33.0		ug/L		37	10K4600	NTK2303-03		11/26/10 13:31
<i>Surrogate: a,a,a-Trifluorotoluene</i>		17.3		ug/L			10K4600	NTK2303-03	86%	11/26/10 13:31

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PROJECT QUALITY CONTROL DATA LCS

Analyte	Known Val.	Analyzed Val	Q	Units	% Rec.	Target Range	Batch	Analyzed Date/Time
General Chemistry Parameters								
10K4061-BS1								
Nitrate as N	3.00	3.10		mg/L	103%	90 - 110	10K4061	11/19/10 17:15
Sulfate	15.0	15.9		mg/L	106%	90 - 110	10K4061	11/19/10 17:15
10K5425-BS1								
Alkalinity, Total (CaCO3)	100	97.0		mg/L	97%	90 - 110	10K5425	11/28/10 01:09
Methane, Ethane, and Ethene by GC								
10K5196-BS1								
Methane	278	293		ug/L	105%	80 - 120	10K5196	11/29/10 17:27
<i>Surrogate: Acetylene</i>	450	367			82%	70 - 122	10K5196	11/29/10 17:27
Dissolved Metals by Method 6020								
10K4615-BS1								
Lead	100	97.0		ug/L	97%	80 - 120	10K4615	12/02/10 11:41
Manganese	100	96.5		ug/L	96%	80 - 120	10K4615	12/02/10 11:41
Volatile Organic Compounds by EPA Method 8260B								
10K5376-BS1								
Benzene	50.0	47.8		ug/L	96%	80 - 121	10K5376	11/27/10 01:58
Ethylbenzene	50.0	50.0		ug/L	100%	78 - 133	10K5376	11/27/10 01:58
Methyl tert-Butyl Ether	50.0	50.2		ug/L	100%	76 - 120	10K5376	11/27/10 01:58
Toluene	50.0	48.5		ug/L	97%	78 - 125	10K5376	11/27/10 01:58
Xylenes, total	150	152		ug/L	101%	78 - 134	10K5376	11/27/10 01:58
1,2-Dibromoethane (EDB)	50.0	52.4		ug/L	105%	80 - 125	10K5376	11/27/10 01:58
1,2-Dichloroethane	50.0	54.7		ug/L	109%	69 - 136	10K5376	11/27/10 01:58
<i>Surrogate: 1,2-Dichloroethane-d4</i>	50.0	55.0			110%	63 - 140	10K5376	11/27/10 01:58
<i>Surrogate: Dibromofluoromethane</i>	50.0	50.7			101%	73 - 131	10K5376	11/27/10 01:58
<i>Surrogate: Toluene-d8</i>	50.0	49.0			98%	80 - 120	10K5376	11/27/10 01:58
<i>Surrogate: 4-Bromofluorobenzene</i>	50.0	45.0			90%	79 - 125	10K5376	11/27/10 01:58
10L0710-BS1								
Hexane	50.0	65.7	L1	ug/L	131%	70 - 130	10L0710	12/03/10 12:06
<i>Surrogate: 1,2-Dichloroethane-d4</i>	25.0	27.3			109%	63 - 140	10L0710	12/03/10 12:06
<i>Surrogate: Dibromofluoromethane</i>	25.0	27.0			108%	73 - 131	10L0710	12/03/10 12:06
<i>Surrogate: Toluene-d8</i>	25.0	22.4			89%	80 - 120	10L0710	12/03/10 12:06
<i>Surrogate: 4-Bromofluorobenzene</i>	25.0	24.4			98%	79 - 125	10L0710	12/03/10 12:06
Polyaromatic Hydrocarbons by EPA 8270D SIM								
10K4272-BS1								
Acenaphthene	1.00	0.620		ug/L	62%	43 - 122	10K4272	12/01/10 14:57
Acenaphthylene	1.00	0.560		ug/L	56%	43 - 129	10K4272	12/01/10 14:57

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 Project Number: [none]
 Received: 11/19/10 08:30

PROJECT QUALITY CONTROL DATA
LCS - Cont.

Analyte	Known Val.	Analyzed Val	Q	Units	% Rec.	Target Range	Batch	Analyzed Date/Time
Polyaromatic Hydrocarbons by EPA 8270D SIM								
10K4272-BS1								
Anthracene	1.00	0.630		ug/L	63%	50 - 138	10K4272	12/01/10 14:57
Benzo (a) anthracene	1.00	0.670		ug/L	67%	50 - 135	10K4272	12/01/10 14:57
Benzo (a) pyrene	1.00	0.690		ug/L	69%	46 - 136	10K4272	12/01/10 14:57
Benzo (b) fluoranthene	1.00	0.960		ug/L	96%	37 - 147	10K4272	12/01/10 14:57
Benzo (g,h,i) perylene	1.00	0.750		ug/L	75%	30 - 145	10K4272	12/01/10 14:57
Benzo (k) fluoranthene	1.00	0.760		ug/L	76%	47 - 135	10K4272	12/01/10 14:57
Chrysene	1.00	0.760		ug/L	76%	47 - 138	10K4272	12/01/10 14:57
Dibenz (a,h) anthracene	1.00	0.760		ug/L	76%	36 - 144	10K4272	12/01/10 14:57
Fluoranthene	1.00	0.730		ug/L	73%	51 - 139	10K4272	12/01/10 14:57
Fluorene	1.00	0.660		ug/L	66%	47 - 128	10K4272	12/01/10 14:57
Indeno (1,2,3-cd) pyrene	1.00	0.690		ug/L	69%	32 - 142	10K4272	12/01/10 14:57
1-Methylnaphthalene	1.00	0.550		ug/L	55%	37 - 126	10K4272	12/01/10 14:57
2-Methylnaphthalene	1.00	0.610		ug/L	61%	41 - 121	10K4272	12/01/10 14:57
Naphthalene	1.00	0.670		ug/L	67%	38 - 120	10K4272	12/01/10 14:57
Phenanthrene	1.00	0.700		ug/L	70%	45 - 133	10K4272	12/01/10 14:57
Pyrene	1.00	0.770		ug/L	77%	50 - 146	10K4272	12/01/10 14:57
Surrogate: Nitrobenzene-d5	1.00	0.490			49%	27 - 120	10K4272	12/01/10 14:57
Surrogate: 2-Fluorobiphenyl	1.00	0.570			57%	29 - 120	10K4272	12/01/10 14:57
Surrogate: Terphenyl-d14	1.00	0.710			71%	13 - 120	10K4272	12/01/10 14:57
Purgeable Petroleum Hydrocarbons								
10K4600-BS2								
GRO (C4-C12) NW	1000	1050	MNR1	ug/L	105%	70 - 130	10K4600	11/25/10 03:36
Surrogate: a,a,a-Trifluorotoluene	20.0	33.2	Z2		166%	50 - 150	10K4600	11/25/10 03:36
Extractable Petroleum Hydrocarbons with Silica Gel Treatment								
10K5251-BS1								
Diesel	1000	818	MNR1	ug/L	82%	57 - 132	10K5251	11/29/10 22:00
Surrogate: o-Terphenyl	20.0	14.6			73%	50 - 150	10K5251	11/29/10 22:00
10L0042-BS1								
Diesel	1000	874	MNR1	ug/L	87%	57 - 132	10L0042	12/01/10 22:27
Surrogate: o-Terphenyl	20.0	16.3			81%	50 - 150	10L0042	12/01/10 22:27

Client AMEC Earth & Environmental (13993)
 600 University Street, Suite 1020
 Seattle, WA 98101
 Attn Leah Vigoren

Work Order: NTK2303
 Project Name: Everett Terminal(46108) - AMEC
 Project Number: [none]
 Received: 11/19/10 08:30

PROJECT QUALITY CONTROL DATA
LCS Dup

Analyte	Orig. Val.	Duplicate	Q	Units	Spike Conc	% Rec.	Target Range	RPD	Limit	Batch	Sample Duplicated	Analyzed Date/Time
Methane, Ethane, and Ethene by GC												
10K5196-BSD1												
Methane		290		ug/L	278	104%	80 - 120	1	20	10K5196		11/29/10 17:30
<i>Surrogate: Acetylene</i>		332		ug/L	450	74%	70 - 122			10K5196		11/29/10 17:30
Dissolved Metals by Method 6020												
10K4615-BSD1												
Lead		97.3		ug/L	100	97%	80 - 120	0.4	20	10K4615		12/02/10 11:45
Manganese		93.2		ug/L	100	93%	80 - 120	3	20	10K4615		12/02/10 11:45
Volatile Organic Compounds by EPA Method 8260B												
10K5376-BSD1												
Benzene		45.0		ug/L	50.0	90%	80 - 121	6	12	10K5376		11/27/10 02:25
Ethylbenzene		47.9		ug/L	50.0	96%	78 - 133	4	12	10K5376		11/27/10 02:25
Methyl tert-Butyl Ether		48.6		ug/L	50.0	97%	76 - 120	3	32	10K5376		11/27/10 02:25
Toluene		46.4		ug/L	50.0	93%	78 - 125	4	35	10K5376		11/27/10 02:25
Xylenes, total		147		ug/L	150	98%	78 - 134	4	18	10K5376		11/27/10 02:25
1,2-Dibromoethane (EDB)		50.8		ug/L	50.0	102%	80 - 125	3	21	10K5376		11/27/10 02:25
1,2-Dichloroethane		51.3		ug/L	50.0	103%	69 - 136	6	26	10K5376		11/27/10 02:25
<i>Surrogate: 1,2-Dichloroethane-d4</i>		54.8		ug/L	50.0	110%	63 - 140			10K5376		11/27/10 02:25
<i>Surrogate: Dibromofluoromethane</i>		49.9		ug/L	50.0	100%	73 - 131			10K5376		11/27/10 02:25
<i>Surrogate: Toluene-d8</i>		49.4		ug/L	50.0	99%	80 - 120			10K5376		11/27/10 02:25
<i>Surrogate: 4-Bromofluorobenzene</i>		45.6		ug/L	50.0	91%	79 - 125			10K5376		11/27/10 02:25
Purgeable Petroleum Hydrocarbons												
10K4600-BSD2												
GRO (C4-C12) NW		922		ug/L	1000	92%	70 - 130	13	37	10K4600		11/26/10 11:32
<i>Surrogate: a,a,a-Trifluorotoluene</i>		29.4		ug/L	20.0	147%	50 - 150			10K4600		11/26/10 11:32

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 Project Number: [none]
 Received: 11/19/10 08:30

PROJECT QUALITY CONTROL DATA Matrix Spike

Analyte	Orig. Val.	MS Val	Q	Units	Spike Conc	% Rec.	Target Range	Batch	Sample Spiked	Analyzed Date/Time
General Chemistry Parameters										
10K4061-MS1										
Nitrate as N	ND	2.98		mg/L	3.00	99%	80 - 120	10K4061	NTK2303-01	11/19/10 17:56
Sulfate	3.07	16.2		mg/L	15.0	88%	80 - 120	10K4061	NTK2303-01	11/19/10 17:56
10K5425-MS1										
Alkalinity, Total (CaCO3)	147	231		mg/L	100	84%	80 - 120	10K5425	NTK2483-03	11/28/10 01:41
Methane, Ethane, and Ethene by GC										
10K5196-MS1										
Methane	994	916	E, M8	ug/L	278	-28%	46 - 133	10K5196	NTK2915-01	11/30/10 10:33
<i>Surrogate: Acetylene</i>		451		ug/L	450	100%	70 - 122	10K5196	NTK2915-01	11/30/10 10:33
10K5196-MS2										
Methane	915	965	E, M8	ug/L	278	18%	46 - 133	10K5196	NTK2483-03	11/30/10 10:38
<i>Surrogate: Acetylene</i>		435		ug/L	450	97%	70 - 122	10K5196	NTK2483-03	11/30/10 10:38
Volatile Organic Compounds by EPA Method 8260B										
10K5376-MS1										
Benzene	237	727		ug/L	500	98%	65 - 151	10K5376	NTK2893-03RE 1	11/27/10 11:18
Ethylbenzene	330	855		ug/L	500	105%	68 - 157	10K5376	NTK2893-03RE 1	11/27/10 11:18
Methyl tert-Butyl Ether	ND	501		ug/L	500	100%	56 - 152	10K5376	NTK2893-03RE 1	11/27/10 11:18
Toluene	ND	498		ug/L	500	100%	61 - 153	10K5376	NTK2893-03RE 1	11/27/10 11:18
Xylenes, total	432	1610		ug/L	1500	78%	68 - 158	10K5376	NTK2893-03RE 1	11/27/10 11:18
1,2-Dibromoethane (EDB)	ND	537		ug/L	500	107%	80 - 132	10K5376	NTK2893-03RE 1	11/27/10 11:18
1,2-Dichloroethane	25.3	542		ug/L	500	103%	53 - 146	10K5376	NTK2893-03RE 1	11/27/10 11:18
<i>Surrogate: 1,2-Dichloroethane-d4</i>		54.9		ug/L	50.0	110%	63 - 140	10K5376	NTK2893-03RE 1	11/27/10 11:18
<i>Surrogate: Dibromofluoromethane</i>		50.9		ug/L	50.0	102%	73 - 131	10K5376	NTK2893-03RE 1	11/27/10 11:18
<i>Surrogate: Toluene-d8</i>		49.1		ug/L	50.0	98%	80 - 120	10K5376	NTK2893-03RE 1	11/27/10 11:18
<i>Surrogate: 4-Bromofluorobenzene</i>		45.2		ug/L	50.0	90%	79 - 125	10K5376	NTK2893-03RE 1	11/27/10 11:18
10L0710-MS1										
Hexane	ND	614		ug/L	500	123%	39 - 167	10L0710	NTK3126-01RE 1	12/03/10 22:12
<i>Surrogate: 1,2-Dichloroethane-d4</i>		28.7		ug/L	25.0	115%	63 - 140	10L0710	NTK3126-01RE 1	12/03/10 22:12

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Work Order: NTK2303
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 Project Number: [none]
 Received: 11/19/10 08:30

PROJECT QUALITY CONTROL DATA
Matrix Spike - Cont.

Analyte	Orig. Val.	MS Val	Q	Units	Spike Conc	% Rec.	Target Range	Batch	Sample Spiked	Analyzed Date/Time
Volatile Organic Compounds by EPA Method 8260B										
10L0710-MS1										
<i>Surrogate: Dibromofluoromethane</i>		27.7		ug/L	25.0	111%	73 - 131	10L0710	NTK3126-01RE 1	12/03/10 22:12
<i>Surrogate: Toluene-d8</i>		23.3		ug/L	25.0	93%	80 - 120	10L0710	NTK3126-01RE 1	12/03/10 22:12
<i>Surrogate: 4-Bromofluorobenzene</i>		25.3		ug/L	25.0	101%	79 - 125	10L0710	NTK3126-01RE 1	12/03/10 22:12
Polyaromatic Hydrocarbons by EPA 8270D SIM										
10K4272-MS1										
Acenaphthene	0.120	0.700		ug/L	1.00	58%	25 - 140	10K4272	NTK2483-03	12/01/10 15:41
Acenaphthylene	ND	0.600		ug/L	1.00	60%	36 - 135	10K4272	NTK2483-03	12/01/10 15:41
Anthracene	ND	0.750		ug/L	1.00	75%	20 - 145	10K4272	NTK2483-03	12/01/10 15:41
Benzo (a) anthracene	ND	0.850		ug/L	1.00	85%	10 - 129	10K4272	NTK2483-03	12/01/10 15:41
Benzo (a) pyrene	ND	0.780		ug/L	1.00	78%	10 - 136	10K4272	NTK2483-03	12/01/10 15:41
Benzo (b) fluoranthene	ND	0.950		ug/L	1.00	95%	10 - 147	10K4272	NTK2483-03	12/01/10 15:41
Benzo (g,h,i) perylene	ND	0.650		ug/L	1.00	65%	10 - 145	10K4272	NTK2483-03	12/01/10 15:41
Benzo (k) fluoranthene	ND	0.770		ug/L	1.00	77%	10 - 135	10K4272	NTK2483-03	12/01/10 15:41
Chrysene	ND	0.740		ug/L	1.00	74%	10 - 138	10K4272	NTK2483-03	12/01/10 15:41
Dibenz (a,h) anthracene	ND	0.650		ug/L	1.00	65%	10 - 144	10K4272	NTK2483-03	12/01/10 15:41
Fluoranthene	ND	0.870		ug/L	1.00	87%	28 - 143	10K4272	NTK2483-03	12/01/10 15:41
Fluorene	0.0800	0.750		ug/L	1.00	67%	28 - 144	10K4272	NTK2483-03	12/01/10 15:41
Indeno (1,2,3-cd) pyrene	ND	0.630		ug/L	1.00	63%	10 - 142	10K4272	NTK2483-03	12/01/10 15:41
1-Methylnaphthalene	0.110	0.690		ug/L	1.00	58%	37 - 126	10K4272	NTK2483-03	12/01/10 15:41
2-Methylnaphthalene	ND	0.620		ug/L	1.00	62%	29 - 127	10K4272	NTK2483-03	12/01/10 15:41
Naphthalene	0.210	0.700		ug/L	1.00	49%	24 - 120	10K4272	NTK2483-03	12/01/10 15:41
Phenanthrene	ND	0.720		ug/L	1.00	72%	31 - 142	10K4272	NTK2483-03	12/01/10 15:41
Pyrene	ND	0.860		ug/L	1.00	86%	10 - 158	10K4272	NTK2483-03	12/01/10 15:41
<i>Surrogate: Nitrobenzene-d5</i>		0.470		ug/L	1.00	47%	27 - 120	10K4272	NTK2483-03	12/01/10 15:41
<i>Surrogate: 2-Fluorobiphenyl</i>		0.520		ug/L	1.00	52%	29 - 120	10K4272	NTK2483-03	12/01/10 15:41
<i>Surrogate: Terphenyl-d14</i>		0.670		ug/L	1.00	67%	13 - 120	10K4272	NTK2483-03	12/01/10 15:41

Client AMEC Earth & Environmental (13993)
600 University Street, Suite 1020
Seattle, WA 98101
Attn Leah Vigoren

Work Order: NTK2303
Project Name: Everett Terminal(46108) - AMEC
Project Number: [none]
Received: 11/19/10 08:30

PROJECT QUALITY CONTROL DATA Matrix Spike Dup

Analyte	Orig. Val.	Duplicate	Q	Units	Spike Conc	% Rec.	Target Range	RPD	Limit	Batch	Sample Duplicated	Analyzed Date/Time
Methane, Ethane, and Ethene by GC												
10K5196-MSD1												
Methane	994	921	E, M8	ug/L	278	-26%	46 - 133	0.5	20	10K5196	NTK2915-01	11/30/10 10:36
<i>Surrogate: Acetylene</i>		422		ug/L	450	94%	70 - 122			10K5196	NTK2915-01	11/30/10 10:36
10K5196-MSD2												
Methane	915	1040		ug/L	278	46%	46 - 133	8	20	10K5196	NTK2483-03	11/30/10 10:41
<i>Surrogate: Acetylene</i>		388		ug/L	450	86%	70 - 122			10K5196	NTK2483-03	11/30/10 10:41
Volatile Organic Compounds by EPA Method 8260B												
10K5376-MSD1												
Benzene	237	716		ug/L	500	96%	65 - 151	2	12	10K5376	NTK2893-03R E1	11/27/10 11:45
Ethylbenzene	330	846		ug/L	500	103%	68 - 157	1	12	10K5376	NTK2893-03R E1	11/27/10 11:45
Methyl tert-Butyl Ether	ND	489		ug/L	500	98%	56 - 152	2	32	10K5376	NTK2893-03R E1	11/27/10 11:45
Toluene	ND	488		ug/L	500	98%	61 - 153	2	35	10K5376	NTK2893-03R E1	11/27/10 11:45
Xylenes, total	432	1540		ug/L	1500	74%	68 - 158	4	18	10K5376	NTK2893-03R E1	11/27/10 11:45
1,2-Dibromoethane (EDB)	ND	506		ug/L	500	101%	80 - 132	6	21	10K5376	NTK2893-03R E1	11/27/10 11:45
1,2-Dichloroethane	25.3	524		ug/L	500	100%	53 - 146	3	26	10K5376	NTK2893-03R E1	11/27/10 11:45
<i>Surrogate: 1,2-Dichloroethane-d4</i>		54.9		ug/L	50.0	110%	63 - 140			10K5376	NTK2893-03R E1	11/27/10 11:45
<i>Surrogate: Dibromofluoromethane</i>		50.8		ug/L	50.0	102%	73 - 131			10K5376	NTK2893-03R E1	11/27/10 11:45
<i>Surrogate: Toluene-d8</i>		49.1		ug/L	50.0	98%	80 - 120			10K5376	NTK2893-03R E1	11/27/10 11:45
<i>Surrogate: 4-Bromofluorobenzene</i>		46.9		ug/L	50.0	94%	79 - 125			10K5376	NTK2893-03R E1	11/27/10 11:45
10L0710-MSD1												
Hexane	ND	649		ug/L	500	130%	39 - 167	6	13	10L0710	NTK3126-01R E1	12/03/10 22:39
<i>Surrogate: 1,2-Dichloroethane-d4</i>		30.1		ug/L	25.0	120%	63 - 140			10L0710	NTK3126-01R E1	12/03/10 22:39
<i>Surrogate: Dibromofluoromethane</i>		27.9		ug/L	25.0	112%	73 - 131			10L0710	NTK3126-01R E1	12/03/10 22:39
<i>Surrogate: Toluene-d8</i>		22.7		ug/L	25.0	91%	80 - 120			10L0710	NTK3126-01R E1	12/03/10 22:39
<i>Surrogate: 4-Bromofluorobenzene</i>		25.5		ug/L	25.0	102%	79 - 125			10L0710	NTK3126-01R E1	12/03/10 22:39
Polyaromatic Hydrocarbons by EPA 8270D SIM												
10K4272-MSD1												
Acenaphthene	0.120	0.686		ug/L	0.980	58%	25 - 140	2	35	10K4272	NTK2483-03	12/01/10 16:02
Acenaphthylene	ND	0.598		ug/L	0.980	61%	36 - 135	0.3	31	10K4272	NTK2483-03	12/01/10 16:02

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 Received: 11/19/10 08:30

PROJECT QUALITY CONTROL DATA
Matrix Spike Dup - Cont.

Analyte	Orig. Val.	Duplicate	Q	Units	Spike Conc	% Rec.	Target Range	RPD	Limit	Batch	Sample Duplicated	Analyzed Date/Time
Polyaromatic Hydrocarbons by EPA 8270D SIM												
10K4272-MSD1												
Anthracene	ND	0.735		ug/L	0.980	75%	20 - 145	2	38	10K4272	NTK2483-03	12/01/10 16:02
Benzo (a) anthracene	ND	0.824		ug/L	0.980	84%	10 - 129	3	50	10K4272	NTK2483-03	12/01/10 16:02
Benzo (a) pyrene	ND	0.765		ug/L	0.980	78%	10 - 136	2	50	10K4272	NTK2483-03	12/01/10 16:02
Benzo (b) fluoranthene	ND	0.892		ug/L	0.980	91%	10 - 147	6	50	10K4272	NTK2483-03	12/01/10 16:02
Benzo (g,h,i) perylene	ND	0.618		ug/L	0.980	63%	10 - 145	5	50	10K4272	NTK2483-03	12/01/10 16:02
Benzo (k) fluoranthene	ND	0.735		ug/L	0.980	75%	10 - 135	5	50	10K4272	NTK2483-03	12/01/10 16:02
Chrysene	ND	0.725		ug/L	0.980	74%	10 - 138	2	50	10K4272	NTK2483-03	12/01/10 16:02
Dibenz (a,h) anthracene	ND	0.618		ug/L	0.980	63%	10 - 144	5	50	10K4272	NTK2483-03	12/01/10 16:02
Fluoranthene	ND	0.863		ug/L	0.980	88%	28 - 143	0.8	40	10K4272	NTK2483-03	12/01/10 16:02
Fluorene	0.0800	0.735		ug/L	0.980	67%	28 - 144	2	39	10K4272	NTK2483-03	12/01/10 16:02
Indeno (1,2,3-cd) pyrene	ND	0.598		ug/L	0.980	61%	10 - 142	5	50	10K4272	NTK2483-03	12/01/10 16:02
1-Methylnaphthalene	0.110	0.696		ug/L	0.980	60%	37 - 126	0.9	27	10K4272	NTK2483-03	12/01/10 16:02
2-Methylnaphthalene	ND	0.608		ug/L	0.980	62%	29 - 127	2	29	10K4272	NTK2483-03	12/01/10 16:02
Naphthalene	0.210	0.716		ug/L	0.980	52%	24 - 120	2	32	10K4272	NTK2483-03	12/01/10 16:02
Phenanthrene	ND	0.696		ug/L	0.980	71%	31 - 142	3	47	10K4272	NTK2483-03	12/01/10 16:02
Pyrene	ND	0.804		ug/L	0.980	82%	10 - 158	7	37	10K4272	NTK2483-03	12/01/10 16:02
Surrogate: Nitrobenzene-d5		0.490		ug/L	0.980	50%	27 - 120			10K4272	NTK2483-03	12/01/10 16:02
Surrogate: 2-Fluorobiphenyl		0.510		ug/L	0.980	52%	29 - 120			10K4272	NTK2483-03	12/01/10 16:02
Surrogate: Terphenyl-d14		0.637		ug/L	0.980	65%	13 - 120			10K4272	NTK2483-03	12/01/10 16:02

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CERTIFICATION SUMMARY

TestAmerica Nashville

Method	Matrix	AIHA	Nelac	Washington
EPA 300.0	Water	N/A	X	X
NWTPH-Dx	Water	N/A		X
NWTPH-Gx	Water	N/A	X	X
RSK 175	Water	N/A	X	X
SM2320 B	Water		X	
SW846 6020	Water		X	X
SW846 8260B	Water	N/A	X	X
SW846 8270D SIM	Water		X	X

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DATA QUALIFIERS AND DEFINITIONS

- B** Analyte was detected in the associated Method Blank.
- B1** Analyte was detected in the associated method blank. Analyte concentration in the sample is greater than 10x the concentration found in the method blank.
- E** Concentration exceeds the calibration range and therefore result is semi-quantitative.
- H** Sample analysis performed past method-specified holding time.
- J** Analyte detected at a level less than the Reporting Limit (RL) and greater than or equal to the Method Detection Limit (MDL). Concentrations within this range are estimated.
- L** Laboratory Control Sample and/or Laboratory Control Sample Duplicate recovery was above the acceptance limits. Analyte not detected, data not impacted.
- L1** Laboratory Control Sample and/or Laboratory Control Sample Duplicate recovery was above acceptance limits.
- M8** The MS and/or MSD were below the acceptance limits. See Blank Spike (LCS).
- MNR1** There was no MS/MSD analyzed with this batch due to insufficient sample volume. See Blank Spike.
- QP7** The hydrocarbon pattern most closely resembles a diesel product.
- Z2** Surrogate recovery was above the acceptance limits. Data not impacted.
- Z3** The sample required a dilution due to the nature of the sample matrix. Because of this dilution, the surrogate spike concentration in the sample was reduced to a level where the recovery calculation does not provide useful information.
- ND** Not detected at the reporting limit (or method detection limit if shown)

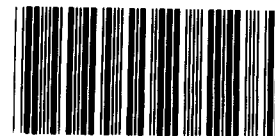
METHOD MODIFICATION NOTES

AGENCY DRAFT

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Nashville, TN



COOLER RECE

NTK2303

Cooler Received/Opened On 11/19/2010 @ 08:30

1. Tracking # 7941 (last 4 digits, FedEx)

Courier: FEDEX IR Gun ID 96210146

2. Temperature of rep. sample or temp blank when opened: 0.5 Degrees Celsius

3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES NO NA

4. Were custody seals on outside of cooler? YES NO NA

If yes, how many and where: 1-Front

5. Were the seals intact, signed, and dated correctly? YES NO NA

6. Were custody papers inside cooler? YES NO NA

I certify that I opened the cooler and answered questions 1-6 (initial) P.A.

7. Were custody seals on containers: YES NO and Intact YES NO NA

Were these signed and dated correctly? YES NO NA

8. Packing mat'l used? Bubblewrap Plastic bag Peanuts Vermiculite Foam Insert Paper Other None

9. Cooling process: Ice Ice-pack Ice (direct contact) Dry ice Other None

10. Did all containers arrive in good condition (unbroken)? YES NO NA

11. Were all container labels complete (#, date, signed, pres., etc)? YES NO NA

12. Did all container labels and tags agree with custody papers? YES NO NA

13a. Were VOA vials received? YES NO NA

b. Was there any observable headspace present in any VOA vial? YES NO NA

14. Was there a Trip Blank in this cooler? YES NO NA If multiple coolers, sequence # 1

I certify that I unloaded the cooler and answered questions 7-14 (initial)

15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES NO NA

b. Did the bottle labels indicate that the correct preservatives were used? YES NO NA

16. Was residual chlorine present? YES NO NA

I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (initial)

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

18. Did you sign the custody papers in the appropriate place? YES NO NA

19. Were correct containers used for the analysis requested? YES NO NA

20. Was sufficient amount of sample sent in each container? YES NO NA

I certify that I entered this project into LIMS and answered questions 17-20 (initial)

I certify that I attached a label with the unique LIMS number to each container (initial)

21. Were there Non-Conformance issues at login? YES NO Was a PIPE generated? YES NO #

AGENCY DRAFT



10000 ...
Nashville, TN

COOLER RECEIPT FORM

Cooler Received/Opened On 11/19/2010 @ 8:30

1. Tracking # 5813 (last 4 digits, FedEx)

Courier: FedEx IR Gun ID Raynger

2. Temperature of rep. sample or temp blank when opened: 2.0 Degrees Celsius

3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES NO NA

4. Were custody seals on outside of cooler? YES...NO...NA

If yes, how many and where: 1 FRONT

5. Were the seals intact, signed, and dated correctly? YES...NO...NA

6. Were custody papers inside cooler? YES...NO...NA

I certify that I opened the cooler and answered questions 1-6 (initial) JH

7. Were custody seals on containers: YES NO and Intact YES...NO...NA

Were these signed and dated correctly? YES...NO...NA

8. Packing mat'l used? Bubblewrap Plastic bag Peanuts Vermiculite Foam Insert Paper Other None

9. Cooling process: Ice Ice-pack Ice (direct contact) Dry ice Other None

10. Did all containers arrive in good condition (unbroken)? YES...NO...NA

11. Were all container labels complete (#, date, signed, pres., etc)? YES...NO...NA

12. Did all container labels and tags agree with custody papers? YES...NO...NA

13a. Were VOA vials received? YES...NO...NA

b. Was there any observable headspace present in any VOA vial? YES...NO...NA

14. Was there a Trip Blank in this cooler? YES...NO...NA If multiple coolers, sequence # 2

I certify that I unloaded the cooler and answered questions 7-14 (initial) [Signature]

15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES...NO...NA

b. Did the bottle labels indicate that the correct preservatives were used YES...NO...NA

16. Was residual chlorine present? YES...NO...NA

I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (initial) [Signature]

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

18. Did you sign the custody papers in the appropriate place? YES...NO...NA

19. Were correct containers used for the analysis requested? YES...NO...NA

20. Was sufficient amount of sample sent in each container? YES...NO...NA

I certify that I entered this project into LIMS and answered questions 17-20 (initial) [Signature]

I certify that I attached a label with the unique LIMS number to each container (initial) [Signature]

21. Were there Non-Conformance issues at login? YES...NO... Was a PIPE generated? YES...NO...#

Lage, Gail

From: Vigoren, Leah R [Leah.Vigoren@amec.com]
Sent: Friday, November 19, 2010 1:39 PM
To: Lage, Gail
Cc: Klingensmith, Leah
Subject: RE: Everett Terminal

See below.

From: Lage, Gail [mailto:Gail.Lage@testamericainc.com]
Sent: Friday, November 19, 2010 11:21 AM
To: Leah; Vigoren, Leah R
Cc: Klingensmith, Leah
Subject: Everett Terminal

Leah,

For the Alkalinity, method 310.1 was changed to SM2320 by the EPA; therefore we will be reporting SM2320.

Manganese – do you need total or dissolved. - *lab filter*

Nitrate/sulfate – please confirm you want method 300 on all Yes

Please confirm that all are level IV. All samples Level IV.

Also, please let me know which samples need EDC, EDB, and hexane. Samples MWA1 and MWA2.

Lastly, please note which samples you do or do not need the nitrate, sulfate, manganese, alkalinity, and methane run on. Please run natural attenuation parameters on samples MWA5, MWA2, MWA3, MW19, MW11, MW40R.

2295-01
2295-02
2333-01
2333-02
2333-03

Thanks

Gail A. Lage
Program Manager

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

2960 Foster Creighton Drive
Nashville, TN 37204
Tel 615.301.5741 / Fax 615.726.3404
www.testamericainc.com

Please let us know if we met your expectations by rating the service you received from TestAmerica on this project by visiting our website at: [Project Feedback](#)

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December 06, 2010 1:53:04PM

Client: AMEC Earth & Environmental (13993)
600 University Street, Suite 1020
Seattle, WA 98101
Attn: Leah Vigoren

Work Order: NTK2295
Project Name: Everett Terminal(46108) - AMEC
Project Nbr: [none]
P/O Nbr:
Date Received: 11/19/10

SAMPLE IDENTIFICATION	LAB NUMBER	COLLECTION DATE AND TIME
MWA5-111710	NTK2295-01	11/17/10 10:45
MWA6-111710	NTK2295-02	11/17/10 12:20
MWA4-111710	NTK2295-03	11/17/10 14:20
MWA2-111710	NTK2295-04	11/17/10 16:15
DUP-1-111710	NTK2295-05	11/17/10 00:01
Trip Blank 1	NTK2295-06	11/17/10 00:01
Trip Blank 2	NTK2295-07	11/17/10 00:01
Trip Blank 3	NTK2295-08	11/17/10 00:01

An executed copy of the chain of custody, the project quality control data, and the sample receipt form are also included as an addendum to this report. If you have any questions relating to this analytical report, please contact your Laboratory Project Manager at 1-800-765-0980. Any opinions, if expressed, are outside the scope of the Laboratory's accreditation.

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Additional Laboratory Comments:

Due to laboratory error, the hexane analysis was not performed within hold time for sample MWA2-111710(NTK2295-04).
Washington Certification Number: C1712

The Chain(s) of Custody, 5 pages, are included and are an integral part of this report.

These results relate only to the items tested. This report shall not be reproduced except in full and with permission of the laboratory.

All solids results are reported in wet weight unless specifically stated.

Estimated uncertainty is available upon request.

This report has been electronically signed.

Report Approved By:



Leah R. Klingensmith

Senior Project Management

Client AMEC Earth & Environmental (13993)
600 University Street, Suite 1020
Seattle, WA 98101
Attn Leah Vigoren

Work Order: NTK2295
Project Name: Everett Terminal(46108) - AMEC
Project Number: [none]
Received: 11/19/10 08:30

ANALYTICAL REPORT

Analyte	Result	Flag	Units	MDL	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
Sample ID: NTK2295-01 (MWA5-111710 - Ground Water) Sampled: 11/17/10 10:45									
General Chemistry Parameters									
Alkalinity, Total (CaCO3)	756		mg/L	1.40	10.0	1	11/28/10 02:32	SM2320 B	10K5425
Nitrate as N	ND	HT3	mg/L	0.0100	0.100	1	11/19/10 12:52	EPA 300.0	10K3859
Sulfate	0.804	J	mg/L	0.110	1.00	1	11/19/10 12:52	EPA 300.0	10K3859
Methane, Ethane, and Ethene by GC									
Methane	10100		ug/L	300	520	20	11/29/10 18:06	RSK 175	10K5196
Surr: Acetylene (70-122%)	*	Z3				20	11/29/10 18:06	RSK 175	10K5196
Dissolved Metals by Method 6020									
Lead	0.0900	J	ug/L	0.0900	2.00	1	12/02/10 11:52	SW846 6020	10K4615
Manganese	968		ug/L	1.00	25.0	5	12/02/10 13:01	SW846 6020	10K4615
Volatile Organic Compounds by EPA Method 8260B									
Benzene	ND		ug/L	0.170	0.500	1	11/24/10 07:33	SW846 8260B	10K4348
Ethylbenzene	ND		ug/L	0.170	0.500	1	11/24/10 07:33	SW846 8260B	10K4348
Methyl tert-Butyl Ether	ND		ug/L	0.170	0.500	1	11/24/10 07:33	SW846 8260B	10K4348
Toluene	ND		ug/L	0.170	0.500	1	11/24/10 07:33	SW846 8260B	10K4348
Xylenes, total	ND		ug/L	0.390	0.500	1	11/24/10 07:33	SW846 8260B	10K4348
Surr: 1,2-Dichloroethane-d4 (63-140%)	105 %					1	11/24/10 07:33	SW846 8260B	10K4348
Surr: Dibromofluoromethane (73-131%)	104 %					1	11/24/10 07:33	SW846 8260B	10K4348
Surr: Toluene-d8 (80-120%)	96 %					1	11/24/10 07:33	SW846 8260B	10K4348
Surr: 4-Bromofluorobenzene (79-125%)	90 %					1	11/24/10 07:33	SW846 8260B	10K4348
Polyaromatic Hydrocarbons by EPA 8270D SIM									
Acenaphthene	1.17		ug/L	0.0280	0.100	1	11/24/10 20:27	SW846 8270D SIM	10K4025
Acenaphthylene	ND		ug/L	0.0250	0.100	1	11/24/10 20:27	SW846 8270D SIM	10K4025
Anthracene	ND		ug/L	0.0310	0.100	1	11/24/10 20:27	SW846 8270D SIM	10K4025
Benzo (a) anthracene	ND		ug/L	0.0180	0.100	1	11/24/10 20:27	SW846 8270D SIM	10K4025
Benzo (a) pyrene	ND		ug/L	0.0320	0.100	1	11/24/10 20:27	SW846 8270D SIM	10K4025
Benzo (b) fluoranthene	ND		ug/L	0.0260	0.100	1	11/24/10 20:27	SW846 8270D SIM	10K4025
Benzo (g,h,i) perylene	ND		ug/L	0.0240	0.100	1	11/24/10 20:27	SW846 8270D SIM	10K4025
Benzo (k) fluoranthene	ND		ug/L	0.0400	0.100	1	11/24/10 20:27	SW846 8270D SIM	10K4025
Chrysene	ND		ug/L	0.0350	0.100	1	11/24/10 20:27	SW846 8270D SIM	10K4025
Dibenz (a,h) anthracene	ND		ug/L	0.0240	0.100	1	11/24/10 20:27	SW846 8270D SIM	10K4025
Fluoranthene	0.0500	J	ug/L	0.0340	0.100	1	11/24/10 20:27	SW846 8270D SIM	10K4025
Fluorene	ND		ug/L	0.0250	0.100	1	11/24/10 20:27	SW846 8270D SIM	10K4025
Indeno (1,2,3-cd) pyrene	ND		ug/L	0.0280	0.100	1	11/24/10 20:27	SW846 8270D SIM	10K4025
1-Methylnaphthalene	ND		ug/L	0.0220	0.100	1	11/24/10 20:27	SW846 8270D SIM	10K4025
2-Methylnaphthalene	ND		ug/L	0.0340	0.100	1	11/24/10 20:27	SW846 8270D SIM	10K4025
Naphthalene	ND		ug/L	0.0250	0.100	1	11/24/10 20:27	SW846 8270D SIM	10K4025
Phenanthrene	0.110		ug/L	0.0630	0.100	1	11/24/10 20:27	SW846 8270D SIM	10K4025
Pyrene	ND		ug/L	0.0250	0.100	1	11/24/10 20:27	SW846 8270D SIM	10K4025
Surr: Nitrobenzene-d5 (27-120%)	47 %					1	11/24/10 20:27	SW846 8270D SIM	10K4025
Surr: 2-Fluorobiphenyl (29-120%)	55 %					1	11/24/10 20:27	SW846 8270D SIM	10K4025
Surr: Terphenyl-d14 (13-120%)	53 %					1	11/24/10 20:27	SW846 8270D SIM	10K4025

Client AMEC Earth & Environmental (13993)
600 University Street, Suite 1020
Seattle, WA 98101
Attn Leah Vigoren

Work Order: NTK2295
Project Name: Everett Terminal(46108) - AMEC
Project Number: [none]
Received: 11/19/10 08:30

ANALYTICAL REPORT

Analyte	Result	Flag	Units	MDL	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
Sample ID: NTK2295-01 (MWA5-111710 - Ground Water) - cont. Sampled: 11/17/10 10:45									
Purgeable Petroleum Hydrocarbons									
GRO (C4-C12) NW	ND	L	ug/L	33.0	100	1	11/24/10 20:44	NWTPH-Gx	10K4953
<i>Surr: a,a,a-Trifluorotoluene (50-150%)</i>	94 %					1	11/24/10 20:44	NWTPH-Gx	10K4953
Extractable Petroleum Hydrocarbons with Silica Gel Treatment									
Diesel	1250	B1, QP7	ug/L	9.80	98.0	1	11/29/10 22:17	NWTPH-Dx	10K5251
Motor Oil	32.8	B, J	ug/L	9.80	98.0	1	11/29/10 22:17	NWTPH-Dx	10K5251
<i>Surr: o-Terphenyl (50-150%)</i>	38 %	ZX				1	11/29/10 22:17	NWTPH-Dx	10K5251
Sample ID: NTK2295-02 (MWA6-111710 - Ground Water) Sampled: 11/17/10 12:20									
Dissolved Metals by Method 6020									
Lead	0.110	J	ug/L	0.0900	2.00	1	12/02/10 11:57	SW846 6020	10K4615
Volatile Organic Compounds by EPA Method 8260B									
Benzene	ND		ug/L	0.170	0.500	1	11/24/10 07:59	SW846 8260B	10K4348
Ethylbenzene	ND		ug/L	0.170	0.500	1	11/24/10 07:59	SW846 8260B	10K4348
Methyl tert-Butyl Ether	ND		ug/L	0.170	0.500	1	11/24/10 07:59	SW846 8260B	10K4348
Toluene	ND		ug/L	0.170	0.500	1	11/24/10 07:59	SW846 8260B	10K4348
Xylenes, total	ND		ug/L	0.390	0.500	1	11/24/10 07:59	SW846 8260B	10K4348
<i>Surr: 1,2-Dichloroethane-d4 (63-140%)</i>	107 %					1	11/24/10 07:59	SW846 8260B	10K4348
<i>Surr: Dibromofluoromethane (73-131%)</i>	103 %					1	11/24/10 07:59	SW846 8260B	10K4348
<i>Surr: Toluene-d8 (80-120%)</i>	96 %					1	11/24/10 07:59	SW846 8260B	10K4348
<i>Surr: 4-Bromofluorobenzene (79-125%)</i>	91 %					1	11/24/10 07:59	SW846 8260B	10K4348
Polyaromatic Hydrocarbons by EPA 8270D SIM									
Acenaphthene	0.130		ug/L	0.0280	0.100	1	11/24/10 20:48	SW846 8270D SIM	10K4025
Acenaphthylene	ND		ug/L	0.0250	0.100	1	11/24/10 20:48	SW846 8270D SIM	10K4025
Anthracene	ND		ug/L	0.0310	0.100	1	11/24/10 20:48	SW846 8270D SIM	10K4025
Benzo (a) anthracene	ND		ug/L	0.0180	0.100	1	11/24/10 20:48	SW846 8270D SIM	10K4025
Benzo (a) pyrene	ND		ug/L	0.0320	0.100	1	11/24/10 20:48	SW846 8270D SIM	10K4025
Benzo (b) fluoranthene	ND		ug/L	0.0260	0.100	1	11/24/10 20:48	SW846 8270D SIM	10K4025
Benzo (g,h,i) perylene	ND		ug/L	0.0240	0.100	1	11/24/10 20:48	SW846 8270D SIM	10K4025
Benzo (k) fluoranthene	ND		ug/L	0.0400	0.100	1	11/24/10 20:48	SW846 8270D SIM	10K4025
Chrysene	ND		ug/L	0.0350	0.100	1	11/24/10 20:48	SW846 8270D SIM	10K4025
Dibenz (a,h) anthracene	ND		ug/L	0.0240	0.100	1	11/24/10 20:48	SW846 8270D SIM	10K4025
Fluoranthene	ND		ug/L	0.0340	0.100	1	11/24/10 20:48	SW846 8270D SIM	10K4025
Fluorene	0.0400	J	ug/L	0.0250	0.100	1	11/24/10 20:48	SW846 8270D SIM	10K4025
Indeno (1,2,3-cd) pyrene	ND		ug/L	0.0280	0.100	1	11/24/10 20:48	SW846 8270D SIM	10K4025
1-Methylnaphthalene	ND		ug/L	0.0220	0.100	1	11/24/10 20:48	SW846 8270D SIM	10K4025
2-Methylnaphthalene	ND		ug/L	0.0340	0.100	1	11/24/10 20:48	SW846 8270D SIM	10K4025
Naphthalene	ND		ug/L	0.0250	0.100	1	11/24/10 20:48	SW846 8270D SIM	10K4025
Phenanthrene	0.0900	J	ug/L	0.0630	0.100	1	11/24/10 20:48	SW846 8270D SIM	10K4025
Pyrene	ND		ug/L	0.0250	0.100	1	11/24/10 20:48	SW846 8270D SIM	10K4025
<i>Surr: Nitrobenzene-d5 (27-120%)</i>	11 %					1	11/24/10 20:48	SW846 8270D SIM	10K4025
<i>Surr: 2-Fluorobiphenyl (29-120%)</i>	17 %					1	11/24/10 20:48	SW846 8270D SIM	10K4025
<i>Surr: Terphenyl-d14 (13-120%)</i>	18 %					1	11/24/10 20:48	SW846 8270D SIM	10K4025

Client AMEC Earth & Environmental (13993)
600 University Street, Suite 1020
Seattle, WA 98101
Attn Leah Vigoren

Work Order: NTK2295
Project Name: Everett Terminal(46108) - AMEC
Project Number: [none]
Received: 11/19/10 08:30

ANALYTICAL REPORT

Analyte	Result	Flag	Units	MDL	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
Sample ID: NTK2295-02 (MWA6-111710 - Ground Water) - cont. Sampled: 11/17/10 12:20									
Purgeable Petroleum Hydrocarbons									
GRO (C4-C12) NW	ND	L	ug/L	33.0	100	1	11/24/10 21:14	NWTPH-Gx	10K4953
<i>Surr: a,a,a-Trifluorotoluene (50-150%)</i>	<i>94 %</i>					<i>1</i>	<i>11/24/10 21:14</i>	<i>NWTPH-Gx</i>	<i>10K4953</i>
Extractable Petroleum Hydrocarbons with Silica Gel Treatment									
Diesel	796	B1, QP7	ug/L	9.62	96.2	1	11/29/10 22:33	NWTPH-Dx	10K5251
Motor Oil	94.3	B, J	ug/L	9.62	96.2	1	11/29/10 22:33	NWTPH-Dx	10K5251
<i>Surr: o-Terphenyl (50-150%)</i>	<i>77 %</i>					<i>1</i>	<i>11/29/10 22:33</i>	<i>NWTPH-Dx</i>	<i>10K5251</i>
Sample ID: NTK2295-03 (MWA4-111710 - Ground Water) Sampled: 11/17/10 14:20									
Dissolved Metals by Method 6020									
Lead	ND		ug/L	9.00	200	100	12/02/10 13:04	SW846 6020	10K4615
Volatile Organic Compounds by EPA Method 8260B									
Benzene	ND	PV	ug/L	0.170	0.500	1	11/24/10 08:26	SW846 8260B	10K4348
Ethylbenzene	ND	PV	ug/L	0.170	0.500	1	11/24/10 08:26	SW846 8260B	10K4348
Methyl tert-Butyl Ether	ND	PV	ug/L	0.170	0.500	1	11/24/10 08:26	SW846 8260B	10K4348
Toluene	ND	PV	ug/L	0.170	0.500	1	11/24/10 08:26	SW846 8260B	10K4348
Xylenes, total	ND	PV	ug/L	0.390	0.500	1	11/24/10 08:26	SW846 8260B	10K4348
<i>Surr: 1,2-Dichloroethane-d4 (63-140%)</i>	<i>107 %</i>					<i>1</i>	<i>11/24/10 08:26</i>	<i>SW846 8260B</i>	<i>10K4348</i>
<i>Surr: Dibromofluoromethane (73-131%)</i>	<i>103 %</i>					<i>1</i>	<i>11/24/10 08:26</i>	<i>SW846 8260B</i>	<i>10K4348</i>
<i>Surr: Toluene-d8 (80-120%)</i>	<i>96 %</i>					<i>1</i>	<i>11/24/10 08:26</i>	<i>SW846 8260B</i>	<i>10K4348</i>
<i>Surr: 4-Bromofluorobenzene (79-125%)</i>	<i>94 %</i>					<i>1</i>	<i>11/24/10 08:26</i>	<i>SW846 8260B</i>	<i>10K4348</i>
Polyaromatic Hydrocarbons by EPA 8270D SIM									
Acenaphthene	2.46		ug/L	0.0280	0.100	1	11/24/10 21:10	SW846 8270D SIM	10K4025
Acenaphthylene	ND		ug/L	0.0250	0.100	1	11/24/10 21:10	SW846 8270D SIM	10K4025
Anthracene	0.130		ug/L	0.0310	0.100	1	11/24/10 21:10	SW846 8270D SIM	10K4025
Benzo (a) anthracene	ND		ug/L	0.0180	0.100	1	11/24/10 21:10	SW846 8270D SIM	10K4025
Benzo (a) pyrene	ND		ug/L	0.0320	0.100	1	11/24/10 21:10	SW846 8270D SIM	10K4025
Benzo (b) fluoranthene	ND		ug/L	0.0260	0.100	1	11/24/10 21:10	SW846 8270D SIM	10K4025
Benzo (g,h,i) perylene	ND		ug/L	0.0240	0.100	1	11/24/10 21:10	SW846 8270D SIM	10K4025
Benzo (k) fluoranthene	ND		ug/L	0.0400	0.100	1	11/24/10 21:10	SW846 8270D SIM	10K4025
Chrysene	ND		ug/L	0.0350	0.100	1	11/24/10 21:10	SW846 8270D SIM	10K4025
Dibenz (a,h) anthracene	ND		ug/L	0.0240	0.100	1	11/24/10 21:10	SW846 8270D SIM	10K4025
Fluoranthene	0.190		ug/L	0.0340	0.100	1	11/24/10 21:10	SW846 8270D SIM	10K4025
Fluorene	1.13		ug/L	0.0250	0.100	1	11/24/10 21:10	SW846 8270D SIM	10K4025
Indeno (1,2,3-cd) pyrene	ND		ug/L	0.0280	0.100	1	11/24/10 21:10	SW846 8270D SIM	10K4025
1-Methylnaphthalene	0.430		ug/L	0.0220	0.100	1	11/24/10 21:10	SW846 8270D SIM	10K4025
2-Methylnaphthalene	0.460		ug/L	0.0340	0.100	1	11/24/10 21:10	SW846 8270D SIM	10K4025
Naphthalene	1.71		ug/L	0.0250	0.100	1	11/24/10 21:10	SW846 8270D SIM	10K4025
Phenanthrene	1.56		ug/L	0.0630	0.100	1	11/24/10 21:10	SW846 8270D SIM	10K4025
Pyrene	0.110		ug/L	0.0250	0.100	1	11/24/10 21:10	SW846 8270D SIM	10K4025
<i>Surr: Nitrobenzene-d5 (27-120%)</i>	<i>58 %</i>					<i>1</i>	<i>11/24/10 21:10</i>	<i>SW846 8270D SIM</i>	<i>10K4025</i>
<i>Surr: 2-Fluorobiphenyl (29-120%)</i>	<i>54 %</i>					<i>1</i>	<i>11/24/10 21:10</i>	<i>SW846 8270D SIM</i>	<i>10K4025</i>

Client AMEC Earth & Environmental (13993)
600 University Street, Suite 1020
Seattle, WA 98101
Attn Leah Vigoren

Work Order: NTK2295
Project Name: Everett Terminal(46108) - AMEC
Project Number: [none]
Received: 11/19/10 08:30

ANALYTICAL REPORT

Analyte	Result	Flag	Units	MDL	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
Sample ID: NTK2295-03 (MWA4-111710 - Ground Water) - cont. Sampled: 11/17/10 14:20									
Polyaromatic Hydrocarbons by EPA 8270D SIM - cont.									
Surr: Terphenyl-d14 (13-120%)	58 %					1	11/24/10 21:10	SW846 8270D SIM	10K4025
Purgeable Petroleum Hydrocarbons									
GRO (C4-C12) NW	ND	L, PV	ug/L	33.0	100	1	11/24/10 21:44	NWTPH-Gx	10K4953
Surr: a,a,a-Trifluorotoluene (50-150%)	93 %					1	11/24/10 21:44	NWTPH-Gx	10K4953
Extractable Petroleum Hydrocarbons with Silica Gel Treatment									
Diesel	585	B1, QP7	ug/L	9.71	97.1	1	11/29/10 22:50	NWTPH-Dx	10K5251
Motor Oil	396	B1, QP7	ug/L	9.71	97.1	1	11/29/10 22:50	NWTPH-Dx	10K5251
Surr: o-Terphenyl (50-150%)	82 %					1	11/29/10 22:50	NWTPH-Dx	10K5251
Sample ID: NTK2295-04 (MWA2-111710 - Ground Water) Sampled: 11/17/10 16:15									
General Chemistry Parameters									
Alkalinity, Total (CaCO3)	279		mg/L	1.40	10.0	1	11/28/10 02:52	SM2320 B	10K5425
Nitrate as N	ND		mg/L	0.0100	0.100	1	11/19/10 14:54	EPA 300.0	10K3859
Sulfate	1.31		mg/L	0.110	1.00	1	11/19/10 14:54	EPA 300.0	10K3859
Methane, Ethane, and Ethene by GC									
Methane	9940		ug/L	300	520	20	11/29/10 18:11	RSK 175	10K5196
Surr: Acetylene (70-122%)	*	Z3				20	11/29/10 18:11	RSK 175	10K5196
Dissolved Metals by Method 6020									
Lead	ND		ug/L	0.0900	2.00	1	12/02/10 12:04	SW846 6020	10K4615
Manganese	2160		ug/L	2.00	50.0	10	12/02/10 13:16	SW846 6020	10K4615
Volatile Organic Compounds by EPA Method 8260B									
Benzene	ND		ug/L	0.170	0.500	1	11/24/10 08:53	SW846 8260B	10K4348
Hexane	ND	H, L	ug/L	0.220	2.00	1	12/03/10 21:18	SW846 8260B	10L0710
Ethylbenzene	ND		ug/L	0.170	0.500	1	11/24/10 08:53	SW846 8260B	10K4348
Methyl tert-Butyl Ether	ND		ug/L	0.170	0.500	1	11/24/10 08:53	SW846 8260B	10K4348
Toluene	ND		ug/L	0.170	0.500	1	11/24/10 08:53	SW846 8260B	10K4348
Xylenes, total	ND		ug/L	0.390	0.500	1	11/24/10 08:53	SW846 8260B	10K4348
1,2-Dibromoethane (EDB)	ND		ug/L	0.180	0.500	1	11/24/10 08:53	SW846 8260B	10K4348
1,2-Dichloroethane	ND		ug/L	0.410	0.500	1	11/24/10 08:53	SW846 8260B	10K4348
Surr: 1,2-Dichloroethane-d4 (63-140%)	118 %					1	12/03/10 21:18	SW846 8260B	10L0710
Surr: 1,2-Dichloroethane-d4 (63-140%)	105 %					1	11/24/10 08:53	SW846 8260B	10K4348
Surr: Dibromofluoromethane (73-131%)	105 %					1	11/24/10 08:53	SW846 8260B	10K4348
Surr: Dibromofluoromethane (73-131%)	114 %					1	12/03/10 21:18	SW846 8260B	10L0710
Surr: Toluene-d8 (80-120%)	97 %					1	11/24/10 08:53	SW846 8260B	10K4348
Surr: Toluene-d8 (80-120%)	96 %					1	12/03/10 21:18	SW846 8260B	10L0710
Surr: 4-Bromofluorobenzene (79-125%)	90 %					1	11/24/10 08:53	SW846 8260B	10K4348
Surr: 4-Bromofluorobenzene (79-125%)	98 %					1	12/03/10 21:18	SW846 8260B	10L0710
Polyaromatic Hydrocarbons by EPA 8270D SIM									
Acenaphthene	1.06		ug/L	0.0267	0.0952	1	11/24/10 21:31	SW846 8270D SIM	10K4025

Client AMEC Earth & Environmental (13993)
 600 University Street, Suite 1020
 Seattle, WA 98101
 Attn Leah Vigoren

Work Order: NTK2295
 Project Name: Everett Terminal(46108) - AMEC
 Project Number: [none]
 Received: 11/19/10 08:30

ANALYTICAL REPORT

Analyte	Result	Flag	Units	MDL	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
Sample ID: NTK2295-04 (MWA2-111710 - Ground Water) - cont. Sampled: 11/17/10 16:15									
Polyaromatic Hydrocarbons by EPA 8270D SIM - cont.									
Acenaphthylene	0.0476	J	ug/L	0.0238	0.0952	1	11/24/10 21:31	SW846 8270D SIM	10K4025
Anthracene	ND		ug/L	0.0295	0.0952	1	11/24/10 21:31	SW846 8270D SIM	10K4025
Benzo (a) anthracene	ND		ug/L	0.0171	0.0952	1	11/24/10 21:31	SW846 8270D SIM	10K4025
Benzo (a) pyrene	ND		ug/L	0.0305	0.0952	1	11/24/10 21:31	SW846 8270D SIM	10K4025
Benzo (b) fluoranthene	ND		ug/L	0.0248	0.0952	1	11/24/10 21:31	SW846 8270D SIM	10K4025
Benzo (g,h,i) perylene	ND		ug/L	0.0229	0.0952	1	11/24/10 21:31	SW846 8270D SIM	10K4025
Benzo (k) fluoranthene	ND		ug/L	0.0381	0.0952	1	11/24/10 21:31	SW846 8270D SIM	10K4025
Chrysene	ND		ug/L	0.0333	0.0952	1	11/24/10 21:31	SW846 8270D SIM	10K4025
Dibenz (a,h) anthracene	ND		ug/L	0.0229	0.0952	1	11/24/10 21:31	SW846 8270D SIM	10K4025
Fluoranthene	ND		ug/L	0.0324	0.0952	1	11/24/10 21:31	SW846 8270D SIM	10K4025
Fluorene	0.314		ug/L	0.0238	0.0952	1	11/24/10 21:31	SW846 8270D SIM	10K4025
Indeno (1,2,3-cd) pyrene	ND		ug/L	0.0267	0.0952	1	11/24/10 21:31	SW846 8270D SIM	10K4025
1-Methylnaphthalene	0.286		ug/L	0.0210	0.0952	1	11/24/10 21:31	SW846 8270D SIM	10K4025
2-Methylnaphthalene	ND		ug/L	0.0324	0.0952	1	11/24/10 21:31	SW846 8270D SIM	10K4025
Naphthalene	0.229		ug/L	0.0238	0.0952	1	11/24/10 21:31	SW846 8270D SIM	10K4025
Phenanthrene	0.105		ug/L	0.0600	0.0952	1	11/24/10 21:31	SW846 8270D SIM	10K4025
Pyrene	ND		ug/L	0.0238	0.0952	1	11/24/10 21:31	SW846 8270D SIM	10K4025
Surr: Nitrobenzene-d5 (27-120%)	53 %					1	11/24/10 21:31	SW846 8270D SIM	10K4025
Surr: 2-Fluorobiphenyl (29-120%)	49 %					1	11/24/10 21:31	SW846 8270D SIM	10K4025
Surr: Terphenyl-d14 (13-120%)	52 %					1	11/24/10 21:31	SW846 8270D SIM	10K4025
Purgeable Petroleum Hydrocarbons									
GRO (C4-C12) NW	171		ug/L	33.0	100	1	11/29/10 14:34	NWTPH-Gx	10K5576
Surr: a,a,a-Trifluorotoluene (50-150%)	94 %					1	11/29/10 14:34	NWTPH-Gx	10K5576
Extractable Petroleum Hydrocarbons with Silica Gel Treatment									
Diesel	2010	B1, QP7	ug/L	9.71	97.1	1	11/29/10 23:06	NWTPH-Dx	10K5251
Motor Oil	48.5	B, J	ug/L	9.71	97.1	1	11/29/10 23:06	NWTPH-Dx	10K5251
Surr: o-Terphenyl (50-150%)	74 %					1	11/29/10 23:06	NWTPH-Dx	10K5251
Sample ID: NTK2295-05 (DUP-1-111710 - Ground Water) Sampled: 11/17/10 00:01									
General Chemistry Parameters									
Alkalinity, Total (CaCO3)	288		mg/L	1.40	10.0	1	11/23/10 18:35	SM2320 B	10K4475
Nitrate as N	ND	HT3	mg/L	0.0100	0.100	1	11/19/10 15:14	EPA 300.0	10K3859
Sulfate	0.902	J	mg/L	0.110	1.00	1	11/19/10 15:14	EPA 300.0	10K3859
Methane, Ethane, and Ethene by GC									
Methane	9660		ug/L	300	520	20	11/29/10 18:19	RSK 175	10K5196
Surr: Acetylene (70-122%)	*	Z3				20	11/29/10 18:19	RSK 175	10K5196
Dissolved Metals by Method 6020									
Lead	ND		ug/L	0.0900	2.00	1	12/02/10 12:08	SW846 6020	10K4615
Manganese	2270		ug/L	2.00	50.0	10	12/02/10 13:20	SW846 6020	10K4615
Volatile Organic Compounds by EPA Method 8260B									
Benzene	ND		ug/L	0.170	0.500	1	11/24/10 09:19	SW846 8260B	10K4348

Client AMEC Earth & Environmental (13993)
600 University Street, Suite 1020
Seattle, WA 98101
Attn Leah Vigoren

Work Order: NTK2295
Project Name: Everett Terminal(46108) - AMEC
Project Number: [none]
Received: 11/19/10 08:30

ANALYTICAL REPORT

Analyte	Result	Flag	Units	MDL	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
Sample ID: NTK2295-05 (DUP-1-111710 - Ground Water) - cont. Sampled: 11/17/10 00:01									
Volatile Organic Compounds by EPA Method 8260B - cont.									
Ethylbenzene	ND		ug/L	0.170	0.500	1	11/24/10 09:19	SW846 8260B	10K4348
Methyl tert-Butyl Ether	ND		ug/L	0.170	0.500	1	11/24/10 09:19	SW846 8260B	10K4348
Toluene	ND		ug/L	0.170	0.500	1	11/24/10 09:19	SW846 8260B	10K4348
Xylenes, total	ND		ug/L	0.390	0.500	1	11/24/10 09:19	SW846 8260B	10K4348
<i>Surr: 1,2-Dichloroethane-d4 (63-140%)</i>	<i>106 %</i>					<i>1</i>	<i>11/24/10 09:19</i>	<i>SW846 8260B</i>	<i>10K4348</i>
<i>Surr: Dibromofluoromethane (73-131%)</i>	<i>105 %</i>					<i>1</i>	<i>11/24/10 09:19</i>	<i>SW846 8260B</i>	<i>10K4348</i>
<i>Surr: Toluene-d8 (80-120%)</i>	<i>96 %</i>					<i>1</i>	<i>11/24/10 09:19</i>	<i>SW846 8260B</i>	<i>10K4348</i>
<i>Surr: 4-Bromofluorobenzene (79-125%)</i>	<i>92 %</i>					<i>1</i>	<i>11/24/10 09:19</i>	<i>SW846 8260B</i>	<i>10K4348</i>
Polyaromatic Hydrocarbons by EPA 8270D SIM									
Acenaphthene	1.36		ug/L	0.0267	0.0952	1	11/24/10 21:52	SW846 8270D SIM	10K4025
Acenaphthylene	0.0762	J	ug/L	0.0238	0.0952	1	11/24/10 21:52	SW846 8270D SIM	10K4025
Anthracene	ND		ug/L	0.0295	0.0952	1	11/24/10 21:52	SW846 8270D SIM	10K4025
Benzo (a) anthracene	ND		ug/L	0.0171	0.0952	1	11/24/10 21:52	SW846 8270D SIM	10K4025
Benzo (a) pyrene	ND		ug/L	0.0305	0.0952	1	11/24/10 21:52	SW846 8270D SIM	10K4025
Benzo (b) fluoranthene	ND		ug/L	0.0248	0.0952	1	11/24/10 21:52	SW846 8270D SIM	10K4025
Benzo (g,h,i) perylene	ND		ug/L	0.0229	0.0952	1	11/24/10 21:52	SW846 8270D SIM	10K4025
Benzo (k) fluoranthene	ND		ug/L	0.0381	0.0952	1	11/24/10 21:52	SW846 8270D SIM	10K4025
Chrysene	ND		ug/L	0.0333	0.0952	1	11/24/10 21:52	SW846 8270D SIM	10K4025
Dibenz (a,h) anthracene	ND		ug/L	0.0229	0.0952	1	11/24/10 21:52	SW846 8270D SIM	10K4025
Fluoranthene	ND		ug/L	0.0324	0.0952	1	11/24/10 21:52	SW846 8270D SIM	10K4025
Fluorene	0.419		ug/L	0.0238	0.0952	1	11/24/10 21:52	SW846 8270D SIM	10K4025
Indeno (1,2,3-cd) pyrene	ND		ug/L	0.0267	0.0952	1	11/24/10 21:52	SW846 8270D SIM	10K4025
1-Methylnaphthalene	0.495		ug/L	0.0210	0.0952	1	11/24/10 21:52	SW846 8270D SIM	10K4025
2-Methylnaphthalene	ND		ug/L	0.0324	0.0952	1	11/24/10 21:52	SW846 8270D SIM	10K4025
Naphthalene	0.314		ug/L	0.0238	0.0952	1	11/24/10 21:52	SW846 8270D SIM	10K4025
Phenanthrene	0.0952		ug/L	0.0600	0.0952	1	11/24/10 21:52	SW846 8270D SIM	10K4025
Pyrene	ND		ug/L	0.0238	0.0952	1	11/24/10 21:52	SW846 8270D SIM	10K4025
<i>Surr: Nitrobenzene-d5 (27-120%)</i>	<i>66 %</i>					<i>1</i>	<i>11/24/10 21:52</i>	<i>SW846 8270D SIM</i>	<i>10K4025</i>
<i>Surr: 2-Fluorobiphenyl (29-120%)</i>	<i>62 %</i>					<i>1</i>	<i>11/24/10 21:52</i>	<i>SW846 8270D SIM</i>	<i>10K4025</i>
<i>Surr: Terphenyl-d14 (13-120%)</i>	<i>64 %</i>					<i>1</i>	<i>11/24/10 21:52</i>	<i>SW846 8270D SIM</i>	<i>10K4025</i>
Purgeable Petroleum Hydrocarbons									
GRO (C4-C12) NW	196		ug/L	33.0	100	1	11/29/10 15:05	NWTPH-Gx	10K5576
<i>Surr: a,a,a-Trifluorotoluene (50-150%)</i>	<i>95 %</i>					<i>1</i>	<i>11/29/10 15:05</i>	<i>NWTPH-Gx</i>	<i>10K5576</i>
Extractable Petroleum Hydrocarbons with Silica Gel Treatment									
Diesel	1880	B1, QP7	ug/L	9.52	95.2	1	11/29/10 23:23	NWTPH-Dx	10K5251
Motor Oil	20.4	B, J	ug/L	9.52	95.2	1	11/29/10 23:23	NWTPH-Dx	10K5251
<i>Surr: o-Terphenyl (50-150%)</i>	<i>77 %</i>					<i>1</i>	<i>11/29/10 23:23</i>	<i>NWTPH-Dx</i>	<i>10K5251</i>
Sample ID: NTK2295-06 (Trip Blank 1 - Water) Sampled: 11/17/10 00:01									
Volatile Organic Compounds by EPA Method 8260B									
Benzene	ND		ug/L	0.170	0.500	1	11/24/10 01:19	SW846 8260B	10K4348
Ethylbenzene	ND		ug/L	0.170	0.500	1	11/24/10 01:19	SW846 8260B	10K4348

Client AMEC Earth & Environmental (13993)
600 University Street, Suite 1020
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Work Order: NTK2295
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ANALYTICAL REPORT

Analyte	Result	Flag	Units	MDL	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
Sample ID: NTK2295-06 (Trip Blank 1 - Water) - cont. Sampled: 11/17/10 00:01									
Volatile Organic Compounds by EPA Method 8260B - cont.									
Methyl tert-Butyl Ether	ND		ug/L	0.170	0.500	1	11/24/10 01:19	SW846 8260B	10K4348
Toluene	ND		ug/L	0.170	0.500	1	11/24/10 01:19	SW846 8260B	10K4348
Xylenes, total	ND		ug/L	0.390	0.500	1	11/24/10 01:19	SW846 8260B	10K4348
<i>Surr: 1,2-Dichloroethane-d4 (63-140%)</i>	<i>107 %</i>					<i>1</i>	<i>11/24/10 01:19</i>	<i>SW846 8260B</i>	<i>10K4348</i>
<i>Surr: Dibromofluoromethane (73-131%)</i>	<i>104 %</i>					<i>1</i>	<i>11/24/10 01:19</i>	<i>SW846 8260B</i>	<i>10K4348</i>
<i>Surr: Toluene-d8 (80-120%)</i>	<i>96 %</i>					<i>1</i>	<i>11/24/10 01:19</i>	<i>SW846 8260B</i>	<i>10K4348</i>
<i>Surr: 4-Bromofluorobenzene (79-125%)</i>	<i>92 %</i>					<i>1</i>	<i>11/24/10 01:19</i>	<i>SW846 8260B</i>	<i>10K4348</i>
Purgeable Petroleum Hydrocarbons									
GRO (C4-C12) NW	ND	L	ug/L	33.0	100	1	11/24/10 15:43	NWTPH-Gx	10K4953
<i>Surr: a,a,a-Trifluorotoluene (50-150%)</i>	<i>92 %</i>					<i>1</i>	<i>11/24/10 15:43</i>	<i>NWTPH-Gx</i>	<i>10K4953</i>
Sample ID: NTK2295-07 (Trip Blank 2 - Water) Sampled: 11/17/10 00:01									
Volatile Organic Compounds by EPA Method 8260B									
Benzene	ND		ug/L	0.170	0.500	1	11/24/10 01:46	SW846 8260B	10K4348
Ethylbenzene	ND		ug/L	0.170	0.500	1	11/24/10 01:46	SW846 8260B	10K4348
Methyl tert-Butyl Ether	ND		ug/L	0.170	0.500	1	11/24/10 01:46	SW846 8260B	10K4348
Toluene	ND		ug/L	0.170	0.500	1	11/24/10 01:46	SW846 8260B	10K4348
Xylenes, total	ND		ug/L	0.390	0.500	1	11/24/10 01:46	SW846 8260B	10K4348
<i>Surr: 1,2-Dichloroethane-d4 (63-140%)</i>	<i>106 %</i>					<i>1</i>	<i>11/24/10 01:46</i>	<i>SW846 8260B</i>	<i>10K4348</i>
<i>Surr: Dibromofluoromethane (73-131%)</i>	<i>103 %</i>					<i>1</i>	<i>11/24/10 01:46</i>	<i>SW846 8260B</i>	<i>10K4348</i>
<i>Surr: Toluene-d8 (80-120%)</i>	<i>97 %</i>					<i>1</i>	<i>11/24/10 01:46</i>	<i>SW846 8260B</i>	<i>10K4348</i>
<i>Surr: 4-Bromofluorobenzene (79-125%)</i>	<i>91 %</i>					<i>1</i>	<i>11/24/10 01:46</i>	<i>SW846 8260B</i>	<i>10K4348</i>
Purgeable Petroleum Hydrocarbons									
GRO (C4-C12) NW	ND	L	ug/L	33.0	100	1	11/24/10 16:13	NWTPH-Gx	10K4953
<i>Surr: a,a,a-Trifluorotoluene (50-150%)</i>	<i>91 %</i>					<i>1</i>	<i>11/24/10 16:13</i>	<i>NWTPH-Gx</i>	<i>10K4953</i>
Sample ID: NTK2295-08 (Trip Blank 3 - Water) Sampled: 11/17/10 00:01									
Volatile Organic Compounds by EPA Method 8260B									
Benzene	ND		ug/L	0.170	0.500	1	11/24/10 02:13	SW846 8260B	10K4348
Ethylbenzene	ND		ug/L	0.170	0.500	1	11/24/10 02:13	SW846 8260B	10K4348
Methyl tert-Butyl Ether	ND		ug/L	0.170	0.500	1	11/24/10 02:13	SW846 8260B	10K4348
Toluene	ND		ug/L	0.170	0.500	1	11/24/10 02:13	SW846 8260B	10K4348
Xylenes, total	ND		ug/L	0.390	0.500	1	11/24/10 02:13	SW846 8260B	10K4348
<i>Surr: 1,2-Dichloroethane-d4 (63-140%)</i>	<i>106 %</i>					<i>1</i>	<i>11/24/10 02:13</i>	<i>SW846 8260B</i>	<i>10K4348</i>
<i>Surr: Dibromofluoromethane (73-131%)</i>	<i>103 %</i>					<i>1</i>	<i>11/24/10 02:13</i>	<i>SW846 8260B</i>	<i>10K4348</i>
<i>Surr: Toluene-d8 (80-120%)</i>	<i>97 %</i>					<i>1</i>	<i>11/24/10 02:13</i>	<i>SW846 8260B</i>	<i>10K4348</i>
<i>Surr: 4-Bromofluorobenzene (79-125%)</i>	<i>90 %</i>					<i>1</i>	<i>11/24/10 02:13</i>	<i>SW846 8260B</i>	<i>10K4348</i>
Purgeable Petroleum Hydrocarbons									
GRO (C4-C12) NW	ND	L	ug/L	33.0	100	1	11/24/10 16:43	NWTPH-Gx	10K4953
<i>Surr: a,a,a-Trifluorotoluene (50-150%)</i>	<i>93 %</i>					<i>1</i>	<i>11/24/10 16:43</i>	<i>NWTPH-Gx</i>	<i>10K4953</i>

Client AMEC Earth & Environmental (13993)
 600 University Street, Suite 1020
 Seattle, WA 98101
 Attn Leah Vigoren

Work Order: NTK2295
 Project Name: Everett Terminal(46108) - AMEC
 Project Number: [none]
 Received: 11/19/10 08:30

SAMPLE EXTRACTION DATA

Parameter	Batch	Lab Number	Wt/Vol Extracted	Extracted Vol	Date	Analyst	Extraction Method
Dissolved Metals by Method 6020							
SW846 6020	10K4615	NTK2295-01	50.00	50.00	11/30/10 16:46	MET	EPA 3010A / 6020 D
SW846 6020	10K4615	NTK2295-01	50.00	50.00	11/30/10 16:46	MET	EPA 3010A / 6020 D
SW846 6020	10K4615	NTK2295-01RE1	50.00	50.00	11/30/10 16:46	MET	EPA 3010A / 6020 D
SW846 6020	10K4615	NTK2295-02	50.00	50.00	11/30/10 16:46	MET	EPA 3010A / 6020 D
SW846 6020	10K4615	NTK2295-03	50.00	50.00	11/30/10 16:46	MET	EPA 3010A / 6020 D
SW846 6020	10K4615	NTK2295-03RE1	50.00	50.00	11/30/10 16:46	MET	EPA 3010A / 6020 D
SW846 6020	10K4615	NTK2295-04	50.00	50.00	11/30/10 16:46	MET	EPA 3010A / 6020 D
SW846 6020	10K4615	NTK2295-04	50.00	50.00	11/30/10 16:46	MET	EPA 3010A / 6020 D
SW846 6020	10K4615	NTK2295-04RE1	50.00	50.00	11/30/10 16:46	MET	EPA 3010A / 6020 D
SW846 6020	10K4615	NTK2295-05	50.00	50.00	11/30/10 16:46	MET	EPA 3010A / 6020 D
SW846 6020	10K4615	NTK2295-05	50.00	50.00	11/30/10 16:46	MET	EPA 3010A / 6020 D
SW846 6020	10K4615	NTK2295-05RE1	50.00	50.00	11/30/10 16:46	MET	EPA 3010A / 6020 D
Extractable Petroleum Hydrocarbons with Silica Gel Treatment							
NWTPH-Dx	10K5251	NTK2295-01	1020.00	1.00	11/27/10 16:50	MAH	EPA 3510C
NWTPH-Dx	10L0042	NTK2295-01RE1	1050.00	1.00	12/01/10 10:25	DXP	EPA 3510C
NWTPH-Dx	10K5251	NTK2295-02	1040.00	1.00	11/27/10 16:50	MAH	EPA 3510C
NWTPH-Dx	10K5251	NTK2295-03	1030.00	1.00	11/27/10 16:50	MAH	EPA 3510C
NWTPH-Dx	10K5251	NTK2295-04	1030.00	1.00	11/27/10 16:50	MAH	EPA 3510C
NWTPH-Dx	10K5251	NTK2295-05	1050.00	1.00	11/27/10 16:50	MAH	EPA 3510C
Polyaromatic Hydrocarbons by EPA 8270D SIM							
SW846 8270D SIM	10K4025	NTK2295-01	1000.00	1.00	11/22/10 14:35	MAH	EPA 3510C
SW846 8270D SIM	10K4025	NTK2295-02	1000.00	1.00	11/22/10 14:35	MAH	EPA 3510C
SW846 8270D SIM	10K4025	NTK2295-03	1000.00	1.00	11/22/10 14:35	MAH	EPA 3510C
SW846 8270D SIM	10K4025	NTK2295-04	1050.00	1.00	11/22/10 14:35	MAH	EPA 3510C
SW846 8270D SIM	10K4025	NTK2295-05	1050.00	1.00	11/22/10 14:35	MAH	EPA 3510C

Client AMEC Earth & Environmental (13993)
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Work Order: NTK2295
 Project Name: Everett Terminal(46108) - AMEC
 Project Number: [none]
 Received: 11/19/10 08:30

PROJECT QUALITY CONTROL DATA
Blank

Analyte	Blank Value	Q	Units	Q.C. Batch	Lab Number	Analyzed Date/Time
General Chemistry Parameters						
10K3859-BLK1						
Nitrate as N	<0.0100		mg/L	10K3859	10K3859-BLK1	11/19/10 10:10
Sulfate	<0.110		mg/L	10K3859	10K3859-BLK1	11/19/10 10:10
10K4475-BLK1						
Alkalinity, Total (CaCO3)	<1.40		mg/L	10K4475	10K4475-BLK1	11/23/10 15:59
10K5425-BLK1						
Alkalinity, Total (CaCO3)	<1.40		mg/L	10K5425	10K5425-BLK1	11/28/10 00:10
Methane, Ethane, and Ethene by GC						
10K5196-BLK1						
Methane	<15.0		ug/L	10K5196	10K5196-BLK1	11/29/10 17:24
Surrogate: Acetylene	109%			10K5196	10K5196-BLK1	11/29/10 17:24
Dissolved Metals by Method 6020						
10K4615-BLK1						
Lead	<0.0900		ug/L	10K4615	10K4615-BLK1	12/02/10 11:48
Manganese	<0.200		ug/L	10K4615	10K4615-BLK1	12/02/10 11:48
Volatile Organic Compounds by EPA Method 8260B						
10K4348-BLK1						
Benzene	<0.170		ug/L	10K4348	10K4348-BLK1	11/24/10 00:53
Ethylbenzene	<0.170		ug/L	10K4348	10K4348-BLK1	11/24/10 00:53
Methyl tert-Butyl Ether	<0.170		ug/L	10K4348	10K4348-BLK1	11/24/10 00:53
Toluene	<0.170		ug/L	10K4348	10K4348-BLK1	11/24/10 00:53
Xylenes, total	<0.390		ug/L	10K4348	10K4348-BLK1	11/24/10 00:53
1,2-Dibromoethane (EDB)	<0.180		ug/L	10K4348	10K4348-BLK1	11/24/10 00:53
1,2-Dichloroethane	<0.410		ug/L	10K4348	10K4348-BLK1	11/24/10 00:53
Surrogate: 1,2-Dichloroethane-d4	106%			10K4348	10K4348-BLK1	11/24/10 00:53
Surrogate: Dibromofluoromethane	103%			10K4348	10K4348-BLK1	11/24/10 00:53
Surrogate: Toluene-d8	95%			10K4348	10K4348-BLK1	11/24/10 00:53
Surrogate: 4-Bromofluorobenzene	91%			10K4348	10K4348-BLK1	11/24/10 00:53
10L0710-BLK1						
Hexane	<0.220		ug/L	10L0710	10L0710-BLK1	12/03/10 13:27
Surrogate: 1,2-Dichloroethane-d4	121%			10L0710	10L0710-BLK1	12/03/10 13:27
Surrogate: Dibromofluoromethane	116%			10L0710	10L0710-BLK1	12/03/10 13:27
Surrogate: Toluene-d8	95%			10L0710	10L0710-BLK1	12/03/10 13:27
Surrogate: 4-Bromofluorobenzene	96%			10L0710	10L0710-BLK1	12/03/10 13:27

Polyaromatic Hydrocarbons by EPA 8270D SIM

10K4025-BLK1

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Work Order: NTK2295
 Project Name: Everett Terminal(46108) - AMEC
 Project Number: [none]
 Received: 11/19/10 08:30

PROJECT QUALITY CONTROL DATA
Blank - Cont.

