

UNDERGROUND STORAGE TANK REMOVAL AND SITE ASSESSMENT REPORT

5400 Airport Way South
Seattle, Washington

Prepared for:

Kelly-Moore Paint Company
San Carlos, California

Prepared by:

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May 2015

Project No. 0146970060

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UNDERGROUND STORAGE TANK REMOVAL AND SITE ASSESSMENT REPORT

5400 Airport Way South
Seattle, Washington

1.0 INTRODUCTION

This underground storage tank (UST) removal and site assessment report summarizes the discovery and decommissioning of a UST at the New Core Development Georgetown LLC (New Core) property (site), located at 5400 Airport Way in Seattle, Washington (Figure 1). The UST was discovered on March 5, 2015, during excavation work associated with an interim action soil cleanup at the site. The UST was a single walled steel tank with a capacity of approximately 500 gallons. Figures 2 and 3 show the site features, including the location of the UST prior to removal and the approximate extent of the tank excavation and subsequent soil removal.

The UST was removed by IO Environmental and Infrastructure, Inc. (IO), of Bellevue, Washington on March 11, 2015. Amec Foster Wheeler Environment & Infrastructure, Inc. (Amec Foster Wheeler) oversaw the removal of the UST and performed the UST decommissioning site assessment.

1.1 PURPOSE OF THIS REPORT

Amec Foster Wheeler provided oversight of the removal activities and collected soil samples as part of a site assessment as required under the Washington State Department of Ecology (Ecology) requirements per Washington Administrative Code (WAC) 173-360-390. The purpose of this report is to document the activities associated with UST removal, confirmation soil sampling, and site assessment as required by Ecology regulations.

1.2 PHYSICAL SETTING

The site is located northeast of the intersection of South Lucile Street and Airport Way South, in the Georgetown neighborhood of Seattle, Washington (Figure 1). The property is bordered on the north and east by BNSF Railway Company tracks, on the west by Airport Way South and the Airport Way South overpass, and on the south by a brewery.

1.3 BACKGROUND

The site has served a variety of industrial uses since the early 1900s. The site was previously owned by Kelly-Moore Paint Company (Kelly-Moore) who used it as a paint manufacturing facility.



Kelly-Moore discontinued paint production activities at the site in 2008, and sold the property to New Core Development in 2014. Kelly-Moore retained environmental liability for the site, and the site is currently enrolled in Ecology's Voluntary Cleanup Program (VCP) to remediate the site (VCP number NW2305). Available records indicate that at least 33 USTs have been removed from the site since the mid-1980s (AMEC Geomatrix, 2009 and 2011). Soil and groundwater contamination have been documented across the site from historical releases from USTs and associated piping, and other past industrial uses of the property.

This report fulfills reporting requirements for the site assessment associated with the discovery and decommissioning of the UST, but is only a small part of the overall interim action cleanup activities conducted in March of 2015. A Cleanup Action Plan (CAP) will be issued separately summarizing the interim action cleanup activities as part of the CAP, and a copy will be provided to Ecology.

2.0 UST DECOMMISSIONING AND CLOSURE METHODS

This section of the report describes the UST decommissioning and closure methods used at the site.

2.1 DISCOVERY AND NOTIFICATIONS

Prior to the discovery of the UST, soil samples collected from a soil excavation in March of 2015, near where the UST was discovered, contained total petroleum hydrocarbon (TPH) concentrations as high as 14,000 milligrams per kilogram (mg/kg) in the diesel range (TPH-D) and 3,000 mg/kg in the gasoline range (TPH-G). Due to the elevated TPH concentrations in soil, the excavation was expanded. It was during this second phase of soil excavation that the UST was discovered.

The UST was discovered on March 5, 2015. Ecology UST staff were immediately notified via telephone. On the same day, additional information was sent to Mr. Andrew Imke of Ecology regarding property and UST ownership, including details on the construction and capacity of the tank and the Site Assessor and UST Decommissioning license numbers of the Amec Foster Wheeler field supervisor. Due to the unplanned nature of the UST discovery, Mr. Imke granted a waiver of the 30-day waiting period normally required prior to decommissioning a UST. A copy of the waiver of the 30-day notice requirements is included in Appendix A.

The UST was located approximately 5 feet east of a series of underground pipes that were awaiting removal, along with associated petroleum contaminated soil. These pipes were left in place following the decommissioning of nine USTs in 2009 (AMEC Geomatrix, 2010). The pipes could not be removed completely at that time because they ran beneath a building. That building was demolished in February 2015, allowing for the remaining piping and associated contaminated soil to be removed (Figure 2). Because the UST was covered by two separate concrete slabs, the tank is assumed to predate the buildings constructed above it. There was no piping connected to the UST or in the immediate vicinity. Soil surrounding the tank is a sandy fill material.

Because the tank was hit inadvertently with a large excavator, the tank was dislodged and was partially damaged. Upon inspection, a small quantity of fluid was visible through a hole ripped in the top of the tank, and several small pin-holes were visible through the rusted metal tank walls. The fluid in the tank appeared to be rusty water, and some of it was observed leaking through the pin holes in the lower portion of the tank walls. To prevent further releases from the tank, the tank was carefully moved with an excavator and placed onto a visqueen liner in a shallow containment berm. Later in the day on March 5, the contents of the tank and the visqueen containment berm were pumped out by Ingenium, a waste disposal company based in Kent, Washington. The tank liquids were pumped into a 55-gallon drum, which was labeled and left on site for later removal.



2.2 UST CLOSURE METHODS

IO was contracted to permanently remove the UST. IO obtained a tank decommissioning permit from the Seattle Fire Department (Appendix C), and mobilized to the site on March 11, 2015 under Amec Foster Wheeler supervision. The tank was triple rinsed by Marine Vacuum Services, Inc., and certified safe for excavation, transport, and demolition by Northwest Marine Chemist, Inc. A copy of the pump and rinse certificate is included in Appendix D, and a copy of the Marine Chemist Certification is included in Appendix E.

Once the tank was rinsed and certified safe for removal, the Seattle Fire Department signed off on the removal permit and the tank was loaded onto a truck for transport to a recycling facility. A copy of the tank destruction record is included in Appendix F.

Ingenium removed and disposed of the tank liquids and rinsate water from the site on April 27. Copies of the disposal records are included in Appendix B.

Selected site photographs are included in Appendix G.

3.0 SOIL EXCAVATION, SAMPLING, AND BACKFILLING

The following sections describe soil excavation and sampling activities in the area of the UST.

3.1 UST EXCAVATION AND CONFIRMATION SOIL SAMPLING

Shortly after discovering the UST, and after it was moved onto a visqueen liner, soil sample Tank-soil-B1 was taken directly beneath the tank for characterization purposes. This sample was analyzed for TPH-D, TPH-G, benzene, toluene, ethylbenzene, and xylenes, semi-volatile organic compounds, polychlorinated biphenyls, and total Resource Conservation and Recovery Act (RCRA) list of eight metals. A follow-up sample, Tank-soil-B1B, was analyzed for volatile organic compounds. Results indicate the samples contained TPH-G, TPH-D, benzene, naphthalene, and benzo[a]pyrene are above proposed cleanup levels for the site (AMEC Geomatrix, 2011). TPH-G and TPH-D were detected at 4,400 and 2,100 mg/kg, respectively. It is unknown whether the source of the contamination was from the UST or from the former piping, or some other unknown source. Other constituents analyzed were either not detected at the laboratory reporting limit, or were detected at concentrations below cleanup levels established for the site. Results of samples collected from the vicinity of the UST are summarized in Table 1. Laboratory reports are included in Appendix H.

Once the UST was removed, the excavation was expanded to an area measuring approximately 15 feet wide by 90 feet long. The depth extended to the water table, which was approximately 5 feet below ground surface. In total, 373 tons of soil were excavated from the area around the UST and disposed of at the Republic Services landfill in Roosevelt, Washington. Copies of the disposal tickets are included in Appendix I. Confirmation samples were collected from the excavation bottom and sidewalls once the excavation was complete (Figure 3). The general naming scheme for the samples begins with a prefix, such as “B7-piping,” to indicate the samples were collected from the former Building 7 piping trench area. Next the samples were identified with either a “B” representing a bottom sample, or “S” representing a sidewall sample, and the number of each type of sample. Lastly, each sample was also identified by its depth in feet below ground surface. Thus, sample ‘B7-piping-B1-5.0’ was the first bottom sample collected in the former Building 7 piping trench area from a depth of 5.0 feet bgs. Soils from two sample locations (tank-soil-B1/B1B and B7-piping-S1-4.0) were subsequently excavated and new bottom and sidewall samples were collected.

Three bottom samples—B7-piping-B1-5.0, B7-piping-B2-5.0, and B7-piping-B5-5.0—and two sidewall samples—B7-piping-S1B-4.0, and B7-piping-S2-4.0—were collected in the vicinity of the former UST, and are representative of soil left in place. All five samples exceed the site cleanup levels for TPH-G, TPH-D, benzene, and benzo[a]pyrene. Sample B7-piping-B5-5.0 also exceeded the cleanup level for ethylbenzene.



3.2 SOIL TREATMENT

In situ chemical oxidation and oxygen releasing compounds were mixed with soil in the piping trench excavation prior to backfill. Descriptions of the oxidant mixing procedures will be described in more detail in the CAP, expected to be finalized in June of 2015.

3.3 BACKFILLING

The excavation was backfilled by New Core Development on March 27, 2015 with imported fill soil consisting primarily of a fine to medium grained sand with trace gravel.

3.4 SITE ASSESSMENT CHECKLIST

Amec Foster Wheeler completed a site assessment checklist, as required by Ecology. The forms are included in Appendix J.

4.0 CONCLUSIONS AND RECOMMENDATIONS

This report documents the removal of a single UST with a capacity of approximately 500 gallons from the New Core Development property (former Kelly-Moore property) at 5400 Airport Way South in Seattle, Washington. The work was conducted in compliance with WAC 173-360-385 and 173-360-390. The tank was discovered during excavation work as part of an interim action to remove petroleum contaminated soil. Previous contents of the UST are unknown. The UST removal and confirmation soil sampling can be summarized as follows:

- One approximately 500-gallon UST was removed from the site on March 11, 2015.
- Petroleum-contaminated soil was present in the area around the UST; however, it is unknown whether the source of contamination was from the UST or nearby product piping, or some other source.
- In total, 311 tons of soil were excavated from the area around the UST and disposed of at the Roosevelt Landfill in Roosevelt, Washington.
- Five confirmation soil samples collected from the excavation in the vicinity of the former UST exceeded cleanup levels established for the site for TPH-D, TPH-G, benzene, and benzo[a]pyrene.
- Groundwater was present in the excavation, but was not sampled.

Contamination at the site is already well documented, and the potential contribution from the UST is unknown, but likely to be minimal in comparison with sampling results from other areas of the site. Remediation at the site is ongoing and the site is already part of Ecology's VCP program (VCP number NW2305).



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5.0 REFERENCES

- AMEC Geomatrix, Inc. (AMEC Geomatrix). 2009. Limited Phase II Environmental Site Assessment Report, Former Kelly-Moore Manufacturing Facility, Seattle, Washington, November.
- AMEC Geomatrix. 2010. Underground Storage Tank Decommissioning Report, Former Kelly-Moore Manufacturing Facility, Seattle, Washington. February.
- AMEC Geomatrix. 2011. Remedial Investigation and Feasibility Study, Former Kelly-Moore Manufacturing Facility, Seattle, Washington, October.



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TABLES

TABLE 1
SOIL SAMPLING RESULTS^{1,2}
5400 Airport Way South
Seattle, Washington

All concentrations in milligrams per kilogram (mg/kg).