Analyte	Blank Value	Q	Units	Q.C. Batch	Lab Number	Analyzed Date/Time
Polyaromatic Hydrocarbons by EPA 8270D SIM						
10K4025-BLK1						
Acenaphthene	<0.0280		ug/L	10K4025	10K4025-BLK1	11/24/10 16:31
Acenaphthylene	<0.0250		ug/L	10K4025	10K4025-BLK1	11/24/10 16:31
Anthracene	<0.0310		ug/L	10K4025	10K4025-BLK1	11/24/10 16:31
Benzo (a) anthracene	<0.0180		ug/L	10K4025	10K4025-BLK1	11/24/10 16:31
Benzo (a) pyrene	<0.0320		ug/L	10K4025	10K4025-BLK1	11/24/10 16:31
Benzo (b) fluoranthene	<0.0260		ug/L	10K4025	10K4025-BLK1	11/24/10 16:31
Benzo (g,h,i) perylene	<0.0240		ug/L	10K4025	10K4025-BLK1	11/24/10 16:31
Benzo (k) fluoranthene	<0.0400		ug/L	10K4025	10K4025-BLK1	11/24/10 16:31
Chrysene	<0.0350		ug/L	10K4025	10K4025-BLK1	11/24/10 16:31
Dibenz (a,h) anthracene	<0.0240		ug/L	10K4025	10K4025-BLK1	11/24/10 16:31
Fluoranthene	<0.0340		ug/L	10K4025	10K4025-BLK1	11/24/10 16:31
Fluorene	<0.0250		ug/L	10K4025	10K4025-BLK1	11/24/10 16:31
Indeno (1,2,3-cd) pyrene	<0.0280		ug/L	10K4025	10K4025-BLK1	11/24/10 16:31
1-Methylnaphthalene	<0.0220		ug/L	10K4025	10K4025-BLK1	11/24/10 16:31
2-Methylnaphthalene	<0.0340		ug/L	10K4025	10K4025-BLK1	11/24/10 16:31
Naphthalene	<0.0250		ug/L	10K4025	10K4025-BLK1	11/24/10 16:31
Phenanthrene	<0.0630		ug/L	10K4025	10K4025-BLK1	11/24/10 16:31
Pyrene	<0.0250		ug/L	10K4025	10K4025-BLK1	11/24/10 16:31
Surrogate: Nitrobenzene-d5	34%			10K4025	10K4025-BLK1	11/24/10 16:31
Surrogate: 2-Fluorobiphenyl	60%			10K4025	10K4025-BLK1	11/24/10 16:31
Surrogate: Terphenyl-d14	67%			10K4025	10K4025-BLK1	11/24/10 16:31
Purgeable Petroleum Hydrocarbons						
10K4953-BLK1						
GRO (C4-C12) NW	<33.0		ug/L	10K4953	10K4953-BLK1	11/24/10 15:12
Surrogate: a,a,a-Trifluorotoluene	94%			10K4953	10K4953-BLK1	11/24/10 15:12
10K5576-BLK1						
GRO (C4-C12) NW	<33.0		ug/L	10K5576	10K5576-BLK1	11/29/10 13:26
Surrogate: a,a,a-Trifluorotoluene	90%			10K5576	10K5576-BLK1	11/29/10 13:26
Extractable Petroleum Hydrocarbons with Silica Gel Treatment						
10K5251-BLK1						
Diesel	30.3	J	ug/L	10K5251	10K5251-BLK1	11/29/10 21:44
Motor Oil	14.1	J	ug/L	10K5251	10K5251-BLK1	11/29/10 21:44
Surrogate: o-Terphenyl	80%			10K5251	10K5251-BLK1	11/29/10 21:44

Client AMEC Earth & Environmental (13993)
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 Attn Leah Vigoren

Work Order: NTK2295
 Project Name: Everett Terminal(46108) - AMEC
 Project Number: [none]
 Received: 11/19/10 08:30

PROJECT QUALITY CONTROL DATA

Duplicate

Analyte	Orig. Val.	Duplicate	Q	Units	RPD	Limit	Batch	Sample Duplicated	% Rec.	Analyzed Date/Time
General Chemistry Parameters										
10K4475-DUP1										
Alkalinity, Total (CaCO3)	278	277		mg/L	0.2	20	10K4475	NTK1563-01		11/23/10 16:22
Purgeable Petroleum Hydrocarbons										
10K4953-DUP1										
GRO (C4-C12) NW	ND	<33.0		ug/L		37	10K4953	NTK2295-01		11/29/10 13:56
<i>Surrogate: a,a,a-Trifluorotoluene</i>		18.0		ug/L			10K4953	NTK2295-01	90%	11/29/10 13:56
10K5576-DUP1										
GRO (C4-C12) NW	ND	<33.0		ug/L		37	10K5576	NTK2612-04		11/30/10 13:39
<i>Surrogate: a,a,a-Trifluorotoluene</i>		17.7		ug/L			10K5576	NTK2612-04	88%	11/30/10 13:39

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Work Order: NTK2295
 Project Name: Everett Terminal(46108) - AMEC
 Project Number: [none]
 Received: 11/19/10 08:30

PROJECT QUALITY CONTROL DATA LCS

Analyte	Known Val.	Analyzed Val	Q	Units	% Rec.	Target Range	Batch	Analyzed Date/Time
General Chemistry Parameters								
10K3859-BS1								
Nitrate as N	3.00	2.95		mg/L	98%	90 - 110	10K3859	11/19/10 10:30
Sulfate	15.0	14.6		mg/L	97%	90 - 110	10K3859	11/19/10 10:30
10K4475-BS1								
Alkalinity, Total (CaCO3)	100	93.7		mg/L	94%	90 - 110	10K4475	11/23/10 16:15
10K5425-BS1								
Alkalinity, Total (CaCO3)	100	97.0		mg/L	97%	90 - 110	10K5425	11/28/10 01:09
Methane, Ethane, and Ethene by GC								
10K5196-BS1								
Methane	278	293		ug/L	105%	80 - 120	10K5196	11/29/10 17:27
<i>Surrogate: Acetylene</i>	450	367			82%	70 - 122	10K5196	11/29/10 17:27
Dissolved Metals by Method 6020								
10K4615-BS1								
Lead	100	97.0		ug/L	97%	80 - 120	10K4615	12/02/10 11:41
Manganese	100	96.5		ug/L	96%	80 - 120	10K4615	12/02/10 11:41
Volatile Organic Compounds by EPA Method 8260B								
10K4348-BS1								
Benzene	50.0	49.5		ug/L	99%	80 - 121	10K4348	11/23/10 23:32
Ethylbenzene	50.0	51.2		ug/L	102%	78 - 133	10K4348	11/23/10 23:32
Methyl tert-Butyl Ether	50.0	53.5		ug/L	107%	76 - 120	10K4348	11/23/10 23:32
Toluene	50.0	49.4		ug/L	99%	78 - 125	10K4348	11/23/10 23:32
Xylenes, total	150	156		ug/L	104%	78 - 134	10K4348	11/23/10 23:32
1,2-Dibromoethane (EDB)	50.0	52.8		ug/L	106%	80 - 125	10K4348	11/23/10 23:32
1,2-Dichloroethane	50.0	55.6		ug/L	111%	69 - 136	10K4348	11/23/10 23:32
<i>Surrogate: 1,2-Dichloroethane-d4</i>	50.0	54.8			110%	63 - 140	10K4348	11/23/10 23:32
<i>Surrogate: Dibromofluoromethane</i>	50.0	51.5			103%	73 - 131	10K4348	11/23/10 23:32
<i>Surrogate: Toluene-d8</i>	50.0	47.9			96%	80 - 120	10K4348	11/23/10 23:32
<i>Surrogate: 4-Bromofluorobenzene</i>	50.0	45.2			90%	79 - 125	10K4348	11/23/10 23:32
10L0710-BS1								
Hexane	50.0	65.7	L1	ug/L	131%	70 - 130	10L0710	12/03/10 12:06
<i>Surrogate: 1,2-Dichloroethane-d4</i>	25.0	27.3			109%	63 - 140	10L0710	12/03/10 12:06
<i>Surrogate: Dibromofluoromethane</i>	25.0	27.0			108%	73 - 131	10L0710	12/03/10 12:06
<i>Surrogate: Toluene-d8</i>	25.0	22.4			89%	80 - 120	10L0710	12/03/10 12:06
<i>Surrogate: 4-Bromofluorobenzene</i>	25.0	24.4			98%	79 - 125	10L0710	12/03/10 12:06

Polyaromatic Hydrocarbons by EPA 8270D SIM

10K4025-BS1

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Work Order: NTK2295
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 Project Number: [none]
 Received: 11/19/10 08:30

PROJECT QUALITY CONTROL DATA
LCS - Cont.

Analyte	Known Val.	Analyzed Val	Q	Units	% Rec.	Target Range	Batch	Analyzed Date/Time
Polyaromatic Hydrocarbons by EPA 8270D SIM								
10K4025-BS1								
Acenaphthene	1.00	0.590	MNR1	ug/L	59%	43 - 122	10K4025	11/24/10 16:52
Acenaphthylene	1.00	0.540	MNR1	ug/L	54%	43 - 129	10K4025	11/24/10 16:52
Anthracene	1.00	0.590	MNR1	ug/L	59%	50 - 138	10K4025	11/24/10 16:52
Benzo (a) anthracene	1.00	0.590	MNR1	ug/L	59%	50 - 135	10K4025	11/24/10 16:52
Benzo (a) pyrene	1.00	0.610	MNR1	ug/L	61%	46 - 136	10K4025	11/24/10 16:52
Benzo (b) fluoranthene	1.00	0.620	MNR1	ug/L	62%	37 - 147	10K4025	11/24/10 16:52
Benzo (g,h,i) perylene	1.00	0.740	MNR1	ug/L	74%	30 - 145	10K4025	11/24/10 16:52
Benzo (k) fluoranthene	1.00	0.740	MNR1	ug/L	74%	47 - 135	10K4025	11/24/10 16:52
Chrysene	1.00	0.710	MNR1	ug/L	71%	47 - 138	10K4025	11/24/10 16:52
Dibenz (a,h) anthracene	1.00	0.630	MNR1	ug/L	63%	36 - 144	10K4025	11/24/10 16:52
Fluoranthene	1.00	0.600	MNR1	ug/L	60%	51 - 139	10K4025	11/24/10 16:52
Fluorene	1.00	0.590	MNR1	ug/L	59%	47 - 128	10K4025	11/24/10 16:52
Indeno (1,2,3-cd) pyrene	1.00	0.620	MNR1	ug/L	62%	32 - 142	10K4025	11/24/10 16:52
1-Methylnaphthalene	1.00	0.510	MNR1	ug/L	51%	37 - 126	10K4025	11/24/10 16:52
2-Methylnaphthalene	1.00	0.550	MNR1	ug/L	55%	41 - 121	10K4025	11/24/10 16:52
Naphthalene	1.00	0.590	MNR1	ug/L	59%	38 - 120	10K4025	11/24/10 16:52
Phenanthrene	1.00	0.690	MNR1	ug/L	69%	45 - 133	10K4025	11/24/10 16:52
Pyrene	1.00	0.650	MNR1	ug/L	65%	50 - 146	10K4025	11/24/10 16:52
Surrogate: Nitrobenzene-d5	1.00	0.330			33%	27 - 120	10K4025	11/24/10 16:52
Surrogate: 2-Fluorobiphenyl	1.00	0.570			57%	29 - 120	10K4025	11/24/10 16:52
Surrogate: Terphenyl-d14	1.00	0.620			62%	13 - 120	10K4025	11/24/10 16:52
Purgeable Petroleum Hydrocarbons								
10K4953-BS1								
GRO (C4-C12) NW	1000	1390	L1	ug/L	139%	70 - 130	10K4953	11/25/10 01:45
Surrogate: a,a,a-Trifluorotoluene	20.0	21.9			110%	50 - 150	10K4953	11/25/10 01:45
10K5576-BS1								
GRO (C4-C12) NW	1000	1120		ug/L	112%	70 - 130	10K5576	11/30/10 00:37
Surrogate: a,a,a-Trifluorotoluene	20.0	23.3			117%	50 - 150	10K5576	11/30/10 00:37
Extractable Petroleum Hydrocarbons with Silica Gel Treatment								
10K5251-BS1								
Diesel	1000	818	MNR1	ug/L	82%	57 - 132	10K5251	11/29/10 22:00
Surrogate: o-Terphenyl	20.0	14.6			73%	50 - 150	10K5251	11/29/10 22:00

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Work Order: NTK2295
 Project Name: Everett Terminal(46108) - AMEC
 Project Number: [none]
 Received: 11/19/10 08:30

PROJECT QUALITY CONTROL DATA

LCS Dup

Analyte	Orig. Val.	Duplicate	Q	Units	Spike Conc	% Rec.	Target Range	RPD	Limit	Batch	Sample Duplicated	Analyzed Date/Time
Methane, Ethane, and Ethene by GC												
10K5196-BSD1												
Methane		290		ug/L	278	104%	80 - 120	1	20	10K5196		11/29/10 17:30
<i>Surrogate: Acetylene</i>		332		ug/L	450	74%	70 - 122			10K5196		11/29/10 17:30
Dissolved Metals by Method 6020												
10K4615-BSD1												
Lead		97.3		ug/L	100	97%	80 - 120	0.4	20	10K4615		12/02/10 11:45
Manganese		93.2		ug/L	100	93%	80 - 120	3	20	10K4615		12/02/10 11:45
Purgeable Petroleum Hydrocarbons												
10K4953-BSD1												
GRO (C4-C12) NW		1020		ug/L	1000	102%	70 - 130	31	37	10K4953		11/25/10 02:15
<i>Surrogate: a,a,a-Trifluorotoluene</i>		21.4		ug/L	20.0	107%	50 - 150			10K4953		11/25/10 02:15
10K5576-BSD1												
GRO (C4-C12) NW		1120		ug/L	1000	112%	70 - 130	0.1	37	10K5576		11/30/10 01:07
<i>Surrogate: a,a,a-Trifluorotoluene</i>		24.6		ug/L	20.0	123%	50 - 150			10K5576		11/30/10 01:07

Client AMEC Earth & Environmental (13993)
 600 University Street, Suite 1020
 Seattle, WA 98101
 Attn Leah Vigoren

Work Order: NTK2295
 Project Name: Everett Terminal(46108) - AMEC
 Project Number: [none]
 Received: 11/19/10 08:30

PROJECT QUALITY CONTROL DATA Matrix Spike

Analyte	Orig. Val.	MS Val	Q	Units	Spike Conc	% Rec.	Target Range	Batch	Sample Spiked	Analyzed Date/Time
General Chemistry Parameters										
10K3859-MS1										
Nitrate as N	4.34	7.17		mg/L	3.00	94%	80 - 120	10K3859	NTK2164-01	11/19/10 11:10
Sulfate	73.5	83.7	M8	mg/L	15.0	68%	80 - 120	10K3859	NTK2164-01	11/19/10 11:10
10K4475-MS1										
Alkalinity, Total (CaCO3)	123	201	M8	mg/L	100	78%	80 - 120	10K4475	NTK2432-06	11/23/10 16:30
10K5425-MS1										
Alkalinity, Total (CaCO3)	147	231		mg/L	100	84%	80 - 120	10K5425	NTK2483-03	11/28/10 01:41
Methane, Ethane, and Ethene by GC										
10K5196-MS1										
Methane	994	916	E, M8	ug/L	278	-28%	46 - 133	10K5196	NTK2915-01	11/30/10 10:33
<i>Surrogate: Acetylene</i>		451		ug/L	450	100%	70 - 122	10K5196	NTK2915-01	11/30/10 10:33
10K5196-MS2										
Methane	915	965	E, M8	ug/L	278	18%	46 - 133	10K5196	NTK2483-03	11/30/10 10:38
<i>Surrogate: Acetylene</i>		435		ug/L	450	97%	70 - 122	10K5196	NTK2483-03	11/30/10 10:38
Volatile Organic Compounds by EPA Method 8260B										
10K4348-MS1										
Benzene	124	673		ug/L	500	110%	65 - 151	10K4348	NTK2072-08RE 1	11/24/10 09:46
Ethylbenzene	15.4	585		ug/L	500	114%	68 - 157	10K4348	NTK2072-08RE 1	11/24/10 09:46
Methyl tert-Butyl Ether	280	874		ug/L	500	119%	56 - 152	10K4348	NTK2072-08RE 1	11/24/10 09:46
Toluene	6.20	557		ug/L	500	110%	61 - 153	10K4348	NTK2072-08RE 1	11/24/10 09:46
Xylenes, total	11.1	1750		ug/L	1500	116%	68 - 158	10K4348	NTK2072-08RE 1	11/24/10 09:46
1,2-Dibromoethane (EDB)	ND	581		ug/L	500	116%	80 - 132	10K4348	NTK2072-08RE 1	11/24/10 09:46
1,2-Dichloroethane	25.9	622		ug/L	500	119%	53 - 146	10K4348	NTK2072-08RE 1	11/24/10 09:46
<i>Surrogate: 1,2-Dichloroethane-d4</i>		55.1		ug/L	50.0	110%	63 - 140	10K4348	NTK2072-08RE 1	11/24/10 09:46
<i>Surrogate: Dibromofluoromethane</i>		51.0		ug/L	50.0	102%	73 - 131	10K4348	NTK2072-08RE 1	11/24/10 09:46
<i>Surrogate: Toluene-d8</i>		48.0		ug/L	50.0	96%	80 - 120	10K4348	NTK2072-08RE 1	11/24/10 09:46
<i>Surrogate: 4-Bromofluorobenzene</i>		46.3		ug/L	50.0	93%	79 - 125	10K4348	NTK2072-08RE 1	11/24/10 09:46

10L0710-MS1

Client AMEC Earth & Environmental (13993)
 600 University Street, Suite 1020
 Seattle, WA 98101
 Attn Leah Vigoren

Work Order: NTK2295
 Project Name: Everett Terminal(46108) - AMEC
 Project Number: [none]
 Received: 11/19/10 08:30

PROJECT QUALITY CONTROL DATA
Matrix Spike - Cont.

Analyte	Orig. Val.	MS Val	Q	Units	Spike Conc	% Rec.	Target Range	Batch	Sample Spiked	Analyzed Date/Time
Volatile Organic Compounds by EPA Method 8260B										
10L0710-MS1										
Hexane	ND	614		ug/L	500	123%	39 - 167	10L0710	NTK3126-01RE 1	12/03/10 22:12
<i>Surrogate: 1,2-Dichloroethane-d4</i>		28.7		ug/L	25.0	115%	63 - 140	10L0710	NTK3126-01RE 1	12/03/10 22:12
<i>Surrogate: Dibromofluoromethane</i>		27.7		ug/L	25.0	111%	73 - 131	10L0710	NTK3126-01RE 1	12/03/10 22:12
<i>Surrogate: Toluene-d8</i>		23.3		ug/L	25.0	93%	80 - 120	10L0710	NTK3126-01RE 1	12/03/10 22:12
<i>Surrogate: 4-Bromofluorobenzene</i>		25.3		ug/L	25.0	101%	79 - 125	10L0710	NTK3126-01RE 1	12/03/10 22:12
Purgeable Petroleum Hydrocarbons										
10K4953-MS1										
GRO (C4-C12) NW	324	1590		ug/L	1000	126%	58 - 139	10K4953	NTK2483-03	11/29/10 12:26
<i>Surrogate: a,a,a-Trifluorotoluene</i>		23.6		ug/L	20.0	118%	50 - 150	10K4953	NTK2483-03	11/29/10 12:26
10K5576-MS1										
GRO (C4-C12) NW	ND	886		ug/L	1000	89%	58 - 139	10K5576	NTK3040-01	11/30/10 14:09
<i>Surrogate: a,a,a-Trifluorotoluene</i>		21.8		ug/L	20.0	109%	50 - 150	10K5576	NTK3040-01	11/30/10 14:09

Client AMEC Earth & Environmental (13993)
 600 University Street, Suite 1020
 Seattle, WA 98101
 Attn Leah Vigoren

Work Order: NTK2295
 Project Name: Everett Terminal(46108) - AMEC
 Project Number: [none]
 Received: 11/19/10 08:30

PROJECT QUALITY CONTROL DATA Matrix Spike Dup

Analyte	Orig. Val.	Duplicate	Q	Units	Spike Conc	% Rec.	Target Range	RPD	Limit	Batch	Sample Duplicated	Analyzed Date/Time
Methane, Ethane, and Ethene by GC												
10K5196-MSD1												
Methane	994	921	E, M8	ug/L	278	-26%	46 - 133	0.5	20	10K5196	NTK2915-01	11/30/10 10:36
<i>Surrogate: Acetylene</i>		422		ug/L	450	94%	70 - 122			10K5196	NTK2915-01	11/30/10 10:36
10K5196-MSD2												
Methane	915	1040		ug/L	278	46%	46 - 133	8	20	10K5196	NTK2483-03	11/30/10 10:41
<i>Surrogate: Acetylene</i>		388		ug/L	450	86%	70 - 122			10K5196	NTK2483-03	11/30/10 10:41
Volatile Organic Compounds by EPA Method 8260B												
10K4348-MSD1												
Benzene	124	692		ug/L	500	114%	65 - 151	3	12	10K4348	NTK2072-08R E1	11/24/10 10:13
Ethylbenzene	15.4	601		ug/L	500	117%	68 - 157	3	12	10K4348	NTK2072-08R E1	11/24/10 10:13
Methyl tert-Butyl Ether	280	887		ug/L	500	121%	56 - 152	2	32	10K4348	NTK2072-08R E1	11/24/10 10:13
Toluene	6.20	572		ug/L	500	113%	61 - 153	3	35	10K4348	NTK2072-08R E1	11/24/10 10:13
Xylenes, total	11.1	1800		ug/L	1500	119%	68 - 158	2	18	10K4348	NTK2072-08R E1	11/24/10 10:13
1,2-Dibromoethane (EDB)	ND	588		ug/L	500	118%	80 - 132	1	21	10K4348	NTK2072-08R E1	11/24/10 10:13
1,2-Dichloroethane	25.9	631		ug/L	500	121%	53 - 146	1	26	10K4348	NTK2072-08R E1	11/24/10 10:13
<i>Surrogate: 1,2-Dichloroethane-d4</i>		55.9		ug/L	50.0	112%	63 - 140			10K4348	NTK2072-08R E1	11/24/10 10:13
<i>Surrogate: Dibromofluoromethane</i>		50.5		ug/L	50.0	101%	73 - 131			10K4348	NTK2072-08R E1	11/24/10 10:13
<i>Surrogate: Toluene-d8</i>		48.6		ug/L	50.0	97%	80 - 120			10K4348	NTK2072-08R E1	11/24/10 10:13
<i>Surrogate: 4-Bromofluorobenzene</i>		45.9		ug/L	50.0	92%	79 - 125			10K4348	NTK2072-08R E1	11/24/10 10:13
10L0710-MSD1												
Hexane	ND	649		ug/L	500	130%	39 - 167	6	13	10L0710	NTK3126-01R E1	12/03/10 22:39
<i>Surrogate: 1,2-Dichloroethane-d4</i>		30.1		ug/L	25.0	120%	63 - 140			10L0710	NTK3126-01R E1	12/03/10 22:39
<i>Surrogate: Dibromofluoromethane</i>		27.9		ug/L	25.0	112%	73 - 131			10L0710	NTK3126-01R E1	12/03/10 22:39
<i>Surrogate: Toluene-d8</i>		22.7		ug/L	25.0	91%	80 - 120			10L0710	NTK3126-01R E1	12/03/10 22:39
<i>Surrogate: 4-Bromofluorobenzene</i>		25.5		ug/L	25.0	102%	79 - 125			10L0710	NTK3126-01R E1	12/03/10 22:39
Purgeable Petroleum Hydrocarbons												
10K4953-MSD1												
GRO (C4-C12) NW	324	1500		ug/L	1000	118%	58 - 139	6	37	10K4953	NTK2483-03	11/29/10 12:56
<i>Surrogate: a,a,a-Trifluorotoluene</i>		23.7		ug/L	20.0	119%	50 - 150			10K4953	NTK2483-03	11/29/10 12:56

Client AMEC Earth & Environmental (13993)
 600 University Street, Suite 1020
 Seattle, WA 98101
 Attn Leah Vigoren

Work Order: NTK2295
 Project Name: Everett Terminal(46108) - AMEC
 Project Number: [none]
 Received: 11/19/10 08:30

PROJECT QUALITY CONTROL DATA

Matrix Spike Dup - Cont.

Analyte	Orig. Val.	Duplicate	Q	Units	Spike Conc	% Rec.	Target Range	RPD	Limit	Batch	Sample Duplicated	Analyzed Date/Time
Purgeable Petroleum Hydrocarbons												
10K5576-MSD1												
GRO (C4-C12) NW	ND	520	M8, R2	ug/L	1000	52%	58 - 139	52	37	10K5576	NTK3040-01	11/30/10 14:39
<i>Surrogate: a,a,a-Trifluorotoluene</i>		20.2		ug/L	20.0	101%	50 - 150			10K5576	NTK3040-01	11/30/10 14:39

Client AMEC Earth & Environmental (13993)
600 University Street, Suite 1020
Seattle, WA 98101
Attn Leah Vigoren

Work Order: NTK2295
Project Name: Everett Terminal(46108) - AMEC
Project Number: [none]
Received: 11/19/10 08:30

CERTIFICATION SUMMARY

TestAmerica Nashville

Method	Matrix	AIHA	Nelac	Washington
EPA 300.0	Water	N/A	X	X
NWTPH-Dx	Water	N/A		X
NWTPH-Gx	Water	N/A	X	X
RSK 175	Water	N/A	X	X
SM2320 B	Water		X	
SW846 6020	Water		X	X
SW846 8260B	Water	N/A	X	X
SW846 8270D SIM	Water		X	X

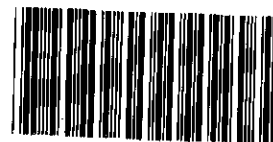
Client AMEC Earth & Environmental (13993)
600 University Street, Suite 1020
Seattle, WA 98101
Attn Leah Vigoren

Work Order: NTK2295
Project Name: Everett Terminal(46108) - AMEC
Project Number: [none]
Received: 11/19/10 08:30

DATA QUALIFIERS AND DEFINITIONS

- B** Analyte was detected in the associated Method Blank.
- B1** Analyte was detected in the associated method blank. Analyte concentration in the sample is greater than 10x the concentration found in the method blank.
- E** Concentration exceeds the calibration range and therefore result is semi-quantitative.
- H** Sample analysis performed past method-specified holding time.
- HT3** Sample received with insufficient holding time remaining for analysis to be performed within the method's holding time requirements.
- J** Analyte detected at a level less than the Reporting Limit (RL) and greater than or equal to the Method Detection Limit (MDL). Concentrations within this range are estimated.
- L** Laboratory Control Sample and/or Laboratory Control Sample Duplicate recovery was above the acceptance limits. Analyte not detected, data not impacted.
- L1** Laboratory Control Sample and/or Laboratory Control Sample Duplicate recovery was above acceptance limits.
- M8** The MS and/or MSD were below the acceptance limits. See Blank Spike (LCS).
- MNR1** There was no MS/MSD analyzed with this batch due to insufficient sample volume. See Blank Spike.
- PV** Acid preservation was indicated on the sample vial. However, a pH of <2 was not obtained.
- QP7** The hydrocarbon pattern most closely resembles a diesel product.
- R2** The RPD exceeded the acceptance limit.
- Z3** The sample required a dilution due to the nature of the sample matrix. Because of this dilution, the surrogate spike concentration in the sample was reduced to a level where the recovery calculation does not provide useful information.
- ZX** Due to sample matrix effects, the surrogate recovery was outside the acceptance limits.
- ND** Not detected at the reporting limit (or method detection limit if shown)

METHOD MODIFICATION NOTES



NTK2295

Cooler Received/Opened On 11/19/2010 @ 0830

1. Tracking # 5846 (last 4 digits, FedEx)

Courier: FedEx IR Gun ID 97460373

2. Temperature of rep. sample or temp blank when opened: 0.6 Degrees Celsius

3. If item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES NO...NA

4. Were custody seals on outside of cooler? YES...NO...NA

If yes, how many and where: 1 (Front)

5. Were the seals intact, signed, and dated correctly? YES...NO...NA

6. Were custody papers inside cooler? YES...NO...NA

I certify that I opened the cooler and answered questions 1-6 (initial)

7. Were custody seals on containers: YES NO and Intact YES...NO...NA

Were these signed and dated correctly? YES...NO...NA

8. Packing mat'l used? Bubblewrap Plastic bag Peanuts Vermiculite Foam Insert Paper Other None

9. Cooling process: Ice Ice-pack Ice (direct contact) Dry ice Other None

10. Did all containers arrive in good condition (unbroken)? YES...NO...NA

11. Were all container labels complete (#, date, signed, pres., etc)? YES...NO...NA

12. Did all container labels and tags agree with custody papers? YES...NO...NA

13a. Were VOA vials received? YES...NO...NA

b. Was there any observable headspace present in any VOA vial? YES...NO...NA

14. Was there a Trip Blank in this cooler? YES...NO...NA If multiple coolers, sequence # 1

I certify that I unloaded the cooler and answered questions 7-14 (initial)

15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES...NO...NA

b. Did the bottle labels indicate that the correct preservatives were used YES...NO...NA

16. Was residual chlorine present? YES...NO...NA

I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (initial)

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

18. Did you sign the custody papers in the appropriate place? YES...NO...NA

19. Were correct containers used for the analysis requested? YES...NO...NA

20. Was sufficient amount of sample sent in each container? YES...NO...NA

I certify that I entered this project into LIMS and answered questions 17-20 (initial)

I certify that I attached a label with the unique LIMS number to each container (initial)

21. Were there Non-Conformance issues at login? YES...NO Was a PIPE generated? YES...NO...#

COOLER RECEIPT FORM

Cooler Received/Opened On 11/19/2010 @ 08:30

1. Tracking # 5802 (last 4 digits, FedEx)

Courier: FEDEX IR Gun ID 96210146

2. Temperature of rep. sample or temp blank when opened: 0.2 Degrees Celsius

3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES (NO) NA

4. Were custody seals on outside of cooler? YES NO NA

If yes, how many and where: 1-Front

5. Were the seals intact, signed, and dated correctly? YES NO NA

6. Were custody papers inside cooler? YES NO NA

I certify that I opened the cooler and answered questions 1-6 (initial) P.H.

7. Were custody seals on containers: YES NO and Intact YES NO NA

Were these signed and dated correctly? YES NO NA

8. Packing mat'l used? Bubblewrap Plastic bag Peanuts Vermiculite Foam Insert Paper Other None

9. Cooling process: ICE Ice-pack Ice (direct contact) Dry ice Other None

10. Did all containers arrive in good condition (unbroken)? YES NO NA

11. Were all container labels complete (#, date, signed, pres., etc)? YES NO NA

12. Did all container labels and tags agree with custody papers? YES NO NA

13a. Were VOA vials received? YES NO NA

b. Was there any observable headspace present in any VOA vial? YES NO NA

14. Was there a Trip Blank in this cooler? YES NO NA If multiple coolers, sequence # 2

I certify that I unloaded the cooler and answered questions 7-14 (initial)

15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES NO NA

b. Did the bottle labels indicate that the correct preservatives were used? YES NO NA

16. Was residual chlorine present? YES NO NA

I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (initial)

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

18. Did you sign the custody papers in the appropriate place? YES NO NA

19. Were correct containers used for the analysis requested? YES NO NA

20. Was sufficient amount of sample sent in each container? YES NO NA

I certify that I entered this project into LIMS and answered questions 17-20 (initial)

I certify that I attached a label with the unique LIMS number to each container (initial)

21. Were there Non-Conformance issues at login? YES NO Was a PIPE generated? YES NO #

COOLER RECEIPT FORM

Cooler Received/Opened On 11/19/2010 @ 08:30

1. Tracking # 5835 (last 4 digits, FedEx)

Courier: FEDEX IR Gun ID 96210146

2. Temperature of rep. sample or temp blank when opened: 0.0 Degrees Celsius

3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES...NO...NA

4. Were custody seals on outside of cooler? YES...NO...NA

If yes, how many and where: 1-Front

5. Were the seals intact, signed, and dated correctly? YES...NO...NA

6. Were custody papers inside cooler? YES...NO...NA

I certify that I opened the cooler and answered questions 1-6 (initial) P.H.

7. Were custody seals on containers: YES NO and Intact YES...NO...NA

Were these signed and dated correctly? YES...NO...NA

8. Packing mat'l used? Bubblewrap Plastic bag Peanuts Vermiculite Foam Insert Paper Other None

9. Cooling process: Ice Ice-pack Ice (direct contact) Dry ice Other None

10. Did all containers arrive in good condition (unbroken)? YES...NO...NA

11. Were all container labels complete (#, date, signed, pres., etc)? YES...NO...NA

12. Did all container labels and tags agree with custody papers? YES...NO...NA

13a. Were VOA vials received? YES...NO...NA

b. Was there any observable headspace present in any VOA vial? YES...NO...NA

14. Was there a Trip Blank in this cooler? YES...NO...NA If multiple coolers, sequence # 3

I certify that I unloaded the cooler and answered questions 7-14 (initial)

15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES...NO...NA

b. Did the bottle labels indicate that the correct preservatives were used? YES...NO...NA

16. Was residual chlorine present? YES...NO...NA

I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (initial)

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

18. Did you sign the custody papers in the appropriate place? YES...NO...NA

19. Were correct containers used for the analysis requested? YES...NO...NA

20. Was sufficient amount of sample sent in each container? YES...NO...NA

I certify that I entered this project into LIMS and answered questions 17-20 (initial)

I certify that I attached a label with the unique LIMS number to each container (initial)

21. Were there Non-Conformance issues at login? YES...NO Was a PIPE generated? YES...NO...#

Lage, Gail

From: Vigoren, Leah R [Leah.Vigoren@amec.com]
Sent: Friday, November 19, 2010 1:39 PM
To: Lage, Gail
Cc: Klingensmith, Leah
Subject: RE: Everett Terminal

See below.

From: Lage, Gail [mailto:Gail.Lage@testamericainc.com]
Sent: Friday, November 19, 2010 11:21 AM
To: Leah; Vigoren, Leah R
Cc: Klingensmith, Leah
Subject: Everett Terminal

Leah,

For the Alkalinity, method 310.1 was changed to SM2320 by the EPA; therefore we will be reporting SM2320.

Manganese – do you need total or dissolved. - *lab filter*

Nitrate/sulfate – please confirm you want method 300 on all Yes

Please confirm that all are level IV. All samples Level IV.

Also, please let me know which samples need EDC, EDB, and hexane. Samples MWA1 and MWA2.

Lastly, please note which samples you do or do not need the nitrate, sulfate, manganese, alkalinity, and methane run on. Please run natural attenuation parameters on samples MWA5, MWA2, MWA3, MW19, MW11, MW40R.

2295-01
2295-02
2333-01
2333-02
2333-03

Thanks

Gail A. Lage
Program Manager

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

2960 Foster Creighton Drive
Nashville, TN 37204
Tel 615.301.5741 / Fax 615.726.3404
www.testamericainc.com

Please let us know if we met your expectations by rating the service you received from TestAmerica on this project by visiting our website at: [Project Feedback](#)

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December 08, 2010 10:33:44AM

Client: AMEC Earth & Environmental (13993)
600 University Street, Suite 1020
Seattle, WA 98101
Attn: Leah Vigoren

Work Order: NTK2483
Project Name: Everett Terminal(46108) - AMEC
Project Nbr: [none]
P/O Nbr:
Date Received: 11/20/10

SAMPLE IDENTIFICATION	LAB NUMBER	COLLECTION DATE AND TIME
W6-111810	NTK2483-01	11/18/10 16:15
MW40R-111810	NTK2483-02	11/18/10 18:45
MW19-111810	NTK2483-03	11/18/10 20:35
Trip Blank	NTK2483-04	11/18/10 00:01

An executed copy of the chain of custody, the project quality control data, and the sample receipt form are also included as an addendum to this report. If you have any questions relating to this analytical report, please contact your Laboratory Project Manager at 1-800-765-0980. Any opinions, if expressed, are outside the scope of the Laboratory's accreditation.

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Washington Certification Number: C1712

The Chain(s) of Custody, 8 pages, are included and are an integral part of this report.

These results relate only to the items tested. This report shall not be reproduced except in full and with permission of the laboratory.

All solids results are reported in wet weight unless specifically stated.

Estimated uncertainty is available upon request.

This report has been electronically signed.

Report Approved By:



Leah R. Klingensmith

Senior Project Management

Client AMEC Earth & Environmental (13993)
 600 University Street, Suite 1020
 Seattle, WA 98101
 Attn Leah Vigoren

Work Order: NTK2483
 Project Name: Everett Terminal(46108) - AMEC
 Project Number: [none]
 Received: 11/20/10 08:30

ANALYTICAL REPORT

Analyte	Result	Flag	Units	MDL	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
Sample ID: NTK2483-01 (W6-111810 - Water) Sampled: 11/18/10 16:15									
Dissolved Metals by Method 6020									
Lead	0.0900	J	ug/L	0.0900	2.00	1	12/02/10 12:40	SW846 6020	10K4615
Volatile Organic Compounds by EPA Method 8260B									
Benzene	ND		ug/L	0.170	0.500	1	12/01/10 14:09	SW846 8260B	10K3949
Ethylbenzene	ND		ug/L	0.170	0.500	1	12/01/10 14:09	SW846 8260B	10K3949
Methyl tert-Butyl Ether	ND		ug/L	0.170	0.500	1	12/01/10 14:09	SW846 8260B	10K3949
Toluene	ND		ug/L	0.170	0.500	1	12/01/10 14:09	SW846 8260B	10K3949
Xylenes, total	ND		ug/L	0.390	0.500	1	12/01/10 14:09	SW846 8260B	10K3949
Surr: 1,2-Dichloroethane-d4 (63-140%)	99 %					1	12/01/10 14:09	SW846 8260B	10K3949
Surr: Dibromofluoromethane (73-131%)	100 %					1	12/01/10 14:09	SW846 8260B	10K3949
Surr: Toluene-d8 (80-120%)	101 %					1	12/01/10 14:09	SW846 8260B	10K3949
Surr: 4-Bromofluorobenzene (79-125%)	70 %	Z6				1	12/01/10 14:09	SW846 8260B	10K3949
Polyaromatic Hydrocarbons by EPA 8270D SIM									
Acenaphthene	0.0667	J	ug/L	0.0267	0.0952	1	12/01/10 19:59	SW846 8270D SIM	10K4272
Acenaphthylene	ND		ug/L	0.0238	0.0952	1	12/01/10 19:59	SW846 8270D SIM	10K4272
Anthracene	ND		ug/L	0.0295	0.0952	1	12/01/10 19:59	SW846 8270D SIM	10K4272
Benzo (a) anthracene	ND		ug/L	0.0171	0.0952	1	12/01/10 19:59	SW846 8270D SIM	10K4272
Benzo (a) pyrene	ND		ug/L	0.0305	0.0952	1	12/01/10 19:59	SW846 8270D SIM	10K4272
Benzo (b) fluoranthene	ND		ug/L	0.0248	0.0952	1	12/01/10 19:59	SW846 8270D SIM	10K4272
Benzo (g,h,i) perylene	ND		ug/L	0.0229	0.0952	1	12/01/10 19:59	SW846 8270D SIM	10K4272
Benzo (k) fluoranthene	ND		ug/L	0.0381	0.0952	1	12/01/10 19:59	SW846 8270D SIM	10K4272
Chrysene	ND		ug/L	0.0333	0.0952	1	12/01/10 19:59	SW846 8270D SIM	10K4272
Dibenz (a,h) anthracene	ND		ug/L	0.0229	0.0952	1	12/01/10 19:59	SW846 8270D SIM	10K4272
Fluoranthene	ND		ug/L	0.0324	0.0952	1	12/01/10 19:59	SW846 8270D SIM	10K4272
Fluorene	0.105		ug/L	0.0238	0.0952	1	12/01/10 19:59	SW846 8270D SIM	10K4272
Indeno (1,2,3-cd) pyrene	ND		ug/L	0.0267	0.0952	1	12/01/10 19:59	SW846 8270D SIM	10K4272
1-Methylnaphthalene	0.600		ug/L	0.0210	0.0952	1	12/01/10 19:59	SW846 8270D SIM	10K4272
2-Methylnaphthalene	ND		ug/L	0.0324	0.0952	1	12/01/10 19:59	SW846 8270D SIM	10K4272
Naphthalene	ND		ug/L	0.0238	0.0952	1	12/01/10 19:59	SW846 8270D SIM	10K4272
Phenanthrene	0.0667	J	ug/L	0.0600	0.0952	1	12/01/10 19:59	SW846 8270D SIM	10K4272
Pyrene	ND		ug/L	0.0238	0.0952	1	12/01/10 19:59	SW846 8270D SIM	10K4272
Surr: Nitrobenzene-d5 (27-120%)	67 %					1	12/01/10 19:59	SW846 8270D SIM	10K4272
Surr: 2-Fluorobiphenyl (29-120%)	68 %					1	12/01/10 19:59	SW846 8270D SIM	10K4272
Surr: Terphenyl-d14 (13-120%)	72 %					1	12/01/10 19:59	SW846 8270D SIM	10K4272
Purgeable Petroleum Hydrocarbons									
GRO (C4-C12) NW	ND	L	ug/L	33.0	100	1	11/24/10 23:14	NWTPH-Gx	10K4953
Surr: a,a,a-Trifluorotoluene (50-150%)	91 %					1	11/24/10 23:14	NWTPH-Gx	10K4953
Extractable Petroleum Hydrocarbons with Silica Gel Treatment									
Diesel	144	B, QP5	ug/L	9.71	97.1	1	11/30/10 11:55	NWTPH-Dx	10K5249
Motor Oil	33.8	B, J	ug/L	9.71	97.1	1	11/30/10 11:55	NWTPH-Dx	10K5249
Surr: o-Terphenyl (50-150%)	99 %					1	11/30/10 11:55	NWTPH-Dx	10K5249

Client AMEC Earth & Environmental (13993)
600 University Street, Suite 1020
Seattle, WA 98101
Attn Leah Vigoren

Work Order: NTK2483
Project Name: Everett Terminal(46108) - AMEC
Project Number: [none]
Received: 11/20/10 08:30

ANALYTICAL REPORT

Analyte	Result	Flag	Units	MDL	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
Sample ID: NTK2483-02 (MW40R-111810 - Water) Sampled: 11/18/10 18:45									
General Chemistry Parameters									
Alkalinity, Total (CaCO3)	269		mg/L	1.40	10.0	1	12/01/10 00:54	SM2320 B	10K5845
Nitrate as N	ND		mg/L	0.0100	0.100	1	11/20/10 19:20	EPA 300.0	10K4177
Sulfate	1.87		mg/L	0.110	1.00	1	11/20/10 19:20	EPA 300.0	10K4177
Methane, Ethane, and Ethene by GC									
Methane	9750		ug/L	300	520	20	11/29/10 18:44	RSK 175	10K5196
Surr: Acetylene (70-122%)	94 %					1	11/29/10 18:42	RSK 175	10K5196
Dissolved Metals by Method 6020									
Lead	ND		ug/L	0.0900	2.00	1	12/02/10 12:44	SW846 6020	10K4615
Manganese	471		ug/L	0.200	5.00	1	12/02/10 12:44	SW846 6020	10K4615
Volatile Organic Compounds by EPA Method 8260B									
Benzene	1.18		ug/L	0.170	0.500	1	12/01/10 14:37	SW846 8260B	10K3949
Ethylbenzene	0.360	J	ug/L	0.170	0.500	1	12/01/10 14:37	SW846 8260B	10K3949
Methyl tert-Butyl Ether	ND		ug/L	0.170	0.500	1	12/01/10 14:37	SW846 8260B	10K3949
Toluene	0.860		ug/L	0.170	0.500	1	12/01/10 14:37	SW846 8260B	10K3949
Xylenes, total	2.95		ug/L	0.390	0.500	1	12/01/10 14:37	SW846 8260B	10K3949
Surr: 1,2-Dichloroethane-d4 (63-140%)	101 %					1	12/01/10 14:37	SW846 8260B	10K3949
Surr: Dibromofluoromethane (73-131%)	102 %					1	12/01/10 14:37	SW846 8260B	10K3949
Surr: Toluene-d8 (80-120%)	99 %					1	12/01/10 14:37	SW846 8260B	10K3949
Surr: 4-Bromofluorobenzene (79-125%)	71 %	Z6				1	12/01/10 14:37	SW846 8260B	10K3949
Polyaromatic Hydrocarbons by EPA 8270D SIM									
Acenaphthene	0.838		ug/L	0.0267	0.0952	1	12/01/10 20:20	SW846 8270D SIM	10K4272
Acenaphthylene	0.133		ug/L	0.0238	0.0952	1	12/01/10 20:20	SW846 8270D SIM	10K4272
Anthracene	0.0571	J	ug/L	0.0295	0.0952	1	12/01/10 20:20	SW846 8270D SIM	10K4272
Benzo (a) anthracene	ND		ug/L	0.0171	0.0952	1	12/01/10 20:20	SW846 8270D SIM	10K4272
Benzo (a) pyrene	ND		ug/L	0.0305	0.0952	1	12/01/10 20:20	SW846 8270D SIM	10K4272
Benzo (b) fluoranthene	ND		ug/L	0.0248	0.0952	1	12/01/10 20:20	SW846 8270D SIM	10K4272
Benzo (g,h,i) perylene	ND		ug/L	0.0229	0.0952	1	12/01/10 20:20	SW846 8270D SIM	10K4272
Benzo (k) fluoranthene	ND		ug/L	0.0381	0.0952	1	12/01/10 20:20	SW846 8270D SIM	10K4272
Chrysene	ND		ug/L	0.0333	0.0952	1	12/01/10 20:20	SW846 8270D SIM	10K4272
Dibenz (a,h) anthracene	ND		ug/L	0.0229	0.0952	1	12/01/10 20:20	SW846 8270D SIM	10K4272
Fluoranthene	0.0476	J	ug/L	0.0324	0.0952	1	12/01/10 20:20	SW846 8270D SIM	10K4272
Fluorene	0.962		ug/L	0.0238	0.0952	1	12/01/10 20:20	SW846 8270D SIM	10K4272
Indeno (1,2,3-cd) pyrene	ND		ug/L	0.0267	0.0952	1	12/01/10 20:20	SW846 8270D SIM	10K4272
1-Methylnaphthalene	18.7		ug/L	0.210	0.952	10	12/06/10 15:05	SW846 8270D SIM	10K4272
2-Methylnaphthalene	1.40		ug/L	0.0324	0.0952	1	12/01/10 20:20	SW846 8270D SIM	10K4272
Naphthalene	0.657		ug/L	0.0238	0.0952	1	12/01/10 20:20	SW846 8270D SIM	10K4272
Phenanthrene	0.438		ug/L	0.0600	0.0952	1	12/01/10 20:20	SW846 8270D SIM	10K4272
Pyrene	0.0667	J	ug/L	0.0238	0.0952	1	12/01/10 20:20	SW846 8270D SIM	10K4272
Surr: Nitrobenzene-d5 (27-120%)	61 %					1	12/01/10 20:20	SW846 8270D SIM	10K4272
Surr: 2-Fluorobiphenyl (29-120%)	51 %					1	12/01/10 20:20	SW846 8270D SIM	10K4272
Surr: Terphenyl-d14 (13-120%)	59 %					1	12/01/10 20:20	SW846 8270D SIM	10K4272

Client AMEC Earth & Environmental (13993)
600 University Street, Suite 1020
Seattle, WA 98101
Attn Leah Vigoren

Work Order: NTK2483
Project Name: Everett Terminal(46108) - AMEC
Project Number: [none]
Received: 11/20/10 08:30

ANALYTICAL REPORT

Analyte	Result	Flag	Units	MDL	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
Sample ID: NTK2483-02 (MW40R-111810 - Water) - cont. Sampled: 11/18/10 18:45									
Purgeable Petroleum Hydrocarbons									
GRO (C4-C12) NW	905		ug/L	33.0	100	1	11/29/10 15:35	NWTPH-Gx	10K5576
<i>Surr: a,a,a-Trifluorotoluene (50-150%)</i>	88 %					1	11/29/10 15:35	NWTPH-Gx	10K5576
Extractable Petroleum Hydrocarbons with Silica Gel Treatment									
Diesel	1970	B1, QP7	ug/L	9.43	94.3	1	11/29/10 14:05	NWTPH-Dx	10K5246
Motor Oil	413	B1, QP7	ug/L	9.43	94.3	1	11/29/10 14:05	NWTPH-Dx	10K5246
<i>Surr: o-Terphenyl (50-150%)</i>	56 %					1	11/29/10 14:05	NWTPH-Dx	10K5246
Sample ID: NTK2483-03 (MW19-111810 - Water) Sampled: 11/18/10 20:35									
General Chemistry Parameters									
Alkalinity, Total (CaCO3)	147		mg/L	1.40	10.0	1	11/28/10 03:53	SM2320 B	10K5425
Nitrate as N	0.315		mg/L	0.0100	0.100	1	11/20/10 20:00	EPA 300.0	10K4177
Sulfate	3.47		mg/L	0.110	1.00	1	11/20/10 20:00	EPA 300.0	10K4177
Methane, Ethane, and Ethene by GC									
Methane	8350		ug/L	300	520	20	11/29/10 18:49	RSK 175	10K5196
<i>Surr: Acetylene (70-122%)</i>	98 %					1	11/29/10 18:46	RSK 175	10K5196
Dissolved Metals by Method 6020									
Lead	ND		ug/L	0.0900	2.00	1	12/02/10 12:48	SW846 6020	10K4615
Manganese	900		ug/L	1.00	25.0	5	12/02/10 13:28	SW846 6020	10K4615
Volatile Organic Compounds by EPA Method 8260B									
Benzene	ND		ug/L	0.170	0.500	1	12/01/10 15:06	SW846 8260B	10K3949
Ethylbenzene	ND		ug/L	0.170	0.500	1	12/01/10 15:06	SW846 8260B	10K3949
Methyl tert-Butyl Ether	ND		ug/L	0.170	0.500	1	12/01/10 15:06	SW846 8260B	10K3949
Toluene	ND		ug/L	0.170	0.500	1	12/01/10 15:06	SW846 8260B	10K3949
Xylenes, total	0.570		ug/L	0.390	0.500	1	12/01/10 15:06	SW846 8260B	10K3949
<i>Surr: 1,2-Dichloroethane-d4 (63-140%)</i>	97 %					1	12/01/10 15:06	SW846 8260B	10K3949
<i>Surr: Dibromofluoromethane (73-131%)</i>	99 %					1	12/01/10 15:06	SW846 8260B	10K3949
<i>Surr: Toluene-d8 (80-120%)</i>	102 %					1	12/01/10 15:06	SW846 8260B	10K3949
<i>Surr: 4-Bromofluorobenzene (79-125%)</i>	75 %	Z6				1	12/01/10 15:06	SW846 8260B	10K3949
Polyaromatic Hydrocarbons by EPA 8270D SIM									
Acenaphthene	0.120		ug/L	0.0280	0.100	1	12/01/10 20:42	SW846 8270D SIM	10K4272
Acenaphthylene	ND		ug/L	0.0250	0.100	1	12/01/10 20:42	SW846 8270D SIM	10K4272
Anthracene	ND		ug/L	0.0310	0.100	1	12/01/10 20:42	SW846 8270D SIM	10K4272
Benzo (a) anthracene	ND		ug/L	0.0180	0.100	1	12/01/10 20:42	SW846 8270D SIM	10K4272
Benzo (a) pyrene	ND		ug/L	0.0320	0.100	1	12/01/10 20:42	SW846 8270D SIM	10K4272
Benzo (b) fluoranthene	ND		ug/L	0.0260	0.100	1	12/01/10 20:42	SW846 8270D SIM	10K4272
Benzo (g,h,i) perylene	ND		ug/L	0.0240	0.100	1	12/01/10 20:42	SW846 8270D SIM	10K4272
Benzo (k) fluoranthene	ND		ug/L	0.0400	0.100	1	12/01/10 20:42	SW846 8270D SIM	10K4272
Chrysene	ND		ug/L	0.0350	0.100	1	12/01/10 20:42	SW846 8270D SIM	10K4272
Dibenz (a,h) anthracene	ND		ug/L	0.0240	0.100	1	12/01/10 20:42	SW846 8270D SIM	10K4272
Fluoranthene	ND		ug/L	0.0340	0.100	1	12/01/10 20:42	SW846 8270D SIM	10K4272
Fluorene	0.0800	J	ug/L	0.0250	0.100	1	12/01/10 20:42	SW846 8270D SIM	10K4272

Client AMEC Earth & Environmental (13993)
600 University Street, Suite 1020
Seattle, WA 98101
Attn Leah Vigoren

Work Order: NTK2483
Project Name: Everett Terminal(46108) - AMEC
Project Number: [none]
Received: 11/20/10 08:30

ANALYTICAL REPORT

Analyte	Result	Flag	Units	MDL	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
Sample ID: NTK2483-03 (MW19-111810 - Water) - cont. Sampled: 11/18/10 20:35									
Polyaromatic Hydrocarbons by EPA 8270D SIM - cont.									
Indeno (1,2,3-cd) pyrene	ND		ug/L	0.0280	0.100	1	12/01/10 20:42	SW846 8270D SIM	10K4272
1-Methylnaphthalene	0.110		ug/L	0.0220	0.100	1	12/01/10 20:42	SW846 8270D SIM	10K4272
2-Methylnaphthalene	ND		ug/L	0.0340	0.100	1	12/01/10 20:42	SW846 8270D SIM	10K4272
Naphthalene	0.210		ug/L	0.0250	0.100	1	12/01/10 20:42	SW846 8270D SIM	10K4272
Phenanthrene	ND		ug/L	0.0630	0.100	1	12/01/10 20:42	SW846 8270D SIM	10K4272
Pyrene	ND		ug/L	0.0250	0.100	1	12/01/10 20:42	SW846 8270D SIM	10K4272
Surr: Nitrobenzene-d5 (27-120%)	67 %					1	12/01/10 20:42	SW846 8270D SIM	10K4272
Surr: 2-Fluorobiphenyl (29-120%)	64 %					1	12/01/10 20:42	SW846 8270D SIM	10K4272
Surr: Terphenyl-d14 (13-120%)	71 %					1	12/01/10 20:42	SW846 8270D SIM	10K4272
Purgeable Petroleum Hydrocarbons									
GRO (C4-C12) NW	302		ug/L	33.0	100	1	11/29/10 16:05	NWTPH-Gx	10K5576
Surr: a,a,a-Trifluorotoluene (50-150%)	90 %					1	11/29/10 16:05	NWTPH-Gx	10K5576
Extractable Petroleum Hydrocarbons with Silica Gel Treatment									
Diesel	488	B1, QP7	ug/L	9.62	96.2	1	11/29/10 14:21	NWTPH-Dx	10K5246
Motor Oil	172	B, QP7	ug/L	9.62	96.2	1	11/29/10 14:21	NWTPH-Dx	10K5246
Surr: o-Terphenyl (50-150%)	73 %					1	11/29/10 14:21	NWTPH-Dx	10K5246
Sample ID: NTK2483-04 (Trip Blank - Water) Sampled: 11/18/10 00:01									
Volatile Organic Compounds by EPA Method 8260B									
Benzene	ND		ug/L	0.170	0.500	1	11/30/10 17:37	SW846 8260B	10L0063
Ethylbenzene	ND		ug/L	0.170	0.500	1	11/30/10 17:37	SW846 8260B	10L0063
Methyl tert-Butyl Ether	ND		ug/L	0.170	0.500	1	11/30/10 17:37	SW846 8260B	10L0063
Toluene	ND		ug/L	0.170	0.500	1	11/30/10 17:37	SW846 8260B	10L0063
Xylenes, total	ND		ug/L	0.390	0.500	1	11/30/10 17:37	SW846 8260B	10L0063
Surr: 1,2-Dichloroethane-d4 (63-140%)	102 %					1	11/30/10 17:37	SW846 8260B	10L0063
Surr: Dibromofluoromethane (73-131%)	101 %					1	11/30/10 17:37	SW846 8260B	10L0063
Surr: Toluene-d8 (80-120%)	101 %					1	11/30/10 17:37	SW846 8260B	10L0063
Surr: 4-Bromofluorobenzene (79-125%)	68 %	Z6				1	11/30/10 17:37	SW846 8260B	10L0063
Purgeable Petroleum Hydrocarbons									
GRO (C4-C12) NW	ND	L	ug/L	33.0	100	1	11/24/10 17:13	NWTPH-Gx	10K4953
Surr: a,a,a-Trifluorotoluene (50-150%)	93 %					1	11/24/10 17:13	NWTPH-Gx	10K4953

Client AMEC Earth & Environmental (13993)
 600 University Street, Suite 1020
 Seattle, WA 98101
 Attn Leah Vigoren

Work Order: NTK2483
 Project Name: Everett Terminal(46108) - AMEC
 Project Number: [none]
 Received: 11/20/10 08:30

SAMPLE EXTRACTION DATA

Parameter	Batch	Lab Number	Wt/Vol Extracted	Extracted Vol	Date	Analyst	Extraction Method
Dissolved Metals by Method 6020							
SW846 6020	10K4615	NTK2483-01	50.00	50.00	11/30/10 16:46	MET	EPA 3010A / 6020 D
SW846 6020	10K4615	NTK2483-02	50.00	50.00	11/30/10 16:46	MET	EPA 3010A / 6020 D
SW846 6020	10K4615	NTK2483-02	50.00	50.00	11/30/10 16:46	MET	EPA 3010A / 6020 D
SW846 6020	10K4615	NTK2483-03	50.00	50.00	11/30/10 16:46	MET	EPA 3010A / 6020 D
SW846 6020	10K4615	NTK2483-03	50.00	50.00	11/30/10 16:46	MET	EPA 3010A / 6020 D
SW846 6020	10K4615	NTK2483-03RE1	50.00	50.00	11/30/10 16:46	MET	EPA 3010A / 6020 D
Extractable Petroleum Hydrocarbons with Silica Gel Treatment							
NWTPH-Dx	10K5249	NTK2483-01	1030.00	1.00	11/27/10 11:00	TDM	EPA 3510C
NWTPH-Dx	10K5246	NTK2483-02	1060.00	1.00	11/29/10 06:00	MAH	EPA 3510C
NWTPH-Dx	10K5246	NTK2483-03	1040.00	1.00	11/29/10 06:00	MAH	EPA 3510C
Polyaromatic Hydrocarbons by EPA 8270D SIM							
SW846 8270D SIM	10K4272	NTK2483-01	1050.00	1.00	11/23/10 12:15	MAH	EPA 3510C
SW846 8270D SIM	10K4272	NTK2483-02	1050.00	1.00	11/23/10 12:15	MAH	EPA 3510C
SW846 8270D SIM	10K4272	NTK2483-02RE1	1050.00	1.00	11/23/10 12:15	MAH	EPA 3510C
SW846 8270D SIM	10K4272	NTK2483-03	1000.00	1.00	11/23/10 12:15	MAH	EPA 3510C

Client AMEC Earth & Environmental (13993)
 600 University Street, Suite 1020
 Seattle, WA 98101
 Attn Leah Vigoren

Work Order: NTK2483
 Project Name: Everett Terminal(46108) - AMEC
 Project Number: [none]
 Received: 11/20/10 08:30

PROJECT QUALITY CONTROL DATA

Blank

Analyte	Blank Value	Q	Units	Q.C. Batch	Lab Number	Analyzed Date/Time
General Chemistry Parameters						
10K4177-BLK1						
Nitrate as N	<0.0100		mg/L	10K4177	10K4177-BLK1	11/20/10 08:08
Sulfate	<0.110		mg/L	10K4177	10K4177-BLK1	11/20/10 08:08
10K5425-BLK1						
Alkalinity, Total (CaCO3)	<1.40		mg/L	10K5425	10K5425-BLK1	11/28/10 00:10
10K5845-BLK1						
Alkalinity, Total (CaCO3)	<1.40		mg/L	10K5845	10K5845-BLK1	11/30/10 23:14
Methane, Ethane, and Ethene by GC						
10K5196-BLK1						
Methane	<15.0		ug/L	10K5196	10K5196-BLK1	11/29/10 17:24
Surrogate: Acetylene	109%			10K5196	10K5196-BLK1	11/29/10 17:24
Dissolved Metals by Method 6020						
10K4615-BLK1						
Lead	<0.0900		ug/L	10K4615	10K4615-BLK1	12/02/10 11:48
Manganese	<0.200		ug/L	10K4615	10K4615-BLK1	12/02/10 11:48
Volatile Organic Compounds by EPA Method 8260B						
10K3949-BLK1						
Benzene	<0.170		ug/L	10K3949	10K3949-BLK1	12/01/10 09:50
Ethylbenzene	<0.170		ug/L	10K3949	10K3949-BLK1	12/01/10 09:50
Methyl tert-Butyl Ether	<0.170		ug/L	10K3949	10K3949-BLK1	12/01/10 09:50
Toluene	<0.170		ug/L	10K3949	10K3949-BLK1	12/01/10 09:50
Xylenes, total	<0.390		ug/L	10K3949	10K3949-BLK1	12/01/10 09:50
Surrogate: 1,2-Dichloroethane-d4	97%			10K3949	10K3949-BLK1	12/01/10 09:50
Surrogate: Dibromofluoromethane	100%			10K3949	10K3949-BLK1	12/01/10 09:50
Surrogate: Toluene-d8	102%			10K3949	10K3949-BLK1	12/01/10 09:50
Surrogate: 4-Bromofluorobenzene	118%			10K3949	10K3949-BLK1	12/01/10 09:50
10L0063-BLK1						
Benzene	<0.170		ug/L	10L0063	10L0063-BLK1	11/30/10 10:24
Ethylbenzene	<0.170		ug/L	10L0063	10L0063-BLK1	11/30/10 10:24
Methyl tert-Butyl Ether	<0.170		ug/L	10L0063	10L0063-BLK1	11/30/10 10:24
Toluene	<0.170		ug/L	10L0063	10L0063-BLK1	11/30/10 10:24
Xylenes, total	<0.390		ug/L	10L0063	10L0063-BLK1	11/30/10 10:24
Surrogate: 1,2-Dichloroethane-d4	99%			10L0063	10L0063-BLK1	11/30/10 10:24
Surrogate: Dibromofluoromethane	101%			10L0063	10L0063-BLK1	11/30/10 10:24
Surrogate: Toluene-d8	100%			10L0063	10L0063-BLK1	11/30/10 10:24
Surrogate: 4-Bromofluorobenzene	117%			10L0063	10L0063-BLK1	11/30/10 10:24

Client AMEC Earth & Environmental (13993)
 600 University Street, Suite 1020
 Seattle, WA 98101
 Attn Leah Vigoren

Work Order: NTK2483
 Project Name: Everett Terminal(46108) - AMEC
 Project Number: [none]
 Received: 11/20/10 08:30

PROJECT QUALITY CONTROL DATA
Blank - Cont.

Analyte	Blank Value	Q	Units	Q.C. Batch	Lab Number	Analyzed Date/Time
Polyaromatic Hydrocarbons by EPA 8270D SIM						
10K4272-BLK1						
Acenaphthene	<0.0280		ug/L	10K4272	10K4272-BLK1	12/01/10 14:36
Acenaphthylene	<0.0250		ug/L	10K4272	10K4272-BLK1	12/01/10 14:36
Anthracene	<0.0310		ug/L	10K4272	10K4272-BLK1	12/01/10 14:36
Benzo (a) anthracene	<0.0180		ug/L	10K4272	10K4272-BLK1	12/01/10 14:36
Benzo (a) pyrene	<0.0320		ug/L	10K4272	10K4272-BLK1	12/01/10 14:36
Benzo (b) fluoranthene	<0.0260		ug/L	10K4272	10K4272-BLK1	12/01/10 14:36
Benzo (g,h,i) perylene	<0.0240		ug/L	10K4272	10K4272-BLK1	12/01/10 14:36
Benzo (k) fluoranthene	<0.0400		ug/L	10K4272	10K4272-BLK1	12/01/10 14:36
Chrysene	<0.0350		ug/L	10K4272	10K4272-BLK1	12/01/10 14:36
Dibenz (a,h) anthracene	<0.0240		ug/L	10K4272	10K4272-BLK1	12/01/10 14:36
Fluoranthene	<0.0340		ug/L	10K4272	10K4272-BLK1	12/01/10 14:36
Fluorene	<0.0250		ug/L	10K4272	10K4272-BLK1	12/01/10 14:36
Indeno (1,2,3-cd) pyrene	<0.0280		ug/L	10K4272	10K4272-BLK1	12/01/10 14:36
1-Methylnaphthalene	<0.0220		ug/L	10K4272	10K4272-BLK1	12/01/10 14:36
2-Methylnaphthalene	<0.0340		ug/L	10K4272	10K4272-BLK1	12/01/10 14:36
Naphthalene	<0.0250		ug/L	10K4272	10K4272-BLK1	12/01/10 14:36
Phenanthrene	<0.0630		ug/L	10K4272	10K4272-BLK1	12/01/10 14:36
Pyrene	<0.0250		ug/L	10K4272	10K4272-BLK1	12/01/10 14:36
Surrogate: Nitrobenzene-d5	50%			10K4272	10K4272-BLK1	12/01/10 14:36
Surrogate: 2-Fluorobiphenyl	59%			10K4272	10K4272-BLK1	12/01/10 14:36
Surrogate: Terphenyl-d14	67%			10K4272	10K4272-BLK1	12/01/10 14:36
Purgeable Petroleum Hydrocarbons						
10K4953-BLK1						
GRO (C4-C12) NW	<33.0		ug/L	10K4953	10K4953-BLK1	11/24/10 15:12
Surrogate: a,a,a-Trifluorotoluene	94%			10K4953	10K4953-BLK1	11/24/10 15:12
10K5576-BLK1						
GRO (C4-C12) NW	<33.0		ug/L	10K5576	10K5576-BLK1	11/29/10 13:26
Surrogate: a,a,a-Trifluorotoluene	90%			10K5576	10K5576-BLK1	11/29/10 13:26
Extractable Petroleum Hydrocarbons with Silica Gel Treatment						
10K5246-BLK1						
Diesel	32.0	J	ug/L	10K5246	10K5246-BLK1	11/29/10 13:01
Motor Oil	27.9	J	ug/L	10K5246	10K5246-BLK1	11/29/10 13:01
Surrogate: o-Terphenyl	71%			10K5246	10K5246-BLK1	11/29/10 13:01
10K5249-BLK1						
Diesel	33.4	J	ug/L	10K5249	10K5249-BLK1	11/29/10 17:37
Motor Oil	30.4	J	ug/L	10K5249	10K5249-BLK1	11/29/10 17:37
Surrogate: o-Terphenyl	81%			10K5249	10K5249-BLK1	11/29/10 17:37

Client AMEC Earth & Environmental (13993)
 600 University Street, Suite 1020
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 Attn Leah Vigoren

Work Order: NTK2483
 Project Name: Everett Terminal(46108) - AMEC
 Project Number: [none]
 Received: 11/20/10 08:30

PROJECT QUALITY CONTROL DATA

Duplicate

Analyte	Orig. Val.	Duplicate	Q	Units	RPD	Limit	Batch	Sample Duplicated	% Rec.	Analyzed Date/Time
General Chemistry Parameters										
10K4177-DUP1										
Nitrate as N	0.315	0.307		mg/L	3	20	10K4177	NTK2483-03		11/20/10 20:21
Sulfate	3.47	3.42		mg/L	1	20	10K4177	NTK2483-03		11/20/10 20:21
10K5845-DUP1										
Alkalinity, Total (CaCO3)	269	270		mg/L	0.3	20	10K5845	NTK2483-02		12/01/10 00:40
Purgeable Petroleum Hydrocarbons										
10K4953-DUP1										
GRO (C4-C12) NW	ND	<33.0		ug/L		37	10K4953	NTK2295-01		11/29/10 13:56
<i>Surrogate: a,a,a-Trifluorotoluene</i>		18.0		ug/L			10K4953	NTK2295-01	90%	11/29/10 13:56
10K5576-DUP1										
GRO (C4-C12) NW	ND	<33.0		ug/L		37	10K5576	NTK2612-04		11/30/10 13:39
<i>Surrogate: a,a,a-Trifluorotoluene</i>		17.7		ug/L			10K5576	NTK2612-04	88%	11/30/10 13:39

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Work Order: NTK2483
 Project Name: Everett Terminal(46108) - AMEC
 Project Number: [none]
 Received: 11/20/10 08:30

PROJECT QUALITY CONTROL DATA LCS

Analyte	Known Val.	Analyzed Val	Q	Units	% Rec.	Target Range	Batch	Analyzed Date/Time
General Chemistry Parameters								
10K4177-BS1								
Nitrate as N	3.00	2.95		mg/L	98%	90 - 110	10K4177	11/20/10 18:53
Sulfate	15.0	14.5		mg/L	97%	90 - 110	10K4177	11/20/10 18:53
10K5425-BS1								
Alkalinity, Total (CaCO3)	100	97.0		mg/L	97%	90 - 110	10K5425	11/28/10 01:09
10K5845-BS1								
Alkalinity, Total (CaCO3)	100	97.6		mg/L	98%	90 - 110	10K5845	12/01/10 00:19
Methane, Ethane, and Ethene by GC								
10K5196-BS1								
Methane	278	293		ug/L	105%	80 - 120	10K5196	11/29/10 17:27
Surrogate: Acetylene	450	367			82%	70 - 122	10K5196	11/29/10 17:27
Dissolved Metals by Method 6020								
10K4615-BS1								
Lead	100	97.0		ug/L	97%	80 - 120	10K4615	12/02/10 11:41
Manganese	100	96.5		ug/L	96%	80 - 120	10K4615	12/02/10 11:41
Volatile Organic Compounds by EPA Method 8260B								
10K3949-BS1								
Benzene	50.0	52.0		ug/L	104%	80 - 121	10K3949	12/01/10 08:24
Ethylbenzene	50.0	51.7		ug/L	103%	78 - 133	10K3949	12/01/10 08:24
Methyl tert-Butyl Ether	50.0	46.3		ug/L	93%	76 - 120	10K3949	12/01/10 08:24
Toluene	50.0	53.0		ug/L	106%	78 - 125	10K3949	12/01/10 08:24
Xylenes, total	150	155		ug/L	103%	78 - 134	10K3949	12/01/10 08:24
Surrogate: 1,2-Dichloroethane-d4	50.0	51.8			104%	63 - 140	10K3949	12/01/10 08:24
Surrogate: Dibromofluoromethane	50.0	51.4			103%	73 - 131	10K3949	12/01/10 08:24
Surrogate: Toluene-d8	50.0	51.8			104%	80 - 120	10K3949	12/01/10 08:24
Surrogate: 4-Bromofluorobenzene	50.0	33.4	Z11		67%	79 - 125	10K3949	12/01/10 08:24
10L0063-BS1								
Benzene	50.0	51.7	MNR1	ug/L	103%	80 - 121	10L0063	11/30/10 08:58
Ethylbenzene	50.0	50.8	MNR1	ug/L	102%	78 - 133	10L0063	11/30/10 08:58
Methyl tert-Butyl Ether	50.0	47.2	MNR1	ug/L	94%	76 - 120	10L0063	11/30/10 08:58
Toluene	50.0	51.0	MNR1	ug/L	102%	78 - 125	10L0063	11/30/10 08:58
Xylenes, total	150	153	MNR1	ug/L	102%	78 - 134	10L0063	11/30/10 08:58
Surrogate: 1,2-Dichloroethane-d4	50.0	54.2			108%	63 - 140	10L0063	11/30/10 08:58
Surrogate: Dibromofluoromethane	50.0	52.7			105%	73 - 131	10L0063	11/30/10 08:58
Surrogate: Toluene-d8	50.0	50.8			102%	80 - 120	10L0063	11/30/10 08:58
Surrogate: 4-Bromofluorobenzene	50.0	43.9			88%	79 - 125	10L0063	11/30/10 08:58

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Work Order: NTK2483
 Project Name: Everett Terminal(46108) - AMEC
 Project Number: [none]
 Received: 11/20/10 08:30

PROJECT QUALITY CONTROL DATA
LCS - Cont.

Analyte	Known Val.	Analyzed Val	Q	Units	% Rec.	Target Range	Batch	Analyzed Date/Time
Polyaromatic Hydrocarbons by EPA 8270D SIM								
10K4272-BS1								
Acenaphthene	1.00	0.620		ug/L	62%	43 - 122	10K4272	12/01/10 14:57
Acenaphthylene	1.00	0.560		ug/L	56%	43 - 129	10K4272	12/01/10 14:57
Anthracene	1.00	0.630		ug/L	63%	50 - 138	10K4272	12/01/10 14:57
Benzo (a) anthracene	1.00	0.670		ug/L	67%	50 - 135	10K4272	12/01/10 14:57
Benzo (a) pyrene	1.00	0.690		ug/L	69%	46 - 136	10K4272	12/01/10 14:57
Benzo (b) fluoranthene	1.00	0.960		ug/L	96%	37 - 147	10K4272	12/01/10 14:57
Benzo (g,h,i) perylene	1.00	0.750		ug/L	75%	30 - 145	10K4272	12/01/10 14:57
Benzo (k) fluoranthene	1.00	0.760		ug/L	76%	47 - 135	10K4272	12/01/10 14:57
Chrysene	1.00	0.760		ug/L	76%	47 - 138	10K4272	12/01/10 14:57
Dibenz (a,h) anthracene	1.00	0.760		ug/L	76%	36 - 144	10K4272	12/01/10 14:57
Fluoranthene	1.00	0.730		ug/L	73%	51 - 139	10K4272	12/01/10 14:57
Fluorene	1.00	0.660		ug/L	66%	47 - 128	10K4272	12/01/10 14:57
Indeno (1,2,3-cd) pyrene	1.00	0.690		ug/L	69%	32 - 142	10K4272	12/01/10 14:57
1-Methylnaphthalene	1.00	0.550		ug/L	55%	37 - 126	10K4272	12/01/10 14:57
2-Methylnaphthalene	1.00	0.610		ug/L	61%	41 - 121	10K4272	12/01/10 14:57
Naphthalene	1.00	0.670		ug/L	67%	38 - 120	10K4272	12/01/10 14:57
Phenanthrene	1.00	0.700		ug/L	70%	45 - 133	10K4272	12/01/10 14:57
Pyrene	1.00	0.770		ug/L	77%	50 - 146	10K4272	12/01/10 14:57
Surrogate: Nitrobenzene-d5	1.00	0.490			49%	27 - 120	10K4272	12/01/10 14:57
Surrogate: 2-Fluorobiphenyl	1.00	0.570			57%	29 - 120	10K4272	12/01/10 14:57
Surrogate: Terphenyl-d14	1.00	0.710			71%	13 - 120	10K4272	12/01/10 14:57
Purgeable Petroleum Hydrocarbons								
10K4953-BS1								
GRO (C4-C12) NW	1000	1390	L1	ug/L	139%	70 - 130	10K4953	11/25/10 01:45
Surrogate: a,a,a-Trifluorotoluene	20.0	21.9			110%	50 - 150	10K4953	11/25/10 01:45
10K5576-BS1								
GRO (C4-C12) NW	1000	1120		ug/L	112%	70 - 130	10K5576	11/30/10 00:37
Surrogate: a,a,a-Trifluorotoluene	20.0	23.3			117%	50 - 150	10K5576	11/30/10 00:37
Extractable Petroleum Hydrocarbons with Silica Gel Treatment								
10K5246-BS1								
Diesel	1000	798		ug/L	80%	57 - 132	10K5246	11/29/10 13:17
Surrogate: o-Terphenyl	20.0	14.1			71%	50 - 150	10K5246	11/29/10 13:17
10K5249-BS1								
Diesel	1000	871	MNR1	ug/L	87%	57 - 132	10K5249	11/29/10 17:53
Surrogate: o-Terphenyl	20.0	15.5			78%	50 - 150	10K5249	11/29/10 17:53

Client AMEC Earth & Environmental (13993)
 600 University Street, Suite 1020
 Seattle, WA 98101
 Attn Leah Vigoren

Work Order: NTK2483
 Project Name: Everett Terminal(46108) - AMEC
 Project Number: [none]
 Received: 11/20/10 08:30

PROJECT QUALITY CONTROL DATA
LCS Dup

Analyte	Orig. Val.	Duplicate	Q	Units	Spike Conc	% Rec.	Target Range	RPD	Limit	Batch	Sample Duplicated	Analyzed Date/Time
Methane, Ethane, and Ethene by GC												
10K5196-BSD1												
Methane		290		ug/L	278	104%	80 - 120	1	20	10K5196		11/29/10 17:30
Surrogate: Acetylene		332		ug/L	450	74%	70 - 122			10K5196		11/29/10 17:30
Dissolved Metals by Method 6020												
10K4615-BSD1												
Lead		97.3		ug/L	100	97%	80 - 120	0.4	20	10K4615		12/02/10 11:45
Manganese		93.2		ug/L	100	93%	80 - 120	3	20	10K4615		12/02/10 11:45
Volatile Organic Compounds by EPA Method 8260B												
10K3949-BSD1												
Benzene		50.6		ug/L	50.0	101%	80 - 121	3	12	10K3949		12/01/10 08:53
Ethylbenzene		50.7		ug/L	50.0	101%	78 - 133	2	12	10K3949		12/01/10 08:53
Methyl tert-Butyl Ether		45.7		ug/L	50.0	91%	76 - 120	1	32	10K3949		12/01/10 08:53
Toluene		51.7		ug/L	50.0	103%	78 - 125	3	35	10K3949		12/01/10 08:53
Xylenes, total		152		ug/L	150	101%	78 - 134	2	18	10K3949		12/01/10 08:53
Surrogate: 1,2-Dichloroethane-d4		51.4		ug/L	50.0	103%	63 - 140			10K3949		12/01/10 08:53
Surrogate: Dibromofluoromethane		50.6		ug/L	50.0	101%	73 - 131			10K3949		12/01/10 08:53
Surrogate: Toluene-d8		51.8		ug/L	50.0	104%	80 - 120			10K3949		12/01/10 08:53
Surrogate: 4-Bromofluorobenzene		34.7	Z11	ug/L	50.0	69%	79 - 125			10K3949		12/01/10 08:53
10L0063-BSD1												
Benzene		48.4		ug/L	50.0	97%	80 - 121	7	12	10L0063		11/30/10 09:27
Ethylbenzene		48.8		ug/L	50.0	98%	78 - 133	4	12	10L0063		11/30/10 09:27
Methyl tert-Butyl Ether		45.1		ug/L	50.0	90%	76 - 120	5	32	10L0063		11/30/10 09:27
Toluene		49.5		ug/L	50.0	99%	78 - 125	3	35	10L0063		11/30/10 09:27
Xylenes, total		147		ug/L	150	98%	78 - 134	4	18	10L0063		11/30/10 09:27
Surrogate: 1,2-Dichloroethane-d4		53.5		ug/L	50.0	107%	63 - 140			10L0063		11/30/10 09:27
Surrogate: Dibromofluoromethane		51.7		ug/L	50.0	103%	73 - 131			10L0063		11/30/10 09:27
Surrogate: Toluene-d8		51.4		ug/L	50.0	103%	80 - 120			10L0063		11/30/10 09:27
Surrogate: 4-Bromofluorobenzene		43.8		ug/L	50.0	88%	79 - 125			10L0063		11/30/10 09:27
Purgeable Petroleum Hydrocarbons												
10K4953-BSD1												
GRO (C4-C12) NW		1020		ug/L	1000	102%	70 - 130	31	37	10K4953		11/25/10 02:15
Surrogate: a,a,a-Trifluorotoluene		21.4		ug/L	20.0	107%	50 - 150			10K4953		11/25/10 02:15
10K5576-BSD1												
GRO (C4-C12) NW		1120		ug/L	1000	112%	70 - 130	0.1	37	10K5576		11/30/10 01:07
Surrogate: a,a,a-Trifluorotoluene		24.6		ug/L	20.0	123%	50 - 150			10K5576		11/30/10 01:07

Client AMEC Earth & Environmental (13993)
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 Attn Leah Vigoren

Work Order: NTK2483
 Project Name: Everett Terminal(46108) - AMEC
 Project Number: [none]
 Received: 11/20/10 08:30

PROJECT QUALITY CONTROL DATA Matrix Spike

Analyte	Orig. Val.	MS Val	Q	Units	Spike Conc	% Rec.	Target Range	Batch	Sample Spiked	Analyzed Date/Time
General Chemistry Parameters										
10K4177-MS1										
Nitrate as N	ND	2.88		mg/L	3.00	96%	80 - 120	10K4177	NTK2483-02	11/20/10 19:40
Sulfate	1.87	15.4		mg/L	15.0	90%	80 - 120	10K4177	NTK2483-02	11/20/10 19:40
10K5425-MS1										
Alkalinity, Total (CaCO3)	147	231		mg/L	100	84%	80 - 120	10K5425	NTK2483-03	11/28/10 01:41
10K5845-MS1										
Alkalinity, Total (CaCO3)	187	262	M8	mg/L	100	75%	80 - 120	10K5845	NTK3060-05	12/01/10 00:47
Methane, Ethane, and Ethene by GC										
10K5196-MS1										
Methane	994	916	E, M8	ug/L	278	-28%	46 - 133	10K5196	NTK2915-01	11/30/10 10:33
<i>Surrogate: Acetylene</i>		451		ug/L	450	100%	70 - 122	10K5196	NTK2915-01	11/30/10 10:33
10K5196-MS2										
Methane	915	965	E, M8	ug/L	278	18%	46 - 133	10K5196	NTK2483-03	11/30/10 10:38
<i>Surrogate: Acetylene</i>		435		ug/L	450	97%	70 - 122	10K5196	NTK2483-03	11/30/10 10:38
Volatile Organic Compounds by EPA Method 8260B										
10K3949-MS1										
Benzene	ND	51.1		ug/L	50.0	102%	65 - 151	10K3949	NTK2483-03	12/01/10 18:26
Ethylbenzene	ND	49.4		ug/L	50.0	99%	68 - 157	10K3949	NTK2483-03	12/01/10 18:26
Methyl tert-Butyl Ether	ND	41.0		ug/L	50.0	82%	56 - 152	10K3949	NTK2483-03	12/01/10 18:26
Toluene	ND	51.4		ug/L	50.0	103%	61 - 153	10K3949	NTK2483-03	12/01/10 18:26
Xylenes, total	0.570	148		ug/L	150	98%	68 - 158	10K3949	NTK2483-03	12/01/10 18:26
<i>Surrogate: 1,2-Dichloroethane-d4</i>		52.7		ug/L	50.0	105%	63 - 140	10K3949	NTK2483-03	12/01/10 18:26
<i>Surrogate: Dibromofluoromethane</i>		51.3		ug/L	50.0	103%	73 - 131	10K3949	NTK2483-03	12/01/10 18:26
<i>Surrogate: Toluene-d8</i>		51.3		ug/L	50.0	103%	80 - 120	10K3949	NTK2483-03	12/01/10 18:26
<i>Surrogate: 4-Bromofluorobenzene</i>		46.7		ug/L	50.0	93%	79 - 125	10K3949	NTK2483-03	12/01/10 18:26
Polyaromatic Hydrocarbons by EPA 8270D SIM										
10K4272-MS1										
Acenaphthene	0.120	0.700		ug/L	1.00	58%	25 - 140	10K4272	NTK2483-03	12/01/10 15:41
Acenaphthylene	ND	0.600		ug/L	1.00	60%	36 - 135	10K4272	NTK2483-03	12/01/10 15:41
Anthracene	ND	0.750		ug/L	1.00	75%	20 - 145	10K4272	NTK2483-03	12/01/10 15:41
Benzo (a) anthracene	ND	0.850		ug/L	1.00	85%	10 - 129	10K4272	NTK2483-03	12/01/10 15:41
Benzo (a) pyrene	ND	0.780		ug/L	1.00	78%	10 - 136	10K4272	NTK2483-03	12/01/10 15:41
Benzo (b) fluoranthene	ND	0.950		ug/L	1.00	95%	10 - 147	10K4272	NTK2483-03	12/01/10 15:41
Benzo (g,h,i) perylene	ND	0.650		ug/L	1.00	65%	10 - 145	10K4272	NTK2483-03	12/01/10 15:41

Client AMEC Earth & Environmental (13993)
 600 University Street, Suite 1020
 Seattle, WA 98101
 Attn Leah Vigoren

Work Order: NTK2483
 Project Name: Everett Terminal(46108) - AMEC
 Project Number: [none]
 Received: 11/20/10 08:30

PROJECT QUALITY CONTROL DATA
Matrix Spike - Cont.

Analyte	Orig. Val.	MS Val	Q	Units	Spike Conc	% Rec.	Target Range	Batch	Sample Spiked	Analyzed Date/Time
Polyaromatic Hydrocarbons by EPA 8270D SIM										
10K4272-MS1										
Benzo (k) fluoranthene	ND	0.770		ug/L	1.00	77%	10 - 135	10K4272	NTK2483-03	12/01/10 15:41
Chrysene	ND	0.740		ug/L	1.00	74%	10 - 138	10K4272	NTK2483-03	12/01/10 15:41
Dibenz (a,h) anthracene	ND	0.650		ug/L	1.00	65%	10 - 144	10K4272	NTK2483-03	12/01/10 15:41
Fluoranthene	ND	0.870		ug/L	1.00	87%	28 - 143	10K4272	NTK2483-03	12/01/10 15:41
Fluorene	0.0800	0.750		ug/L	1.00	67%	28 - 144	10K4272	NTK2483-03	12/01/10 15:41
Indeno (1,2,3-cd) pyrene	ND	0.630		ug/L	1.00	63%	10 - 142	10K4272	NTK2483-03	12/01/10 15:41
1-Methylnaphthalene	0.110	0.690		ug/L	1.00	58%	37 - 126	10K4272	NTK2483-03	12/01/10 15:41
2-Methylnaphthalene	ND	0.620		ug/L	1.00	62%	29 - 127	10K4272	NTK2483-03	12/01/10 15:41
Naphthalene	0.210	0.700		ug/L	1.00	49%	24 - 120	10K4272	NTK2483-03	12/01/10 15:41
Phenanthrene	ND	0.720		ug/L	1.00	72%	31 - 142	10K4272	NTK2483-03	12/01/10 15:41
Pyrene	ND	0.860		ug/L	1.00	86%	10 - 158	10K4272	NTK2483-03	12/01/10 15:41
Surrogate: Nitrobenzene-d5		0.470		ug/L	1.00	47%	27 - 120	10K4272	NTK2483-03	12/01/10 15:41
Surrogate: 2-Fluorobiphenyl		0.520		ug/L	1.00	52%	29 - 120	10K4272	NTK2483-03	12/01/10 15:41
Surrogate: Terphenyl-d14		0.670		ug/L	1.00	67%	13 - 120	10K4272	NTK2483-03	12/01/10 15:41
Purgeable Petroleum Hydrocarbons										
10K4953-MS1										
GRO (C4-C12) NW	324	1590		ug/L	1000	126%	58 - 139	10K4953	NTK2483-03	11/29/10 12:26
Surrogate: a,a,a-Trifluorotoluene		23.6		ug/L	20.0	118%	50 - 150	10K4953	NTK2483-03	11/29/10 12:26
10K5576-MS1										
GRO (C4-C12) NW	ND	886		ug/L	1000	89%	58 - 139	10K5576	NTK3040-01	11/30/10 14:09
Surrogate: a,a,a-Trifluorotoluene		21.8		ug/L	20.0	109%	50 - 150	10K5576	NTK3040-01	11/30/10 14:09
Extractable Petroleum Hydrocarbons with Silica Gel Treatment										
10K5246-MS1										
Diesel	488	978		ug/L	990	49%	30 - 140	10K5246	NTK2483-03	11/29/10 13:33
Surrogate: o-Terphenyl		8.49	Z6	ug/L	19.8	43%	50 - 150	10K5246	NTK2483-03	11/29/10 13:33

Client AMEC Earth & Environmental (13993)
 600 University Street, Suite 1020
 Seattle, WA 98101
 Attn Leah Vigoren

Work Order: NTK2483
 Project Name: Everett Terminal(46108) - AMEC
 Project Number: [none]
 Received: 11/20/10 08:30

PROJECT QUALITY CONTROL DATA Matrix Spike Dup

Analyte	Orig. Val.	Duplicate	Q	Units	Spike Conc	% Rec.	Target Range	RPD	Limit	Batch	Sample Duplicated	Analyzed Date/Time
Methane, Ethane, and Ethene by GC												
10K5196-MSD1												
Methane	994	921	E, M8	ug/L	278	-26%	46 - 133	0.5	20	10K5196	NTK2915-01	11/30/10 10:36
<i>Surrogate: Acetylene</i>		422		ug/L	450	94%	70 - 122			10K5196	NTK2915-01	11/30/10 10:36
10K5196-MSD2												
Methane	915	1040		ug/L	278	46%	46 - 133	8	20	10K5196	NTK2483-03	11/30/10 10:41
<i>Surrogate: Acetylene</i>		388		ug/L	450	86%	70 - 122			10K5196	NTK2483-03	11/30/10 10:41
Volatile Organic Compounds by EPA Method 8260B												
10K3949-MSD1												
Benzene	ND	54.4		ug/L	50.0	109%	65 - 151	6	12	10K3949	NTK2483-03	12/01/10 18:54
Ethylbenzene	ND	54.1		ug/L	50.0	108%	68 - 157	9	12	10K3949	NTK2483-03	12/01/10 18:54
Methyl tert-Butyl Ether	ND	47.1		ug/L	50.0	94%	56 - 152	14	32	10K3949	NTK2483-03	12/01/10 18:54
Toluene	ND	55.5		ug/L	50.0	111%	61 - 153	8	35	10K3949	NTK2483-03	12/01/10 18:54
Xylenes, total	0.570	160		ug/L	150	106%	68 - 158	8	18	10K3949	NTK2483-03	12/01/10 18:54
<i>Surrogate: 1,2-Dichloroethane-d4</i>		50.8		ug/L	50.0	102%	63 - 140			10K3949	NTK2483-03	12/01/10 18:54
<i>Surrogate: Dibromofluoromethane</i>		50.8		ug/L	50.0	102%	73 - 131			10K3949	NTK2483-03	12/01/10 18:54
<i>Surrogate: Toluene-d8</i>		52.4		ug/L	50.0	105%	80 - 120			10K3949	NTK2483-03	12/01/10 18:54
<i>Surrogate: 4-Bromofluorobenzene</i>		46.4		ug/L	50.0	93%	79 - 125			10K3949	NTK2483-03	12/01/10 18:54
Polyaromatic Hydrocarbons by EPA 8270D SIM												
10K4272-MSD1												
Acenaphthene	0.120	0.686		ug/L	0.980	58%	25 - 140	2	35	10K4272	NTK2483-03	12/01/10 16:02
Acenaphthylene	ND	0.598		ug/L	0.980	61%	36 - 135	0.3	31	10K4272	NTK2483-03	12/01/10 16:02
Anthracene	ND	0.735		ug/L	0.980	75%	20 - 145	2	38	10K4272	NTK2483-03	12/01/10 16:02
Benzo (a) anthracene	ND	0.824		ug/L	0.980	84%	10 - 129	3	50	10K4272	NTK2483-03	12/01/10 16:02
Benzo (a) pyrene	ND	0.765		ug/L	0.980	78%	10 - 136	2	50	10K4272	NTK2483-03	12/01/10 16:02
Benzo (b) fluoranthene	ND	0.892		ug/L	0.980	91%	10 - 147	6	50	10K4272	NTK2483-03	12/01/10 16:02
Benzo (g,h,i) perylene	ND	0.618		ug/L	0.980	63%	10 - 145	5	50	10K4272	NTK2483-03	12/01/10 16:02
Benzo (k) fluoranthene	ND	0.735		ug/L	0.980	75%	10 - 135	5	50	10K4272	NTK2483-03	12/01/10 16:02
Chrysene	ND	0.725		ug/L	0.980	74%	10 - 138	2	50	10K4272	NTK2483-03	12/01/10 16:02
Dibenz (a,h) anthracene	ND	0.618		ug/L	0.980	63%	10 - 144	5	50	10K4272	NTK2483-03	12/01/10 16:02
Fluoranthene	ND	0.863		ug/L	0.980	88%	28 - 143	0.8	40	10K4272	NTK2483-03	12/01/10 16:02
Fluorene	0.0800	0.735		ug/L	0.980	67%	28 - 144	2	39	10K4272	NTK2483-03	12/01/10 16:02
Indeno (1,2,3-cd) pyrene	ND	0.598		ug/L	0.980	61%	10 - 142	5	50	10K4272	NTK2483-03	12/01/10 16:02
1-Methylnaphthalene	0.110	0.696		ug/L	0.980	60%	37 - 126	0.9	27	10K4272	NTK2483-03	12/01/10 16:02
2-Methylnaphthalene	ND	0.608		ug/L	0.980	62%	29 - 127	2	29	10K4272	NTK2483-03	12/01/10 16:02
Naphthalene	0.210	0.716		ug/L	0.980	52%	24 - 120	2	32	10K4272	NTK2483-03	12/01/10 16:02
Phenanthrene	ND	0.696		ug/L	0.980	71%	31 - 142	3	47	10K4272	NTK2483-03	12/01/10 16:02
Pyrene	ND	0.804		ug/L	0.980	82%	10 - 158	7	37	10K4272	NTK2483-03	12/01/10 16:02
<i>Surrogate: Nitrobenzene-d5</i>		0.490		ug/L	0.980	50%	27 - 120			10K4272	NTK2483-03	12/01/10 16:02
<i>Surrogate: 2-Fluorobiphenyl</i>		0.510		ug/L	0.980	52%	29 - 120			10K4272	NTK2483-03	12/01/10 16:02

Client AMEC Earth & Environmental (13993)
 600 University Street, Suite 1020
 Seattle, WA 98101
 Attn Leah Vigoren

Work Order: NTK2483
 Project Name: Everett Terminal(46108) - AMEC
 Project Number: [none]
 Received: 11/20/10 08:30

PROJECT QUALITY CONTROL DATA

Matrix Spike Dup - Cont.

Analyte	Orig. Val.	Duplicate	Q	Units	Spike Conc	% Rec.	Target Range	RPD	Limit	Batch	Sample Duplicated	Analyzed Date/Time
Polyaromatic Hydrocarbons by EPA 8270D SIM												
10K4272-MSD1												
<i>Surrogate: Terphenyl-d14</i>		0.637		ug/L	0.980	65%	13 - 120			10K4272	NTK2483-03	12/01/10 16:02
Purgeable Petroleum Hydrocarbons												
10K4953-MSD1												
GRO (C4-C12) NW	324	1500		ug/L	1000	118%	58 - 139	6	37	10K4953	NTK2483-03	11/29/10 12:56
<i>Surrogate: a,a,a-Trifluorotoluene</i>		23.7		ug/L	20.0	119%	50 - 150			10K4953	NTK2483-03	11/29/10 12:56
10K5576-MSD1												
GRO (C4-C12) NW	ND	520	M8, R2	ug/L	1000	52%	58 - 139	52	37	10K5576	NTK3040-01	11/30/10 14:39
<i>Surrogate: a,a,a-Trifluorotoluene</i>		20.2		ug/L	20.0	101%	50 - 150			10K5576	NTK3040-01	11/30/10 14:39
Extractable Petroleum Hydrocarbons with Silica Gel Treatment												
10K5246-MSD1												
Diesel	488	990		ug/L	952	53%	30 - 140	1	41	10K5246	NTK2483-03	11/29/10 13:49
<i>Surrogate: o-Terphenyl</i>		7.60	Z6	ug/L	19.0	40%	50 - 150			10K5246	NTK2483-03	11/29/10 13:49

Client AMEC Earth & Environmental (13993)
600 University Street, Suite 1020
Seattle, WA 98101
Attn Leah Vigoren

Work Order: NTK2483
Project Name: Everett Terminal(46108) - AMEC
Project Number: [none]
Received: 11/20/10 08:30

CERTIFICATION SUMMARY

TestAmerica Nashville

Method	Matrix	AIHA	Nelac	Washington
EPA 300.0	Water	N/A	X	X
NWTPH-Dx	Water	N/A		X
NWTPH-Gx	Water	N/A	X	X
RSK 175	Water	N/A	X	X
SM2320 B	Water		X	
SW846 6020	Water		X	X
SW846 8260B	Water	N/A	X	X
SW846 8270D SIM	Water		X	X

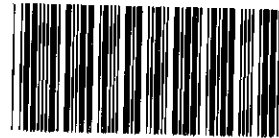
Client AMEC Earth & Environmental (13993)
600 University Street, Suite 1020
Seattle, WA 98101
Attn Leah Vigoren

Work Order: NTK2483
Project Name: Everett Terminal(46108) - AMEC
Project Number: [none]
Received: 11/20/10 08:30

DATA QUALIFIERS AND DEFINITIONS

- B** Analyte was detected in the associated Method Blank.
- B1** Analyte was detected in the associated method blank. Analyte concentration in the sample is greater than 10x the concentration found in the method blank.
- E** Concentration exceeds the calibration range and therefore result is semi-quantitative.
- J** Analyte detected at a level less than the Reporting Limit (RL) and greater than or equal to the Method Detection Limit (MDL). Concentrations within this range are estimated.
- L** Laboratory Control Sample and/or Laboratory Control Sample Duplicate recovery was above the acceptance limits. Analyte not detected, data not impacted.
- L1** Laboratory Control Sample and/or Laboratory Control Sample Duplicate recovery was above acceptance limits.
- M8** The MS and/or MSD were below the acceptance limits. See Blank Spike (LCS).
- MNR1** There was no MS/MSD analyzed with this batch due to insufficient sample volume. See Blank Spike.
- QP5** There was insufficient contamination present to perform a pattern match.
- QP7** The hydrocarbon pattern most closely resembles a blended gasoline & diesel product.
- R2** The RPD exceeded the acceptance limit.
- Z11** Surrogate low but all targets within method criteria. No effect on data.
- Z6** Surrogate recovery was below acceptance limits.
- ND** Not detected at the reporting limit (or method detection limit if shown)

METHOD MODIFICATION NOTES



COOLER RECEIPT

Cooler Received/Opened On 11/20/10 @ 08:30

NTK2483

1. Tracking # 5824 (last 4 digits, FedEx)

Courier: FED-EX IR Gun ID 97310166

2. Temperature of rep. sample or temp blank when opened: 0.5 Degrees Celsius

3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES NO NA

4. Were custody seals on outside of cooler? YES NO NA

If yes, how many and where: FROST

5. Were the seals intact, signed, and dated correctly? YES NO NA

6. Were custody papers inside cooler? YES NO NA

I certify that I opened the cooler and answered questions 1-6 (initial) [Signature]

7. Were custody seals on containers: YES NO and intact YES NO NA

Were these signed and dated correctly? YES NO NA

8. Packing mat'l used? Bubblewrap Plastic bag Peanuts Vermiculite Foam Insert Paper Other None

9. Cooling process: Ice Ice-pack Ice (direct contact) Dry ice Other None

10. Did all containers arrive in good condition (unbroken)? YES NO NA

11. Were all container labels complete (#, date, signed, pres., etc)? YES NO NA

12. Did all container labels and tags agree with custody papers? YES NO NA

13a. Were VOA vials received? YES NO NA

b. Was there any observable headspace present in any VOA vial? YES NO NA

14. Was there a Trip Blank in this cooler? YES NO NA If multiple coolers, sequence # 1

I certify that I unloaded the cooler and answered questions 7-14 (initial) [Signature] 11.18.10

15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES NO NA

b. Did the bottle labels indicate that the correct preservatives were used YES NO NA

16. Was residual chlorine present? YES NO NA

I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (initial) [Signature] 11.18.10

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

18. Did you sign the custody papers in the appropriate place? YES NO NA

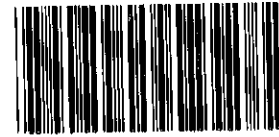
19. Were correct containers used for the analysis requested? YES NO NA

20. Was sufficient amount of sample sent in each container? YES NO NA

I certify that I entered this project into LIMS and answered questions 17-20 (initial) [Signature] 11.18.10

I certify that I attached a label with the unique LIMS number to each container (initial) [Signature] 11.18.10

21. Were there Non-Conformance issues at login? YES NO Was a PIPE generated? YES NO # _____



NTK2483

Cooler Received/Opened On 11/20/2010 @ 0830

1. Tracking # 5508 (last 4 digits, FedEx)

Courier: FedEx IR Gun ID 97460373

2. Temperature of rep. sample or temp blank when opened: 4.4 Degrees Celsius

3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES NO...NA

4. Were custody seals on outside of cooler? YES...NO...NA

If yes, how many and where: 1 (Front)

5. Were the seals intact, signed, and dated correctly? YES...NO...NA

6. Were custody papers inside cooler? YES...NO...NA

I certify that I opened the cooler and answered questions 1-6 (initial)

7. Were custody seals on containers: YES NO and intact YES...NO...NA

Were these signed and dated correctly? YES...NO...NA

8. Packing mat'l used? Bubblewrap Plastic bag Peanuts Vermiculite Foam Insert Paper Other None

9. Cooling process: Ice Ice-pack Ice (direct contact) Dry ice Other None

10. Did all containers arrive in good condition (unbroken)? YES...NO...NA

11. Were all container labels complete (#, date, signed, pres., etc)? YES...NO...NA

12. Did all container labels and tags agree with custody papers? YES...NO...NA

13a. Were VOA vials received? YES...NO...NA

b. Was there any observable headspace present in any VOA vial? YES...NO...NA

14. Was there a Trip Blank in this cooler? YES...NO...NA If multiple coolers, sequence # 2

I certify that I unloaded the cooler and answered questions 7-14 (initial)

15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES...NO...NA

b. Did the bottle labels indicate that the correct preservatives were used? YES...NO...NA

16. Was residual chlorine present? YES...NO...NA

I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (initial)

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

18. Did you sign the custody papers in the appropriate place? YES...NO...NA

19. Were correct containers used for the analysis requested? YES...NO...NA

20. Was sufficient amount of sample sent in each container? YES...NO...NA

I certify that I entered this project into LIMS and answered questions 17-20 (initial)

I certify that I attached a label with the unique LIMS number to each container (initial)

21. Were there Non-Conformance issues at login? YES...NO... Was a PIPE generated? YES...NO...#

Cooler Received/Opened On 11/20/2010 @ 0830

1. Tracking # 7920 (last 4 digits, FedEx)

Courier: FedEx IR Gun ID 97460373

2. Temperature of rep. sample or temp blank when opened: 0.8 Degrees Celsius

3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES NO...NA

4. Were custody seals on outside of cooler? YES...NO...NA

If yes, how many and where: 1 (front)

5. Were the seals intact, signed, and dated correctly? YES...NO...NA

6. Were custody papers inside cooler? YES...NO...NA

I certify that I opened the cooler and answered questions 1-6 (initial)

7. Were custody seals on containers: YES NO and Intact YES...NO...NA

Were these signed and dated correctly? YES...NO...NA

8. Packing mat'l used? Bubblewrap Plastic bag Peanuts Vermiculite Foam Insert Paper Other None

9. Cooling process: Ice Ice-pack Ice (direct contact) Dry ice Other None

10. Did all containers arrive in good condition (unbroken)? YES...NO...NA

11. Were all container labels complete (#, date, signed, pres., etc)? YES...NO...NA

12. Did all container labels and tags agree with custody papers? YES...NO...NA

13a. Were VOA vials received? YES...NO...NA

b. Was there any observable headspace present in any VOA vial? YES...NO...NA

14. Was there a Trip Blank in this cooler? YES...NO...NA If multiple coolers, sequence # 3

I certify that I unloaded the cooler and answered questions 7-14 (initial)

15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES...NO...NA

b. Did the bottle labels indicate that the correct preservatives were used YES...NO...NA

16. Was residual chlorine present? YES...NO...NA

I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (initial)

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

18. Did you sign the custody papers in the appropriate place? YES...NO...NA

19. Were correct containers used for the analysis requested? YES...NO...NA

20. Was sufficient amount of sample sent in each container? YES...NO...NA

I certify that I entered this project into LIMS and answered questions 17-20 (initial)

I certify that I attached a label with the unique LIMS number to each container (initial)

21. Were there Non-Conformance issues at login? YES...NO... Was a PIPE generated? YES...NO...#

AGENCY DRAFT



Nashville, TN

NTK2483

12/08/10 23:59

COOLER RECEIPT FORM

Cooler Received/Opened On 11/20/2010 @ 8:30

1. Tracking # 7930 (last 4 digits, FedEx)

Courier: FedEx IR Gun ID Raynger

2. Temperature of rep. sample or temp blank when opened: 0.4 Degrees Celsius

3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES NO NA

4. Were custody seals on outside of cooler? YES NO NA

If yes, how many and where: 1 Front

5. Were the seals intact, signed, and dated correctly? YES NO NA

6. Were custody papers inside cooler? YES NO NA

I certify that I opened the cooler and answered questions 1-6 (initial) JH

7. Were custody seals on containers: YES NO and Intact YES NO NA

Were these signed and dated correctly? YES NO NA

8. Packing mat'l used? Bubblewrap Plastic bag Peanuts Vermiculite Foam Insert Paper Other None

9. Cooling process: ice Ice-pack ice (direct contact) Dry ice Other None

10. Did all containers arrive in good condition (unbroken)? YES NO NA

11. Were all container labels complete (#, date, signed, pres., etc)? YES NO NA

12. Did all container labels and tags agree with custody papers? YES NO NA

13a. Were VOA vials received? YES NO NA

b. Was there any observable headspace present in any VOA vial? YES NO NA

14. Was there a Trip Blank in this cooler? YES NO NA If multiple coolers, sequence # 4

I certify that I unloaded the cooler and answered questions 7-14 (initial) gm

15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES NO NA

b. Did the bottle labels indicate that the correct preservatives were used YES NO NA

16. Was residual chlorine present? YES NO NA

I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (initial) gm

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

18. Did you sign the custody papers in the appropriate place? YES NO NA

19. Were correct containers used for the analysis requested? YES NO NA

20. Was sufficient amount of sample sent in each container? YES NO NA

I certify that I entered this project into LIMS and answered questions 17-20 (initial) gm

I certify that I attached a label with the unique LIMS number to each container (initial) gm

21. Were there Non-Conformance issues at login? YES NO Was a PIPE generated? YES NO #

Lage, Gail

From: Vigoren, Leah R [Leah.Vigoren@amec.com]
Sent: Friday, November 19, 2010 4:07 PM
To: Lage, Gail
Cc: Klingensmith, Leah
Subject: RE: ExxonMobil; Everett

That's correct, W-6 will not be analyzed for the below.

From: Lage, Gail [mailto:Gail.Lage@testamericainc.com]
Sent: Friday, November 19, 2010 1:59 PM
To: Vigoren, Leah R
Cc: Klingensmith, Leah
Subject: RE: ExxonMobil; Everett

OK, so on the third chain that we will receive tomorrow, we do not need to run nitrate, sulfate, manganese, alkalinity, and methane on sample W6 – correct?

Gail A. Lage

Program Manager

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

2960 Foster Creighton Drive

Nashville, TN 37204

Tel 615.301.5741 / Fax 615.726.3404

www.testamericainc.com

From: Vigoren, Leah R [mailto:Leah.Vigoren@amec.com]

11/19/2010

Sent: Friday, November 19, 2010 3:49 PM
To: Lage, Gail
Cc: Klingensmith, Leah
Subject: ExxonMobil; Everett

Gail

Tracking numbers for tomorrows (Saturday) shipment: 873-775-155-508, 463-440-947-930, 463-440-945-824, 463-440-947-920.

Copy of the COCs attached.

Leah

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Nashville Division
 2960 Foster Creighton Drive * Nashville TN 37204
 Phone: (800) 765-0980 / (615) 726-0177 Fax: (615) 726-3404
 "Reg District (CA)"



Page 1 of 1

Consultant: AMEC Earth & Environmental (13993)
 Address: 600 University Street, Suite 1020
 City, State, Zip: Seattle WA 98101

TA Account #:
 Invoice to: AMEC Earth & Environmental (13993)
 Report to: Leah Vigoren

ExxonMobil Project Mgr: Attn: Accounts Payable A.J. Abel
 Consultant Project Mgr: Leah Vigoren

Project Name: Everett Terminal(46108) - AMEC
 Retail Project (MRN): 46108

Consultant Telephone #: (206) 342-1760
 Sampler Name (Print): Joseph C. Petrich
 Samplers Signature: *[Signature]*

Major Project (AFE): E2.1985.95X94.V.01.08
 Site Address: 2717 Federal Avenue
 City, State, Zip: Everett Washington

Sample ID	Preservative				Matrix				Analyze for								
	Grab	Composite	Field Filtered	Methanol	Sodium Bisulfate	(Blue Label) HCL	(Orange Label) NaOH	(Yellow Label) Plastic H2SO4	(Yellow Label) Glass H2SO4	(Red Label) HNO3	(Black Label) None	Groundwater	Wastewater	Drinking Water	Sludge	Soil	(specify) Other
106 - 111810	X					X				X	X	X					
MW4012 - 111810	X				X	X				X	X	X					
MW19 - 111810	X				X	X				X	X	X					
TRIP BLANK																	

COMMENTS: All turn around times are calculated from the time of receipt at TestAmerica. It will be the responsibility of Exxon Mobil or its consultant to notify the TestAmerica Project Manager by phone or fax that a rush sample will be submitted. EA Project manager: *[Name]* Date: *[Date]*

NOTES/SPECIAL INSTRUCTIONS: BO # 20926
 Mufflers for SOC, 208 mpa. Approved by US EPA 5/20/13
 on select ground water samples. will contact cos directly.

Relinquished by: *[Signature]* Date: 11/19/10 Time: 0830
 Received by: *[Signature]* Date: 11/19/10 Time: 0830

Shipped Via: *[Signature]*
 Temperature Upon Receipt: *[Blank]*
 Sample Containers Intact? Y N
 VOCs Free of Headspace? Y N

QC Deliverables (Please Circle One):
 Level 2: Level 3: Level 4: Site Specific
 (If site specific, please pre-schedule w/ TestAmerica Project Manager or attach specific instructions)

Date Due of Report: *[Blank]*

December 13, 2010 2:31:15PM

Client: AMEC Earth & Environmental (13993)
600 University Street, Suite 1020
Seattle, WA 98101
Attn: Leah Vigoren

Work Order: NTL0082
Project Name: Everett Terminal(46108) - AMEC
Project Nbr: [none]
P/O Nbr:
Date Received: 12/01/10

SAMPLE IDENTIFICATION	LAB NUMBER	COLLECTION DATE AND TIME
MW7A-1	NTL0082-01	11/30/10 09:30
AP4-1	NTL0082-02	11/30/10 10:00
AP3-1	NTL0082-03	11/30/10 10:15
AP2-1	NTL0082-04	11/30/10 10:30
AP5-1	NTL0082-05	11/30/10 11:00
AP6-1	NTL0082-06	11/30/10 11:45
Trip Blank	NTL0082-07	11/30/10 00:01

An executed copy of the chain of custody, the project quality control data, and the sample receipt form are also included as an addendum to this report. If you have any questions relating to this analytical report, please contact your Laboratory Project Manager at 1-800-765-0980. Any opinions, if expressed, are outside the scope of the Laboratory's accreditation.

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Washington Certification Number: C1712

The Chain(s) of Custody, 2 pages, are included and are an integral part of this report.

These results relate only to the items tested. This report shall not be reproduced except in full and with permission of the laboratory.

All solids results are reported in wet weight unless specifically stated.

Estimated uncertainty is available upon request.

This report has been electronically signed.

Report Approved By:



Leah R. Klingensmith

Senior Project Management

Client AMEC Earth & Environmental (13993)
600 University Street, Suite 1020
Seattle, WA 98101
Attn Leah Vigoren

Work Order: NTL0082
Project Name: Everett Terminal(46108) - AMEC
Project Number: [none]
Received: 12/01/10 08:00

ANALYTICAL REPORT

Analyte	Result	Flag	Units	MDL	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
Sample ID: NTL0082-01 (MW7A-1 - Soil) Sampled: 11/30/10 09:30									
General Chemistry Parameters									
% Dry Solids	85.1		%	0.500	0.500	1	12/03/10 07:39	SW-846	10L0311
Volatile Organic Compounds by EPA Method 8260B									
Benzene	ND		mg/kg dry	0.000898	0.00163	1	12/10/10 14:35	SW846 8260B	10L0205
Ethylbenzene	ND		mg/kg dry	0.000800	0.00163	1	12/10/10 14:35	SW846 8260B	10L0205
Methyl tert-Butyl Ether	ND		mg/kg dry	0.000547	0.00163	1	12/10/10 14:35	SW846 8260B	10L0205
Toluene	ND		mg/kg dry	0.000726	0.00163	1	12/10/10 14:35	SW846 8260B	10L0205
Xylenes, total	ND		mg/kg dry	0.00155	0.00408	1	12/10/10 14:35	SW846 8260B	10L0205
Surr: 1,2-Dichloroethane-d4 (67-138%)	104 %					1	12/10/10 14:35	SW846 8260B	10L0205
Surr: Dibromofluoromethane (75-125%)	101 %					1	12/10/10 14:35	SW846 8260B	10L0205
Surr: Toluene-d8 (76-129%)	113 %					1	12/10/10 14:35	SW846 8260B	10L0205
Surr: 4-Bromofluorobenzene (67-147%)	96 %					1	12/10/10 14:35	SW846 8260B	10L0205
Polyaromatic Hydrocarbons by EPA 8270D SIM									
Acenaphthene	ND		mg/kg dry	0.00163	0.00776	2	12/08/10 11:06	SW846 8270D SIM	10L0221
Acenaphthylene	0.00621	J	mg/kg dry	0.00140	0.00776	2	12/08/10 11:06	SW846 8270D SIM	10L0221
Anthracene	0.00544	J	mg/kg dry	0.00116	0.00776	2	12/08/10 11:06	SW846 8270D SIM	10L0221
Benzo (a) anthracene	0.0116		mg/kg dry	0.00140	0.00776	2	12/08/10 11:06	SW846 8270D SIM	10L0221
Benzo (a) pyrene	0.0264		mg/kg dry	0.00140	0.00776	2	12/08/10 11:06	SW846 8270D SIM	10L0221
Benzo (b) fluoranthene	0.0264		mg/kg dry	0.00163	0.00776	2	12/08/10 11:06	SW846 8270D SIM	10L0221
Benzo (g,h,i) perylene	0.0248		mg/kg dry	0.00163	0.00776	2	12/08/10 11:06	SW846 8270D SIM	10L0221
Benzo (k) fluoranthene	0.00466	J	mg/kg dry	0.00163	0.00776	2	12/08/10 11:06	SW846 8270D SIM	10L0221
Chrysene	0.0171		mg/kg dry	0.00233	0.00776	2	12/08/10 11:06	SW846 8270D SIM	10L0221
Dibenz (a,h) anthracene	0.00854		mg/kg dry	0.00210	0.00776	2	12/08/10 11:06	SW846 8270D SIM	10L0221
Fluoranthene	0.0163		mg/kg dry	0.00116	0.00776	2	12/08/10 11:06	SW846 8270D SIM	10L0221
Fluorene	ND		mg/kg dry	0.00233	0.00776	2	12/08/10 11:06	SW846 8270D SIM	10L0221
Indeno (1,2,3-cd) pyrene	0.0124		mg/kg dry	0.00140	0.00776	2	12/08/10 11:06	SW846 8270D SIM	10L0221
1-Methylnaphthalene	0.00466	J	mg/kg dry	0.00140	0.00776	2	12/08/10 11:06	SW846 8270D SIM	10L0221
2-Methylnaphthalene	0.00854		mg/kg dry	0.00186	0.00776	2	12/08/10 11:06	SW846 8270D SIM	10L0221
Naphthalene	0.00544	J	mg/kg dry	0.00140	0.00776	2	12/08/10 11:06	SW846 8270D SIM	10L0221
Phenanthrene	0.0163		mg/kg dry	0.00186	0.00776	2	12/08/10 11:06	SW846 8270D SIM	10L0221
Pyrene	0.0280		mg/kg dry	0.00186	0.00776	2	12/08/10 11:06	SW846 8270D SIM	10L0221
Surr: Nitrobenzene-d5 (17-120%)	74 %					2	12/08/10 11:06	SW846 8270D SIM	10L0221
Surr: 2-Fluorobiphenyl (14-120%)	74 %					2	12/08/10 11:06	SW846 8270D SIM	10L0221
Surr: Terphenyl-d14 (18-120%)	90 %					2	12/08/10 11:06	SW846 8270D SIM	10L0221
Purgeable Petroleum Hydrocarbons									
GRO (C4-C12) NW	0.816	J	mg/kg dry	0.441	4.41	50	12/02/10 20:43	NWTPH-Gx	10L0210
Surr: a,a,a-Trifluorotoluene (50-150%)	98 %					50	12/02/10 20:43	NWTPH-Gx	10L0210
Extractable Petroleum Hydrocarbons with Silica Gel Treatment									
Diesel	10.0	QP7a	mg/kg dry	1.58	9.05	2	12/04/10 01:06	NWTPH-Dx	10L0224
Motor Oil	228	QP7a	mg/kg dry	1.58	9.05	2	12/04/10 01:06	NWTPH-Dx	10L0224
Surr: o-Terphenyl (50-150%)	68 %					2	12/04/10 01:06	NWTPH-Dx	10L0224

Client AMEC Earth & Environmental (13993)
600 University Street, Suite 1020
Seattle, WA 98101
Attn Leah Vigoren

Work Order: NTL0082
Project Name: Everett Terminal(46108) - AMEC
Project Number: [none]
Received: 12/01/10 08:00

ANALYTICAL REPORT

Analyte	Result	Flag	Units	MDL	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
Sample ID: NTL0082-02 (AP4-1 - Soil) Sampled: 11/30/10 10:00									
General Chemistry Parameters									
% Dry Solids	81.9		%	0.500	0.500	1	12/03/10 07:39	SW-846	10L0311
Volatile Organic Compounds by EPA Method 8260B									
Benzene	ND		mg/kg dry	0.00119	0.00217	1	12/10/10 15:04	SW846 8260B	10L0205
Ethylbenzene	ND		mg/kg dry	0.00106	0.00217	1	12/10/10 15:04	SW846 8260B	10L0205
Methyl tert-Butyl Ether	ND		mg/kg dry	0.000727	0.00217	1	12/10/10 15:04	SW846 8260B	10L0205
Toluene	ND		mg/kg dry	0.000966	0.00217	1	12/10/10 15:04	SW846 8260B	10L0205
Xylenes, total	ND		mg/kg dry	0.00206	0.00543	1	12/10/10 15:04	SW846 8260B	10L0205
Surr: 1,2-Dichloroethane-d4 (67-138%)	104 %					1	12/10/10 15:04	SW846 8260B	10L0205
Surr: Dibromofluoromethane (75-125%)	101 %					1	12/10/10 15:04	SW846 8260B	10L0205
Surr: Toluene-d8 (76-129%)	115 %					1	12/10/10 15:04	SW846 8260B	10L0205
Surr: 4-Bromofluorobenzene (67-147%)	98 %					1	12/10/10 15:04	SW846 8260B	10L0205
Polyaromatic Hydrocarbons by EPA 8270D SIM									
Acenaphthene	ND		mg/kg dry	0.000844	0.00401	1	12/08/10 11:28	SW846 8270D SIM	10L0221
Acenaphthylene	0.00201	J	mg/kg dry	0.000723	0.00401	1	12/08/10 11:28	SW846 8270D SIM	10L0221
Anthracene	0.00241	J	mg/kg dry	0.000603	0.00401	1	12/08/10 11:28	SW846 8270D SIM	10L0221
Benzo (a) anthracene	0.00723		mg/kg dry	0.000723	0.00401	1	12/08/10 11:28	SW846 8270D SIM	10L0221
Benzo (a) pyrene	0.00884		mg/kg dry	0.000723	0.00401	1	12/08/10 11:28	SW846 8270D SIM	10L0221
Benzo (b) fluoranthene	0.0141		mg/kg dry	0.000844	0.00401	1	12/08/10 11:28	SW846 8270D SIM	10L0221
Benzo (g,h,i) perylene	0.0113		mg/kg dry	0.000844	0.00401	1	12/08/10 11:28	SW846 8270D SIM	10L0221
Benzo (k) fluoranthene	ND		mg/kg dry	0.000844	0.00401	1	12/08/10 11:28	SW846 8270D SIM	10L0221
Chrysene	0.00804		mg/kg dry	0.00121	0.00401	1	12/08/10 11:28	SW846 8270D SIM	10L0221
Dibenz (a,h) anthracene	0.00201	J	mg/kg dry	0.00109	0.00401	1	12/08/10 11:28	SW846 8270D SIM	10L0221
Fluoranthene	0.0104		mg/kg dry	0.000603	0.00401	1	12/08/10 11:28	SW846 8270D SIM	10L0221
Fluorene	ND		mg/kg dry	0.00121	0.00401	1	12/08/10 11:28	SW846 8270D SIM	10L0221
Indeno (1,2,3-cd) pyrene	0.00683		mg/kg dry	0.000723	0.00401	1	12/08/10 11:28	SW846 8270D SIM	10L0221
1-Methylnaphthalene	0.00201	J	mg/kg dry	0.000723	0.00401	1	12/08/10 11:28	SW846 8270D SIM	10L0221
2-Methylnaphthalene	0.00402		mg/kg dry	0.000965	0.00401	1	12/08/10 11:28	SW846 8270D SIM	10L0221
Naphthalene	0.00281	J	mg/kg dry	0.000723	0.00401	1	12/08/10 11:28	SW846 8270D SIM	10L0221
Phenanthrene	0.0104		mg/kg dry	0.000965	0.00401	1	12/08/10 11:28	SW846 8270D SIM	10L0221
Pyrene	0.0145		mg/kg dry	0.000965	0.00401	1	12/08/10 11:28	SW846 8270D SIM	10L0221
Surr: Nitrobenzene-d5 (17-120%)	70 %					1	12/08/10 11:28	SW846 8270D SIM	10L0221
Surr: 2-Fluorobiphenyl (14-120%)	66 %					1	12/08/10 11:28	SW846 8270D SIM	10L0221
Surr: Terphenyl-d14 (18-120%)	88 %					1	12/08/10 11:28	SW846 8270D SIM	10L0221
Purgeable Petroleum Hydrocarbons									
GRO (C4-C12) NW	0.686	J	mg/kg dry	0.604	6.04	50	12/02/10 22:38	NWTPH-Gx	10L0210
Surr: a,a,a-Trifluorotoluene (50-150%)	94 %					50	12/02/10 22:38	NWTPH-Gx	10L0210
Extractable Petroleum Hydrocarbons with Silica Gel Treatment									
Diesel	6.95	QP7a	mg/kg dry	0.828	4.73	1	12/04/10 01:22	NWTPH-Dx	10L0224
Motor Oil	111	QP7a	mg/kg dry	0.828	4.73	1	12/04/10 01:22	NWTPH-Dx	10L0224
Surr: o-Terphenyl (50-150%)	92 %					1	12/04/10 01:22	NWTPH-Dx	10L0224

Client AMEC Earth & Environmental (13993)
600 University Street, Suite 1020
Seattle, WA 98101
Attn Leah Vigoren

Work Order: NTL0082
Project Name: Everett Terminal(46108) - AMEC
Project Number: [none]
Received: 12/01/10 08:00

ANALYTICAL REPORT

Analyte	Result	Flag	Units	MDL	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
Sample ID: NTL0082-03 (AP3-1 - Soil) Sampled: 11/30/10 10:15									
General Chemistry Parameters									
% Dry Solids	85.8		%	0.500	0.500	1	12/03/10 07:39	SW-846	10L0311
Volatile Organic Compounds by EPA Method 8260B									
Benzene	ND		mg/kg dry	0.00117	0.00212	1	12/10/10 15:34	SW846 8260B	10L0205
Ethylbenzene	ND		mg/kg dry	0.00104	0.00212	1	12/10/10 15:34	SW846 8260B	10L0205
Methyl tert-Butyl Ether	ND		mg/kg dry	0.000711	0.00212	1	12/10/10 15:34	SW846 8260B	10L0205
Toluene	ND		mg/kg dry	0.000945	0.00212	1	12/10/10 15:34	SW846 8260B	10L0205
Xylenes, total	ND		mg/kg dry	0.00202	0.00531	1	12/10/10 15:34	SW846 8260B	10L0205
Surr: 1,2-Dichloroethane-d4 (67-138%)	108 %					1	12/10/10 15:34	SW846 8260B	10L0205
Surr: Dibromofluoromethane (75-125%)	103 %					1	12/10/10 15:34	SW846 8260B	10L0205
Surr: Toluene-d8 (76-129%)	122 %					1	12/10/10 15:34	SW846 8260B	10L0205
Surr: 4-Bromofluorobenzene (67-147%)	111 %					1	12/10/10 15:34	SW846 8260B	10L0205
Polyaromatic Hydrocarbons by EPA 8270D SIM									
Acenaphthene	ND		mg/kg dry	0.000814	0.00387	1	12/08/10 11:51	SW846 8270D SIM	10L0221
Acenaphthylene	0.00233	J	mg/kg dry	0.000698	0.00387	1	12/08/10 11:51	SW846 8270D SIM	10L0221
Anthracene	0.00310	J	mg/kg dry	0.000581	0.00387	1	12/08/10 11:51	SW846 8270D SIM	10L0221
Benzo (a) anthracene	0.00620		mg/kg dry	0.000698	0.00387	1	12/08/10 11:51	SW846 8270D SIM	10L0221
Benzo (a) pyrene	0.00659		mg/kg dry	0.000698	0.00387	1	12/08/10 11:51	SW846 8270D SIM	10L0221
Benzo (b) fluoranthene	0.0112		mg/kg dry	0.000814	0.00387	1	12/08/10 11:51	SW846 8270D SIM	10L0221
Benzo (g,h,i) perylene	0.00698		mg/kg dry	0.000814	0.00387	1	12/08/10 11:51	SW846 8270D SIM	10L0221
Benzo (k) fluoranthene	ND		mg/kg dry	0.000814	0.00387	1	12/08/10 11:51	SW846 8270D SIM	10L0221
Chrysene	0.00581		mg/kg dry	0.00116	0.00387	1	12/08/10 11:51	SW846 8270D SIM	10L0221
Dibenz (a,h) anthracene	0.00271	J	mg/kg dry	0.00105	0.00387	1	12/08/10 11:51	SW846 8270D SIM	10L0221
Fluoranthene	0.00775		mg/kg dry	0.000581	0.00387	1	12/08/10 11:51	SW846 8270D SIM	10L0221
Fluorene	ND		mg/kg dry	0.00116	0.00387	1	12/08/10 11:51	SW846 8270D SIM	10L0221
Indeno (1,2,3-cd) pyrene	0.00465		mg/kg dry	0.000698	0.00387	1	12/08/10 11:51	SW846 8270D SIM	10L0221
1-Methylnaphthalene	0.0171		mg/kg dry	0.000698	0.00387	1	12/08/10 11:51	SW846 8270D SIM	10L0221
2-Methylnaphthalene	0.0209		mg/kg dry	0.000930	0.00387	1	12/08/10 11:51	SW846 8270D SIM	10L0221
Naphthalene	0.00930		mg/kg dry	0.000698	0.00387	1	12/08/10 11:51	SW846 8270D SIM	10L0221
Phenanthrene	0.0120		mg/kg dry	0.000930	0.00387	1	12/08/10 11:51	SW846 8270D SIM	10L0221
Pyrene	0.00930		mg/kg dry	0.000930	0.00387	1	12/08/10 11:51	SW846 8270D SIM	10L0221
Surr: Nitrobenzene-d5 (17-120%)	67 %					1	12/08/10 11:51	SW846 8270D SIM	10L0221
Surr: 2-Fluorobiphenyl (14-120%)	65 %					1	12/08/10 11:51	SW846 8270D SIM	10L0221
Surr: Terphenyl-d14 (18-120%)	90 %					1	12/08/10 11:51	SW846 8270D SIM	10L0221
Purgeable Petroleum Hydrocarbons									
GRO (C4-C12) NW	1.63	J	mg/kg dry	0.481	4.81	50	12/02/10 23:17	NWTPH-Gx	10L0210
Surr: a,a,a-Trifluorotoluene (50-150%)	82 %					50	12/02/10 23:17	NWTPH-Gx	10L0210
Extractable Petroleum Hydrocarbons with Silica Gel Treatment									
Diesel	8.37	QP7a	mg/kg dry	0.800	4.57	1	12/04/10 01:39	NWTPH-Dx	10L0224
Motor Oil	106	QP7a	mg/kg dry	0.800	4.57	1	12/04/10 01:39	NWTPH-Dx	10L0224
Surr: o-Terphenyl (50-150%)	77 %					1	12/04/10 01:39	NWTPH-Dx	10L0224

Client AMEC Earth & Environmental (13993)
600 University Street, Suite 1020
Seattle, WA 98101
Attn Leah Vigoren

Work Order: NTL0082
Project Name: Everett Terminal(46108) - AMEC
Project Number: [none]
Received: 12/01/10 08:00

ANALYTICAL REPORT

Analyte	Result	Flag	Units	MDL	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
Sample ID: NTL0082-04 (AP2-1 - Soil) Sampled: 11/30/10 10:30									
General Chemistry Parameters									
% Dry Solids	88.0		%	0.500	0.500	1	12/03/10 07:39	SW-846	10L0311
Volatile Organic Compounds by EPA Method 8260B									
Benzene	ND		mg/kg dry	0.000897	0.00163	1	12/10/10 18:33	SW846 8260B	10L0205
Ethylbenzene	ND		mg/kg dry	0.000799	0.00163	1	12/10/10 18:33	SW846 8260B	10L0205
Methyl tert-Butyl Ether	ND		mg/kg dry	0.000546	0.00163	1	12/10/10 18:33	SW846 8260B	10L0205
Toluene	ND		mg/kg dry	0.000725	0.00163	1	12/10/10 18:33	SW846 8260B	10L0205
Xylenes, total	ND		mg/kg dry	0.00155	0.00408	1	12/10/10 18:33	SW846 8260B	10L0205
Surr: 1,2-Dichloroethane-d4 (67-138%)	105 %					1	12/10/10 18:33	SW846 8260B	10L0205
Surr: Dibromofluoromethane (75-125%)	99 %					1	12/10/10 18:33	SW846 8260B	10L0205
Surr: Toluene-d8 (76-129%)	110 %					1	12/10/10 18:33	SW846 8260B	10L0205
Surr: 4-Bromofluorobenzene (67-147%)	92 %					1	12/10/10 18:33	SW846 8260B	10L0205
Polyaromatic Hydrocarbons by EPA 8270D SIM									
Acenaphthene	ND		mg/kg dry	0.000782	0.00372	1	12/08/10 12:13	SW846 8270D SIM	10L0221
Acenaphthylene	ND		mg/kg dry	0.000670	0.00372	1	12/08/10 12:13	SW846 8270D SIM	10L0221
Anthracene	0.00223	J	mg/kg dry	0.000559	0.00372	1	12/08/10 12:13	SW846 8270D SIM	10L0221
Benzo (a) anthracene	0.00708		mg/kg dry	0.000670	0.00372	1	12/08/10 12:13	SW846 8270D SIM	10L0221
Benzo (a) pyrene	0.0156		mg/kg dry	0.000670	0.00372	1	12/08/10 12:13	SW846 8270D SIM	10L0221
Benzo (b) fluoranthene	0.00708		mg/kg dry	0.000782	0.00372	1	12/08/10 12:13	SW846 8270D SIM	10L0221
Benzo (g,h,i) perylene	0.00782		mg/kg dry	0.000782	0.00372	1	12/08/10 12:13	SW846 8270D SIM	10L0221
Benzo (k) fluoranthene	ND		mg/kg dry	0.000782	0.00372	1	12/08/10 12:13	SW846 8270D SIM	10L0221
Chrysene	0.0108		mg/kg dry	0.00112	0.00372	1	12/08/10 12:13	SW846 8270D SIM	10L0221
Dibenz (a,h) anthracene	0.00484		mg/kg dry	0.00101	0.00372	1	12/08/10 12:13	SW846 8270D SIM	10L0221
Fluoranthene	0.00633		mg/kg dry	0.000559	0.00372	1	12/08/10 12:13	SW846 8270D SIM	10L0221
Fluorene	0.00186	J	mg/kg dry	0.00112	0.00372	1	12/08/10 12:13	SW846 8270D SIM	10L0221
Indeno (1,2,3-cd) pyrene	0.00484		mg/kg dry	0.000670	0.00372	1	12/08/10 12:13	SW846 8270D SIM	10L0221
1-Methylnaphthalene	0.00372		mg/kg dry	0.000670	0.00372	1	12/08/10 12:13	SW846 8270D SIM	10L0221
2-Methylnaphthalene	0.00410		mg/kg dry	0.000894	0.00372	1	12/08/10 12:13	SW846 8270D SIM	10L0221
Naphthalene	ND		mg/kg dry	0.000670	0.00372	1	12/08/10 12:13	SW846 8270D SIM	10L0221
Phenanthrene	0.0268		mg/kg dry	0.000894	0.00372	1	12/08/10 12:13	SW846 8270D SIM	10L0221
Pyrene	0.0168		mg/kg dry	0.000894	0.00372	1	12/08/10 12:13	SW846 8270D SIM	10L0221
Surr: Nitrobenzene-d5 (17-120%)	65 %					1	12/08/10 12:13	SW846 8270D SIM	10L0221
Surr: 2-Fluorobiphenyl (14-120%)	63 %					1	12/08/10 12:13	SW846 8270D SIM	10L0221
Surr: Terphenyl-d14 (18-120%)	79 %					1	12/08/10 12:13	SW846 8270D SIM	10L0221
Purgeable Petroleum Hydrocarbons									
GRO (C4-C12) NW	0.623	J	mg/kg dry	0.412	4.12	50	12/02/10 23:55	NWTPH-Gx	10L0210
Surr: a,a,a-Trifluorotoluene (50-150%)	96 %					50	12/02/10 23:55	NWTPH-Gx	10L0210
Extractable Petroleum Hydrocarbons with Silica Gel Treatment									
Diesel	4.31	J	mg/kg dry	0.768	4.39	1	12/03/10 10:39	NWTPH-Dx	10L0224
Motor Oil	32.5	QP7a	mg/kg dry	0.768	4.39	1	12/03/10 10:39	NWTPH-Dx	10L0224
Surr: o-Terphenyl (50-150%)	65 %					1	12/03/10 10:39	NWTPH-Dx	10L0224

Client AMEC Earth & Environmental (13993)
600 University Street, Suite 1020
Seattle, WA 98101
Attn Leah Vigoren

Work Order: NTL0082
Project Name: Everett Terminal(46108) - AMEC
Project Number: [none]
Received: 12/01/10 08:00

ANALYTICAL REPORT

Analyte	Result	Flag	Units	MDL	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
Sample ID: NTL0082-05 (AP5-1 - Soil) Sampled: 11/30/10 11:00									
General Chemistry Parameters									
% Dry Solids	88.6		%	0.500	0.500	1	12/03/10 07:39	SW-846	10L0311
Volatile Organic Compounds by EPA Method 8260B									
Benzene	ND		mg/kg dry	0.000940	0.00171	1	12/10/10 19:02	SW846 8260B	10L0205
Ethylbenzene	ND		mg/kg dry	0.000838	0.00171	1	12/10/10 19:02	SW846 8260B	10L0205
Methyl tert-Butyl Ether	ND		mg/kg dry	0.000573	0.00171	1	12/10/10 19:02	SW846 8260B	10L0205
Toluene	ND		mg/kg dry	0.000761	0.00171	1	12/10/10 19:02	SW846 8260B	10L0205
Xylenes, total	ND		mg/kg dry	0.00162	0.00427	1	12/10/10 19:02	SW846 8260B	10L0205
Surr: 1,2-Dichloroethane-d4 (67-138%)	108 %					1	12/10/10 19:02	SW846 8260B	10L0205
Surr: Dibromofluoromethane (75-125%)	104 %					1	12/10/10 19:02	SW846 8260B	10L0205
Surr: Toluene-d8 (76-129%)	121 %					1	12/10/10 19:02	SW846 8260B	10L0205
Surr: 4-Bromofluorobenzene (67-147%)	100 %					1	12/10/10 19:02	SW846 8260B	10L0205
Polyaromatic Hydrocarbons by EPA 8270D SIM									
Acenaphthene	0.00261	J	mg/kg dry	0.000784	0.00373	1	12/08/10 12:35	SW846 8270D SIM	10L0221
Acenaphthylene	0.00523		mg/kg dry	0.000672	0.00373	1	12/08/10 12:35	SW846 8270D SIM	10L0221
Anthracene	0.00374		mg/kg dry	0.000560	0.00373	1	12/08/10 12:35	SW846 8270D SIM	10L0221
Benzo (a) anthracene	0.00710		mg/kg dry	0.000672	0.00373	1	12/08/10 12:35	SW846 8270D SIM	10L0221
Benzo (a) pyrene	0.00710		mg/kg dry	0.000672	0.00373	1	12/08/10 12:35	SW846 8270D SIM	10L0221
Benzo (b) fluoranthene	0.00859		mg/kg dry	0.000784	0.00373	1	12/08/10 12:35	SW846 8270D SIM	10L0221
Benzo (g,h,i) perylene	0.00897		mg/kg dry	0.000784	0.00373	1	12/08/10 12:35	SW846 8270D SIM	10L0221
Benzo (k) fluoranthene	ND		mg/kg dry	0.000784	0.00373	1	12/08/10 12:35	SW846 8270D SIM	10L0221
Chrysene	0.0112		mg/kg dry	0.00112	0.00373	1	12/08/10 12:35	SW846 8270D SIM	10L0221
Dibenz (a,h) anthracene	0.00448		mg/kg dry	0.00101	0.00373	1	12/08/10 12:35	SW846 8270D SIM	10L0221
Fluoranthene	0.00710		mg/kg dry	0.000560	0.00373	1	12/08/10 12:35	SW846 8270D SIM	10L0221
Fluorene	0.00523		mg/kg dry	0.00112	0.00373	1	12/08/10 12:35	SW846 8270D SIM	10L0221
Indeno (1,2,3-cd) pyrene	0.00486		mg/kg dry	0.000672	0.00373	1	12/08/10 12:35	SW846 8270D SIM	10L0221
1-Methylnaphthalene	0.0161		mg/kg dry	0.000672	0.00373	1	12/08/10 12:35	SW846 8270D SIM	10L0221
2-Methylnaphthalene	0.00747		mg/kg dry	0.000897	0.00373	1	12/08/10 12:35	SW846 8270D SIM	10L0221
Naphthalene	0.00261	J	mg/kg dry	0.000672	0.00373	1	12/08/10 12:35	SW846 8270D SIM	10L0221
Phenanthrene	0.0314		mg/kg dry	0.000897	0.00373	1	12/08/10 12:35	SW846 8270D SIM	10L0221
Pyrene	0.0191		mg/kg dry	0.000897	0.00373	1	12/08/10 12:35	SW846 8270D SIM	10L0221
Surr: Nitrobenzene-d5 (17-120%)	81 %					1	12/08/10 12:35	SW846 8270D SIM	10L0221
Surr: 2-Fluorobiphenyl (14-120%)	71 %					1	12/08/10 12:35	SW846 8270D SIM	10L0221
Surr: Terphenyl-d14 (18-120%)	88 %					1	12/08/10 12:35	SW846 8270D SIM	10L0221
Purgeable Petroleum Hydrocarbons									
GRO (C4-C12) NW	44.8		mg/kg dry	0.418	4.18	50	12/03/10 00:33	NWTPH-Gx	10L0210
Surr: a,a,a-Trifluorotoluene (50-150%)	77 %					50	12/03/10 00:33	NWTPH-Gx	10L0210
Extractable Petroleum Hydrocarbons with Silica Gel Treatment									
Diesel	44.4	QP5	mg/kg dry	3.87	22.1	5	12/03/10 11:12	NWTPH-Dx	10L0224
Motor Oil	369	QP7a	mg/kg dry	3.87	22.1	5	12/03/10 11:12	NWTPH-Dx	10L0224
Surr: o-Terphenyl (50-150%)	59 %					5	12/03/10 11:12	NWTPH-Dx	10L0224

Client AMEC Earth & Environmental (13993)
600 University Street, Suite 1020
Seattle, WA 98101
Attn Leah Vigoren

Work Order: NTL0082
Project Name: Everett Terminal(46108) - AMEC
Project Number: [none]
Received: 12/01/10 08:00

ANALYTICAL REPORT

Analyte	Result	Flag	Units	MDL	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
Sample ID: NTL0082-06 (AP6-1 - Soil) Sampled: 11/30/10 11:45									
General Chemistry Parameters									
% Dry Solids	83.4		%	0.500	0.500	1	12/03/10 07:39	SW-846	10L0311
Volatile Organic Compounds by EPA Method 8260B									
1,2-Dibromoethane (EDB)	ND		mg/kg dry	0.000644	0.00192	1	12/10/10 19:32	SW846 8260B	10L0205
1,2-Dichloroethane	ND		mg/kg dry	0.000490	0.00192	1	12/10/10 19:32	SW846 8260B	10L0205
Benzene	0.00156	J	mg/kg dry	0.00106	0.00192	1	12/10/10 19:32	SW846 8260B	10L0205
Hexane	0.0567		mg/kg dry	0.00106	0.00961	1	12/10/10 19:32	SW846 8260B	10L0205
Ethylbenzene	0.00128	J	mg/kg dry	0.000942	0.00192	1	12/10/10 19:32	SW846 8260B	10L0205
Methyl tert-Butyl Ether	ND		mg/kg dry	0.000644	0.00192	1	12/10/10 19:32	SW846 8260B	10L0205
Toluene	0.00288		mg/kg dry	0.000855	0.00192	1	12/10/10 19:32	SW846 8260B	10L0205
Xylenes, total	0.00588		mg/kg dry	0.00183	0.00481	1	12/10/10 19:32	SW846 8260B	10L0205
Surr: 1,2-Dichloroethane-d4 (67-138%)	117 %					1	12/10/10 19:32	SW846 8260B	10L0205
Surr: Dibromofluoromethane (75-125%)	103 %					1	12/10/10 19:32	SW846 8260B	10L0205
Surr: Toluene-d8 (76-129%)	212 %	ZX				1	12/10/10 19:32	SW846 8260B	10L0205
Surr: 4-Bromofluorobenzene (67-147%)	156 %	ZX				1	12/10/10 19:32	SW846 8260B	10L0205
Polyaromatic Hydrocarbons by EPA 8270D SIM									
Acenaphthene	0.409		mg/kg dry	0.00835	0.0397	10	12/07/10 18:40	SW846 8270D SIM	10L0221
Acenaphthylene	0.167		mg/kg dry	0.00715	0.0397	10	12/07/10 18:40	SW846 8270D SIM	10L0221
Anthracene	0.544		mg/kg dry	0.00596	0.0397	10	12/07/10 18:40	SW846 8270D SIM	10L0221
Benzo (a) anthracene	0.0397		mg/kg dry	0.00715	0.0397	10	12/07/10 18:40	SW846 8270D SIM	10L0221
Benzo (a) pyrene	0.0318	J	mg/kg dry	0.00715	0.0397	10	12/07/10 18:40	SW846 8270D SIM	10L0221
Benzo (b) fluoranthene	0.0477		mg/kg dry	0.00835	0.0397	10	12/07/10 18:40	SW846 8270D SIM	10L0221
Benzo (g,h,i) perylene	0.0238	J	mg/kg dry	0.00835	0.0397	10	12/07/10 18:40	SW846 8270D SIM	10L0221
Benzo (k) fluoranthene	ND		mg/kg dry	0.00835	0.0397	10	12/07/10 18:40	SW846 8270D SIM	10L0221
Chrysene	0.0358	J	mg/kg dry	0.0119	0.0397	10	12/07/10 18:40	SW846 8270D SIM	10L0221
Dibenz (a,h) anthracene	0.0238	J	mg/kg dry	0.0107	0.0397	10	12/07/10 18:40	SW846 8270D SIM	10L0221
Fluoranthene	0.191		mg/kg dry	0.00596	0.0397	10	12/07/10 18:40	SW846 8270D SIM	10L0221
Fluorene	0.779		mg/kg dry	0.0119	0.0397	10	12/07/10 18:40	SW846 8270D SIM	10L0221
Indeno (1,2,3-cd) pyrene	0.0278	J	mg/kg dry	0.00715	0.0397	10	12/07/10 18:40	SW846 8270D SIM	10L0221
1-Methylnaphthalene	2.44		mg/kg dry	0.00715	0.0397	10	12/07/10 18:40	SW846 8270D SIM	10L0221
2-Methylnaphthalene	0.219		mg/kg dry	0.00954	0.0397	10	12/07/10 18:40	SW846 8270D SIM	10L0221
Naphthalene	0.0397		mg/kg dry	0.00715	0.0397	10	12/07/10 18:40	SW846 8270D SIM	10L0221
Phenanthrene	2.14		mg/kg dry	0.00954	0.0397	10	12/07/10 18:40	SW846 8270D SIM	10L0221
Pyrene	0.231		mg/kg dry	0.00954	0.0397	10	12/07/10 18:40	SW846 8270D SIM	10L0221
Surr: Nitrobenzene-d5 (17-120%)	200 %	ZX				10	12/07/10 18:40	SW846 8270D SIM	10L0221
Surr: 2-Fluorobiphenyl (14-120%)	100 %					10	12/07/10 18:40	SW846 8270D SIM	10L0221
Surr: Terphenyl-d14 (18-120%)	100 %					10	12/07/10 18:40	SW846 8270D SIM	10L0221
Purgeable Petroleum Hydrocarbons									
GRO (C4-C12) NW	184		mg/kg dry	0.556	5.56	50	12/03/10 01:11	NWTPH-Gx	10L0210
Surr: a,a,a-Trifluorotoluene (50-150%)	72 %					50	12/03/10 01:11	NWTPH-Gx	10L0210
Extractable Petroleum Hydrocarbons with Silica Gel Treatment									
Diesel	1990	QP7	mg/kg dry	16.7	95.3	20	12/04/10 12:32	NWTPH-Dx	10L0224
Motor Oil	129	QP7a	mg/kg dry	8.34	47.7	10	12/04/10 01:55	NWTPH-Dx	10L0224

Client AMEC Earth & Environmental (13993)
 600 University Street, Suite 1020
 Seattle, WA 98101
 Attn Leah Vigoren

Work Order: NTL0082
 Project Name: Everett Terminal(46108) - AMEC
 Project Number: [none]
 Received: 12/01/10 08:00

ANALYTICAL REPORT

Analyte	Result	Flag	Units	MDL	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
Sample ID: NTL0082-06 (AP6-1 - Soil) - cont. Sampled: 11/30/10 11:45									
Extractable Petroleum Hydrocarbons with Silica Gel Treatment - cont.									
<i>Surr: o-Terphenyl (50-150%)</i>	*		Z3			10	12/04/10 01:55	NWTPH-Dx	10L0224
Sample ID: NTL0082-07 (Trip Blank - Water) Sampled: 11/30/10 00:01									
Volatile Organic Compounds by EPA Method 8260B									
Benzene	ND		ug/L	0.270	1.00	1	12/02/10 15:55	SW846 8260B	10L0409
Ethylbenzene	ND		ug/L	0.320	1.00	1	12/02/10 15:55	SW846 8260B	10L0409
Methyl tert-Butyl Ether	ND		ug/L	0.320	1.00	1	12/02/10 15:55	SW846 8260B	10L0409
Toluene	ND		ug/L	0.330	1.00	1	12/02/10 15:55	SW846 8260B	10L0409
Xylenes, total	ND		ug/L	0.870	3.00	1	12/02/10 15:55	SW846 8260B	10L0409
<i>Surr: 1,2-Dichloroethane-d4 (63-140%)</i>	118 %					1	12/02/10 15:55	SW846 8260B	10L0409
<i>Surr: Dibromofluoromethane (73-131%)</i>	104 %					1	12/02/10 15:55	SW846 8260B	10L0409
<i>Surr: Toluene-d8 (80-120%)</i>	102 %					1	12/02/10 15:55	SW846 8260B	10L0409
<i>Surr: 4-Bromofluorobenzene (79-125%)</i>	112 %					1	12/02/10 15:55	SW846 8260B	10L0409

Client AMEC Earth & Environmental (13993)
 600 University Street, Suite 1020
 Seattle, WA 98101
 Attn Leah Vigoren

Work Order: NTL0082
 Project Name: Everett Terminal(46108) - AMEC
 Project Number: [none]
 Received: 12/01/10 08:00

SAMPLE EXTRACTION DATA

Parameter	Batch	Lab Number	Wt/Vol Extracted	Extracted Vol	Date	Analyst	Extraction Method
Extractable Petroleum Hydrocarbons with Silica Gel Treatment							
NWTPH-Dx	10L0224	NTL0082-01	25.98	1.00	12/02/10 08:00	CAG	EPA 3550B
NWTPH-Dx	10L0224	NTL0082-01RE1	25.98	1.00	12/02/10 08:00	CAG	EPA 3550B
NWTPH-Dx	10L0224	NTL0082-02	25.81	1.00	12/02/10 08:00	CAG	EPA 3550B
NWTPH-Dx	10L0224	NTL0082-02RE1	25.81	1.00	12/02/10 08:00	CAG	EPA 3550B
NWTPH-Dx	10L0224	NTL0082-03	25.50	1.00	12/02/10 08:00	CAG	EPA 3550B
NWTPH-Dx	10L0224	NTL0082-03RE1	25.50	1.00	12/02/10 08:00	CAG	EPA 3550B
NWTPH-Dx	10L0224	NTL0082-04	25.88	1.00	12/02/10 08:00	CAG	EPA 3550B
NWTPH-Dx	10L0224	NTL0082-05	25.49	1.00	12/02/10 08:00	CAG	EPA 3550B
NWTPH-Dx	10L0224	NTL0082-06	25.17	1.00	12/02/10 08:00	CAG	EPA 3550B
NWTPH-Dx	10L0224	NTL0082-06RE1	25.17	1.00	12/02/10 08:00	CAG	EPA 3550B
NWTPH-Dx	10L0224	NTL0082-06RE2	25.17	1.00	12/02/10 08:00	CAG	EPA 3550B
Polyaromatic Hydrocarbons by EPA 8270D SIM							
SW846 8270D SIM	10L0221	NTL0082-01	30.27	1.00	12/02/10 08:15	CAG	EPA 3550C
SW846 8270D SIM	10L0221	NTL0082-02	30.40	1.00	12/02/10 08:15	CAG	EPA 3550C
SW846 8270D SIM	10L0221	NTL0082-03	30.08	1.00	12/02/10 08:15	CAG	EPA 3550C
SW846 8270D SIM	10L0221	NTL0082-04	30.51	1.00	12/02/10 08:15	CAG	EPA 3550C
SW846 8270D SIM	10L0221	NTL0082-05	30.20	1.00	12/02/10 08:15	CAG	EPA 3550C
SW846 8270D SIM	10L0221	NTL0082-06	30.18	1.00	12/02/10 08:15	CAG	EPA 3550C
Purgeable Petroleum Hydrocarbons							
NWTPH-Gx	10L0210	NTL0082-01	6.67	5.00	11/30/10 09:30	CHH	EPA 5035A (GC)
NWTPH-Gx	10L0210	NTL0082-02	5.06	5.00	11/30/10 10:00	CHH	EPA 5035A (GC)
NWTPH-Gx	10L0210	NTL0082-03	6.06	5.00	11/30/10 10:15	CHH	EPA 5035A (GC)
NWTPH-Gx	10L0210	NTL0082-04	6.90	5.00	11/30/10 10:30	CHH	EPA 5035A (GC)
NWTPH-Gx	10L0210	NTL0082-05	6.74	5.00	11/30/10 11:00	CHH	EPA 5035A (GC)
NWTPH-Gx	10L0210	NTL0082-06	5.39	5.00	11/30/10 11:45	CHH	EPA 5035A (GC)
Volatile Organic Compounds by EPA Method 8260B							
SW846 8260B	10L0205	NTL0082-01	7.20	5.00	11/30/10 09:30	CHH	EPA 5035
SW846 8260B	10L0205	NTL0082-02	5.63	5.00	11/30/10 10:00	CHH	EPA 5035
SW846 8260B	10L0205	NTL0082-03	5.49	5.00	11/30/10 10:15	CHH	EPA 5035
SW846 8260B	10L0205	NTL0082-04	6.97	5.00	11/30/10 10:30	CHH	EPA 5035
SW846 8260B	10L0205	NTL0082-05	6.60	5.00	11/30/10 11:00	CHH	EPA 5035
SW846 8260B	10L0205	NTL0082-06	6.24	5.00	11/30/10 11:45	CHH	EPA 5035
SW846 8260B	10L0205	NTL0082-06	6.24	5.00	11/30/10 11:45	CHH	EPA 5035
SW846 8260B	10L0205	NTL0082-06	6.24	5.00	11/30/10 11:45	CHH	EPA 5035
SW846 8260B	10L0205	NTL0082-06	6.24	5.00	11/30/10 11:45	CHH	EPA 5035

Client AMEC Earth & Environmental (13993)
 600 University Street, Suite 1020
 Seattle, WA 98101
 Attn Leah Vigoren

Work Order: NTL0082
 Project Name: Everett Terminal(46108) - AMEC
 Project Number: [none]
 Received: 12/01/10 08:00

PROJECT QUALITY CONTROL DATA
Blank

Analyte	Blank Value	Q	Units	Q.C. Batch	Lab Number	Analyzed Date/Time
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Volatile Organic Compounds by EPA Method 8260B

10L0205-BLK1

1,2-Dibromoethane (EDB)	<0.000670		mg/kg wet	10L0205	10L0205-BLK1	12/10/10 13:36
1,2-Dichloroethane	<0.000510		mg/kg wet	10L0205	10L0205-BLK1	12/10/10 13:36
Benzene	<0.00110		mg/kg wet	10L0205	10L0205-BLK1	12/10/10 13:36
Hexane	<0.00110		mg/kg wet	10L0205	10L0205-BLK1	12/10/10 13:36
Ethylbenzene	<0.000980		mg/kg wet	10L0205	10L0205-BLK1	12/10/10 13:36
Methyl tert-Butyl Ether	<0.000670		mg/kg wet	10L0205	10L0205-BLK1	12/10/10 13:36
Toluene	<0.000890		mg/kg wet	10L0205	10L0205-BLK1	12/10/10 13:36
Xylenes, total	<0.00190		mg/kg wet	10L0205	10L0205-BLK1	12/10/10 13:36
Surrogate: 1,2-Dichloroethane-d4	104%			10L0205	10L0205-BLK1	12/10/10 13:36
Surrogate: Dibromofluoromethane	101%			10L0205	10L0205-BLK1	12/10/10 13:36
Surrogate: Toluene-d8	109%			10L0205	10L0205-BLK1	12/10/10 13:36
Surrogate: 4-Bromofluorobenzene	91%			10L0205	10L0205-BLK1	12/10/10 13:36

10L0205-BLK2

1,2-Dibromoethane (EDB)	<0.0335		mg/kg wet	10L0205	10L0205-BLK2	12/10/10 17:34
1,2-Dichloroethane	<0.0255		mg/kg wet	10L0205	10L0205-BLK2	12/10/10 17:34
Benzene	<0.0550		mg/kg wet	10L0205	10L0205-BLK2	12/10/10 17:34
Hexane	<0.0550		mg/kg wet	10L0205	10L0205-BLK2	12/10/10 17:34
Ethylbenzene	<0.0490		mg/kg wet	10L0205	10L0205-BLK2	12/10/10 17:34
Methyl tert-Butyl Ether	<0.0335		mg/kg wet	10L0205	10L0205-BLK2	12/10/10 17:34
Toluene	<0.0445		mg/kg wet	10L0205	10L0205-BLK2	12/10/10 17:34
Xylenes, total	<0.0950		mg/kg wet	10L0205	10L0205-BLK2	12/10/10 17:34
Surrogate: 1,2-Dichloroethane-d4	96%			10L0205	10L0205-BLK2	12/10/10 17:34
Surrogate: Dibromofluoromethane	96%			10L0205	10L0205-BLK2	12/10/10 17:34
Surrogate: Toluene-d8	112%			10L0205	10L0205-BLK2	12/10/10 17:34
Surrogate: 4-Bromofluorobenzene	88%			10L0205	10L0205-BLK2	12/10/10 17:34

10L0409-BLK1

Benzene	<0.270		ug/L	10L0409	10L0409-BLK1	12/02/10 11:54
Ethylbenzene	<0.320		ug/L	10L0409	10L0409-BLK1	12/02/10 11:54
Methyl tert-Butyl Ether	<0.320		ug/L	10L0409	10L0409-BLK1	12/02/10 11:54
Toluene	<0.330		ug/L	10L0409	10L0409-BLK1	12/02/10 11:54
Xylenes, total	<0.870		ug/L	10L0409	10L0409-BLK1	12/02/10 11:54
Surrogate: 1,2-Dichloroethane-d4	116%			10L0409	10L0409-BLK1	12/02/10 11:54
Surrogate: Dibromofluoromethane	110%			10L0409	10L0409-BLK1	12/02/10 11:54
Surrogate: Toluene-d8	102%			10L0409	10L0409-BLK1	12/02/10 11:54
Surrogate: 4-Bromofluorobenzene	115%			10L0409	10L0409-BLK1	12/02/10 11:54

Polyaromatic Hydrocarbons by EPA 8270D SIM

10L0221-BLK1

Acenaphthene	<0.000700		mg/kg wet	10L0221	10L0221-BLK1	12/07/10 16:27
Acenaphthylene	<0.000600		mg/kg wet	10L0221	10L0221-BLK1	12/07/10 16:27

Client AMEC Earth & Environmental (13993)
 600 University Street, Suite 1020
 Seattle, WA 98101
 Attn Leah Vigoren

Work Order: NTL0082
 Project Name: Everett Terminal(46108) - AMEC
 Project Number: [none]
 Received: 12/01/10 08:00

PROJECT QUALITY CONTROL DATA
Blank - Cont.

Analyte	Blank Value	Q	Units	Q.C. Batch	Lab Number	Analyzed Date/Time
Polyaromatic Hydrocarbons by EPA 8270D SIM						
10L0221-BLK1						
Anthracene	<0.000500		mg/kg wet	10L0221	10L0221-BLK1	12/07/10 16:27
Benzo (a) anthracene	<0.000600		mg/kg wet	10L0221	10L0221-BLK1	12/07/10 16:27
Benzo (a) pyrene	<0.000600		mg/kg wet	10L0221	10L0221-BLK1	12/07/10 16:27
Benzo (b) fluoranthene	<0.000700		mg/kg wet	10L0221	10L0221-BLK1	12/07/10 16:27
Benzo (g,h,i) perylene	<0.000700		mg/kg wet	10L0221	10L0221-BLK1	12/07/10 16:27
Benzo (k) fluoranthene	<0.000700		mg/kg wet	10L0221	10L0221-BLK1	12/07/10 16:27
Chrysene	<0.00100		mg/kg wet	10L0221	10L0221-BLK1	12/07/10 16:27
Dibenz (a,h) anthracene	<0.000900		mg/kg wet	10L0221	10L0221-BLK1	12/07/10 16:27
Fluoranthene	<0.000500		mg/kg wet	10L0221	10L0221-BLK1	12/07/10 16:27
Fluorene	<0.00100		mg/kg wet	10L0221	10L0221-BLK1	12/07/10 16:27
Indeno (1,2,3-cd) pyrene	<0.000600		mg/kg wet	10L0221	10L0221-BLK1	12/07/10 16:27
1-Methylnaphthalene	<0.000600		mg/kg wet	10L0221	10L0221-BLK1	12/07/10 16:27
2-Methylnaphthalene	<0.000800		mg/kg wet	10L0221	10L0221-BLK1	12/07/10 16:27
Naphthalene	<0.000600		mg/kg wet	10L0221	10L0221-BLK1	12/07/10 16:27
Phenanthrene	<0.000800		mg/kg wet	10L0221	10L0221-BLK1	12/07/10 16:27
Pyrene	<0.000800		mg/kg wet	10L0221	10L0221-BLK1	12/07/10 16:27
Surrogate: Nitrobenzene-d5	59%			10L0221	10L0221-BLK1	12/07/10 16:27
Surrogate: 2-Fluorobiphenyl	58%			10L0221	10L0221-BLK1	12/07/10 16:27
Surrogate: Terphenyl-d14	82%			10L0221	10L0221-BLK1	12/07/10 16:27

Purgeable Petroleum Hydrocarbons

10L0210-BLK1

GRO (C4-C12) NW	0.606	J	mg/kg wet	10L0210	10L0210-BLK1	12/02/10 17:32
Surrogate: a,a,a-Trifluorotoluene	94%			10L0210	10L0210-BLK1	12/02/10 17:32

Extractable Petroleum Hydrocarbons with Silica Gel Treatment

10L0224-BLK1

Diesel	1.25	J	mg/kg wet	10L0224	10L0224-BLK1	12/03/10 09:18
Motor Oil	0.825	J	mg/kg wet	10L0224	10L0224-BLK1	12/03/10 09:18
Surrogate: o-Terphenyl	72%			10L0224	10L0224-BLK1	12/03/10 09:18

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Work Order: NTL0082
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 Project Number: [none]
 Received: 12/01/10 08:00

PROJECT QUALITY CONTROL DATA

Duplicate

Analyte	Orig. Val.	Duplicate	Q	Units	RPD	Limit	Batch	Sample Duplicated	% Rec.	Analyzed Date/Time
General Chemistry Parameters										
10L0311-DUP1										
% Dry Solids	85.1	86.5		%	2	20	10L0311	NTL0082-01		12/03/10 07:39
Purgeable Petroleum Hydrocarbons										
10L0210-DUP1										
GRO (C4-C12) NW	0.816	0.0102	R2, J	mg/kg dry	195	50	10L0210	NTL0082-01		12/02/10 22:00
<i>Surrogate: a,a,a-Trifluorotoluene</i>		18.0		ug/L			10L0210	NTL0082-01	90%	12/02/10 22:00

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Work Order: NTL0082
 Project Name: Everett Terminal(46108) - AMEC
 Project Number: [none]
 Received: 12/01/10 08:00

PROJECT QUALITY CONTROL DATA LCS

Analyte	Known Val.	Analyzed Val	Q	Units	% Rec.	Target Range	Batch	Analyzed Date/Time
Volatile Organic Compounds by EPA Method 8260B								
10L0205-BS1								
1,2-Dibromoethane (EDB)	50.0	56.1		ug/kg	112%	80 - 131	10L0205	12/10/10 12:08
1,2-Dichloroethane	50.0	50.0		ug/kg	100%	70 - 139	10L0205	12/10/10 12:08
Benzene	50.0	50.8		ug/kg	102%	78 - 126	10L0205	12/10/10 12:08
Hexane	50.0	62.4		ug/kg	125%	55 - 136	10L0205	12/10/10 12:08
Ethylbenzene	50.0	54.7		ug/kg	109%	79 - 130	10L0205	12/10/10 12:08
Methyl tert-Butyl Ether	50.0	50.9		ug/kg	102%	70 - 128	10L0205	12/10/10 12:08
Toluene	50.0	56.2		ug/kg	112%	76 - 126	10L0205	12/10/10 12:08
Xylenes, total	150	167		ug/kg	111%	80 - 130	10L0205	12/10/10 12:08
<i>Surrogate: 1,2-Dichloroethane-d4</i>	50.0	48.5			97%	67 - 138	10L0205	12/10/10 12:08
<i>Surrogate: Dibromofluoromethane</i>	50.0	49.0			98%	75 - 125	10L0205	12/10/10 12:08
<i>Surrogate: Toluene-d8</i>	50.0	54.7			109%	76 - 129	10L0205	12/10/10 12:08
<i>Surrogate: 4-Bromofluorobenzene</i>	50.0	46.2			92%	67 - 147	10L0205	12/10/10 12:08
10L0409-BS1								
Benzene	20.0	18.5		ug/L	92%	80 - 121	10L0409	12/02/10 10:39
Ethylbenzene	20.0	21.5		ug/L	107%	78 - 133	10L0409	12/02/10 10:39
Methyl tert-Butyl Ether	20.0	16.9		ug/L	85%	76 - 120	10L0409	12/02/10 10:39
Toluene	20.0	20.2		ug/L	101%	78 - 125	10L0409	12/02/10 10:39
Xylenes, total	60.0	65.6		ug/L	109%	78 - 134	10L0409	12/02/10 10:39
<i>Surrogate: 1,2-Dichloroethane-d4</i>	30.0	34.5			115%	63 - 140	10L0409	12/02/10 10:39
<i>Surrogate: Dibromofluoromethane</i>	30.0	30.8			103%	73 - 131	10L0409	12/02/10 10:39
<i>Surrogate: Toluene-d8</i>	30.0	30.4			101%	80 - 120	10L0409	12/02/10 10:39
<i>Surrogate: 4-Bromofluorobenzene</i>	30.0	30.7			102%	79 - 125	10L0409	12/02/10 10:39
Polyaromatic Hydrocarbons by EPA 8270D SIM								
10L0221-BS1								
Acenaphthene	0.0333	0.0290	MNR	mg/kg wet	87%	44 - 120	10L0221	12/07/10 12:00
Acenaphthylene	0.0333	0.0317	MNR	mg/kg wet	95%	46 - 127	10L0221	12/07/10 12:00
Anthracene	0.0333	0.0337	MNR	mg/kg wet	101%	49 - 139	10L0221	12/07/10 12:00
Benzo (a) anthracene	0.0333	0.0400	MNR	mg/kg wet	120%	53 - 132	10L0221	12/07/10 12:00
Benzo (a) pyrene	0.0333	0.0387	MNR	mg/kg wet	116%	57 - 125	10L0221	12/07/10 12:00
Benzo (b) fluoranthene	0.0333	0.0397	MNR	mg/kg wet	119%	36 - 140	10L0221	12/07/10 12:00
Benzo (g,h,i) perylene	0.0333	0.0357	MNR	mg/kg wet	107%	54 - 139	10L0221	12/07/10 12:00
Benzo (k) fluoranthene	0.0333	0.0297	MNR	mg/kg wet	89%	49 - 140	10L0221	12/07/10 12:00
Chrysene	0.0333	0.0313	MNR	mg/kg wet	94%	47 - 139	10L0221	12/07/10 12:00
Dibenz (a,h) anthracene	0.0333	0.0383	MNR	mg/kg wet	115%	58 - 141	10L0221	12/07/10 12:00
Fluoranthene	0.0333	0.0357	MNR	mg/kg wet	107%	34 - 135	10L0221	12/07/10 12:00
Fluorene	0.0333	0.0300	MNR	mg/kg wet	90%	47 - 129	10L0221	12/07/10 12:00
Indeno (1,2,3-cd) pyrene	0.0333	0.0380	MNR	mg/kg wet	114%	53 - 142	10L0221	12/07/10 12:00
1-Methylnaphthalene	0.0333	0.0283	MNR	mg/kg wet	85%	41 - 120	10L0221	12/07/10 12:00
2-Methylnaphthalene	0.0333	0.0310	MNR	mg/kg wet	93%	48 - 121	10L0221	12/07/10 12:00

Client AMEC Earth & Environmental (13993)
 600 University Street, Suite 1020
 Seattle, WA 98101
 Attn Leah Vigoren

Work Order: NTL0082
 Project Name: Everett Terminal(46108) - AMEC
 Project Number: [none]
 Received: 12/01/10 08:00

PROJECT QUALITY CONTROL DATA
LCS - Cont.