Sample Location	Depth (feet bgs)	Sample Date	TPH			Benzene	Toluene	Ethylbenzene	m,p-Xylene	o-Xylene	Benzo[a]pyrene	Naphthalene
			Diesel	Lube Oil	Gasoline							
Cleanup Level ³			2,000	2,000	30 ⁴	0.004	4.65	6.05	13.5	322	0.23	4.46
Tank-soil-B1 ⁵	~ 3.5	03/05/15	2,100	1,700	4,400	0.17	0.19	2.5	5.0	1.3 U	11	8.2
Tank-soil-B1B ⁵	~ 3.5	03/09/15	--	--	--	0.063 U	0.31 U	0.29	1.2	0.17	--	0.38
B7-Piping-S1-4.0 ⁵	4.0	02/27/15	14,000	6,100	250	0.11	0.17 U	0.17 U	0.64	0.17 U	7.8	--
B7-Piping-B1-5.0	5.0	02/27/15	3,300	370	2,600	0.097	0.14 U	0.62	3.8	1.4	0.42	--
B7-Piping-B2-5.0	5.0	02/27/15	4,100	710	3,000	0.41	0.098 U	1.2	8.9	4.8	4.6	--
B7-Piping-S2-4.0	4.0	02/27/15	7,400	5,600	1,300	0.069	0.095 U	7.4	9.5	1.0	51	--
B7-Piping-B5-5.0	5.0	03/13/15	7,800	970 U	1,100	0.13	0.12 U	0.27	1.4	0.12 U	3.7	--
B7-Piping-S1B-4.0	4.0	03/13/15	11,000	1,300 U	3,900	0.27	0.12 U	0.27	1.4	0.12 U	0.28	--

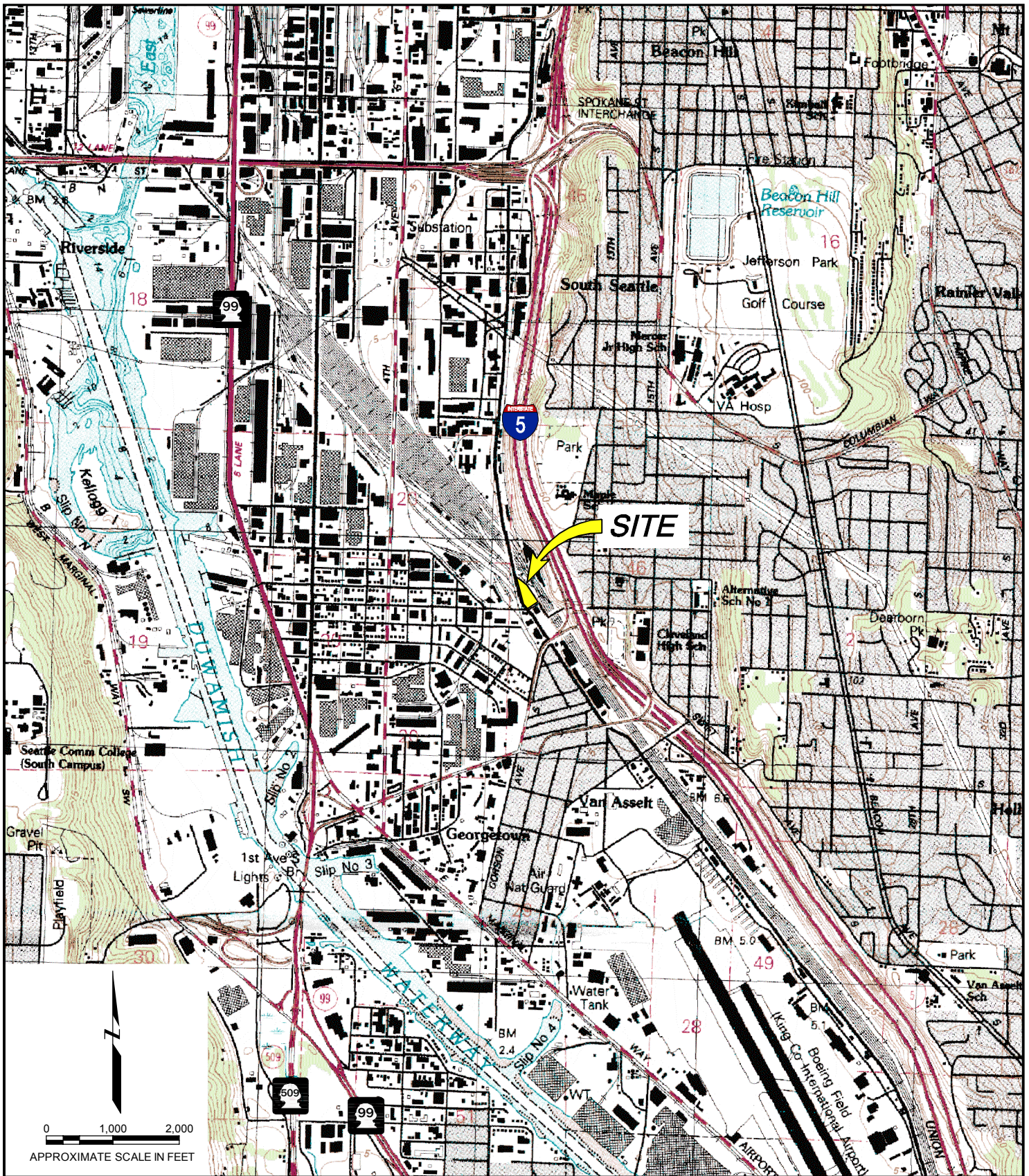
Notes


1. Data qualifiers are as follows:
U = analyte not detected at or above laboratory reporting limit indicated.
2. **Bold** values exceed cleanup level.
3. Cleanup levels obtained from Remedial Investigation and Feasibility Study (AMEC Geomatrix, 2011).
4. If benzene is present.
5. Samples with soil that was subsequently removed.

Abbreviations

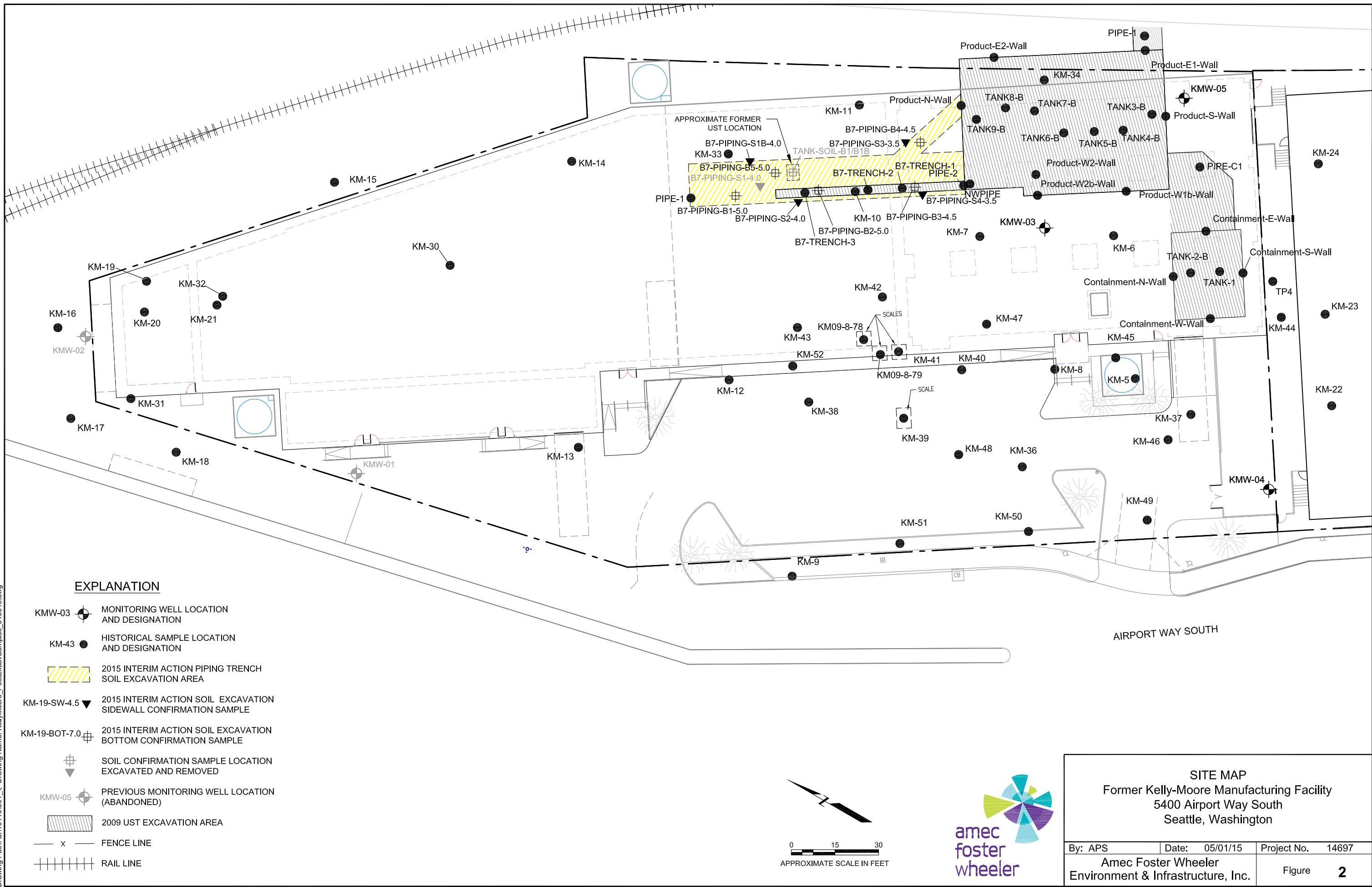
-- = not analyzed/not available
bgs = below ground surface
TPH = total petroleum hydrocarbons

FIGURES



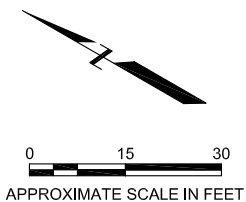
<p>CLIENT</p> <p>Former Kelly-Moore Manufacturing Facility</p>	 <p>amec foster wheeler</p>	<p>PROJECT</p> <p>5410 Airport Way South Seattle, Washington</p>	<p>DATE</p> <p>MAY 2015</p>
<p>Amec Foster Wheeler Environment & Infrastructure, Inc. 600 University Street, Suite 600 Seattle, WA 98101</p>		<p>TITLE</p> <p>SITE LOCATION</p>	<p>SCALE</p> <p>AS SHOWN</p> <p>PROJECT NO.</p> <p>16110</p> <p>FIGURE</p> <p>1</p>

Plot Date: 05/01/15 - 10:56am, Plotted by: adam.stenberg
Drawing Path: S:\16110\001_1, Drawing Name: KellyMoore_PostExcavSamples_043015.dwg



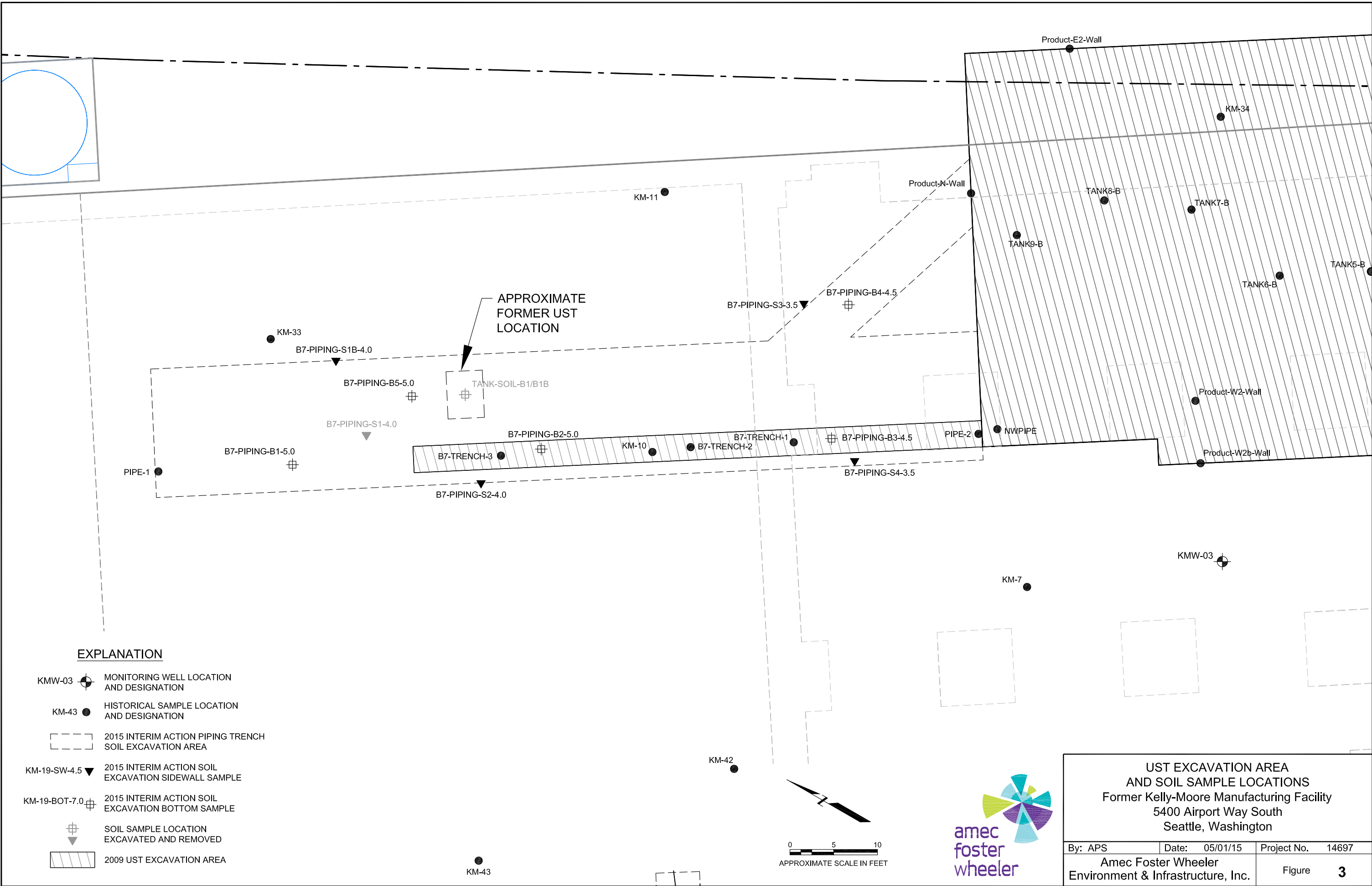
EXPLANATION

- KMW-03 MONITORING WELL LOCATION AND DESIGNATION
- KM-43 HISTORICAL SAMPLE LOCATION AND DESIGNATION
- 2015 INTERIM ACTION PIPING TRENCH
- 2015 INTERIM ACTION SOIL EXCAVATION
- KM-19-SW-4.5 2015 INTERIM ACTION SOIL EXCAVATION
- KM-19-BOT-7.0 2015 INTERIM ACTION SOIL EXCAVATION
- SOIL CONFIRMATION SAMPLE LOCATION EXCAVATED AND REMOVED
- KMW-05 PREVIOUS MONITORING WELL LOCATION (ABANDONED)
- 2009 UST EXCAVATION AREA
- x FENCE LINE
- RAIL LINE