Analyte	Known Val.	Analyzed Val	Q	Units	% Rec.	Target Range	Batch	Analyzed Date/Time
Polyaromatic Hydrocarbons by EPA 8270D SIM								
10L0221-BS1								
Naphthalene	0.0333	0.0290	MNR	mg/kg wet	87%	42 - 120	10L0221	12/07/10 12:00
Phenanthrene	0.0333	0.0290	MNR	mg/kg wet	87%	52 - 134	10L0221	12/07/10 12:00
Pyrene	0.0333	0.0357	MNR	mg/kg wet	107%	56 - 144	10L0221	12/07/10 12:00
<i>Surrogate: Nitrobenzene-d5</i>	0.0333	0.0233			70%	17 - 120	10L0221	12/07/10 12:00
<i>Surrogate: 2-Fluorobiphenyl</i>	0.0333	0.0223			67%	14 - 120	10L0221	12/07/10 12:00
<i>Surrogate: Terphenyl-d14</i>	0.0333	0.0270			81%	18 - 120	10L0221	12/07/10 12:00
Purgeable Petroleum Hydrocarbons								
10L0210-BS1								
GRO (C4-C12) NW	10.0	11.2		mg/kg wet	112%	60 - 123	10L0210	12/03/10 01:50
<i>Surrogate: a,a,a-Trifluorotoluene</i>	20.0	27.0			135%	50 - 150	10L0210	12/03/10 01:50
Extractable Petroleum Hydrocarbons with Silica Gel Treatment								
10L0224-BS1								
Diesel	40.0	28.2	MNR1	mg/kg wet	70%	55 - 123	10L0224	12/03/10 09:34
<i>Surrogate: o-Terphenyl</i>	0.800	0.509			64%	50 - 150	10L0224	12/03/10 09:34

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 Attn Leah Vigoren

Work Order: NTL0082
 Project Name: Everett Terminal(46108) - AMEC
 Project Number: [none]
 Received: 12/01/10 08:00

PROJECT QUALITY CONTROL DATA

LCS Dup

Analyte	Orig. Val.	Duplicate	Q	Units	Spike Conc	% Rec.	Target Range	RPD	Limit	Batch	Sample Duplicated	Analyzed Date/Time
Volatile Organic Compounds by EPA Method 8260B												
10L0205-BSD1												
1,2-Dibromoethane (EDB)		58.9		ug/kg	50.0	118%	80 - 131	5	45	10L0205		12/10/10 12:37
1,2-Dichloroethane		53.7		ug/kg	50.0	107%	70 - 139	7	50	10L0205		12/10/10 12:37
Benzene		51.9		ug/kg	50.0	104%	78 - 126	2	50	10L0205		12/10/10 12:37
Hexane		62.6		ug/kg	50.0	125%	55 - 136	0.3	48	10L0205		12/10/10 12:37
Ethylbenzene		56.1		ug/kg	50.0	112%	79 - 130	3	50	10L0205		12/10/10 12:37
Methyl tert-Butyl Ether		58.1		ug/kg	50.0	116%	70 - 128	13	50	10L0205		12/10/10 12:37
Toluene		57.1		ug/kg	50.0	114%	76 - 126	2	50	10L0205		12/10/10 12:37
Xylenes, total		169		ug/kg	150	112%	80 - 130	1	50	10L0205		12/10/10 12:37
Surrogate: 1,2-Dichloroethane-d4		50.2		ug/kg	50.0	100%	67 - 138			10L0205		12/10/10 12:37
Surrogate: Dibromofluoromethane		49.5		ug/kg	50.0	99%	75 - 125			10L0205		12/10/10 12:37
Surrogate: Toluene-d8		54.8		ug/kg	50.0	110%	76 - 129			10L0205		12/10/10 12:37
Surrogate: 4-Bromofluorobenzene		46.0		ug/kg	50.0	92%	67 - 147			10L0205		12/10/10 12:37

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 Seattle, WA 98101
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Work Order: NTL0082
 Project Name: Everett Terminal(46108) - AMEC
 Project Number: [none]
 Received: 12/01/10 08:00

PROJECT QUALITY CONTROL DATA
Matrix Spike

Analyte	Orig. Val.	MS Val	Q	Units	Spike Conc	% Rec.	Target Range	Batch	Sample Spiked	Analyzed Date/Time
Volatile Organic Compounds by EPA Method 8260B										
10L0205-MS1										
1,2-Dibromoethane (EDB)	ND	0.0408		mg/kg dry	0.0498	82%	30 - 155	10L0205	NTL0082-01	12/10/10 20:01
1,2-Dichloroethane	ND	0.0423		mg/kg dry	0.0498	85%	32 - 155	10L0205	NTL0082-01	12/10/10 20:01
Benzene	ND	0.0403		mg/kg dry	0.0498	81%	42 - 141	10L0205	NTL0082-01	12/10/10 20:01
Hexane	ND	0.0434		mg/kg dry	0.0498	87%	10 - 180	10L0205	NTL0082-01	12/10/10 20:01
Ethylbenzene	ND	0.0391		mg/kg dry	0.0498	78%	21 - 165	10L0205	NTL0082-01	12/10/10 20:01
Methyl tert-Butyl Ether	ND	0.0492		mg/kg dry	0.0498	99%	34 - 154	10L0205	NTL0082-01	12/10/10 20:01
Toluene	ND	0.0437		mg/kg dry	0.0498	88%	45 - 145	10L0205	NTL0082-01	12/10/10 20:01
Xylenes, total	ND	0.118		mg/kg dry	0.149	79%	31 - 159	10L0205	NTL0082-01	12/10/10 20:01
<i>Surrogate: 1,2-Dichloroethane-d4</i>		52.0		ug/kg	50.0	104%	67 - 138	10L0205	NTL0082-01	12/10/10 20:01
<i>Surrogate: Dibromofluoromethane</i>		50.6		ug/kg	50.0	101%	75 - 125	10L0205	NTL0082-01	12/10/10 20:01
<i>Surrogate: Toluene-d8</i>		56.3		ug/kg	50.0	113%	76 - 129	10L0205	NTL0082-01	12/10/10 20:01
<i>Surrogate: 4-Bromofluorobenzene</i>		49.6		ug/kg	50.0	99%	67 - 147	10L0205	NTL0082-01	12/10/10 20:01
10L0409-MS1										
Benzene	13.0	270		ug/L	250	103%	65 - 151	10L0409	NTL0023-01RE 1	12/02/10 20:32
Ethylbenzene	21.2	311		ug/L	250	116%	68 - 157	10L0409	NTL0023-01RE 1	12/02/10 20:32
Methyl tert-Butyl Ether	ND	203		ug/L	250	81%	56 - 152	10L0409	NTL0023-01RE 1	12/02/10 20:32
Toluene	176	434		ug/L	250	103%	61 - 153	10L0409	NTL0023-01RE 1	12/02/10 20:32
Xylenes, total	477	1350		ug/L	750	117%	68 - 158	10L0409	NTL0023-01RE 1	12/02/10 20:32
<i>Surrogate: 1,2-Dichloroethane-d4</i>		32.0		ug/L	30.0	107%	63 - 140	10L0409	NTL0023-01RE 1	12/02/10 20:32
<i>Surrogate: Dibromofluoromethane</i>		30.9		ug/L	30.0	103%	73 - 131	10L0409	NTL0023-01RE 1	12/02/10 20:32
<i>Surrogate: Toluene-d8</i>		30.2		ug/L	30.0	101%	80 - 120	10L0409	NTL0023-01RE 1	12/02/10 20:32
<i>Surrogate: 4-Bromofluorobenzene</i>		29.2		ug/L	30.0	97%	79 - 125	10L0409	NTL0023-01RE 1	12/02/10 20:32
Purgeable Petroleum Hydrocarbons										
10L0210-MS1										
GRO (C4-C12) NW	0.482	452		mg/kg dry	446	101%	59 - 130	10L0210	NTL0145-01	12/03/10 03:05
<i>Surrogate: a,a,a-Trifluorotoluene</i>		24.7		ug/L	20.0	124%	50 - 150	10L0210	NTL0145-01	12/03/10 03:05

Client AMEC Earth & Environmental (13993)
 600 University Street, Suite 1020
 Seattle, WA 98101
 Attn Leah Vigoren

Work Order: NTL0082
 Project Name: Everett Terminal(46108) - AMEC
 Project Number: [none]
 Received: 12/01/10 08:00

PROJECT QUALITY CONTROL DATA Matrix Spike Dup

Analyte	Orig. Val.	Duplicate	Q	Units	Spike Conc	% Rec.	Target Range	RPD	Limit	Batch	Sample Duplicated	Analyzed Date/Time
Volatile Organic Compounds by EPA Method 8260B												
10L0205-MSD1												
1,2-Dibromoethane (EDB)	ND	0.0419		mg/kg dry	0.0490	86%	30 - 155	3	45	10L0205	NTL0082-01	12/10/10 20:31
1,2-Dichloroethane	ND	0.0433		mg/kg dry	0.0490	88%	32 - 155	2	50	10L0205	NTL0082-01	12/10/10 20:31
Benzene	ND	0.0400		mg/kg dry	0.0490	82%	42 - 141	0.9	50	10L0205	NTL0082-01	12/10/10 20:31
Hexane	ND	0.0405		mg/kg dry	0.0490	83%	10 - 180	7	48	10L0205	NTL0082-01	12/10/10 20:31
Ethylbenzene	ND	0.0374		mg/kg dry	0.0490	76%	21 - 165	4	50	10L0205	NTL0082-01	12/10/10 20:31
Methyl tert-Butyl Ether	ND	0.0499		mg/kg dry	0.0490	102%	34 - 154	1	50	10L0205	NTL0082-01	12/10/10 20:31
Toluene	ND	0.0417		mg/kg dry	0.0490	85%	45 - 145	5	50	10L0205	NTL0082-01	12/10/10 20:31
Xylenes, total	ND	0.112		mg/kg dry	0.147	76%	31 - 159	5	50	10L0205	NTL0082-01	12/10/10 20:31
<i>Surrogate: 1,2-Dichloroethane-d4</i>		56.1		ug/kg	50.0	112%	67 - 138			10L0205	NTL0082-01	12/10/10 20:31
<i>Surrogate: Dibromofluoromethane</i>		50.8		ug/kg	50.0	102%	75 - 125			10L0205	NTL0082-01	12/10/10 20:31
<i>Surrogate: Toluene-d8</i>		56.3		ug/kg	50.0	113%	76 - 129			10L0205	NTL0082-01	12/10/10 20:31
<i>Surrogate: 4-Bromofluorobenzene</i>		51.0		ug/kg	50.0	102%	67 - 147			10L0205	NTL0082-01	12/10/10 20:31
10L0409-MSD1												
Benzene	13.0	263		ug/L	250	100%	65 - 151	3	12	10L0409	NTL0023-01RE 1	12/02/10 20:57
Ethylbenzene	21.2	306		ug/L	250	114%	68 - 157	1	12	10L0409	NTL0023-01RE 1	12/02/10 20:57
Methyl tert-Butyl Ether	ND	213		ug/L	250	85%	56 - 152	4	32	10L0409	NTL0023-01RE 1	12/02/10 20:57
Toluene	176	431		ug/L	250	102%	61 - 153	0.8	35	10L0409	NTL0023-01RE 1	12/02/10 20:57
Xylenes, total	477	1320		ug/L	750	113%	68 - 158	2	18	10L0409	NTL0023-01RE 1	12/02/10 20:57
<i>Surrogate: 1,2-Dichloroethane-d4</i>		32.6		ug/L	30.0	109%	63 - 140			10L0409	NTL0023-01RE 1	12/02/10 20:57
<i>Surrogate: Dibromofluoromethane</i>		32.2		ug/L	30.0	107%	73 - 131			10L0409	NTL0023-01RE 1	12/02/10 20:57
<i>Surrogate: Toluene-d8</i>		30.8		ug/L	30.0	103%	80 - 120			10L0409	NTL0023-01RE 1	12/02/10 20:57
<i>Surrogate: 4-Bromofluorobenzene</i>		29.4		ug/L	30.0	98%	79 - 125			10L0409	NTL0023-01RE 1	12/02/10 20:57
Purgeable Petroleum Hydrocarbons												
10L0210-MSD1												
GRO (C4-C12) NW	0.482	459		mg/kg dry	446	103%	59 - 130	2	50	10L0210	NTL0145-01	12/03/10 03:44
<i>Surrogate: a,a,a-Trifluorotoluene</i>		24.2		ug/L	20.0	121%	50 - 150			10L0210	NTL0145-01	12/03/10 03:44

Client AMEC Earth & Environmental (13993)
600 University Street, Suite 1020
Seattle, WA 98101
Attn Leah Vigoren

Work Order: NTL0082
Project Name: Everett Terminal(46108) - AMEC
Project Number: [none]
Received: 12/01/10 08:00

CERTIFICATION SUMMARY

TestAmerica Nashville

Method	Matrix	AIHA	Nelac	Washington
NWTPH-Dx	Soil	N/A		X
NWTPH-Gx	Soil	N/A	X	X
SW846 8260B	Soil	N/A	X	X
SW846 8260B	Water	N/A	X	X
SW846 8270D SIM	Soil		X	X
SW-846	Soil			

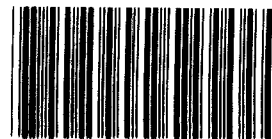
Client AMEC Earth & Environmental (13993)
600 University Street, Suite 1020
Seattle, WA 98101
Attn Leah Vigoren

Work Order: NTL0082
Project Name: Everett Terminal(46108) - AMEC
Project Number: [none]
Received: 12/01/10 08:00

DATA QUALIFIERS AND DEFINITIONS

- J** Analyte detected at a level less than the Reporting Limit (RL) and greater than or equal to the Method Detection Limit (MDL). Concentrations within this range are estimated.
- MNR** No results were reported for the MS/MSD. The sample used for the MS/MSD required dilution due to the sample matrix. Because of this, the spike compounds were diluted below the detection limit.
- MNR1** There was no MS/MSD analyzed with this batch due to insufficient sample volume. See Blank Spike.
- QP5** There was insufficient contamination present to perform a pattern match.
- QP7** The hydrocarbon pattern most closely resembles a diesel product.
- QP7a** The hydrocarbon pattern most closely resembles a motor oil product.
- R2** The RPD exceeded the acceptance limit.
- Z3** The sample required a dilution due to the nature of the sample matrix. Because of this dilution, the surrogate spike concentration in the sample was reduced to a level where the recovery calculation does not provide useful information.
- ZX** Due to sample matrix effects, the surrogate recovery was outside the acceptance limits.
- ND** Not detected at the reporting limit (or method detection limit if shown)

METHOD MODIFICATION NOTES



COOLER RECEI

NTL0082

Cooler Received/Opened On 12/1/2010 @ 0800

1. Tracking # 4288 (last 4 digits, FedEx)

Courier: FedEx IR Gun ID 95610068

2. Temperature of rep. sample or temp blank when opened: 0.1 Degrees Celsius

3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES NO...NA

4. Were custody seals on outside of cooler? YES...NO...NA

If yes, how many and where: 1 seal

5. Were the seals intact, signed, and dated correctly? YES...NO...NA

6. Were custody papers inside cooler? YES...NO...NA

I certify that I opened the cooler and answered questions 1-6 (initial) M

7. Were custody seals on containers: YES NO and Intact YES...NO...NA

Were these signed and dated correctly? YES...NO...NA

8. Packing mat'l used? Bubblewrap Plastic bag Peanuts Vermiculite Foam Insert Paper Other None

9. Cooling process: Ice Ice-pack Ice (direct contact) Dry ice Other None

10. Did all containers arrive in good condition (unbroken)? YES...NO...NA

11. Were all container labels complete (#, date, signed, pres., etc)? YES...NO...NA

12. Did all container labels and tags agree with custody papers? YES...NO...NA

13a. Were VOA vials received? YES...NO...NA

b. Was there any observable headspace present in any VOA vial? YES...NO...NA 50.1

14. Was there a Trip Blank in this cooler? YES...NO...NA If multiple coolers, sequence # 1

I certify that I unloaded the cooler and answered questions 7-14 (initial) T

15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES...NO...NA

b. Did the bottle labels indicate that the correct preservatives were used YES...NO...NA

16. Was residual chlorine present? YES...NO...NA

I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (initial) C

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

18. Did you sign the custody papers in the appropriate place? YES...NO...NA

19. Were correct containers used for the analysis requested? YES...NO...NA

20. Was sufficient amount of sample sent in each container? YES...NO...NA

I certify that I entered this project into LIMS and answered questions 17-20 (initial) C

I certify that I attached a label with the unique LIMS number to each container (initial) C

21. Were there Non-Conformance issues at login? YES...NO Was a PIPE generated? YES...NO...#

Nashville
2960 Foster Creighton Drive

Nashville, TN 37204
phone 615.726.0177 fax 615.726.3403

Chain of Custody Record

TestAmerica
The Laboratory

Client Contact

AMEC E&E
11810 North Creek Parkway N
Bothell, WA 98011
(425) 3681000
(425) 3681001

Project Manager: Leah Vigoren
Tel/Fax: 206 838-8430
Analysis Turnaround Time
Calendar (C) or Work Days (W) Standard

Project Name: ExxonMobil/ADC Property
Site: Exxon Mobile Everett
P O #

TAT If different from Below
 2 weeks
 1 week
 2 days
 1 day

Project Manager: Leah Vigoren
Tel/Fax: 206 838-8430

Site Contact: Leah Vigoren
Lab Contact: Leah Vigoren
Manager: SMH
Partner:

Date: 11/30/10

TestAmerica Laboratories, Inc.
COC No. 1 of 1 COCs
Job No. 0-915-15716C
SDG No.

Sample Identification

Sample Date	Sample Time	Sample Type	Matrix	# of Cont.
MW 7A-1				
AP4-1	11/30/10	soil	soil	7
AP 3-1				7
AP 2-1				7
AP 5-1				7
AP 6-1				7
Tripp Blanks				2

TPH - 6x
TPH - DX (silicagel)
BTEX/MTBE 8260 B
EDC, EDB n-hexane
by 8260 B
PAMS by 8270DSM

Sample Specific Notes:
DX - silicagel
clean up

Preservation Used: 1=Ice 2=HCl 3=H2SO4 4=HNO3 5=NaOH 6=Other

Possible Hazard Identification
 Non-Hazard Flammable Skin Irritant Poison B Unknown

Special Instructions/QC Requirements & Comments:
desel #? BA/QC

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
 Return To Client Disposal By Lab Archive For _____ Months

Relinquished by:

Company: _____ Date/Time: _____

Relinquished by:

Company: _____ Date/Time: _____

Relinquished by:

Company: _____ Date/Time: _____

Received by:

Company: _____

Date/Time: 12-10/10 800

Received by:

Company: _____

Date/Time: _____

Received by:

Company: _____

Date/Time: _____

December 14, 2010 1:24:47PM

Client: AMEC Earth & Environmental (13993)
600 University Street, Suite 1020
Seattle, WA 98101
Attn: Leah Vigoren

Work Order: NTL0445
Project Name: Everett Terminal(46108) - AMEC
Project Nbr: [none]
P/O Nbr:
Date Received: 12/03/10

SAMPLE IDENTIFICATION	LAB NUMBER	COLLECTION DATE AND TIME
MW-7Ab	NTL0445-01	12/01/10 10:00
AP6-23	NTL0445-02	12/02/10 10:30
DUP5-120210	NTL0445-03	12/02/10 10:45
AP6-30	NTL0445-04	12/02/10 11:00
Trip Blank	NTL0445-05	12/02/10 00:01

An executed copy of the chain of custody, the project quality control data, and the sample receipt form are also included as an addendum to this report. If you have any questions relating to this analytical report, please contact your Laboratory Project Manager at 1-800-765-0980. Any opinions, if expressed, are outside the scope of the Laboratory's accreditation.

This material is intended only for the use of the individual(s) or entity to whom it is addressed, and may contain information that is privileged and confidential. If you are not the intended recipient, or the employee or agent responsible for delivering this material to the intended recipient, you are hereby notified that any dissemination, distribution, or copying of this material is strictly prohibited. If you have received this material in error, please notify us immediately at 615-726-0177.

Washington Certification Number: C1712

The Chain(s) of Custody, 4 pages, are included and are an integral part of this report.

These results relate only to the items tested. This report shall not be reproduced except in full and with permission of the laboratory.

All solids results are reported in wet weight unless specifically stated.

Estimated uncertainty is available upon request.

This report has been electronically signed.

Report Approved By:



Leah R. Klingensmith

Senior Project Management

Client AMEC Earth & Environmental (13993)
600 University Street, Suite 1020
Seattle, WA 98101
Attn Leah Vigoren

Work Order: NTL0445
Project Name: Everett Terminal(46108) - AMEC
Project Number: [none]
Received: 12/03/10 08:15

ANALYTICAL REPORT

Analyte	Result	Flag	Units	MDL	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
Sample ID: NTL0445-01 (MW-7Ab - Soil) Sampled: 12/01/10 10:00									
General Chemistry Parameters									
% Dry Solids	79.9		%	0.500	0.500	1	12/07/10 09:14	SW-846	10L1112
Volatile Organic Compounds by EPA Method 8260B									
Benzene	ND		mg/kg dry	0.00123	0.00224	1	12/06/10 17:38	SW846 8260B	10L0867
Ethylbenzene	ND		mg/kg dry	0.00110	0.00224	1	12/06/10 17:38	SW846 8260B	10L0867
Methyl tert-Butyl Ether	ND		mg/kg dry	0.000750	0.00224	1	12/06/10 17:38	SW846 8260B	10L0867
Toluene	ND		mg/kg dry	0.000996	0.00224	1	12/06/10 17:38	SW846 8260B	10L0867
Xylenes, total	ND		mg/kg dry	0.00213	0.00560	1	12/06/10 17:38	SW846 8260B	10L0867
Surr: 1,2-Dichloroethane-d4 (67-138%)	91 %					1	12/06/10 17:38	SW846 8260B	10L0867
Surr: Dibromofluoromethane (75-125%)	94 %					1	12/06/10 17:38	SW846 8260B	10L0867
Surr: Toluene-d8 (76-129%)	100 %					1	12/06/10 17:38	SW846 8260B	10L0867
Surr: 4-Bromofluorobenzene (67-147%)	106 %					1	12/06/10 17:38	SW846 8260B	10L0867
Polyaromatic Hydrocarbons by EPA 8270D SIM									
Acenaphthene	ND		mg/kg dry	0.000868	0.00413	1	12/07/10 20:08	SW846 8270D SIM	10L1133
Acenaphthylene	ND		mg/kg dry	0.000744	0.00413	1	12/07/10 20:08	SW846 8270D SIM	10L1133
Anthracene	ND		mg/kg dry	0.000620	0.00413	1	12/07/10 20:08	SW846 8270D SIM	10L1133
Benzo (a) anthracene	ND		mg/kg dry	0.000744	0.00413	1	12/07/10 20:08	SW846 8270D SIM	10L1133
Benzo (a) pyrene	0.00248	J	mg/kg dry	0.000744	0.00413	1	12/07/10 20:08	SW846 8270D SIM	10L1133
Benzo (b) fluoranthene	0.00248	J	mg/kg dry	0.000868	0.00413	1	12/07/10 20:08	SW846 8270D SIM	10L1133
Benzo (g,h,i) perylene	ND		mg/kg dry	0.000868	0.00413	1	12/07/10 20:08	SW846 8270D SIM	10L1133
Benzo (k) fluoranthene	ND		mg/kg dry	0.000868	0.00413	1	12/07/10 20:08	SW846 8270D SIM	10L1133
Chrysene	ND		mg/kg dry	0.00124	0.00413	1	12/07/10 20:08	SW846 8270D SIM	10L1133
Dibenz (a,h) anthracene	0.00248	J	mg/kg dry	0.00112	0.00413	1	12/07/10 20:08	SW846 8270D SIM	10L1133
Fluoranthene	ND		mg/kg dry	0.000620	0.00413	1	12/07/10 20:08	SW846 8270D SIM	10L1133
Fluorene	ND		mg/kg dry	0.00124	0.00413	1	12/07/10 20:08	SW846 8270D SIM	10L1133
Indeno (1,2,3-cd) pyrene	0.00248	J	mg/kg dry	0.000744	0.00413	1	12/07/10 20:08	SW846 8270D SIM	10L1133
1-Methylnaphthalene	ND		mg/kg dry	0.000744	0.00413	1	12/07/10 20:08	SW846 8270D SIM	10L1133
2-Methylnaphthalene	ND		mg/kg dry	0.000992	0.00413	1	12/07/10 20:08	SW846 8270D SIM	10L1133
Naphthalene	ND		mg/kg dry	0.000744	0.00413	1	12/07/10 20:08	SW846 8270D SIM	10L1133
Phenanthrene	0.00207	J	mg/kg dry	0.000992	0.00413	1	12/07/10 20:08	SW846 8270D SIM	10L1133
Pyrene	ND		mg/kg dry	0.000992	0.00413	1	12/07/10 20:08	SW846 8270D SIM	10L1133
Surr: Nitrobenzene-d5 (17-120%)	75 %					1	12/07/10 20:08	SW846 8270D SIM	10L1133
Surr: 2-Fluorobiphenyl (14-120%)	71 %					1	12/07/10 20:08	SW846 8270D SIM	10L1133
Surr: Terphenyl-d14 (18-120%)	86 %					1	12/07/10 20:08	SW846 8270D SIM	10L1133
Purgeable Petroleum Hydrocarbons									
GRO (C4-C12) NW	1.54	J	mg/kg dry	0.585	5.85	50	12/08/10 13:42	NWTPH-Gx	10L1772
Surr: a,a,a-Trifluorotoluene (50-150%)	100 %					50	12/08/10 13:42	NWTPH-Gx	10L1772
Extractable Petroleum Hydrocarbons with Silica Gel Treatment									
Diesel	2.36	J	mg/kg dry	0.873	4.99	1	12/07/10 14:52	NWTPH-Dx	10L1134
Motor Oil	2.93	J	mg/kg dry	0.873	4.99	1	12/07/10 14:52	NWTPH-Dx	10L1134
Surr: o-Terphenyl (50-150%)	84 %					1	12/07/10 14:52	NWTPH-Dx	10L1134

Client AMEC Earth & Environmental (13993)
600 University Street, Suite 1020
Seattle, WA 98101
Attn Leah Vigoren

Work Order: NTL0445
Project Name: Everett Terminal(46108) - AMEC
Project Number: [none]
Received: 12/03/10 08:15

ANALYTICAL REPORT

Analyte	Result	Flag	Units	MDL	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
Sample ID: NTL0445-02 (AP6-23 - Soil) Sampled: 12/02/10 10:30									
General Chemistry Parameters									
% Dry Solids	80.9		%	0.500	0.500	1	12/07/10 09:14	SW-846	10L1112
Volatile Organic Compounds by EPA Method 8260B									
Benzene	ND		mg/kg dry	0.00115	0.00210	1	12/06/10 18:07	SW846 8260B	10L0867
Ethylbenzene	ND		mg/kg dry	0.00103	0.00210	1	12/06/10 18:07	SW846 8260B	10L0867
Methyl tert-Butyl Ether	ND		mg/kg dry	0.000703	0.00210	1	12/06/10 18:07	SW846 8260B	10L0867
Toluene	ND		mg/kg dry	0.000934	0.00210	1	12/06/10 18:07	SW846 8260B	10L0867
Xylenes, total	ND		mg/kg dry	0.00199	0.00525	1	12/06/10 18:07	SW846 8260B	10L0867
Surr: 1,2-Dichloroethane-d4 (67-138%)	93 %					1	12/06/10 18:07	SW846 8260B	10L0867
Surr: Dibromofluoromethane (75-125%)	95 %					1	12/06/10 18:07	SW846 8260B	10L0867
Surr: Toluene-d8 (76-129%)	104 %					1	12/06/10 18:07	SW846 8260B	10L0867
Surr: 4-Bromofluorobenzene (67-147%)	110 %					1	12/06/10 18:07	SW846 8260B	10L0867
Polyaromatic Hydrocarbons by EPA 8270D SIM									
Acenaphthene	0.00242	J	mg/kg dry	0.000848	0.00403	1	12/07/10 20:30	SW846 8270D SIM	10L1133
Acenaphthylene	ND		mg/kg dry	0.000727	0.00403	1	12/07/10 20:30	SW846 8270D SIM	10L1133
Anthracene	0.00363	J	mg/kg dry	0.000605	0.00403	1	12/07/10 20:30	SW846 8270D SIM	10L1133
Benzo (a) anthracene	0.00283	J	mg/kg dry	0.000727	0.00403	1	12/07/10 20:30	SW846 8270D SIM	10L1133
Benzo (a) pyrene	0.00323	J	mg/kg dry	0.000727	0.00403	1	12/07/10 20:30	SW846 8270D SIM	10L1133
Benzo (b) fluoranthene	0.00363	J	mg/kg dry	0.000848	0.00403	1	12/07/10 20:30	SW846 8270D SIM	10L1133
Benzo (g,h,i) perylene	0.00242	J	mg/kg dry	0.000848	0.00403	1	12/07/10 20:30	SW846 8270D SIM	10L1133
Benzo (k) fluoranthene	ND		mg/kg dry	0.000848	0.00403	1	12/07/10 20:30	SW846 8270D SIM	10L1133
Chrysene	0.00283	J	mg/kg dry	0.00121	0.00403	1	12/07/10 20:30	SW846 8270D SIM	10L1133
Dibenz (a,h) anthracene	0.00242	J	mg/kg dry	0.00109	0.00403	1	12/07/10 20:30	SW846 8270D SIM	10L1133
Fluoranthene	0.00565		mg/kg dry	0.000605	0.00403	1	12/07/10 20:30	SW846 8270D SIM	10L1133
Fluorene	0.00565		mg/kg dry	0.00121	0.00403	1	12/07/10 20:30	SW846 8270D SIM	10L1133
Indeno (1,2,3-cd) pyrene	0.00283	J	mg/kg dry	0.000727	0.00403	1	12/07/10 20:30	SW846 8270D SIM	10L1133
1-Methylnaphthalene	0.00888		mg/kg dry	0.000727	0.00403	1	12/07/10 20:30	SW846 8270D SIM	10L1133
2-Methylnaphthalene	ND		mg/kg dry	0.000969	0.00403	1	12/07/10 20:30	SW846 8270D SIM	10L1133
Naphthalene	ND		mg/kg dry	0.000727	0.00403	1	12/07/10 20:30	SW846 8270D SIM	10L1133
Phenanthrene	0.00969		mg/kg dry	0.000969	0.00403	1	12/07/10 20:30	SW846 8270D SIM	10L1133
Pyrene	0.00969		mg/kg dry	0.000969	0.00403	1	12/07/10 20:30	SW846 8270D SIM	10L1133
Surr: Nitrobenzene-d5 (17-120%)	78 %					1	12/07/10 20:30	SW846 8270D SIM	10L1133
Surr: 2-Fluorobiphenyl (14-120%)	75 %					1	12/07/10 20:30	SW846 8270D SIM	10L1133
Surr: Terphenyl-d14 (18-120%)	92 %					1	12/07/10 20:30	SW846 8270D SIM	10L1133
Purgeable Petroleum Hydrocarbons									
GRO (C4-C12) NW	2.59	J	mg/kg dry	0.512	5.12	50	12/07/10 15:52	NWTPH-Gx	10L0917
Surr: a,a,a-Trifluorotoluene (50-150%)	115 %					50	12/07/10 15:52	NWTPH-Gx	10L0917
Extractable Petroleum Hydrocarbons with Silica Gel Treatment									
Diesel	45.3	QP6	mg/kg dry	0.849	4.85	1	12/07/10 15:08	NWTPH-Dx	10L1134
Motor Oil	37.1	QP6	mg/kg dry	0.849	4.85	1	12/07/10 15:08	NWTPH-Dx	10L1134
Surr: o-Terphenyl (50-150%)	81 %					1	12/07/10 15:08	NWTPH-Dx	10L1134

Client AMEC Earth & Environmental (13993)
600 University Street, Suite 1020
Seattle, WA 98101
Attn Leah Vigoren

Work Order: NTL0445
Project Name: Everett Terminal(46108) - AMEC
Project Number: [none]
Received: 12/03/10 08:15

ANALYTICAL REPORT

Analyte	Result	Flag	Units	MDL	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
Sample ID: NTL0445-03 (DUP5-120210 - Soil) Sampled: 12/02/10 10:45									
General Chemistry Parameters									
% Dry Solids	82.3		%	0.500	0.500	1	12/07/10 09:14	SW-846	10L1112
Volatile Organic Compounds by EPA Method 8260B									
Benzene	ND		mg/kg dry	0.00123	0.00224	1	12/06/10 18:36	SW846 8260B	10L0867
Ethylbenzene	ND		mg/kg dry	0.00110	0.00224	1	12/06/10 18:36	SW846 8260B	10L0867
Methyl tert-Butyl Ether	ND		mg/kg dry	0.000751	0.00224	1	12/06/10 18:36	SW846 8260B	10L0867
Toluene	ND		mg/kg dry	0.000998	0.00224	1	12/06/10 18:36	SW846 8260B	10L0867
Xylenes, total	ND		mg/kg dry	0.00213	0.00561	1	12/06/10 18:36	SW846 8260B	10L0867
Surr: 1,2-Dichloroethane-d4 (67-138%)	93 %					1	12/06/10 18:36	SW846 8260B	10L0867
Surr: Dibromofluoromethane (75-125%)	96 %					1	12/06/10 18:36	SW846 8260B	10L0867
Surr: Toluene-d8 (76-129%)	104 %					1	12/06/10 18:36	SW846 8260B	10L0867
Surr: 4-Bromofluorobenzene (67-147%)	110 %					1	12/06/10 18:36	SW846 8260B	10L0867
Polyaromatic Hydrocarbons by EPA 8270D SIM									
Acenaphthene	0.00239	J	mg/kg dry	0.000836	0.00398	1	12/07/10 20:52	SW846 8270D SIM	10L1133
Acenaphthylene	ND		mg/kg dry	0.000717	0.00398	1	12/07/10 20:52	SW846 8270D SIM	10L1133
Anthracene	0.00358	J	mg/kg dry	0.000597	0.00398	1	12/07/10 20:52	SW846 8270D SIM	10L1133
Benzo (a) anthracene	0.00319	J	mg/kg dry	0.000717	0.00398	1	12/07/10 20:52	SW846 8270D SIM	10L1133
Benzo (a) pyrene	0.00319	J	mg/kg dry	0.000717	0.00398	1	12/07/10 20:52	SW846 8270D SIM	10L1133
Benzo (b) fluoranthene	0.00358	J	mg/kg dry	0.000836	0.00398	1	12/07/10 20:52	SW846 8270D SIM	10L1133
Benzo (g,h,i) perylene	0.00279	J	mg/kg dry	0.000836	0.00398	1	12/07/10 20:52	SW846 8270D SIM	10L1133
Benzo (k) fluoranthene	ND		mg/kg dry	0.000836	0.00398	1	12/07/10 20:52	SW846 8270D SIM	10L1133
Chrysene	0.00279	J	mg/kg dry	0.00119	0.00398	1	12/07/10 20:52	SW846 8270D SIM	10L1133
Dibenz (a,h) anthracene	0.00239	J	mg/kg dry	0.00108	0.00398	1	12/07/10 20:52	SW846 8270D SIM	10L1133
Fluoranthene	0.00558		mg/kg dry	0.000597	0.00398	1	12/07/10 20:52	SW846 8270D SIM	10L1133
Fluorene	0.00558		mg/kg dry	0.00119	0.00398	1	12/07/10 20:52	SW846 8270D SIM	10L1133
Indeno (1,2,3-cd) pyrene	0.00279	J	mg/kg dry	0.000717	0.00398	1	12/07/10 20:52	SW846 8270D SIM	10L1133
1-Methylnaphthalene	0.00558		mg/kg dry	0.000717	0.00398	1	12/07/10 20:52	SW846 8270D SIM	10L1133
2-Methylnaphthalene	ND		mg/kg dry	0.000956	0.00398	1	12/07/10 20:52	SW846 8270D SIM	10L1133
Naphthalene	ND		mg/kg dry	0.000717	0.00398	1	12/07/10 20:52	SW846 8270D SIM	10L1133
Phenanthrene	0.00956		mg/kg dry	0.000956	0.00398	1	12/07/10 20:52	SW846 8270D SIM	10L1133
Pyrene	0.0104		mg/kg dry	0.000956	0.00398	1	12/07/10 20:52	SW846 8270D SIM	10L1133
Surr: Nitrobenzene-d5 (17-120%)	63 %					1	12/07/10 20:52	SW846 8270D SIM	10L1133
Surr: 2-Fluorobiphenyl (14-120%)	64 %					1	12/07/10 20:52	SW846 8270D SIM	10L1133
Surr: Terphenyl-d14 (18-120%)	81 %					1	12/07/10 20:52	SW846 8270D SIM	10L1133
Purgeable Petroleum Hydrocarbons									
GRO (C4-C12) NW	1.76	J	mg/kg dry	0.565	5.65	50	12/08/10 13:59	NWTPH-Gx	10L1772
Surr: a,a,a-Trifluorotoluene (50-150%)	106 %					50	12/08/10 13:59	NWTPH-Gx	10L1772
Extractable Petroleum Hydrocarbons with Silica Gel Treatment									
Diesel	13.2	QP5	mg/kg dry	0.841	4.81	1	12/07/10 15:24	NWTPH-Dx	10L1134
Motor Oil	10.5	QP5	mg/kg dry	0.841	4.81	1	12/07/10 15:24	NWTPH-Dx	10L1134
Surr: o-Terphenyl (50-150%)	71 %					1	12/07/10 15:24	NWTPH-Dx	10L1134

Client AMEC Earth & Environmental (13993)
600 University Street, Suite 1020
Seattle, WA 98101
Attn Leah Vigoren

Work Order: NTL0445
Project Name: Everett Terminal(46108) - AMEC
Project Number: [none]
Received: 12/03/10 08:15

ANALYTICAL REPORT

Analyte	Result	Flag	Units	MDL	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
Sample ID: NTL0445-04 (AP6-30 - Soil) Sampled: 12/02/10 11:00									
General Chemistry Parameters									
% Dry Solids	80.6		%	0.500	0.500	1	12/07/10 09:14	SW-846	10L1112
Volatile Organic Compounds by EPA Method 8260B									
Benzene	ND		mg/kg dry	0.00108	0.00197	1	12/06/10 19:05	SW846 8260B	10L0867
Ethylbenzene	ND		mg/kg dry	0.000966	0.00197	1	12/06/10 19:05	SW846 8260B	10L0867
Methyl tert-Butyl Ether	ND		mg/kg dry	0.000660	0.00197	1	12/06/10 19:05	SW846 8260B	10L0867
Toluene	ND		mg/kg dry	0.000877	0.00197	1	12/06/10 19:05	SW846 8260B	10L0867
Xylenes, total	ND		mg/kg dry	0.00187	0.00493	1	12/06/10 19:05	SW846 8260B	10L0867
Surr: 1,2-Dichloroethane-d4 (67-138%)	91 %					1	12/06/10 19:05	SW846 8260B	10L0867
Surr: Dibromofluoromethane (75-125%)	93 %					1	12/06/10 19:05	SW846 8260B	10L0867
Surr: Toluene-d8 (76-129%)	103 %					1	12/06/10 19:05	SW846 8260B	10L0867
Surr: 4-Bromofluorobenzene (67-147%)	108 %					1	12/06/10 19:05	SW846 8260B	10L0867
Purgeable Petroleum Hydrocarbons									
GRO (C4-C12) NW	1.58	J	mg/kg dry	0.463	4.63	50	12/07/10 16:26	NWTPH-Gx	10L0917
Surr: a,a,a-Trifluorotoluene (50-150%)	111 %					50	12/07/10 16:26	NWTPH-Gx	10L0917
Extractable Petroleum Hydrocarbons with Silica Gel Treatment									
Diesel	3.43	J	mg/kg dry	0.841	4.81	1	12/07/10 15:40	NWTPH-Dx	10L1134
Motor Oil	2.39	J	mg/kg dry	0.841	4.81	1	12/07/10 15:40	NWTPH-Dx	10L1134
Surr: o-Terphenyl (50-150%)	74 %					1	12/07/10 15:40	NWTPH-Dx	10L1134
Sample ID: NTL0445-05 (Trip Blank - Water) Sampled: 12/02/10 00:01									
Volatile Organic Compounds by EPA Method 8260B									
Benzene	ND		ug/L	0.270	1.00	1	12/04/10 17:39	SW846 8260B	10L1140
Ethylbenzene	ND		ug/L	0.320	1.00	1	12/04/10 17:39	SW846 8260B	10L1140
Toluene	ND		ug/L	0.330	1.00	1	12/04/10 17:39	SW846 8260B	10L1140
Xylenes, total	ND		ug/L	0.870	3.00	1	12/04/10 17:39	SW846 8260B	10L1140
Surr: 1,2-Dichloroethane-d4 (63-140%)	100 %					1	12/04/10 17:39	SW846 8260B	10L1140
Surr: Dibromofluoromethane (73-131%)	103 %					1	12/04/10 17:39	SW846 8260B	10L1140
Surr: Toluene-d8 (80-120%)	104 %					1	12/04/10 17:39	SW846 8260B	10L1140
Surr: 4-Bromofluorobenzene (79-125%)	102 %					1	12/04/10 17:39	SW846 8260B	10L1140

Client AMEC Earth & Environmental (13993)
 600 University Street, Suite 1020
 Seattle, WA 98101
 Attn Leah Vigoren

Work Order: NTL0445
 Project Name: Everett Terminal(46108) - AMEC
 Project Number: [none]
 Received: 12/03/10 08:15

SAMPLE EXTRACTION DATA

Parameter	Batch	Lab Number	Wt/Vol Extracted	Extracted Vol	Date	Analyst	Extraction Method
Extractable Petroleum Hydrocarbons with Silica Gel Treatment							
NWTPH-Dx	10L1134	NTL0445-01	25.09	1.00	12/07/10 06:45	SAS	EPA 3550B
NWTPH-Dx	10L1134	NTL0445-02	25.50	1.00	12/07/10 06:45	SAS	EPA 3550B
NWTPH-Dx	10L1134	NTL0445-03	25.28	1.00	12/07/10 06:45	SAS	EPA 3550B
NWTPH-Dx	10L1134	NTL0445-04	25.80	1.00	12/07/10 06:45	SAS	EPA 3550B
Polyaromatic Hydrocarbons by EPA 8270D SIM							
SW846 8270D SIM	10L1133	NTL0445-01	30.28	1.00	12/07/10 07:00	SAS	EPA 3550C
SW846 8270D SIM	10L1133	NTL0445-02	30.64	1.00	12/07/10 07:00	SAS	EPA 3550C
SW846 8270D SIM	10L1133	NTL0445-03	30.52	1.00	12/07/10 07:00	SAS	EPA 3550C
Purgeable Petroleum Hydrocarbons							
NWTPH-Gx	10L0917	NTL0445-01	5.35	5.00	12/01/10 10:00	CHH	EPA 5035A (GC)
NWTPH-Gx	10L1772	NTL0445-01RE1	5.35	5.00	12/08/10 13:36	CHH	EPA 5035A (GC)
NWTPH-Gx	10L0917	NTL0445-02	6.04	5.00	12/02/10 10:30	CHH	EPA 5035A (GC)
NWTPH-Gx	10L0917	NTL0445-03	5.38	5.00	12/02/10 10:45	CHH	EPA 5035A (GC)
NWTPH-Gx	10L1772	NTL0445-03RE1	5.38	5.00	12/08/10 13:36	CHH	EPA 5035A (GC)
NWTPH-Gx	10L0917	NTL0445-04	6.70	5.00	12/02/10 11:00	CHH	EPA 5035A (GC)
Volatile Organic Compounds by EPA Method 8260B							
SW846 8260B	10L0867	NTL0445-01	5.59	5.00	12/01/10 10:00	CHH	EPA 5035
SW846 8260B	10L0867	NTL0445-02	5.89	5.00	12/02/10 10:30	CHH	EPA 5035
SW846 8260B	10L0867	NTL0445-03	5.42	5.00	12/02/10 10:45	CHH	EPA 5035
SW846 8260B	10L0867	NTL0445-04	6.29	5.00	12/02/10 11:00	CHH	EPA 5035

Client AMEC Earth & Environmental (13993)
 600 University Street, Suite 1020
 Seattle, WA 98101
 Attn Leah Vigoren

Work Order: NTL0445
 Project Name: Everett Terminal(46108) - AMEC
 Project Number: [none]
 Received: 12/03/10 08:15

PROJECT QUALITY CONTROL DATA
Blank

Analyte	Blank Value	Q	Units	Q.C. Batch	Lab Number	Analyzed Date/Time
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Volatile Organic Compounds by EPA Method 8260B

10L0867-BLK1

Benzene	<0.00110		mg/kg wet	10L0867	10L0867-BLK1	12/06/10 13:17
Ethylbenzene	<0.000980		mg/kg wet	10L0867	10L0867-BLK1	12/06/10 13:17
Methyl tert-Butyl Ether	<0.000670		mg/kg wet	10L0867	10L0867-BLK1	12/06/10 13:17
Toluene	<0.000890		mg/kg wet	10L0867	10L0867-BLK1	12/06/10 13:17
Xylenes, total	<0.00190		mg/kg wet	10L0867	10L0867-BLK1	12/06/10 13:17
Surrogate: 1,2-Dichloroethane-d4	95%			10L0867	10L0867-BLK1	12/06/10 13:17
Surrogate: Dibromofluoromethane	98%			10L0867	10L0867-BLK1	12/06/10 13:17
Surrogate: Toluene-d8	101%			10L0867	10L0867-BLK1	12/06/10 13:17
Surrogate: 4-Bromofluorobenzene	106%			10L0867	10L0867-BLK1	12/06/10 13:17

10L0867-BLK2

Benzene	<0.0550		mg/kg wet	10L0867	10L0867-BLK2	12/06/10 13:46
Ethylbenzene	<0.0490		mg/kg wet	10L0867	10L0867-BLK2	12/06/10 13:46
Methyl tert-Butyl Ether	<0.0335		mg/kg wet	10L0867	10L0867-BLK2	12/06/10 13:46
Toluene	<0.0445		mg/kg wet	10L0867	10L0867-BLK2	12/06/10 13:46
Xylenes, total	<0.0950		mg/kg wet	10L0867	10L0867-BLK2	12/06/10 13:46
Surrogate: 1,2-Dichloroethane-d4	83%			10L0867	10L0867-BLK2	12/06/10 13:46
Surrogate: Dibromofluoromethane	92%			10L0867	10L0867-BLK2	12/06/10 13:46
Surrogate: Toluene-d8	105%			10L0867	10L0867-BLK2	12/06/10 13:46
Surrogate: 4-Bromofluorobenzene	104%			10L0867	10L0867-BLK2	12/06/10 13:46

10L1140-BLK1

Benzene	<0.270		ug/L	10L1140	10L1140-BLK1	12/04/10 17:11
Ethylbenzene	<0.320		ug/L	10L1140	10L1140-BLK1	12/04/10 17:11
Toluene	<0.330		ug/L	10L1140	10L1140-BLK1	12/04/10 17:11
Xylenes, total	<0.870		ug/L	10L1140	10L1140-BLK1	12/04/10 17:11
Surrogate: 1,2-Dichloroethane-d4	103%			10L1140	10L1140-BLK1	12/04/10 17:11
Surrogate: Dibromofluoromethane	102%			10L1140	10L1140-BLK1	12/04/10 17:11
Surrogate: Toluene-d8	105%			10L1140	10L1140-BLK1	12/04/10 17:11
Surrogate: 4-Bromofluorobenzene	102%			10L1140	10L1140-BLK1	12/04/10 17:11

Polyaromatic Hydrocarbons by EPA 8270D SIM

10L1133-BLK1

Acenaphthene	<0.000700		mg/kg wet	10L1133	10L1133-BLK1	12/07/10 19:02
Acenaphthylene	<0.000600		mg/kg wet	10L1133	10L1133-BLK1	12/07/10 19:02
Anthracene	<0.000500		mg/kg wet	10L1133	10L1133-BLK1	12/07/10 19:02
Benzo (a) anthracene	<0.000600		mg/kg wet	10L1133	10L1133-BLK1	12/07/10 19:02
Benzo (a) pyrene	<0.000600		mg/kg wet	10L1133	10L1133-BLK1	12/07/10 19:02
Benzo (b) fluoranthene	<0.000700		mg/kg wet	10L1133	10L1133-BLK1	12/07/10 19:02
Benzo (g,h,i) perylene	<0.000700		mg/kg wet	10L1133	10L1133-BLK1	12/07/10 19:02
Benzo (k) fluoranthene	<0.000700		mg/kg wet	10L1133	10L1133-BLK1	12/07/10 19:02
Chrysene	<0.00100		mg/kg wet	10L1133	10L1133-BLK1	12/07/10 19:02

Client AMEC Earth & Environmental (13993)
600 University Street, Suite 1020
Seattle, WA 98101
Attn Leah Vigoren

Work Order: NTL0445
Project Name: Everett Terminal(46108) - AMEC
Project Number: [none]
Received: 12/03/10 08:15

PROJECT QUALITY CONTROL DATA
Blank - Cont.

Analyte	Blank Value	Q	Units	Q.C. Batch	Lab Number	Analyzed Date/Time
Polyaromatic Hydrocarbons by EPA 8270D SIM						
10L1133-BLK1						
Dibenz (a,h) anthracene	<0.000900		mg/kg wet	10L1133	10L1133-BLK1	12/07/10 19:02
Fluoranthene	<0.000500		mg/kg wet	10L1133	10L1133-BLK1	12/07/10 19:02
Fluorene	<0.00100		mg/kg wet	10L1133	10L1133-BLK1	12/07/10 19:02
Indeno (1,2,3-cd) pyrene	<0.000600		mg/kg wet	10L1133	10L1133-BLK1	12/07/10 19:02
1-Methylnaphthalene	<0.000600		mg/kg wet	10L1133	10L1133-BLK1	12/07/10 19:02
2-Methylnaphthalene	<0.000800		mg/kg wet	10L1133	10L1133-BLK1	12/07/10 19:02
Naphthalene	<0.000600		mg/kg wet	10L1133	10L1133-BLK1	12/07/10 19:02
Phenanthrene	<0.000800		mg/kg wet	10L1133	10L1133-BLK1	12/07/10 19:02
Pyrene	<0.000800		mg/kg wet	10L1133	10L1133-BLK1	12/07/10 19:02
Surrogate: Nitrobenzene-d5	77%			10L1133	10L1133-BLK1	12/07/10 19:02
Surrogate: 2-Fluorobiphenyl	73%			10L1133	10L1133-BLK1	12/07/10 19:02
Surrogate: Terphenyl-d14	85%			10L1133	10L1133-BLK1	12/07/10 19:02
Purgeable Petroleum Hydrocarbons						
10L0917-BLK1						
GRO (C4-C12) NW	0.0468	J	mg/kg wet	10L0917	10L0917-BLK1	12/07/10 15:01
Surrogate: a,a,a-Trifluorotoluene	105%			10L0917	10L0917-BLK1	12/07/10 15:01
10L0917-BLK2						
GRO (C4-C12) NW	0.0270	J	mg/kg wet	10L0917	10L0917-BLK2	12/07/10 15:18
Surrogate: a,a,a-Trifluorotoluene	112%			10L0917	10L0917-BLK2	12/07/10 15:18
10L0917-BLK3						
GRO (C4-C12) NW	0.0353	J	mg/kg wet	10L0917	10L0917-BLK3	12/08/10 10:44
Surrogate: a,a,a-Trifluorotoluene	91%			10L0917	10L0917-BLK3	12/08/10 10:44
10L0917-BLK4						
GRO (C4-C12) NW	0.0224	J	mg/kg wet	10L0917	10L0917-BLK4	12/08/10 11:01
Surrogate: a,a,a-Trifluorotoluene	91%			10L0917	10L0917-BLK4	12/08/10 11:01
10L1772-BLK1						
GRO (C4-C12) NW	0.0109	J	mg/kg wet	10L1772	10L1772-BLK1	12/08/10 13:08
Surrogate: a,a,a-Trifluorotoluene	95%			10L1772	10L1772-BLK1	12/08/10 13:08
10L1772-BLK2						
GRO (C4-C12) NW	0.0341	J	mg/kg wet	10L1772	10L1772-BLK2	12/08/10 13:25
Surrogate: a,a,a-Trifluorotoluene	98%			10L1772	10L1772-BLK2	12/08/10 13:25
10L1772-BLK3						
GRO (C4-C12) NW	0.0320	J	mg/kg wet	10L1772	10L1772-BLK3	12/08/10 19:56
Surrogate: a,a,a-Trifluorotoluene	90%			10L1772	10L1772-BLK3	12/08/10 19:56

Client AMEC Earth & Environmental (13993)
 600 University Street, Suite 1020
 Seattle, WA 98101
 Attn Leah Vigoren

Work Order: NTL0445
 Project Name: Everett Terminal(46108) - AMEC
 Project Number: [none]
 Received: 12/03/10 08:15

PROJECT QUALITY CONTROL DATA
Blank - Cont.

Analyte	Blank Value	Q	Units	Q.C. Batch	Lab Number	Analyzed Date/Time
Extractable Petroleum Hydrocarbons with Silica Gel Treatment						
10L1134-BLK1						
Diesel	1.28	J	mg/kg wet	10L1134	10L1134-BLK1	12/07/10 13:47
Motor Oil	1.22	J	mg/kg wet	10L1134	10L1134-BLK1	12/07/10 13:47
Surrogate: <i>o</i> -Terphenyl	74%			10L1134	10L1134-BLK1	12/07/10 13:47

Client AMEC Earth & Environmental (13993)
600 University Street, Suite 1020
Seattle, WA 98101
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Work Order: NTL0445
Project Name: Everett Terminal(46108) - AMEC
Project Number: [none]
Received: 12/03/10 08:15

PROJECT QUALITY CONTROL DATA

Duplicate

Analyte	Orig. Val.	Duplicate	Q	Units	RPD	Limit	Batch	Sample Duplicated	% Rec.	Analyzed Date/Time
General Chemistry Parameters										
10L1112-DUP1										
% Dry Solids	88.2	89.4		%	1	20	10L1112	NTL0620-08		12/07/10 09:14

Client AMEC Earth & Environmental (13993)
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 Seattle, WA 98101
 Attn Leah Vigoren

Work Order: NTL0445
 Project Name: Everett Terminal(46108) - AMEC
 Project Number: [none]
 Received: 12/03/10 08:15

PROJECT QUALITY CONTROL DATA LCS

Analyte	Known Val.	Analyzed Val	Q	Units	% Rec.	Target Range	Batch	Analyzed Date/Time
Volatile Organic Compounds by EPA Method 8260B								
10L0867-BS1								
Benzene	50.0	42.5		ug/kg	85%	78 - 126	10L0867	12/06/10 11:49
Ethylbenzene	50.0	43.1		ug/kg	86%	79 - 130	10L0867	12/06/10 11:49
Methyl tert-Butyl Ether	50.0	49.5		ug/kg	99%	70 - 128	10L0867	12/06/10 11:49
Toluene	50.0	42.8		ug/kg	86%	76 - 126	10L0867	12/06/10 11:49
Xylenes, total	150	126		ug/kg	84%	80 - 130	10L0867	12/06/10 11:49
Surrogate: 1,2-Dichloroethane-d4	50.0	46.7			93%	67 - 138	10L0867	12/06/10 11:49
Surrogate: Dibromofluoromethane	50.0	49.2			98%	75 - 125	10L0867	12/06/10 11:49
Surrogate: Toluene-d8	50.0	50.7			101%	76 - 129	10L0867	12/06/10 11:49
Surrogate: 4-Bromofluorobenzene	50.0	53.5			107%	67 - 147	10L0867	12/06/10 11:49
10L1140-BS1								
Benzene	50.0	47.2		ug/L	94%	80 - 121	10L1140	12/04/10 15:49
Ethylbenzene	50.0	50.6		ug/L	101%	78 - 133	10L1140	12/04/10 15:49
Toluene	50.0	48.8		ug/L	98%	78 - 125	10L1140	12/04/10 15:49
Xylenes, total	150	152		ug/L	102%	78 - 134	10L1140	12/04/10 15:49
Surrogate: 1,2-Dichloroethane-d4	25.0	25.6			103%	63 - 140	10L1140	12/04/10 15:49
Surrogate: Dibromofluoromethane	25.0	26.4			106%	73 - 131	10L1140	12/04/10 15:49
Surrogate: Toluene-d8	25.0	25.4			102%	80 - 120	10L1140	12/04/10 15:49
Surrogate: 4-Bromofluorobenzene	25.0	25.2			101%	79 - 125	10L1140	12/04/10 15:49
Polyaromatic Hydrocarbons by EPA 8270D SIM								
10L1133-BS1								
Acenaphthene	0.0333	0.0220		mg/kg wet	66%	44 - 120	10L1133	12/07/10 12:22
Acenaphthylene	0.0333	0.0250		mg/kg wet	75%	46 - 127	10L1133	12/07/10 12:22
Anthracene	0.0333	0.0267		mg/kg wet	80%	49 - 139	10L1133	12/07/10 12:22
Benzo (a) anthracene	0.0333	0.0290		mg/kg wet	87%	53 - 132	10L1133	12/07/10 12:22
Benzo (a) pyrene	0.0333	0.0280		mg/kg wet	84%	57 - 125	10L1133	12/07/10 12:22
Benzo (b) fluoranthene	0.0333	0.0293		mg/kg wet	88%	36 - 140	10L1133	12/07/10 12:22
Benzo (g,h,i) perylene	0.0333	0.0257		mg/kg wet	77%	54 - 139	10L1133	12/07/10 12:22
Benzo (k) fluoranthene	0.0333	0.0210		mg/kg wet	63%	49 - 140	10L1133	12/07/10 12:22
Chrysene	0.0333	0.0230		mg/kg wet	69%	47 - 139	10L1133	12/07/10 12:22
Dibenz (a,h) anthracene	0.0333	0.0277		mg/kg wet	83%	58 - 141	10L1133	12/07/10 12:22
Fluoranthene	0.0333	0.0267		mg/kg wet	80%	34 - 135	10L1133	12/07/10 12:22
Fluorene	0.0333	0.0233		mg/kg wet	70%	47 - 129	10L1133	12/07/10 12:22
Indeno (1,2,3-cd) pyrene	0.0333	0.0273		mg/kg wet	82%	53 - 142	10L1133	12/07/10 12:22
1-Methylnaphthalene	0.0333	0.0217		mg/kg wet	65%	41 - 120	10L1133	12/07/10 12:22
2-Methylnaphthalene	0.0333	0.0237		mg/kg wet	71%	48 - 121	10L1133	12/07/10 12:22
Naphthalene	0.0333	0.0223		mg/kg wet	67%	42 - 120	10L1133	12/07/10 12:22
Phenanthrene	0.0333	0.0230		mg/kg wet	69%	52 - 134	10L1133	12/07/10 12:22
Pyrene	0.0333	0.0260		mg/kg wet	78%	56 - 144	10L1133	12/07/10 12:22
Surrogate: Nitrobenzene-d5	0.0333	0.0207			62%	17 - 120	10L1133	12/07/10 12:22

Client AMEC Earth & Environmental (13993)
 600 University Street, Suite 1020
 Seattle, WA 98101
 Attn Leah Vigoren

Work Order: NTL0445
 Project Name: Everett Terminal(46108) - AMEC
 Project Number: [none]
 Received: 12/03/10 08:15

PROJECT QUALITY CONTROL DATA
LCS - Cont.

Analyte	Known Val.	Analyzed Val	Q	Units	% Rec.	Target Range	Batch	Analyzed Date/Time
Polyaromatic Hydrocarbons by EPA 8270D SIM								
10L1133-BS1								
<i>Surrogate: 2-Fluorobiphenyl</i>	0.0333	0.0207			62%	14 - 120	10L1133	12/07/10 12:22
<i>Surrogate: Terphenyl-d14</i>	0.0333	0.0237			71%	18 - 120	10L1133	12/07/10 12:22
Purgeable Petroleum Hydrocarbons								
10L0917-BS1								
GRO (C4-C12) NW	10.0	10.5		mg/kg wet	105%	60 - 123	10L0917	12/08/10 08:51
<i>Surrogate: a,a,a-Trifluorotoluene</i>	20.0	25.2			126%	50 - 150	10L0917	12/08/10 08:51
10L0917-BS2								
GRO (C4-C12) NW	10.0	9.62		mg/kg wet	96%	60 - 123	10L0917	12/08/10 09:07
<i>Surrogate: a,a,a-Trifluorotoluene</i>	20.0	25.2			126%	50 - 150	10L0917	12/08/10 09:07
10L1772-BS1								
GRO (C4-C12) NW	10.0	9.66		mg/kg wet	97%	60 - 123	10L1772	12/08/10 19:23
<i>Surrogate: a,a,a-Trifluorotoluene</i>	20.0	23.3			116%	50 - 150	10L1772	12/08/10 19:23
10L1772-BS2								
GRO (C4-C12) NW	10.0	9.60		mg/kg wet	96%	60 - 123	10L1772	12/09/10 01:35
<i>Surrogate: a,a,a-Trifluorotoluene</i>	20.0	26.4			132%	50 - 150	10L1772	12/09/10 01:35
Extractable Petroleum Hydrocarbons with Silica Gel Treatment								
10L1134-BS1								
Diesel	40.0	31.9		mg/kg wet	80%	55 - 123	10L1134	12/07/10 14:03
<i>Surrogate: o-Terphenyl</i>	0.800	0.501			63%	50 - 150	10L1134	12/07/10 14:03

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 Project Number: [none]
 Received: 12/03/10 08:15

PROJECT QUALITY CONTROL DATA

LCS Dup

Analyte	Orig. Val.	Duplicate	Q	Units	Spike Conc	% Rec.	Target Range	RPD	Limit	Batch	Sample Duplicated	Analyzed Date/Time
Volatile Organic Compounds by EPA Method 8260B												
10L1140-BSD1												
Benzene		47.3		ug/L	50.0	95%	80 - 121	0.3	12	10L1140		12/04/10 16:16
Ethylbenzene		51.0		ug/L	50.0	102%	78 - 133	0.8	12	10L1140		12/04/10 16:16
Toluene		49.8		ug/L	50.0	100%	78 - 125	2	35	10L1140		12/04/10 16:16
Xylenes, total		154		ug/L	150	103%	78 - 134	1	18	10L1140		12/04/10 16:16
Surrogate: 1,2-Dichloroethane-d4		26.0		ug/L	25.0	104%	63 - 140			10L1140		12/04/10 16:16
Surrogate: Dibromofluoromethane		26.0		ug/L	25.0	104%	73 - 131			10L1140		12/04/10 16:16
Surrogate: Toluene-d8		25.4		ug/L	25.0	102%	80 - 120			10L1140		12/04/10 16:16
Surrogate: 4-Bromofluorobenzene		25.0		ug/L	25.0	100%	79 - 125			10L1140		12/04/10 16:16

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Work Order: NTL0445
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 Project Number: [none]
 Received: 12/03/10 08:15

PROJECT QUALITY CONTROL DATA Matrix Spike

Analyte	Orig. Val.	MS Val	Q	Units	Spike Conc	% Rec.	Target Range	Batch	Sample Spiked	Analyzed Date/Time
Volatile Organic Compounds by EPA Method 8260B										
10L0867-MS1										
Benzene	ND	3.04		mg/kg wet	2.50	122%	42 - 141	10L0867	NTK3328-01RE 3	12/06/10 20:33
Ethylbenzene	ND	3.37		mg/kg wet	2.50	135%	21 - 165	10L0867	NTK3328-01RE 3	12/06/10 20:33
Methyl tert-Butyl Ether	ND	2.98		mg/kg wet	2.50	119%	34 - 154	10L0867	NTK3328-01RE 3	12/06/10 20:33
Toluene	ND	3.28		mg/kg wet	2.50	131%	45 - 145	10L0867	NTK3328-01RE 3	12/06/10 20:33
Xylenes, total	ND	10.1		mg/kg wet	7.50	134%	31 - 159	10L0867	NTK3328-01RE 3	12/06/10 20:33
<i>Surrogate: 1,2-Dichloroethane-d4</i>		40.6		ug/kg	50.0	81%	67 - 138	10L0867	NTK3328-01RE 3	12/06/10 20:33
<i>Surrogate: Dibromofluoromethane</i>		44.7		ug/kg	50.0	89%	75 - 125	10L0867	NTK3328-01RE 3	12/06/10 20:33
<i>Surrogate: Toluene-d8</i>		52.2		ug/kg	50.0	104%	76 - 129	10L0867	NTK3328-01RE 3	12/06/10 20:33
<i>Surrogate: 4-Bromofluorobenzene</i>		51.9		ug/kg	50.0	104%	67 - 147	10L0867	NTK3328-01RE 3	12/06/10 20:33
10L1140-MS1										
Benzene	ND	45.2		ug/L	50.0	90%	65 - 151	10L1140	NTL0484-03	12/05/10 01:52
Ethylbenzene	ND	48.2		ug/L	50.0	96%	68 - 157	10L1140	NTL0484-03	12/05/10 01:52
Toluene	ND	47.1		ug/L	50.0	94%	61 - 153	10L1140	NTL0484-03	12/05/10 01:52
Xylenes, total	ND	144		ug/L	150	96%	68 - 158	10L1140	NTL0484-03	12/05/10 01:52
<i>Surrogate: 1,2-Dichloroethane-d4</i>		24.6		ug/L	25.0	98%	63 - 140	10L1140	NTL0484-03	12/05/10 01:52
<i>Surrogate: Dibromofluoromethane</i>		25.0		ug/L	25.0	100%	73 - 131	10L1140	NTL0484-03	12/05/10 01:52
<i>Surrogate: Toluene-d8</i>		25.6		ug/L	25.0	102%	80 - 120	10L1140	NTL0484-03	12/05/10 01:52
<i>Surrogate: 4-Bromofluorobenzene</i>		25.6		ug/L	25.0	102%	79 - 125	10L1140	NTL0484-03	12/05/10 01:52
Polyaromatic Hydrocarbons by EPA 8270D SIM										
10L1133-MS1										
Acenaphthene	0.00242	0.0285		mg/kg dry	0.0408	64%	42 - 120	10L1133	NTL0445-02	12/07/10 19:24
Acenaphthylene	ND	0.0318		mg/kg dry	0.0408	78%	39 - 127	10L1133	NTL0445-02	12/07/10 19:24
Anthracene	0.00363	0.0391		mg/kg dry	0.0408	87%	39 - 139	10L1133	NTL0445-02	12/07/10 19:24
Benzo (a) anthracene	0.00283	0.0408		mg/kg dry	0.0408	93%	31 - 132	10L1133	NTL0445-02	12/07/10 19:24
Benzo (a) pyrene	0.00323	0.0379		mg/kg dry	0.0408	85%	22 - 125	10L1133	NTL0445-02	12/07/10 19:24
Benzo (b) fluoranthene	0.00363	0.0403		mg/kg dry	0.0408	90%	10 - 147	10L1133	NTL0445-02	12/07/10 19:24
Benzo (g,h,i) perylene	0.00242	0.0334		mg/kg dry	0.0408	76%	10 - 151	10L1133	NTL0445-02	12/07/10 19:24
Benzo (k) fluoranthene	ND	0.0273		mg/kg dry	0.0408	67%	23 - 140	10L1133	NTL0445-02	12/07/10 19:24
Chrysene	0.00283	0.0293		mg/kg dry	0.0408	65%	20 - 139	10L1133	NTL0445-02	12/07/10 19:24
Dibenz (a,h) anthracene	0.00242	0.0359		mg/kg dry	0.0408	82%	18 - 150	10L1133	NTL0445-02	12/07/10 19:24
Fluoranthene	0.00565	0.0371		mg/kg dry	0.0408	77%	29 - 135	10L1133	NTL0445-02	12/07/10 19:24

Client AMEC Earth & Environmental (13993)
 600 University Street, Suite 1020
 Seattle, WA 98101
 Attn Leah Vigoren

Work Order: NTL0445
 Project Name: Everett Terminal(46108) - AMEC
 Project Number: [none]
 Received: 12/03/10 08:15

PROJECT QUALITY CONTROL DATA
Matrix Spike - Cont.

Analyte	Orig. Val.	MS Val	Q	Units	Spike Conc	% Rec.	Target Range	Batch	Sample Spiked	Analyzed Date/Time
Polyaromatic Hydrocarbons by EPA 8270D SIM										
10L1133-MS1										
Fluorene	0.00565	0.0334		mg/kg dry	0.0408	68%	38 - 129	10L1133	NTL0445-02	12/07/10 19:24
Indeno (1,2,3-cd) pyrene	0.00283	0.0363		mg/kg dry	0.0408	82%	13 - 146	10L1133	NTL0445-02	12/07/10 19:24
1-Methylnaphthalene	0.00888	0.0318		mg/kg dry	0.0408	56%	20 - 120	10L1133	NTL0445-02	12/07/10 19:24
2-Methylnaphthalene	ND	0.0289		mg/kg dry	0.0408	71%	28 - 124	10L1133	NTL0445-02	12/07/10 19:24
Naphthalene	ND	0.0261		mg/kg dry	0.0408	64%	10 - 135	10L1133	NTL0445-02	12/07/10 19:24
Phenanthrene	0.00969	0.0350		mg/kg dry	0.0408	62%	33 - 134	10L1133	NTL0445-02	12/07/10 19:24
Pyrene	0.00969	0.0436		mg/kg dry	0.0408	83%	26 - 153	10L1133	NTL0445-02	12/07/10 19:24
Surrogate: Nitrobenzene-d5		0.0261		mg/kg dry	0.0408	64%	17 - 120	10L1133	NTL0445-02	12/07/10 19:24
Surrogate: 2-Fluorobiphenyl		0.0249		mg/kg dry	0.0408	61%	14 - 120	10L1133	NTL0445-02	12/07/10 19:24
Surrogate: Terphenyl-d14		0.0322		mg/kg dry	0.0408	79%	18 - 120	10L1133	NTL0445-02	12/07/10 19:24
Purgeable Petroleum Hydrocarbons										
10L1772-MS1										
GRO (C4-C12) NW	0.588	10.7		mg/kg wet	10.0	101%	59 - 130	10L1772	NTL0539-24RE 1	12/08/10 18:15
Surrogate: a,a,a-Trifluorotoluene		24.1		ug/L	20.0	120%	50 - 150	10L1772	NTL0539-24RE 1	12/08/10 18:15
Extractable Petroleum Hydrocarbons with Silica Gel Treatment										
10L1134-MS1										
Diesel	2.36	42.6		mg/kg dry	49.8	81%	34 - 138	10L1134	NTL0445-01	12/07/10 14:19
Surrogate: o-Terphenyl		0.703		mg/kg dry	0.995	71%	50 - 150	10L1134	NTL0445-01	12/07/10 14:19

Client AMEC Earth & Environmental (13993)
600 University Street, Suite 1020
Seattle, WA 98101
Attn Leah Vigoren

Work Order: NTL0445
Project Name: Everett Terminal(46108) - AMEC
Project Number: [none]
Received: 12/03/10 08:15

PROJECT QUALITY CONTROL DATA Matrix Spike Dup

Analyte	Orig. Val.	Duplicate	Q	Units	Spike Conc	% Rec.	Target Range	RPD	Limit	Batch	Sample Duplicated	Analyzed Date/Time
Volatile Organic Compounds by EPA Method 8260B												
10L0867-MSD1												
Benzene	ND	2.41		mg/kg wet	2.50	96%	42 - 141	23	50	10L0867	NTK3328-01R E3	12/06/10 21:02
Ethylbenzene	ND	2.61		mg/kg wet	2.50	105%	21 - 165	25	50	10L0867	NTK3328-01R E3	12/06/10 21:02
Methyl tert-Butyl Ether	ND	2.71		mg/kg wet	2.50	109%	34 - 154	9	50	10L0867	NTK3328-01R E3	12/06/10 21:02
Toluene	ND	2.53		mg/kg wet	2.50	101%	45 - 145	26	50	10L0867	NTK3328-01R E3	12/06/10 21:02
Xylenes, total	ND	7.77		mg/kg wet	7.50	104%	31 - 159	26	50	10L0867	NTK3328-01R E3	12/06/10 21:02
Surrogate: 1,2-Dichloroethane-d4		43.2		ug/kg	50.0	86%	67 - 138			10L0867	NTK3328-01R E3	12/06/10 21:02
Surrogate: Dibromofluoromethane		46.8		ug/kg	50.0	94%	75 - 125			10L0867	NTK3328-01R E3	12/06/10 21:02
Surrogate: Toluene-d8		51.0		ug/kg	50.0	102%	76 - 129			10L0867	NTK3328-01R E3	12/06/10 21:02
Surrogate: 4-Bromofluorobenzene		51.7		ug/kg	50.0	103%	67 - 147			10L0867	NTK3328-01R E3	12/06/10 21:02
10L1140-MSD1												
Benzene	ND	48.2		ug/L	50.0	96%	65 - 151	6	12	10L1140	NTL0484-03	12/05/10 02:20
Ethylbenzene	ND	51.9		ug/L	50.0	104%	68 - 157	7	12	10L1140	NTL0484-03	12/05/10 02:20
Toluene	ND	50.6		ug/L	50.0	101%	61 - 153	7	35	10L1140	NTL0484-03	12/05/10 02:20
Xylenes, total	ND	155		ug/L	150	103%	68 - 158	7	18	10L1140	NTL0484-03	12/05/10 02:20
Surrogate: 1,2-Dichloroethane-d4		24.2		ug/L	25.0	97%	63 - 140			10L1140	NTL0484-03	12/05/10 02:20
Surrogate: Dibromofluoromethane		24.8		ug/L	25.0	99%	73 - 131			10L1140	NTL0484-03	12/05/10 02:20
Surrogate: Toluene-d8		25.6		ug/L	25.0	102%	80 - 120			10L1140	NTL0484-03	12/05/10 02:20
Surrogate: 4-Bromofluorobenzene		25.0		ug/L	25.0	100%	79 - 125			10L1140	NTL0484-03	12/05/10 02:20
Polyaromatic Hydrocarbons by EPA 8270D SIM												
10L1133-MSD1												
Acenaphthene	0.00242	0.0330		mg/kg dry	0.0407	75%	42 - 120	15	32	10L1133	NTL0445-02	12/07/10 19:46
Acenaphthylene	ND	0.0367		mg/kg dry	0.0407	90%	39 - 127	14	34	10L1133	NTL0445-02	12/07/10 19:46
Anthracene	0.00363	0.0411		mg/kg dry	0.0407	92%	39 - 139	5	31	10L1133	NTL0445-02	12/07/10 19:46
Benzo (a) anthracene	0.00283	0.0444		mg/kg dry	0.0407	102%	31 - 132	9	43	10L1133	NTL0445-02	12/07/10 19:46
Benzo (a) pyrene	0.00323	0.0424		mg/kg dry	0.0407	96%	22 - 125	11	41	10L1133	NTL0445-02	12/07/10 19:46
Benzo (b) fluoranthene	0.00363	0.0452		mg/kg dry	0.0407	102%	10 - 147	11	50	10L1133	NTL0445-02	12/07/10 19:46
Benzo (g,h,i) perylene	0.00242	0.0367		mg/kg dry	0.0407	84%	10 - 151	9	50	10L1133	NTL0445-02	12/07/10 19:46
Benzo (k) fluoranthene	ND	0.0285		mg/kg dry	0.0407	70%	23 - 140	4	38	10L1133	NTL0445-02	12/07/10 19:46
Chrysene	0.00283	0.0334		mg/kg dry	0.0407	75%	20 - 139	13	40	10L1133	NTL0445-02	12/07/10 19:46
Dibenz (a,h) anthracene	0.00242	0.0391		mg/kg dry	0.0407	90%	18 - 150	9	50	10L1133	NTL0445-02	12/07/10 19:46
Fluoranthene	0.00565	0.0420		mg/kg dry	0.0407	89%	29 - 135	12	47	10L1133	NTL0445-02	12/07/10 19:46
Fluorene	0.00565	0.0371		mg/kg dry	0.0407	77%	38 - 129	10	38	10L1133	NTL0445-02	12/07/10 19:46
Indeno (1,2,3-cd) pyrene	0.00283	0.0391		mg/kg dry	0.0407	89%	13 - 146	8	46	10L1133	NTL0445-02	12/07/10 19:46
1-Methylnaphthalene	0.00888	0.0358		mg/kg dry	0.0407	66%	20 - 120	12	35	10L1133	NTL0445-02	12/07/10 19:46

Client AMEC Earth & Environmental (13993)
 600 University Street, Suite 1020
 Seattle, WA 98101
 Attn Leah Vigoren

Work Order: NTL0445
 Project Name: Everett Terminal(46108) - AMEC
 Project Number: [none]
 Received: 12/03/10 08:15

PROJECT QUALITY CONTROL DATA

Matrix Spike Dup - Cont.

Analyte	Orig. Val.	Duplicate	Q	Units	Spike Conc	% Rec.	Target Range	RPD	Limit	Batch	Sample Duplicated	Analyzed Date/Time
Polyaromatic Hydrocarbons by EPA 8270D SIM												
10L1133-MSD1												
2-Methylnaphthalene	ND	0.0346		mg/kg dry	0.0407	85%	28 - 124	18	38	10L1133	NTL0445-02	12/07/10 19:46
Naphthalene	ND	0.0330		mg/kg dry	0.0407	81%	10 - 135	23	36	10L1133	NTL0445-02	12/07/10 19:46
Phenanthrene	0.00969	0.0411		mg/kg dry	0.0407	77%	33 - 134	16	46	10L1133	NTL0445-02	12/07/10 19:46
Pyrene	0.00969	0.0485		mg/kg dry	0.0407	95%	26 - 153	11	50	10L1133	NTL0445-02	12/07/10 19:46
Surrogate: Nitrobenzene-d5		0.0318		mg/kg dry	0.0407	78%	17 - 120			10L1133	NTL0445-02	12/07/10 19:46
Surrogate: 2-Fluorobiphenyl		0.0297		mg/kg dry	0.0407	73%	14 - 120			10L1133	NTL0445-02	12/07/10 19:46
Surrogate: Terphenyl-d14		0.0346		mg/kg dry	0.0407	85%	18 - 120			10L1133	NTL0445-02	12/07/10 19:46
Purgeable Petroleum Hydrocarbons												
10L1772-MSD1												
GRO (C4-C12) NW	0.588	10.2		mg/kg wet	10.0	96%	59 - 130	5	50	10L1772	NTL0539-24RE 1	12/08/10 18:32
Surrogate: a,a,a-Trifluorotoluene		27.3		ug/L	20.0	136%	50 - 150			10L1772	NTL0539-24RE 1	12/08/10 18:32
Extractable Petroleum Hydrocarbons with Silica Gel Treatment												
10L1134-MSD1												
Diesel	2.36	45.4		mg/kg dry	49.5	87%	34 - 138	6	43	10L1134	NTL0445-01	12/07/10 14:36
Surrogate: o-Terphenyl		0.732		mg/kg dry	0.990	74%	50 - 150			10L1134	NTL0445-01	12/07/10 14:36

Client AMEC Earth & Environmental (13993)
600 University Street, Suite 1020
Seattle, WA 98101
Attn Leah Vigoren

Work Order: NTL0445
Project Name: Everett Terminal(46108) - AMEC
Project Number: [none]
Received: 12/03/10 08:15

CERTIFICATION SUMMARY

TestAmerica Nashville

Method	Matrix	AIHA	Nelac	Washington
NWTPH-Dx	Soil	N/A		X
NWTPH-Gx	Soil	N/A	X	X
SW846 8260B	Soil	N/A	X	X
SW846 8260B	Water	N/A	X	X
SW846 8270D SIM	Soil		X	X
SW-846	Soil			

Client AMEC Earth & Environmental (13993)
600 University Street, Suite 1020
Seattle, WA 98101
Attn Leah Vigoren

Work Order: NTL0445
Project Name: Everett Terminal(46108) - AMEC
Project Number: [none]
Received: 12/03/10 08:15

DATA QUALIFIERS AND DEFINITIONS

- J** Analyte detected at a level less than the Reporting Limit (RL) and greater than or equal to the Method Detection Limit (MDL). Concentrations within this range are estimated.
- QP5** There was insufficient contamination present to perform a pattern match.
- QP6** The contamination did not match any standards in our library.
- ND** Not detected at the reporting limit (or method detection limit if shown)

METHOD MODIFICATION NOTES

AGENCY DRAFT**Klingensmith, Leah**

From: Vigoren, Leah R [Leah.Vigoren@amec.com]
Sent: Tuesday, December 14, 2010 11:28 AM
To: Klingensmith, Leah
Subject: FW: Everett NTL0445 & NTL0082

For sample AB6-30 analyze for Gx, Dx, and BTEX. Thanks. Leah

From: Klingensmith, Leah [mailto:Leah.Klingensmith@testamericainc.com]
Sent: Tuesday, December 14, 2010 7:25 AM
To: Vigoren, Leah R
Subject: RE: Everett NTL0445 & NTL0082

Leah,
Do you want a Level II report or Level IV data package for these projects?

LEAH R. KLINGENSMITH
Senior Project Manager

In observance of the upcoming holidays, we will be closed on Saturday, December 25th and Saturday, January 1st.

We will have limited staff for prescheduled projects on Friday, December 24th, Monday, December 27th and Friday, December 31st.

Please contact your Project Manager if you will require courier pick-ups/deliveries or have short hold/rush projects coming in so we may staff accordingly.

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

2960 Foster Creighton
Nashville, TN 37204
Tel 615-301-5038
www.testamericainc.com

From: Vigoren, Leah R [mailto:Leah.Vigoren@amec.com]
Sent: Monday, December 13, 2010 2:18 PM
To: Klingensmith, Leah
Subject: FW: Everett NTL0445

Leah:

It's MW-7Ab (collected from the boring).

Thanks,

Leah

AGENCY DRAFT

From: Klingensmith, Leah [mailto:Leah.Klingensmith@testamericainc.com]
Sent: Monday, December 13, 2010 11:00 AM
To: Vigoren, Leah R
Subject: Everett NTL0445

LEAH R. KLINGENSMITH
Senior Project Manager

The TestAmerica-Nashville Laboratory will be closed Christmas Day and New Years Day, December 25th and January 1st. The laboratory will not be staffed on these days and will not be available to receive samples. Due to temperature and holding time requirements, samples should not be shipped after Thursday December 23 or Thursday December 30. Happy Holidays!

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

2960 Foster Creighton
Nashville, TN 37204
Tel 615-301-5038
www.testamericainc.com

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The information contained in this e-mail is intended only for the individual or entity to whom it is addressed. Its contents (including any attachments) may contain confidential and/or privileged information. If you are not an intended recipient you must not use, disclose, disseminate, copy or print its contents. If you receive this e-mail in error, please notify the sender by reply e-mail and delete and destroy the message.

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING
Nashville, TN



COOLER RECEIPT

NTL0445

Cooler Received/Opened On 12/3/2010 @ 08:15

1. Tracking # 4266 (last 4 digits, FedEx)

Courier: FEDEX IR Gun ID 96210146

2. Temperature of rep. sample or temp blank when opened: 1.1 Degrees Celsius

3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES...NO...NA

4. Were custody seals on outside of cooler? YES...NO...NA

If yes, how many and where: 1-Front

5. Were the seals intact, signed, and dated correctly? YES...NO...NA

6. Were custody papers inside cooler? YES...NO...NA

I certify that I opened the cooler and answered questions 1-6 (initial) P.H.

7. Were custody seals on containers: YES NO and Intact YES...NO...NA

Were these signed and dated correctly? YES...NO...NA

8. Packing mat'l used? Bubblewrap Plastic bag Peanuts Vermiculite Foam Insert Paper Other None

9. Cooling process: Ice Ice-pack Ice (direct contact) Dry ice Other None

10. Did all containers arrive in good condition (unbroken)? YES...NO...NA

11. Were all container labels complete (#, date, signed, pres., etc)? YES...NO...NA

12. Did all container labels and tags agree with custody papers? YES...NO...NA

13a. Were VOA vials received? YES...NO...NA

b. Was there any observable headspace present in any VOA vial? YES...NO...NA - Seal

14. Was there a Trip Blank in this cooler? YES...NO...NA If multiple coolers, sequence # NA

I certify that I unloaded the cooler and answered questions 7-14 (initial) JH

15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES...NO...NA

b. Did the bottle labels indicate that the correct preservatives were used YES...NO...NA

16. Was residual chlorine present? YES...NO...NA

I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (initial) JH

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

18. Did you sign the custody papers in the appropriate place? YES...NO...NA

19. Were correct containers used for the analysis requested? YES...NO...NA

20. Was sufficient amount of sample sent in each container? YES...NO...NA

I certify that I entered this project into LIMS and answered questions 17-20 (initial) JH

I certify that I attached a label with the unique LIMS number to each container (initial) JH

21. Were there Non-Conformance issues at login? YES...NO Was a PIPE generated? YES...NO #

Nashville, TN 37204
phone 615.726.0177 fax 615.726.3403

1244740 25 59

Client Contact

AMEC E&E
11810 North Creek Parkway N
Bothell, WA 98011
(425) 3681000
(425) 3681001

Project Name: ExxonMobil/ADC Property
Site: Exxon, WA

P.O.#

Project Manager: Leah Vigoren
Tel/Fax: 206 915 8222

Calendar (C) or Work Days (W)
Analysis Turnaround Time

TAT if different from Below
 2 weeks
 1 week
 2 days
 1 day

Site Contact: Leah Vigoren
Lab Contact: Leah Vigoren

Date: 12/02/10
Carrier: FedEx

COG No. 1
of 1 COCs

Job No. 0-915-159161D

SDG No.

Sample Identification

Sample Date

Sample Time

Sample Type

Matrix

of Cont.

TPH-DX
TPH-RX
BTEX/MTBE
PAHs

8260 B
8270 D SH

Sample Specific Notes:

AW-3A6

AP6-R3

DUPS-120210

AP6-30

12/1/10

12/2/10

12/2/10

12/2/10

1000

1030

1045

1100

Soil

Soil

Soil

Soil

Soil

Soil

Soil

Soil

3

3

3

3

X X X X

X X X X

X X X X

X X X X

Sample Specific Notes:
See see for Dr
↓
Nobel

AGENCY DRAFT

Preservation Used: 1=I2, 2=HCl; 3=H2SO4; 4=HNO3; 5=NaOH; 6=Other Methanol

Possible Hazard Identification
 Non-Hazard Flammable Skin Irritant Poison B Unknown

Special Instructions/OC Requirements & Comments:
Sample Disposal (A Fee may be assessed if samples are retained longer than 1 month)
 Return To Client Disposal By Lab Archive For _____ Months

Please, analyze for PH-DX before since gel cleavage
Send to QA/QC

Relinquished by: Leah Company: AMEC Date/Time: 12/3/10 08:15

Relinquished by: Leah Company: AMEC Date/Time: 12/2/10

Relinquished by: Leah Company: AMEC Date/Time: 12/2/10

Relinquished by: Leah Company: AMEC Date/Time: 12/2/10

December 17, 2010 1:13:37PM

Client: AMEC Earth & Environmental (13993)
600 University Street, Suite 1020
Seattle, WA 98101
Attn: Leah Vigoren

Work Order: NTL0684
Project Name: Everett Terminal(46108) - AMEC
Project Nbr: [none]
P/O Nbr:
Date Received: 12/04/10

SAMPLE IDENTIFICATION	LAB NUMBER	COLLECTION DATE AND TIME
AB1-14	NTL0684-01	12/03/10 10:15
AB1-27	NTL0684-02	12/03/10 11:15
Trip Blanks	NTL0684-03	12/03/10 00:01

An executed copy of the chain of custody, the project quality control data, and the sample receipt form are also included as an addendum to this report. If you have any questions relating to this analytical report, please contact your Laboratory Project Manager at 1-800-765-0980. Any opinions, if expressed, are outside the scope of the Laboratory's accreditation.

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Washington Certification Number: C1712

The Chain(s) of Custody, 2 pages, are included and are an integral part of this report.

These results relate only to the items tested. This report shall not be reproduced except in full and with permission of the laboratory.

All solids results are reported in wet weight unless specifically stated.

Estimated uncertainty is available upon request.

This report has been electronically signed.

Report Approved By:



Leah R. Klingensmith

Senior Project Management

Client AMEC Earth & Environmental (13993)
600 University Street, Suite 1020
Seattle, WA 98101
Attn Leah Vigoren

Work Order: NTL0684
Project Name: Everett Terminal(46108) - AMEC
Project Number: [none]
Received: 12/04/10 08:45

ANALYTICAL REPORT

Analyte	Result	Flag	Units	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
Sample ID: NTL0684-01 (AB1-14 - Soil) Sampled: 12/03/10 10:15								
General Chemistry Parameters								
% Dry Solids	80.7		%	0.500	1	12/09/10 09:06	SW-846	10L1709
Volatile Organic Compounds by EPA Method 8260B								
Benzene	ND		mg/kg dry	0.00187	1	12/13/10 20:37	SW846 8260B	10L3011
Ethylbenzene	ND		mg/kg dry	0.00187	1	12/13/10 20:37	SW846 8260B	10L3011
Methyl tert-Butyl Ether	ND		mg/kg dry	0.00187	1	12/13/10 20:37	SW846 8260B	10L3011
Toluene	ND		mg/kg dry	0.00187	1	12/13/10 20:37	SW846 8260B	10L3011
Xylenes, total	ND		mg/kg dry	0.00467	1	12/13/10 20:37	SW846 8260B	10L3011
<i>Surr: 1,2-Dichloroethane-d4 (67-138%)</i>	88 %					12/13/10 20:37	SW846 8260B	10L3011
<i>Surr: Dibromofluoromethane (75-125%)</i>	105 %					12/13/10 20:37	SW846 8260B	10L3011
<i>Surr: Toluene-d8 (76-129%)</i>	100 %					12/13/10 20:37	SW846 8260B	10L3011
<i>Surr: 4-Bromofluorobenzene (67-147%)</i>	130 %					12/13/10 20:37	SW846 8260B	10L3011
Polyaromatic Hydrocarbons by EPA 8270D SIM								
Acenaphthene	0.00535		mg/kg dry	0.00411	1	12/09/10 22:40	SW846 8270D SIM	10L1817
Acenaphthylene	ND		mg/kg dry	0.00411	1	12/09/10 22:40	SW846 8270D SIM	10L1817
Anthracene	ND		mg/kg dry	0.00411	1	12/09/10 22:40	SW846 8270D SIM	10L1817
Benzo (a) anthracene	0.00412		mg/kg dry	0.00411	1	12/09/10 22:40	SW846 8270D SIM	10L1817
Benzo (a) pyrene	0.00494		mg/kg dry	0.00411	1	12/09/10 22:40	SW846 8270D SIM	10L1817
Benzo (b) fluoranthene	0.00535		mg/kg dry	0.00411	1	12/09/10 22:40	SW846 8270D SIM	10L1817
Benzo (g,h,i) perylene	ND		mg/kg dry	0.00411	1	12/09/10 22:40	SW846 8270D SIM	10L1817
Benzo (k) fluoranthene	ND		mg/kg dry	0.00411	1	12/09/10 22:40	SW846 8270D SIM	10L1817
Chrysene	ND		mg/kg dry	0.00411	1	12/09/10 22:40	SW846 8270D SIM	10L1817
Dibenz (a,h) anthracene	ND		mg/kg dry	0.00411	1	12/09/10 22:40	SW846 8270D SIM	10L1817
Fluoranthene	0.0119		mg/kg dry	0.00411	1	12/09/10 22:40	SW846 8270D SIM	10L1817
Fluorene	0.00741		mg/kg dry	0.00411	1	12/09/10 22:40	SW846 8270D SIM	10L1817
Indeno (1,2,3-cd) pyrene	ND		mg/kg dry	0.00411	1	12/09/10 22:40	SW846 8270D SIM	10L1817
1-Methylnaphthalene	0.0206		mg/kg dry	0.00411	1	12/09/10 22:40	SW846 8270D SIM	10L1817
2-Methylnaphthalene	0.0140		mg/kg dry	0.00411	1	12/09/10 22:40	SW846 8270D SIM	10L1817
Naphthalene	ND		mg/kg dry	0.00411	1	12/09/10 22:40	SW846 8270D SIM	10L1817
Phenanthrene	0.0156		mg/kg dry	0.00411	1	12/09/10 22:40	SW846 8270D SIM	10L1817
Pyrene	0.0115		mg/kg dry	0.00411	1	12/09/10 22:40	SW846 8270D SIM	10L1817
<i>Surr: Nitrobenzene-d5 (17-120%)</i>	68 %					12/09/10 22:40	SW846 8270D SIM	10L1817
<i>Surr: 2-Fluorobiphenyl (14-120%)</i>	69 %					12/09/10 22:40	SW846 8270D SIM	10L1817
<i>Surr: Terphenyl-d14 (18-120%)</i>	77 %					12/09/10 22:40	SW846 8270D SIM	10L1817
Purgeable Petroleum Hydrocarbons								
GRO (C4-C12) NW	ND		mg/kg dry	5.29	50	12/16/10 05:52	NWTPH-Gx	10L1789
<i>Surr: a,a,a-Trifluorotoluene (50-150%)</i>	80 %					12/16/10 05:52	NWTPH-Gx	10L1789
Extractable Petroleum Hydrocarbons with Silica Gel Treatment								
Diesel	44.7	QP7	mg/kg dry	4.93	1	12/11/10 03:00	NWTPH-Dx	10L1818
Motor Oil	21.9	QP7a	mg/kg dry	4.93	1	12/11/10 03:00	NWTPH-Dx	10L1818
<i>Surr: o-Terphenyl (50-150%)</i>	55 %					12/11/10 03:00	NWTPH-Dx	10L1818

Client AMEC Earth & Environmental (13993)
600 University Street, Suite 1020
Seattle, WA 98101
Attn Leah Vigoren

Work Order: NTL0684
Project Name: Everett Terminal(46108) - AMEC
Project Number: [none]
Received: 12/04/10 08:45

ANALYTICAL REPORT

Analyte	Result	Flag	Units	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
Sample ID: NTL0684-02 (AB1-27 - Soil) Sampled: 12/03/10 11:15								
General Chemistry Parameters								
% Dry Solids	78.8		%	0.500	1	12/14/10 08:26	SW-846	10L2803
Volatile Organic Compounds by EPA Method 8260B								
Benzene	ND		mg/kg dry	0.00219	1	12/13/10 21:06	SW846 8260B	10L3011
Ethylbenzene	ND		mg/kg dry	0.00219	1	12/13/10 21:06	SW846 8260B	10L3011
Methyl tert-Butyl Ether	ND		mg/kg dry	0.00219	1	12/13/10 21:06	SW846 8260B	10L3011
Toluene	ND		mg/kg dry	0.00219	1	12/13/10 21:06	SW846 8260B	10L3011
Xylenes, total	ND		mg/kg dry	0.00548	1	12/13/10 21:06	SW846 8260B	10L3011
<i>Surr: 1,2-Dichloroethane-d4 (67-138%)</i>	90 %					12/13/10 21:06	SW846 8260B	10L3011
<i>Surr: Dibromofluoromethane (75-125%)</i>	106 %					12/13/10 21:06	SW846 8260B	10L3011
<i>Surr: Toluene-d8 (76-129%)</i>	94 %					12/13/10 21:06	SW846 8260B	10L3011
<i>Surr: 4-Bromofluorobenzene (67-147%)</i>	122 %					12/13/10 21:06	SW846 8260B	10L3011
Polyaromatic Hydrocarbons by EPA 8270D SIM								
Acenaphthene	ND		mg/kg dry	0.00422	1	12/12/10 21:03	SW846 8270D SIM	10L2516
Acenaphthylene	ND		mg/kg dry	0.00422	1	12/12/10 21:03	SW846 8270D SIM	10L2516
Anthracene	ND		mg/kg dry	0.00422	1	12/12/10 21:03	SW846 8270D SIM	10L2516
Benzo (a) anthracene	ND		mg/kg dry	0.00422	1	12/12/10 21:03	SW846 8270D SIM	10L2516
Benzo (a) pyrene	ND		mg/kg dry	0.00422	1	12/12/10 21:03	SW846 8270D SIM	10L2516
Benzo (b) fluoranthene	ND		mg/kg dry	0.00422	1	12/12/10 21:03	SW846 8270D SIM	10L2516
Benzo (g,h,i) perylene	ND		mg/kg dry	0.00422	1	12/12/10 21:03	SW846 8270D SIM	10L2516
Benzo (k) fluoranthene	ND		mg/kg dry	0.00422	1	12/12/10 21:03	SW846 8270D SIM	10L2516
Chrysene	ND		mg/kg dry	0.00422	1	12/12/10 21:03	SW846 8270D SIM	10L2516
Dibenz (a,h) anthracene	ND		mg/kg dry	0.00422	1	12/12/10 21:03	SW846 8270D SIM	10L2516
Fluoranthene	ND		mg/kg dry	0.00422	1	12/12/10 21:03	SW846 8270D SIM	10L2516
Fluorene	ND		mg/kg dry	0.00422	1	12/12/10 21:03	SW846 8270D SIM	10L2516
Indeno (1,2,3-cd) pyrene	ND		mg/kg dry	0.00422	1	12/12/10 21:03	SW846 8270D SIM	10L2516
1-Methylnaphthalene	ND		mg/kg dry	0.00422	1	12/12/10 21:03	SW846 8270D SIM	10L2516
2-Methylnaphthalene	ND		mg/kg dry	0.00422	1	12/12/10 21:03	SW846 8270D SIM	10L2516
Naphthalene	ND		mg/kg dry	0.00422	1	12/12/10 21:03	SW846 8270D SIM	10L2516
Phenanthrene	ND		mg/kg dry	0.00422	1	12/12/10 21:03	SW846 8270D SIM	10L2516
Pyrene	ND		mg/kg dry	0.00422	1	12/12/10 21:03	SW846 8270D SIM	10L2516
<i>Surr: Nitrobenzene-d5 (17-120%)</i>	60 %					12/12/10 21:03	SW846 8270D SIM	10L2516
<i>Surr: 2-Fluorobiphenyl (14-120%)</i>	58 %					12/12/10 21:03	SW846 8270D SIM	10L2516
<i>Surr: Terphenyl-d14 (18-120%)</i>	69 %					12/12/10 21:03	SW846 8270D SIM	10L2516
Purgeable Petroleum Hydrocarbons								
GRO (C4-C12) NW	ND		mg/kg dry	6.09	50	12/16/10 06:22	NWTPH-Gx	10L1789
<i>Surr: a,a,a-Trifluorotoluene (50-150%)</i>	78 %					12/16/10 06:22	NWTPH-Gx	10L1789
Extractable Petroleum Hydrocarbons with Silica Gel Treatment								
Diesel	5.20	QP5	mg/kg dry	5.05	1	12/12/10 10:59	NWTPH-Dx	10L2523
Motor Oil	9.37	QP5	mg/kg dry	5.05	1	12/12/10 10:59	NWTPH-Dx	10L2523
<i>Surr: o-Terphenyl (50-150%)</i>	86 %					12/12/10 10:59	NWTPH-Dx	10L2523

Client AMEC Earth & Environmental (13993)
 600 University Street, Suite 1020
 Seattle, WA 98101
 Attn Leah Vigoren

Work Order: NTL0684
 Project Name: Everett Terminal(46108) - AMEC
 Project Number: [none]
 Received: 12/04/10 08:45

ANALYTICAL REPORT

Analyte	Result	Flag	Units	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
Sample ID: NTL0684-03 (Trip Blanks - Soil) Sampled: 12/03/10 00:01								
Volatile Organic Compounds by EPA Method 8260B								
Benzene	ND		mg/kg wet	0.100	50	12/13/10 19:38	SW846 8260B	10L3011
Ethylbenzene	ND		mg/kg wet	0.100	50	12/13/10 19:38	SW846 8260B	10L3011
Methyl tert-Butyl Ether	ND		mg/kg wet	0.100	50	12/13/10 19:38	SW846 8260B	10L3011
Toluene	ND		mg/kg wet	0.100	50	12/13/10 19:38	SW846 8260B	10L3011
Xylenes, total	ND		mg/kg wet	0.250	50	12/13/10 19:38	SW846 8260B	10L3011
<i>Surr: 1,2-Dichloroethane-d4 (67-138%)</i>	<i>86 %</i>					<i>12/13/10 19:38</i>	<i>SW846 8260B</i>	<i>10L3011</i>
<i>Surr: Dibromofluoromethane (75-125%)</i>	<i>101 %</i>					<i>12/13/10 19:38</i>	<i>SW846 8260B</i>	<i>10L3011</i>
<i>Surr: Toluene-d8 (76-129%)</i>	<i>91 %</i>					<i>12/13/10 19:38</i>	<i>SW846 8260B</i>	<i>10L3011</i>
<i>Surr: 4-Bromofluorobenzene (67-147%)</i>	<i>103 %</i>					<i>12/13/10 19:38</i>	<i>SW846 8260B</i>	<i>10L3011</i>

Client AMEC Earth & Environmental (13993)
 600 University Street, Suite 1020
 Seattle, WA 98101
 Attn Leah Vigoren

Work Order: NTL0684
 Project Name: Everett Terminal(46108) - AMEC
 Project Number: [none]
 Received: 12/04/10 08:45

SAMPLE EXTRACTION DATA

Parameter	Batch	Lab Number	Wt/Vol Extracted	Extracted Vol	Date	Analyst	Extraction Method
Extractable Petroleum Hydrocarbons with Silica Gel Treatment							
NWTPH-Dx	10L1818	NTL0684-01	25.13	1.00	12/09/10 08:15	CAG	EPA 3550B
NWTPH-Dx	10L2523	NTL0684-02	25.14	1.00	12/11/10 11:15	CAG	EPA 3550B
Polyaromatic Hydrocarbons by EPA 8270D SIM							
SW846 8270D SIM	10L1817	NTL0684-01	30.12	1.00	12/08/10 15:00	JDC	EPA 3550C
SW846 8270D SIM	10L2516	NTL0684-02	30.05	1.00	12/11/10 12:30	JDC	EPA 3550C
Purgeable Petroleum Hydrocarbons							
NWTPH-Gx	10L1789	NTL0684-01	5.86	5.00	12/03/10 10:15	CHH	EPA 5035A (GC)
NWTPH-Gx	10L1789	NTL0684-02	5.21	5.00	12/03/10 11:15	CHH	EPA 5035A (GC)
Volatile Organic Compounds by EPA Method 8260B							
SW846 8260B	10L3011	NTL0684-01	6.64	5.00	12/03/10 10:15	CHH	EPA 5035
SW846 8260B	10L3011	NTL0684-02	5.79	5.00	12/03/10 11:15	CHH	EPA 5035
SW846 8260B	10L3011	NTL0684-03	5.00	5.00	12/03/10 00:01	CHH	EPA 5035

Client AMEC Earth & Environmental (13993)
 600 University Street, Suite 1020
 Seattle, WA 98101
 Attn Leah Vigoren

Work Order: NTL0684
 Project Name: Everett Terminal(46108) - AMEC
 Project Number: [none]
 Received: 12/04/10 08:45

PROJECT QUALITY CONTROL DATA
Blank

Analyte	Blank Value	Q	Units	Q.C. Batch	Lab Number	Analyzed Date/Time
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Volatile Organic Compounds by EPA Method 8260B

10L3011-BLK1

Benzene	<0.00110		mg/kg wet	10L3011	10L3011-BLK1	12/13/10 18:39
Ethylbenzene	<0.000980		mg/kg wet	10L3011	10L3011-BLK1	12/13/10 18:39
Methyl tert-Butyl Ether	<0.000670		mg/kg wet	10L3011	10L3011-BLK1	12/13/10 18:39
Toluene	<0.000890		mg/kg wet	10L3011	10L3011-BLK1	12/13/10 18:39
Xylenes, total	<0.00190		mg/kg wet	10L3011	10L3011-BLK1	12/13/10 18:39
Surrogate: 1,2-Dichloroethane-d4	91%			10L3011	10L3011-BLK1	12/13/10 18:39
Surrogate: Dibromofluoromethane	109%			10L3011	10L3011-BLK1	12/13/10 18:39
Surrogate: Toluene-d8	90%			10L3011	10L3011-BLK1	12/13/10 18:39
Surrogate: 4-Bromofluorobenzene	110%			10L3011	10L3011-BLK1	12/13/10 18:39

10L3011-BLK2

Benzene	<0.0550		mg/kg wet	10L3011	10L3011-BLK2	12/13/10 19:08
Ethylbenzene	<0.0490		mg/kg wet	10L3011	10L3011-BLK2	12/13/10 19:08
Methyl tert-Butyl Ether	<0.0335		mg/kg wet	10L3011	10L3011-BLK2	12/13/10 19:08
Toluene	<0.0445		mg/kg wet	10L3011	10L3011-BLK2	12/13/10 19:08
Xylenes, total	<0.0950		mg/kg wet	10L3011	10L3011-BLK2	12/13/10 19:08
Surrogate: 1,2-Dichloroethane-d4	87%			10L3011	10L3011-BLK2	12/13/10 19:08
Surrogate: Dibromofluoromethane	110%			10L3011	10L3011-BLK2	12/13/10 19:08
Surrogate: Toluene-d8	90%			10L3011	10L3011-BLK2	12/13/10 19:08
Surrogate: 4-Bromofluorobenzene	111%			10L3011	10L3011-BLK2	12/13/10 19:08

Polyaromatic Hydrocarbons by EPA 8270D SIM

10L1817-BLK1

Acenaphthene	<0.000700		mg/kg wet	10L1817	10L1817-BLK1	12/09/10 21:10
Acenaphthylene	<0.000600		mg/kg wet	10L1817	10L1817-BLK1	12/09/10 21:10
Anthracene	<0.000500		mg/kg wet	10L1817	10L1817-BLK1	12/09/10 21:10
Benzo (a) anthracene	<0.000600		mg/kg wet	10L1817	10L1817-BLK1	12/09/10 21:10
Benzo (a) pyrene	<0.000600		mg/kg wet	10L1817	10L1817-BLK1	12/09/10 21:10
Benzo (b) fluoranthene	<0.000700		mg/kg wet	10L1817	10L1817-BLK1	12/09/10 21:10
Benzo (g,h,i) perylene	<0.000700		mg/kg wet	10L1817	10L1817-BLK1	12/09/10 21:10
Benzo (k) fluoranthene	<0.000700		mg/kg wet	10L1817	10L1817-BLK1	12/09/10 21:10
Chrysene	<0.00100		mg/kg wet	10L1817	10L1817-BLK1	12/09/10 21:10
Dibenz (a,h) anthracene	<0.000900		mg/kg wet	10L1817	10L1817-BLK1	12/09/10 21:10
Fluoranthene	<0.000500		mg/kg wet	10L1817	10L1817-BLK1	12/09/10 21:10
Fluorene	<0.00100		mg/kg wet	10L1817	10L1817-BLK1	12/09/10 21:10
Indeno (1,2,3-cd) pyrene	<0.000600		mg/kg wet	10L1817	10L1817-BLK1	12/09/10 21:10
1-Methylnaphthalene	<0.000600		mg/kg wet	10L1817	10L1817-BLK1	12/09/10 21:10
2-Methylnaphthalene	<0.000800		mg/kg wet	10L1817	10L1817-BLK1	12/09/10 21:10
Naphthalene	<0.000600		mg/kg wet	10L1817	10L1817-BLK1	12/09/10 21:10
Phenanthrene	<0.000800		mg/kg wet	10L1817	10L1817-BLK1	12/09/10 21:10
Pyrene	<0.000800		mg/kg wet	10L1817	10L1817-BLK1	12/09/10 21:10

Client AMEC Earth & Environmental (13993)
 600 University Street, Suite 1020
 Seattle, WA 98101
 Attn Leah Vigoren

Work Order: NTL0684
 Project Name: Everett Terminal(46108) - AMEC
 Project Number: [none]
 Received: 12/04/10 08:45

PROJECT QUALITY CONTROL DATA
Blank - Cont.

Analyte	Blank Value	Q	Units	Q.C. Batch	Lab Number	Analyzed Date/Time
Polyaromatic Hydrocarbons by EPA 8270D SIM						
10L1817-BLK1						
<i>Surrogate: Nitrobenzene-d5</i>	66%			10L1817	10L1817-BLK1	12/09/10 21:10
<i>Surrogate: 2-Fluorobiphenyl</i>	65%			10L1817	10L1817-BLK1	12/09/10 21:10
<i>Surrogate: Terphenyl-d14</i>	72%			10L1817	10L1817-BLK1	12/09/10 21:10
10L2516-BLK1						
Acenaphthene	<0.000700		mg/kg wet	10L2516	10L2516-BLK1	12/12/10 19:36
Acenaphthylene	<0.000600		mg/kg wet	10L2516	10L2516-BLK1	12/12/10 19:36
Anthracene	<0.000500		mg/kg wet	10L2516	10L2516-BLK1	12/12/10 19:36
Benzo (a) anthracene	<0.000600		mg/kg wet	10L2516	10L2516-BLK1	12/12/10 19:36
Benzo (a) pyrene	<0.000600		mg/kg wet	10L2516	10L2516-BLK1	12/12/10 19:36
Benzo (b) fluoranthene	<0.000700		mg/kg wet	10L2516	10L2516-BLK1	12/12/10 19:36
Benzo (g,h,i) perylene	<0.000700		mg/kg wet	10L2516	10L2516-BLK1	12/12/10 19:36
Benzo (k) fluoranthene	<0.000700		mg/kg wet	10L2516	10L2516-BLK1	12/12/10 19:36
Chrysene	<0.001100		mg/kg wet	10L2516	10L2516-BLK1	12/12/10 19:36
Dibenz (a,h) anthracene	<0.000900		mg/kg wet	10L2516	10L2516-BLK1	12/12/10 19:36
Fluoranthene	<0.000500		mg/kg wet	10L2516	10L2516-BLK1	12/12/10 19:36
Fluorene	<0.001100		mg/kg wet	10L2516	10L2516-BLK1	12/12/10 19:36
Indeno (1,2,3-cd) pyrene	<0.000600		mg/kg wet	10L2516	10L2516-BLK1	12/12/10 19:36
1-Methylnaphthalene	<0.000600		mg/kg wet	10L2516	10L2516-BLK1	12/12/10 19:36
2-Methylnaphthalene	<0.000800		mg/kg wet	10L2516	10L2516-BLK1	12/12/10 19:36
Naphthalene	<0.000600		mg/kg wet	10L2516	10L2516-BLK1	12/12/10 19:36
Phenanthrene	<0.000800		mg/kg wet	10L2516	10L2516-BLK1	12/12/10 19:36
Pyrene	<0.000800		mg/kg wet	10L2516	10L2516-BLK1	12/12/10 19:36
<i>Surrogate: Nitrobenzene-d5</i>	78%			10L2516	10L2516-BLK1	12/12/10 19:36
<i>Surrogate: 2-Fluorobiphenyl</i>	75%			10L2516	10L2516-BLK1	12/12/10 19:36
<i>Surrogate: Terphenyl-d14</i>	78%			10L2516	10L2516-BLK1	12/12/10 19:36
Purgeable Petroleum Hydrocarbons						
10L1789-BLK1						
GRO (C4-C12) NW	1.66		mg/kg wet	10L1789	10L1789-BLK1	12/15/10 15:01
<i>Surrogate: a,a,a-Trifluorotoluene</i>	85%			10L1789	10L1789-BLK1	12/15/10 15:01
10L1789-BLK2						
GRO (C4-C12) NW	<0.0100		mg/kg wet	10L1789	10L1789-BLK2	12/16/10 04:21
<i>Surrogate: a,a,a-Trifluorotoluene</i>	80%			10L1789	10L1789-BLK2	12/16/10 04:21
Extractable Petroleum Hydrocarbons with Silica Gel Treatment						
10L1818-BLK1						
Diesel	<0.700		mg/kg wet	10L1818	10L1818-BLK1	12/11/10 01:23
Motor Oil	1.24		mg/kg wet	10L1818	10L1818-BLK1	12/11/10 01:23
<i>Surrogate: o-Terphenyl</i>	83%			10L1818	10L1818-BLK1	12/11/10 01:23

Client AMEC Earth & Environmental (13993)
 600 University Street, Suite 1020
 Seattle, WA 98101
 Attn Leah Vigoren

Work Order: NTL0684
 Project Name: Everett Terminal(46108) - AMEC
 Project Number: [none]
 Received: 12/04/10 08:45

PROJECT QUALITY CONTROL DATA
Blank - Cont.

Analyte	Blank Value	Q	Units	Q.C. Batch	Lab Number	Analyzed Date/Time
Extractable Petroleum Hydrocarbons with Silica Gel Treatment						
10L2523-BLK1						
Diesel	<0.700		mg/kg wet	10L2523	10L2523-BLK1	12/12/10 09:44
Motor Oil	<0.700		mg/kg wet	10L2523	10L2523-BLK1	12/12/10 09:44
Surrogate: <i>o</i> -Terphenyl	79%			10L2523	10L2523-BLK1	12/12/10 09:44

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Work Order: NTL0684
 Project Name: Everett Terminal(46108) - AMEC
 Project Number: [none]
 Received: 12/04/10 08:45

PROJECT QUALITY CONTROL DATA
Duplicate

Analyte	Orig. Val.	Duplicate	Q	Units	RPD	Limit	Batch	Sample Duplicated	% Rec.	Analyzed Date/Time
General Chemistry Parameters										
10L1709-DUP1										
% Dry Solids	80.7	80.8		%	0.1	20	10L1709	NTL0684-01		12/09/10 09:06
10L2803-DUP1										
% Dry Solids	97.6	97.4		%	0.2	20	10L2803	NTL1481-04		12/14/10 08:26

Client AMEC Earth & Environmental (13993)
 600 University Street, Suite 1020
 Seattle, WA 98101
 Attn Leah Vigoren

Work Order: NTL0684
 Project Name: Everett Terminal(46108) - AMEC
 Project Number: [none]
 Received: 12/04/10 08:45

PROJECT QUALITY CONTROL DATA LCS

Analyte	Known Val.	Analyzed Val	Q	Units	% Rec.	Target Range	Batch	Analyzed Date/Time
Volatile Organic Compounds by EPA Method 8260B								
10L3011-BS1								
Benzene	50.0	52.7		ug/kg	105%	78 - 126	10L3011	12/13/10 16:40
Ethylbenzene	50.0	49.1		ug/kg	98%	79 - 130	10L3011	12/13/10 16:40
Methyl tert-Butyl Ether	50.0	45.7		ug/kg	91%	70 - 128	10L3011	12/13/10 16:40
Toluene	50.0	43.9		ug/kg	88%	76 - 126	10L3011	12/13/10 16:40
Xylenes, total	150	148		ug/kg	99%	80 - 130	10L3011	12/13/10 16:40
<i>Surrogate: 1,2-Dichloroethane-d4</i>	50.0	45.2			90%	67 - 138	10L3011	12/13/10 16:40
<i>Surrogate: Dibromofluoromethane</i>	50.0	54.3			109%	75 - 125	10L3011	12/13/10 16:40
<i>Surrogate: Toluene-d8</i>	50.0	45.1			90%	76 - 129	10L3011	12/13/10 16:40
<i>Surrogate: 4-Bromofluorobenzene</i>	50.0	52.7			105%	67 - 147	10L3011	12/13/10 16:40

Polyaromatic Hydrocarbons by EPA 8270D SIM

10L1817-BS1								
Acenaphthene	0.0333	0.0240		mg/kg wet	72%	44 - 120	10L1817	12/09/10 21:33
Acenaphthylene	0.0333	0.0267		mg/kg wet	80%	46 - 127	10L1817	12/09/10 21:33
Anthracene	0.0333	0.0280		mg/kg wet	84%	49 - 139	10L1817	12/09/10 21:33
Benzo (a) anthracene	0.0333	0.0290		mg/kg wet	87%	53 - 132	10L1817	12/09/10 21:33
Benzo (a) pyrene	0.0333	0.0263		mg/kg wet	79%	57 - 125	10L1817	12/09/10 21:33
Benzo (b) fluoranthene	0.0333	0.0240		mg/kg wet	72%	36 - 140	10L1817	12/09/10 21:33
Benzo (g,h,i) perylene	0.0333	0.0250		mg/kg wet	75%	54 - 139	10L1817	12/09/10 21:33
Benzo (k) fluoranthene	0.0333	0.0260		mg/kg wet	78%	49 - 140	10L1817	12/09/10 21:33
Chrysene	0.0333	0.0243		mg/kg wet	73%	47 - 139	10L1817	12/09/10 21:33
Dibenz (a,h) anthracene	0.0333	0.0257		mg/kg wet	77%	58 - 141	10L1817	12/09/10 21:33
Fluoranthene	0.0333	0.0287		mg/kg wet	86%	34 - 135	10L1817	12/09/10 21:33
Fluorene	0.0333	0.0250		mg/kg wet	75%	47 - 129	10L1817	12/09/10 21:33
Indeno (1,2,3-cd) pyrene	0.0333	0.0260		mg/kg wet	78%	53 - 142	10L1817	12/09/10 21:33
1-Methylnaphthalene	0.0333	0.0220		mg/kg wet	66%	41 - 120	10L1817	12/09/10 21:33
2-Methylnaphthalene	0.0333	0.0240		mg/kg wet	72%	48 - 121	10L1817	12/09/10 21:33
Naphthalene	0.0333	0.0237		mg/kg wet	71%	42 - 120	10L1817	12/09/10 21:33
Phenanthrene	0.0333	0.0250		mg/kg wet	75%	52 - 134	10L1817	12/09/10 21:33
Pyrene	0.0333	0.0277		mg/kg wet	83%	56 - 144	10L1817	12/09/10 21:33
<i>Surrogate: Nitrobenzene-d5</i>	0.0333	0.0227			68%	17 - 120	10L1817	12/09/10 21:33
<i>Surrogate: 2-Fluorobiphenyl</i>	0.0333	0.0223			67%	14 - 120	10L1817	12/09/10 21:33
<i>Surrogate: Terphenyl-d14</i>	0.0333	0.0243			73%	18 - 120	10L1817	12/09/10 21:33

10L2516-BS1								
Acenaphthene	0.0333	0.0237		mg/kg wet	71%	44 - 120	10L2516	12/12/10 19:58
Acenaphthylene	0.0333	0.0263		mg/kg wet	79%	46 - 127	10L2516	12/12/10 19:58
Anthracene	0.0333	0.0280		mg/kg wet	84%	49 - 139	10L2516	12/12/10 19:58
Benzo (a) anthracene	0.0333	0.0287		mg/kg wet	86%	53 - 132	10L2516	12/12/10 19:58
Benzo (a) pyrene	0.0333	0.0253		mg/kg wet	76%	57 - 125	10L2516	12/12/10 19:58
Benzo (b) fluoranthene	0.0333	0.0230		mg/kg wet	69%	36 - 140	10L2516	12/12/10 19:58

Client AMEC Earth & Environmental (13993)
 600 University Street, Suite 1020
 Seattle, WA 98101
 Attn Leah Vigoren

Work Order: NTL0684
 Project Name: Everett Terminal(46108) - AMEC
 Project Number: [none]
 Received: 12/04/10 08:45

PROJECT QUALITY CONTROL DATA
LCS - Cont.

Analyte	Known Val.	Analyzed Val	Q	Units	% Rec.	Target Range	Batch	Analyzed Date/Time
Polyaromatic Hydrocarbons by EPA 8270D SIM								
10L2516-BS1								
Benzo (g,h,i) perylene	0.0333	0.0247		mg/kg wet	74%	54 - 139	10L2516	12/12/10 19:58
Benzo (k) fluoranthene	0.0333	0.0260		mg/kg wet	78%	49 - 140	10L2516	12/12/10 19:58
Chrysene	0.0333	0.0247		mg/kg wet	74%	47 - 139	10L2516	12/12/10 19:58
Dibenz (a,h) anthracene	0.0333	0.0247		mg/kg wet	74%	58 - 141	10L2516	12/12/10 19:58
Fluoranthene	0.0333	0.0280		mg/kg wet	84%	34 - 135	10L2516	12/12/10 19:58
Fluorene	0.0333	0.0247		mg/kg wet	74%	47 - 129	10L2516	12/12/10 19:58
Indeno (1,2,3-cd) pyrene	0.0333	0.0250		mg/kg wet	75%	53 - 142	10L2516	12/12/10 19:58
1-Methylnaphthalene	0.0333	0.0230		mg/kg wet	69%	41 - 120	10L2516	12/12/10 19:58
2-Methylnaphthalene	0.0333	0.0253		mg/kg wet	76%	48 - 121	10L2516	12/12/10 19:58
Naphthalene	0.0333	0.0247		mg/kg wet	74%	42 - 120	10L2516	12/12/10 19:58
Phenanthrene	0.0333	0.0237		mg/kg wet	71%	52 - 134	10L2516	12/12/10 19:58
Pyrene	0.0333	0.0267		mg/kg wet	80%	56 - 144	10L2516	12/12/10 19:58
<i>Surrogate: Nitrobenzene-d5</i>	0.0333	0.0240			72%	17 - 120	10L2516	12/12/10 19:58
<i>Surrogate: 2-Fluorobiphenyl</i>	0.0333	0.0223			67%	14 - 120	10L2516	12/12/10 19:58
<i>Surrogate: Terphenyl-d14</i>	0.0333	0.0237			71%	18 - 120	10L2516	12/12/10 19:58
Purgeable Petroleum Hydrocarbons								
10L1789-BS1								
GRO (C4-C12) NW	1.00	1.00		mg/kg wet	100%	60 - 123	10L1789	12/16/10 01:50
<i>Surrogate: a,a,a-Trifluorotoluene</i>	20.0	21.1			106%	50 - 150	10L1789	12/16/10 01:50
10L1789-BS2								
GRO (C4-C12) NW	1.00	1.12		mg/kg wet	112%	60 - 123	10L1789	12/16/10 10:53
<i>Surrogate: a,a,a-Trifluorotoluene</i>	20.0	19.3			96%	50 - 150	10L1789	12/16/10 10:53
Extractable Petroleum Hydrocarbons with Silica Gel Treatment								
10L1818-BS1								
Diesel	40.0	35.2		mg/kg wet	88%	55 - 123	10L1818	12/11/10 01:47
<i>Surrogate: o-Terphenyl</i>	0.800	0.697			87%	50 - 150	10L1818	12/11/10 01:47
10L2523-BS1								
Diesel	40.0	38.6		mg/kg wet	97%	55 - 123	10L2523	12/12/10 10:03
<i>Surrogate: o-Terphenyl</i>	0.800	0.687			86%	50 - 150	10L2523	12/12/10 10:03

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Work Order: NTL0684
 Project Name: Everett Terminal(46108) - AMEC
 Project Number: [none]
 Received: 12/04/10 08:45

PROJECT QUALITY CONTROL DATA
LCS Dup

Analyte	Orig. Val.	Duplicate	Q	Units	Spike Conc	% Rec.	Target Range	RPD	Limit	Batch	Sample Duplicated	Analyzed Date/Time
Volatile Organic Compounds by EPA Method 8260B												
10L3011-BSD1												
Benzene		52.1		ug/kg	50.0	104%	78 - 126	1	50	10L3011		12/13/10 17:10
Ethylbenzene		48.1		ug/kg	50.0	96%	79 - 130	2	50	10L3011		12/13/10 17:10
Methyl tert-Butyl Ether		45.1		ug/kg	50.0	90%	70 - 128	1	50	10L3011		12/13/10 17:10
Toluene		44.0		ug/kg	50.0	88%	76 - 126	0.2	50	10L3011		12/13/10 17:10
Xylenes, total		146		ug/kg	150	97%	80 - 130	1	50	10L3011		12/13/10 17:10
<i>Surrogate: 1,2-Dichloroethane-d4</i>		44.8		ug/kg	50.0	90%	67 - 138			10L3011		12/13/10 17:10
<i>Surrogate: Dibromofluoromethane</i>		53.7		ug/kg	50.0	107%	75 - 125			10L3011		12/13/10 17:10
<i>Surrogate: Toluene-d8</i>		45.3		ug/kg	50.0	91%	76 - 129			10L3011		12/13/10 17:10
<i>Surrogate: 4-Bromofluorobenzene</i>		53.1		ug/kg	50.0	106%	67 - 147			10L3011		12/13/10 17:10
Purgeable Petroleum Hydrocarbons												
10L1789-BSD1												
GRO (C4-C12) NW		0.983		mg/kg wet	1.00	98%	60 - 123	2	50	10L1789		12/16/10 02:21
<i>Surrogate: a,a,a-Trifluorotoluene</i>		20.9		ug/L	20.0	105%	50 - 150			10L1789		12/16/10 02:21
10L1789-BSD2												
GRO (C4-C12) NW		1.07		mg/kg wet	1.00	107%	60 - 123	4	50	10L1789		12/16/10 11:23
<i>Surrogate: a,a,a-Trifluorotoluene</i>		19.7		ug/L	20.0	99%	50 - 150			10L1789		12/16/10 11:23

Client AMEC Earth & Environmental (13993)
600 University Street, Suite 1020
Seattle, WA 98101
Attn Leah Vigoren

Work Order: NTL0684
Project Name: Everett Terminal(46108) - AMEC
Project Number: [none]
Received: 12/04/10 08:45

PROJECT QUALITY CONTROL DATA Matrix Spike

Analyte	Orig. Val.	MS Val	Q	Units	Spike Conc	% Rec.	Target Range	Batch	Sample Spiked	Analyzed Date/Time
Volatile Organic Compounds by EPA Method 8260B										
10L3011-MS1										
Benzene	0.00360	0.0483		mg/kg dry	0.0584	77%	42 - 141	10L3011	NTL1430-05	12/14/10 22:59
Ethylbenzene	0.00282	0.0417		mg/kg dry	0.0584	67%	21 - 165	10L3011	NTL1430-05	12/14/10 22:59
Methyl tert-Butyl Ether	ND	0.0289		mg/kg dry	0.0584	50%	34 - 154	10L3011	NTL1430-05	12/14/10 22:59
Toluene	0.00821	0.0477		mg/kg dry	0.0584	68%	45 - 145	10L3011	NTL1430-05	12/14/10 22:59
Xylenes, total	0.00646	0.116		mg/kg dry	0.175	63%	31 - 159	10L3011	NTL1430-05	12/14/10 22:59
<i>Surrogate: 1,2-Dichloroethane-d4</i>		44.8		ug/kg	50.0	90%	67 - 138	10L3011	NTL1430-05	12/14/10 22:59
<i>Surrogate: Dibromofluoromethane</i>		50.2		ug/kg	50.0	100%	75 - 125	10L3011	NTL1430-05	12/14/10 22:59
<i>Surrogate: Toluene-d8</i>		49.1		ug/kg	50.0	98%	76 - 129	10L3011	NTL1430-05	12/14/10 22:59
<i>Surrogate: 4-Bromofluorobenzene</i>		51.3		ug/kg	50.0	103%	67 - 147	10L3011	NTL1430-05	12/14/10 22:59
Polyaromatic Hydrocarbons by EPA 8270D SIM										
10L1817-MS1										
Acenaphthene	0.00535	0.0342		mg/kg dry	0.0412	70%	42 - 120	10L1817	NTL0684-01	12/09/10 21:55
Acenaphthylene	ND	0.0358		mg/kg dry	0.0412	87%	39 - 127	10L1817	NTL0684-01	12/09/10 21:55
Anthracene	0.00247	0.0371		mg/kg dry	0.0412	84%	39 - 139	10L1817	NTL0684-01	12/09/10 21:55
Benzo (a) anthracene	0.00412	0.0404		mg/kg dry	0.0412	88%	31 - 132	10L1817	NTL0684-01	12/09/10 21:55
Benzo (a) pyrene	0.00494	0.0358		mg/kg dry	0.0412	75%	22 - 125	10L1817	NTL0684-01	12/09/10 21:55
Benzo (b) fluoranthene	0.00535	0.0338		mg/kg dry	0.0412	69%	10 - 147	10L1817	NTL0684-01	12/09/10 21:55
Benzo (g,h,i) perylene	0.00370	0.0342		mg/kg dry	0.0412	74%	10 - 151	10L1817	NTL0684-01	12/09/10 21:55
Benzo (k) fluoranthene	0.00288	0.0334		mg/kg dry	0.0412	74%	23 - 140	10L1817	NTL0684-01	12/09/10 21:55
Chrysene	0.00370	0.0321		mg/kg dry	0.0412	69%	20 - 139	10L1817	NTL0684-01	12/09/10 21:55
Dibenz (a,h) anthracene	ND	0.0326		mg/kg dry	0.0412	79%	18 - 150	10L1817	NTL0684-01	12/09/10 21:55
Fluoranthene	0.0119	0.0453		mg/kg dry	0.0412	81%	29 - 135	10L1817	NTL0684-01	12/09/10 21:55
Fluorene	0.00741	0.0367		mg/kg dry	0.0412	71%	38 - 129	10L1817	NTL0684-01	12/09/10 21:55
Indeno (1,2,3-cd) pyrene	0.00329	0.0354		mg/kg dry	0.0412	78%	13 - 146	10L1817	NTL0684-01	12/09/10 21:55
1-Methylnaphthalene	0.0206	0.0429		mg/kg dry	0.0412	54%	20 - 120	10L1817	NTL0684-01	12/09/10 21:55
2-Methylnaphthalene	0.0140	0.0404		mg/kg dry	0.0412	64%	28 - 124	10L1817	NTL0684-01	12/09/10 21:55
Naphthalene	ND	0.0313		mg/kg dry	0.0412	76%	10 - 135	10L1817	NTL0684-01	12/09/10 21:55
Phenanthrene	0.0156	0.0400		mg/kg dry	0.0412	59%	33 - 134	10L1817	NTL0684-01	12/09/10 21:55
Pyrene	0.0115	0.0441		mg/kg dry	0.0412	79%	26 - 153	10L1817	NTL0684-01	12/09/10 21:55
<i>Surrogate: Nitrobenzene-d5</i>		0.0284		mg/kg dry	0.0412	69%	17 - 120	10L1817	NTL0684-01	12/09/10 21:55
<i>Surrogate: 2-Fluorobiphenyl</i>		0.0280		mg/kg dry	0.0412	68%	14 - 120	10L1817	NTL0684-01	12/09/10 21:55
<i>Surrogate: Terphenyl-d14</i>		0.0305		mg/kg dry	0.0412	74%	18 - 120	10L1817	NTL0684-01	12/09/10 21:55
10L2516-MS1										
Acenaphthene		0.0298		mg/kg dry	0.0372	80%	42 - 120	10L2516	NTL1430-04	12/12/10 20:20
Acenaphthylene		0.0294		mg/kg dry	0.0372	79%	39 - 127	10L2516	NTL1430-04	12/12/10 20:20
Anthracene		0.0372		mg/kg dry	0.0372	100%	39 - 139	10L2516	NTL1430-04	12/12/10 20:20

Client AMEC Earth & Environmental (13993)
 600 University Street, Suite 1020
 Seattle, WA 98101
 Attn Leah Vigoren

Work Order: NTL0684
 Project Name: Everett Terminal(46108) - AMEC
 Project Number: [none]
 Received: 12/04/10 08:45

PROJECT QUALITY CONTROL DATA
Matrix Spike - Cont.

Analyte	Orig. Val.	MS Val	Q	Units	Spike Conc	% Rec.	Target Range	Batch	Sample Spiked	Analyzed Date/Time
Polyaromatic Hydrocarbons by EPA 8270D SIM										
10L2516-MS1										
Benzo (a) anthracene		0.0469		mg/kg dry	0.0372	126%	31 - 132	10L2516	NTL1430-04	12/12/10 20:20
Benzo (a) pyrene		0.0413		mg/kg dry	0.0372	111%	22 - 125	10L2516	NTL1430-04	12/12/10 20:20
Benzo (b) fluoranthene		0.0428		mg/kg dry	0.0372	115%	10 - 147	10L2516	NTL1430-04	12/12/10 20:20
Benzo (g,h,i) perylene		0.0350		mg/kg dry	0.0372	94%	10 - 151	10L2516	NTL1430-04	12/12/10 20:20
Benzo (k) fluoranthene		0.0328		mg/kg dry	0.0372	88%	23 - 140	10L2516	NTL1430-04	12/12/10 20:20
Chrysene		0.0387		mg/kg dry	0.0372	104%	20 - 139	10L2516	NTL1430-04	12/12/10 20:20
Dibenz (a,h) anthracene		0.0279		mg/kg dry	0.0372	75%	18 - 150	10L2516	NTL1430-04	12/12/10 20:20
Fluoranthene		0.0704	M7	mg/kg dry	0.0372	189%	29 - 135	10L2516	NTL1430-04	12/12/10 20:20
Fluorene		0.0305		mg/kg dry	0.0372	82%	38 - 129	10L2516	NTL1430-04	12/12/10 20:20
Indeno (1,2,3-cd) pyrene		0.0350		mg/kg dry	0.0372	94%	13 - 146	10L2516	NTL1430-04	12/12/10 20:20
1-Methylnaphthalene		0.0257		mg/kg dry	0.0372	69%	20 - 120	10L2516	NTL1430-04	12/12/10 20:20
2-Methylnaphthalene		0.0283		mg/kg dry	0.0372	76%	28 - 124	10L2516	NTL1430-04	12/12/10 20:20
Naphthalene		0.0272		mg/kg dry	0.0372	73%	10 - 135	10L2516	NTL1430-04	12/12/10 20:20
Phenanthrene		0.0521	M7	mg/kg dry	0.0372	140%	33 - 134	10L2516	NTL1430-04	12/12/10 20:20
Pyrene		0.0596	M7	mg/kg dry	0.0372	160%	26 - 153	10L2516	NTL1430-04	12/12/10 20:20
Surrogate: Nitrobenzene-d5		0.0257		mg/kg dry	0.0372	69%	17 - 120	10L2516	NTL1430-04	12/12/10 20:20
Surrogate: 2-Fluorobiphenyl		0.0246		mg/kg dry	0.0372	66%	14 - 120	10L2516	NTL1430-04	12/12/10 20:20
Surrogate: Terphenyl-d14		0.0268		mg/kg dry	0.0372	72%	18 - 120	10L2516	NTL1430-04	12/12/10 20:20

Extractable Petroleum Hydrocarbons with Silica Gel Treatment

10L1818-MS1										
Diesel	44.7	85.9		mg/kg dry	48.4	85%	34 - 138	10L1818	NTL0684-01	12/11/10 02:12
Surrogate: o-Terphenyl		0.688		mg/kg dry	0.967	71%	50 - 150	10L1818	NTL0684-01	12/11/10 02:12
10L2523-MS1										
Diesel	5.20	51.9		mg/kg dry	50.3	93%	34 - 138	10L2523	NTL0684-02	12/12/10 10:21
Surrogate: o-Terphenyl		0.854		mg/kg dry	1.01	85%	50 - 150	10L2523	NTL0684-02	12/12/10 10:21

Client AMEC Earth & Environmental (13993)
 600 University Street, Suite 1020
 Seattle, WA 98101
 Attn Leah Vigoren

Work Order: NTL0684
 Project Name: Everett Terminal(46108) - AMEC
 Project Number: [none]
 Received: 12/04/10 08:45

PROJECT QUALITY CONTROL DATA Matrix Spike Dup

Analyte	Orig. Val.	Duplicate	Q	Units	Spike Conc	% Rec.	Target Range	RPD	Limit	Batch	Sample Duplicated	Analyzed Date/Time
Volatile Organic Compounds by EPA Method 8260B												
10L3011-MSD1												
Benzene	0.00360	0.0522		mg/kg dry	0.0583	83%	42 - 141	8	50	10L3011	NTL1430-05	12/14/10 23:29
Ethylbenzene	0.00282	0.0451		mg/kg dry	0.0583	72%	21 - 165	8	50	10L3011	NTL1430-05	12/14/10 23:29
Methyl tert-Butyl Ether	ND	0.0292		mg/kg dry	0.0583	50%	34 - 154	1	50	10L3011	NTL1430-05	12/14/10 23:29
Toluene	0.00821	0.0506		mg/kg dry	0.0583	73%	45 - 145	6	50	10L3011	NTL1430-05	12/14/10 23:29
Xylenes, total	0.00646	0.126		mg/kg dry	0.175	68%	31 - 159	8	50	10L3011	NTL1430-05	12/14/10 23:29
Surrogate: 1,2-Dichloroethane-d4		44.7		ug/kg	50.0	89%	67 - 138			10L3011	NTL1430-05	12/14/10 23:29
Surrogate: Dibromofluoromethane		49.9		ug/kg	50.0	100%	75 - 125			10L3011	NTL1430-05	12/14/10 23:29
Surrogate: Toluene-d8		48.7		ug/kg	50.0	97%	76 - 129			10L3011	NTL1430-05	12/14/10 23:29
Surrogate: 4-Bromofluorobenzene		51.2		ug/kg	50.0	102%	67 - 147			10L3011	NTL1430-05	12/14/10 23:29
Polyaromatic Hydrocarbons by EPA 8270D SIM												
10L1817-MSD1												
Acenaphthene	0.00535	0.0346		mg/kg dry	0.0407	72%	42 - 120	1	32	10L1817	NTL0684-01	12/09/10 22:17
Acenaphthylene	ND	0.0358		mg/kg dry	0.0407	88%	39 - 127	0.01	34	10L1817	NTL0684-01	12/09/10 22:17
Anthracene	0.00247	0.0379		mg/kg dry	0.0407	87%	39 - 139	2	31	10L1817	NTL0684-01	12/09/10 22:17
Benzo (a) anthracene	0.00412	0.0407		mg/kg dry	0.0407	90%	31 - 132	0.9	43	10L1817	NTL0684-01	12/09/10 22:17
Benzo (a) pyrene	0.00494	0.0391		mg/kg dry	0.0407	84%	22 - 125	9	41	10L1817	NTL0684-01	12/09/10 22:17
Benzo (b) fluoranthene	0.00535	0.0383		mg/kg dry	0.0407	81%	10 - 147	12	50	10L1817	NTL0684-01	12/09/10 22:17
Benzo (g,h,i) perylene	0.00370	0.0363		mg/kg dry	0.0407	80%	10 - 151	6	50	10L1817	NTL0684-01	12/09/10 22:17
Benzo (k) fluoranthene	0.00288	0.0281		mg/kg dry	0.0407	62%	23 - 140	17	38	10L1817	NTL0684-01	12/09/10 22:17
Chrysene	0.00370	0.0346		mg/kg dry	0.0407	76%	20 - 139	7	40	10L1817	NTL0684-01	12/09/10 22:17
Dibenz (a,h) anthracene	ND	0.0326		mg/kg dry	0.0407	80%	18 - 150	0.1	50	10L1817	NTL0684-01	12/09/10 22:17
Fluoranthene	0.0119	0.0481		mg/kg dry	0.0407	89%	29 - 135	6	47	10L1817	NTL0684-01	12/09/10 22:17
Fluorene	0.00741	0.0379		mg/kg dry	0.0407	75%	38 - 129	3	38	10L1817	NTL0684-01	12/09/10 22:17
Indeno (1,2,3-cd) pyrene	0.00329	0.0367		mg/kg dry	0.0407	82%	13 - 146	3	46	10L1817	NTL0684-01	12/09/10 22:17
1-Methylnaphthalene	0.0206	0.0464		mg/kg dry	0.0407	63%	20 - 120	8	35	10L1817	NTL0684-01	12/09/10 22:17
2-Methylnaphthalene	0.0140	0.0440		mg/kg dry	0.0407	74%	28 - 124	9	38	10L1817	NTL0684-01	12/09/10 22:17
Naphthalene	ND	0.0330		mg/kg dry	0.0407	81%	10 - 135	5	36	10L1817	NTL0684-01	12/09/10 22:17
Phenanthrene	0.0156	0.0436		mg/kg dry	0.0407	69%	33 - 134	9	46	10L1817	NTL0684-01	12/09/10 22:17
Pyrene	0.0115	0.0468		mg/kg dry	0.0407	87%	26 - 153	6	50	10L1817	NTL0684-01	12/09/10 22:17
Surrogate: Nitrobenzene-d5		0.0281		mg/kg dry	0.0407	69%	17 - 120			10L1817	NTL0684-01	12/09/10 22:17
Surrogate: 2-Fluorobiphenyl		0.0277		mg/kg dry	0.0407	68%	14 - 120			10L1817	NTL0684-01	12/09/10 22:17
Surrogate: Terphenyl-d14		0.0318		mg/kg dry	0.0407	78%	18 - 120			10L1817	NTL0684-01	12/09/10 22:17
10L2516-MSD1												
Acenaphthene		0.0246		mg/kg dry	0.0372	66%	42 - 120	19	32	10L2516	NTL1430-04	12/12/10 20:42
Acenaphthylene		0.0279		mg/kg dry	0.0372	75%	39 - 127	5	34	10L2516	NTL1430-04	12/12/10 20:42
Anthracene		0.0290		mg/kg dry	0.0372	78%	39 - 139	25	31	10L2516	NTL1430-04	12/12/10 20:42
Benzo (a) anthracene		0.0309		mg/kg dry	0.0372	83%	31 - 132	41	43	10L2516	NTL1430-04	12/12/10 20:42
Benzo (a) pyrene		0.0272		mg/kg dry	0.0372	73%	22 - 125	41	41	10L2516	NTL1430-04	12/12/10 20:42
Benzo (b) fluoranthene		0.0253	R2	mg/kg dry	0.0372	68%	10 - 147	51	50	10L2516	NTL1430-04	12/12/10 20:42

Client AMEC Earth & Environmental (13993)
 600 University Street, Suite 1020
 Seattle, WA 98101
 Attn Leah Vigoren

Work Order: NTL0684
 Project Name: Everett Terminal(46108) - AMEC
 Project Number: [none]
 Received: 12/04/10 08:45

PROJECT QUALITY CONTROL DATA
Matrix Spike Dup - Cont.

Analyte	Orig. Val.	Duplicate	Q	Units	Spike Conc	% Rec.	Target Range	RPD	Limit	Batch	Sample Duplicated	Analyzed Date/Time
Polyaromatic Hydrocarbons by EPA 8270D SIM												
10L2516-MSD1												
Benzo (g,h,i) perylene		0.0264		mg/kg dry	0.0372	71%	10 - 151	28	50	10L2516	NTL1430-04	12/12/10 20:42
Benzo (k) fluoranthene		0.0264		mg/kg dry	0.0372	71%	23 - 140	21	38	10L2516	NTL1430-04	12/12/10 20:42
Chrysene		0.0257	R2	mg/kg dry	0.0372	69%	20 - 139	41	40	10L2516	NTL1430-04	12/12/10 20:42
Dibenz (a,h) anthracene		0.0264		mg/kg dry	0.0372	71%	18 - 150	6	50	10L2516	NTL1430-04	12/12/10 20:42
Fluoranthene		0.0309	R2	mg/kg dry	0.0372	83%	29 - 135	78	47	10L2516	NTL1430-04	12/12/10 20:42
Fluorene		0.0264		mg/kg dry	0.0372	71%	38 - 129	14	38	10L2516	NTL1430-04	12/12/10 20:42
Indeno (1,2,3-cd) pyrene		0.0272		mg/kg dry	0.0372	73%	13 - 146	25	46	10L2516	NTL1430-04	12/12/10 20:42
1-Methylnaphthalene		0.0242		mg/kg dry	0.0372	65%	20 - 120	6	35	10L2516	NTL1430-04	12/12/10 20:42
2-Methylnaphthalene		0.0264		mg/kg dry	0.0372	71%	28 - 124	7	38	10L2516	NTL1430-04	12/12/10 20:42
Naphthalene		0.0257		mg/kg dry	0.0372	69%	10 - 135	6	36	10L2516	NTL1430-04	12/12/10 20:42
Phenanthrene		0.0257	R2	mg/kg dry	0.0372	69%	33 - 134	68	46	10L2516	NTL1430-04	12/12/10 20:42
Pyrene		0.0294	R2	mg/kg dry	0.0372	79%	26 - 153	68	50	10L2516	NTL1430-04	12/12/10 20:42
Surrogate: Nitrobenzene-d5		0.0242		mg/kg dry	0.0372	65%	17 - 120			10L2516	NTL1430-04	12/12/10 20:42
Surrogate: 2-Fluorobiphenyl		0.0227		mg/kg dry	0.0372	61%	14 - 120			10L2516	NTL1430-04	12/12/10 20:42
Surrogate: Terphenyl-d14		0.0249		mg/kg dry	0.0372	67%	18 - 120			10L2516	NTL1430-04	12/12/10 20:42

Extractable Petroleum Hydrocarbons with Silica Gel Treatment

10L1818-MSD1

Diesel	44.7	89.2		mg/kg dry	48.7	92%	34 - 138	4	43	10L1818	NTL0684-01	12/11/10 02:36
Surrogate: o-Terphenyl		0.657		mg/kg dry	0.974	67%	50 - 150			10L1818	NTL0684-01	12/11/10 02:36

10L2523-MSD1

Diesel	5.20	54.1		mg/kg dry	50.5	97%	34 - 138	4	43	10L2523	NTL0684-02	12/12/10 10:40
Surrogate: o-Terphenyl		0.821		mg/kg dry	1.01	81%	50 - 150			10L2523	NTL0684-02	12/12/10 10:40

Client AMEC Earth & Environmental (13993)
600 University Street, Suite 1020
Seattle, WA 98101
Attn Leah Vigoren

Work Order: NTL0684
Project Name: Everett Terminal(46108) - AMEC
Project Number: [none]
Received: 12/04/10 08:45

CERTIFICATION SUMMARY

TestAmerica Nashville

Method	Matrix	AIHA	Nelac	Washington
NWTPH-Dx	Soil	N/A		X
NWTPH-Gx	Soil	N/A	X	X
SW846 8260B	Soil	N/A	X	X
SW846 8270D SIM	Soil		X	X
SW-846	Soil			

Client AMEC Earth & Environmental (13993)
600 University Street, Suite 1020
Seattle, WA 98101
Attn Leah Vigoren

Work Order: NTL0684
Project Name: Everett Terminal(46108) - AMEC
Project Number: [none]
Received: 12/04/10 08:45

DATA QUALIFIERS AND DEFINITIONS

M7 The MS and/or MSD were above the acceptance limits. See Blank Spike (LCS).
QP5 There was insufficient contamination present to perform a pattern match.
QP7 The hydrocarbon pattern most closely resembles a diesel product.
QP7a The hydrocarbon pattern most closely resembles a motor oil product.
R2 The RPD exceeded the acceptance limit.
ND Not detected at the reporting limit (or method detection limit if shown)

METHOD MODIFICATION NOTES



NTI 0684

COOLER RECEIPT

Cooler Received/Opened On 12/04/10 @ 08:45

1. Tracking # 4299 (last 4 digits, FedEx)
Courier: FED-EX IR Gun ID 97310166

2. Temperature of rep. sample or temp blank when opened: 12 Degrees Celsius
3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES NO NA

4. Were custody seals on outside of cooler?
If yes, how many and where: 1 - FRONT YES...NO...NA YES...NO...NA

5. Were the seals intact, signed, and dated correctly? YES...NO...NA
6. Were custody papers inside cooler? YES...NO...NA

I certify that I opened the cooler and answered questions 1-6 (initial) BN

7. Were custody seals on containers: YES NO and Intact YES...NO...NA
Were these signed and dated correctly? YES...NO...NA

8. Packing mat'l used? Bubblewrap Plastic bag Peanuts Vermiculite Foam Insert Paper Other None
YES...NO...NA

9. Cooling process: Ice Ice-pack Ice (direct contact) Dry ice Other None
YES...NO...NA

10. Did all containers arrive in good condition (unbroken)? YES...NO...NA

11. Were all container labels complete (#, date, signed, pres., etc)? YES...NO...NA

12. Did all container labels and tags agree with custody papers? YES...NO...NA

13a. Were VOA vials received? YES...NO...NA

b. Was there any observable headspace present in any VOA vial? YES...NO...NA Sail

14. Was there a Trip Blank in this cooler? YES...NO...NA If multiple coolers, sequence # NA
I certify that I unloaded the cooler and answered questions 7-14 (initial) JH

15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES...NO...NA
b. Did the bottle labels indicate that the correct preservatives were used YES...NO...NA

16. Was residual chlorine present? YES...NO...NA
I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (initial) JH

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

18. Did you sign the custody papers in the appropriate place? YES...NO...NA

19. Were correct containers used for the analysis requested? YES...NO...NA

20. Was sufficient amount of sample sent in each container? YES...NO...NA
I certify that I entered this project into LIMS and answered questions 17-20 (initial) JH

I certify that I attached a label with the unique LIMS number to each container (initial) JH
21. Were there Non-Conformance issues at login? YES...NO Was a PIPE generated? YES...NO...#

Chain of Custody Record
NTL0684
12/28/10 23:59

TestAmerica Laboratories, Inc.

Client Contact		Project Manager: Leah Vigoren		Site Contact: Leah Vigoren		COC No:	
AMEC E&E		Tel/Fax: 206 838 8430		Lab Contact: Leah Vigoren		Date: 12/3/10	
11810 North Creek Parkway N		Analysis Turnaround Time		Carrier: Feb 5th		Job No. 0915-15716D	
Bothell, WA 98011		Calendar (C) or Work Days (W)		TPH-EX		SDG No.	
(425) 368100		TAT if different from Below		TPH-DX (staged)			
(425) 3681001		<input checked="" type="checkbox"/> 2 weeks		X BTEX/HTE 82608			
Project Name: ExxonMobil/ADC Property		<input type="checkbox"/> 1 week		X PH-DX (staged)			
Site: Exxon Mobile Everett		<input type="checkbox"/> 2 days		X TPH-EX			
PO #		<input type="checkbox"/> 1 day		X PPHs 827005m			
Sample Identification		Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	Sample Specific Notes:
AB1-14		12/3/10	1015	8006	S	7	
AB1-27		12/3/10	1115	8006	S	6	hurdled
Trip Blanks						2	

AGENCY DRAFT

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4= HNO3; 5= NaOH; 6= Other
 Possible Hazard Identification
 Non-Hazard Flammable Skin Irritant Poison B Unknown
 Special Instructions/QC Requirements & Comments:
 lwdl 2 QAPC / Silica gel cleanup for Dx

Relinquished by: [Signature]	Company: Amec	Date/Time: 12.3.10	Received by: [Signature]	Company: TA	Date/Time: 12-10-08:45
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:

December 21, 2010 1:29:58PM

Client: AMEC Earth & Environmental (13993)
600 University Street, Suite 1020
Seattle, WA 98101
Attn: Leah Vigoren

Work Order: NTL1087
Project Name: Everett Terminal(46108) - AMEC
Project Nbr: [none]
P/O Nbr:
Date Received: 12/08/10

SAMPLE IDENTIFICATION	LAB NUMBER	COLLECTION DATE AND TIME
AP4-6	NTL1087-01	12/07/10 09:25
AP4-15	NTL1087-02	12/07/10 09:35
AP3-9	NTL1087-03	12/07/10 10:00
AP2-14	NTL1087-05	12/07/10 11:30
AP5-1.5	NTL1087-06	12/07/10 12:00
AP5-14.5	NTL1087-07	12/07/10 12:20
AP7-10	NTL1087-08	12/07/10 12:45
DUP6-120710	NTL1087-09	12/07/10 12:55
AP7-15	NTL1087-10	12/07/10 13:10
Trip Blank	NTL1087-11	12/07/10 00:01

An executed copy of the chain of custody, the project quality control data, and the sample receipt form are also included as an addendum to this report. If you have any questions relating to this analytical report, please contact your Laboratory Project Manager at 1-800-765-0980. Any opinions, if expressed, are outside the scope of the Laboratory's accreditation.

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Washington Certification Number: C1712

The Chain(s) of Custody, 3 pages, are included and are an integral part of this report.

These results relate only to the items tested. This report shall not be reproduced except in full and with permission of the laboratory.

All solids results are reported in wet weight unless specifically stated.

Estimated uncertainty is available upon request.

This report has been electronically signed.