SITE MAP Former Kelly-Moore Manufacturing Facility 5400 Airport Way South Seattle, Washington		
By: APS	Date: 05/01/15	Project No. 14697
Amec Foster Wheeler Environment & Infrastructure, Inc.		Figure 2

Plot Date: 05/01/15 - 12:24pm, Plotted by: adam.stenberg
Drawing Path: S:\16110\001_1, Drawing Name: KellyMoore_USTExcavSamples_040615.dwg



EXPLANATION

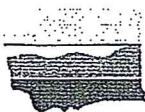
- KMW-03 MONITORING WELL LOCATION AND DESIGNATION
- KM-43 HISTORICAL SAMPLE LOCATION AND DESIGNATION
- 2015 INTERIM ACTION PIPING TRENCH
- 2015 INTERIM ACTION SOIL EXCAVATION AREA
- KM-19-SW-4.5 2015 INTERIM ACTION SOIL EXCAVATION SIDEWALL SAMPLE
- KM-19-BOT-7.0 2015 INTERIM ACTION SOIL EXCAVATION BOTTOM SAMPLE
- SOIL SAMPLE LOCATION EXCAVATED AND REMOVED
- 2009 UST EXCAVATION AREA

UST EXCAVATION AREA AND SOIL SAMPLE LOCATIONS Former Kelly-Moore Manufacturing Facility 5400 Airport Way South Seattle, Washington		
By: APS	Date: 05/01/15	Project No. 14697
Amec Foster Wheeler Environment & Infrastructure, Inc.		Figure 3



APPENDIX A

Waiver of 30-day Notice Requirement



DEPARTMENT OF
ECOLOGY
State of Washington

Request to Waive 30 Day Waiting Period

****To be completed by Person Submitting Request****

UST ID # (if known): UNK

Full Site Address: 5400 Airport Way S

Owner/ Operator: NCD Georgetown, LLC. Dan Jenkins

Contact Phone #: 206-679-8568

Waiver Requested for 30 Day Notice to:
(Circle one or both)

DECOMMISSION

INSTALL

Person and Company Submitting Request: Patrick Hsieh, PE Amec Foster Wheeler

Contact phone #: 206-549-9015

Reason for Submitting Request:
(Circle all that apply)

ENVIRONMENTAL HAZARD

HEALTH HAZARD

OTHER

Explain Reason: A tank was unexpectedly found to be leaking an unknown fluid during excavation onsite.

Date Request Submitted: 03/05/15

Date and Time of Construction: 03/05/15 10:00 AM

For all that apply	Name	Contact Phone Number	ICC Certification Number
INSTALLER			
DECOMMISSIONER	Nathan Moxley	509-332-9281	8198685
SITE ASSESSOR	<u>Nathan Moxley</u>	<u>509 332 9281</u>	<u>8198685</u>

must submit ASAP!

Completed 30 Day Notice Attached to Waiver Request Form?

(Circle one)

YES

NO

Department of Ecology Response to Request (to be completed by UST Inspector):

WAIVER GRANTED

WAIVER DENIED

Inspector: Andrew A. Burke

Signature and Date: [Signature]

04/05/2015

****DECOMMISSIONER(S) SHALL HAVE A COPY OF 30 DAY NOTICE AND A COPY OF THE WAIVER REQUEST FORM ON SITE DURING ALL DECOMMISSIONING RELATED ACTIONS *****



UNDERGROUND STORAGE TANK (UST)

30-DAY NOTICE

(See back of form for instructions)

FOR OFFICE USE ONLY

Site ID # _____

FS ID # _____

Please ✓ the appropriate box:

☐ Intent
to Install☐ Intent
to Close

HQ (360)407-7170 / Central (509)575-2490 / Eastern (509)329-3400 / Northwest (425)649-7000 / Southwest (360)407-6300

SITE INFORMATION

OWNER INFORMATION

(this form will be returned to this address)

Tag or UBI number

Kelly Moore Paint

Site Name

5400 Airport Way S.

Site Physical Address

Seattle WA

98108

City

Nathan Moxley

Zip Code

509-332-9281

Site Phone Number

Dan Jenkins NCD Georgetown, LLC.

UST Owner/Operator

11112 Rahier Ave S.

Mailing Address/PO Box

Seattle, WA 98178

City

206-679-8568

Zip Code

Owner/Operator Phone Number

dan@newcoredevelopment.com

Owner/Operator Email Address

TANK INFORMATION

Tank ID	Substance Stored	Capacity	Date Project is Expected to Begin	Comments:
Unknown	Unknown	~300gals	3/5/15	

1) SERVICE PROVIDER INFORMATION - check the appropriate boxes

PLEASE NOTE: INDIVIDUALS PERFORMING UST SERVICES MUST BE ICC CERTIFIED OR HAVE
PASSED ANOTHER QUALIFYING EXAM APPROVED BY THE DEPARTMENT OF ECOLOGY.☐ Installer ☒ Decommissioner ☐ Site Assessor

Amec Foster Wheeler

Service Provider Company Name

Nathan Moxley

Certified Service Provider Name

8198685

ICC Certification #

Contact Person

509-332-9281

Contact Phone Number

Nathan.moxley@amec-fw.com

Contact Email Address

2) SERVICE PROVIDER INFORMATION (REQUIRED IF USING MORE THAN ONE PROVIDER) - check the appropriate boxes

☐ Installer ☐ Decommissioner ☐ Site Assessor

Service Provider Company Name

Contact Person

Certified Service Provider Name

Contact Phone Number

ICC Certification #

Contact Email Address

Imke, Andrew (ECY)

From: Hsieh, Patrick [patrick.hsieh@amecfw.com]
Sent: Thursday, March 05, 2015 2:58 PM
To: Imke, Andrew (ECY)
Cc: Moxley, Nathan; Gray, Natasya
Subject: UST Notice and Waiver
Attachments: 030515 UST Notice and waiver.pdf

Andrew,

Please see the attached paperwork and call me (info below) if anything else needs to be done.
Tasya is not in the office today and Nathan is still onsite with no access to email.

Regards,

Patrick Hsieh, PE | Associate Engineer

Amec Foster Wheeler Environment & Infrastructure | Seattle, Washington
600 University St, Suite 600 | Seattle, WA 98101
206.342.1773 (direct) 206.549.9015 (cell) | 206.342.1760 (Seattle Main) | 206.342.1761 (fax)
patrick.hsieh@amecfw.com



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Moxley, Nathan

From: Imke, Andrew (ECY) <aimk461@ECY.WA.GOV>
Sent: Monday, April 06, 2015 11:52 AM
To: Moxley, Nathan
Subject: RE: Site Assessment Report - 5400 Airport Way S., Seattle

Good morning Nathan,

As we just discussed on the phone, I will extend the deadline for submission of the required regulatory documentation for Decommissioning of the abandon UST systems until May 15, 2015. Please ensure that these documents are submitted as soon as they become available.

Respectfully,
Drew

Andrew A. Imke
Senior Underground Storage Tank Inspector
Dept. of Ecology-NWR0: TCP/UST
Work (425) 649-7226
Cell (425) 457-3142
Fax (425) 649-7161
andrew.imke@ecy.wa.gov

From: Moxley, Nathan [mailto:nathan.moxley@amecfw.com]
Sent: Monday, April 06, 2015 10:00 AM
To: Imke, Andrew (ECY)
Cc: Gray, Natasya; May, Logan
Subject: Site Assessment Report - 5400 Airport Way S., Seattle

Andrew,

We are still preparing the Site Assessment report for the New Core Development Site at 5400 Airport Way South in Seattle, and would like approval for an extension to the 30-day reporting requirement. The UST discovered on March 5, 2015 was permanently removed on March 11, 2015, and 30 days would be this Wednesday, April 8, 2015. The UST decommissioning report is but one part of a larger interim action cleanup report being prepared simultaneously. Please let me know about the extension.

Thanks,

Nathan



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APPENDIX B

Tank Liquids and Rinsate Water Disposal Record

Records pending as of the writing of this report.
To be submitted separately.



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APPENDIX C

Seattle Fire Department UST Decommissioning Permit

RECEIVED

MAR 09 2015

PERMIT SECTION



W60 08/11/15
9 AM SK

Your
Seattle
Fire Department

APPLICATION FOR TEMPORARY PERMIT

Code 7908

Commercial Tank Removal/Decommissioning

Permit Fee: \$218.00

Date Issued: 3/11/15

Tank(s) must be removed from site on the same day as permit is issued!

TO BE COMPLETED BY PERMIT APPLICANT

FIRM NAME	TO Environmental & Infrastructure		
MAILING ADDRESS	2200 118th Ave SE	SUITE	
CITY	Bellevue	STATE	WA ZIP 98005
JOBSITE ADDRESS	5400 Airport Way South, Seattle, WA		
CONTACT PERSON	SEPP KELLER	PHONE NUMBER	(206) 698-3093
Number of Tank(s):	1	Tank Size(s):	1,000
Product(s) Previously Contained:		Water / Stoddard Solvent	
<input checked="" type="checkbox"/> Removal (Marine Chemist inspection and certificate required for all tanks regardless of size or contents)		<input type="checkbox"/> Aboveground tank	
<input type="checkbox"/> Abandonment-in-Place (Marine Chemist certificate required for tanks previously containing Class I flammable liquids and/or unknowns)		<input checked="" type="checkbox"/> Underground tank	
Hot work being conducted:		<input checked="" type="checkbox"/> No <input type="checkbox"/> Yes (If yes, a separate hot work permit is required)	

Permit applications may be submitted in person weekdays from 8:00 a.m. to 5:00 p.m., or mailed to:

Seattle Fire Department
Fire Marshal's Office - Permits
220 Third Ave S, 2nd Floor
Seattle, WA 98104-2608

To pay with a Visa or Master Card: Fax or email this application
THEN CALL US TO CONFIRM RECEIPT AND MAKE PAYMENT
Tel: (206) 386-1450 / Fax: (206) 386-1348
E-mail: permits@seattle.gov

Call 386-1450, at least 24 hours prior to needed inspection time to arrange for an appointment.

TANKS MAY BE REMOVED/DECOMMISSIONED ONLY AFTER FIRE DEPARTMENT INSPECTION

NO HOT WORK IS ALLOWED ON A TANK SYSTEM PRIOR TO ISSUANCE OF THIS FIRE DEPARTMENT PERMIT!

Permission is hereby granted to remove or decommission the tank(s) identified in this permit in accordance with the attached conditions, all noted special conditions, and all applicable provisions of the Seattle Fire Code, federal, state and local regulations. **THIS PERMIT IS NULL AND VOID IF PERMIT CONDITIONS ARE NOT ATTACHED**

Special permit conditions: Tank removal/decommissioning must be performed, or directly supervised, by an ICC certified individual (WAC 173-360-600)

FMO USE: 2820030915	APPROVED BY:	
Check No.:	Inspector: R. Derr	SFD ID# 132
Receipt No.: 5-243589	Name of Marine Chemist: P. Allen	Certificate # 137
Application ID#: 106257	Date: 3/11/15	

APPENDIX D

UST Pump and Rinse Certificate

Marine Vacuum Service, Inc.