Report Approved By:



Leah R. Klingensmith

Senior Project Management

Client AMEC Earth & Environmental (13993)
600 University Street, Suite 1020
Seattle, WA 98101
Attn Leah Vigoren

Work Order: NTL1087
Project Name: Everett Terminal(46108) - AMEC
Project Number: [none]
Received: 12/08/10 08:30

ANALYTICAL REPORT

Analyte	Result	Flag	Units	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
Sample ID: NTL1087-01 (AP4-6 - Soil) Sampled: 12/07/10 09:25								
General Chemistry Parameters								
% Dry Solids	59.6		%	0.500	1	12/10/10 08:17	SW-846	10L1998
Volatile Organic Compounds by EPA Method 8260B								
Benzene	ND		mg/kg dry	0.00316	1	12/16/10 16:42	SW846 8260B	10L3345
Ethylbenzene	ND		mg/kg dry	0.00316	1	12/16/10 16:42	SW846 8260B	10L3345
Methyl tert-Butyl Ether	ND		mg/kg dry	0.00316	1	12/16/10 16:42	SW846 8260B	10L3345
Toluene	ND		mg/kg dry	0.00316	1	12/16/10 16:42	SW846 8260B	10L3345
Xylenes, total	ND		mg/kg dry	0.00790	1	12/16/10 16:42	SW846 8260B	10L3345
Surr: 1,2-Dichloroethane-d4 (67-138%)	80 %					12/16/10 16:42	SW846 8260B	10L3345
Surr: Dibromofluoromethane (75-125%)	97 %					12/16/10 16:42	SW846 8260B	10L3345
Surr: Toluene-d8 (76-129%)	110 %					12/16/10 16:42	SW846 8260B	10L3345
Surr: 4-Bromofluorobenzene (67-147%)	129 %					12/16/10 16:42	SW846 8260B	10L3345
Polyaromatic Hydrocarbons by EPA 8270D SIM								
Acenaphthene	ND		mg/kg dry	0.00553	1	12/10/10 20:43	SW846 8270D SIM	10L1919
Acenaphthylene	ND		mg/kg dry	0.00553	1	12/10/10 20:43	SW846 8270D SIM	10L1919
Anthracene	ND		mg/kg dry	0.00553	1	12/10/10 20:43	SW846 8270D SIM	10L1919
Benzo (a) anthracene	ND		mg/kg dry	0.00553	1	12/10/10 20:43	SW846 8270D SIM	10L1919
Benzo (a) pyrene	0.00609		mg/kg dry	0.00553	1	12/10/10 20:43	SW846 8270D SIM	10L1919
Benzo (b) fluoranthene	0.00609		mg/kg dry	0.00553	1	12/10/10 20:43	SW846 8270D SIM	10L1919
Benzo (g,h,i) perylene	0.00554		mg/kg dry	0.00553	1	12/10/10 20:43	SW846 8270D SIM	10L1919
Benzo (k) fluoranthene	ND		mg/kg dry	0.00553	1	12/10/10 20:43	SW846 8270D SIM	10L1919
Chrysene	ND		mg/kg dry	0.00553	1	12/10/10 20:43	SW846 8270D SIM	10L1919
Dibenz (a,h) anthracene	ND		mg/kg dry	0.00553	1	12/10/10 20:43	SW846 8270D SIM	10L1919
Fluoranthene	0.0111		mg/kg dry	0.00553	1	12/10/10 20:43	SW846 8270D SIM	10L1919
Fluorene	ND		mg/kg dry	0.00553	1	12/10/10 20:43	SW846 8270D SIM	10L1919
Indeno (1,2,3-cd) pyrene	ND		mg/kg dry	0.00553	1	12/10/10 20:43	SW846 8270D SIM	10L1919
1-Methylnaphthalene	ND		mg/kg dry	0.00553	1	12/10/10 20:43	SW846 8270D SIM	10L1919
2-Methylnaphthalene	ND		mg/kg dry	0.00553	1	12/10/10 20:43	SW846 8270D SIM	10L1919
Naphthalene	ND		mg/kg dry	0.00553	1	12/10/10 20:43	SW846 8270D SIM	10L1919
Phenanthrene	ND		mg/kg dry	0.00553	1	12/10/10 20:43	SW846 8270D SIM	10L1919
Pyrene	0.0116		mg/kg dry	0.00553	1	12/10/10 20:43	SW846 8270D SIM	10L1919
Surr: Nitrobenzene-d5 (17-120%)	49 %					12/10/10 20:43	SW846 8270D SIM	10L1919
Surr: 2-Fluorobiphenyl (14-120%)	54 %					12/10/10 20:43	SW846 8270D SIM	10L1919
Surr: Terphenyl-d14 (18-120%)	67 %					12/10/10 20:43	SW846 8270D SIM	10L1919
Purgeable Petroleum Hydrocarbons								
GRO (C4-C12) NW	ND		mg/kg dry	8.25	50	12/19/10 20:14	NWTPH-Gx	10L1949
Surr: a,a,a-Trifluorotoluene (50-150%)	112 %					12/19/10 20:14	NWTPH-Gx	10L1949
Extractable Petroleum Hydrocarbons with Silica Gel Treatment								
Diesel	ND		mg/kg dry	6.64	1	12/11/10 03:24	NWTPH-Dx	10L1818
Motor Oil	16.6	QP5	mg/kg dry	6.64	1	12/11/10 03:24	NWTPH-Dx	10L1818
Surr: o-Terphenyl (50-150%)	89 %					12/11/10 03:24	NWTPH-Dx	10L1818

Client AMEC Earth & Environmental (13993)
600 University Street, Suite 1020
Seattle, WA 98101
Attn Leah Vigoren

Work Order: NTL1087
Project Name: Everett Terminal(46108) - AMEC
Project Number: [none]
Received: 12/08/10 08:30

ANALYTICAL REPORT

Analyte	Result	Flag	Units	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
Sample ID: NTL1087-02 (AP4-15 - Soil) Sampled: 12/07/10 09:35								
General Chemistry Parameters								
% Dry Solids	84.1		%	0.500	1	12/15/10 08:16	SW-846	10L3017
Volatile Organic Compounds by EPA Method 8260B								
Benzene	ND		mg/kg dry	0.00202	1	12/15/10 21:56	SW846 8260B	10L3257
Ethylbenzene	ND		mg/kg dry	0.00202	1	12/15/10 21:56	SW846 8260B	10L3257
Methyl tert-Butyl Ether	ND		mg/kg dry	0.00202	1	12/15/10 21:56	SW846 8260B	10L3257
Toluene	ND		mg/kg dry	0.00202	1	12/15/10 21:56	SW846 8260B	10L3257
Xylenes, total	ND		mg/kg dry	0.00505	1	12/15/10 21:56	SW846 8260B	10L3257
Surr: 1,2-Dichloroethane-d4 (67-138%)	92 %					12/15/10 21:56	SW846 8260B	10L3257
Surr: Dibromofluoromethane (75-125%)	99 %					12/15/10 21:56	SW846 8260B	10L3257
Surr: Toluene-d8 (76-129%)	99 %					12/15/10 21:56	SW846 8260B	10L3257
Surr: 4-Bromofluorobenzene (67-147%)	106 %					12/15/10 21:56	SW846 8260B	10L3257
Purgeable Petroleum Hydrocarbons								
GRO (C4-C12) NW	ND		mg/kg dry	4.91	50	12/19/10 20:31	NWTPH-Gx	10L1949
Surr: a,a,a-Trifluorotoluene (50-150%)	119 %					12/19/10 20:31	NWTPH-Gx	10L1949
Extractable Petroleum Hydrocarbons with Silica Gel Treatment								
Diesel	ND		mg/kg dry	4.73	1	12/15/10 19:54	NWTPH-Dx	10L3006
Motor Oil	ND		mg/kg dry	4.73	1	12/15/10 19:54	NWTPH-Dx	10L3006
Surr: o-Terphenyl (50-150%)	68 %					12/15/10 19:54	NWTPH-Dx	10L3006
Sample ID: NTL1087-03 (AP3-9 - Soil) Sampled: 12/07/10 10:00								
General Chemistry Parameters								
% Dry Solids	85.8		%	0.500	1	12/10/10 08:17	SW-846	10L1998
Volatile Organic Compounds by EPA Method 8260B								
Benzene	ND		mg/kg dry	0.00320	1	12/16/10 17:11	SW846 8260B	10L3345
Ethylbenzene	ND	RL1	mg/kg dry	0.192	50	12/16/10 17:39	SW846 8260B	10L3345
Methyl tert-Butyl Ether	ND		mg/kg dry	0.00320	1	12/16/10 17:11	SW846 8260B	10L3345
Toluene	ND	RL1	mg/kg dry	0.192	50	12/16/10 17:39	SW846 8260B	10L3345
Xylenes, total	ND	RL1	mg/kg dry	0.481	50	12/16/10 17:39	SW846 8260B	10L3345
Surr: 1,2-Dichloroethane-d4 (67-138%)	84 %					12/16/10 17:11	SW846 8260B	10L3345
Surr: 1,2-Dichloroethane-d4 (67-138%)	76 %					12/16/10 17:39	SW846 8260B	10L3345
Surr: Dibromofluoromethane (75-125%)	113 %					12/16/10 17:11	SW846 8260B	10L3345
Surr: Dibromofluoromethane (75-125%)	90 %					12/16/10 17:39	SW846 8260B	10L3345
Surr: Toluene-d8 (76-129%)	154 %	ZX				12/16/10 17:11	SW846 8260B	10L3345
Surr: Toluene-d8 (76-129%)	97 %					12/16/10 17:39	SW846 8260B	10L3345
Surr: 4-Bromofluorobenzene (67-147%)	155 %	ZX				12/16/10 17:11	SW846 8260B	10L3345
Surr: 4-Bromofluorobenzene (67-147%)	101 %					12/16/10 17:39	SW846 8260B	10L3345
Polyaromatic Hydrocarbons by EPA 8270D SIM								
Acenaphthene	ND		mg/kg dry	0.00384	1	12/10/10 21:06	SW846 8270D SIM	10L1919
Acenaphthylene	ND		mg/kg dry	0.00384	1	12/10/10 21:06	SW846 8270D SIM	10L1919
Anthracene	ND		mg/kg dry	0.00384	1	12/10/10 21:06	SW846 8270D SIM	10L1919
Benzo (a) anthracene	ND		mg/kg dry	0.00384	1	12/10/10 21:06	SW846 8270D SIM	10L1919
Benzo (a) pyrene	0.00807		mg/kg dry	0.00384	1	12/10/10 21:06	SW846 8270D SIM	10L1919

Client AMEC Earth & Environmental (13993)
600 University Street, Suite 1020
Seattle, WA 98101
Attn Leah Vigoren

Work Order: NTL1087
Project Name: Everett Terminal(46108) - AMEC
Project Number: [none]
Received: 12/08/10 08:30

ANALYTICAL REPORT

Analyte	Result	Flag	Units	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
Sample ID: NTL1087-03 (AP3-9 - Soil) - cont. Sampled: 12/07/10 10:00								
Polyaromatic Hydrocarbons by EPA 8270D SIM - cont.								
Benzo (b) fluoranthene	ND		mg/kg dry	0.00384	1	12/10/10 21:06	SW846 8270D SIM	10L1919
Benzo (g,h,i) perylene	ND		mg/kg dry	0.00384	1	12/10/10 21:06	SW846 8270D SIM	10L1919
Benzo (k) fluoranthene	ND		mg/kg dry	0.00384	1	12/10/10 21:06	SW846 8270D SIM	10L1919
Chrysene	ND		mg/kg dry	0.00384	1	12/10/10 21:06	SW846 8270D SIM	10L1919
Dibenz (a,h) anthracene	ND		mg/kg dry	0.00384	1	12/10/10 21:06	SW846 8270D SIM	10L1919
Fluoranthene	ND		mg/kg dry	0.00384	1	12/10/10 21:06	SW846 8270D SIM	10L1919
Fluorene	ND		mg/kg dry	0.00384	1	12/10/10 21:06	SW846 8270D SIM	10L1919
Indeno (1,2,3-cd) pyrene	ND		mg/kg dry	0.00384	1	12/10/10 21:06	SW846 8270D SIM	10L1919
1-Methylnaphthalene	ND		mg/kg dry	0.00384	1	12/10/10 21:06	SW846 8270D SIM	10L1919
2-Methylnaphthalene	ND		mg/kg dry	0.00384	1	12/10/10 21:06	SW846 8270D SIM	10L1919
Naphthalene	ND		mg/kg dry	0.00384	1	12/10/10 21:06	SW846 8270D SIM	10L1919
Phenanthrene	ND		mg/kg dry	0.00384	1	12/10/10 21:06	SW846 8270D SIM	10L1919
Pyrene	ND		mg/kg dry	0.00384	1	12/10/10 21:06	SW846 8270D SIM	10L1919
Surr: Nitrobenzene-d5 (17-120%)	56 %					12/10/10 21:06	W846 8270D SIA	10L1919
Surr: 2-Fluorobiphenyl (14-120%)	58 %					12/10/10 21:06	W846 8270D SIA	10L1919
Surr: Terphenyl-d14 (18-120%)	65 %					12/10/10 21:06	W846 8270D SIA	10L1919
Purgeable Petroleum Hydrocarbons								
GRO (C4-C12) NW	ND		mg/kg dry	9.43	50	12/19/10 20:48	NWTPH-Gx	10L1949
Surr: a,a,a-Trifluorotoluene (50-150%)	99 %					12/19/10 20:48	NWTPH-Gx	10L1949
Extractable Petroleum Hydrocarbons with Silica Gel Treatment								
Diesel	ND		mg/kg dry	4.62	1	12/11/10 03:48	NWTPH-Dx	10L1818
Motor Oil	15.7	QP6	mg/kg dry	4.62	1	12/11/10 03:48	NWTPH-Dx	10L1818
Surr: o-Terphenyl (50-150%)	63 %					12/11/10 03:48	NWTPH-Dx	10L1818
Sample ID: NTL1087-05 (AP2-14 - Soil) Sampled: 12/07/10 11:30								
General Chemistry Parameters								
% Dry Solids	85.1		%	0.500	1	12/10/10 08:17	SW-846	10L1998
Volatile Organic Compounds by EPA Method 8260B								
Benzene	ND		mg/kg dry	0.00220	1	12/15/10 23:21	SW846 8260B	10L3257
Ethylbenzene	ND		mg/kg dry	0.00220	1	12/15/10 23:21	SW846 8260B	10L3257
Methyl tert-Butyl Ether	ND		mg/kg dry	0.00220	1	12/15/10 23:21	SW846 8260B	10L3257
Toluene	ND		mg/kg dry	0.00220	1	12/15/10 23:21	SW846 8260B	10L3257
Xylenes, total	ND		mg/kg dry	0.00549	1	12/15/10 23:21	SW846 8260B	10L3257
Surr: 1,2-Dichloroethane-d4 (67-138%)	84 %					12/15/10 23:21	SW846 8260B	10L3257
Surr: Dibromofluoromethane (75-125%)	93 %					12/15/10 23:21	SW846 8260B	10L3257
Surr: Toluene-d8 (76-129%)	98 %					12/15/10 23:21	SW846 8260B	10L3257
Surr: 4-Bromofluorobenzene (67-147%)	104 %					12/15/10 23:21	SW846 8260B	10L3257
Polyaromatic Hydrocarbons by EPA 8270D SIM								
Acenaphthene	ND		mg/kg dry	0.00385	1	12/10/10 21:28	SW846 8270D SIM	10L1919
Acenaphthylene	ND		mg/kg dry	0.00385	1	12/10/10 21:28	SW846 8270D SIM	10L1919
Anthracene	ND		mg/kg dry	0.00385	1	12/10/10 21:28	SW846 8270D SIM	10L1919
Benzo (a) anthracene	ND		mg/kg dry	0.00385	1	12/10/10 21:28	SW846 8270D SIM	10L1919

Client AMEC Earth & Environmental (13993)
600 University Street, Suite 1020
Seattle, WA 98101
Attn Leah Vigoren

Work Order: NTL1087
Project Name: Everett Terminal(46108) - AMEC
Project Number: [none]
Received: 12/08/10 08:30

ANALYTICAL REPORT

Analyte	Result	Flag	Units	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
Sample ID: NTL1087-05 (AP2-14 - Soil) - cont. Sampled: 12/07/10 11:30								
Polyaromatic Hydrocarbons by EPA 8270D SIM - cont.								
Benzo (a) pyrene	ND		mg/kg dry	0.00385	1	12/10/10 21:28	SW846 8270D SIM	10L1919
Benzo (b) fluoranthene	ND		mg/kg dry	0.00385	1	12/10/10 21:28	SW846 8270D SIM	10L1919
Benzo (g,h,i) perylene	ND		mg/kg dry	0.00385	1	12/10/10 21:28	SW846 8270D SIM	10L1919
Benzo (k) fluoranthene	ND		mg/kg dry	0.00385	1	12/10/10 21:28	SW846 8270D SIM	10L1919
Chrysene	ND		mg/kg dry	0.00385	1	12/10/10 21:28	SW846 8270D SIM	10L1919
Dibenz (a,h) anthracene	ND		mg/kg dry	0.00385	1	12/10/10 21:28	SW846 8270D SIM	10L1919
Fluoranthene	ND		mg/kg dry	0.00385	1	12/10/10 21:28	SW846 8270D SIM	10L1919
Fluorene	ND		mg/kg dry	0.00385	1	12/10/10 21:28	SW846 8270D SIM	10L1919
Indeno (1,2,3-cd) pyrene	ND		mg/kg dry	0.00385	1	12/10/10 21:28	SW846 8270D SIM	10L1919
1-Methylnaphthalene	ND		mg/kg dry	0.00385	1	12/10/10 21:28	SW846 8270D SIM	10L1919
2-Methylnaphthalene	ND		mg/kg dry	0.00385	1	12/10/10 21:28	SW846 8270D SIM	10L1919
Naphthalene	ND		mg/kg dry	0.00385	1	12/10/10 21:28	SW846 8270D SIM	10L1919
Phenanthrene	ND		mg/kg dry	0.00385	1	12/10/10 21:28	SW846 8270D SIM	10L1919
Pyrene	ND		mg/kg dry	0.00385	1	12/10/10 21:28	SW846 8270D SIM	10L1919
Surr: Nitrobenzene-d5 (17-120%)	62 %					12/10/10 21:28	W846 8270D SIA	10L1919
Surr: 2-Fluorobiphenyl (14-120%)	67 %					12/10/10 21:28	W846 8270D SIA	10L1919
Surr: Terphenyl-d14 (18-120%)	77 %					12/10/10 21:28	W846 8270D SIA	10L1919
Purgeable Petroleum Hydrocarbons								
GRO (C4-C12) NW	ND		mg/kg dry	5.44	50	12/19/10 21:22	NWTPH-Gx	10L1949
Surr: a,a,a-Trifluorotoluene (50-150%)	109 %					12/19/10 21:22	NWTPH-Gx	10L1949
Extractable Petroleum Hydrocarbons with Silica Gel Treatment								
Diesel	ND		mg/kg dry	4.56	1	12/11/10 04:13	NWTPH-Dx	10L1818
Motor Oil	8.98	QP5	mg/kg dry	4.56	1	12/11/10 04:13	NWTPH-Dx	10L1818
Surr: o-Terphenyl (50-150%)	101 %					12/11/10 04:13	NWTPH-Dx	10L1818
Sample ID: NTL1087-06 (AP5-1.5 - Soil) Sampled: 12/07/10 12:00								
General Chemistry Parameters								
% Dry Solids	88.8		%	0.500	1	12/10/10 08:17	SW-846	10L1998
Volatile Organic Compounds by EPA Method 8260B								
1,2-Dibromoethane (EDB)	ND		mg/kg dry	0.00183	1	12/15/10 23:50	SW846 8260B	10L3257
1,2-Dichloroethane	ND		mg/kg dry	0.00183	1	12/15/10 23:50	SW846 8260B	10L3257
Benzene	0.0353		mg/kg dry	0.00183	1	12/15/10 23:50	SW846 8260B	10L3257
Hexane	1.37		mg/kg dry	0.640	50	12/20/10 13:18	SW846 8260B	10L4254
Ethylbenzene	0.0151		mg/kg dry	0.00183	1	12/15/10 23:50	SW846 8260B	10L3257
Methyl tert-Butyl Ether	ND		mg/kg dry	0.00183	1	12/15/10 23:50	SW846 8260B	10L3257
Toluene	0.0142		mg/kg dry	0.00183	1	12/15/10 23:50	SW846 8260B	10L3257
Xylenes, total	0.0620		mg/kg dry	0.00457	1	12/15/10 23:50	SW846 8260B	10L3257
Surr: 1,2-Dichloroethane-d4 (67-138%)	142 %	ZX				12/15/10 23:50	SW846 8260B	10L3257
Surr: 1,2-Dichloroethane-d4 (67-138%)	88 %					12/20/10 13:18	SW846 8260B	10L4254
Surr: Dibromofluoromethane (75-125%)	128 %	ZX				12/15/10 23:50	SW846 8260B	10L3257
Surr: Dibromofluoromethane (75-125%)	91 %					12/20/10 13:18	SW846 8260B	10L4254
Surr: Toluene-d8 (76-129%)	533 %	ZX				12/15/10 23:50	SW846 8260B	10L3257
Surr: Toluene-d8 (76-129%)	107 %					12/20/10 13:18	SW846 8260B	10L4254

Client AMEC Earth & Environmental (13993)
600 University Street, Suite 1020
Seattle, WA 98101
Attn Leah Vigoren

Work Order: NTL1087
Project Name: Everett Terminal(46108) - AMEC
Project Number: [none]
Received: 12/08/10 08:30

ANALYTICAL REPORT

Analyte	Result	Flag	Units	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
Sample ID: NTL1087-06 (AP5-1.5 - Soil) - cont. Sampled: 12/07/10 12:00								
Volatile Organic Compounds by EPA Method 8260B - cont.								
Surr: 4-Bromofluorobenzene (67-147%)	3780 %	ZX				12/15/10 23:50	SW846 8260B	10L3257
Surr: 4-Bromofluorobenzene (67-147%)	93 %					12/20/10 13:18	SW846 8260B	10L4254
Polyaromatic Hydrocarbons by EPA 8270D SIM								
Acenaphthene	0.0492		mg/kg dry	0.00364	1	12/10/10 21:50	SW846 8270D SIM	10L1919
Acenaphthylene	0.0291		mg/kg dry	0.00364	1	12/10/10 21:50	SW846 8270D SIM	10L1919
Anthracene	0.0306		mg/kg dry	0.00364	1	12/10/10 21:50	SW846 8270D SIM	10L1919
Benzo (a) anthracene	0.0339		mg/kg dry	0.00364	1	12/10/10 21:50	SW846 8270D SIM	10L1919
Benzo (a) pyrene	0.0324		mg/kg dry	0.00364	1	12/10/10 21:50	SW846 8270D SIM	10L1919
Benzo (b) fluoranthene	0.0401		mg/kg dry	0.00364	1	12/10/10 21:50	SW846 8270D SIM	10L1919
Benzo (g,h,i) perylene	0.0273		mg/kg dry	0.00364	1	12/10/10 21:50	SW846 8270D SIM	10L1919
Benzo (k) fluoranthene	0.0171		mg/kg dry	0.00364	1	12/10/10 21:50	SW846 8270D SIM	10L1919
Chrysene	0.0342		mg/kg dry	0.00364	1	12/10/10 21:50	SW846 8270D SIM	10L1919
Dibenz (a,h) anthracene	0.0117		mg/kg dry	0.00364	1	12/10/10 21:50	SW846 8270D SIM	10L1919
Fluoranthene	0.0874		mg/kg dry	0.00364	1	12/10/10 21:50	SW846 8270D SIM	10L1919
Fluorene	0.0856		mg/kg dry	0.00364	1	12/10/10 21:50	SW846 8270D SIM	10L1919
Indeno (1,2,3-cd) pyrene	0.0204		mg/kg dry	0.00364	1	12/10/10 21:50	SW846 8270D SIM	10L1919
1-Methylnaphthalene	0.574		mg/kg dry	0.0182	5	12/11/10 14:03	SW846 8270D SIM	10L1919
2-Methylnaphthalene	0.0444		mg/kg dry	0.00364	1	12/10/10 21:50	SW846 8270D SIM	10L1919
Naphthalene	ND		mg/kg dry	0.00364	1	12/10/10 21:50	SW846 8270D SIM	10L1919
Phenanthrene	0.189		mg/kg dry	0.00364	1	12/10/10 21:50	SW846 8270D SIM	10L1919
Pyrene	0.117		mg/kg dry	0.00364	1	12/10/10 21:50	SW846 8270D SIM	10L1919
Surr: Nitrobenzene-d5 (17-120%)	213 %	ZX				12/10/10 21:50	W846 8270D SIA	10L1919
Surr: 2-Fluorobiphenyl (14-120%)	63 %					12/10/10 21:50	W846 8270D SIA	10L1919
Surr: Terphenyl-d14 (18-120%)	69 %					12/10/10 21:50	W846 8270D SIA	10L1919
Extractable Petroleum Hydrocarbons								
C8-C10 Aliphatics	ND		mg/kg dry	5.22	1	12/15/10 20:37	NWTPH EPH	10L1984
C8-C10 Aromatics	ND		mg/kg dry	5.22	1	12/15/10 21:06	NWTPH EPH	10L1984
>C10 to C12 Ali	7.28		mg/kg dry	5.22	1	12/15/10 20:37	NWTPH EPH	10L1984
>C10 to C12 Aro	ND		mg/kg dry	5.22	1	12/15/10 21:06	NWTPH EPH	10L1984
>C12 to C16 Ali	23.3		mg/kg dry	5.22	1	12/15/10 20:37	NWTPH EPH	10L1984
>C12 to C16 Aro	ND		mg/kg dry	5.22	1	12/15/10 21:06	NWTPH EPH	10L1984
>C16 to C21 Ali	19.9		mg/kg dry	5.22	1	12/15/10 20:37	NWTPH EPH	10L1984
>C16 to C21 Aro	9.18		mg/kg dry	5.22	1	12/15/10 21:06	NWTPH EPH	10L1984
>C21 to C34 Ali	14.8		mg/kg dry	5.22	1	12/15/10 20:37	NWTPH EPH	10L1984
>C21 to C34 Aro	ND		mg/kg dry	5.22	1	12/15/10 21:06	NWTPH EPH	10L1984
Surr: o-Terphenyl (60-140%)	78 %					12/15/10 21:06	NWTPH EPH	10L1984
Surr: 2-Fluorobiphenyl (60-140%)	91 %					12/15/10 21:06	NWTPH EPH	10L1984
Surr: 2-Bromonaphthalene (60-140%)	105 %					12/15/10 21:06	NWTPH EPH	10L1984
Surr: 1-Chlorooctadecane (60-140%)	86 %					12/15/10 20:37	NWTPH EPH	10L1984
Purgeable Petroleum Hydrocarbons								
C5 - C6 Aliphatic Hydrocarbons	ND		mg/kg dry	4.76	50	12/11/10 01:04	NWTPH VPH	10L2392
>C6 to C8 Ali	12.5		mg/kg dry	4.76	50	12/11/10 01:04	NWTPH VPH	10L2392

Client AMEC Earth & Environmental (13993)
600 University Street, Suite 1020
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Attn Leah Vigoren

Work Order: NTL1087
Project Name: Everett Terminal(46108) - AMEC
Project Number: [none]
Received: 12/08/10 08:30

ANALYTICAL REPORT

Analyte	Result	Flag	Units	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
Sample ID: NTL1087-06 (AP5-1.5 - Soil) - cont. Sampled: 12/07/10 12:00								
Purgeable Petroleum Hydrocarbons - cont.								
>C8 to C10 Ali	19.9		mg/kg dry	4.76	50	12/11/10 01:04	NWTPH VPH	10L2392
>C10 to C12 Ali	31.9		mg/kg dry	4.76	50	12/11/10 01:04	NWTPH VPH	10L2392
>C8 to C10 Aro	14.2		mg/kg dry	4.76	50	12/11/10 01:04	NWTPH VPH	10L2392
>C10 to C12 Aro	26.3		mg/kg dry	9.53	100	12/15/10 13:44	NWTPH VPH	10L3302
>C12 to C13 Aro	11.9		mg/kg dry	4.76	50	12/11/10 01:04	NWTPH VPH	10L2392
GRO (C4-C12) NW	652		mg/kg dry	5.84	50	12/19/10 21:39	NWTPH-Gx	10L1949
Surr: 2,5-Dibromotoluene (FID) (70-130%)	271 %	ZX				12/11/10 01:04	NWTPH VPH	10L2392
Surr: 2,5-Dibromotoluene (FID) (70-130%)	190 %	ZX				12/15/10 13:44	NWTPH VPH	10L3302
Surr: a,a,a-Trifluorotoluene (50-150%)	75 %					12/19/10 21:39	NWTPH-Gx	10L1949
Surr: 2,5-Dibromotoluene (PID) (70-130%)	154 %	ZX				12/11/10 01:04	NWTPH VPH	10L2392
Surr: 2,5-Dibromotoluene (PID) (70-130%)	124 %					12/15/10 13:44	NWTPH VPH	10L3302
Extractable Petroleum Hydrocarbons with Silica Gel Treatment								
Diesel	440	QP7a	mg/kg dry	22.1	5	12/11/10 13:54	NWTPH-Dx	10L1818
Motor Oil	176	QP7a	mg/kg dry	22.1	5	12/11/10 13:54	NWTPH-Dx	10L1818
Surr: o-Terphenyl (50-150%)	38 %	ZX				12/11/10 13:54	NWTPH-Dx	10L1818
Sample ID: NTL1087-07 (AP5-14.5 - Soil) Sampled: 12/07/10 12:20								
General Chemistry Parameters								
% Dry Solids	17.4		%	0.500	1	12/10/10 08:17	SW-846	10L1998
Volatile Organic Compounds by EPA Method 8260B								
Benzene	ND		mg/kg dry	0.0168	1	12/16/10 00:18	SW846 8260B	10L3257
Ethylbenzene	0.0250		mg/kg dry	0.0168	1	12/16/10 00:18	SW846 8260B	10L3257
Methyl tert-Butyl Ether	ND		mg/kg dry	0.0168	1	12/16/10 00:18	SW846 8260B	10L3257
Toluene	ND		mg/kg dry	0.0168	1	12/16/10 00:18	SW846 8260B	10L3257
Xylenes, total	0.0627		mg/kg dry	0.0419	1	12/16/10 00:18	SW846 8260B	10L3257
Surr: 1,2-Dichloroethane-d4 (67-138%)	85 %					12/16/10 00:18	SW846 8260B	10L3257
Surr: Dibromofluoromethane (75-125%)	100 %					12/16/10 00:18	SW846 8260B	10L3257
Surr: Toluene-d8 (76-129%)	156 %	ZX				12/16/10 00:18	SW846 8260B	10L3257
Surr: 4-Bromofluorobenzene (67-147%)	209 %	ZX				12/16/10 00:18	SW846 8260B	10L3257
Polyaromatic Hydrocarbons by EPA 8270D SIM								
Acenaphthene	0.661		mg/kg dry	0.189	10	12/10/10 22:12	SW846 8270D SIM	10L1919
Acenaphthylene	0.434		mg/kg dry	0.189	10	12/10/10 22:12	SW846 8270D SIM	10L1919
Anthracene	0.831		mg/kg dry	0.189	10	12/10/10 22:12	SW846 8270D SIM	10L1919
Benzo (a) anthracene	0.434		mg/kg dry	0.189	10	12/10/10 22:12	SW846 8270D SIM	10L1919
Benzo (a) pyrene	0.283		mg/kg dry	0.189	10	12/10/10 22:12	SW846 8270D SIM	10L1919
Benzo (b) fluoranthene	0.359		mg/kg dry	0.189	10	12/10/10 22:12	SW846 8270D SIM	10L1919
Benzo (g,h,i) perylene	0.189		mg/kg dry	0.189	10	12/10/10 22:12	SW846 8270D SIM	10L1919
Benzo (k) fluoranthene	ND		mg/kg dry	0.189	10	12/10/10 22:12	SW846 8270D SIM	10L1919
Chrysene	0.567		mg/kg dry	0.189	10	12/10/10 22:12	SW846 8270D SIM	10L1919
Dibenz (a,h) anthracene	ND		mg/kg dry	0.189	10	12/10/10 22:12	SW846 8270D SIM	10L1919
Fluoranthene	0.831		mg/kg dry	0.189	10	12/10/10 22:12	SW846 8270D SIM	10L1919
Fluorene	1.25		mg/kg dry	0.189	10	12/10/10 22:12	SW846 8270D SIM	10L1919
Indeno (1,2,3-cd) pyrene	ND		mg/kg dry	0.189	10	12/10/10 22:12	SW846 8270D SIM	10L1919

Client AMEC Earth & Environmental (13993)
600 University Street, Suite 1020
Seattle, WA 98101
Attn Leah Vigoren

Work Order: NTL1087
Project Name: Everett Terminal(46108) - AMEC
Project Number: [none]
Received: 12/08/10 08:30

ANALYTICAL REPORT

Analyte	Result	Flag	Units	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
Sample ID: NTL1087-07 (AP5-14.5 - Soil) - cont. Sampled: 12/07/10 12:20								
Polyaromatic Hydrocarbons by EPA 8270D SIM - cont.								
1-Methylnaphthalene	0.925		mg/kg dry	0.189	10	12/10/10 22:12	SW846 8270D SIM	10L1919
2-Methylnaphthalene	0.397		mg/kg dry	0.189	10	12/10/10 22:12	SW846 8270D SIM	10L1919
Naphthalene	ND		mg/kg dry	0.189	10	12/10/10 22:12	SW846 8270D SIM	10L1919
Phenanthrene	1.68		mg/kg dry	0.189	10	12/10/10 22:12	SW846 8270D SIM	10L1919
Pyrene	2.34		mg/kg dry	0.189	10	12/10/10 22:12	SW846 8270D SIM	10L1919
Surr: Nitrobenzene-d5 (17-120%)	290 %	ZX				12/10/10 22:12	W846 8270D SIM	10L1919
Surr: 2-Fluorobiphenyl (14-120%)	110 %					12/10/10 22:12	W846 8270D SIM	10L1919
Surr: Terphenyl-d14 (18-120%)	110 %					12/10/10 22:12	W846 8270D SIM	10L1919
Purgeable Petroleum Hydrocarbons								
GRO (C4-C12) NW	ND		mg/kg dry	45.1	50	12/19/10 21:55	NWTPH-Gx	10L1949
Surr: a,a,a-Trifluorotoluene (50-150%)	105 %					12/19/10 21:55	NWTPH-Gx	10L1949
Extractable Petroleum Hydrocarbons with Silica Gel Treatment								
Diesel	8660	QP7	mg/kg dry	225	10	12/11/10 05:49	NWTPH-Dx	10L1818
Motor Oil	8980	QP7	mg/kg dry	225	10	12/11/10 05:49	NWTPH-Dx	10L1818
Surr: o-Terphenyl (50-150%)	*	Z3				12/11/10 05:49	NWTPH-Dx	10L1818
Sample ID: NTL1087-08 (AP7-10 - Soil) Sampled: 12/07/10 12:45								
General Chemistry Parameters								
% Dry Solids	35.5		%	0.500	1	12/10/10 08:17	SW-846	10L1998
Volatile Organic Compounds by EPA Method 8260B								
Benzene	ND		mg/kg dry	0.00962	1	12/16/10 00:47	SW846 8260B	10L3257
Ethylbenzene	ND		mg/kg dry	0.00962	1	12/16/10 00:47	SW846 8260B	10L3257
Methyl tert-Butyl Ether	ND		mg/kg dry	0.00962	1	12/16/10 00:47	SW846 8260B	10L3257
Toluene	ND		mg/kg dry	0.00962	1	12/16/10 00:47	SW846 8260B	10L3257
Xylenes, total	ND		mg/kg dry	0.0240	1	12/16/10 00:47	SW846 8260B	10L3257
Surr: 1,2-Dichloroethane-d4 (67-138%)	80 %					12/16/10 00:47	SW846 8260B	10L3257
Surr: Dibromofluoromethane (75-125%)	99 %					12/16/10 00:47	SW846 8260B	10L3257
Surr: Toluene-d8 (76-129%)	124 %					12/16/10 00:47	SW846 8260B	10L3257
Surr: 4-Bromofluorobenzene (67-147%)	166 %	ZX				12/16/10 00:47	SW846 8260B	10L3257
Polyaromatic Hydrocarbons by EPA 8270D SIM								
Acenaphthene	0.0606		mg/kg dry	0.0466	5	12/10/10 22:35	SW846 8270D SIM	10L1919
Acenaphthylene	0.0466		mg/kg dry	0.0466	5	12/10/10 22:35	SW846 8270D SIM	10L1919
Anthracene	0.0792		mg/kg dry	0.0466	5	12/10/10 22:35	SW846 8270D SIM	10L1919
Benzo (a) anthracene	0.0513		mg/kg dry	0.0466	5	12/10/10 22:35	SW846 8270D SIM	10L1919
Benzo (a) pyrene	ND		mg/kg dry	0.0466	5	12/10/10 22:35	SW846 8270D SIM	10L1919
Benzo (b) fluoranthene	0.0606		mg/kg dry	0.0466	5	12/10/10 22:35	SW846 8270D SIM	10L1919
Benzo (g,h,i) perylene	ND		mg/kg dry	0.0466	5	12/10/10 22:35	SW846 8270D SIM	10L1919
Benzo (k) fluoranthene	ND		mg/kg dry	0.0466	5	12/10/10 22:35	SW846 8270D SIM	10L1919
Chrysene	0.0699		mg/kg dry	0.0466	5	12/10/10 22:35	SW846 8270D SIM	10L1919
Dibenz (a,h) anthracene	ND		mg/kg dry	0.0466	5	12/10/10 22:35	SW846 8270D SIM	10L1919
Fluoranthene	0.0886		mg/kg dry	0.0466	5	12/10/10 22:35	SW846 8270D SIM	10L1919
Fluorene	0.0979		mg/kg dry	0.0466	5	12/10/10 22:35	SW846 8270D SIM	10L1919

Client AMEC Earth & Environmental (13993)
600 University Street, Suite 1020
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Attn Leah Vigoren

Work Order: NTL1087
Project Name: Everett Terminal(46108) - AMEC
Project Number: [none]
Received: 12/08/10 08:30

ANALYTICAL REPORT

Analyte	Result	Flag	Units	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
Sample ID: NTL1087-08 (AP7-10 - Soil) - cont. Sampled: 12/07/10 12:45								
Polyaromatic Hydrocarbons by EPA 8270D SIM - cont.								
Indeno (1,2,3-cd) pyrene	ND		mg/kg dry	0.0466	5	12/10/10 22:35	SW846 8270D SIM	10L1919
1-Methylnaphthalene	0.0839		mg/kg dry	0.0466	5	12/10/10 22:35	SW846 8270D SIM	10L1919
2-Methylnaphthalene	ND		mg/kg dry	0.0466	5	12/10/10 22:35	SW846 8270D SIM	10L1919
Naphthalene	ND		mg/kg dry	0.0466	5	12/10/10 22:35	SW846 8270D SIM	10L1919
Phenanthrene	0.0606		mg/kg dry	0.0466	5	12/10/10 22:35	SW846 8270D SIM	10L1919
Pyrene	ND		mg/kg dry	0.0466	5	12/10/10 22:35	SW846 8270D SIM	10L1919
Surr: Nitrobenzene-d5 (17-120%)	105 %					12/10/10 22:35	W846 8270D SIA	10L1919
Surr: 2-Fluorobiphenyl (14-120%)	80 %					12/10/10 22:35	W846 8270D SIA	10L1919
Surr: Terphenyl-d14 (18-120%)	85 %					12/10/10 22:35	W846 8270D SIA	10L1919
Purgeable Petroleum Hydrocarbons								
GRO (C4-C12) NW	44.3		mg/kg dry	21.7	50	12/19/10 22:12	NWTPH-Gx	10L1949
Surr: a,a,a-Trifluorotoluene (50-150%)	59 %					12/19/10 22:12	NWTPH-Gx	10L1949
Extractable Petroleum Hydrocarbons with Silica Gel Treatment								
Diesel	553	QP7	mg/kg dry	113	10	12/11/10 06:14	NWTPH-Dx	10L1818
Motor Oil	836	QP7	mg/kg dry	113	10	12/11/10 06:14	NWTPH-Dx	10L1818
Surr: o-Terphenyl (50-150%)	*	Z3				12/11/10 06:14	NWTPH-Dx	10L1818
Sample ID: NTL1087-09 (DUP6-120710 - Soil) Sampled: 12/07/10 12:55								
General Chemistry Parameters								
% Dry Solids	62.7		%	0.500	1	12/10/10 08:17	SW-846	10L1998
Volatile Organic Compounds by EPA Method 8260B								
Benzene	ND		mg/kg dry	0.00441	1	12/16/10 01:15	SW846 8260B	10L3257
Ethylbenzene	0.00688		mg/kg dry	0.00441	1	12/16/10 01:15	SW846 8260B	10L3257
Methyl tert-Butyl Ether	ND		mg/kg dry	0.00441	1	12/16/10 01:15	SW846 8260B	10L3257
Toluene	ND		mg/kg dry	0.00441	1	12/16/10 01:15	SW846 8260B	10L3257
Xylenes, total	0.0254		mg/kg dry	0.0110	1	12/16/10 01:15	SW846 8260B	10L3257
Surr: 1,2-Dichloroethane-d4 (67-138%)	87 %					12/16/10 01:15	SW846 8260B	10L3257
Surr: Dibromofluoromethane (75-125%)	102 %					12/16/10 01:15	SW846 8260B	10L3257
Surr: Toluene-d8 (76-129%)	130 %	ZX				12/16/10 01:15	SW846 8260B	10L3257
Surr: 4-Bromofluorobenzene (67-147%)	336 %	ZX				12/16/10 01:15	SW846 8260B	10L3257
Polyaromatic Hydrocarbons by EPA 8270D SIM								
Acenaphthene	0.0633		mg/kg dry	0.0527	10	12/10/10 22:57	SW846 8270D SIM	10L1919
Acenaphthylene	ND		mg/kg dry	0.0527	10	12/10/10 22:57	SW846 8270D SIM	10L1919
Anthracene	0.0738		mg/kg dry	0.0527	10	12/10/10 22:57	SW846 8270D SIM	10L1919
Benzo (a) anthracene	0.0527		mg/kg dry	0.0527	10	12/10/10 22:57	SW846 8270D SIM	10L1919
Benzo (a) pyrene	0.0527		mg/kg dry	0.0527	10	12/10/10 22:57	SW846 8270D SIM	10L1919
Benzo (b) fluoranthene	0.0633		mg/kg dry	0.0527	10	12/10/10 22:57	SW846 8270D SIM	10L1919
Benzo (g,h,i) perylene	ND		mg/kg dry	0.0527	10	12/10/10 22:57	SW846 8270D SIM	10L1919
Benzo (k) fluoranthene	ND		mg/kg dry	0.0527	10	12/10/10 22:57	SW846 8270D SIM	10L1919
Chrysene	0.0633		mg/kg dry	0.0527	10	12/10/10 22:57	SW846 8270D SIM	10L1919
Dibenz (a,h) anthracene	ND		mg/kg dry	0.0527	10	12/10/10 22:57	SW846 8270D SIM	10L1919
Fluoranthene	0.0843		mg/kg dry	0.0527	10	12/10/10 22:57	SW846 8270D SIM	10L1919

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Work Order: NTL1087
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Received: 12/08/10 08:30

ANALYTICAL REPORT

Analyte	Result	Flag	Units	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
Sample ID: NTL1087-09 (DUP6-120710 - Soil) - cont. Sampled: 12/07/10 12:55								
Polyaromatic Hydrocarbons by EPA 8270D SIM - cont.								
Fluorene	0.100		mg/kg dry	0.0527	10	12/10/10 22:57	SW846 8270D SIM	10L1919
Indeno (1,2,3-cd) pyrene	ND		mg/kg dry	0.0527	10	12/10/10 22:57	SW846 8270D SIM	10L1919
1-Methylnaphthalene	0.100		mg/kg dry	0.0527	10	12/10/10 22:57	SW846 8270D SIM	10L1919
2-Methylnaphthalene	ND		mg/kg dry	0.0527	10	12/10/10 22:57	SW846 8270D SIM	10L1919
Naphthalene	ND		mg/kg dry	0.0527	10	12/10/10 22:57	SW846 8270D SIM	10L1919
Phenanthrene	0.0843		mg/kg dry	0.0527	10	12/10/10 22:57	SW846 8270D SIM	10L1919
Pyrene	ND		mg/kg dry	0.0527	10	12/10/10 22:57	SW846 8270D SIM	10L1919
Surr: Nitrobenzene-d5 (17-120%)	130 %	ZX				12/10/10 22:57	W846 8270D SIA	10L1919
Surr: 2-Fluorobiphenyl (14-120%)	80 %					12/10/10 22:57	W846 8270D SIA	10L1919
Surr: Terphenyl-d14 (18-120%)	90 %					12/10/10 22:57	W846 8270D SIA	10L1919
Purgeable Petroleum Hydrocarbons								
GRO (C4-C12) NW	51.8		mg/kg dry	10.9	50	12/19/10 22:29	NWTPH-Gx	10L1949
Surr: a,a,a-Trifluorotoluene (50-150%)	112 %					12/19/10 22:29	NWTPH-Gx	10L1949
Extractable Petroleum Hydrocarbons with Silica Gel Treatment								
Diesel	717	QP7	mg/kg dry	63.4	10	12/11/10 06:38	NWTPH-Dx	10L1818
Motor Oil	861	QP7	mg/kg dry	63.4	10	12/11/10 06:38	NWTPH-Dx	10L1818
Surr: o-Terphenyl (50-150%)	*	Z3				12/11/10 06:38	NWTPH-Dx	10L1818
Sample ID: NTL1087-10 (AP7-15 - Soil) Sampled: 12/07/10 13:10								
General Chemistry Parameters								
% Dry Solids	87.7		%	0.500	1	12/10/10 08:17	SW-846	10L1998
Volatile Organic Compounds by EPA Method 8260B								
Benzene	ND		mg/kg dry	0.00215	1	12/16/10 01:44	SW846 8260B	10L3257
Ethylbenzene	ND		mg/kg dry	0.00215	1	12/16/10 01:44	SW846 8260B	10L3257
Methyl tert-Butyl Ether	ND		mg/kg dry	0.00215	1	12/16/10 01:44	SW846 8260B	10L3257
Toluene	ND		mg/kg dry	0.00215	1	12/16/10 01:44	SW846 8260B	10L3257
Xylenes, total	ND		mg/kg dry	0.00537	1	12/16/10 01:44	SW846 8260B	10L3257
Surr: 1,2-Dichloroethane-d4 (67-138%)	81 %					12/16/10 01:44	SW846 8260B	10L3257
Surr: Dibromofluoromethane (75-125%)	95 %					12/16/10 01:44	SW846 8260B	10L3257
Surr: Toluene-d8 (76-129%)	96 %					12/16/10 01:44	SW846 8260B	10L3257
Surr: 4-Bromofluorobenzene (67-147%)	103 %					12/16/10 01:44	SW846 8260B	10L3257
Polyaromatic Hydrocarbons by EPA 8270D SIM								
Acenaphthene	ND		mg/kg dry	0.00371	1	12/10/10 23:19	SW846 8270D SIM	10L1919
Acenaphthylene	ND		mg/kg dry	0.00371	1	12/10/10 23:19	SW846 8270D SIM	10L1919
Anthracene	ND		mg/kg dry	0.00371	1	12/10/10 23:19	SW846 8270D SIM	10L1919
Benzo (a) anthracene	ND		mg/kg dry	0.00371	1	12/10/10 23:19	SW846 8270D SIM	10L1919
Benzo (a) pyrene	ND		mg/kg dry	0.00371	1	12/10/10 23:19	SW846 8270D SIM	10L1919
Benzo (b) fluoranthene	ND		mg/kg dry	0.00371	1	12/10/10 23:19	SW846 8270D SIM	10L1919
Benzo (g,h,i) perylene	ND		mg/kg dry	0.00371	1	12/10/10 23:19	SW846 8270D SIM	10L1919
Benzo (k) fluoranthene	ND		mg/kg dry	0.00371	1	12/10/10 23:19	SW846 8270D SIM	10L1919
Chrysene	ND		mg/kg dry	0.00371	1	12/10/10 23:19	SW846 8270D SIM	10L1919
Dibenz (a,h) anthracene	ND		mg/kg dry	0.00371	1	12/10/10 23:19	SW846 8270D SIM	10L1919

Client AMEC Earth & Environmental (13993)
 600 University Street, Suite 1020
 Seattle, WA 98101
 Attn Leah Vigoren

Work Order: NTL1087
 Project Name: Everett Terminal(46108) - AMEC
 Project Number: [none]
 Received: 12/08/10 08:30

ANALYTICAL REPORT

Analyte	Result	Flag	Units	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
Sample ID: NTL1087-10 (AP7-15 - Soil) - cont. Sampled: 12/07/10 13:10								
Polyaromatic Hydrocarbons by EPA 8270D SIM - cont.								
Fluoranthene	ND		mg/kg dry	0.00371	1	12/10/10 23:19	SW846 8270D SIM	10L1919
Fluorene	ND		mg/kg dry	0.00371	1	12/10/10 23:19	SW846 8270D SIM	10L1919
Indeno (1,2,3-cd) pyrene	ND		mg/kg dry	0.00371	1	12/10/10 23:19	SW846 8270D SIM	10L1919
1-Methylnaphthalene	ND		mg/kg dry	0.00371	1	12/10/10 23:19	SW846 8270D SIM	10L1919
2-Methylnaphthalene	ND		mg/kg dry	0.00371	1	12/10/10 23:19	SW846 8270D SIM	10L1919
Naphthalene	ND		mg/kg dry	0.00371	1	12/10/10 23:19	SW846 8270D SIM	10L1919
Phenanthrene	ND		mg/kg dry	0.00371	1	12/10/10 23:19	SW846 8270D SIM	10L1919
Pyrene	ND		mg/kg dry	0.00371	1	12/10/10 23:19	SW846 8270D SIM	10L1919
<i>Surr: Nitrobenzene-d5 (17-120%)</i>	66 %					12/10/10 23:19	W846 8270D SIA	10L1919
<i>Surr: 2-Fluorobiphenyl (14-120%)</i>	64 %					12/10/10 23:19	W846 8270D SIA	10L1919
<i>Surr: Terphenyl-d14 (18-120%)</i>	75 %					12/10/10 23:19	W846 8270D SIA	10L1919
Purgeable Petroleum Hydrocarbons								
GRO (C4-C12) NW	ND		mg/kg dry	8.15	50	12/19/10 22:46	NWTPH-Gx	10L1949
<i>Surr: a,a,a-Trifluorotoluene (50-150%)</i>	116 %					12/19/10 22:46	NWTPH-Gx	10L1949
Extractable Petroleum Hydrocarbons with Silica Gel Treatment								
Diesel	ND		mg/kg dry	4.46	1	12/11/10 07:02	NWTPH-Dx	10L1818
Motor Oil	ND		mg/kg dry	4.46	1	12/11/10 07:02	NWTPH-Dx	10L1818
<i>Surr: o-Terphenyl (50-150%)</i>	58 %					12/11/10 07:02	NWTPH-Dx	10L1818
Sample ID: NTL1087-11 (Trip Blank - Water) Sampled: 12/07/10 00:01								
Volatile Organic Compounds by EPA Method 8260B								
Benzene	ND		ug/L	1.00	1	12/09/10 15:19	SW846 8260B	10L1863
Ethylbenzene	ND		ug/L	1.00	1	12/09/10 15:19	SW846 8260B	10L1863
Methyl tert-Butyl Ether	ND		ug/L	1.00	1	12/09/10 15:19	SW846 8260B	10L1863
Toluene	ND		ug/L	1.00	1	12/09/10 15:19	SW846 8260B	10L1863
Xylenes, total	ND		ug/L	3.00	1	12/09/10 15:19	SW846 8260B	10L1863
<i>Surr: 1,2-Dichloroethane-d4 (63-140%)</i>	106 %					12/09/10 15:19	SW846 8260B	10L1863
<i>Surr: Dibromofluoromethane (73-131%)</i>	101 %					12/09/10 15:19	SW846 8260B	10L1863
<i>Surr: Toluene-d8 (80-120%)</i>	103 %					12/09/10 15:19	SW846 8260B	10L1863
<i>Surr: 4-Bromofluorobenzene (79-125%)</i>	102 %					12/09/10 15:19	SW846 8260B	10L1863

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 Attn Leah Vigoren

Work Order: NTL1087
 Project Name: Everett Terminal(46108) - AMEC
 Project Number: [none]
 Received: 12/08/10 08:30

SAMPLE EXTRACTION DATA

Parameter	Batch	Lab Number	Wt/Vol Extracted	Extracted Vol	Date	Analyst	Extraction Method
Extractable Petroleum Hydrocarbons							
NWTPH EPH	10L1984	NTL1087-06	10.78	2.00	12/09/10 11:20	SAS	MADEP soil
Extractable Petroleum Hydrocarbons with Silica Gel Treatment							
NWTPH-Dx	10L1818	NTL1087-01	25.29	1.00	12/09/10 08:15	CAG	EPA 3550B
NWTPH-Dx	10L3006	NTL1087-02	25.12	1.00	12/14/10 14:00	SAS	EPA 3550B
NWTPH-Dx	10L1818	NTL1087-03	25.22	1.00	12/09/10 08:15	CAG	EPA 3550B
NWTPH-Dx	10L1818	NTL1087-05	25.77	1.00	12/09/10 08:15	CAG	EPA 3550B
NWTPH-Dx	10L1818	NTL1087-06	25.47	1.00	12/09/10 08:15	CAG	EPA 3550B
NWTPH-Dx	10L1818	NTL1087-06RE1	25.47	1.00	12/09/10 08:15	CAG	EPA 3550B
NWTPH-Dx	10L1818	NTL1087-06RE2	25.47	1.00	12/09/10 08:15	CAG	EPA 3550B
NWTPH-Dx	10L1818	NTL1087-07	25.55	1.00	12/09/10 08:15	CAG	EPA 3550B
NWTPH-Dx	10L1818	NTL1087-07RE1	25.55	1.00	12/09/10 08:15	CAG	EPA 3550B
NWTPH-Dx	10L1818	NTL1087-08	25.01	1.00	12/09/10 08:15	CAG	EPA 3550B
NWTPH-Dx	10L1818	NTL1087-09	25.16	1.00	12/09/10 08:15	CAG	EPA 3550B
NWTPH-Dx	10L1818	NTL1087-10	25.60	1.00	12/09/10 08:15	CAG	EPA 3550B
Polyaromatic Hydrocarbons by EPA 8270D SIM							
SW846 8270D SIM	10L1919	NTL1087-01	30.30	1.00	12/09/10 09:15	CAG	EPA 3550C
SW846 8270D SIM	10L1919	NTL1087-03	30.33	1.00	12/09/10 09:15	CAG	EPA 3550C
SW846 8270D SIM	10L1919	NTL1087-05	30.47	1.00	12/09/10 09:15	CAG	EPA 3550C
SW846 8270D SIM	10L1919	NTL1087-06	30.92	1.00	12/09/10 09:15	CAG	EPA 3550C
SW846 8270D SIM	10L1919	NTL1087-06RE1	30.92	1.00	12/09/10 09:15	CAG	EPA 3550C
SW846 8270D SIM	10L1919	NTL1087-07	30.38	1.00	12/09/10 09:15	CAG	EPA 3550C
SW846 8270D SIM	10L1919	NTL1087-08	30.22	1.00	12/09/10 09:15	CAG	EPA 3550C
SW846 8270D SIM	10L1919	NTL1087-09	30.27	1.00	12/09/10 09:15	CAG	EPA 3550C
SW846 8270D SIM	10L1919	NTL1087-10	30.72	1.00	12/09/10 09:15	CAG	EPA 3550C
Purgeable Petroleum Hydrocarbons							
NWTPH VPH	10L2392	NTL1087-06	5.91	5.00	12/07/10 12:00	HW	NWTPH VPH
NWTPH VPH	10L2836	NTL1087-06RE1	5.91	5.00	12/07/10 12:00	HW	NWTPH VPH
NWTPH VPH	10L3302	NTL1087-06RE2	5.91	5.00	12/07/10 12:00	HW	NWTPH VPH
NWTPH-Gx	10L1949	NTL1087-01	5.09	5.00	12/07/10 09:25	CHH	EPA 5035A (GC)
NWTPH-Gx	10L1949	NTL1087-02	6.06	5.00	12/07/10 09:35	CHH	EPA 5035A (GC)
NWTPH-Gx	10L1949	NTL1087-03	3.09	5.00	12/07/10 10:00	CHH	EPA 5035A (GC)
NWTPH-Gx	10L1949	NTL1087-05	5.40	5.00	12/07/10 11:30	CHH	EPA 5035A (GC)
NWTPH-Gx	10L1949	NTL1087-06	4.82	5.00	12/07/10 12:00	CHH	EPA 5035A (GC)
NWTPH-Gx	10L1949	NTL1087-07	3.18	5.00	12/07/10 12:20	CHH	EPA 5035A (GC)
NWTPH-Gx	10L1949	NTL1087-08	3.24	5.00	12/07/10 12:45	CHH	EPA 5035A (GC)
NWTPH-Gx	10L1949	NTL1087-09	3.66	5.00	12/07/10 12:55	CHH	EPA 5035A (GC)
NWTPH-Gx	10L1949	NTL1087-10	3.50	5.00	12/07/10 13:10	CHH	EPA 5035A (GC)
Volatile Organic Compounds by EPA Method 8260B							
SW846 8260B	10L3257	NTL1087-01	5.32	5.00	12/07/10 09:25	CHH	EPA 5035
SW846 8260B	10L3345	NTL1087-01RE1	5.31	5.00	12/07/10 09:25	CHH	EPA 5035
SW846 8260B	10L3257	NTL1087-02	5.89	5.00	12/07/10 09:35	CHH	EPA 5035
SW846 8260B	10L3257	NTL1087-03	3.19	5.00	12/07/10 10:00	CHH	EPA 5035
SW846 8260B	10L3345	NTL1087-03RE1	3.64	5.00	12/07/10 10:00	CHH	EPA 5035
SW846 8260B	10L3345	NTL1087-03RE2	3.03	5.00	12/07/10 10:00	CHH	EPA 5035

Client AMEC Earth & Environmental (13993)
 600 University Street, Suite 1020
 Seattle, WA 98101
 Attn Leah Vigoren

Work Order: NTL1087
 Project Name: Everett Terminal(46108) - AMEC
 Project Number: [none]
 Received: 12/08/10 08:30

SAMPLE EXTRACTION DATA

Parameter	Batch	Lab Number	Wt/Vol		Date	Analyst	Extraction Method
			Extracted	Extracted Vol			
SW846 8260B	10L3257	NTL1087-05	5.35	5.00	12/07/10 11:30	CHH	EPA 5035
SW846 8260B	10L3257	NTL1087-06	6.16	5.00	12/07/10 12:00	CHH	EPA 5035
SW846 8260B	10L3257	NTL1087-06	6.16	5.00	12/07/10 12:00	CHH	EPA 5035
SW846 8260B	10L3257	NTL1087-06	6.16	5.00	12/07/10 12:00	CHH	EPA 5035
SW846 8260B	10L3257	NTL1087-06	6.16	5.00	12/07/10 12:00	CHH	EPA 5035
SW846 8260B	10L4254	NTL1087-06RE1	4.40	5.00	12/07/10 12:00	CHH	EPA 5035
SW846 8260B	10L3257	NTL1087-07	3.42	5.00	12/07/10 12:20	CHH	EPA 5035
SW846 8260B	10L3257	NTL1087-08	2.93	5.00	12/07/10 12:45	CHH	EPA 5035
SW846 8260B	10L3257	NTL1087-09	3.62	5.00	12/07/10 12:55	CHH	EPA 5035
SW846 8260B	10L3257	NTL1087-10	5.31	5.00	12/07/10 13:10	CHH	EPA 5035

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 Project Name: Everett Terminal(46108) - AMEC
 Project Number: [none]
 Received: 12/08/10 08:30

PROJECT QUALITY CONTROL DATA
Blank

Analyte	Blank Value	Q	Units	Q.C. Batch	Lab Number	Analyzed Date/Time
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Volatile Organic Compounds by EPA Method 8260B

10L1863-BLK1

Benzene	<0.270		ug/L	10L1863	10L1863-BLK1	12/09/10 14:51
Ethylbenzene	<0.320		ug/L	10L1863	10L1863-BLK1	12/09/10 14:51
Methyl tert-Butyl Ether	<0.320		ug/L	10L1863	10L1863-BLK1	12/09/10 14:51
Toluene	<0.330		ug/L	10L1863	10L1863-BLK1	12/09/10 14:51
Xylenes, total	<0.870		ug/L	10L1863	10L1863-BLK1	12/09/10 14:51
Surrogate: 1,2-Dichloroethane-d4	105%			10L1863	10L1863-BLK1	12/09/10 14:51
Surrogate: Dibromofluoromethane	102%			10L1863	10L1863-BLK1	12/09/10 14:51
Surrogate: Toluene-d8	104%			10L1863	10L1863-BLK1	12/09/10 14:51
Surrogate: 4-Bromofluorobenzene	104%			10L1863	10L1863-BLK1	12/09/10 14:51

10L3257-BLK1

1,2-Dibromoethane (EDB)	<0.000670		mg/kg wet	10L3257	10L3257-BLK1	12/15/10 18:33
1,2-Dichloroethane	<0.000510		mg/kg wet	10L3257	10L3257-BLK1	12/15/10 18:33
Benzene	<0.00110		mg/kg wet	10L3257	10L3257-BLK1	12/15/10 18:33
Hexane	0.00204		mg/kg wet	10L3257	10L3257-BLK1	12/15/10 18:33
Ethylbenzene	<0.000980		mg/kg wet	10L3257	10L3257-BLK1	12/15/10 18:33
Methyl tert-Butyl Ether	<0.000670		mg/kg wet	10L3257	10L3257-BLK1	12/15/10 18:33
Toluene	<0.000890		mg/kg wet	10L3257	10L3257-BLK1	12/15/10 18:33
Xylenes, total	<0.00190		mg/kg wet	10L3257	10L3257-BLK1	12/15/10 18:33
Surrogate: 1,2-Dichloroethane-d4	87%			10L3257	10L3257-BLK1	12/15/10 18:33
Surrogate: Dibromofluoromethane	98%			10L3257	10L3257-BLK1	12/15/10 18:33
Surrogate: Toluene-d8	97%			10L3257	10L3257-BLK1	12/15/10 18:33
Surrogate: 4-Bromofluorobenzene	102%			10L3257	10L3257-BLK1	12/15/10 18:33

10L3345-BLK1

Benzene	<0.00110		mg/kg wet	10L3345	10L3345-BLK1	12/16/10 15:45
Ethylbenzene	<0.000980		mg/kg wet	10L3345	10L3345-BLK1	12/16/10 15:45
Methyl tert-Butyl Ether	<0.000670		mg/kg wet	10L3345	10L3345-BLK1	12/16/10 15:45
Toluene	<0.000890		mg/kg wet	10L3345	10L3345-BLK1	12/16/10 15:45
Xylenes, total	<0.00190		mg/kg wet	10L3345	10L3345-BLK1	12/16/10 15:45
Surrogate: 1,2-Dichloroethane-d4	81%			10L3345	10L3345-BLK1	12/16/10 15:45
Surrogate: Dibromofluoromethane	96%			10L3345	10L3345-BLK1	12/16/10 15:45
Surrogate: Toluene-d8	96%			10L3345	10L3345-BLK1	12/16/10 15:45
Surrogate: 4-Bromofluorobenzene	101%			10L3345	10L3345-BLK1	12/16/10 15:45

10L3345-BLK2

Benzene	<0.0550		mg/kg wet	10L3345	10L3345-BLK2	12/16/10 16:14
Ethylbenzene	<0.0490		mg/kg wet	10L3345	10L3345-BLK2	12/16/10 16:14
Methyl tert-Butyl Ether	<0.0335		mg/kg wet	10L3345	10L3345-BLK2	12/16/10 16:14
Toluene	<0.0445		mg/kg wet	10L3345	10L3345-BLK2	12/16/10 16:14
Xylenes, total	<0.0950		mg/kg wet	10L3345	10L3345-BLK2	12/16/10 16:14
Surrogate: 1,2-Dichloroethane-d4	77%			10L3345	10L3345-BLK2	12/16/10 16:14

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Work Order: NTL1087
 Project Name: Everett Terminal(46108) - AMEC
 Project Number: [none]
 Received: 12/08/10 08:30

PROJECT QUALITY CONTROL DATA
Blank - Cont.

Analyte	Blank Value	Q	Units	Q.C. Batch	Lab Number	Analyzed Date/Time
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Volatile Organic Compounds by EPA Method 8260B

10L3345-BLK2

Surrogate: Dibromofluoromethane	92%			10L3345	10L3345-BLK2	12/16/10 16:14
Surrogate: Toluene-d8	96%			10L3345	10L3345-BLK2	12/16/10 16:14
Surrogate: 4-Bromofluorobenzene	103%			10L3345	10L3345-BLK2	12/16/10 16:14

10L4254-BLK1

Hexane	<0.00110		mg/kg wet	10L4254	10L4254-BLK1	12/20/10 12:18
Surrogate: 1,2-Dichloroethane-d4	99%			10L4254	10L4254-BLK1	12/20/10 12:18
Surrogate: Dibromofluoromethane	103%			10L4254	10L4254-BLK1	12/20/10 12:18
Surrogate: Toluene-d8	100%			10L4254	10L4254-BLK1	12/20/10 12:18
Surrogate: 4-Bromofluorobenzene	116%			10L4254	10L4254-BLK1	12/20/10 12:18

10L4254-BLK2

Hexane	<0.0550		mg/kg wet	10L4254	10L4254-BLK2	12/20/10 12:48
Surrogate: 1,2-Dichloroethane-d4	91%			10L4254	10L4254-BLK2	12/20/10 12:48
Surrogate: Dibromofluoromethane	93%			10L4254	10L4254-BLK2	12/20/10 12:48
Surrogate: Toluene-d8	101%			10L4254	10L4254-BLK2	12/20/10 12:48
Surrogate: 4-Bromofluorobenzene	106%			10L4254	10L4254-BLK2	12/20/10 12:48

Polyaromatic Hydrocarbons by EPA 8270D SIM

10L1919-BLK1

Acenaphthene	<0.000700		mg/kg wet	10L1919	10L1919-BLK1	12/11/10 11:27
Acenaphthylene	<0.000600		mg/kg wet	10L1919	10L1919-BLK1	12/11/10 11:27
Anthracene	<0.000500		mg/kg wet	10L1919	10L1919-BLK1	12/11/10 11:27
Benzo (a) anthracene	<0.000600		mg/kg wet	10L1919	10L1919-BLK1	12/11/10 11:27
Benzo (a) pyrene	<0.000600		mg/kg wet	10L1919	10L1919-BLK1	12/11/10 11:27
Benzo (b) fluoranthene	<0.000700		mg/kg wet	10L1919	10L1919-BLK1	12/11/10 11:27
Benzo (g,h,i) perylene	<0.000700		mg/kg wet	10L1919	10L1919-BLK1	12/11/10 11:27
Benzo (k) fluoranthene	<0.000700		mg/kg wet	10L1919	10L1919-BLK1	12/11/10 11:27
Chrysene	<0.00100		mg/kg wet	10L1919	10L1919-BLK1	12/11/10 11:27
Dibenz (a,h) anthracene	<0.000900		mg/kg wet	10L1919	10L1919-BLK1	12/11/10 11:27
Fluoranthene	<0.000500		mg/kg wet	10L1919	10L1919-BLK1	12/11/10 11:27
Fluorene	<0.00100		mg/kg wet	10L1919	10L1919-BLK1	12/11/10 11:27
Indeno (1,2,3-cd) pyrene	<0.000600		mg/kg wet	10L1919	10L1919-BLK1	12/11/10 11:27
1-Methylnaphthalene	<0.000600		mg/kg wet	10L1919	10L1919-BLK1	12/11/10 11:27
2-Methylnaphthalene	<0.000800		mg/kg wet	10L1919	10L1919-BLK1	12/11/10 11:27
Naphthalene	<0.000600		mg/kg wet	10L1919	10L1919-BLK1	12/11/10 11:27
Phenanthrene	<0.000800		mg/kg wet	10L1919	10L1919-BLK1	12/11/10 11:27
Pyrene	<0.000800		mg/kg wet	10L1919	10L1919-BLK1	12/11/10 11:27
Surrogate: Nitrobenzene-d5	68%			10L1919	10L1919-BLK1	12/11/10 11:27
Surrogate: 2-Fluorobiphenyl	64%			10L1919	10L1919-BLK1	12/11/10 11:27
Surrogate: Terphenyl-d14	69%			10L1919	10L1919-BLK1	12/11/10 11:27

Client AMEC Earth & Environmental (13993)
 600 University Street, Suite 1020
 Seattle, WA 98101
 Attn Leah Vigoren

Work Order: NTL1087
 Project Name: Everett Terminal(46108) - AMEC
 Project Number: [none]
 Received: 12/08/10 08:30

PROJECT QUALITY CONTROL DATA
Blank - Cont.

Analyte	Blank Value	Q	Units	Q.C. Batch	Lab Number	Analyzed Date/Time
Extractable Petroleum Hydrocarbons						
10L1984-BLK1						
C8-C10 Aliphatics	<1.90		mg/kg wet	10L1984	10L1984-BLK1	12/15/10 16:41
C8-C10 Aromatics	<2.50		mg/kg wet	10L1984	10L1984-BLK1	12/15/10 17:10
>C10 to C12 Ali	<1.00		mg/kg wet	10L1984	10L1984-BLK1	12/15/10 16:41
>C10 to C12 Aro	0.980		mg/kg wet	10L1984	10L1984-BLK1	12/15/10 17:10
>C12 to C16 Ali	<1.40		mg/kg wet	10L1984	10L1984-BLK1	12/15/10 16:41
>C12 to C16 Aro	<1.70		mg/kg wet	10L1984	10L1984-BLK1	12/15/10 17:10
>C16 to C21 Ali	<2.00		mg/kg wet	10L1984	10L1984-BLK1	12/15/10 16:41
>C16 to C21 Aro	<3.10		mg/kg wet	10L1984	10L1984-BLK1	12/15/10 17:10
>C21 to C34 Ali	<3.20		mg/kg wet	10L1984	10L1984-BLK1	12/15/10 16:41
>C21 to C34 Aro	<4.40		mg/kg wet	10L1984	10L1984-BLK1	12/15/10 17:10
Surrogate: <i>o</i> -Terphenyl	91%			10L1984	10L1984-BLK1	12/15/10 17:10
Surrogate: 2-Fluorobiphenyl	94%			10L1984	10L1984-BLK1	12/15/10 17:10
Surrogate: 2-Bromonaphthalene	67%			10L1984	10L1984-BLK1	12/15/10 17:10
Surrogate: 1-Chlorooctadecane	75%			10L1984	10L1984-BLK1	12/15/10 16:41
Purgeable Petroleum Hydrocarbons						
10L1949-BLK1						
GRO (C4-C12) NW	2.81		mg/kg wet	10L1949	10L1949-BLK1	12/19/10 19:06
Surrogate: <i>a,a,a</i> -Trifluorotoluene	109%			10L1949	10L1949-BLK1	12/19/10 19:06
10L1949-BLK2						
GRO (C4-C12) NW	1.60		mg/kg wet	10L1949	10L1949-BLK2	12/19/10 19:23
Surrogate: <i>a,a,a</i> -Trifluorotoluene	121%			10L1949	10L1949-BLK2	12/19/10 19:23
10L1949-BLK3						
GRO (C4-C12) NW	2.32		mg/kg wet	10L1949	10L1949-BLK3	12/20/10 03:00
Surrogate: <i>a,a,a</i> -Trifluorotoluene	100%			10L1949	10L1949-BLK3	12/20/10 03:00
10L1949-BLK4						
GRO (C4-C12) NW	1.56		mg/kg wet	10L1949	10L1949-BLK4	12/20/10 03:17
Surrogate: <i>a,a,a</i> -Trifluorotoluene	114%			10L1949	10L1949-BLK4	12/20/10 03:17
10L2392-BLK1						
Benzene	<0.0200		mg/kg wet	10L2392	10L2392-BLK1	12/10/10 23:58
Ethylbenzene	<0.0250		mg/kg wet	10L2392	10L2392-BLK1	12/10/10 23:58
Methyl tert-Butyl Ether	<0.0350		mg/kg wet	10L2392	10L2392-BLK1	12/10/10 23:58
Naphthalene	0.0258		mg/kg wet	10L2392	10L2392-BLK1	12/10/10 23:58
Toluene	<0.0250		mg/kg wet	10L2392	10L2392-BLK1	12/10/10 23:58
Xylenes, total	<0.0950		mg/kg wet	10L2392	10L2392-BLK1	12/10/10 23:58
C5 - C6 Aliphatic Hydrocarbons	<1.00		mg/kg wet	10L2392	10L2392-BLK1	12/10/10 23:58
>C6 to C8 Ali	<1.50		mg/kg wet	10L2392	10L2392-BLK1	12/10/10 23:58
>C8 to C10 Ali	<5.00		mg/kg wet	10L2392	10L2392-BLK1	12/10/10 23:58

Client AMEC Earth & Environmental (13993)
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Work Order: NTL1087
 Project Name: Everett Terminal(46108) - AMEC
 Project Number: [none]
 Received: 12/08/10 08:30

PROJECT QUALITY CONTROL DATA
Blank - Cont.

Analyte	Blank Value	Q	Units	Q.C. Batch	Lab Number	Analyzed Date/Time
Purgeable Petroleum Hydrocarbons						
10L2392-BLK1						
>C10 to C12 Ali	<1.00		mg/kg wet	10L2392	10L2392-BLK1	12/10/10 23:58
>C8 to C10 Aro	<2.00		mg/kg wet	10L2392	10L2392-BLK1	12/10/10 23:58
>C10 to C12 Aro	<1.50		mg/kg wet	10L2392	10L2392-BLK1	12/10/10 23:58
>C12 to C13 Aro	<0.500		mg/kg wet	10L2392	10L2392-BLK1	12/10/10 23:58
Surrogate: 2,5-Dibromotoluene (FID)	101%			10L2392	10L2392-BLK1	12/10/10 23:58
Surrogate: 2,5-Dibromotoluene (PID)	98%			10L2392	10L2392-BLK1	12/10/10 23:58
10L3302-BLK1						
Benzene	<0.0200	MNR1	mg/kg wet	10L3302	10L3302-BLK1	12/15/10 11:54
Ethylbenzene	<0.0250	MNR1	mg/kg wet	10L3302	10L3302-BLK1	12/15/10 11:54
Methyl tert-Butyl Ether	<0.0350	MNR1	mg/kg wet	10L3302	10L3302-BLK1	12/15/10 11:54
Naphthalene	0.0744	MNR1	mg/kg wet	10L3302	10L3302-BLK1	12/15/10 11:54
Toluene	<0.0250	MNR1	mg/kg wet	10L3302	10L3302-BLK1	12/15/10 11:54
Xylenes, total	<0.0950	MNR1	mg/kg wet	10L3302	10L3302-BLK1	12/15/10 11:54
C5 - C6 Aliphatic Hydrocarbons	<1.00	MNR1	mg/kg wet	10L3302	10L3302-BLK1	12/15/10 11:54
>C6 to C8 Ali	<1.50	MNR1	mg/kg wet	10L3302	10L3302-BLK1	12/15/10 11:54
>C8 to C10 Ali	<5.00	MNR1	mg/kg wet	10L3302	10L3302-BLK1	12/15/10 11:54
>C10 to C12 Ali	<1.00	MNR1	mg/kg wet	10L3302	10L3302-BLK1	12/15/10 11:54
>C8 to C10 Aro	<2.00	MNR1	mg/kg wet	10L3302	10L3302-BLK1	12/15/10 11:54
>C10 to C12 Aro	<1.50	MNR1	mg/kg wet	10L3302	10L3302-BLK1	12/15/10 11:54
>C12 to C13 Aro	<0.500	MNR1	mg/kg wet	10L3302	10L3302-BLK1	12/15/10 11:54
Surrogate: 2,5-Dibromotoluene (FID)	90%			10L3302	10L3302-BLK1	12/15/10 11:54
Surrogate: 2,5-Dibromotoluene (PID)	90%			10L3302	10L3302-BLK1	12/15/10 11:54
Extractable Petroleum Hydrocarbons with Silica Gel Treatment						
10L1818-BLK1						
Diesel	<0.700		mg/kg wet	10L1818	10L1818-BLK1	12/11/10 01:23
Motor Oil	1.24		mg/kg wet	10L1818	10L1818-BLK1	12/11/10 01:23
Surrogate: o-Terphenyl	83%			10L1818	10L1818-BLK1	12/11/10 01:23
10L3006-BLK1						
Diesel	1.12		mg/kg wet	10L3006	10L3006-BLK1	12/15/10 18:49
Motor Oil	0.936		mg/kg wet	10L3006	10L3006-BLK1	12/15/10 18:49
Surrogate: o-Terphenyl	71%			10L3006	10L3006-BLK1	12/15/10 18:49

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 Project Number: [none]
 Received: 12/08/10 08:30

PROJECT QUALITY CONTROL DATA

Duplicate

Analyte	Orig. Val.	Duplicate	Q	Units	RPD	Limit	Batch	Sample Duplicated	% Rec.	Analyzed Date/Time
General Chemistry Parameters										
10L1998-DUP1										
% Dry Solids	96.4	96.5		%	0.1	20	10L1998	NTL1079-02		12/10/10 08:17
10L3017-DUP1										
% Dry Solids	78.6	78.0		%	0.8	20	10L3017	NTL1544-11		12/15/10 08:16
Purgeable Petroleum Hydrocarbons										
10L1949-DUP1										
GRO (C4-C12) NW	1.90	2.09		mg/kg dry	9	50	10L1949	NTL1087-10		12/19/10 23:03
<i>Surrogate: a,a,a-Trifluorotoluene</i>		23.9		ug/L			10L1949	NTL1087-10	119%	12/19/10 23:03

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 Received: 12/08/10 08:30

PROJECT QUALITY CONTROL DATA LCS

Analyte	Known Val.	Analyzed Val	Q	Units	% Rec.	Target Range	Batch	Analyzed Date/Time
Volatile Organic Compounds by EPA Method 8260B								
10L1863-BS1								
Benzene	50.0	44.5		ug/L	89%	80 - 121	10L1863	12/09/10 13:56
Ethylbenzene	50.0	48.3		ug/L	97%	78 - 133	10L1863	12/09/10 13:56
Methyl tert-Butyl Ether	50.0	47.4		ug/L	95%	76 - 120	10L1863	12/09/10 13:56
Toluene	50.0	46.9		ug/L	94%	78 - 125	10L1863	12/09/10 13:56
Xylenes, total	150	146		ug/L	97%	78 - 134	10L1863	12/09/10 13:56
<i>Surrogate: 1,2-Dichloroethane-d4</i>	25.0	26.2			105%	63 - 140	10L1863	12/09/10 13:56
<i>Surrogate: Dibromofluoromethane</i>	25.0	26.0			104%	73 - 131	10L1863	12/09/10 13:56
<i>Surrogate: Toluene-d8</i>	25.0	25.6			102%	80 - 120	10L1863	12/09/10 13:56
<i>Surrogate: 4-Bromofluorobenzene</i>	25.0	24.6			99%	79 - 125	10L1863	12/09/10 13:56
10L3257-BS1								
1,2-Dibromoethane (EDB)	50.0	54.2		ug/kg	108%	80 - 131	10L3257	12/15/10 16:05
1,2-Dichloroethane	50.0	46.3		ug/kg	93%	70 - 139	10L3257	12/15/10 16:05
Benzene	50.0	53.4		ug/kg	107%	78 - 126	10L3257	12/15/10 16:05
Hexane	50.0	65.3		ug/kg	131%	55 - 136	10L3257	12/15/10 16:05
Ethylbenzene	50.0	53.5		ug/kg	107%	79 - 130	10L3257	12/15/10 16:05
Methyl tert-Butyl Ether	50.0	58.1		ug/kg	116%	70 - 128	10L3257	12/15/10 16:05
Toluene	50.0	53.4		ug/kg	107%	76 - 126	10L3257	12/15/10 16:05
Xylenes, total	150	158		ug/kg	106%	80 - 130	10L3257	12/15/10 16:05
<i>Surrogate: 1,2-Dichloroethane-d4</i>	50.0	44.2			88%	67 - 138	10L3257	12/15/10 16:05
<i>Surrogate: Dibromofluoromethane</i>	50.0	49.9			100%	75 - 125	10L3257	12/15/10 16:05
<i>Surrogate: Toluene-d8</i>	50.0	47.5			95%	76 - 129	10L3257	12/15/10 16:05
<i>Surrogate: 4-Bromofluorobenzene</i>	50.0	50.5			101%	67 - 147	10L3257	12/15/10 16:05
10L3345-BS1								
Benzene	50.0	51.4		ug/kg	103%	78 - 126	10L3345	12/16/10 14:08
Ethylbenzene	50.0	49.4		ug/kg	99%	79 - 130	10L3345	12/16/10 14:08
Methyl tert-Butyl Ether	50.0	62.0		ug/kg	124%	70 - 128	10L3345	12/16/10 14:08
Toluene	50.0	52.9		ug/kg	106%	76 - 126	10L3345	12/16/10 14:08
Xylenes, total	150	146		ug/kg	97%	80 - 130	10L3345	12/16/10 14:08
<i>Surrogate: 1,2-Dichloroethane-d4</i>	50.0	39.5			79%	67 - 138	10L3345	12/16/10 14:08
<i>Surrogate: Dibromofluoromethane</i>	50.0	48.3			97%	75 - 125	10L3345	12/16/10 14:08
<i>Surrogate: Toluene-d8</i>	50.0	48.2			96%	76 - 129	10L3345	12/16/10 14:08
<i>Surrogate: 4-Bromofluorobenzene</i>	50.0	51.1			102%	67 - 147	10L3345	12/16/10 14:08
10L4254-BS1								
Hexane	50.0	49.3		ug/kg	99%	55 - 136	10L4254	12/20/10 11:18
<i>Surrogate: 1,2-Dichloroethane-d4</i>	50.0	48.8			98%	67 - 138	10L4254	12/20/10 11:18
<i>Surrogate: Dibromofluoromethane</i>	50.0	50.3			101%	75 - 125	10L4254	12/20/10 11:18
<i>Surrogate: Toluene-d8</i>	50.0	51.1			102%	76 - 129	10L4254	12/20/10 11:18
<i>Surrogate: 4-Bromofluorobenzene</i>	50.0	45.1			90%	67 - 147	10L4254	12/20/10 11:18

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 Project Name: Everett Terminal(46108) - AMEC
 Project Number: [none]
 Received: 12/08/10 08:30

PROJECT QUALITY CONTROL DATA
LCS - Cont.

Analyte	Known Val.	Analyzed Val	Q	Units	% Rec.	Target Range	Batch	Analyzed Date/Time
Polyaromatic Hydrocarbons by EPA 8270D SIM								
10L1919-BS1								
Acenaphthene	0.0333	0.0257		mg/kg wet	77%	44 - 120	10L1919	12/11/10 11:49
Acenaphthylene	0.0333	0.0287		mg/kg wet	86%	46 - 127	10L1919	12/11/10 11:49
Anthracene	0.0333	0.0300		mg/kg wet	90%	49 - 139	10L1919	12/11/10 11:49
Benzo (a) anthracene	0.0333	0.0320		mg/kg wet	96%	53 - 132	10L1919	12/11/10 11:49
Benzo (a) pyrene	0.0333	0.0287		mg/kg wet	86%	57 - 125	10L1919	12/11/10 11:49
Benzo (b) fluoranthene	0.0333	0.0277		mg/kg wet	83%	36 - 140	10L1919	12/11/10 11:49
Benzo (g,h,i) perylene	0.0333	0.0270		mg/kg wet	81%	54 - 139	10L1919	12/11/10 11:49
Benzo (k) fluoranthene	0.0333	0.0250		mg/kg wet	75%	49 - 140	10L1919	12/11/10 11:49
Chrysene	0.0333	0.0253		mg/kg wet	76%	47 - 139	10L1919	12/11/10 11:49
Dibenz (a,h) anthracene	0.0333	0.0280		mg/kg wet	84%	58 - 141	10L1919	12/11/10 11:49
Fluoranthene	0.0333	0.0303		mg/kg wet	91%	34 - 135	10L1919	12/11/10 11:49
Fluorene	0.0333	0.0263		mg/kg wet	79%	47 - 129	10L1919	12/11/10 11:49
Indeno (1,2,3-cd) pyrene	0.0333	0.0280		mg/kg wet	84%	53 - 142	10L1919	12/11/10 11:49
1-Methylnaphthalene	0.0333	0.0243		mg/kg wet	73%	41 - 120	10L1919	12/11/10 11:49
2-Methylnaphthalene	0.0333	0.0267		mg/kg wet	80%	48 - 121	10L1919	12/11/10 11:49
Naphthalene	0.0333	0.0257		mg/kg wet	77%	42 - 120	10L1919	12/11/10 11:49
Phenanthrene	0.0333	0.0260		mg/kg wet	78%	52 - 134	10L1919	12/11/10 11:49
Pyrene	0.0333	0.0287		mg/kg wet	86%	56 - 144	10L1919	12/11/10 11:49
Surrogate: Nitrobenzene-d5	0.0333	0.0263			79%	17 - 120	10L1919	12/11/10 11:49
Surrogate: 2-Fluorobiphenyl	0.0333	0.0243			73%	14 - 120	10L1919	12/11/10 11:49
Surrogate: Terphenyl-d14	0.0333	0.0263			79%	18 - 120	10L1919	12/11/10 11:49

Extractable Petroleum Hydrocarbons

10L1984-BS1

C8-C10 Aliphatics	15.0	7.77	M3	mg/kg wet	52%	50 - 150	10L1984	12/15/10 17:40
>C10 to C12 Ali	7.50	6.01	M3	mg/kg wet	80%	70 - 130	10L1984	12/15/10 17:40
>C10 to C12 Aro	7.50	6.89	M3	mg/kg wet	92%	70 - 130	10L1984	12/15/10 18:09
>C12 to C16 Ali	15.0	12.6	M3	mg/kg wet	84%	70 - 130	10L1984	12/15/10 17:40
>C12 to C16 Aro	22.5	18.8	M3	mg/kg wet	84%	70 - 130	10L1984	12/15/10 18:09
>C16 to C21 Ali	22.5	21.1	M3	mg/kg wet	94%	70 - 130	10L1984	12/15/10 17:40
>C16 to C21 Aro	37.5	33.5	M3	mg/kg wet	89%	70 - 130	10L1984	12/15/10 18:09
>C21 to C34 Ali	37.5	39.3	M3	mg/kg wet	105%	70 - 130	10L1984	12/15/10 17:40
>C21 to C34 Aro	60.0	58.5	M3	mg/kg wet	98%	70 - 130	10L1984	12/15/10 18:09
Surrogate: o-Terphenyl	8.00	6.73			84%	60 - 140	10L1984	12/15/10 18:09
Surrogate: 2-Fluorobiphenyl	8.00	7.15			89%	60 - 140	10L1984	12/15/10 18:09
Surrogate: 2-Bromonaphthalene	8.00	6.65			83%	60 - 140	10L1984	12/15/10 18:09
Surrogate: 1-Chlorooctadecane	8.00	5.40			67%	60 - 140	10L1984	12/15/10 17:40

Purgeable Petroleum Hydrocarbons

10L1949-BS1

GRO (C4-C12) NW	10.0	9.73	MNR1	mg/kg wet	97%	60 - 123	10L1949	12/19/10 18:32
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 Attn Leah Vigoren

Work Order: NTL1087
 Project Name: Everett Terminal(46108) - AMEC
 Project Number: [none]
 Received: 12/08/10 08:30

PROJECT QUALITY CONTROL DATA
LCS - Cont.

Analyte	Known Val.	Analyzed Val	Q	Units	% Rec.	Target Range	Batch	Analyzed Date/Time
Purgeable Petroleum Hydrocarbons								
10L1949-BS1								
<i>Surrogate: a,a,a-Trifluorotoluene</i>	20.0	24.8			124%	50 - 150	10L1949	12/19/10 18:32
10L1949-BS2								
GRO (C4-C12) NW	10.0	10.0		mg/kg wet	100%	60 - 123	10L1949	12/19/10 18:49
<i>Surrogate: a,a,a-Trifluorotoluene</i>	20.0	27.0			135%	50 - 150	10L1949	12/19/10 18:49
10L1949-BS3								
GRO (C4-C12) NW	10.0	9.66		mg/kg wet	97%	60 - 123	10L1949	12/20/10 02:26
<i>Surrogate: a,a,a-Trifluorotoluene</i>	20.0	26.3			132%	50 - 150	10L1949	12/20/10 02:26
10L1949-BS4								
GRO (C4-C12) NW	10.0	10.2		mg/kg wet	102%	60 - 123	10L1949	12/20/10 02:43
<i>Surrogate: a,a,a-Trifluorotoluene</i>	20.0	24.9			124%	50 - 150	10L1949	12/20/10 02:43
10L2392-BS1								
Benzene	5.00	5.54	MNR1	mg/kg wet	111%	70 - 130	10L2392	12/10/10 22:53
Ethylbenzene	5.00	5.40	MNR1	mg/kg wet	108%	70 - 130	10L2392	12/10/10 22:53
Methyl tert-Butyl Ether	5.00	5.08	MNR1	mg/kg wet	102%	70 - 130	10L2392	12/10/10 22:53
Naphthalene	5.00	4.98	MNR1	mg/kg wet	100%	70 - 130	10L2392	12/10/10 22:53
Toluene	5.00	5.33	MNR1	mg/kg wet	107%	70 - 130	10L2392	12/10/10 22:53
Xylenes, total	15.0	16.1	MNR1	mg/kg wet	107%	70 - 130	10L2392	12/10/10 22:53
C5 - C6 Aliphatic Hydrocarbons	15.0	14.2	MNR1	mg/kg wet	95%	70 - 130	10L2392	12/10/10 22:53
>C6 to C8 Ali	10.0	10.1	MNR1	mg/kg wet	101%	70 - 130	10L2392	12/10/10 22:53
>C8 to C10 Ali	30.0	31.0	MNR1	mg/kg wet	103%	70 - 130	10L2392	12/10/10 22:53
>C10 to C12 Ali	10.0	10.3	MNR1	mg/kg wet	103%	70 - 130	10L2392	12/10/10 22:53
>C8 to C10 Aro	25.0	27.2	MNR1	mg/kg wet	109%	70 - 130	10L2392	12/10/10 22:53
>C10 to C12 Aro	5.00	5.25	MNR1	mg/kg wet	105%	70 - 130	10L2392	12/10/10 22:53
>C12 to C13 Aro	5.00	5.13	MNR1	mg/kg wet	103%	70 - 130	10L2392	12/10/10 22:53
<i>Surrogate: 2,5-Dibromotoluene (FID)</i>	40.0	40.2			101%	70 - 130	10L2392	12/10/10 22:53
<i>Surrogate: 2,5-Dibromotoluene (PID)</i>	40.0	40.1			100%	70 - 130	10L2392	12/10/10 22:53
10L3302-BS1								
Benzene	5.00	5.09		mg/kg wet	102%	70 - 130	10L3302	12/14/10 12:21
Ethylbenzene	5.00	4.96		mg/kg wet	99%	70 - 130	10L3302	12/14/10 12:21
Methyl tert-Butyl Ether	5.00	4.73		mg/kg wet	95%	70 - 130	10L3302	12/14/10 12:21
Naphthalene	5.00	4.50		mg/kg wet	90%	70 - 130	10L3302	12/14/10 12:21
Toluene	5.00	4.93		mg/kg wet	99%	70 - 130	10L3302	12/14/10 12:21
Xylenes, total	15.0	14.7		mg/kg wet	98%	70 - 130	10L3302	12/14/10 12:21
C5 - C6 Aliphatic Hydrocarbons	15.0	13.7		mg/kg wet	91%	70 - 130	10L3302	12/14/10 12:21
>C6 to C8 Ali	10.0	8.81		mg/kg wet	88%	70 - 130	10L3302	12/14/10 12:21
>C8 to C10 Ali	30.0	27.6		mg/kg wet	92%	70 - 130	10L3302	12/14/10 12:21
>C10 to C12 Ali	10.0	10.4		mg/kg wet	104%	70 - 130	10L3302	12/14/10 12:21

Client AMEC Earth & Environmental (13993)
 600 University Street, Suite 1020
 Seattle, WA 98101
 Attn Leah Vigoren

Work Order: NTL1087
 Project Name: Everett Terminal(46108) - AMEC
 Project Number: [none]
 Received: 12/08/10 08:30

PROJECT QUALITY CONTROL DATA
LCS - Cont.

Analyte	Known Val.	Analyzed Val	Q	Units	% Rec.	Target Range	Batch	Analyzed Date/Time
Purgeable Petroleum Hydrocarbons								
10L3302-BS1								
>C8 to C10 Aro	25.0	24.6		mg/kg wet	98%	70 - 130	10L3302	12/14/10 12:21
>C10 to C12 Aro	5.00	5.41		mg/kg wet	108%	70 - 130	10L3302	12/14/10 12:21
>C12 to C13 Aro	5.00	4.58		mg/kg wet	92%	70 - 130	10L3302	12/14/10 12:21
Surrogate: 2,5-Dibromotoluene (FID)	40.0	31.4			79%	70 - 130	10L3302	12/14/10 12:21
Surrogate: 2,5-Dibromotoluene (PID)	40.0	32.2			81%	70 - 130	10L3302	12/14/10 12:21
Extractable Petroleum Hydrocarbons with Silica Gel Treatment								
10L1818-BS1								
Diesel	40.0	35.2		mg/kg wet	88%	55 - 123	10L1818	12/11/10 01:47
Surrogate: o-Terphenyl	0.800	0.697			87%	50 - 150	10L1818	12/11/10 01:47
10L3006-BS1								
Diesel	40.0	37.2		mg/kg wet	93%	55 - 123	10L3006	12/15/10 19:05
Surrogate: o-Terphenyl	0.800	0.696			87%	50 - 150	10L3006	12/15/10 19:05

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Received: 12/08/10 08:30

PROJECT QUALITY CONTROL DATA Matrix Spike

Analyte	Orig. Val.	MS Val	Q	Units	Spike Conc	% Rec.	Target Range	Batch	Sample Spiked	Analyzed Date/Time
Volatile Organic Compounds by EPA Method 8260B										
10L1863-MS1										
Benzene	ND	46.6		ug/L	50.0	93%	65 - 151	10L1863	NTL0988-01	12/10/10 08:15
Ethylbenzene	ND	48.7		ug/L	50.0	97%	68 - 157	10L1863	NTL0988-01	12/10/10 08:15
Methyl tert-Butyl Ether	ND	52.0		ug/L	50.0	104%	56 - 152	10L1863	NTL0988-01	12/10/10 08:15
Toluene	ND	47.2		ug/L	50.0	94%	61 - 153	10L1863	NTL0988-01	12/10/10 08:15
Xylenes, total	ND	146		ug/L	150	97%	68 - 158	10L1863	NTL0988-01	12/10/10 08:15
<i>Surrogate: 1,2-Dichloroethane-d4</i>		25.8		ug/L	25.0	103%	63 - 140	10L1863	NTL0988-01	12/10/10 08:15
<i>Surrogate: Dibromofluoromethane</i>		25.5		ug/L	25.0	102%	73 - 131	10L1863	NTL0988-01	12/10/10 08:15
<i>Surrogate: Toluene-d8</i>		25.0		ug/L	25.0	100%	80 - 120	10L1863	NTL0988-01	12/10/10 08:15
<i>Surrogate: 4-Bromofluorobenzene</i>		24.8		ug/L	25.0	99%	79 - 125	10L1863	NTL0988-01	12/10/10 08:15
10L3257-MS1										
1,2-Dibromoethane (EDB)	ND	0.0604		mg/kg dry	0.0599	101%	30 - 155	10L3257	NTL1711-01	12/16/10 02:13
1,2-Dichloroethane	ND	0.0463		mg/kg dry	0.0599	77%	32 - 155	10L3257	NTL1711-01	12/16/10 02:13
Benzene	ND	0.0580		mg/kg dry	0.0599	97%	42 - 141	10L3257	NTL1711-01	12/16/10 02:13
Hexane	ND	0.0739		mg/kg dry	0.0599	124%	10 - 180	10L3257	NTL1711-01	12/16/10 02:13
Ethylbenzene	ND	0.0570		mg/kg dry	0.0599	95%	21 - 165	10L3257	NTL1711-01	12/16/10 02:13
Methyl tert-Butyl Ether	ND	0.0655		mg/kg dry	0.0599	109%	34 - 154	10L3257	NTL1711-01	12/16/10 02:13
Toluene	ND	0.0602		mg/kg dry	0.0599	101%	45 - 145	10L3257	NTL1711-01	12/16/10 02:13
Xylenes, total	ND	0.170		mg/kg dry	0.180	95%	31 - 159	10L3257	NTL1711-01	12/16/10 02:13
<i>Surrogate: 1,2-Dichloroethane-d4</i>		38.7		ug/kg	50.0	77%	67 - 138	10L3257	NTL1711-01	12/16/10 02:13
<i>Surrogate: Dibromofluoromethane</i>		48.2		ug/kg	50.0	96%	75 - 125	10L3257	NTL1711-01	12/16/10 02:13
<i>Surrogate: Toluene-d8</i>		49.2		ug/kg	50.0	98%	76 - 129	10L3257	NTL1711-01	12/16/10 02:13
<i>Surrogate: 4-Bromofluorobenzene</i>		51.4		ug/kg	50.0	103%	67 - 147	10L3257	NTL1711-01	12/16/10 02:13
10L3345-MS1										
Benzene	0.00113	0.0602		mg/kg wet	0.0432	137%	42 - 141	10L3345	NTL1881-03	12/16/10 22:34
Ethylbenzene	0.00165	0.0595		mg/kg wet	0.0432	134%	21 - 165	10L3345	NTL1881-03	12/16/10 22:34
Methyl tert-Butyl Ether	ND	0.0656		mg/kg wet	0.0432	152%	34 - 154	10L3345	NTL1881-03	12/16/10 22:34
Toluene	0.00442	0.0691	M7	mg/kg wet	0.0432	150%	45 - 145	10L3345	NTL1881-03	12/16/10 22:34
Xylenes, total	0.00665	0.181		mg/kg wet	0.130	135%	31 - 159	10L3345	NTL1881-03	12/16/10 22:34
<i>Surrogate: 1,2-Dichloroethane-d4</i>		38.3		ug/kg	50.0	77%	67 - 138	10L3345	NTL1881-03	12/16/10 22:34
<i>Surrogate: Dibromofluoromethane</i>		47.6		ug/kg	50.0	95%	75 - 125	10L3345	NTL1881-03	12/16/10 22:34
<i>Surrogate: Toluene-d8</i>		49.3		ug/kg	50.0	99%	76 - 129	10L3345	NTL1881-03	12/16/10 22:34
<i>Surrogate: 4-Bromofluorobenzene</i>		52.4		ug/kg	50.0	105%	67 - 147	10L3345	NTL1881-03	12/16/10 22:34
Polyaromatic Hydrocarbons by EPA 8270D SIM										
10L1919-MS1										
Acenaphthene	ND	0.0278		mg/kg dry	0.0386	72%	42 - 120	10L1919	NTL1087-05	12/11/10 12:12

Client AMEC Earth & Environmental (13993)
 600 University Street, Suite 1020
 Seattle, WA 98101
 Attn Leah Vigoren

Work Order: NTL1087
 Project Name: Everett Terminal(46108) - AMEC
 Project Number: [none]
 Received: 12/08/10 08:30

PROJECT QUALITY CONTROL DATA
Matrix Spike - Cont.

Analyte	Orig. Val.	MS Val	Q	Units	Spike Conc	% Rec.	Target Range	Batch	Sample Spiked	Analyzed Date/Time
Polyaromatic Hydrocarbons by EPA 8270D SIM										
10L1919-MS1										
Acenaphthylene	ND	0.0312		mg/kg dry	0.0386	81%	39 - 127	10L1919	NTL1087-05	12/11/10 12:12
Anthracene	ND	0.0324		mg/kg dry	0.0386	84%	39 - 139	10L1919	NTL1087-05	12/11/10 12:12
Benzo (a) anthracene	ND	0.0362		mg/kg dry	0.0386	94%	31 - 132	10L1919	NTL1087-05	12/11/10 12:12
Benzo (a) pyrene	ND	0.0335		mg/kg dry	0.0386	87%	22 - 125	10L1919	NTL1087-05	12/11/10 12:12
Benzo (b) fluoranthene	ND	0.0320		mg/kg dry	0.0386	83%	10 - 147	10L1919	NTL1087-05	12/11/10 12:12
Benzo (g,h,i) perylene	ND	0.0320		mg/kg dry	0.0386	83%	10 - 151	10L1919	NTL1087-05	12/11/10 12:12
Benzo (k) fluoranthene	ND	0.0301		mg/kg dry	0.0386	78%	23 - 140	10L1919	NTL1087-05	12/11/10 12:12
Chrysene	ND	0.0293		mg/kg dry	0.0386	76%	20 - 139	10L1919	NTL1087-05	12/11/10 12:12
Dibenz (a,h) anthracene	ND	0.0332		mg/kg dry	0.0386	86%	18 - 150	10L1919	NTL1087-05	12/11/10 12:12
Fluoranthene	ND	0.0355		mg/kg dry	0.0386	92%	29 - 135	10L1919	NTL1087-05	12/11/10 12:12
Fluorene	ND	0.0297		mg/kg dry	0.0386	77%	38 - 129	10L1919	NTL1087-05	12/11/10 12:12
Indeno (1,2,3-cd) pyrene	ND	0.0335		mg/kg dry	0.0386	87%	13 - 146	10L1919	NTL1087-05	12/11/10 12:12
1-Methylnaphthalene	ND	0.0278		mg/kg dry	0.0386	72%	20 - 120	10L1919	NTL1087-05	12/11/10 12:12
2-Methylnaphthalene	ND	0.0301		mg/kg dry	0.0386	78%	28 - 124	10L1919	NTL1087-05	12/11/10 12:12
Naphthalene	ND	0.0281		mg/kg dry	0.0386	73%	10 - 135	10L1919	NTL1087-05	12/11/10 12:12
Phenanthrene	ND	0.0289		mg/kg dry	0.0386	75%	33 - 134	10L1919	NTL1087-05	12/11/10 12:12
Pyrene	ND	0.0339		mg/kg dry	0.0386	88%	26 - 153	10L1919	NTL1087-05	12/11/10 12:12
<i>Surrogate: Nitrobenzene-d5</i>		0.0274		mg/kg dry	0.0386	71%	17 - 120	10L1919	NTL1087-05	12/11/10 12:12
<i>Surrogate: 2-Fluorobiphenyl</i>		0.0254		mg/kg dry	0.0386	66%	14 - 120	10L1919	NTL1087-05	12/11/10 12:12
<i>Surrogate: Terphenyl-d14</i>		0.0297		mg/kg dry	0.0386	77%	18 - 120	10L1919	NTL1087-05	12/11/10 12:12

Extractable Petroleum Hydrocarbons with Silica Gel Treatment

10L1818-MS1

Diesel	44.7	85.9		mg/kg dry	48.4	85%	34 - 138	10L1818	NTL0684-01	12/11/10 02:12
<i>Surrogate: o-Terphenyl</i>		0.688		mg/kg dry	0.967	71%	50 - 150	10L1818	NTL0684-01	12/11/10 02:12

10L3006-MS1

Diesel	1.58	38.3		mg/kg dry	46.1	80%	34 - 138	10L3006	NTL1087-02	12/15/10 19:22
<i>Surrogate: o-Terphenyl</i>		0.765		mg/kg dry	0.921	83%	50 - 150	10L3006	NTL1087-02	12/15/10 19:22

Client AMEC Earth & Environmental (13993)
 600 University Street, Suite 1020
 Seattle, WA 98101
 Attn Leah Vigoren

Work Order: NTL1087
 Project Name: Everett Terminal(46108) - AMEC
 Project Number: [none]
 Received: 12/08/10 08:30

PROJECT QUALITY CONTROL DATA
Matrix Spike Dup

Analyte	Orig. Val.	Duplicate	Q	Units	Spike Conc	% Rec.	Target Range	RPD	Limit	Batch	Sample Duplicated	Analyzed Date/Time
Volatile Organic Compounds by EPA Method 8260B												
10L1863-MSD1												
Benzene	ND	45.5		ug/L	50.0	91%	65 - 151	2	12	10L1863	NTL0988-01	12/10/10 08:43
Ethylbenzene	ND	48.5		ug/L	50.0	97%	68 - 157	0.5	12	10L1863	NTL0988-01	12/10/10 08:43
Methyl tert-Butyl Ether	ND	50.3		ug/L	50.0	101%	56 - 152	3	32	10L1863	NTL0988-01	12/10/10 08:43
Toluene	ND	47.1		ug/L	50.0	94%	61 - 153	0.2	35	10L1863	NTL0988-01	12/10/10 08:43
Xylenes, total	ND	145		ug/L	150	97%	68 - 158	0.4	18	10L1863	NTL0988-01	12/10/10 08:43
Surrogate: 1,2-Dichloroethane-d4		25.4		ug/L	25.0	102%	63 - 140			10L1863	NTL0988-01	12/10/10 08:43
Surrogate: Dibromofluoromethane		25.4		ug/L	25.0	102%	73 - 131			10L1863	NTL0988-01	12/10/10 08:43
Surrogate: Toluene-d8		25.4		ug/L	25.0	102%	80 - 120			10L1863	NTL0988-01	12/10/10 08:43
Surrogate: 4-Bromofluorobenzene		24.7		ug/L	25.0	99%	79 - 125			10L1863	NTL0988-01	12/10/10 08:43
10L3257-MSD1												
1,2-Dibromoethane (EDB)	ND	0.0544		mg/kg dry	0.0605	90%	30 - 155	11	45	10L3257	NTL1711-01	12/16/10 02:41
1,2-Dichloroethane	ND	0.0418		mg/kg dry	0.0605	69%	32 - 155	10	50	10L3257	NTL1711-01	12/16/10 02:41
Benzene	ND	0.0540		mg/kg dry	0.0605	89%	42 - 141	7	50	10L3257	NTL1711-01	12/16/10 02:41
Hexane	ND	0.0700		mg/kg dry	0.0605	116%	10 - 180	5	48	10L3257	NTL1711-01	12/16/10 02:41
Ethylbenzene	ND	0.0539		mg/kg dry	0.0605	89%	21 - 165	6	50	10L3257	NTL1711-01	12/16/10 02:41
Methyl tert-Butyl Ether	ND	0.0583		mg/kg dry	0.0605	96%	34 - 154	12	50	10L3257	NTL1711-01	12/16/10 02:41
Toluene	ND	0.0570		mg/kg dry	0.0605	94%	45 - 145	5	50	10L3257	NTL1711-01	12/16/10 02:41
Xylenes, total	ND	0.159		mg/kg dry	0.182	88%	31 - 159	6	50	10L3257	NTL1711-01	12/16/10 02:41
Surrogate: 1,2-Dichloroethane-d4		38.4		ug/kg	50.0	77%	67 - 138			10L3257	NTL1711-01	12/16/10 02:41
Surrogate: Dibromofluoromethane		47.6		ug/kg	50.0	95%	75 - 125			10L3257	NTL1711-01	12/16/10 02:41
Surrogate: Toluene-d8		48.8		ug/kg	50.0	98%	76 - 129			10L3257	NTL1711-01	12/16/10 02:41
Surrogate: 4-Bromofluorobenzene		51.5		ug/kg	50.0	103%	67 - 147			10L3257	NTL1711-01	12/16/10 02:41
10L3345-MSD1												
Benzene	0.00113	0.0478		mg/kg wet	0.0484	96%	42 - 141	23	50	10L3345	NTL1881-03	12/16/10 23:02
Ethylbenzene	0.00165	0.0474		mg/kg wet	0.0484	94%	21 - 165	23	50	10L3345	NTL1881-03	12/16/10 23:02
Methyl tert-Butyl Ether	ND	0.0539		mg/kg wet	0.0484	111%	34 - 154	20	50	10L3345	NTL1881-03	12/16/10 23:02
Toluene	0.00442	0.0532		mg/kg wet	0.0484	101%	45 - 145	26	50	10L3345	NTL1881-03	12/16/10 23:02
Xylenes, total	0.00665	0.142		mg/kg wet	0.145	93%	31 - 159	24	50	10L3345	NTL1881-03	12/16/10 23:02
Surrogate: 1,2-Dichloroethane-d4		38.0		ug/kg	50.0	76%	67 - 138			10L3345	NTL1881-03	12/16/10 23:02
Surrogate: Dibromofluoromethane		47.6		ug/kg	50.0	95%	75 - 125			10L3345	NTL1881-03	12/16/10 23:02
Surrogate: Toluene-d8		48.8		ug/kg	50.0	98%	76 - 129			10L3345	NTL1881-03	12/16/10 23:02
Surrogate: 4-Bromofluorobenzene		52.7		ug/kg	50.0	105%	67 - 147			10L3345	NTL1881-03	12/16/10 23:02
Polyaromatic Hydrocarbons by EPA 8270D SIM												
10L1919-MSD1												
Acenaphthene	ND	0.0300		mg/kg dry	0.0380	79%	42 - 120	8	32	10L1919	NTL1087-05	12/11/10 12:34
Acenaphthylene	ND	0.0338		mg/kg dry	0.0380	89%	39 - 127	8	34	10L1919	NTL1087-05	12/11/10 12:34
Anthracene	ND	0.0350		mg/kg dry	0.0380	92%	39 - 139	8	31	10L1919	NTL1087-05	12/11/10 12:34
Benzo (a) anthracene	ND	0.0384		mg/kg dry	0.0380	101%	31 - 132	6	43	10L1919	NTL1087-05	12/11/10 12:34

Client AMEC Earth & Environmental (13993)
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Work Order: NTL1087
 Project Name: Everett Terminal(46108) - AMEC
 Project Number: [none]
 Received: 12/08/10 08:30

PROJECT QUALITY CONTROL DATA
Matrix Spike Dup - Cont.

Analyte	Orig. Val.	Duplicate	Q	Units	Spike Conc	% Rec.	Target Range	RPD	Limit	Batch	Sample Duplicated	Analyzed Date/Time
Polyaromatic Hydrocarbons by EPA 8270D SIM												
10L1919-MSD1												
Benzo (a) pyrene	ND	0.0354		mg/kg dry	0.0380	93%	22 - 125	5	41	10L1919	NTL1087-05	12/11/10 12:34
Benzo (b) fluoranthene	ND	0.0354		mg/kg dry	0.0380	93%	10 - 147	10	50	10L1919	NTL1087-05	12/11/10 12:34
Benzo (g,h,i) perylene	ND	0.0346		mg/kg dry	0.0380	91%	10 - 151	8	50	10L1919	NTL1087-05	12/11/10 12:34
Benzo (k) fluoranthene	ND	0.0312		mg/kg dry	0.0380	82%	23 - 140	4	38	10L1919	NTL1087-05	12/11/10 12:34
Chrysene	ND	0.0316		mg/kg dry	0.0380	83%	20 - 139	7	40	10L1919	NTL1087-05	12/11/10 12:34
Dibenz (a,h) anthracene	ND	0.0357		mg/kg dry	0.0380	94%	18 - 150	7	50	10L1919	NTL1087-05	12/11/10 12:34
Fluoranthene	ND	0.0373		mg/kg dry	0.0380	98%	29 - 135	5	47	10L1919	NTL1087-05	12/11/10 12:34
Fluorene	ND	0.0319		mg/kg dry	0.0380	84%	38 - 129	7	38	10L1919	NTL1087-05	12/11/10 12:34
Indeno (1,2,3-cd) pyrene	ND	0.0361		mg/kg dry	0.0380	95%	13 - 146	7	46	10L1919	NTL1087-05	12/11/10 12:34
1-Methylnaphthalene	ND	0.0289		mg/kg dry	0.0380	76%	20 - 120	4	35	10L1919	NTL1087-05	12/11/10 12:34
2-Methylnaphthalene	ND	0.0316		mg/kg dry	0.0380	83%	28 - 124	5	38	10L1919	NTL1087-05	12/11/10 12:34
Naphthalene	ND	0.0300		mg/kg dry	0.0380	79%	10 - 135	6	36	10L1919	NTL1087-05	12/11/10 12:34
Phenanthrene	ND	0.0312		mg/kg dry	0.0380	82%	33 - 134	8	46	10L1919	NTL1087-05	12/11/10 12:34
Pyrene	ND	0.0369		mg/kg dry	0.0380	97%	26 - 153	8	50	10L1919	NTL1087-05	12/11/10 12:34
Surrogate: Nitrobenzene-d5		0.0304		mg/kg dry	0.0380	80%	17 - 120			10L1919	NTL1087-05	12/11/10 12:34
Surrogate: 2-Fluorobiphenyl		0.0289		mg/kg dry	0.0380	76%	14 - 120			10L1919	NTL1087-05	12/11/10 12:34
Surrogate: Terphenyl-d14		0.0323		mg/kg dry	0.0380	85%	18 - 120			10L1919	NTL1087-05	12/11/10 12:34

Extractable Petroleum Hydrocarbons with Silica Gel Treatment

10L1818-MSD1

Diesel	44.7	89.2		mg/kg dry	48.7	92%	34 - 138	4	43	10L1818	NTL0684-01	12/11/10 02:36
Surrogate: o-Terphenyl		0.657		mg/kg dry	0.974	67%	50 - 150			10L1818	NTL0684-01	12/11/10 02:36

10L3006-MSD1

Diesel	1.58	40.4		mg/kg dry	47.4	82%	34 - 138	5	43	10L3006	NTL1087-02	12/15/10 19:38
Surrogate: o-Terphenyl		0.794		mg/kg dry	0.947	84%	50 - 150			10L3006	NTL1087-02	12/15/10 19:38

Client AMEC Earth & Environmental (13993)
600 University Street, Suite 1020
Seattle, WA 98101
Attn Leah Vigoren

Work Order: NTL1087
Project Name: Everett Terminal(46108) - AMEC
Project Number: [none]
Received: 12/08/10 08:30

CERTIFICATION SUMMARY

TestAmerica Nashville

Method	Matrix	AIHA	Nelac	Washington
NWTPH EPH	Soil	N/A	X	X
NWTPH VPH	Soil	N/A	X	X
NWTPH-Dx	Soil	N/A		X
NWTPH-Gx	Soil	N/A	X	X
SW846 8260B	Soil	N/A	X	X
SW846 8260B	Water	N/A	X	X
SW846 8270D SIM	Soil		X	X
SW-846	Soil			

Client AMEC Earth & Environmental (13993)
600 University Street, Suite 1020
Seattle, WA 98101
Attn Leah Vigoren

Work Order: NTL1087
Project Name: Everett Terminal(46108) - AMEC
Project Number: [none]
Received: 12/08/10 08:30

DATA QUALIFIERS AND DEFINITIONS

- M3** Results exceeded the linear range in the MS/MSD and therefore are not available for reporting. The batch was accepted based on acceptable recovery in the Blank Spike (LCS).
- M7** The MS and/or MSD were above the acceptance limits. See Blank Spike (LCS).
- MNR1** There was no MS/MSD analyzed with this batch due to insufficient sample volume. See Blank Spike.
- QP5** There was insufficient contamination present to perform a pattern match.
- QP6** The contamination did not match any standards in our library.
- QP7** The hydrocarbon pattern most closely resembles a blended diesel and motor oil product.
- QP7a** The hydrocarbon pattern most closely resembles a diesel product.
- RL1** Reporting limit raised due to sample matrix effects.
- Z3** The sample required a dilution due to the nature of the sample matrix. Because of this dilution, the surrogate spike concentration in the sample was reduced to a level where the recovery calculation does not provide useful information.
- ZX** Due to sample matrix effects, the surrogate recovery was outside the acceptance limits.
- ND** Not detected at the reporting limit (or method detection limit if shown)

METHOD MODIFICATION NOTES

AGENCY DRAFT**Klingensmith, Leah**

From: Vigoren, Leah R [Leah.Vigoren@amec.com]
Sent: Tuesday, December 14, 2010 11:27 AM
To: Klingensmith, Leah
Subject: FW: Everett NTL1087

Leah

Please run AP4-15 for Gx, Dx, BTEX and no analysis on sample AP2-10.

Leah

From: Klingensmith, Leah [mailto:Leah.Klingensmith@testamericainc.com]
Sent: Monday, December 13, 2010 7:24 AM
To: Vigoren, Leah R
Subject: Everett NTL1087

Hey Leah,
For these two samples you had on hold, what analysis do you want added?

LEAH R. KLINGENSMITH
Senior Project Manager

The TestAmerica-Nashville Laboratory will be closed Christmas Day and New Years Day, December 25th and January 1st. The laboratory will not be staffed on these days and will not be available to receive samples. Due to temperature and holding time requirements, samples should not be shipped after Thursday December 23 or Thursday December 30. Happy Holidays!

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

2960 Foster Creighton
Nashville, TN 37204
Tel 615-301-5038
www.testamericainc.com

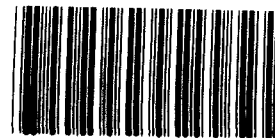
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12/14/2010

COOLER RECEIPT



NTL1087

Cooler Received/Opened On 12/08/10 @ 08:30

1. Tracking # 5470 (last 4 digits, FedEx)

Courier: FED-EX IR Gun ID 97310166

2. Temperature of rep. sample or temp blank when opened: 4.2 Degrees Celsius

3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES NO...NA

4. Were custody seals on outside of cooler? YES...NO...NA

If yes, how many and where: 1 - FRONT

5. Were the seals intact, signed, and dated correctly? YES...NO...NA

6. Were custody papers inside cooler? YES...NO...NA

I certify that I opened the cooler and answered questions 1-6 (initial) [Signature]

7. Were custody seals on containers: YES NO and Intact YES...NO...NA

Were these signed and dated correctly? YES...NO...NA

8. Packing mat'l used? Bubblewrap Plastic bag Peanuts Vermiculite Foam Insert Paper Other None

9. Cooling process: Ice Ice-pack Ice (direct contact) Dry ice Other None

10. Did all containers arrive in good condition (unbroken)? YES...NO...NA

11. Were all container labels complete (#, date, signed, pres., etc)? YES...NO...NA

12. Did all container labels and tags agree with custody papers? YES...NO...NA

13a. Were VOA vials received? YES...NO...NA

b. Was there any observable headspace present in any VOA vial? YES...NO...NA Soil

14. Was there a Trip Blank in this cooler? YES...NO...NA If multiple coolers, sequence #

I certify that I unloaded the cooler and answered questions 7-14 (initial) [Signature]

15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES...NO...NA

b. Did the bottle labels indicate that the correct preservatives were used YES...NO...NA

16. Was residual chlorine present? YES...NO...NA

I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (initial) [Signature]

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

18. Did you sign the custody papers in the appropriate place? YES...NO...NA

19. Were correct containers used for the analysis requested? YES...NO...NA

20. Was sufficient amount of sample sent in each container? YES...NO...NA

I certify that I entered this project into LIMS and answered questions 17-20 (initial) [Signature]

I certify that I attached a label with the unique LIMS number to each container (initial) [Signature]

21. Were there Non-Conformance issues at login? YES...NO Was a PIPE generated? YES...NO...#

Nashville
2960 Foster Creighton Drive

Nashville, TN 37204
phone 615.726.0177 fax 615.726.3403

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratories, Inc.

Chain of Custody Record

Client Contact		Project Manager: Leah Vigoren		Site Contact: Leah Vigoren		Date: 12/7/10	
AMEC E&E		Tel/Fax: 206 238-8470		Lab Contact: Leah Vigoren		Carrier: F&EX	
11810 North Creek Parkway N		Analysis Turnaround Time		TPH-DX (Silica gel)		Job No. 0-915-157161	
Bothell, WA 98011		Calendar (C) or Work Days (W)		TPH-DX (Silica gel)		SDG No. NTL1087	
(425) 368100		TAT if different from Below		EDC EDB n-hexane 8260 B		12/22/10 23:59	
(425) 3681001		<input checked="" type="checkbox"/> 2 weeks		BTEX/HTBE 8260 B		Sample Specific Notes:	
Project Name: ExxonMobil/ADC Property		<input type="checkbox"/> 1 week		TPH-DX (Silica gel)		hold (freeze)	
Site: ExxonMobil Everett		<input type="checkbox"/> 2 days		TPH-DX (Silica gel)		hold (freeze)	
PO #		<input type="checkbox"/> 1 day		TPH-DX (Silica gel)		analyze hold (freeze)	
Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	Disposition	Notes
AP 4-6	12/7/10	925	9006	soil	7	<input checked="" type="checkbox"/> Return To Client	
AP 4-15		935			7	<input checked="" type="checkbox"/> Disposal By Lab	
AP 3-9		1000			7		
AP 2-10		1050			7		
AP 2-14		1130			7		
AP 5-1.5		1200			11		
AP 5-14.5		1220			7		
AP 7-10		1245			7		
PUP 6-020710		1255			7		
AP 7-15		1310			9		
Blank					2		

Preservation Used: (1=Ice) 2=HCl; 3=H2SO4; 4=HNO3; 5=NaOH; 6=Other *measured*

Possible Hazard Identification
 Non-Hazard Flammable Skin Irritant Poison B Unknown

Special Instructions/QC Requirements & Comments:
 please, analyze for DX after silica gel cleanup
 level I QA/QC

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
 Return To Client Disposal By Lab Archive For 6 Months

Relinquished by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Nashville
2960 Foster Creighton Road
Nashville, TN 37204
Tel: 800-765-0980

TestAmerica Job ID: NUB3024

TestAmerica Sample Delivery Group: NUB3024

Client Project/Site: [none]

Client Project Description: Everett Terminal(46108) - AMEC

For:

AMEC Earth & Environmental (13993)
600 University Street, Suite 1020
Seattle, WA 98101

Attn: Leah Vigoren



Authorized for release by:
03/04/2011 01:27:33 PM

Leah R. Klingensmith
Senior Project Management
leah.klingensmith@testamericainc.com

LINKS

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TotalAccess

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This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

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AGENCY DRAFT
Sample Summary

Client: AMEC Earth & Environmental (13993)
Project/Site: [none]

TestAmerica Job ID: NUB3024

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
NUB3024-01	MW11-021611	Ground Water	02/16/11 16:20	02/19/11 08:35
NUB3024-02	MW40R-021711	Ground Water	02/17/11 10:15	02/19/11 08:35
NUB3024-03	MW19-021711	Ground Water	02/17/11 11:50	02/19/11 08:35
NUB3024-04	MWA4-021711	Ground Water	02/17/11 13:20	02/19/11 08:35
NUB3024-05	MWA3-021711	Ground Water	02/17/11 14:50	02/19/11 08:35
NUB3024-06	MWA2-021711	Ground Water	02/17/11 17:05	02/19/11 08:35
NUB3024-07	MWA5-021811	Ground Water	02/18/11 09:45	02/19/11 08:35
NUB3024-08	MWA6-021811	Ground Water	02/18/11 10:55	02/19/11 08:35
NUB3024-09	MWA1-021811	Ground Water	02/18/11 12:12	02/19/11 08:35
NUB3024-10	MWA7-021811	Ground Water	02/18/11 13:15	02/19/11 08:35
NUB3024-11	Dup-021811	Ground Water	02/18/11 00:01	02/19/11 08:35
NUB3024-12	Trip Blank	Water	02/17/11 00:01	02/19/11 08:35

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Client: AMEC Earth & Environmental (13993)
 Project/Site: [none]

TestAmerica Job ID: NUB3024
 SDG: NUB3024

Qualifiers

GCMS Volatiles

Qualifier	Qualifier Description
J	Analyte detected at a level less than the Reporting Limit (RL) and greater than or equal to the Method Detection Limit (MDL). Concentrations within this range are estimated.
PV	Acid preservation was indicated on the sample vial. However, a pH of <2 was not obtained.

GCMS Semivolatiles

Qualifier	Qualifier Description
J	Analyte detected at a level less than the Reporting Limit (RL) and greater than or equal to the Method Detection Limit (MDL). Concentrations within this range are estimated.
MNR1	There was no MS/MSD analyzed with this batch due to insufficient sample volume. See Blank Spike.

GC Volatiles

Qualifier	Qualifier Description
MNR1	There was no MS/MSD analyzed with this batch due to insufficient sample volume. See Blank Spike.
PV	Acid preservation was indicated on the sample vial. However, a pH of <2 was not obtained.

GC Semivolatiles

Qualifier	Qualifier Description
B	Analyte was detected in the associated Method Blank.
J	Analyte detected at a level less than the Reporting Limit (RL) and greater than or equal to the Method Detection Limit (MDL). Concentrations within this range are estimated.
MNR1	There was no MS/MSD analyzed with this batch due to insufficient sample volume. See Blank Spike.
QP5	There was insufficient contamination present to perform a pattern match.
QP6	The contamination did not match any standards in our library.
QP7	The hydrocarbon pattern most closely resembles a blended gasoline & diesel product.
QP7a	The hydrocarbon pattern most closely resembles a diesel product.

Metals

Qualifier	Qualifier Description
J	Analyte detected at a level less than the Reporting Limit (RL) and greater than or equal to the Method Detection Limit (MDL). Concentrations within this range are estimated.
P7	Sample filtered in lab.

Glossary

Glossary	Glossary Description
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis.



Client: AMEC Earth & Environmental (13993)
Project/Site: [none]

TestAmerica Job ID: NUB3024
SDG: NUB3024

Client Sample ID: MW11-021611

Lab Sample ID: NUB3024-01

Date Collected: 02/16/11 16:20

Matrix: Ground Water

Date Received: 02/19/11 08:35

Sampler Name: Joseph Petrick

Sampler Phone Number: (206) 342-1760

Method: SW846 8260B - Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.500	0.170	ug/L		02/22/11 16:42	02/26/11 04:36	1.00
Ethylbenzene	ND		0.500	0.170	ug/L		02/22/11 16:42	02/26/11 04:36	1.00
Methyl tert-Butyl Ether	ND		0.500	0.170	ug/L		02/22/11 16:42	02/26/11 04:36	1.00
Toluene	ND		0.500	0.170	ug/L		02/22/11 16:42	02/26/11 04:36	1.00
Xylenes, total	ND		0.500	0.390	ug/L		02/22/11 16:42	02/26/11 04:36	1.00

Surrogate	% Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4	103		63 - 140	02/22/11 16:42	02/26/11 04:36	1.00
Dibromofluoromethane	100		73 - 131	02/22/11 16:42	02/26/11 04:36	1.00
Toluene-d8	95		80 - 120	02/22/11 16:42	02/26/11 04:36	1.00
4-Bromofluorobenzene	100		79 - 125	02/22/11 16:42	02/26/11 04:36	1.00

Method: SW846 8270D SIM - Polyaromatic Hydrocarbons by EPA 8270D SIM

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.0990	0.0277	ug/L		02/23/11 10:25	02/25/11 19:32	1.00
Acenaphthylene	ND		0.0990	0.0248	ug/L		02/23/11 10:25	02/25/11 19:32	1.00
Anthracene	ND		0.0990	0.0307	ug/L		02/23/11 10:25	02/25/11 19:32	1.00
Benzo (a) anthracene	ND		0.0990	0.0178	ug/L		02/23/11 10:25	02/25/11 19:32	1.00
Benzo (a) pyrene	ND		0.0990	0.0317	ug/L		02/23/11 10:25	02/25/11 19:32	1.00
Benzo (b) fluoranthene	ND		0.0990	0.0257	ug/L		02/23/11 10:25	02/25/11 19:32	1.00
Benzo (g,h,i) perylene	ND		0.0990	0.0238	ug/L		02/23/11 10:25	02/25/11 19:32	1.00
Benzo (k) fluoranthene	ND		0.0990	0.0396	ug/L		02/23/11 10:25	02/25/11 19:32	1.00
Chrysene	ND		0.0990	0.0347	ug/L		02/23/11 10:25	02/25/11 19:32	1.00
Dibenz (a,h) anthracene	ND		0.0990	0.0238	ug/L		02/23/11 10:25	02/25/11 19:32	1.00
Fluoranthene	ND		0.0990	0.0337	ug/L		02/23/11 10:25	02/25/11 19:32	1.00
Fluorene	ND		0.0990	0.0248	ug/L		02/23/11 10:25	02/25/11 19:32	1.00
Indeno (1,2,3-cd) pyrene	ND		0.0990	0.0277	ug/L		02/23/11 10:25	02/25/11 19:32	1.00
1-Methylnaphthalene	ND		0.0990	0.0218	ug/L		02/23/11 10:25	02/25/11 19:32	1.00
2-Methylnaphthalene	ND		0.0990	0.0337	ug/L		02/23/11 10:25	02/25/11 19:32	1.00
Naphthalene	ND		0.0990	0.0248	ug/L		02/23/11 10:25	02/25/11 19:32	1.00
Phenanthrene	ND		0.0990	0.0624	ug/L		02/23/11 10:25	02/25/11 19:32	1.00
Pyrene	ND		0.0990	0.0248	ug/L		02/23/11 10:25	02/25/11 19:32	1.00

Surrogate	% Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	58		27 - 120	02/23/11 10:25	02/25/11 19:32	1.00
2-Fluorobiphenyl	62		29 - 120	02/23/11 10:25	02/25/11 19:32	1.00
Terphenyl-d14	62		13 - 120	02/23/11 10:25	02/25/11 19:32	1.00

Method: NWTPH-Gx - Purgeable Petroleum Hydrocarbons

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
GRO (C4-C12) NW	ND		100	33.0	ug/L		02/16/11 16:20	02/23/11 12:33	1.00

Surrogate	% Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	79		50 - 150	02/16/11 16:20	02/23/11 12:33	1.00

Method: NWTPH-Dx - Extractable Petroleum Hydrocarbons with Silica Gel Treatment

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel	47.7	J, B	105	10.5	ug/L		02/24/11 06:20	02/24/11 15:37	1.00
Motor Oil	74.8	J, B	105	10.5	ug/L		02/24/11 06:20	02/24/11 15:37	1.00

AGENCY DRAFT

Analytical Data

Client: AMEC Earth & Environmental (13993)
 Project/Site: [none]

TestAmerica Job ID: NUB3024
 SDG: NUB3024

Client Sample ID: MW11-021611

Lab Sample ID: NUB3024-01

Date Collected: 02/16/11 16:20

Matrix: Ground Water

Date Received: 02/19/11 08:35

Sampler Name: Joseph Petrick

Sampler Phone Number: (206) 342-1760

Surrogate	% Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	110		50 - 150	02/24/11 06:20	02/24/11 15:37	1.00

Method: SW846 6020 - Dissolved Metals by Method 6020 - dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND	P7	2.00	0.0900	ug/L		02/28/11 08:45	03/01/11 12:34	1.00

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Client: AMEC Earth & Environmental (13993)
Project/Site: [none]

TestAmerica Job ID: NUB3024
SDG: NUB3024

Client Sample ID: MW40R-021711

Lab Sample ID: NUB3024-02

Date Collected: 02/17/11 10:15

Matrix: Ground Water

Date Received: 02/19/11 08:35

Sampler Name: Joseph Petrick

Sampler Phone Number: (206) 342-1760

Method: SW846 8260B - Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.720		0.500	0.170	ug/L		02/22/11 16:42	02/26/11 05:04	1.00
Ethylbenzene	ND		0.500	0.170	ug/L		02/22/11 16:42	02/26/11 05:04	1.00
Methyl tert-Butyl Ether	ND		0.500	0.170	ug/L		02/22/11 16:42	02/26/11 05:04	1.00
Toluene	0.760		0.500	0.170	ug/L		02/22/11 16:42	02/26/11 05:04	1.00
Xylenes, total	3.28		0.500	0.390	ug/L		02/22/11 16:42	02/26/11 05:04	1.00

Surrogate	% Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4	98		63 - 140	02/22/11 16:42	02/26/11 05:04	1.00
Dibromofluoromethane	99		73 - 131	02/22/11 16:42	02/26/11 05:04	1.00
Toluene-d8	97		80 - 120	02/22/11 16:42	02/26/11 05:04	1.00
4-Bromofluorobenzene	102		79 - 125	02/22/11 16:42	02/26/11 05:04	1.00

Method: SW846 8270D SIM - Polyaromatic Hydrocarbons by EPA 8270D SIM

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	1.09		0.0971	0.0272	ug/L		02/23/11 10:25	02/25/11 19:53	1.00
Acenaphthylene	0.136		0.0971	0.0243	ug/L		02/23/11 10:25	02/25/11 19:53	1.00
Anthracene	0.0583	J	0.0971	0.0301	ug/L		02/23/11 10:25	02/25/11 19:53	1.00
Benzo (a) anthracene	ND		0.0971	0.0175	ug/L		02/23/11 10:25	02/25/11 19:53	1.00
Benzo (a) pyrene	ND		0.0971	0.0311	ug/L		02/23/11 10:25	02/25/11 19:53	1.00
Benzo (b) fluoranthene	ND		0.0971	0.0252	ug/L		02/23/11 10:25	02/25/11 19:53	1.00
Benzo (g,h,i) perylene	ND		0.0971	0.0233	ug/L		02/23/11 10:25	02/25/11 19:53	1.00
Benzo (k) fluoranthene	ND		0.0971	0.0388	ug/L		02/23/11 10:25	02/25/11 19:53	1.00
Chrysene	ND		0.0971	0.0340	ug/L		02/23/11 10:25	02/25/11 19:53	1.00
Dibenz (a,h) anthracene	ND		0.0971	0.0233	ug/L		02/23/11 10:25	02/25/11 19:53	1.00
Fluoranthene	0.0583	J	0.0971	0.0330	ug/L		02/23/11 10:25	02/25/11 19:53	1.00
Fluorene	1.08		0.0971	0.0243	ug/L		02/23/11 10:25	02/25/11 19:53	1.00
Indeno (1,2,3-cd) pyrene	ND		0.0971	0.0272	ug/L		02/23/11 10:25	02/25/11 19:53	1.00
2-Methylnaphthalene	0.971		0.0971	0.0330	ug/L		02/23/11 10:25	02/25/11 19:53	1.00
Naphthalene	0.903		0.0971	0.0243	ug/L		02/23/11 10:25	02/25/11 19:53	1.00
Phenanthrene	0.466		0.0971	0.0612	ug/L		02/23/11 10:25	02/25/11 19:53	1.00
Pyrene	0.0777	J	0.0971	0.0243	ug/L		02/23/11 10:25	02/25/11 19:53	1.00

Surrogate	% Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	67		27 - 120	02/23/11 10:25	02/25/11 19:53	1.00
2-Fluorobiphenyl	65		29 - 120	02/23/11 10:25	02/25/11 19:53	1.00
Terphenyl-d14	62		13 - 120	02/23/11 10:25	02/25/11 19:53	1.00

Method: SW846 8270D SIM - Polyaromatic Hydrocarbons by EPA 8270D SIM - RE1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	20.9		0.485	0.107	ug/L		02/23/11 10:25	02/26/11 22:17	5.00

Method: NWTPH-Gx - Purgeable Petroleum Hydrocarbons

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
GRO (C4-C12) NW	763		100	33.0	ug/L		02/17/11 10:15	02/23/11 13:03	1.00

Surrogate	% Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	79		50 - 150	02/17/11 10:15	02/23/11 13:03	1.00

Method: NWTPH-Dx - Extractable Petroleum Hydrocarbons with Silica Gel Treatment

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel	2030	QP7, B	96.2	9.62	ug/L		02/24/11 06:20	02/24/11 15:53	1.00

Client: AMEC Earth & Environmental (13993)
Project/Site: [none]

TestAmerica Job ID: NUB3024
SDG: NUB3024

Client Sample ID: MW40R-021711

Lab Sample ID: NUB3024-02

Date Collected: 02/17/11 10:15

Matrix: Ground Water

Date Received: 02/19/11 08:35

Sampler Name: Joseph Petrick

Sampler Phone Number: (206) 342-1760

Method: NWTPH-Dx - Extractable Petroleum Hydrocarbons with Silica Gel Treatment (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Motor Oil	638	QP6, B	96.2	9.62	ug/L		02/24/11 06:20	02/24/11 15:53	1.00
<i>Surrogate</i>	<i>% Recovery</i>	<i>Qualifier</i>	<i>Limits</i>				<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
<i>o-Terphenyl</i>	88		50 - 150				02/24/11 06:20	02/24/11 15:53	1.00

Method: SW846 6020 - Dissolved Metals by Method 6020 - dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.200	P7, J	2.00	0.0900	ug/L		02/28/11 08:45	03/01/11 12:46	1.00



Client: AMEC Earth & Environmental (13993)
Project/Site: [none]

TestAmerica Job ID: NUB3024
SDG: NUB3024

Client Sample ID: MW19-021711

Lab Sample ID: NUB3024-03

Date Collected: 02/17/11 11:50

Matrix: Ground Water

Date Received: 02/19/11 08:35

Sampler Name: Joseph Petrick

Sampler Phone Number: (206) 342-1760

Method: SW846 8260B - Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.500	0.170	ug/L		02/22/11 16:42	02/26/11 05:31	1.00
Ethylbenzene	ND		0.500	0.170	ug/L		02/22/11 16:42	02/26/11 05:31	1.00
Methyl tert-Butyl Ether	ND		0.500	0.170	ug/L		02/22/11 16:42	02/26/11 05:31	1.00
Toluene	ND		0.500	0.170	ug/L		02/22/11 16:42	02/26/11 05:31	1.00
Xylenes, total	0.730		0.500	0.390	ug/L		02/22/11 16:42	02/26/11 05:31	1.00

Surrogate	% Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4	97		63 - 140	02/22/11 16:42	02/26/11 05:31	1.00
Dibromofluoromethane	99		73 - 131	02/22/11 16:42	02/26/11 05:31	1.00
Toluene-d8	96		80 - 120	02/22/11 16:42	02/26/11 05:31	1.00
4-Bromofluorobenzene	94		79 - 125	02/22/11 16:42	02/26/11 05:31	1.00

Method: SW846 8270D SIM - Polyaromatic Hydrocarbons by EPA 8270D SIM

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.223		0.0971	0.0272	ug/L		02/23/11 10:25	02/25/11 20:15	1.00
Acenaphthylene	ND		0.0971	0.0243	ug/L		02/23/11 10:25	02/25/11 20:15	1.00
Anthracene	ND		0.0971	0.0301	ug/L		02/23/11 10:25	02/25/11 20:15	1.00
Benzo (a) anthracene	ND		0.0971	0.0175	ug/L		02/23/11 10:25	02/25/11 20:15	1.00
Benzo (a) pyrene	ND		0.0971	0.0311	ug/L		02/23/11 10:25	02/25/11 20:15	1.00
Benzo (b) fluoranthene	ND		0.0971	0.0252	ug/L		02/23/11 10:25	02/25/11 20:15	1.00
Benzo (g,h,i) perylene	ND		0.0971	0.0233	ug/L		02/23/11 10:25	02/25/11 20:15	1.00
Benzo (k) fluoranthene	ND		0.0971	0.0388	ug/L		02/23/11 10:25	02/25/11 20:15	1.00
Chrysene	ND		0.0971	0.0340	ug/L		02/23/11 10:25	02/25/11 20:15	1.00
Dibenz (a,h) anthracene	ND		0.0971	0.0233	ug/L		02/23/11 10:25	02/25/11 20:15	1.00
Fluoranthene	ND		0.0971	0.0330	ug/L		02/23/11 10:25	02/25/11 20:15	1.00
Fluorene	0.262		0.0971	0.0243	ug/L		02/23/11 10:25	02/25/11 20:15	1.00
Indeno (1,2,3-cd) pyrene	ND		0.0971	0.0272	ug/L		02/23/11 10:25	02/25/11 20:15	1.00
1-Methylnaphthalene	1.33		0.0971	0.0214	ug/L		02/23/11 10:25	02/25/11 20:15	1.00
2-Methylnaphthalene	0.0777	J	0.0971	0.0330	ug/L		02/23/11 10:25	02/25/11 20:15	1.00
Naphthalene	0.456		0.0971	0.0243	ug/L		02/23/11 10:25	02/25/11 20:15	1.00
Phenanthrene	ND		0.0971	0.0612	ug/L		02/23/11 10:25	02/25/11 20:15	1.00
Pyrene	ND		0.0971	0.0243	ug/L		02/23/11 10:25	02/25/11 20:15	1.00

Surrogate	% Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	78		27 - 120	02/23/11 10:25	02/25/11 20:15	1.00
2-Fluorobiphenyl	79		29 - 120	02/23/11 10:25	02/25/11 20:15	1.00
Terphenyl-d14	89		13 - 120	02/23/11 10:25	02/25/11 20:15	1.00

Method: NWTPH-Gx - Purgeable Petroleum Hydrocarbons

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
GRO (C4-C12) NW	397		100	33.0	ug/L		02/17/11 11:50	02/23/11 13:33	1.00

Surrogate	% Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	78		50 - 150	02/17/11 11:50	02/23/11 13:33	1.00

Method: NWTPH-Dx - Extractable Petroleum Hydrocarbons with Silica Gel Treatment

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel	570	QP7, B	100	10.0	ug/L		02/24/11 06:20	02/24/11 16:12	1.00
Motor Oil	128	QP5, B	100	10.0	ug/L		02/24/11 06:20	02/24/11 16:12	1.00

AGENCY DRAFT

Analytical Data

Client: AMEC Earth & Environmental (13993)
 Project/Site: [none]

TestAmerica Job ID: NUB3024
 SDG: NUB3024

Client Sample ID: MW19-021711

Lab Sample ID: NUB3024-03

Date Collected: 02/17/11 11:50

Matrix: Ground Water

Date Received: 02/19/11 08:35

Sampler Name: Joseph Petrick

Sampler Phone Number: (206) 342-1760

Surrogate	% Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	93		50 - 150	02/24/11 06:20	02/24/11 16:12	1.00

Method: SW846 6020 - Dissolved Metals by Method 6020 - dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND	P7	2.00	0.0900	ug/L		02/28/11 08:45	03/01/11 12:50	1.00

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Client: AMEC Earth & Environmental (13993)
Project/Site: [none]

TestAmerica Job ID: NUB3024
SDG: NUB3024

Client Sample ID: MWA4-021711

Lab Sample ID: NUB3024-04

Date Collected: 02/17/11 13:20

Matrix: Ground Water

Date Received: 02/19/11 08:35

Sampler Name: Joseph Petrick

Sampler Phone Number: (206) 342-1760

Method: SW846 8260B - Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND	PV	0.500	0.170	ug/L		02/22/11 16:42	02/26/11 05:59	1.00
Ethylbenzene	ND	PV	0.500	0.170	ug/L		02/22/11 16:42	02/26/11 05:59	1.00
Methyl tert-Butyl Ether	ND	PV	0.500	0.170	ug/L		02/22/11 16:42	02/26/11 05:59	1.00
Toluene	ND	PV	0.500	0.170	ug/L		02/22/11 16:42	02/26/11 05:59	1.00
Xylenes, total	ND	PV	0.500	0.390	ug/L		02/22/11 16:42	02/26/11 05:59	1.00

Surrogate	% Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4	108		63 - 140	02/22/11 16:42	02/26/11 05:59	1.00
Dibromofluoromethane	101		73 - 131	02/22/11 16:42	02/26/11 05:59	1.00
Toluene-d8	96		80 - 120	02/22/11 16:42	02/26/11 05:59	1.00
4-Bromofluorobenzene	100		79 - 125	02/22/11 16:42	02/26/11 05:59	1.00

Method: SW846 8270D SIM - Polyaromatic Hydrocarbons by EPA 8270D SIM

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	4.14		0.0971	0.0272	ug/L		02/23/11 10:25	02/25/11 20:36	1.00
Acenaphthylene	ND		0.0971	0.0243	ug/L		02/23/11 10:25	02/25/11 20:36	1.00
Anthracene	0.165		0.0971	0.0301	ug/L		02/23/11 10:25	02/25/11 20:36	1.00
Benzo (a) anthracene	ND		0.0971	0.0175	ug/L		02/23/11 10:25	02/25/11 20:36	1.00
Benzo (a) pyrene	ND		0.0971	0.0311	ug/L		02/23/11 10:25	02/25/11 20:36	1.00
Benzo (b) fluoranthene	ND		0.0971	0.0252	ug/L		02/23/11 10:25	02/25/11 20:36	1.00
Benzo (g,h,i) perylene	ND		0.0971	0.0233	ug/L		02/23/11 10:25	02/25/11 20:36	1.00
Benzo (k) fluoranthene	ND		0.0971	0.0388	ug/L		02/23/11 10:25	02/25/11 20:36	1.00
Chrysene	ND		0.0971	0.0340	ug/L		02/23/11 10:25	02/25/11 20:36	1.00
Dibenz (a,h) anthracene	ND		0.0971	0.0233	ug/L		02/23/11 10:25	02/25/11 20:36	1.00
Fluoranthene	0.252		0.0971	0.0330	ug/L		02/23/11 10:25	02/25/11 20:36	1.00
Fluorene	1.85		0.0971	0.0243	ug/L		02/23/11 10:25	02/25/11 20:36	1.00
Indeno (1,2,3-cd) pyrene	ND		0.0971	0.0272	ug/L		02/23/11 10:25	02/25/11 20:36	1.00
1-Methylnaphthalene	1.32		0.0971	0.0214	ug/L		02/23/11 10:25	02/25/11 20:36	1.00
2-Methylnaphthalene	1.34		0.0971	0.0330	ug/L		02/23/11 10:25	02/25/11 20:36	1.00
Naphthalene	7.03		0.0971	0.0243	ug/L		02/23/11 10:25	02/25/11 20:36	1.00
Phenanthrene	2.06		0.0971	0.0612	ug/L		02/23/11 10:25	02/25/11 20:36	1.00
Pyrene	0.146		0.0971	0.0243	ug/L		02/23/11 10:25	02/25/11 20:36	1.00

Surrogate	% Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	70		27 - 120	02/23/11 10:25	02/25/11 20:36	1.00
2-Fluorobiphenyl	72		29 - 120	02/23/11 10:25	02/25/11 20:36	1.00
Terphenyl-d14	77		13 - 120	02/23/11 10:25	02/25/11 20:36	1.00

Method: NWTPH-Gx - Purgeable Petroleum Hydrocarbons

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
GRO (C4-C12) NW	ND	PV	100	33.0	ug/L		02/17/11 13:20	02/23/11 14:05	1.00

Surrogate	% Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	74		50 - 150	02/17/11 13:20	02/23/11 14:05	1.00

Method: NWTPH-Dx - Extractable Petroleum Hydrocarbons with Silica Gel Treatment

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel	667	QP7a, B	105	10.5	ug/L		02/24/11 06:20	02/24/11 16:31	1.00
Motor Oil	515	QP7a, B	105	10.5	ug/L		02/24/11 06:20	02/24/11 16:31	1.00

AGENCY DRAFT

Analytical Data

Client: AMEC Earth & Environmental (13993)
 Project/Site: [none]

TestAmerica Job ID: NUB3024
 SDG: NUB3024

Client Sample ID: MWA4-021711

Lab Sample ID: NUB3024-04

Date Collected: 02/17/11 13:20

Matrix: Ground Water

Date Received: 02/19/11 08:35

Sampler Name: Joseph Petrick

Sampler Phone Number: (206) 342-1760

Surrogate	% Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	93		50 - 150	02/24/11 06:20	02/24/11 16:31	1.00

Method: SW846 6020 - Dissolved Metals by Method 6020 - dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND	P7	200	9.00	ug/L		02/28/11 08:45	03/01/11 12:54	100

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Client: AMEC Earth & Environmental (13993)
Project/Site: [none]

TestAmerica Job ID: NUB3024
SDG: NUB3024

Client Sample ID: MWA3-021711

Lab Sample ID: NUB3024-05

Date Collected: 02/17/11 14:50

Matrix: Ground Water

Date Received: 02/19/11 08:35

Sampler Name: Joseph Petrick

Sampler Phone Number: (206) 342-1760

Method: SW846 8260B - Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.500	0.170	ug/L		02/22/11 16:42	02/26/11 06:26	1.00
Ethylbenzene	ND		0.500	0.170	ug/L		02/22/11 16:42	02/26/11 06:26	1.00
Methyl tert-Butyl Ether	ND		0.500	0.170	ug/L		02/22/11 16:42	02/26/11 06:26	1.00
Toluene	ND		0.500	0.170	ug/L		02/22/11 16:42	02/26/11 06:26	1.00
Xylenes, total	ND		0.500	0.390	ug/L		02/22/11 16:42	02/26/11 06:26	1.00

Surrogate	% Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4	96		63 - 140	02/22/11 16:42	02/26/11 06:26	1.00
Dibromofluoromethane	98		73 - 131	02/22/11 16:42	02/26/11 06:26	1.00
Toluene-d8	98		80 - 120	02/22/11 16:42	02/26/11 06:26	1.00
4-Bromofluorobenzene	99		79 - 125	02/22/11 16:42	02/26/11 06:26	1.00

Method: SW846 8270D SIM - Polyaromatic Hydrocarbons by EPA 8270D SIM

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.359		0.0971	0.0272	ug/L		02/23/11 10:25	02/25/11 20:57	1.00
Acenaphthylene	ND		0.0971	0.0243	ug/L		02/23/11 10:25	02/25/11 20:57	1.00
Anthracene	ND		0.0971	0.0301	ug/L		02/23/11 10:25	02/25/11 20:57	1.00
Benzo (a) anthracene	ND		0.0971	0.0175	ug/L		02/23/11 10:25	02/25/11 20:57	1.00
Benzo (a) pyrene	ND		0.0971	0.0311	ug/L		02/23/11 10:25	02/25/11 20:57	1.00
Benzo (b) fluoranthene	ND		0.0971	0.0252	ug/L		02/23/11 10:25	02/25/11 20:57	1.00
Benzo (g,h,i) perylene	ND		0.0971	0.0233	ug/L		02/23/11 10:25	02/25/11 20:57	1.00
Benzo (k) fluoranthene	ND		0.0971	0.0388	ug/L		02/23/11 10:25	02/25/11 20:57	1.00
Chrysene	ND		0.0971	0.0340	ug/L		02/23/11 10:25	02/25/11 20:57	1.00
Dibenz (a,h) anthracene	ND		0.0971	0.0233	ug/L		02/23/11 10:25	02/25/11 20:57	1.00
Fluoranthene	0.0485	J	0.0971	0.0330	ug/L		02/23/11 10:25	02/25/11 20:57	1.00
Fluorene	0.320		0.0971	0.0243	ug/L		02/23/11 10:25	02/25/11 20:57	1.00
Indeno (1,2,3-cd) pyrene	ND		0.0971	0.0272	ug/L		02/23/11 10:25	02/25/11 20:57	1.00
1-Methylnaphthalene	ND		0.0971	0.0214	ug/L		02/23/11 10:25	02/25/11 20:57	1.00
2-Methylnaphthalene	ND		0.0971	0.0330	ug/L		02/23/11 10:25	02/25/11 20:57	1.00
Naphthalene	0.0680	J	0.0971	0.0243	ug/L		02/23/11 10:25	02/25/11 20:57	1.00
Phenanthrene	0.621		0.0971	0.0612	ug/L		02/23/11 10:25	02/25/11 20:57	1.00
Pyrene	ND		0.0971	0.0243	ug/L		02/23/11 10:25	02/25/11 20:57	1.00

Surrogate	% Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	70		27 - 120	02/23/11 10:25	02/25/11 20:57	1.00
2-Fluorobiphenyl	69		29 - 120	02/23/11 10:25	02/25/11 20:57	1.00
Terphenyl-d14	69		13 - 120	02/23/11 10:25	02/25/11 20:57	1.00

Method: NWTPH-Gx - Purgeable Petroleum Hydrocarbons

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
GRO (C4-C12) NW	ND		100	33.0	ug/L		02/17/11 14:50	02/23/11 14:35	1.00

Surrogate	% Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	76		50 - 150	02/17/11 14:50	02/23/11 14:35	1.00

Method: NWTPH-Dx - Extractable Petroleum Hydrocarbons with Silica Gel Treatment

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel	791	QP7a, B	96.2	9.62	ug/L		02/24/11 06:20	02/24/11 16:47	1.00
Motor Oil	220	QP7a, B	96.2	9.62	ug/L		02/24/11 06:20	02/24/11 16:47	1.00

AGENCY DRAFT

Analytical Data

Client: AMEC Earth & Environmental (13993)
 Project/Site: [none]

TestAmerica Job ID: NUB3024
 SDG: NUB3024

Client Sample ID: MWA3-021711

Lab Sample ID: NUB3024-05

Date Collected: 02/17/11 14:50

Matrix: Ground Water

Date Received: 02/19/11 08:35

Sampler Name: Joseph Petrick

Sampler Phone Number: (206) 342-1760

Surrogate	% Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	79		50 - 150	02/24/11 06:20	02/24/11 16:47	1.00

Method: SW846 6020 - Dissolved Metals by Method 6020 - dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.230	P7, J	2.00	0.0900	ug/L		02/28/11 08:45	03/01/11 12:58	1.00

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Client: AMEC Earth & Environmental (13993)
Project/Site: [none]

TestAmerica Job ID: NUB3024
SDG: NUB3024

Client Sample ID: MWA2-021711

Lab Sample ID: NUB3024-06

Date Collected: 02/17/11 17:05

Matrix: Ground Water

Date Received: 02/19/11 08:35

Sampler Name: Joseph Petrick

Sampler Phone Number: (206) 342-1760

Method: SW846 8260B - Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.500	0.170	ug/L		02/22/11 16:42	02/26/11 06:54	1.00
Ethylbenzene	ND		0.500	0.170	ug/L		02/22/11 16:42	02/26/11 06:54	1.00
Methyl tert-Butyl Ether	ND		0.500	0.170	ug/L		02/22/11 16:42	02/26/11 06:54	1.00
Toluene	ND		0.500	0.170	ug/L		02/22/11 16:42	02/26/11 06:54	1.00
Xylenes, total	ND		0.500	0.390	ug/L		02/22/11 16:42	02/26/11 06:54	1.00
1,2-Dibromoethane (EDB)	ND		0.500	0.180	ug/L		02/22/11 16:42	02/26/11 06:54	1.00
1,2-Dichloroethane	ND		0.500	0.410	ug/L		02/22/11 16:42	02/26/11 06:54	1.00

Surrogate	% Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4	97		63 - 140	02/22/11 16:42	02/26/11 06:54	1.00
Dibromofluoromethane	100		73 - 131	02/22/11 16:42	02/26/11 06:54	1.00
Toluene-d8	99		80 - 120	02/22/11 16:42	02/26/11 06:54	1.00
4-Bromofluorobenzene	100		79 - 125	02/22/11 16:42	02/26/11 06:54	1.00

Method: SW846 8270D SIM - Polyaromatic Hydrocarbons by EPA 8270D SIM

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	1.00		0.0971	0.0272	ug/L		02/23/11 10:25	02/25/11 21:19	1.00
Acenaphthylene	ND		0.0971	0.0243	ug/L		02/23/11 10:25	02/25/11 21:19	1.00
Anthracene	ND		0.0971	0.0301	ug/L		02/23/11 10:25	02/25/11 21:19	1.00
Benzo (a) anthracene	ND		0.0971	0.0175	ug/L		02/23/11 10:25	02/25/11 21:19	1.00
Benzo (a) pyrene	ND		0.0971	0.0311	ug/L		02/23/11 10:25	02/25/11 21:19	1.00
Benzo (b) fluoranthene	ND		0.0971	0.0252	ug/L		02/23/11 10:25	02/25/11 21:19	1.00
Benzo (g,h,i) perylene	ND		0.0971	0.0233	ug/L		02/23/11 10:25	02/25/11 21:19	1.00
Benzo (k) fluoranthene	ND		0.0971	0.0388	ug/L		02/23/11 10:25	02/25/11 21:19	1.00
Chrysene	ND		0.0971	0.0340	ug/L		02/23/11 10:25	02/25/11 21:19	1.00
Dibenz (a,h) anthracene	ND		0.0971	0.0233	ug/L		02/23/11 10:25	02/25/11 21:19	1.00
Fluoranthene	ND		0.0971	0.0330	ug/L		02/23/11 10:25	02/25/11 21:19	1.00
Fluorene	0.204		0.0971	0.0243	ug/L		02/23/11 10:25	02/25/11 21:19	1.00
Indeno (1,2,3-cd) pyrene	ND		0.0971	0.0272	ug/L		02/23/11 10:25	02/25/11 21:19	1.00
1-Methylnaphthalene	ND		0.0971	0.0214	ug/L		02/23/11 10:25	02/25/11 21:19	1.00
2-Methylnaphthalene	ND		0.0971	0.0330	ug/L		02/23/11 10:25	02/25/11 21:19	1.00
Naphthalene	ND		0.0971	0.0243	ug/L		02/23/11 10:25	02/25/11 21:19	1.00
Phenanthrene	ND		0.0971	0.0612	ug/L		02/23/11 10:25	02/25/11 21:19	1.00
Pyrene	ND		0.0971	0.0243	ug/L		02/23/11 10:25	02/25/11 21:19	1.00

Surrogate	% Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	68		27 - 120	02/23/11 10:25	02/25/11 21:19	1.00
2-Fluorobiphenyl	64		29 - 120	02/23/11 10:25	02/25/11 21:19	1.00
Terphenyl-d14	63		13 - 120	02/23/11 10:25	02/25/11 21:19	1.00

Method: NWTPH-Gx - Purgeable Petroleum Hydrocarbons

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
GRO (C4-C12) NW	100		100	33.0	ug/L		02/17/11 17:05	02/23/11 15:05	1.00

Surrogate	% Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	81		50 - 150	02/17/11 17:05	02/23/11 15:05	1.00

Method: NWTPH-Dx - Extractable Petroleum Hydrocarbons with Silica Gel Treatment

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel	1720	QP7a, B	97.1	9.71	ug/L		02/24/11 06:20	02/24/11 17:06	1.00
Motor Oil	421	QP7a, B	97.1	9.71	ug/L		02/24/11 06:20	02/24/11 17:06	1.00

AGENCY DRAFT

Analytical Data

Client: AMEC Earth & Environmental (13993)
 Project/Site: [none]

TestAmerica Job ID: NUB3024
 SDG: NUB3024

Client Sample ID: MWA2-021711

Lab Sample ID: NUB3024-06

Date Collected: 02/17/11 17:05

Matrix: Ground Water

Date Received: 02/19/11 08:35

Sampler Name: Joseph Petrick

Sampler Phone Number: (206) 342-1760

Surrogate	% Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	92		50 - 150	02/24/11 06:20	02/24/11 17:06	1.00

Method: SW846 6020 - Dissolved Metals by Method 6020 - dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND	P7	2.00	0.0900	ug/L		02/28/11 08:45	03/01/11 13:02	1.00

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Client: AMEC Earth & Environmental (13993)
Project/Site: [none]

TestAmerica Job ID: NUB3024
SDG: NUB3024

Client Sample ID: MWA5-021811

Lab Sample ID: NUB3024-07

Date Collected: 02/18/11 09:45

Matrix: Ground Water

Date Received: 02/19/11 08:35

Sampler Name: Joseph Petrick

Sampler Phone Number: (206) 342-1760

Method: SW846 8260B - Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.270	J	0.500	0.170	ug/L		02/22/11 16:42	02/26/11 07:21	1.00
Ethylbenzene	ND		0.500	0.170	ug/L		02/22/11 16:42	02/26/11 07:21	1.00
Methyl tert-Butyl Ether	ND		0.500	0.170	ug/L		02/22/11 16:42	02/26/11 07:21	1.00
Toluene	ND		0.500	0.170	ug/L		02/22/11 16:42	02/26/11 07:21	1.00
Xylenes, total	ND		0.500	0.390	ug/L		02/22/11 16:42	02/26/11 07:21	1.00

Surrogate	% Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4	97		63 - 140	02/22/11 16:42	02/26/11 07:21	1.00
Dibromofluoromethane	100		73 - 131	02/22/11 16:42	02/26/11 07:21	1.00
Toluene-d8	98		80 - 120	02/22/11 16:42	02/26/11 07:21	1.00
4-Bromofluorobenzene	101		79 - 125	02/22/11 16:42	02/26/11 07:21	1.00

Method: SW846 8270D SIM - Polyaromatic Hydrocarbons by EPA 8270D SIM

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	1.18		0.0990	0.0277	ug/L		02/23/11 10:25	02/25/11 21:40	1.00
Acenaphthylene	ND		0.0990	0.0248	ug/L		02/23/11 10:25	02/25/11 21:40	1.00
Anthracene	ND		0.0990	0.0307	ug/L		02/23/11 10:25	02/25/11 21:40	1.00
Benzo (a) anthracene	ND		0.0990	0.0178	ug/L		02/23/11 10:25	02/25/11 21:40	1.00
Benzo (a) pyrene	ND		0.0990	0.0317	ug/L		02/23/11 10:25	02/25/11 21:40	1.00
Benzo (b) fluoranthene	ND		0.0990	0.0257	ug/L		02/23/11 10:25	02/25/11 21:40	1.00
Benzo (g,h,i) perylene	ND		0.0990	0.0238	ug/L		02/23/11 10:25	02/25/11 21:40	1.00
Benzo (k) fluoranthene	ND		0.0990	0.0396	ug/L		02/23/11 10:25	02/25/11 21:40	1.00
Chrysene	ND		0.0990	0.0347	ug/L		02/23/11 10:25	02/25/11 21:40	1.00
Dibenz (a,h) anthracene	ND		0.0990	0.0238	ug/L		02/23/11 10:25	02/25/11 21:40	1.00
Fluoranthene	ND		0.0990	0.0337	ug/L		02/23/11 10:25	02/25/11 21:40	1.00
Fluorene	ND		0.0990	0.0248	ug/L		02/23/11 10:25	02/25/11 21:40	1.00
Indeno (1,2,3-cd) pyrene	ND		0.0990	0.0277	ug/L		02/23/11 10:25	02/25/11 21:40	1.00
1-Methylnaphthalene	ND		0.0990	0.0218	ug/L		02/23/11 10:25	02/25/11 21:40	1.00
2-Methylnaphthalene	ND		0.0990	0.0337	ug/L		02/23/11 10:25	02/25/11 21:40	1.00
Naphthalene	ND		0.0990	0.0248	ug/L		02/23/11 10:25	02/25/11 21:40	1.00
Phenanthrene	0.109		0.0990	0.0624	ug/L		02/23/11 10:25	02/25/11 21:40	1.00
Pyrene	ND		0.0990	0.0248	ug/L		02/23/11 10:25	02/25/11 21:40	1.00

Surrogate	% Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	71		27 - 120	02/23/11 10:25	02/25/11 21:40	1.00
2-Fluorobiphenyl	75		29 - 120	02/23/11 10:25	02/25/11 21:40	1.00
Terphenyl-d14	79		13 - 120	02/23/11 10:25	02/25/11 21:40	1.00

Method: NWTPH-Gx - Purgeable Petroleum Hydrocarbons

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
GRO (C4-C12) NW	ND		100	33.0	ug/L		02/18/11 09:45	02/23/11 15:35	1.00

Surrogate	% Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	77		50 - 150	02/18/11 09:45	02/23/11 15:35	1.00

Method: NWTPH-Dx - Extractable Petroleum Hydrocarbons with Silica Gel Treatment

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel	2800	QP7a, B	98.0	9.80	ug/L		02/24/11 06:20	02/24/11 17:22	1.00
Motor Oil	523	QP7a, B	98.0	9.80	ug/L		02/24/11 06:20	02/24/11 17:22	1.00

AGENCY DRAFT

Analytical Data

Client: AMEC Earth & Environmental (13993)
 Project/Site: [none]

TestAmerica Job ID: NUB3024
 SDG: NUB3024

Client Sample ID: MWA5-021811

Lab Sample ID: NUB3024-07

Date Collected: 02/18/11 09:45

Matrix: Ground Water

Date Received: 02/19/11 08:35

Sampler Name: Joseph Petrick

Sampler Phone Number: (206) 342-1760

Surrogate	% Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
<i>o-Terphenyl</i>	85		50 - 150	02/24/11 06:20	02/24/11 17:22	1.00

Method: SW846 6020 - Dissolved Metals by Method 6020 - dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND	P7	2.00	0.0900	ug/L		02/28/11 08:45	03/01/11 13:14	1.00

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Client: AMEC Earth & Environmental (13993)
Project/Site: [none]

TestAmerica Job ID: NUB3024
SDG: NUB3024

Client Sample ID: MWA6-021811

Lab Sample ID: NUB3024-08

Date Collected: 02/18/11 10:55

Matrix: Ground Water

Date Received: 02/19/11 08:35

Sampler Name: Joseph Petrick

Sampler Phone Number: (206) 342-1760

Method: SW846 8260B - Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.500	0.170	ug/L		02/22/11 16:42	02/26/11 07:49	1.00
Ethylbenzene	ND		0.500	0.170	ug/L		02/22/11 16:42	02/26/11 07:49	1.00
Methyl tert-Butyl Ether	ND		0.500	0.170	ug/L		02/22/11 16:42	02/26/11 07:49	1.00
Toluene	ND		0.500	0.170	ug/L		02/22/11 16:42	02/26/11 07:49	1.00
Xylenes, total	ND		0.500	0.390	ug/L		02/22/11 16:42	02/26/11 07:49	1.00

Surrogate	% Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4	100		63 - 140	02/22/11 16:42	02/26/11 07:49	1.00
Dibromofluoromethane	99		73 - 131	02/22/11 16:42	02/26/11 07:49	1.00
Toluene-d8	98		80 - 120	02/22/11 16:42	02/26/11 07:49	1.00
4-Bromofluorobenzene	100		79 - 125	02/22/11 16:42	02/26/11 07:49	1.00

Method: SW846 8270D SIM - Polyaromatic Hydrocarbons by EPA 8270D SIM

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.408		0.0971	0.0272	ug/L		02/23/11 10:25	02/25/11 22:01	1.00
Acenaphthylene	ND		0.0971	0.0243	ug/L		02/23/11 10:25	02/25/11 22:01	1.00
Anthracene	ND		0.0971	0.0301	ug/L		02/23/11 10:25	02/25/11 22:01	1.00
Benzo (a) anthracene	ND		0.0971	0.0175	ug/L		02/23/11 10:25	02/25/11 22:01	1.00
Benzo (a) pyrene	ND		0.0971	0.0311	ug/L		02/23/11 10:25	02/25/11 22:01	1.00
Benzo (b) fluoranthene	ND		0.0971	0.0252	ug/L		02/23/11 10:25	02/25/11 22:01	1.00
Benzo (g,h,i) perylene	ND		0.0971	0.0233	ug/L		02/23/11 10:25	02/25/11 22:01	1.00
Benzo (k) fluoranthene	ND		0.0971	0.0388	ug/L		02/23/11 10:25	02/25/11 22:01	1.00
Chrysene	ND		0.0971	0.0340	ug/L		02/23/11 10:25	02/25/11 22:01	1.00
Dibenz (a,h) anthracene	ND		0.0971	0.0233	ug/L		02/23/11 10:25	02/25/11 22:01	1.00
Fluoranthene	0.0680	J	0.0971	0.0330	ug/L		02/23/11 10:25	02/25/11 22:01	1.00
Fluorene	0.107		0.0971	0.0243	ug/L		02/23/11 10:25	02/25/11 22:01	1.00
Indeno (1,2,3-cd) pyrene	ND		0.0971	0.0272	ug/L		02/23/11 10:25	02/25/11 22:01	1.00
1-Methylnaphthalene	ND		0.0971	0.0214	ug/L		02/23/11 10:25	02/25/11 22:01	1.00
2-Methylnaphthalene	ND		0.0971	0.0330	ug/L		02/23/11 10:25	02/25/11 22:01	1.00
Naphthalene	ND		0.0971	0.0243	ug/L		02/23/11 10:25	02/25/11 22:01	1.00
Phenanthrene	0.155		0.0971	0.0612	ug/L		02/23/11 10:25	02/25/11 22:01	1.00
Pyrene	0.0485	J	0.0971	0.0243	ug/L		02/23/11 10:25	02/25/11 22:01	1.00

Surrogate	% Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	63		27 - 120	02/23/11 10:25	02/25/11 22:01	1.00
2-Fluorobiphenyl	57		29 - 120	02/23/11 10:25	02/25/11 22:01	1.00
Terphenyl-d14	55		13 - 120	02/23/11 10:25	02/25/11 22:01	1.00

Method: NWTPH-Gx - Purgeable Petroleum Hydrocarbons

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
GRO (C4-C12) NW	ND		100	33.0	ug/L		02/18/11 10:55	02/23/11 16:05	1.00

Surrogate	% Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	79		50 - 150	02/18/11 10:55	02/23/11 16:05	1.00

Method: NWTPH-Dx - Extractable Petroleum Hydrocarbons with Silica Gel Treatment

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel	1500	QP7a, B	99.0	9.90	ug/L		02/24/11 06:25	02/24/11 18:44	1.00
Motor Oil	273	QP7a, B	99.0	9.90	ug/L		02/24/11 06:25	02/24/11 18:44	1.00

AGENCY DRAFT

Analytical Data

Client: AMEC Earth & Environmental (13993)
 Project/Site: [none]

TestAmerica Job ID: NUB3024
 SDG: NUB3024

Client Sample ID: MWA6-021811

Lab Sample ID: NUB3024-08

Date Collected: 02/18/11 10:55

Matrix: Ground Water

Date Received: 02/19/11 08:35

Sampler Name: Joseph Petrick

Sampler Phone Number: (206) 342-1760

Surrogate	% Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	91		50 - 150	02/24/11 06:25	02/24/11 18:44	1.00

Method: SW846 6020 - Dissolved Metals by Method 6020 - dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.480	P7, J	2.00	0.0900	ug/L		02/28/11 08:45	03/01/11 13:18	1.00

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Client: AMEC Earth & Environmental (13993)
Project/Site: [none]

TestAmerica Job ID: NUB3024
SDG: NUB3024

Client Sample ID: MWA1-021811

Lab Sample ID: NUB3024-09

Date Collected: 02/18/11 12:12

Matrix: Ground Water

Date Received: 02/19/11 08:35

Sampler Name: Joseph Petrick

Sampler Phone Number: (206) 342-1760

Method: SW846 8260B - Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.500	0.170	ug/L		02/22/11 16:42	02/26/11 08:16	1.00
Ethylbenzene	ND		0.500	0.170	ug/L		02/22/11 16:42	02/26/11 08:16	1.00
Methyl tert-Butyl Ether	ND		0.500	0.170	ug/L		02/22/11 16:42	02/26/11 08:16	1.00
Toluene	ND		0.500	0.170	ug/L		02/22/11 16:42	02/26/11 08:16	1.00
Xylenes, total	ND		0.500	0.390	ug/L		02/22/11 16:42	02/26/11 08:16	1.00
1,2-Dibromoethane (EDB)	ND		0.500	0.180	ug/L		02/22/11 16:42	02/26/11 08:16	1.00
1,2-Dichloroethane	ND		0.500	0.410	ug/L		02/22/11 16:42	02/26/11 08:16	1.00
Surrogate	% Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4	100		63 - 140				02/22/11 16:42	02/26/11 08:16	1.00
Dibromofluoromethane	99		73 - 131				02/22/11 16:42	02/26/11 08:16	1.00
Toluene-d8	96		80 - 120				02/22/11 16:42	02/26/11 08:16	1.00
4-Bromofluorobenzene	99		79 - 125				02/22/11 16:42	02/26/11 08:16	1.00

Method: SW846 8270D SIM - Polyaromatic Hydrocarbons by EPA 8270D SIM

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.0980	0.0275	ug/L		02/23/11 10:25	02/25/11 22:23	1.00
Acenaphthylene	ND		0.0980	0.0245	ug/L		02/23/11 10:25	02/25/11 22:23	1.00
Anthracene	ND		0.0980	0.0304	ug/L		02/23/11 10:25	02/25/11 22:23	1.00
Benzo (a) anthracene	ND		0.0980	0.0176	ug/L		02/23/11 10:25	02/25/11 22:23	1.00
Benzo (a) pyrene	ND		0.0980	0.0314	ug/L		02/23/11 10:25	02/25/11 22:23	1.00
Benzo (b) fluoranthene	ND		0.0980	0.0255	ug/L		02/23/11 10:25	02/25/11 22:23	1.00
Benzo (g,h,i) perylene	ND		0.0980	0.0235	ug/L		02/23/11 10:25	02/25/11 22:23	1.00
Benzo (k) fluoranthene	ND		0.0980	0.0392	ug/L		02/23/11 10:25	02/25/11 22:23	1.00
Chrysene	ND		0.0980	0.0343	ug/L		02/23/11 10:25	02/25/11 22:23	1.00
Dibenz (a,h) anthracene	ND		0.0980	0.0235	ug/L		02/23/11 10:25	02/25/11 22:23	1.00
Fluoranthene	ND		0.0980	0.0333	ug/L		02/23/11 10:25	02/25/11 22:23	1.00
Fluorene	0.127		0.0980	0.0245	ug/L		02/23/11 10:25	02/25/11 22:23	1.00
Indeno (1,2,3-cd) pyrene	ND		0.0980	0.0275	ug/L		02/23/11 10:25	02/25/11 22:23	1.00
1-Methylnaphthalene	0.0588	J	0.0980	0.0216	ug/L		02/23/11 10:25	02/25/11 22:23	1.00
2-Methylnaphthalene	ND		0.0980	0.0333	ug/L		02/23/11 10:25	02/25/11 22:23	1.00
Naphthalene	ND		0.0980	0.0245	ug/L		02/23/11 10:25	02/25/11 22:23	1.00
Phenanthrene	0.0784	J	0.0980	0.0618	ug/L		02/23/11 10:25	02/25/11 22:23	1.00
Pyrene	ND		0.0980	0.0245	ug/L		02/23/11 10:25	02/25/11 22:23	1.00
Surrogate	% Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	72		27 - 120				02/23/11 10:25	02/25/11 22:23	1.00
2-Fluorobiphenyl	67		29 - 120				02/23/11 10:25	02/25/11 22:23	1.00
Terphenyl-d14	62		13 - 120				02/23/11 10:25	02/25/11 22:23	1.00