GENERAL CONTRACTOR

CONTRACTORS LICENSE # MARINVS097JA

P.O. Box 24263 Seattle, Washington 98124

Telephone (206) 762-0240

FAX (206) 763-8084

1-800-540-7491

AST/UST STORAGE TANK PUMP & RINSE CERTIFICATE

Tank Size: 750 gls
Last Contents: Stoddard Solvent
Tank Location: 5400 Airport Way S.
Seattle WA.

Marine Vacuum Service, Inc. certifies that the above mentioned tank(s) have been triple rinsed in accordance with the industry standard as outlined in 40 CFR PART 280.70, WAC 173-360-380(I), API 1604, API 2015 and that all residual product and rinsate has been disposed of in accordance with Federal, State and Local regulations. Tanks listed above are **NOT GAS FREE** or **NOT SAFE FOR HOT WORK**

Tank Owner: _____

Contractor: IO Environmental + Infrastructure

M.V.S. Representative: Carl Phillip Kuschner

Date: 03-11-15

Notes:

DBE # D4M1302341

EPA # WAD980974521

A MINORITY BUSINESS ENTERPRISE ID # D4M1302341

APPENDIX E

Marine Chemist Tank Testing Certificate



I O Environmental	Kelly Moore	Mar 11, 2015
Survey Requested by	Vessel Owner Agent	Date
Tank Farm	Underground Storage Tank	5400 Airport Way South
Vessel	Type of Vessel	Specific Location of Vessel
Stoddard Solvent	O ₂ , LEL, Visual, VOC	10:25
Last Three 3 Loadings	Tests Performed	Time Survey Completed

Inspected Spaces:

Group 1. 1-1,000 gal. UST

Safety Designations:

**ATMOSPHERE SAFE FOR WORKERS
SAFE FOR HOT WORK**

Instructions

Maintain firewatch with charged extinguisher at ready during hot work operations.
This tank has been cleaned free of all flammable and combustible residues and is safe for excavation, transportation, and demolition.

Test Results

	<u>% O₂</u>	<u>% LEL</u>	<u>VOC</u>
Inspected spaces group 1	20.8%	0%	6.1 ppm

Limits of Detection

0.1 ppm VOC

In the event of physical or atmospheric changes affecting the STANDARD SAFETY DESIGNATIONS assigned to any of the above spaces, this certificate is voided; spaces not listed on the Certificate are not to be entered unless authorized on another Certificate and/or maintained in accordance with OSHA 29 CFR 1915; or if in any doubt, immediately stop all work and contact the undersigned Marine Chemist. Unless otherwise stated on the Certificate, all spaces and affected adjacent spaces are to be reinspected daily or more often as necessary by the competent person or the authority having jurisdiction as applicable in support of work prior to entry or commencement of work.

QUALIFICATIONS: Transfer of ballast, cargo, fuel or manipulation of valves or closure equipment tending to alter conditions in pipelines, tanks, or compartments subject to gas accumulation, unless specifically approved on this Certificate, requires inspection and a new Certificate for spaces so affected. All lines, vents, heating coils, valves, and similar enclosed appurtenances shall be considered "not safe" unless otherwise specifically designated. Movement of the vessel from its specific location voids the Certificate unless shifting of the vessel within the facility has been specifically authorized on this certificate.

STANDARD SAFETY DESIGNATIONS: (partial list, paraphrased from NFPA 306, Subsections 4.3.1 through 4.3.6)

ATMOSPHERE SAFE FOR WORKERS: In the compartment or space so designated (a) the oxygen content of the atmosphere shall be at least 19.5 percent and not greater than 22 percent by volume; (b) the concentration of flammable materials is below 10 percent of the lower explosive limit; (c) any toxic materials in the atmosphere associated with cargo, fuel, tank coatings, inerting mediums, or fumigants are within permissible concentrations at the time of the inspection.

NOT SAFE FOR WORKERS: In the compartment or space so designated, entry shall not be permitted.

ENTER WITH RESTRICTIONS: In the compartment or space so designated, entry for work is permitted only if conditions of proper protective equipment, or clothing, or time, or all of the aforementioned, as appropriate, are as specified.

SAFE FOR HOT WORK: In the compartment or space so designated (a) the oxygen content of the atmosphere is not greater than 22 percent by volume; (b) the concentration of flammable materials in the atmosphere is less than 10 percent of the lower explosive limit; (c) the residues, scale, or preservative coatings are cleaned sufficiently to prevent the spread of fire and are not be capable of producing a higher concentration than permitted by (a) or (b); (d) all adjacent spaces, containing or having contained flammable or combustible materials shall be sufficiently cleaned of residues, scale, or preservative coatings to prevent the spread of fire; or they are inerted. Ship's fuel tanks, lube tanks, or engine room or fire room bilges, or other machinery spaces, are treated in accordance with the Marine Chemist's requirements.

SAFE FOR LIMITED HOT WORK: In the compartment or space so designated (a) portions of the space meet the requirements Safe for Hot Work and Partial Cleaning, as applicable, or (b) the space is inerted, adjacent spaces meet the requirements for Safe for Hot Work, and hot work is restricted to specific locations; (c) portions of the space shall meet the requirements for Safe for Hot Work, as applicable; and the nature or type of hot work shall be limited or restricted.

NOT SAFE FOR HOT WORK: In the compartment or space so designated, hot is not permitted.

CHEMISTS ENDORSEMENT. This is to certify that I have personally determined that all spaces in the foregoing list are in accordance with NFPA 306 Control of Gas Hazards on Vessels and have found the condition of each to be in accordance with its assigned designation.

"The undersigned acknowledges receipt of this Certificate under NFPA 306 and understands conditions and limitations under which it was issued, and the requirements for maintaining its validity."

This Certificate is based on conditions existing at the time the inspection herein set forth was completed and is issued subject to compliance with all qualifications and instructions.

Authorized Representative

Mar 11, 2015

Date

I O Environmental

Company

Signed Marine Chemist

637

CMC No.

APPENDIX F

Tank Destruction Record

Marine Vacuum Service, Inc.

GENERAL CONTRACTOR

CONTRACTORS LICENSE # MARINVS097JA

P.O. Box 24263 Seattle, Washington 98124

Telephone (206) 762-0240

FAX (206) 763-8084

1-800-540-7491

STORAGE TANK

CERTIFICATE OF DESTRUCTION

DATE: 3/11/15

TANK OWNER: Kelley Moore Paint / 10 Environmental

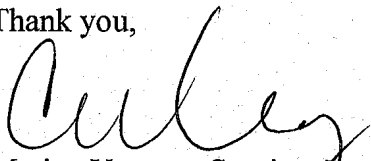
TANK LOCATION: 5400 Airport Way S. Seattle, WA

TANK DESCRIPTION: 750 UST

LAST CONTENTS HELD IN TANKS: Stoddard solvent

Marine Vacuum Service, Inc certifies that the tank mentioned above was pumped of all liquid materials and washed clean with a high-pressure washer and soap solution. The tank and contents therein have been disposed of according to all Local, State and Federal Regulations.

Thank you,



Marine Vacuum Service, Inc.

DBE # D4M1302341

EPA # WAD980974521

A MINORITY BUSINESS ENTERPRISE ID # D4M1302341

APPENDIX G

Selected Site Photographs

APPENDIX G

SELECTED SITE PHOTOGRAPHS

5400 Airport Way South
Seattle, Washington



Photograph 1 Close-up of the underground storage tank (UST) after moving to temporary staging area.



Photograph 2 UST after discovery on March 5, 2015. View is to the east.

APPENDIX G

SELECTED SITE PHOTOGRAPHS

5400 Airport Way South
Seattle, Washington



Photograph 3 UST after moving to temporary staging area. View is to the east.

APPENDIX H

Laboratory Analytical Results



14648 NE 95th Street, Redmond, WA 98052 • (425) 883-3881

March 6, 2015

Tasya Gray
AMEC Environment and Infrastructure, Inc.
One Union Square
600 University Street, Suite 600
Seattle, WA 98101

Re: Analytical Data for Project 14697
Laboratory Reference No. 1503-037

Dear Tasya:

Enclosed are the analytical results and associated quality control data for samples submitted on March 5, 2015.

The standard policy of OnSite Environmental, Inc. is to store your samples for 30 days from the date of receipt. If you require longer storage, please contact the laboratory.

We appreciate the opportunity to be of service to you on this project. If you have any questions concerning the data, or need additional information, please feel free to call me.

Sincerely,

A handwritten signature in black ink, appearing to read 'DB', followed by a long horizontal stroke.

David Baumeister
Project Manager

Enclosures

Date of Report: March 6, 2015
Samples Submitted: March 5, 2015
Laboratory Reference: 1503-037
Project: 14697

Case Narrative

Samples were collected on March 5, 2015 and received by the laboratory on March 5, 2015. They were maintained at the laboratory at a temperature of 2°C to 6°C.

General QA/QC issues associated with the analytical data enclosed in this laboratory report will be indicated with a reference to a comment or explanation on the Data Qualifier page. More complex and involved QA/QC issues will be discussed in detail below.

NWTPH Gx/BTEX Analysis

Method 5035A VOA vials were not provided. The sample was therefore extracted from a 4-ounce jar for analysis. Some loss of volatiles may have occurred.

The sample chromatogram is similar to mineral spirits with diesel.

Semivolatiles EPA 8270D/SIM Analysis

Sample tank-soil-B1 had one surrogate recovery out of control limits. This is within allowance of our standard operating procedure as long as the recovery is above 10%.

Total Metals EPA 6010C/7471B Analysis

The duplicate RPD for Chromium is outside control limits due to the inherently high percentage variability of samples that are within five times the detection limit.

Please note that any other QA/QC issues associated with these extractions and analyses will be indicated with a footnote reference and discussed in detail on the Data Qualifier page.

Date of Report: March 6, 2015
 Samples Submitted: March 5, 2015
 Laboratory Reference: 1503-037
 Project: 14697

NWTPH-Gx/BTEX

Matrix: Soil
 Units: mg/kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	tank-soil-B1					
Laboratory ID:	03-037-01					
Benzene	0.17	0.025	EPA 8021B	3-5-15	3-5-15	
Toluene	0.19	0.13	EPA 8021B	3-5-15	3-5-15	
Ethyl Benzene	2.5	0.13	EPA 8021B	3-5-15	3-5-15	
m,p-Xylene	5.0	0.13	EPA 8021B	3-5-15	3-5-15	
o-Xylene	ND	1.3	EPA 8021B	3-5-15	3-5-15	U1
Gasoline	4400	320	NWTPH-Gx	3-5-15	3-6-15	Z
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Fluorobenzene</i>	<i>85</i>	<i>68-123</i>				

Date of Report: March 6, 2015
 Samples Submitted: March 5, 2015
 Laboratory Reference: 1503-037
 Project: 14697

**NWTPH-Gx/BTEX
 QUALITY CONTROL**

Matrix: Soil
 Units: mg/kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0305S1					
Benzene	ND	0.020	EPA 8021B	3-5-15	3-5-15	
Toluene	ND	0.050	EPA 8021B	3-5-15	3-5-15	
Ethyl Benzene	ND	0.050	EPA 8021B	3-5-15	3-5-15	
m,p-Xylene	ND	0.050	EPA 8021B	3-5-15	3-5-15	
o-Xylene	ND	0.050	EPA 8021B	3-5-15	3-5-15	
Gasoline	ND	5.0	NWTPH-Gx	3-5-15	3-5-15	
Surrogate:	Percent Recovery	Control Limits				
Fluorobenzene	84	68-123				

Analyte	Result	Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE								
Laboratory ID:	03-031-01							
	ORIG	DUP						
Benzene	ND	ND	NA	NA	NA	NA	NA	30
Toluene	ND	ND	NA	NA	NA	NA	NA	30
Ethyl Benzene	ND	ND	NA	NA	NA	NA	NA	30
m,p-Xylene	ND	ND	NA	NA	NA	NA	NA	30
o-Xylene	ND	ND	NA	NA	NA	NA	NA	30
Gasoline	ND	ND	NA	NA	NA	NA	NA	30
Surrogate:								
Fluorobenzene				89	92	68-123		

SPIKE BLANKS

Laboratory ID:	SB0305S1								
	SB	SBD	SB	SBD	SB	SBD			
Benzene	0.930	0.964	1.00	1.00	93	96	75-117	4	13
Toluene	0.936	0.968	1.00	1.00	94	97	78-118	3	12
Ethyl Benzene	0.932	0.974	1.00	1.00	93	97	78-118	4	12
m,p-Xylene	0.939	0.980	1.00	1.00	94	98	78-121	4	13
o-Xylene	0.948	0.983	1.00	1.00	95	98	77-119	4	13
Surrogate:									
Fluorobenzene					91	94	68-123		

Date of Report: March 6, 2015
 Samples Submitted: March 5, 2015
 Laboratory Reference: 1503-037
 Project: 14697

NWTPH-Dx

Matrix: Soil
 Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	tank-soil-B1					
Laboratory ID:	03-037-01					
Diesel Range Organics	2100	150	NWTPH-Dx	3-5-15	3-5-15	M
Lube Oil Range Organics	1700	290	NWTPH-Dx	3-5-15	3-5-15	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	<i>87</i>	<i>50-150</i>				

Date of Report: March 6, 2015
 Samples Submitted: March 5, 2015
 Laboratory Reference: 1503-037
 Project: 14697

**NWTPH-Dx
 QUALITY CONTROL**

Matrix: Soil
 Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0305S4					
Diesel Range Organics	ND	25	NWTPH-Dx	3-5-15	3-5-15	
Lube Oil Range Organics	ND	50	NWTPH-Dx	3-5-15	3-5-15	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	<i>102</i>	<i>50-150</i>				

Analyte	Result		Spike Level		Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE										
Laboratory ID:	03-031-01									
	ORIG	DUP								
Diesel Range	ND	ND	NA	NA		NA	NA	NA	NA	
Lube Oil Range	ND	ND	NA	NA		NA	NA	NA	NA	
Surrogate:										
o-Terphenyl						92	94	50-150		

Date of Report: March 6, 2015
 Samples Submitted: March 5, 2015
 Laboratory Reference: 1503-037
 Project: 14697

SEMIVOLATILES EPA 8270D/SIM
 page 1 of 2

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	tank-soil-B1					
Laboratory ID:	03-037-01					
n-Nitrosodimethylamine	ND	0.79	EPA 8270D	3-5-15	3-6-15	
Pyridine	ND	7.9	EPA 8270D	3-5-15	3-6-15	
Phenol	ND	0.79	EPA 8270D	3-5-15	3-6-15	
Aniline	ND	3.9	EPA 8270D	3-5-15	3-6-15	
bis(2-Chloroethyl)ether	ND	0.79	EPA 8270D	3-5-15	3-6-15	
2-Chlorophenol	ND	0.79	EPA 8270D	3-5-15	3-6-15	
1,3-Dichlorobenzene	ND	0.79	EPA 8270D	3-5-15	3-6-15	
1,4-Dichlorobenzene	ND	0.79	EPA 8270D	3-5-15	3-6-15	
Benzyl alcohol	ND	3.9	EPA 8270D	3-5-15	3-6-15	
1,2-Dichlorobenzene	ND	0.79	EPA 8270D	3-5-15	3-6-15	
2-Methylphenol (o-Cresol)	ND	0.79	EPA 8270D	3-5-15	3-6-15	
bis(2-Chloroisopropyl)ether	ND	0.79	EPA 8270D	3-5-15	3-6-15	
(3+4)-Methylphenol (m,p-Cresol)	ND	0.79	EPA 8270D	3-5-15	3-6-15	
n-Nitroso-di-n-propylamine	ND	0.79	EPA 8270D	3-5-15	3-6-15	
Hexachloroethane	ND	0.79	EPA 8270D	3-5-15	3-6-15	
Nitrobenzene	ND	0.79	EPA 8270D	3-5-15	3-6-15	
Isophorone	ND	0.79	EPA 8270D	3-5-15	3-6-15	
2-Nitrophenol	ND	0.79	EPA 8270D	3-5-15	3-6-15	
2,4-Dimethylphenol	ND	0.79	EPA 8270D	3-5-15	3-6-15	
bis(2-Chloroethoxy)methane	ND	0.79	EPA 8270D	3-5-15	3-6-15	
2,4-Dichlorophenol	ND	0.79	EPA 8270D	3-5-15	3-6-15	
1,2,4-Trichlorobenzene	ND	0.79	EPA 8270D	3-5-15	3-6-15	
Naphthalene	8.2	0.79	EPA 8270D	3-5-15	3-6-15	
4-Chloroaniline	ND	3.9	EPA 8270D	3-5-15	3-6-15	
Hexachlorobutadiene	ND	0.79	EPA 8270D	3-5-15	3-6-15	
4-Chloro-3-methylphenol	ND	0.79	EPA 8270D	3-5-15	3-6-15	
2-Methylnaphthalene	16	0.79	EPA 8270D	3-5-15	3-6-15	
1-Methylnaphthalene	12	0.79	EPA 8270D	3-5-15	3-6-15	
Hexachlorocyclopentadiene	ND	0.79	EPA 8270D	3-5-15	3-6-15	
2,4,6-Trichlorophenol	ND	0.79	EPA 8270D	3-5-15	3-6-15	
2,3-Dichloroaniline	ND	0.79	EPA 8270D	3-5-15	3-6-15	
2,4,5-Trichlorophenol	ND	0.79	EPA 8270D	3-5-15	3-6-15	
2-Chloronaphthalene	ND	0.79	EPA 8270D	3-5-15	3-6-15	
2-Nitroaniline	ND	0.79	EPA 8270D	3-5-15	3-6-15	
1,4-Dinitrobenzene	ND	0.79	EPA 8270D	3-5-15	3-6-15	
Dimethylphthalate	ND	0.79	EPA 8270D	3-5-15	3-6-15	
1,3-Dinitrobenzene	ND	0.79	EPA 8270D	3-5-15	3-6-15	
2,6-Dinitrotoluene	ND	0.79	EPA 8270D	3-5-15	3-6-15	
1,2-Dinitrobenzene	ND	0.79	EPA 8270D	3-5-15	3-6-15	
Acenaphthylene	0.93	0.79	EPA 8270D	3-5-15	3-6-15	
3-Nitroaniline	ND	0.79	EPA 8270D	3-5-15	3-6-15	

Date of Report: March 6, 2015
 Samples Submitted: March 5, 2015
 Laboratory Reference: 1503-037
 Project: 14697

SEMIVOLATILES EPA 8270D/SIM
 page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	tank-soil-B1					
Laboratory ID:	03-037-01					
2,4-Dinitrophenol	ND	3.9	EPA 8270D	3-5-15	3-6-15	
Acenaphthene	5.8	0.79	EPA 8270D	3-5-15	3-6-15	
4-Nitrophenol	ND	0.79	EPA 8270D	3-5-15	3-6-15	
2,4-Dinitrotoluene	ND	0.79	EPA 8270D	3-5-15	3-6-15	
Dibenzofuran	1.8	0.79	EPA 8270D	3-5-15	3-6-15	
2,3,5,6-Tetrachlorophenol	ND	0.79	EPA 8270D	3-5-15	3-6-15	
2,3,4,6-Tetrachlorophenol	ND	0.79	EPA 8270D	3-5-15	3-6-15	
Diethylphthalate	ND	3.9	EPA 8270D	3-5-15	3-6-15	
4-Chlorophenyl-phenylether	ND	0.79	EPA 8270D	3-5-15	3-6-15	
4-Nitroaniline	ND	0.79	EPA 8270D	3-5-15	3-6-15	
Fluorene	3.6	0.79	EPA 8270D	3-5-15	3-6-15	
4,6-Dinitro-2-methylphenol	ND	3.9	EPA 8270D	3-5-15	3-6-15	
n-Nitrosodiphenylamine	ND	0.79	EPA 8270D	3-5-15	3-6-15	
1,2-Diphenylhydrazine	ND	0.79	EPA 8270D	3-5-15	3-6-15	
4-Bromophenyl-phenylether	ND	0.79	EPA 8270D	3-5-15	3-6-15	
Hexachlorobenzene	ND	0.79	EPA 8270D	3-5-15	3-6-15	
Pentachlorophenol	ND	3.9	EPA 8270D	3-5-15	3-6-15	
Phenanthrene	12	0.79	EPA 8270D	3-5-15	3-6-15	
Anthracene	3.3	0.79	EPA 8270D	3-5-15	3-6-15	
Carbazole	ND	0.79	EPA 8270D	3-5-15	3-6-15	
Di-n-butylphthalate	ND	0.79	EPA 8270D	3-5-15	3-6-15	
Fluoranthene	14	0.79	EPA 8270D	3-5-15	3-6-15	
Benzidine	ND	7.9	EPA 8270D	3-5-15	3-6-15	
Pyrene	14	0.79	EPA 8270D	3-5-15	3-6-15	
Butylbenzylphthalate	ND	0.79	EPA 8270D	3-5-15	3-6-15	
bis-2-Ethylhexyladipate	ND	0.79	EPA 8270D	3-5-15	3-6-15	
3,3'-Dichlorobenzidine	ND	3.9	EPA 8270D	3-5-15	3-6-15	
Benzo[a]anthracene	11	0.79	EPA 8270D	3-5-15	3-6-15	
Chrysene	15	0.79	EPA 8270D	3-5-15	3-6-15	
bis(2-Ethylhexyl)phthalate	ND	0.79	EPA 8270D	3-5-15	3-6-15	
Di-n-octylphthalate	ND	0.79	EPA 8270D	3-5-15	3-6-15	
Benzo[b]fluoranthene	20	0.79	EPA 8270D	3-5-15	3-6-15	
Benzo(j,k)fluoranthene	6.0	0.79	EPA 8270D	3-5-15	3-6-15	
Benzo[a]pyrene	11	0.79	EPA 8270D	3-5-15	3-6-15	
Indeno[1,2,3-cd]pyrene	8.4	0.79	EPA 8270D	3-5-15	3-6-15	
Dibenz[a,h]anthracene	3.2	0.79	EPA 8270D	3-5-15	3-6-15	
Benzo[g,h,i]perylene	10	0.79	EPA 8270D	3-5-15	3-6-15	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
2-Fluorophenol	47	31 - 110				
Phenol-d6	60	34 - 109				
Nitrobenzene-d5	125	30 - 109				
2-Fluorobiphenyl	83	39 - 103				
2,4,6-Tribromophenol	48	25 - 120				
Terphenyl-d14	75	40 - 117				

Q

Date of Report: March 6, 2015
 Samples Submitted: March 5, 2015
 Laboratory Reference: 1503-037
 Project: 14697

**SEMIVOLATILES EPA 8270D/SIM
 METHOD BLANK QUALITY CONTROL**

page 1 of 2

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Laboratory ID:	MB0305S1					
n-Nitrosodimethylamine	ND	0.033	EPA 8270D	3-5-15	3-6-15	
Pyridine	ND	0.33	EPA 8270D	3-5-15	3-6-15	
Phenol	ND	0.033	EPA 8270D	3-5-15	3-6-15	
Aniline	ND	0.17	EPA 8270D	3-5-15	3-6-15	
bis(2-Chloroethyl)ether	ND	0.033	EPA 8270D	3-5-15	3-6-15	
2-Chlorophenol	ND	0.033	EPA 8270D	3-5-15	3-6-15	
1,3-Dichlorobenzene	ND	0.033	EPA 8270D	3-5-15	3-6-15	
1,4-Dichlorobenzene	ND	0.033	EPA 8270D	3-5-15	3-6-15	
Benzyl alcohol	ND	0.17	EPA 8270D	3-5-15	3-6-15	
1,2-Dichlorobenzene	ND	0.033	EPA 8270D	3-5-15	3-6-15	
2-Methylphenol (o-Cresol)	ND	0.033	EPA 8270D	3-5-15	3-6-15	
bis(2-Chloroisopropyl)ether	ND	0.033	EPA 8270D	3-5-15	3-6-15	
(3+4)-Methylphenol (m,p-Cresol)	ND	0.033	EPA 8270D	3-5-15	3-6-15	
n-Nitroso-di-n-propylamine	ND	0.033	EPA 8270D	3-5-15	3-6-15	
Hexachloroethane	ND	0.033	EPA 8270D	3-5-15	3-6-15	
Nitrobenzene	ND	0.033	EPA 8270D	3-5-15	3-6-15	
Isophorone	ND	0.033	EPA 8270D	3-5-15	3-6-15	
2-Nitrophenol	ND	0.033	EPA 8270D	3-5-15	3-6-15	
2,4-Dimethylphenol	ND	0.033	EPA 8270D	3-5-15	3-6-15	
bis(2-Chloroethoxy)methane	ND	0.033	EPA 8270D	3-5-15	3-6-15	
2,4-Dichlorophenol	ND	0.033	EPA 8270D	3-5-15	3-6-15	
1,2,4-Trichlorobenzene	ND	0.033	EPA 8270D	3-5-15	3-6-15	
Naphthalene	ND	0.0067	EPA 8270D/SIM	3-5-15	3-6-15	
4-Chloroaniline	ND	0.17	EPA 8270D	3-5-15	3-6-15	
Hexachlorobutadiene	ND	0.033	EPA 8270D	3-5-15	3-6-15	
4-Chloro-3-methylphenol	ND	0.033	EPA 8270D	3-5-15	3-6-15	
2-Methylnaphthalene	ND	0.0067	EPA 8270D/SIM	3-5-15	3-6-15	
1-Methylnaphthalene	ND	0.0067	EPA 8270D/SIM	3-5-15	3-6-15	
Hexachlorocyclopentadiene	ND	0.033	EPA 8270D	3-5-15	3-6-15	
2,4,6-Trichlorophenol	ND	0.033	EPA 8270D	3-5-15	3-6-15	
2,3-Dichloroaniline	ND	0.033	EPA 8270D	3-5-15	3-6-15	
2,4,5-Trichlorophenol	ND	0.033	EPA 8270D	3-5-15	3-6-15	
2-Chloronaphthalene	ND	0.033	EPA 8270D	3-5-15	3-6-15	
2-Nitroaniline	ND	0.033	EPA 8270D	3-5-15	3-6-15	
1,4-Dinitrobenzene	ND	0.033	EPA 8270D	3-5-15	3-6-15	
Dimethylphthalate	ND	0.033	EPA 8270D	3-5-15	3-6-15	
1,3-Dinitrobenzene	ND	0.033	EPA 8270D	3-5-15	3-6-15	
2,6-Dinitrotoluene	ND	0.033	EPA 8270D	3-5-15	3-6-15	
1,2-Dinitrobenzene	ND	0.033	EPA 8270D	3-5-15	3-6-15	
Acenaphthylene	ND	0.0067	EPA 8270D/SIM	3-5-15	3-6-15	
3-Nitroaniline	ND	0.033	EPA 8270D	3-5-15	3-6-15	