Method: NWTPH-Gx - Purgeable Petroleum Hydrocarbons

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
GRO (C4-C12) NW	ND		100	33.0	ug/L		02/18/11 12:12	02/23/11 16:35	1.00
Surrogate	% Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	80		50 - 150				02/18/11 12:12	02/23/11 16:35	1.00

Method: NWTPH-Dx - Extractable Petroleum Hydrocarbons with Silica Gel Treatment

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel	3260	QP7a, B	97.1	9.71	ug/L		02/24/11 06:25	02/24/11 19:00	1.00
Motor Oil	529	QP7a, B	97.1	9.71	ug/L		02/24/11 06:25	02/24/11 19:00	1.00

AGENCY DRAFT

Analytical Data

Client: AMEC Earth & Environmental (13993)
 Project/Site: [none]

TestAmerica Job ID: NUB3024
 SDG: NUB3024

Client Sample ID: MWA1-021811

Lab Sample ID: NUB3024-09

Date Collected: 02/18/11 12:12

Matrix: Ground Water

Date Received: 02/19/11 08:35

Sampler Name: Joseph Petrick

Sampler Phone Number: (206) 342-1760

Surrogate	% Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	84		50 - 150	02/24/11 06:25	02/24/11 19:00	1.00

Method: SW846 6020 - Dissolved Metals by Method 6020 - dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND	P7	2.00	0.0900	ug/L		02/28/11 08:45	03/01/11 13:22	1.00

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Client: AMEC Earth & Environmental (13993)
Project/Site: [none]

TestAmerica Job ID: NUB3024
SDG: NUB3024

Client Sample ID: MWA7-021811

Lab Sample ID: NUB3024-10

Date Collected: 02/18/11 13:15

Matrix: Ground Water

Date Received: 02/19/11 08:35

Sampler Name: Joseph Petrick

Sampler Phone Number: (206) 342-1760

Method: SW846 8260B - Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.500	0.170	ug/L		02/22/11 16:42	02/26/11 08:43	1.00
Ethylbenzene	ND		0.500	0.170	ug/L		02/22/11 16:42	02/26/11 08:43	1.00
Methyl tert-Butyl Ether	ND		0.500	0.170	ug/L		02/22/11 16:42	02/26/11 08:43	1.00
Toluene	ND		0.500	0.170	ug/L		02/22/11 16:42	02/26/11 08:43	1.00
Xylenes, total	ND		0.500	0.390	ug/L		02/22/11 16:42	02/26/11 08:43	1.00

Surrogate	% Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4	99		63 - 140	02/22/11 16:42	02/26/11 08:43	1.00
Dibromofluoromethane	98		73 - 131	02/22/11 16:42	02/26/11 08:43	1.00
Toluene-d8	98		80 - 120	02/22/11 16:42	02/26/11 08:43	1.00
4-Bromofluorobenzene	100		79 - 125	02/22/11 16:42	02/26/11 08:43	1.00

Method: SW846 8270D SIM - Polyaromatic Hydrocarbons by EPA 8270D SIM

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.0980	0.0275	ug/L		02/23/11 10:25	02/25/11 22:44	1.00
Acenaphthylene	ND		0.0980	0.0245	ug/L		02/23/11 10:25	02/25/11 22:44	1.00
Anthracene	ND		0.0980	0.0304	ug/L		02/23/11 10:25	02/25/11 22:44	1.00
Benzo (a) anthracene	ND		0.0980	0.0176	ug/L		02/23/11 10:25	02/25/11 22:44	1.00
Benzo (a) pyrene	ND		0.0980	0.0314	ug/L		02/23/11 10:25	02/25/11 22:44	1.00
Benzo (b) fluoranthene	ND		0.0980	0.0255	ug/L		02/23/11 10:25	02/25/11 22:44	1.00
Benzo (g,h,i) perylene	ND		0.0980	0.0235	ug/L		02/23/11 10:25	02/25/11 22:44	1.00
Benzo (k) fluoranthene	ND		0.0980	0.0392	ug/L		02/23/11 10:25	02/25/11 22:44	1.00
Chrysene	ND		0.0980	0.0343	ug/L		02/23/11 10:25	02/25/11 22:44	1.00
Dibenz (a,h) anthracene	ND		0.0980	0.0235	ug/L		02/23/11 10:25	02/25/11 22:44	1.00
Fluoranthene	ND		0.0980	0.0333	ug/L		02/23/11 10:25	02/25/11 22:44	1.00
Fluorene	ND		0.0980	0.0245	ug/L		02/23/11 10:25	02/25/11 22:44	1.00
Indeno (1,2,3-cd) pyrene	ND		0.0980	0.0275	ug/L		02/23/11 10:25	02/25/11 22:44	1.00
1-Methylnaphthalene	ND		0.0980	0.0216	ug/L		02/23/11 10:25	02/25/11 22:44	1.00
2-Methylnaphthalene	ND		0.0980	0.0333	ug/L		02/23/11 10:25	02/25/11 22:44	1.00
Naphthalene	ND		0.0980	0.0245	ug/L		02/23/11 10:25	02/25/11 22:44	1.00
Phenanthrene	ND		0.0980	0.0618	ug/L		02/23/11 10:25	02/25/11 22:44	1.00
Pyrene	ND		0.0980	0.0245	ug/L		02/23/11 10:25	02/25/11 22:44	1.00

Surrogate	% Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	73		27 - 120	02/23/11 10:25	02/25/11 22:44	1.00
2-Fluorobiphenyl	77		29 - 120	02/23/11 10:25	02/25/11 22:44	1.00
Terphenyl-d14	73		13 - 120	02/23/11 10:25	02/25/11 22:44	1.00

Method: NWTPH-Gx - Purgeable Petroleum Hydrocarbons

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
GRO (C4-C12) NW	ND		100	33.0	ug/L		02/18/11 13:15	02/23/11 17:05	1.00

Surrogate	% Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	80		50 - 150	02/18/11 13:15	02/23/11 17:05	1.00

Method: NWTPH-Dx - Extractable Petroleum Hydrocarbons with Silica Gel Treatment

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel	14.0	J, B	94.3	9.43	ug/L		02/24/11 06:25	02/24/11 19:16	1.00
Motor Oil	44.4	J, B	94.3	9.43	ug/L		02/24/11 06:25	02/24/11 19:16	1.00

AGENCY DRAFT

Analytical Data

Client: AMEC Earth & Environmental (13993)
 Project/Site: [none]

TestAmerica Job ID: NUB3024
 SDG: NUB3024

Client Sample ID: MWA7-021811

Lab Sample ID: NUB3024-10

Date Collected: 02/18/11 13:15

Matrix: Ground Water

Date Received: 02/19/11 08:35

Sampler Name: Joseph Petrick

Sampler Phone Number: (206) 342-1760

Surrogate	% Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	84		50 - 150	02/24/11 06:25	02/24/11 19:16	1.00

Method: SW846 6020 - Dissolved Metals by Method 6020 - dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND	P7	2.00	0.0900	ug/L		02/28/11 08:45	03/01/11 13:26	1.00

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Client: AMEC Earth & Environmental (13993)
Project/Site: [none]

TestAmerica Job ID: NUB3024
SDG: NUB3024

Client Sample ID: Dup-021811

Lab Sample ID: NUB3024-11

Date Collected: 02/18/11 00:01

Matrix: Ground Water

Date Received: 02/19/11 08:35

Sampler Name: Joseph Petrick

Sampler Phone Number: (206) 342-1760

Method: SW846 8260B - Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.500	0.170	ug/L		02/22/11 16:42	02/26/11 09:11	1.00
Ethylbenzene	ND		0.500	0.170	ug/L		02/22/11 16:42	02/26/11 09:11	1.00
Methyl tert-Butyl Ether	ND		0.500	0.170	ug/L		02/22/11 16:42	02/26/11 09:11	1.00
Toluene	ND		0.500	0.170	ug/L		02/22/11 16:42	02/26/11 09:11	1.00
Xylenes, total	ND		0.500	0.390	ug/L		02/22/11 16:42	02/26/11 09:11	1.00

Surrogate	% Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4	97		63 - 140	02/22/11 16:42	02/26/11 09:11	1.00
Dibromofluoromethane	99		73 - 131	02/22/11 16:42	02/26/11 09:11	1.00
Toluene-d8	98		80 - 120	02/22/11 16:42	02/26/11 09:11	1.00
4-Bromofluorobenzene	102		79 - 125	02/22/11 16:42	02/26/11 09:11	1.00

Method: SW846 8270D SIM - Polyaromatic Hydrocarbons by EPA 8270D SIM

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.0990	0.0277	ug/L		02/23/11 10:25	02/25/11 23:06	1.00
Acenaphthylene	ND		0.0990	0.0248	ug/L		02/23/11 10:25	02/25/11 23:06	1.00
Anthracene	ND		0.0990	0.0307	ug/L		02/23/11 10:25	02/25/11 23:06	1.00
Benzo (a) anthracene	ND		0.0990	0.0178	ug/L		02/23/11 10:25	02/25/11 23:06	1.00
Benzo (a) pyrene	ND		0.0990	0.0317	ug/L		02/23/11 10:25	02/25/11 23:06	1.00
Benzo (b) fluoranthene	ND		0.0990	0.0257	ug/L		02/23/11 10:25	02/25/11 23:06	1.00
Benzo (g,h,i) perylene	ND		0.0990	0.0238	ug/L		02/23/11 10:25	02/25/11 23:06	1.00
Benzo (k) fluoranthene	ND		0.0990	0.0396	ug/L		02/23/11 10:25	02/25/11 23:06	1.00
Chrysene	ND		0.0990	0.0347	ug/L		02/23/11 10:25	02/25/11 23:06	1.00
Dibenz (a,h) anthracene	ND		0.0990	0.0238	ug/L		02/23/11 10:25	02/25/11 23:06	1.00
Fluoranthene	ND		0.0990	0.0337	ug/L		02/23/11 10:25	02/25/11 23:06	1.00
Fluorene	ND		0.0990	0.0248	ug/L		02/23/11 10:25	02/25/11 23:06	1.00
Indeno (1,2,3-cd) pyrene	ND		0.0990	0.0277	ug/L		02/23/11 10:25	02/25/11 23:06	1.00
1-Methylnaphthalene	ND		0.0990	0.0218	ug/L		02/23/11 10:25	02/25/11 23:06	1.00
2-Methylnaphthalene	ND		0.0990	0.0337	ug/L		02/23/11 10:25	02/25/11 23:06	1.00
Naphthalene	ND		0.0990	0.0248	ug/L		02/23/11 10:25	02/25/11 23:06	1.00
Phenanthrene	ND		0.0990	0.0624	ug/L		02/23/11 10:25	02/25/11 23:06	1.00
Pyrene	ND		0.0990	0.0248	ug/L		02/23/11 10:25	02/25/11 23:06	1.00

Surrogate	% Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	73		27 - 120	02/23/11 10:25	02/25/11 23:06	1.00
2-Fluorobiphenyl	78		29 - 120	02/23/11 10:25	02/25/11 23:06	1.00
Terphenyl-d14	74		13 - 120	02/23/11 10:25	02/25/11 23:06	1.00

Method: NWTPH-Gx - Purgeable Petroleum Hydrocarbons

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
GRO (C4-C12) NW	ND		100	33.0	ug/L		02/18/11 00:01	02/23/11 17:35	1.00

Surrogate	% Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	79		50 - 150	02/18/11 00:01	02/23/11 17:35	1.00

Method: NWTPH-Dx - Extractable Petroleum Hydrocarbons with Silica Gel Treatment

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel	17.4	J, B	99.0	9.90	ug/L		02/24/11 06:25	02/24/11 19:32	1.00
Motor Oil	37.1	J, B	99.0	9.90	ug/L		02/24/11 06:25	02/24/11 19:32	1.00

AGENCY DRAFT

Analytical Data

Client: AMEC Earth & Environmental (13993)
 Project/Site: [none]

TestAmerica Job ID: NUB3024
 SDG: NUB3024

Client Sample ID: Dup-021811

Lab Sample ID: NUB3024-11

Date Collected: 02/18/11 00:01

Matrix: Ground Water

Date Received: 02/19/11 08:35

Sampler Name: Joseph Petrick

Sampler Phone Number: (206) 342-1760

Surrogate	% Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	87		50 - 150	02/24/11 06:25	02/24/11 19:32	1.00

Method: SW846 6020 - Dissolved Metals by Method 6020 - dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND	P7	2.00	0.0900	ug/L		02/28/11 08:45	03/01/11 13:30	1.00

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Client: AMEC Earth & Environmental (13993)
Project/Site: [none]

TestAmerica Job ID: NUB3024
SDG: NUB3024

Client Sample ID: Trip Blank

Lab Sample ID: NUB3024-12

Date Collected: 02/17/11 00:01

Matrix: Water

Date Received: 02/19/11 08:35

Sampler Name: Joseph Petrick

Sampler Phone Number: (206) 342-1760

Method: SW846 8260B - Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.500	0.170	ug/L		02/22/11 16:42	02/26/11 04:09	1.00
Ethylbenzene	ND		0.500	0.170	ug/L		02/22/11 16:42	02/26/11 04:09	1.00
Methyl tert-Butyl Ether	ND		0.500	0.170	ug/L		02/22/11 16:42	02/26/11 04:09	1.00
Toluene	ND		0.500	0.170	ug/L		02/22/11 16:42	02/26/11 04:09	1.00
Xylenes, total	ND		0.500	0.390	ug/L		02/22/11 16:42	02/26/11 04:09	1.00

Surrogate	% Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4	99		63 - 140	02/22/11 16:42	02/26/11 04:09	1.00
Dibromofluoromethane	99		73 - 131	02/22/11 16:42	02/26/11 04:09	1.00
Toluene-d8	98		80 - 120	02/22/11 16:42	02/26/11 04:09	1.00
4-Bromofluorobenzene	100		79 - 125	02/22/11 16:42	02/26/11 04:09	1.00

Method: NWTPH-Gx - Purgeable Petroleum Hydrocarbons

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
GRO (C4-C12) NW	ND		100	33.0	ug/L		02/17/11 00:01	02/23/11 12:03	1.00

Surrogate	% Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	67		50 - 150	02/17/11 00:01	02/23/11 12:03	1.00

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Client: AMEC Earth & Environmental (13993)
Project/Site: [none]

TestAmerica Job ID: NUB3024
SDG: NUB3024

Method: SW846 8260B - Volatile Organic Compounds by EPA Method 8260B

Lab Sample ID: 11B4454-BLK1

Matrix: Water

Analysis Batch: U003075

Client Sample ID: 11B4454-BLK1

Prep Type: total

Prep Batch: 11B4454_P

Analyte	Blank Result	Blank Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.500	0.170	ug/L		02/22/11 16:42	02/26/11 03:41	1.00
Ethylbenzene	ND		0.500	0.170	ug/L		02/22/11 16:42	02/26/11 03:41	1.00
Methyl tert-Butyl Ether	ND		0.500	0.170	ug/L		02/22/11 16:42	02/26/11 03:41	1.00
Toluene	ND		0.500	0.170	ug/L		02/22/11 16:42	02/26/11 03:41	1.00
Xylenes, total	ND		0.500	0.390	ug/L		02/22/11 16:42	02/26/11 03:41	1.00
1,2-Dibromoethane (EDB)	ND		0.500	0.180	ug/L		02/22/11 16:42	02/26/11 03:41	1.00
1,2-Dichloroethane	ND		0.500	0.410	ug/L		02/22/11 16:42	02/26/11 03:41	1.00

Surrogate	Blank % Recovery	Blank Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4	96		63 - 140	02/22/11 16:42	02/26/11 03:41	1.00
Dibromofluoromethane	99		73 - 131	02/22/11 16:42	02/26/11 03:41	1.00
Toluene-d8	98		80 - 120	02/22/11 16:42	02/26/11 03:41	1.00
4-Bromofluorobenzene	101		79 - 125	02/22/11 16:42	02/26/11 03:41	1.00

Lab Sample ID: 11B4454-BS1

Matrix: Water

Analysis Batch: U003075

Client Sample ID: 11B4454-BS1

Prep Type: total

Prep Batch: 11B4454_P

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	% Rec	% Rec. Limits
Benzene	50.0	53.0		ug/L		106	80 - 121
Ethylbenzene	50.0	53.2		ug/L		106	78 - 133
Methyl tert-Butyl Ether	50.0	50.4		ug/L		101	76 - 120
Toluene	50.0	50.7		ug/L		101	78 - 125
Xylenes, total	150	157		ug/L		105	78 - 134
1,2-Dibromoethane (EDB)	50.0	51.4		ug/L		103	80 - 125
1,2-Dichloroethane	50.0	51.8		ug/L		104	69 - 136

Surrogate	LCS % Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4	95		63 - 140
Dibromofluoromethane	98		73 - 131
Toluene-d8	98		80 - 120
4-Bromofluorobenzene	101		79 - 125

Lab Sample ID: 11B4454-MS1

Matrix: Water

Analysis Batch: U003075

Client Sample ID: MW19-021711

Prep Type: total

Prep Batch: 11B4454_P

Analyte	Sample Result	Sample Qualifier	Spike Added	Matrix Spike Result	Matrix Spike Qualifier	Unit	D	% Rec	% Rec. Limits
Benzene	ND		50.0	52.0		ug/L		104	65 - 151
Ethylbenzene	ND		50.0	51.7		ug/L		103	68 - 157
Methyl tert-Butyl Ether	ND		50.0	49.1		ug/L		98	56 - 152
Toluene	ND		50.0	49.1		ug/L		98	61 - 153
Xylenes, total	0.730		150	152		ug/L		101	68 - 158
1,2-Dibromoethane (EDB)	ND		50.0	48.4		ug/L		97	80 - 132
1,2-Dichloroethane	ND		50.0	49.8		ug/L		100	53 - 146

Surrogate	Matrix Spike % Recovery	Matrix Spike Qualifier	Limits
1,2-Dichloroethane-d4	96		63 - 140

Client: AMEC Earth & Environmental (13993)
Project/Site: [none]

TestAmerica Job ID: NUB3024
SDG: NUB3024

Method: SW846 8260B - Volatile Organic Compounds by EPA Method 8260B (Continued)

Lab Sample ID: 11B4454-MS1
Matrix: Water
Analysis Batch: U003075

Client Sample ID: MW19-021711
Prep Type: total
Prep Batch: 11B4454_P

Surrogate	Matrix Spike % Recovery	Matrix Spike Qualifier	Limits
Dibromofluoromethane	99		73 - 131
Toluene-d8	96		80 - 120
4-Bromofluorobenzene	94		79 - 125

Lab Sample ID: 11B4454-MSD1
Matrix: Water
Analysis Batch: U003075

Client Sample ID: MW19-021711
Prep Type: total
Prep Batch: 11B4454_P

Analyte	Sample	Sample	Spike	Matrix Spike Dup	Matrix Spike Dup	D	% Rec	% Rec.	RPD	RPD
	Result	Qualifier	Added	Result	Qualifier					
Benzene	ND		50.0	56.8			114	65 - 151	9	12
Ethylbenzene	ND		50.0	57.2			114	68 - 157	10	12
Methyl tert-Butyl Ether	ND		50.0	55.2			110	56 - 152	12	32
Toluene	ND		50.0	54.1			108	61 - 153	10	35
Xylenes, total	0.730		150	168			112	68 - 158	10	18
1,2-Dibromoethane (EDB)	ND		50.0	54.4			109	80 - 132	12	21
1,2-Dichloroethane	ND		50.0	55.2			110	53 - 146	10	26

Surrogate	Matrix Spike Dup % Recovery	Matrix Spike Dup Qualifier	Limits
1,2-Dichloroethane-d4	93		63 - 140
Dibromofluoromethane	98		73 - 131
Toluene-d8	97		80 - 120
4-Bromofluorobenzene	97		79 - 125

Method: SW846 8270D SIM - Polyaromatic Hydrocarbons by EPA 8270D SIM

Lab Sample ID: 11B4534-BLK1
Matrix: Water
Analysis Batch: U002983

Client Sample ID: 11B4534-BLK1
Prep Type: total
Prep Batch: 11B4534_P

Analyte	Blank	Blank	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Acenaphthene	ND		0.100	0.0280	ug/L		02/23/11 10:25	02/25/11 18:06	1.00
Acenaphthylene	ND		0.100	0.0250	ug/L		02/23/11 10:25	02/25/11 18:06	1.00
Anthracene	ND		0.100	0.0310	ug/L		02/23/11 10:25	02/25/11 18:06	1.00
Benzo (a) anthracene	ND		0.100	0.0180	ug/L		02/23/11 10:25	02/25/11 18:06	1.00
Benzo (a) pyrene	ND		0.100	0.0320	ug/L		02/23/11 10:25	02/25/11 18:06	1.00
Benzo (b) fluoranthene	ND		0.100	0.0260	ug/L		02/23/11 10:25	02/25/11 18:06	1.00
Benzo (g,h,i) perylene	ND		0.100	0.0240	ug/L		02/23/11 10:25	02/25/11 18:06	1.00
Benzo (k) fluoranthene	ND		0.100	0.0400	ug/L		02/23/11 10:25	02/25/11 18:06	1.00
Chrysene	ND		0.100	0.0350	ug/L		02/23/11 10:25	02/25/11 18:06	1.00
Dibenz (a,h) anthracene	ND		0.100	0.0240	ug/L		02/23/11 10:25	02/25/11 18:06	1.00
Fluoranthene	ND		0.100	0.0340	ug/L		02/23/11 10:25	02/25/11 18:06	1.00
Fluorene	ND		0.100	0.0250	ug/L		02/23/11 10:25	02/25/11 18:06	1.00
Indeno (1,2,3-cd) pyrene	ND		0.100	0.0280	ug/L		02/23/11 10:25	02/25/11 18:06	1.00
1-Methylnaphthalene	ND		0.100	0.0220	ug/L		02/23/11 10:25	02/25/11 18:06	1.00
2-Methylnaphthalene	ND		0.100	0.0340	ug/L		02/23/11 10:25	02/25/11 18:06	1.00
Naphthalene	ND		0.100	0.0250	ug/L		02/23/11 10:25	02/25/11 18:06	1.00
Phenanthrene	ND		0.100	0.0630	ug/L		02/23/11 10:25	02/25/11 18:06	1.00
Pyrene	ND		0.100	0.0250	ug/L		02/23/11 10:25	02/25/11 18:06	1.00

Client: AMEC Earth & Environmental (13993)
Project/Site: [none]

TestAmerica Job ID: NUB3024
SDG: NUB3024

Method: SW846 8270D SIM - Polyaromatic Hydrocarbons by EPA 8270D SIM (Continued)

Lab Sample ID: 11B4534-BLK1
Matrix: Water
Analysis Batch: U002983

Client Sample ID: 11B4534-BLK1
Prep Type: total
Prep Batch: 11B4534_P

Surrogate	Blank		Limits	Prepared	Analyzed	Dil Fac
	% Recovery	Qualifier				
Nitrobenzene-d5	68		27 - 120	02/23/11 10:25	02/25/11 18:06	1.00
2-Fluorobiphenyl	73		29 - 120	02/23/11 10:25	02/25/11 18:06	1.00
Terphenyl-d14	86		13 - 120	02/23/11 10:25	02/25/11 18:06	1.00

Lab Sample ID: 11B4534-BS1
Matrix: Water
Analysis Batch: U002983

Client Sample ID: 11B4534-BS1
Prep Type: total
Prep Batch: 11B4534_P

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	% Rec	Limits
Acenaphthylene	1.00	0.680	MNR1	ug/L		68	43 - 129
Anthracene	1.00	0.720	MNR1	ug/L		72	50 - 138
Benzo (a) anthracene	1.00	0.730	MNR1	ug/L		73	50 - 135
Benzo (a) pyrene	1.00	0.620	MNR1	ug/L		62	46 - 136
Benzo (b) fluoranthene	1.00	0.640	MNR1	ug/L		64	37 - 147
Benzo (g,h,i) perylene	1.00	0.720	MNR1	ug/L		72	30 - 145
Benzo (k) fluoranthene	1.00	0.780	MNR1	ug/L		78	47 - 135
Chrysene	1.00	0.810	MNR1	ug/L		81	47 - 138
Dibenz (a,h) anthracene	1.00	0.680	MNR1	ug/L		68	36 - 144
Fluoranthene	1.00	0.750	MNR1	ug/L		75	51 - 139
Fluorene	1.00	0.700	MNR1	ug/L		70	47 - 128
Indeno (1,2,3-cd) pyrene	1.00	0.680	MNR1	ug/L		68	32 - 142
1-Methylnaphthalene	1.00	0.600	MNR1	ug/L		60	37 - 126
2-Methylnaphthalene	1.00	0.630	MNR1	ug/L		63	41 - 121
Naphthalene	1.00	0.640	MNR1	ug/L		64	38 - 120
Phenanthrene	1.00	0.830	MNR1	ug/L		83	45 - 133
Pyrene	1.00	0.780	MNR1	ug/L		78	50 - 146

Surrogate	LCS		Limits
	% Recovery	Qualifier	
Nitrobenzene-d5	60		27 - 120
2-Fluorobiphenyl	68		29 - 120
Terphenyl-d14	73		13 - 120

Method: NWTPH-Gx - Purgeable Petroleum Hydrocarbons

Lab Sample ID: 11B4573-BLK1
Matrix: Water
Analysis Batch: U002940

Client Sample ID: 11B4573-BLK1
Prep Type: total
Prep Batch: 11B4573_P

Analyte	Blank		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
GRO (C4-C12) NW	ND		100	33.0	ug/L		02/23/11 10:36	02/23/11 11:24	1.00

Surrogate	Blank		Limits	Prepared	Analyzed	Dil Fac
	% Recovery	Qualifier				
a,a,a-Trifluorotoluene	76		50 - 150	02/23/11 10:36	02/23/11 11:24	1.00

Client: AMEC Earth & Environmental (13993)
Project/Site: [none]

TestAmerica Job ID: NUB3024
SDG: NUB3024

Method: NWTPH-Gx - Purgeable Petroleum Hydrocarbons (Continued)

Lab Sample ID: 11B4573-BS1
Matrix: Water
Analysis Batch: U002940

Client Sample ID: 11B4573-BS1
Prep Type: total
Prep Batch: 11B4573_P

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	% Rec	% Rec. Limits
GRO (C4-C12) NW	1000	883	MNR1	ug/L		88	70 - 130
Surrogate	% Recovery	LCS Qualifier	Limits				
<i>a,a,a-Trifluorotoluene</i>	92		50 - 150				

Lab Sample ID: 11B4573-DUP1
Matrix: Water
Analysis Batch: U002940

Client Sample ID: MW11-021611
Prep Type: total
Prep Batch: 11B4573_P

Analyte	Sample Result	Sample Qualifier	Duplicate Result	Duplicate Qualifier	Unit	D	RPD	RPD Limit
GRO (C4-C12) NW	ND		ND		ug/L			37
Surrogate	% Recovery	Duplicate Qualifier	Limits					
<i>a,a,a-Trifluorotoluene</i>	80		50 - 150					

Method: NWTPH-Dx - Extractable Petroleum Hydrocarbons with Silica Gel Treatment

Lab Sample ID: 11B4539-BLK1
Matrix: Water
Analysis Batch: U003017

Client Sample ID: 11B4539-BLK1
Prep Type: total
Prep Batch: 11B4539_P

Analyte	Blank Result	Blank Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel	12.2	J	100	10.0	ug/L		02/24/11 06:25	02/24/11 18:12	1.00
Motor Oil	46.1	J	100	10.0	ug/L		02/24/11 06:25	02/24/11 18:12	1.00
Surrogate	% Recovery	Blank Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o-Terphenyl</i>	79		50 - 150				02/24/11 06:25	02/24/11 18:12	1.00

Lab Sample ID: 11B4539-BS1
Matrix: Water
Analysis Batch: U003017

Client Sample ID: 11B4539-BS1
Prep Type: total
Prep Batch: 11B4539_P

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	% Rec	% Rec. Limits
Diesel	1000	710	MNR1, B	ug/L		71	57 - 132
Surrogate	% Recovery	LCS Qualifier	Limits				
<i>o-Terphenyl</i>	85		50 - 150				

Lab Sample ID: 11B4540-BLK1
Matrix: Water
Analysis Batch: U003017

Client Sample ID: 11B4540-BLK1
Prep Type: total
Prep Batch: 11B4540_P

Analyte	Blank Result	Blank Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel	18.1	J	100	10.0	ug/L		02/24/11 06:20	02/24/11 15:06	1.00
Motor Oil	24.5	J	100	10.0	ug/L		02/24/11 06:20	02/24/11 15:06	1.00
Surrogate	% Recovery	Blank Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o-Terphenyl</i>	84		50 - 150				02/24/11 06:20	02/24/11 15:06	1.00

Client: AMEC Earth & Environmental (13993)
Project/Site: [none]

TestAmerica Job ID: NUB3024
SDG: NUB3024

Method: NWTPH-Dx - Extractable Petroleum Hydrocarbons with Silica Gel Treatment (Continued)

Lab Sample ID: 11B4540-BS1
Matrix: Water
Analysis Batch: U003017

Client Sample ID: 11B4540-BS1
Prep Type: total
Prep Batch: 11B4540_P

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	% Rec	% Rec. Limits
Diesel	1000	1000	MNR1, B	ug/L		100	57 - 132
<i>Surrogate</i>	<i>% Recovery</i>	<i>LCS Qualifier</i>	<i>Limits</i>				
<i>o-Terphenyl</i>	107		50 - 150				

Method: SW846 6020 - Dissolved Metals by Method 6020

Lab Sample ID: 11B4489-BLK1
Matrix: Water
Analysis Batch: U003283

Client Sample ID: 11B4489-BLK1
Prep Type: dissolved
Prep Batch: 11B4489_P

Analyte	Blank Result	Blank Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		2.00	0.0900	ug/L		02/28/11 08:45	03/01/11 12:29	1.00

Lab Sample ID: 11B4489-BS1
Matrix: Water
Analysis Batch: U003283

Client Sample ID: 11B4489-BS1
Prep Type: dissolved
Prep Batch: 11B4489_P

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	% Rec	% Rec. Limits
Lead	100	103		ug/L		103	80 - 120

Lab Sample ID: 11B4489-MS1
Matrix: Water
Analysis Batch: U003283

Client Sample ID: MW11-021611
Prep Type: dissolved
Prep Batch: 11B4489_P

Analyte	Sample Result	Sample Qualifier	Spike Added	Matrix Spike Result	Matrix Spike Qualifier	Unit	D	% Rec	% Rec. Limits
Lead	ND	P7	100	104		ug/L		104	75 - 125

Lab Sample ID: 11B4489-MSD1
Matrix: Water
Analysis Batch: U003283

Client Sample ID: MW11-021611
Prep Type: dissolved
Prep Batch: 11B4489_P

Analyte	Sample Result	Sample Qualifier	Spike Added	Matrix Spike Dup Result	Matrix Spike Dup Qualifier	Unit	D	% Rec	% Rec. Limits	RPD	RPD Limit
Lead	ND	P7	100	102		ug/L		102	75 - 125	1	20

Client: AMEC Earth & Environmental (13993)
Project/Site: [none]

TestAmerica Job ID: NUB3024
SDG: NUB3024

GCMS Volatiles

Prep Batch: 11B4454_P

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
11B4454-BS1	11B4454-BS1	total	Water	EPA 5030B	
11B4454-BLK1	11B4454-BLK1	total	Water	EPA 5030B	
NUB3024-12	Trip Blank	total	Water	EPA 5030B	
NUB3024-01	MW11-021611	total	Ground Water	EPA 5030B	
NUB3024-02	MW40R-021711	total	Ground Water	EPA 5030B	
NUB3024-03	MW19-021711	total	Ground Water	EPA 5030B	
NUB3024-04	MWA4-021711	total	Ground Water	EPA 5030B	
NUB3024-05	MWA3-021711	total	Ground Water	EPA 5030B	
NUB3024-06	MWA2-021711	total	Ground Water	EPA 5030B	
NUB3024-07	MWA5-021811	total	Ground Water	EPA 5030B	
NUB3024-08	MWA6-021811	total	Ground Water	EPA 5030B	
NUB3024-09	MWA1-021811	total	Ground Water	EPA 5030B	
NUB3024-10	MWA7-021811	total	Ground Water	EPA 5030B	
NUB3024-11	Dup-021811	total	Ground Water	EPA 5030B	
11B4454-MS1	MW19-021711	total	Water	EPA 5030B	
11B4454-MSD1	MW19-021711	total	Water	EPA 5030B	

Analysis Batch: U003075

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
11B4454-BS1	11B4454-BS1	total	Water	SW846 8260B	11B4454_P
11B4454-BLK1	11B4454-BLK1	total	Water	SW846 8260B	11B4454_P
NUB3024-12	Trip Blank	total	Water	SW846 8260B	11B4454_P
NUB3024-01	MW11-021611	total	Ground Water	SW846 8260B	11B4454_P
NUB3024-02	MW40R-021711	total	Ground Water	SW846 8260B	11B4454_P
NUB3024-03	MW19-021711	total	Ground Water	SW846 8260B	11B4454_P
NUB3024-04	MWA4-021711	total	Ground Water	SW846 8260B	11B4454_P
NUB3024-05	MWA3-021711	total	Ground Water	SW846 8260B	11B4454_P
NUB3024-06	MWA2-021711	total	Ground Water	SW846 8260B	11B4454_P
NUB3024-07	MWA5-021811	total	Ground Water	SW846 8260B	11B4454_P
NUB3024-08	MWA6-021811	total	Ground Water	SW846 8260B	11B4454_P
NUB3024-09	MWA1-021811	total	Ground Water	SW846 8260B	11B4454_P
NUB3024-10	MWA7-021811	total	Ground Water	SW846 8260B	11B4454_P
NUB3024-11	Dup-021811	total	Ground Water	SW846 8260B	11B4454_P
11B4454-MS1	MW19-021711	total	Water	SW846 8260B	11B4454_P
11B4454-MSD1	MW19-021711	total	Water	SW846 8260B	11B4454_P

GCMS Semivolatiles

Prep Batch: 11B4534_P

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
11B4534-BLK1	11B4534-BLK1	total	Water	EPA 3510C	
11B4534-BS1	11B4534-BS1	total	Water	EPA 3510C	
NUB3024-01	MW11-021611	total	Ground Water	EPA 3510C	
NUB3024-02	MW40R-021711	total	Ground Water	EPA 3510C	
NUB3024-03	MW19-021711	total	Ground Water	EPA 3510C	
NUB3024-04	MWA4-021711	total	Ground Water	EPA 3510C	
NUB3024-05	MWA3-021711	total	Ground Water	EPA 3510C	
NUB3024-06	MWA2-021711	total	Ground Water	EPA 3510C	
NUB3024-07	MWA5-021811	total	Ground Water	EPA 3510C	
NUB3024-08	MWA6-021811	total	Ground Water	EPA 3510C	
NUB3024-09	MWA1-021811	total	Ground Water	EPA 3510C	
NUB3024-10	MWA7-021811	total	Ground Water	EPA 3510C	



Client: AMEC Earth & Environmental (13993)
Project/Site: [none]

TestAmerica Job ID: NUB3024
SDG: NUB3024

GCMS Semivolatiles (Continued)

Prep Batch: 11B4534_P (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
NUB3024-11	Dup-021811	total	Ground Water	EPA 3510C	
NUB3024-02 - RE1	MW40R-021711	total	Ground Water	EPA 3510C	

Analysis Batch: U002983

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
11B4534-BLK1	11B4534-BLK1	total	Water	SW846 8270D SIM	11B4534_P
11B4534-BS1	11B4534-BS1	total	Water	SW846 8270D SIM	11B4534_P
NUB3024-01	MW11-021611	total	Ground Water	SW846 8270D SIM	11B4534_P
NUB3024-02	MW40R-021711	total	Ground Water	SW846 8270D SIM	11B4534_P
NUB3024-03	MW19-021711	total	Ground Water	SW846 8270D SIM	11B4534_P
NUB3024-04	MWA4-021711	total	Ground Water	SW846 8270D SIM	11B4534_P
NUB3024-05	MWA3-021711	total	Ground Water	SW846 8270D SIM	11B4534_P
NUB3024-06	MWA2-021711	total	Ground Water	SW846 8270D SIM	11B4534_P
NUB3024-07	MWA5-021811	total	Ground Water	SW846 8270D SIM	11B4534_P
NUB3024-08	MWA6-021811	total	Ground Water	SW846 8270D SIM	11B4534_P
NUB3024-09	MWA1-021811	total	Ground Water	SW846 8270D SIM	11B4534_P
NUB3024-10	MWA7-021811	total	Ground Water	SW846 8270D SIM	11B4534_P
NUB3024-11	Dup-021811	total	Ground Water	SW846 8270D SIM	11B4534_P

Analysis Batch: U003064

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
NUB3024-02 - RE1	MW40R-021711	total	Ground Water	SW846 8270D SIM	11B4534_P

GC Volatiles

Prep Batch: 11B4573_P

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
11B4573-BLK1	11B4573-BLK1	total	Water	EPA 5030B (GC)	
NUB3024-12	Trip Blank	total	Water	EPA 5030B (GC)	
NUB3024-01	MW11-021611	total	Ground Water	EPA 5030B (GC)	
NUB3024-02	MW40R-021711	total	Ground Water	EPA 5030B (GC)	
NUB3024-03	MW19-021711	total	Ground Water	EPA 5030B (GC)	
NUB3024-04	MWA4-021711	total	Ground Water	EPA 5030B (GC)	
NUB3024-05	MWA3-021711	total	Ground Water	EPA 5030B (GC)	
NUB3024-06	MWA2-021711	total	Ground Water	EPA 5030B (GC)	
NUB3024-07	MWA5-021811	total	Ground Water	EPA 5030B (GC)	
NUB3024-08	MWA6-021811	total	Ground Water	EPA 5030B (GC)	
NUB3024-09	MWA1-021811	total	Ground Water	EPA 5030B (GC)	



Client: AMEC Earth & Environmental (13993)
Project/Site: [none]

TestAmerica Job ID: NUB3024
SDG: NUB3024

GC Volatiles (Continued)

Prep Batch: 11B4573_P (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
NUB3024-10	MWA7-021811	total	Ground Water	EPA 5030B (GC)	
NUB3024-11	Dup-021811	total	Ground Water	EPA 5030B (GC)	
11B4573-DUP1	MW11-021611	total	Water	EPA 5030B (GC)	
11B4573-BS1	11B4573-BS1	total	Water	EPA 5030B (GC)	

Analysis Batch: U002940

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
11B4573-BLK1	11B4573-BLK1	total	Water	NWTPH-Gx	11B4573_P
NUB3024-12	Trip Blank	total	Water	NWTPH-Gx	11B4573_P
NUB3024-01	MW11-021611	total	Ground Water	NWTPH-Gx	11B4573_P
NUB3024-02	MW40R-021711	total	Ground Water	NWTPH-Gx	11B4573_P
NUB3024-03	MW19-021711	total	Ground Water	NWTPH-Gx	11B4573_P
NUB3024-04	MWA4-021711	total	Ground Water	NWTPH-Gx	11B4573_P
NUB3024-05	MWA3-021711	total	Ground Water	NWTPH-Gx	11B4573_P
NUB3024-06	MWA2-021711	total	Ground Water	NWTPH-Gx	11B4573_P
NUB3024-07	MWA5-021811	total	Ground Water	NWTPH-Gx	11B4573_P
NUB3024-08	MWA6-021811	total	Ground Water	NWTPH-Gx	11B4573_P
NUB3024-09	MWA1-021811	total	Ground Water	NWTPH-Gx	11B4573_P
NUB3024-10	MWA7-021811	total	Ground Water	NWTPH-Gx	11B4573_P
NUB3024-11	Dup-021811	total	Ground Water	NWTPH-Gx	11B4573_P
11B4573-DUP1	MW11-021611	total	Water	NWTPH-Gx	11B4573_P
11B4573-BS1	11B4573-BS1	total	Water	NWTPH-Gx	11B4573_P

GC Semivolatiles

Prep Batch: 11B4539_P

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
11B4539-BLK1	11B4539-BLK1	total	Water	EPA 3510C	
11B4539-BS1	11B4539-BS1	total	Water	EPA 3510C	
NUB3024-08	MWA6-021811	total	Ground Water	EPA 3510C	
NUB3024-09	MWA1-021811	total	Ground Water	EPA 3510C	
NUB3024-10	MWA7-021811	total	Ground Water	EPA 3510C	
NUB3024-11	Dup-021811	total	Ground Water	EPA 3510C	

Prep Batch: 11B4540_P

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
11B4540-BLK1	11B4540-BLK1	total	Water	EPA 3510C	
11B4540-BS1	11B4540-BS1	total	Water	EPA 3510C	
NUB3024-01	MW11-021611	total	Ground Water	EPA 3510C	
NUB3024-02	MW40R-021711	total	Ground Water	EPA 3510C	
NUB3024-03	MW19-021711	total	Ground Water	EPA 3510C	
NUB3024-04	MWA4-021711	total	Ground Water	EPA 3510C	
NUB3024-05	MWA3-021711	total	Ground Water	EPA 3510C	
NUB3024-06	MWA2-021711	total	Ground Water	EPA 3510C	
NUB3024-07	MWA5-021811	total	Ground Water	EPA 3510C	

Analysis Batch: U003017

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
11B4540-BLK1	11B4540-BLK1	total	Water	NWTPH-Dx	11B4540_P
11B4540-BS1	11B4540-BS1	total	Water	NWTPH-Dx	11B4540_P



Client: AMEC Earth & Environmental (13993)
Project/Site: [none]

TestAmerica Job ID: NUB3024
SDG: NUB3024

GC Semivolatiles (Continued)

Analysis Batch: U003017 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
NUB3024-01	MW11-021611	total	Ground Water	NWTPH-Dx	11B4540_P
NUB3024-02	MW40R-021711	total	Ground Water	NWTPH-Dx	11B4540_P
NUB3024-03	MW19-021711	total	Ground Water	NWTPH-Dx	11B4540_P
NUB3024-04	MWA4-021711	total	Ground Water	NWTPH-Dx	11B4540_P
NUB3024-05	MWA3-021711	total	Ground Water	NWTPH-Dx	11B4540_P
NUB3024-06	MWA2-021711	total	Ground Water	NWTPH-Dx	11B4540_P
NUB3024-07	MWA5-021811	total	Ground Water	NWTPH-Dx	11B4540_P
11B4539-BLK1	11B4539-BLK1	total	Water	NWTPH-Dx	11B4539_P
11B4539-BS1	11B4539-BS1	total	Water	NWTPH-Dx	11B4539_P
NUB3024-08	MWA6-021811	total	Ground Water	NWTPH-Dx	11B4539_P
NUB3024-09	MWA1-021811	total	Ground Water	NWTPH-Dx	11B4539_P
NUB3024-10	MWA7-021811	total	Ground Water	NWTPH-Dx	11B4539_P
NUB3024-11	Dup-021811	total	Ground Water	NWTPH-Dx	11B4539_P

Metals

Prep Batch: 11B4489_P

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
11B4489-BS1	11B4489-BS1	Dissolved	Water	EPA 3010A / 6020 Dissolved	
11B4489-BLK1	11B4489-BLK1	Dissolved	Water	EPA 3010A / 6020 Dissolved	
NUB3024-01	MW11-021611	Dissolved	Ground Water	EPA 3010A / 6020 Dissolved	
11B4489-MS1	MW11-021611	Dissolved	Water	EPA 3010A / 6020 Dissolved	
11B4489-MSD1	MW11-021611	Dissolved	Water	EPA 3010A / 6020 Dissolved	
NUB3024-02	MW40R-021711	Dissolved	Ground Water	EPA 3010A / 6020 Dissolved	
NUB3024-03	MW19-021711	Dissolved	Ground Water	EPA 3010A / 6020 Dissolved	
NUB3024-04	MWA4-021711	Dissolved	Ground Water	EPA 3010A / 6020 Dissolved	
NUB3024-05	MWA3-021711	Dissolved	Ground Water	EPA 3010A / 6020 Dissolved	
NUB3024-06	MWA2-021711	Dissolved	Ground Water	EPA 3010A / 6020 Dissolved	
NUB3024-07	MWA5-021811	Dissolved	Ground Water	EPA 3010A / 6020 Dissolved	
NUB3024-08	MWA6-021811	Dissolved	Ground Water	EPA 3010A / 6020 Dissolved	
NUB3024-09	MWA1-021811	Dissolved	Ground Water	EPA 3010A / 6020 Dissolved	
NUB3024-10	MWA7-021811	Dissolved	Ground Water	EPA 3010A / 6020 Dissolved	
NUB3024-11	Dup-021811	Dissolved	Ground Water	EPA 3010A / 6020 Dissolved	

Analysis Batch: U003283

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
11B4489-BS1	11B4489-BS1	Dissolved	Water	SW846 6020	11B4489_P
11B4489-BLK1	11B4489-BLK1	Dissolved	Water	SW846 6020	11B4489_P
NUB3024-01	MW11-021611	Dissolved	Ground Water	SW846 6020	11B4489_P
11B4489-MS1	MW11-021611	Dissolved	Water	SW846 6020	11B4489_P
11B4489-MSD1	MW11-021611	Dissolved	Water	SW846 6020	11B4489_P
NUB3024-02	MW40R-021711	Dissolved	Ground Water	SW846 6020	11B4489_P
NUB3024-03	MW19-021711	Dissolved	Ground Water	SW846 6020	11B4489_P
NUB3024-04	MWA4-021711	Dissolved	Ground Water	SW846 6020	11B4489_P



AGENCY DRAFT
QC Association Summary

Client: AMEC Earth & Environmental (13993)
Project/Site: [none]

TestAmerica Job ID: NUB3024
SDG: NUB3024

Metals (Continued)

Analysis Batch: U003283 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
NUB3024-05	MWA3-021711	Dissolved	Ground Water	SW846 6020	11B4489_P
NUB3024-06	MWA2-021711	Dissolved	Ground Water	SW846 6020	11B4489_P
NUB3024-07	MWA5-021811	Dissolved	Ground Water	SW846 6020	11B4489_P
NUB3024-08	MWA6-021811	Dissolved	Ground Water	SW846 6020	11B4489_P
NUB3024-09	MWA1-021811	Dissolved	Ground Water	SW846 6020	11B4489_P
NUB3024-10	MWA7-021811	Dissolved	Ground Water	SW846 6020	11B4489_P
NUB3024-11	Dup-021811	Dissolved	Ground Water	SW846 6020	11B4489_P

Analysis Batch: U003075

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
NUB3024-03	MW19-021711	total	Ground Water	SW846 8260B	



Client: AMEC Earth & Environmental (13993)
Project/Site: [none]

TestAmerica Job ID: NUB3024
SDG: NUB3024

Client Sample ID: MW11-021611

Date Collected: 02/16/11 16:20

Date Received: 02/19/11 08:35

Lab Sample ID: NUB3024-01

Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared Or Analyzed	Analyst	Lab
total	Prep	EPA 5030B		1.00	11B4454_P	02/22/11 16:42	TSP	TestAmerica Nashville
total	Analysis	SW846 8260B		1.00	U003075	02/26/11 04:36	AJB	TestAmerica Nashville
total	Prep	EPA 3510C		0.990	11B4534_P	02/23/11 10:25	AMJ	TestAmerica Nashville
total	Analysis	SW846 8270D SIM		1.00	U002983	02/25/11 19:32	BES	TestAmerica Nashville
total	Prep	EPA 5030B (GC)		1.00	11B4573_P	02/16/11 16:20	GWM	TestAmerica Nashville
total	Analysis	NWTPH-Gx		1.00	U002940	02/23/11 12:33	GWM	TestAmerica Nashville
total	Prep	EPA 3510C		1.05	11B4540_P	02/24/11 06:20	MAH	TestAmerica Nashville
total	Analysis	NWTPH-Dx		1.00	U003017	02/24/11 15:37	jdj	TestAmerica Nashville
Dissolved	Prep	EPA 3010A / 6020 Dissolved		1.00	11B4489_P	02/28/11 08:45	MET	TestAmerica Nashville
Dissolved	Analysis	SW846 6020		1.00	U003283	03/01/11 12:34	MET	TestAmerica Nashville

Client Sample ID: MW40R-021711

Date Collected: 02/17/11 10:15

Date Received: 02/19/11 08:35

Lab Sample ID: NUB3024-02

Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared Or Analyzed	Analyst	Lab
total	Prep	EPA 5030B		1.00	11B4454_P	02/22/11 16:42	TSP	TestAmerica Nashville
total	Analysis	SW846 8260B		1.00	U003075	02/26/11 05:04	AJB	TestAmerica Nashville
total	Prep	EPA 3510C		0.971	11B4534_P	02/23/11 10:25	AMJ	TestAmerica Nashville
total	Analysis	SW846 8270D SIM		1.00	U002983	02/25/11 19:53	BES	TestAmerica Nashville
total	Prep	EPA 3510C	RE1	0.971	11B4534_P	02/23/11 10:25	AMJ	TestAmerica Nashville
total	Analysis	SW846 8270D SIM	RE1	5.00	U003064	02/26/11 22:17	BES	TestAmerica Nashville
total	Prep	EPA 5030B (GC)		1.00	11B4573_P	02/17/11 10:15	GWM	TestAmerica Nashville
total	Analysis	NWTPH-Gx		1.00	U002940	02/23/11 13:03	GWM	TestAmerica Nashville
total	Prep	EPA 3510C		0.962	11B4540_P	02/24/11 06:20	MAH	TestAmerica Nashville
total	Analysis	NWTPH-Dx		1.00	U003017	02/24/11 15:53	jdj	TestAmerica Nashville
Dissolved	Prep	EPA 3010A / 6020 Dissolved		1.00	11B4489_P	02/28/11 08:45	MET	TestAmerica Nashville
Dissolved	Analysis	SW846 6020		1.00	U003283	03/01/11 12:46	MET	TestAmerica Nashville

Client Sample ID: MW19-021711

Date Collected: 02/17/11 11:50

Date Received: 02/19/11 08:35

Lab Sample ID: NUB3024-03

Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared Or Analyzed	Analyst	Lab
total	Prep	EPA 5030B		1.00	11B4454_P	02/22/11 16:42	TSP	TestAmerica Nashville
total	Analysis	SW846 8260B		1.00	U003075	02/26/11 05:31	AJB	TestAmerica Nashville
total	Prep	EPA 3510C		0.971	11B4534_P	02/23/11 10:25	AMJ	TestAmerica Nashville
total	Analysis	SW846 8270D SIM		1.00	U002983	02/25/11 20:15	BES	TestAmerica Nashville
total	Prep	EPA 5030B (GC)		1.00	11B4573_P	02/17/11 11:50	GWM	TestAmerica Nashville
total	Analysis	NWTPH-Gx		1.00	U002940	02/23/11 13:33	GWM	TestAmerica Nashville
total	Prep	EPA 3510C		1.00	11B4540_P	02/24/11 06:20	MAH	TestAmerica Nashville



Client: AMEC Earth & Environmental (13993)
Project/Site: [none]

TestAmerica Job ID: NUB3024
SDG: NUB3024

Client Sample ID: MW19-021711

Date Collected: 02/17/11 11:50

Date Received: 02/19/11 08:35

Lab Sample ID: NUB3024-03

Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared Or Analyzed	Analyst	Lab
total	Analysis	NWTPH-Dx		1.00	U003017	02/24/11 16:12	jdj	TestAmerica Nashville
Dissolved	Prep	EPA 3010A / 6020 Dissolved		1.00	11B4489_P	02/28/11 08:45	MET	TestAmerica Nashville
Dissolved	Analysis	SW846 6020		1.00	U003283	03/01/11 12:50	MET	TestAmerica Nashville
total	Analysis	SW846 8260B		1.00	U003075	02/26/11 13:18		TestAmerica Nashville

Client Sample ID: MWA4-021711

Date Collected: 02/17/11 13:20

Date Received: 02/19/11 08:35

Lab Sample ID: NUB3024-04

Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared Or Analyzed	Analyst	Lab
total	Prep	EPA 5030B		1.00	11B4454_P	02/22/11 16:42	TSP	TestAmerica Nashville
total	Analysis	SW846 8260B		1.00	U003075	02/26/11 05:59	AJB	TestAmerica Nashville
total	Prep	EPA 3510C		0.971	11B4534_P	02/23/11 10:25	AMJ	TestAmerica Nashville
total	Analysis	SW846 8270D SIM		1.00	U002983	02/25/11 20:36	BES	TestAmerica Nashville
total	Prep	EPA 5030B (GC)		1.00	11B4573_P	02/17/11 13:20	GWM	TestAmerica Nashville
total	Analysis	NWTPH-Gx		1.00	U002940	02/23/11 14:05	GWM	TestAmerica Nashville
total	Prep	EPA 3510C		1.05	11B4540_P	02/24/11 06:20	MAH	TestAmerica Nashville
total	Analysis	NWTPH-Dx		1.00	U003017	02/24/11 16:31	jdj	TestAmerica Nashville
Dissolved	Prep	EPA 3010A / 6020 Dissolved		1.00	11B4489_P	02/28/11 08:45	MET	TestAmerica Nashville
Dissolved	Analysis	SW846 6020		100	U003283	03/01/11 12:54	MET	TestAmerica Nashville

Client Sample ID: MWA3-021711

Date Collected: 02/17/11 14:50

Date Received: 02/19/11 08:35

Lab Sample ID: NUB3024-05

Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared Or Analyzed	Analyst	Lab
total	Prep	EPA 5030B		1.00	11B4454_P	02/22/11 16:42	TSP	TestAmerica Nashville
total	Analysis	SW846 8260B		1.00	U003075	02/26/11 06:26	AJB	TestAmerica Nashville
total	Prep	EPA 3510C		0.971	11B4534_P	02/23/11 10:25	AMJ	TestAmerica Nashville
total	Analysis	SW846 8270D SIM		1.00	U002983	02/25/11 20:57	BES	TestAmerica Nashville
total	Prep	EPA 5030B (GC)		1.00	11B4573_P	02/17/11 14:50	GWM	TestAmerica Nashville
total	Analysis	NWTPH-Gx		1.00	U002940	02/23/11 14:35	GWM	TestAmerica Nashville
total	Prep	EPA 3510C		0.962	11B4540_P	02/24/11 06:20	MAH	TestAmerica Nashville
total	Analysis	NWTPH-Dx		1.00	U003017	02/24/11 16:47	jdj	TestAmerica Nashville
Dissolved	Prep	EPA 3010A / 6020 Dissolved		1.00	11B4489_P	02/28/11 08:45	MET	TestAmerica Nashville
Dissolved	Analysis	SW846 6020		1.00	U003283	03/01/11 12:58	MET	TestAmerica Nashville

Client: AMEC Earth & Environmental (13993)
Project/Site: [none]

TestAmerica Job ID: NUB3024
SDG: NUB3024

Client Sample ID: MWA2-021711

Date Collected: 02/17/11 17:05

Date Received: 02/19/11 08:35

Lab Sample ID: NUB3024-06

Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared Or Analyzed	Analyst	Lab
total	Prep	EPA 5030B		1.00	11B4454_P	02/22/11 16:42	TSP	TestAmerica Nashville
total	Analysis	SW846 8260B		1.00	U003075	02/26/11 06:54	AJB	TestAmerica Nashville
total	Prep	EPA 3510C		0.971	11B4534_P	02/23/11 10:25	AMJ	TestAmerica Nashville
total	Analysis	SW846 8270D SIM		1.00	U002983	02/25/11 21:19	BES	TestAmerica Nashville
total	Prep	EPA 5030B (GC)		1.00	11B4573_P	02/17/11 17:05	GWM	TestAmerica Nashville
total	Analysis	NWTPH-Gx		1.00	U002940	02/23/11 15:05	GWM	TestAmerica Nashville
total	Prep	EPA 3510C		0.971	11B4540_P	02/24/11 06:20	MAH	TestAmerica Nashville
total	Analysis	NWTPH-Dx		1.00	U003017	02/24/11 17:06	jdj	TestAmerica Nashville
Dissolved	Prep	EPA 3010A / 6020 Dissolved		1.00	11B4489_P	02/28/11 08:45	MET	TestAmerica Nashville
Dissolved	Analysis	SW846 6020		1.00	U003283	03/01/11 13:02	MET	TestAmerica Nashville

Client Sample ID: MWA5-021811

Date Collected: 02/18/11 09:45

Date Received: 02/19/11 08:35

Lab Sample ID: NUB3024-07

Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared Or Analyzed	Analyst	Lab
total	Prep	EPA 5030B		1.00	11B4454_P	02/22/11 16:42	TSP	TestAmerica Nashville
total	Analysis	SW846 8260B		1.00	U003075	02/26/11 07:21	AJB	TestAmerica Nashville
total	Prep	EPA 3510C		0.990	11B4534_P	02/23/11 10:25	AMJ	TestAmerica Nashville
total	Analysis	SW846 8270D SIM		1.00	U002983	02/25/11 21:40	BES	TestAmerica Nashville
total	Prep	EPA 5030B (GC)		1.00	11B4573_P	02/18/11 09:45	GWM	TestAmerica Nashville
total	Analysis	NWTPH-Gx		1.00	U002940	02/23/11 15:35	GWM	TestAmerica Nashville
total	Prep	EPA 3510C		0.980	11B4540_P	02/24/11 06:20	MAH	TestAmerica Nashville
total	Analysis	NWTPH-Dx		1.00	U003017	02/24/11 17:22	jdj	TestAmerica Nashville
Dissolved	Prep	EPA 3010A / 6020 Dissolved		1.00	11B4489_P	02/28/11 08:45	MET	TestAmerica Nashville
Dissolved	Analysis	SW846 6020		1.00	U003283	03/01/11 13:14	MET	TestAmerica Nashville

Client Sample ID: MWA6-021811

Date Collected: 02/18/11 10:55

Date Received: 02/19/11 08:35

Lab Sample ID: NUB3024-08

Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared Or Analyzed	Analyst	Lab
total	Prep	EPA 5030B		1.00	11B4454_P	02/22/11 16:42	TSP	TestAmerica Nashville
total	Analysis	SW846 8260B		1.00	U003075	02/26/11 07:49	AJB	TestAmerica Nashville
total	Prep	EPA 3510C		0.971	11B4534_P	02/23/11 10:25	AMJ	TestAmerica Nashville
total	Analysis	SW846 8270D SIM		1.00	U002983	02/25/11 22:01	BES	TestAmerica Nashville
total	Prep	EPA 5030B (GC)		1.00	11B4573_P	02/18/11 10:55	GWM	TestAmerica Nashville
total	Analysis	NWTPH-Gx		1.00	U002940	02/23/11 16:05	GWM	TestAmerica Nashville
total	Prep	EPA 3510C		0.990	11B4539_P	02/24/11 06:25	CAG	TestAmerica Nashville
total	Analysis	NWTPH-Dx		1.00	U003017	02/24/11 18:44	jdj	TestAmerica Nashville
Dissolved	Prep	EPA 3010A / 6020 Dissolved		1.00	11B4489_P	02/28/11 08:45	MET	TestAmerica Nashville



Client: AMEC Earth & Environmental (13993)
Project/Site: [none]

TestAmerica Job ID: NUB3024
SDG: NUB3024

Client Sample ID: MWA6-021811

Date Collected: 02/18/11 10:55

Date Received: 02/19/11 08:35

Lab Sample ID: NUB3024-08

Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared Or Analyzed	Analyst	Lab
Dissolved	Analysis	SW846 6020		1.00	U003283	03/01/11 13:18	MET	TestAmerica Nashville

Client Sample ID: MWA1-021811

Date Collected: 02/18/11 12:12

Date Received: 02/19/11 08:35

Lab Sample ID: NUB3024-09

Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared Or Analyzed	Analyst	Lab
total	Prep	EPA 5030B		1.00	11B4454_P	02/22/11 16:42	TSP	TestAmerica Nashville
total	Analysis	SW846 8260B		1.00	U003075	02/26/11 08:16	AJB	TestAmerica Nashville
total	Prep	EPA 3510C		0.980	11B4534_P	02/23/11 10:25	AMJ	TestAmerica Nashville
total	Analysis	SW846 8270D SIM		1.00	U002983	02/25/11 22:23	BES	TestAmerica Nashville
total	Prep	EPA 5030B (GC)		1.00	11B4573_P	02/18/11 12:12	GWM	TestAmerica Nashville
total	Analysis	NWTPH-Gx		1.00	U002940	02/23/11 16:35	GWM	TestAmerica Nashville
total	Prep	EPA 3510C		0.971	11B4539_P	02/24/11 06:25	CAG	TestAmerica Nashville
total	Analysis	NWTPH-Dx		1.00	U003017	02/24/11 19:00	jdj	TestAmerica Nashville
Dissolved	Prep	EPA 3010A / 6020 Dissolved		1.00	11B4489_P	02/28/11 08:45	MET	TestAmerica Nashville
Dissolved	Analysis	SW846 6020		1.00	U003283	03/01/11 13:22	MET	TestAmerica Nashville

Client Sample ID: MWA7-021811

Date Collected: 02/18/11 13:15

Date Received: 02/19/11 08:35

Lab Sample ID: NUB3024-10

Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared Or Analyzed	Analyst	Lab
total	Prep	EPA 5030B		1.00	11B4454_P	02/22/11 16:42	TSP	TestAmerica Nashville
total	Analysis	SW846 8260B		1.00	U003075	02/26/11 08:43	AJB	TestAmerica Nashville
total	Prep	EPA 3510C		0.980	11B4534_P	02/23/11 10:25	AMJ	TestAmerica Nashville
total	Analysis	SW846 8270D SIM		1.00	U002983	02/25/11 22:44	BES	TestAmerica Nashville
total	Prep	EPA 5030B (GC)		1.00	11B4573_P	02/18/11 13:15	GWM	TestAmerica Nashville
total	Analysis	NWTPH-Gx		1.00	U002940	02/23/11 17:05	GWM	TestAmerica Nashville
total	Prep	EPA 3510C		0.943	11B4539_P	02/24/11 06:25	CAG	TestAmerica Nashville
total	Analysis	NWTPH-Dx		1.00	U003017	02/24/11 19:16	jdj	TestAmerica Nashville
Dissolved	Prep	EPA 3010A / 6020 Dissolved		1.00	11B4489_P	02/28/11 08:45	MET	TestAmerica Nashville
Dissolved	Analysis	SW846 6020		1.00	U003283	03/01/11 13:26	MET	TestAmerica Nashville

Client Sample ID: Dup-021811

Date Collected: 02/18/11 00:01

Date Received: 02/19/11 08:35

Lab Sample ID: NUB3024-11

Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared Or Analyzed	Analyst	Lab
total	Prep	EPA 5030B		1.00	11B4454_P	02/22/11 16:42	TSP	TestAmerica Nashville
total	Analysis	SW846 8260B		1.00	U003075	02/26/11 09:11	AJB	TestAmerica Nashville
total	Prep	EPA 3510C		0.990	11B4534_P	02/23/11 10:25	AMJ	TestAmerica Nashville

Client: AMEC Earth & Environmental (13993)
Project/Site: [none]

TestAmerica Job ID: NUB3024
SDG: NUB3024

Client Sample ID: Dup-021811

Date Collected: 02/18/11 00:01

Date Received: 02/19/11 08:35

Lab Sample ID: NUB3024-11

Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared Or Analyzed	Analyst	Lab
total	Analysis	SW846 8270D SIM		1.00	U002983	02/25/11 23:06	BES	TestAmerica Nashville
total	Prep	EPA 5030B (GC)		1.00	11B4573_P	02/18/11 00:01	GWM	TestAmerica Nashville
total	Analysis	NWTPH-Gx		1.00	U002940	02/23/11 17:35	GWM	TestAmerica Nashville
total	Prep	EPA 3510C		0.990	11B4539_P	02/24/11 06:25	CAG	TestAmerica Nashville
total	Analysis	NWTPH-Dx		1.00	U003017	02/24/11 19:32	jdj	TestAmerica Nashville
Dissolved	Prep	EPA 3010A / 6020 Dissolved		1.00	11B4489_P	02/28/11 08:45	MET	TestAmerica Nashville
Dissolved	Analysis	SW846 6020		1.00	U003283	03/01/11 13:30	MET	TestAmerica Nashville

Client Sample ID: Trip Blank

Date Collected: 02/17/11 00:01

Date Received: 02/19/11 08:35

Lab Sample ID: NUB3024-12

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared Or Analyzed	Analyst	Lab
total	Prep	EPA 5030B		1.00	11B4454_P	02/22/11 16:42	TSP	TestAmerica Nashville
total	Analysis	SW846 8260B		1.00	U003075	02/26/11 04:09	AJB	TestAmerica Nashville
total	Prep	EPA 5030B (GC)		1.00	11B4573_P	02/17/11 00:01	GWM	TestAmerica Nashville
total	Analysis	NWTPH-Gx		1.00	U002940	02/23/11 12:03	GWM	TestAmerica Nashville

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11

Client: AMEC Earth & Environmental (13993)
Project/Site: [none]

TestAmerica Job ID: NUB3024
SDG: NUB3024

Method	Method Description	Protocol	Laboratory
SW846 8260B	Volatile Organic Compounds by EPA Method 8260B		TAL NSH
SW846 8270D SIM	Polyaromatic Hydrocarbons by EPA 8270D SIM		TAL NSH
NWTPH-Gx	Purgeable Petroleum Hydrocarbons		TAL NSH
NWTPH-Dx	Extractable Petroleum Hydrocarbons with Silica Gel Treatment		TAL NSH
SW846 6020	Dissolved Metals by Method 6020		TAL NSH

Protocol References:

Laboratory References:

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Road, Nashville, TN 37204, TEL 800-765-0980



AGENCY DRAFT

Certification Summary

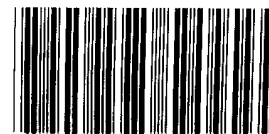
Client: AMEC Earth & Environmental (13993)
 Project/Site: [none]

TestAmerica Job ID: NUB3024
 SDG: NUB3024

Laboratory	Authority	Program	EPA Region	Certification ID	* Expiration Date
TestAmerica Nashville		AIHA		100790	09/01/11
TestAmerica Nashville		USDA		S-48469	11/02/13
TestAmerica Nashville	A2LA	A2LA	0	0453.07	12/31/11
TestAmerica Nashville	A2LA	WY UST	0	453.07	12/31/11
TestAmerica Nashville	Alabama	State Program	4	41150	03/19/11
TestAmerica Nashville	Alaska	Alaska UST	10	UST-087	07/24/11
TestAmerica Nashville	Arizona	State Program	9	AZ0473	05/05/11
TestAmerica Nashville	Arkansas	State Program	6	88-0737	04/25/11
TestAmerica Nashville	California	NELAC	9	1168CA	10/31/11
TestAmerica Nashville	Colorado	State Program	8	N/A	02/28/12
TestAmerica Nashville	Connecticut	State Program	1	PH-0220	12/31/11
TestAmerica Nashville	Florida	NELAC	4	E87358	06/30/11
TestAmerica Nashville	Illinois	NELAC	5	200010	12/09/11
TestAmerica Nashville	Iowa	State Program	7	131	05/01/12
TestAmerica Nashville	Kansas	NELAC	7	E-10229	10/31/11
TestAmerica Nashville	Kentucky	Kentucky UST	4	19	07/13/12
TestAmerica Nashville	Kentucky	State Program	4	90038	02/15/11
TestAmerica Nashville	Louisiana	NELAC	6	30613	06/30/11
TestAmerica Nashville	Louisiana	NELAC	6	LA100011	12/31/11
TestAmerica Nashville	Maryland	State Program	3	316	03/31/11
TestAmerica Nashville	Massachusetts	State Program	1	M-TN032	06/30/11
TestAmerica Nashville	Minnesota	NELAC	5	047-999-345	12/31/11
TestAmerica Nashville	Mississippi	State Program	4	N/A	06/30/11
TestAmerica Nashville	Montana	MT DEQ UST	8	NA	01/01/15
TestAmerica Nashville	Nevada	State Program	9	TN00032	07/31/11
TestAmerica Nashville	New Hampshire	NELAC	1	2963	10/09/11
TestAmerica Nashville	New Jersey	NELAC	2	TN965	06/30/11
TestAmerica Nashville	New York	NELAC	2	11342	04/01/11
TestAmerica Nashville	North Carolina	North Carolina DENR	4	387	12/31/11
TestAmerica Nashville	North Dakota	State Program	8	R-146	06/30/11
TestAmerica Nashville	Ohio	OVAP	5	CL0033	04/01/12
TestAmerica Nashville	Oklahoma	State Program	6	9412	08/31/11
TestAmerica Nashville	Oregon	NELAC	10	TN200001	04/30/11
TestAmerica Nashville	Pennsylvania	NELAC	3	68-00585	06/30/11
TestAmerica Nashville	Rhode Island	State Program	1	LAO00268	12/30/11
TestAmerica Nashville	South Carolina	State Program	4	84009	03/19/11
TestAmerica Nashville	Tennessee	State Program	4	R-19172-F16	06/30/16
TestAmerica Nashville	Tennessee	State Program	4	2008	03/19/11
TestAmerica Nashville	Texas	NELAC	6	T104704077-09-TX	08/31/11
TestAmerica Nashville	Utah	NELAC	8	TAN	06/30/11
TestAmerica Nashville	Virginia	State Program	3	00323	06/30/11
TestAmerica Nashville	Washington	State Program	10	C789	07/19/11
TestAmerica Nashville	West Virginia	West Virginia DEP	3	219	03/31/11
TestAmerica Nashville	Wisconsin	State Program	5	998020430	08/31/11

Accreditation may not be offered or required for all methods and analytes reported in this package. Please contact your project manager for the laboratory's current list of certified methods and analytes.

* Any expired certifications in this list are currently pending renewal and are considered valid.



COOLER RECEIPT

NUB3024

Cooler Received/Opened On 2/19/2011 @ 0835

1. Tracking # 6878 (last 4 digits, FedEx)

Courier: FedEx IR Gun ID 95610068

2. Temperature of rep. sample or temp blank when opened: 1.4 Degrees Celsius

3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES NO...NA

4. Were custody seals on outside of cooler? YES...NO...NA (1 Seal)

5. Were the seals intact, signed, and dated correctly? YES...NO...NA

6. Were custody papers inside cooler? YES...NO...NA

I certify that I opened the cooler and answered questions 1-6 (initial)

7. Were custody seals on containers: YES NO and Intact YES...NO...NA Were these signed and dated correctly? YES...NO...NA

8. Packing mat'l used? Bubblewrap Plastic bag Peanuts Vermiculite Foam Insert Paper Other None

9. Cooling process: Ice Ice-pack Ice (direct contact) Dry ice Other None

10. Did all containers arrive in good condition (unbroken)? YES...NO...NA

11. Were all container labels complete (#, date, signed, pres., etc)? YES...NO...NA

12. Did all container labels and tags agree with custody papers? YES...NO...NA

13a. Were VOA vials received? YES...NO...NA

b. Was there any observable headspace present in any VOA vial? YES...NO...NA

14. Was there a Trip Blank in this cooler? YES...NO...NA If multiple coolers, sequence # 1

I certify that I unloaded the cooler and answered questions 7-14 (initial)

15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES...NO...NA

b. Did the bottle labels indicate that the correct preservatives were used? YES...NO...NA

16. Was residual chlorine present? YES...NO...NA

I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (initial)

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

18. Did you sign the custody papers in the appropriate place? YES...NO...NA

19. Were correct containers used for the analysis requested? YES...NO...NA

20. Was sufficient amount of sample sent in each container? YES...NO...NA

I certify that I entered this project into LIMS and answered questions 17-20 (initial)

I certify that I attached a label with the unique LIMS number to each container (initial)

21. Were there Non-Conformance issues at login? YES...NO Was a PIPE generated? YES...NO...#

1 liter received broken MWA3





THE LEADER IN ENVIRONMENTAL TESTING
Nashville, TN

COOLER RECEIPT FORM

Cooler Received/Opened On 2/19/2011 @ 0835

1. Tracking # 6974 (last 4 digits, FedEx)

Courier: FedEx IR Gun ID 95610068

2. Temperature of rep. sample or temp blank when opened: 1.3 Degrees Celsius

3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES NO NA

4. Were custody seals on outside of cooler?

If yes, how many and where: 1 (Front)

5. Were the seals intact, signed, and dated correctly?

6. Were custody papers inside cooler?

I certify that I opened the cooler and answered questions 1-6 (initial) [Signature]

7. Were custody seals on containers:

YES NO

and Intact

YES...NO...NA

Were these signed and dated correctly?

YES...NO...NA

8. Packing mat'l used? Bubblewrap Plastic bag Peanuts Vermiculite Foam Insert Paper Other None

9. Cooling process:

Ice

Ice-pack

Ice (direct contact)

Dry ice

Other

None

10. Did all containers arrive in good condition (unbroken)?

YES...NO...NA

11. Were all container labels complete (#, date, signed, pres., etc)?

YES...NO...NA

12. Did all container labels and tags agree with custody papers?

YES...NO...NA

13a. Were VOA vials received?

YES...NO...NA

b. Was there any observable headspace present in any VOA vial?

YES...NO...NA

14. Was there a Trip Blank in this cooler?

YES...NO...NA

If multiple coolers, sequence #

2

I certify that I unloaded the cooler and answered questions 7-14 (initial) [Signature]

15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES..NO..NA

b. Did the bottle labels indicate that the correct preservatives were used

YES...NO...NA

16. Was residual chlorine present?

YES...NO...NA

I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (initial) [Signature]

17. Were custody papers properly filled out (ink, signed, etc)?

YES...NO...NA

18. Did you sign the custody papers in the appropriate place?

YES...NO...NA

19. Were correct containers used for the analysis requested?

YES...NO...NA

20. Was sufficient amount of sample sent in each container?

YES...NO...NA

I certify that I entered this project into LIMS and answered questions 17-20 (initial) [Signature]

I certify that I attached a label with the unique LIMS number to each container (initial) [Signature]

21. Were there Non-Conformance issues at login? YES..NO Was a PIPE generated? YES..NO..#





THE LEADER IN ENVIRONMENTAL TESTING
Nashville, TN

COOLER RECEIPT FORM

Cooler Received/Opened On 2/19/2011@ 8:35

1. Tracking # 3915 (last 4 digits, FedEx)

Courier: Fedex IR Gun ID Raynger

2. Temperature of rep. sample or temp blank when opened: 19 Degrees Celsius

3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES NO NA

4. Were custody seals on outside of cooler? YES...NO...NA

If yes, how many and where: 1 Front

5. Were the seals intact, signed, and dated correctly? YES...NO...NA

6. Were custody papers inside cooler? YES...NO...NA

I certify that I opened the cooler and answered questions 1-6 (initial) JH

7. Were custody seals on containers: YES NO and Intact YES...NO...NA

Were these signed and dated correctly? YES...NO...NA

8. Packing mat'l used? Bubblewrap Plastic bag Peanuts Vermiculite Foam Insert Paper Other None

9. Cooling process: Ice Ice-pack Ice (direct contact) Dry ice Other None

10. Did all containers arrive in good condition (unbroken)? YES...NO...NA

11. Were all container labels complete (#, date, signed, pres., etc)? YES...NO...NA

12. Did all container labels and tags agree with custody papers? YES...NO...NA

13a. Were VOA vials received? YES...NO...NA

b. Was there any observable headspace present in any VOA vial? YES...NO...NA

14. Was there a Trip Blank in this cooler? YES...NO...NA If multiple coolers, sequence # 3

I certify that I unloaded the cooler and answered questions 7-14 (initial) J

15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES..NO..NA

b. Did the bottle labels indicate that the correct preservatives were used YES...NO...NA

16. Was residual chlorine present? YES...NO...NA

I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (initial) [Signature]

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

18. Did you sign the custody papers in the appropriate place? YES...NO...NA

19. Were correct containers used for the analysis requested? YES...NO...NA

20. Was sufficient amount of sample sent in each container? YES...NO...NA

I certify that I entered this project into LIMS and answered questions 17-20 (initial) [Signature]

I certify that I attached a label with the unique LIMS number to each container (initial) [Signature]

21. Were there Non-Conformance issues at login? YES..NO Was a PIPE generated? YES..NO..#





THE LEADER IN ENVIRONMENTAL TESTING

Nashville, TN

COOLER RECEIPT FORM

Cooler Received/Opened On 2/19/2011 @ 0835

1. Tracking # 6890 (last 4 digits, FedEx)

Courier: FedEx IR Gun ID 96210146

2. Temperature of rep. sample or temp blank when opened: 1.9 Degrees Celsius

3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES NO...NA

4. Were custody seals on outside of cooler? YES...NO...NA

If yes, how many and where: 1-Front

5. Were the seals intact, signed, and dated correctly? YES...NO...NA

6. Were custody papers inside cooler? YES...NO...NA

I certify that I opened the cooler and answered questions 1-6 (initial) P.H.

7. Were custody seals on containers: YES NO and Intact YES...NO...NA

Were these signed and dated correctly? YES...NO...NA

8. Packing mat'l used? Bubblewrap Plastic bag Peanuts Vermiculite Foam Insert Paper Other None

9. Cooling process: Ice Ice-pack Ice (direct contact) Dry ice Other None

10. Did all containers arrive in good condition (unbroken)? YES...NO...NA

11. Were all container labels complete (#, date, signed, pres., etc)? YES...NO...NA

12. Did all container labels and tags agree with custody papers? YES...NO...NA

13a. Were VOA vials received? YES...NO...NA

b. Was there any observable headspace present in any VOA vial? YES...NO...NA

14. Was there a Trip Blank in this cooler? YES...NO...NA If multiple coolers, sequence # 4

I certify that I unloaded the cooler and answered questions 7-14 (initial)

15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES...NO...NA

b. Did the bottle labels indicate that the correct preservatives were used? YES...NO...NA

16. Was residual chlorine present? YES...NO...NA

I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (initial)

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

18. Did you sign the custody papers in the appropriate place? YES...NO...NA

19. Were correct containers used for the analysis requested? YES...NO...NA

20. Was sufficient amount of sample sent in each container? YES...NO...NA

I certify that I entered this project into LIMS and answered questions 17-20 (initial)

I certify that I attached a label with the unique LIMS number to each container (initial)

21. Were there Non-Conformance issues at login? YES...NO...# Was a PIPE generated? YES...NO...#

COOLER RECEIPT FORM

Cooler Received/Opened On 2/19/2011@ 8:35

1. Tracking # 0904 (last 4 digits, FedEx)

Courier: Fedex IR Gun ID Raynger

2. Temperature of rep. sample or temp blank when opened: 2.8 Degrees Celsius

3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES NO NA

4. Were custody seals on outside of cooler? YES...NO...NA

If yes, how many and where: 1 Front

5. Were the seals intact, signed, and dated correctly? YES...NO...NA

6. Were custody papers inside cooler? YES...NO...NA

I certify that I opened the cooler and answered questions 1-6 (initial) JH

7. Were custody seals on containers: YES NO and Intact YES...NO...NA

Were these signed and dated correctly? YES...NO...NA

8. Packing mat'l used? Bubblewrap Plastic bag Peanuts Vermiculite Foam Insert Paper Other None

9. Cooling process: Ice Ice-pack Ice (direct contact) Dry ice Other None

10. Did all containers arrive in good condition (unbroken)? YES...NO...NA

11. Were all container labels complete (#, date, signed, pres., etc)? YES...NO...NA

12. Did all container labels and tags agree with custody papers? YES...NO...NA

13a. Were VOA vials received? YES...NO...NA

b. Was there any observable headspace present in any VOA vial? YES...NO...NA

14. Was there a Trip Blank in this cooler? YES...NO...NA If multiple coolers, sequence # 5

I certify that I unloaded the cooler and answered questions 7-14 (initial) [Signature]

15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES...NO...NA

b. Did the bottle labels indicate that the correct preservatives were used YES...NO...NA

16. Was residual chlorine present? YES...NO...NA

I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (initial) [Signature]

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

18. Did you sign the custody papers in the appropriate place? YES...NO...NA

19. Were correct containers used for the analysis requested? YES...NO...NA

20. Was sufficient amount of sample sent in each container? YES...NO...NA

I certify that I entered this project into LIMS and answered questions 17-20 (initial) [Signature]

I certify that I attached a label with the unique LIMS number to each container (initial) [Signature]

21. Were there Non-Conformance issues at login? YES...NO Was a PIPE generated? YES...NO...#



COOLER RECEIPT FORM

Cooler Received/Opened On 2/19/2011 @ 0835

1. Tracking # 6937 (last 4 digits, FedEx)

Courier: FedEx IR Gun ID 96210146

2. Temperature of rep. sample or temp blank when opened: 0.3 Degrees Celsius

3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES NO NA

4. Were custody seals on outside of cooler? YES NO NA

If yes, how many and where: 1-Front

5. Were the seals intact, signed, and dated correctly? YES NO NA

6. Were custody papers inside cooler? YES NO NA

I certify that I opened the cooler and answered questions 1-6 (initial) P.H.

7. Were custody seals on containers: YES NO and Intact YES NO NA

Were these signed and dated correctly? YES NO NA

8. Packing mat'l used? Bubblewrap Plastic bag Peanuts Vermiculite Foam Insert Paper Other None

9. Cooling process: Ice Ice-pack Ice (direct contact) Dry ice Other None

10. Did all containers arrive in good condition (unbroken)? YES NO NA

11. Were all container labels complete (#, date, signed, pres., etc)? YES NO NA

12. Did all container labels and tags agree with custody papers? YES NO NA

13a. Were VOA vials received? YES NO NA

b. Was there any observable headspace present in any VOA vial? YES NO NA

14. Was there a Trip Blank in this cooler? YES NO NA If multiple coolers, sequence # 6

I certify that I unloaded the cooler and answered questions 7-14 (initial) P.H.

15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES NO NA

b. Did the bottle labels indicate that the correct preservatives were used YES NO NA

16. Was residual chlorine present? YES NO NA

I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (initial) P.H.

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

18. Did you sign the custody papers in the appropriate place? YES NO NA

19. Were correct containers used for the analysis requested? YES NO NA

20. Was sufficient amount of sample sent in each container? YES NO NA

I certify that I entered this project into LIMS and answered questions 17-20 (initial) P.H.

I certify that I attached a label with the unique LIMS number to each container (initial) P.H.

21. Were there Non-Conformance issues at login? YES NO Was a PIPE generated? YES NO #

*1 HCC
later
received
with no
info recorded
on the
label.*