Date of Report: March 6, 2015
 Samples Submitted: March 5, 2015
 Laboratory Reference: 1503-037
 Project: 14697

SEMIVOLATILES EPA 8270D/SIM
METHOD BLANK QUALITY CONTROL
 page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<hr/>						
Laboratory ID:	MB0305S1					
2,4-Dinitrophenol	ND	0.17	EPA 8270D	3-5-15	3-6-15	
Acenaphthene	ND	0.0067	EPA 8270D/SIM	3-5-15	3-6-15	
4-Nitrophenol	ND	0.033	EPA 8270D	3-5-15	3-6-15	
2,4-Dinitrotoluene	ND	0.033	EPA 8270D	3-5-15	3-6-15	
Dibenzofuran	ND	0.033	EPA 8270D	3-5-15	3-6-15	
2,3,5,6-Tetrachlorophenol	ND	0.033	EPA 8270D	3-5-15	3-6-15	
2,3,4,6-Tetrachlorophenol	ND	0.033	EPA 8270D	3-5-15	3-6-15	
Diethylphthalate	ND	0.17	EPA 8270D	3-5-15	3-6-15	
4-Chlorophenyl-phenylether	ND	0.033	EPA 8270D	3-5-15	3-6-15	
4-Nitroaniline	ND	0.033	EPA 8270D	3-5-15	3-6-15	
Fluorene	ND	0.0067	EPA 8270D/SIM	3-5-15	3-6-15	
4,6-Dinitro-2-methylphenol	ND	0.17	EPA 8270D	3-5-15	3-6-15	
n-Nitrosodiphenylamine	ND	0.033	EPA 8270D	3-5-15	3-6-15	
1,2-Diphenylhydrazine	ND	0.033	EPA 8270D	3-5-15	3-6-15	
4-Bromophenyl-phenylether	ND	0.033	EPA 8270D	3-5-15	3-6-15	
Hexachlorobenzene	ND	0.033	EPA 8270D	3-5-15	3-6-15	
Pentachlorophenol	ND	0.17	EPA 8270D	3-5-15	3-6-15	
Phenanthrene	ND	0.0067	EPA 8270D/SIM	3-5-15	3-6-15	
Anthracene	ND	0.0067	EPA 8270D/SIM	3-5-15	3-6-15	
Carbazole	ND	0.033	EPA 8270D	3-5-15	3-6-15	
Di-n-butylphthalate	ND	0.033	EPA 8270D	3-5-15	3-6-15	
Fluoranthene	ND	0.0067	EPA 8270D/SIM	3-5-15	3-6-15	
Benzidine	ND	0.33	EPA 8270D	3-5-15	3-6-15	
Pyrene	ND	0.0067	EPA 8270D/SIM	3-5-15	3-6-15	
Butylbenzylphthalate	ND	0.033	EPA 8270D	3-5-15	3-6-15	
bis-2-Ethylhexyladipate	ND	0.033	EPA 8270D	3-5-15	3-6-15	
3,3'-Dichlorobenzidine	ND	0.17	EPA 8270D	3-5-15	3-6-15	
Benzo[a]anthracene	ND	0.0067	EPA 8270D/SIM	3-5-15	3-6-15	
Chrysene	ND	0.0067	EPA 8270D/SIM	3-5-15	3-6-15	
bis(2-Ethylhexyl)phthalate	ND	0.033	EPA 8270D	3-5-15	3-6-15	
Di-n-octylphthalate	ND	0.033	EPA 8270D	3-5-15	3-6-15	
Benzo[b]fluoranthene	ND	0.0067	EPA 8270D/SIM	3-5-15	3-6-15	
Benzo(j,k)fluoranthene	ND	0.0067	EPA 8270D/SIM	3-5-15	3-6-15	
Benzo[a]pyrene	ND	0.0067	EPA 8270D/SIM	3-5-15	3-6-15	
Indeno[1,2,3-cd]pyrene	ND	0.0067	EPA 8270D/SIM	3-5-15	3-6-15	
Dibenz[a,h]anthracene	ND	0.0067	EPA 8270D/SIM	3-5-15	3-6-15	
Benzo[g,h,i]perylene	ND	0.0067	EPA 8270D/SIM	3-5-15	3-6-15	
<hr/>						
Surrogate:	Percent Recovery	Control Limits				
2-Fluorophenol	75	31 - 110				
Phenol-d6	77	34 - 109				
Nitrobenzene-d5	80	30 - 109				
2-Fluorobiphenyl	75	39 - 103				
2,4,6-Tribromophenol	69	25 - 120				
Terphenyl-d14	68	40 - 117				

Date of Report: March 6, 2015
 Samples Submitted: March 5, 2015
 Laboratory Reference: 1503-037
 Project: 14697

**SEMIVOLATILES EPA 8270D/SIM
 SB/SBD QUALITY CONTROL**

Matrix: Soil
 Units: mg/Kg

Analyte	Result		Spike Level		Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
SPIKE BLANKS										
Laboratory ID:	SB0305S1									
	SB	SBD	SB	SBD	SB	SBD				
Phenol	0.954	1.06	1.33	1.33	72	80	55 - 105	11	25	
2-Chlorophenol	0.950	1.07	1.33	1.33	71	80	56 - 102	12	30	
1,4-Dichlorobenzene	0.487	0.528	0.667	0.667	73	79	49 - 99	8	35	
n-Nitroso-di-n-propylamine	0.460	0.521	0.667	0.667	69	78	52 - 102	12	26	
1,2,4-Trichlorobenzene	0.479	0.559	0.667	0.667	72	84	49 - 110	15	30	
4-Chloro-3-methylphenol	0.908	1.10	1.33	1.33	68	83	59 - 113	19	22	
Acenaphthene	0.422	0.512	0.667	0.667	63	77	52 - 103	19	22	
4-Nitrophenol	0.944	1.18	1.33	1.33	71	89	51 - 125	22	23	
2,4-Dinitrotoluene	0.429	0.534	0.667	0.667	64	80	53 - 118	22	23	
Pentachlorophenol	0.957	1.13	1.33	1.33	72	85	25 - 141	17	39	
Pyrene	0.423	0.505	0.667	0.667	63	76	57 - 120	18	20	
Surrogate:										
2-Fluorophenol					68	76	31 - 110			
Phenol-d6					69	79	34 - 109			
Nitrobenzene-d5					69	82	30 - 109			
2-Fluorobiphenyl					66	78	39 - 103			
2,4,6-Tribromophenol					63	76	25 - 120			
Terphenyl-d14					60	71	40 - 117			

Date of Report: March 6, 2015
 Samples Submitted: March 5, 2015
 Laboratory Reference: 1503-037
 Project: 14697

PCBs
EPA 8082A

Matrix: Soil
 Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	tank-soil-B1					
Laboratory ID:	03-037-01					
Aroclor 1016	ND	0.24	EPA 8082A	3-6-15	3-6-15	
Aroclor 1221	ND	0.24	EPA 8082A	3-6-15	3-6-15	
Aroclor 1232	ND	0.24	EPA 8082A	3-6-15	3-6-15	
Aroclor 1242	ND	0.24	EPA 8082A	3-6-15	3-6-15	
Aroclor 1248	ND	0.24	EPA 8082A	3-6-15	3-6-15	
Aroclor 1254	ND	0.24	EPA 8082A	3-6-15	3-6-15	
Aroclor 1260	ND	0.24	EPA 8082A	3-6-15	3-6-15	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>DCB</i>	<i>104</i>	<i>55-140</i>				

Date of Report: March 6, 2015
 Samples Submitted: March 5, 2015
 Laboratory Reference: 1503-037
 Project: 14697

**PCBs EPA 8082A
 QUALITY CONTROL**

Matrix: Soil
 Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0306S1					
Aroclor 1016	ND	0.050	EPA 8082A	3-6-15	3-6-15	
Aroclor 1221	ND	0.050	EPA 8082A	3-6-15	3-6-15	
Aroclor 1232	ND	0.050	EPA 8082A	3-6-15	3-6-15	
Aroclor 1242	ND	0.050	EPA 8082A	3-6-15	3-6-15	
Aroclor 1248	ND	0.050	EPA 8082A	3-6-15	3-6-15	
Aroclor 1254	ND	0.050	EPA 8082A	3-6-15	3-6-15	
Aroclor 1260	ND	0.050	EPA 8082A	3-6-15	3-6-15	
Surrogate:	Percent Recovery	Control Limits				
DCB	91	55-140				

Analyte	Result		Spike Level		Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
MATRIX SPIKES										
Laboratory ID:	03-022-02									
	MS	MSD	MS	MSD		MS	MSD			
Aroclor 1260	0.296	0.267	0.500	0.500	ND	59	53	46-136	10	17
Surrogate:										
DCB						65	62	55-140		

Date of Report: March 6, 2015
 Samples Submitted: March 5, 2015
 Laboratory Reference: 1503-037
 Project: 14697

**TOTAL METALS
 EPA 6010C/7471B**

Matrix: Soil
 Units: mg/kg (ppm)

Analyte	Result	PQL	EPA Method	Date Prepared	Date Analyzed	Flags
<hr/>						
Lab ID:	03-037-01					
Client ID:	tank-soil-B1					
<hr/>						
Arsenic	ND	12	6010C	3-5-15	3-5-15	
Barium	170	2.9	6010C	3-5-15	3-5-15	
Cadmium	ND	0.59	6010C	3-5-15	3-5-15	
Chromium	25	0.59	6010C	3-5-15	3-5-15	
Lead	120	5.9	6010C	3-5-15	3-5-15	
Mercury	ND	0.29	7471B	3-6-15	3-6-15	
Selenium	ND	12	6010C	3-5-15	3-5-15	
Silver	ND	1.2	6010C	3-5-15	3-5-15	
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Date of Report: March 6, 2015
Samples Submitted: March 5, 2015
Laboratory Reference: 1503-037
Project: 14697

**TOTAL METALS
EPA 6010C
METHOD BLANK QUALITY CONTROL**

Date Extracted: 3-5-15
Date Analyzed: 3-5-15

Matrix: Soil
Units: mg/kg (ppm)

Lab ID: MB0305SM1

Analyte	Method	Result	PQL
Arsenic	6010C	ND	10
Barium	6010C	ND	2.5
Cadmium	6010C	ND	0.50
Chromium	6010C	ND	0.50
Lead	6010C	ND	5.0
Selenium	6010C	ND	10
Silver	6010C	ND	1.0

Date of Report: March 6, 2015
Samples Submitted: March 5, 2015
Laboratory Reference: 1503-037
Project: 14697

**TOTAL MERCURY
EPA 7471B
METHOD BLANK QUALITY CONTROL**

Date Extracted: 3-6-15
Date Analyzed: 3-6-15

Matrix: Soil
Units: mg/kg (ppm)

Lab ID: MB03061

Analyte	Method	Result	PQL
Mercury	7471B	ND	0.25

Date of Report: March 6, 2015
 Samples Submitted: March 5, 2015
 Laboratory Reference: 1503-037
 Project: 14697

**TOTAL METALS
 EPA 6010C
 DUPLICATE QUALITY CONTROL**

Date Extracted: 3-5-15

Date Analyzed: 3-5-15

Matrix: Soil

Units: mg/kg (ppm)

Lab ID: 02-189-01

Analyte	Sample Result	Duplicate Result	RPD	PQL	Flags
Arsenic	ND	ND	NA	10	
Barium	55.7	54.0	3	2.5	
Cadmium	ND	ND	NA	0.50	
Chromium	55.6	41.4	29	0.50	K
Lead	ND	ND	NA	5.0	
Selenium	ND	ND	NA	10	
Silver	ND	ND	NA	1.0	

Date of Report: March 6, 2015
Samples Submitted: March 5, 2015
Laboratory Reference: 1503-037
Project: 14697

**TOTAL MERCURY
EPA 7471B
DUPLICATE QUALITY CONTROL**

Date Extracted: 3-6-15

Date Analyzed: 3-6-15

Matrix: Soil

Units: mg/kg (ppm)

Lab ID: 03-037-01

Analyte	Sample Result	Duplicate Result	RPD	PQL	Flags
Mercury	ND	ND	NA	0.25	

Date of Report: March 6, 2015
 Samples Submitted: March 5, 2015
 Laboratory Reference: 1503-037
 Project: 14697

**TOTAL METALS
 EPA 6010C
 MS/MSD QUALITY CONTROL**

Date Extracted: 3-5-15

Date Analyzed: 3-5-15

Matrix: Soil

Units: mg/kg (ppm)

Lab ID: 02-189-01

Analyte	Spike Level	MS	Percent Recovery	MSD	Percent Recovery	RPD	Flags
Arsenic	100	94.2	94	89.9	90	5	
Barium	100	165	110	158	103	4	
Cadmium	50.0	50.0	100	48.3	97	3	
Chromium	100	139	83	138	83	0	
Lead	250	229	92	220	88	4	
Selenium	100	95.7	96	94.8	95	1	
Silver	25.0	21.4	86	20.4	82	5	

Date of Report: March 6, 2015
Samples Submitted: March 5, 2015
Laboratory Reference: 1503-037
Project: 14697

**TOTAL MERCURY
EPA 7471B
MS/MSD QUALITY CONTROL**

Date Extracted: 3-6-15

Date Analyzed: 3-6-15

Matrix: Soil

Units: mg/kg (ppm)

Lab ID: 03-037-01

Analyte	Spike Level	MS	Percent Recovery	MSD	Percent Recovery	RPD	Flags
Mercury	0.500	0.486	97	0.486	97	0	

Date of Report: March 6, 2015
Samples Submitted: March 5, 2015
Laboratory Reference: 1503-037
Project: 14697

% MOISTURE

Date Analyzed: 3-5-15

Client ID	Lab ID	% Moisture
tank-soil-B1	03-037-01	15



Data Qualifiers and Abbreviations

- A - Due to a high sample concentration, the amount spiked is insufficient for meaningful MS/MSD recovery data.
- B - The analyte indicated was also found in the blank sample.
- C - The duplicate RPD is outside control limits due to high result variability when analyte concentrations are within five times the quantitation limit.
- E - The value reported exceeds the quantitation range and is an estimate.
- F - Surrogate recovery data is not available due to the high concentration of coeluting target compounds.
- H - The analyte indicated is a common laboratory solvent and may have been introduced during sample preparation, and be impacting the sample result.
- I - Compound recovery is outside of the control limits.
- J - The value reported was below the practical quantitation limit. The value is an estimate.
- K - Sample duplicate RPD is outside control limits due to sample inhomogeneity. The sample was re-extracted and re-analyzed with similar results.
- L - The RPD is outside of the control limits.
- M - Hydrocarbons in the gasoline range are impacting the diesel range result.
- M1 - Hydrocarbons in the gasoline range (toluene-naphthalene) are present in the sample.
- N - Hydrocarbons in the lube oil range are impacting the diesel range result.
- N1 - Hydrocarbons in diesel range are impacting lube oil range results.
- O - Hydrocarbons indicative of heavier fuels are present in the sample and are impacting the gasoline result.
- P - The RPD of the detected concentrations between the two columns is greater than 40.
- Q - Surrogate recovery is outside of the control limits.
- S - Surrogate recovery data is not available due to the necessary dilution of the sample.
- T - The sample chromatogram is not similar to a typical _____.
- U - The analyte was analyzed for, but was not detected above the reported sample quantitation limit.
- U1 - The practical quantitation limit is elevated due to interferences present in the sample.
- V - Matrix Spike/Matrix Spike Duplicate recoveries are outside control limits due to matrix effects.
- W - Matrix Spike/Matrix Spike Duplicate RPD are outside control limits due to matrix effects.
- X - Sample extract treated with a mercury cleanup procedure.
- X1 - Sample extract treated with a Sulfuric acid/Silica gel cleanup procedure.
- Y - The calibration verification for this analyte exceeded the 20% drift specified in method 8260C, and therefore the reported result should be considered an estimate. The overall performance of the calibration verification standard met the acceptance criteria of the method.
- Z - The sample chromatogram is similar to mineral spirits with diesel.

ND - Not Detected at PQL
 PQL - Practical Quantitation Limit
 RPD - Relative Percent Difference



OnSite Environmental Inc.

Analytical Laboratory Testing Services
14648 NE 95th Street • Redmond, WA 98052
Phone: (425) 883-3881 • www.onsite-env.com

Chain of Custody

Page 1 of 1

Turnaround Request
(in working days)

Laboratory Number:

03-037

Company:

Qwee

Project Number:

14697

Project Name:

Former Kelly-Moore

Project Manager:

Tasya King

Sampled by:

Nathan Moxley

(Check One)

☐ Same Day ☒ 1 Day

☐ 2 Days ☐ 3 Days

☐ Standard (7 Days)
(TPH analysis 5 Days)

☒ Rush (other) PT

Lab ID Sample Identification

1 Tank-Soil-B1

Date Sampled 3/5/15 Time Sampled 1210 Matrix Soil

Number of Containers

NWTPH-HCID

X NWTPH-Gx/BTEX

X NWTPH-Gx

X NWTPH-Dx

Volatiles 8260C

Halogenated Volatiles 8260C

X Semivolatiles 8270D/SIM
(with low-level PAHs)

PAHs 8270D/SIM (low-level)

X PCBs 8082A

Organochlorine Pesticides 8081B

Organophosphorus Pesticides 8270D/SIM

Chlorinated Acid Herbicides 8151A

X Total RCRA Metals

Total MTCA Metals

TCLP Metals

HEM (oil and grease) 1664A

X % Moisture

Signature

[Signature]

Company

Qwee

Date

3/5/15

Time

1300

Comments/Special Instructions

Please confirm analysis of SVOCs and PCBs by Tasya King DJ

Relinquished

Received

Relinquished

Received

Relinquished

Received

Reviewed/Date

Reviewed/Date

Chromatograms with final report ☐

Data Package: Standard ☐ Level III ☐ Level IV ☐

Electronic Data Deliverables (EDDs) ☐



14648 NE 95th Street, Redmond, WA 98052 • (425) 883-3881

March 11, 2015

Tasya Gray
AMEC Environment and Infrastructure, Inc.
One Union Square
600 University Street, Suite 600
Seattle, WA 98101

Re: Analytical Data for Project 14967
Laboratory Reference No. 1503-080

Dear Tasya:

Enclosed are the analytical results and associated quality control data for samples submitted on March 10, 2015.

The standard policy of OnSite Environmental, Inc. is to store your samples for 30 days from the date of receipt. If you require longer storage, please contact the laboratory.

We appreciate the opportunity to be of service to you on this project. If you have any questions concerning the data, or need additional information, please feel free to call me.

Sincerely,

A handwritten signature in black ink, appearing to read 'DB', followed by a horizontal line.

David Baumeister
Project Manager

Enclosures

Date of Report: March 11, 2015
Samples Submitted: March 10, 2015
Laboratory Reference: 1503-080
Project: 14967

Case Narrative

Samples were collected on March 9, 2015 and received by the laboratory on March 10, 2015. They were maintained at the laboratory at a temperature of 2°C to 6°C.

General QA/QC issues associated with the analytical data enclosed in this laboratory report will be indicated with a reference to a comment or explanation on the Data Qualifier page. More complex and involved QA/QC issues will be discussed in detail below.

Volatiles EPA 8260C Analysis

Method 5035 vials were not supplied, therefore samples were extracted from 4oz jars. Some loss of volatiles may have occurred.

Due to the necessary dilution of the samples some MTCA cleanup levels were not achievable.

Any other QA/QC issues associated with this extraction and analysis will be indicated with a footnote reference and discussed in detail on the Data Qualifier page.

Date of Report: March 11, 2015
 Samples Submitted: March 10, 2015
 Laboratory Reference: 1503-080
 Project: 14967

VOLATILES EPA 8260C

Page 1 of 2

Matrix: Soil
 Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:		Tank-soil-B1-B				
Laboratory ID:		03-080-01				
Dichlorodifluoromethane	ND	0.063	EPA 8260C	3-10-15	3-10-15	
Chloromethane	ND	0.31	EPA 8260C	3-10-15	3-10-15	
Vinyl Chloride	ND	0.063	EPA 8260C	3-10-15	3-10-15	
Bromomethane	ND	0.063	EPA 8260C	3-10-15	3-10-15	
Chloroethane	ND	0.31	EPA 8260C	3-10-15	3-10-15	
Trichlorofluoromethane	ND	0.063	EPA 8260C	3-10-15	3-10-15	
1,1-Dichloroethene	ND	0.063	EPA 8260C	3-10-15	3-10-15	
Acetone	ND	0.31	EPA 8260C	3-10-15	3-10-15	
Iodomethane	ND	0.31	EPA 8260C	3-10-15	3-10-15	
Carbon Disulfide	ND	0.063	EPA 8260C	3-10-15	3-10-15	
Methylene Chloride	ND	0.31	EPA 8260C	3-10-15	3-10-15	
(trans) 1,2-Dichloroethene	ND	0.063	EPA 8260C	3-10-15	3-10-15	
Methyl t-Butyl Ether	ND	0.063	EPA 8260C	3-10-15	3-10-15	
1,1-Dichloroethane	ND	0.063	EPA 8260C	3-10-15	3-10-15	
Vinyl Acetate	ND	0.31	EPA 8260C	3-10-15	3-10-15	
2,2-Dichloropropane	ND	0.063	EPA 8260C	3-10-15	3-10-15	
(cis) 1,2-Dichloroethene	ND	0.063	EPA 8260C	3-10-15	3-10-15	
2-Butanone	ND	0.31	EPA 8260C	3-10-15	3-10-15	
Bromochloromethane	ND	0.063	EPA 8260C	3-10-15	3-10-15	
Chloroform	ND	0.063	EPA 8260C	3-10-15	3-10-15	
1,1,1-Trichloroethane	ND	0.063	EPA 8260C	3-10-15	3-10-15	
Carbon Tetrachloride	ND	0.063	EPA 8260C	3-10-15	3-10-15	
1,1-Dichloropropene	ND	0.063	EPA 8260C	3-10-15	3-10-15	
Benzene	ND	0.063	EPA 8260C	3-10-15	3-10-15	
1,2-Dichloroethane	ND	0.063	EPA 8260C	3-10-15	3-10-15	
Trichloroethene	ND	0.063	EPA 8260C	3-10-15	3-10-15	
1,2-Dichloropropane	ND	0.063	EPA 8260C	3-10-15	3-10-15	
Dibromomethane	ND	0.063	EPA 8260C	3-10-15	3-10-15	
Bromodichloromethane	ND	0.063	EPA 8260C	3-10-15	3-10-15	
2-Chloroethyl Vinyl Ether	ND	0.31	EPA 8260C	3-10-15	3-10-15	
(cis) 1,3-Dichloropropene	ND	0.063	EPA 8260C	3-10-15	3-10-15	
Methyl Isobutyl Ketone	ND	0.31	EPA 8260C	3-10-15	3-10-15	
Toluene	ND	0.31	EPA 8260C	3-10-15	3-10-15	
(trans) 1,3-Dichloropropene	ND	0.063	EPA 8260C	3-10-15	3-10-15	

Date of Report: March 11, 2015
 Samples Submitted: March 10, 2015
 Laboratory Reference: 1503-080
 Project: 14967

VOLATILES EPA 8260C

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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	Tank-soil-B1-B					
Laboratory ID:	03-080-01					
1,1,2-Trichloroethane	ND	0.063	EPA 8260C	3-10-15	3-10-15	
Tetrachloroethene	ND	0.063	EPA 8260C	3-10-15	3-10-15	
1,3-Dichloropropane	ND	0.063	EPA 8260C	3-10-15	3-10-15	
2-Hexanone	ND	0.31	EPA 8260C	3-10-15	3-10-15	
Dibromochloromethane	ND	0.063	EPA 8260C	3-10-15	3-10-15	
1,2-Dibromoethane	ND	0.063	EPA 8260C	3-10-15	3-10-15	
Chlorobenzene	ND	0.063	EPA 8260C	3-10-15	3-10-15	
1,1,1,2-Tetrachloroethane	ND	0.063	EPA 8260C	3-10-15	3-10-15	
Ethylbenzene	0.29	0.063	EPA 8260C	3-10-15	3-10-15	
m,p-Xylene	1.2	0.13	EPA 8260C	3-10-15	3-10-15	
o-Xylene	0.17	0.063	EPA 8260C	3-10-15	3-10-15	
Styrene	ND	0.063	EPA 8260C	3-10-15	3-10-15	
Bromoform	ND	0.063	EPA 8260C	3-10-15	3-10-15	
Isopropylbenzene	0.18	0.063	EPA 8260C	3-10-15	3-10-15	
Bromobenzene	ND	0.063	EPA 8260C	3-10-15	3-10-15	
1,1,2,2-Tetrachloroethane	ND	0.063	EPA 8260C	3-10-15	3-10-15	
1,2,3-Trichloropropane	ND	0.063	EPA 8260C	3-10-15	3-10-15	
n-Propylbenzene	0.27	0.063	EPA 8260C	3-10-15	3-10-15	
2-Chlorotoluene	ND	0.063	EPA 8260C	3-10-15	3-10-15	
4-Chlorotoluene	ND	0.063	EPA 8260C	3-10-15	3-10-15	
1,3,5-Trimethylbenzene	ND	0.063	EPA 8260C	3-10-15	3-10-15	
tert-Butylbenzene	ND	0.063	EPA 8260C	3-10-15	3-10-15	
1,2,4-Trimethylbenzene	0.10	0.063	EPA 8260C	3-10-15	3-10-15	
sec-Butylbenzene	0.074	0.063	EPA 8260C	3-10-15	3-10-15	
1,3-Dichlorobenzene	ND	0.063	EPA 8260C	3-10-15	3-10-15	
p-Isopropyltoluene	ND	0.063	EPA 8260C	3-10-15	3-10-15	
1,4-Dichlorobenzene	ND	0.063	EPA 8260C	3-10-15	3-10-15	
1,2-Dichlorobenzene	ND	0.063	EPA 8260C	3-10-15	3-10-15	
n-Butylbenzene	ND	0.063	EPA 8260C	3-10-15	3-10-15	
1,2-Dibromo-3-chloropropane	ND	0.31	EPA 8260C	3-10-15	3-10-15	
1,2,4-Trichlorobenzene	ND	0.063	EPA 8260C	3-10-15	3-10-15	
Hexachlorobutadiene	ND	0.31	EPA 8260C	3-10-15	3-10-15	
Naphthalene	0.38	0.063	EPA 8260C	3-10-15	3-10-15	
1,2,3-Trichlorobenzene	ND	0.063	EPA 8260C	3-10-15	3-10-15	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>110</i>	<i>76-131</i>				
<i>Toluene-d8</i>	<i>103</i>	<i>82-129</i>				
<i>4-Bromofluorobenzene</i>	<i>117</i>	<i>79-126</i>				

Date of Report: March 11, 2015
 Samples Submitted: March 10, 2015
 Laboratory Reference: 1503-080
 Project: 14967

VOLATILES EPA 8260C
METHOD BLANK QUALITY CONTROL

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Matrix: Soil
 Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<hr/>						
Laboratory ID:	MB0310S1					
Dichlorodifluoromethane	ND	0.0010	EPA 8260C	3-10-15	3-10-15	
Chloromethane	ND	0.0050	EPA 8260C	3-10-15	3-10-15	
Vinyl Chloride	ND	0.0010	EPA 8260C	3-10-15	3-10-15	
Bromomethane	ND	0.0010	EPA 8260C	3-10-15	3-10-15	
Chloroethane	ND	0.0050	EPA 8260C	3-10-15	3-10-15	
Trichlorofluoromethane	ND	0.0010	EPA 8260C	3-10-15	3-10-15	
1,1-Dichloroethene	ND	0.0010	EPA 8260C	3-10-15	3-10-15	
Acetone	ND	0.0050	EPA 8260C	3-10-15	3-10-15	
Iodomethane	ND	0.0050	EPA 8260C	3-10-15	3-10-15	
Carbon Disulfide	ND	0.0010	EPA 8260C	3-10-15	3-10-15	
Methylene Chloride	ND	0.0050	EPA 8260C	3-10-15	3-10-15	
(trans) 1,2-Dichloroethene	ND	0.0010	EPA 8260C	3-10-15	3-10-15	
Methyl t-Butyl Ether	ND	0.0010	EPA 8260C	3-10-15	3-10-15	
1,1-Dichloroethane	ND	0.0010	EPA 8260C	3-10-15	3-10-15	
Vinyl Acetate	ND	0.0050	EPA 8260C	3-10-15	3-10-15	
2,2-Dichloropropane	ND	0.0010	EPA 8260C	3-10-15	3-10-15	
(cis) 1,2-Dichloroethene	ND	0.0010	EPA 8260C	3-10-15	3-10-15	
2-Butanone	ND	0.0050	EPA 8260C	3-10-15	3-10-15	
Bromochloromethane	ND	0.0010	EPA 8260C	3-10-15	3-10-15	
Chloroform	ND	0.0010	EPA 8260C	3-10-15	3-10-15	
1,1,1-Trichloroethane	ND	0.0010	EPA 8260C	3-10-15	3-10-15	
Carbon Tetrachloride	ND	0.0010	EPA 8260C	3-10-15	3-10-15	
1,1-Dichloropropene	ND	0.0010	EPA 8260C	3-10-15	3-10-15	
Benzene	ND	0.0010	EPA 8260C	3-10-15	3-10-15	
1,2-Dichloroethane	ND	0.0010	EPA 8260C	3-10-15	3-10-15	
Trichloroethene	ND	0.0010	EPA 8260C	3-10-15	3-10-15	
1,2-Dichloropropane	ND	0.0010	EPA 8260C	3-10-15	3-10-15	
Dibromomethane	ND	0.0010	EPA 8260C	3-10-15	3-10-15	
Bromodichloromethane	ND	0.0010	EPA 8260C	3-10-15	3-10-15	
2-Chloroethyl Vinyl Ether	ND	0.0050	EPA 8260C	3-10-15	3-10-15	
(cis) 1,3-Dichloropropene	ND	0.0010	EPA 8260C	3-10-15	3-10-15	
Methyl Isobutyl Ketone	ND	0.0050	EPA 8260C	3-10-15	3-10-15	
Toluene	ND	0.0050	EPA 8260C	3-10-15	3-10-15	
(trans) 1,3-Dichloropropene	ND	0.0010	EPA 8260C	3-10-15	3-10-15	

Date of Report: March 11, 2015
 Samples Submitted: March 10, 2015
 Laboratory Reference: 1503-080
 Project: 14967

VOLATILES EPA 8260C
METHOD BLANK QUALITY CONTROL

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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Laboratory ID: MB0310S1						
1,1,2-Trichloroethane	ND	0.0010	EPA 8260C	3-10-15	3-10-15	
Tetrachloroethene	ND	0.0010	EPA 8260C	3-10-15	3-10-15	
1,3-Dichloropropane	ND	0.0010	EPA 8260C	3-10-15	3-10-15	
2-Hexanone	ND	0.0050	EPA 8260C	3-10-15	3-10-15	
Dibromochloromethane	ND	0.0010	EPA 8260C	3-10-15	3-10-15	
1,2-Dibromoethane	ND	0.0010	EPA 8260C	3-10-15	3-10-15	
Chlorobenzene	ND	0.0010	EPA 8260C	3-10-15	3-10-15	
1,1,1,2-Tetrachloroethane	ND	0.0010	EPA 8260C	3-10-15	3-10-15	
Ethylbenzene	ND	0.0010	EPA 8260C	3-10-15	3-10-15	
m,p-Xylene	ND	0.0020	EPA 8260C	3-10-15	3-10-15	
o-Xylene	ND	0.0010	EPA 8260C	3-10-15	3-10-15	
Styrene	ND	0.0010	EPA 8260C	3-10-15	3-10-15	
Bromoform	ND	0.0010	EPA 8260C	3-10-15	3-10-15	
Isopropylbenzene	ND	0.0010	EPA 8260C	3-10-15	3-10-15	
Bromobenzene	ND	0.0010	EPA 8260C	3-10-15	3-10-15	
1,1,2,2-Tetrachloroethane	ND	0.0010	EPA 8260C	3-10-15	3-10-15	
1,2,3-Trichloropropane	ND	0.0010	EPA 8260C	3-10-15	3-10-15	
n-Propylbenzene	ND	0.0010	EPA 8260C	3-10-15	3-10-15	
2-Chlorotoluene	ND	0.0010	EPA 8260C	3-10-15	3-10-15	
4-Chlorotoluene	ND	0.0010	EPA 8260C	3-10-15	3-10-15	
1,3,5-Trimethylbenzene	ND	0.0010	EPA 8260C	3-10-15	3-10-15	
tert-Butylbenzene	ND	0.0010	EPA 8260C	3-10-15	3-10-15	
1,2,4-Trimethylbenzene	ND	0.0010	EPA 8260C	3-10-15	3-10-15	
sec-Butylbenzene	ND	0.0010	EPA 8260C	3-10-15	3-10-15	
1,3-Dichlorobenzene	ND	0.0010	EPA 8260C	3-10-15	3-10-15	
p-Isopropyltoluene	ND	0.0010	EPA 8260C	3-10-15	3-10-15	
1,4-Dichlorobenzene	ND	0.0010	EPA 8260C	3-10-15	3-10-15	
1,2-Dichlorobenzene	ND	0.0010	EPA 8260C	3-10-15	3-10-15	
n-Butylbenzene	ND	0.0010	EPA 8260C	3-10-15	3-10-15	
1,2-Dibromo-3-chloropropane	ND	0.0050	EPA 8260C	3-10-15	3-10-15	
1,2,4-Trichlorobenzene	ND	0.0010	EPA 8260C	3-10-15	3-10-15	
Hexachlorobutadiene	ND	0.0050	EPA 8260C	3-10-15	3-10-15	
Naphthalene	ND	0.0010	EPA 8260C	3-10-15	3-10-15	
1,2,3-Trichlorobenzene	ND	0.0010	EPA 8260C	3-10-15	3-10-15	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>102</i>	<i>76-131</i>				
<i>Toluene-d8</i>	<i>96</i>	<i>82-129</i>				
<i>4-Bromofluorobenzene</i>	<i>99</i>	<i>79-126</i>				

Date of Report: March 11, 2015
 Samples Submitted: March 10, 2015
 Laboratory Reference: 1503-080
 Project: 14967

**VOLATILES EPA 8260C
 SB/SBD QUALITY CONTROL**

Matrix: Soil
 Units: mg/kg

Analyte	Result		Spike Level		Percent Recovery		Recovery	RPD	RPD	Flags
					Recovery	Limits	Limit			
SPIKE BLANKS										
Laboratory ID:	SB0310S1									
	SB	SBD	SB	SBD	SB	SBD				
1,1-Dichloroethene	0.0460	0.0426	0.0500	0.0500	92	85	66-129	8	15	
Benzene	0.0466	0.0425	0.0500	0.0500	93	85	71-123	9	15	
Trichloroethene	0.0511	0.0454	0.0500	0.0500	102	91	75-115	12	15	
Toluene	0.0477	0.0448	0.0500	0.0500	95	90	75-120	6	15	
Chlorobenzene	0.0472	0.0421	0.0500	0.0500	94	84	75-121	11	15	
Surrogate:										
Dibromofluoromethane					100	103	76-131			
Toluene-d8					93	97	82-129			
4-Bromofluorobenzene					98	100	79-126			

Date of Report: March 11, 2015
Samples Submitted: March 10, 2015
Laboratory Reference: 1503-080
Project: 14967

% MOISTURE

Date Analyzed: 3-10-15

Client ID	Lab ID	% Moisture
Tank-soil-B1-B	03-080-01	13



Data Qualifiers and Abbreviations

- A - Due to a high sample concentration, the amount spiked is insufficient for meaningful MS/MSD recovery data.
- B - The analyte indicated was also found in the blank sample.
- C - The duplicate RPD is outside control limits due to high result variability when analyte concentrations are within five times the quantitation limit.
- E - The value reported exceeds the quantitation range and is an estimate.
- F - Surrogate recovery data is not available due to the high concentration of coeluting target compounds.
- H - The analyte indicated is a common laboratory solvent and may have been introduced during sample preparation, and be impacting the sample result.
- I - Compound recovery is outside of the control limits.
- J - The value reported was below the practical quantitation limit. The value is an estimate.
- K - Sample duplicate RPD is outside control limits due to sample inhomogeneity. The sample was re-extracted and re-analyzed with similar results.
- L - The RPD is outside of the control limits.
- M - Hydrocarbons in the gasoline range are impacting the diesel range result.
- M1 - Hydrocarbons in the gasoline range (toluene-naphthalene) are present in the sample.
- N - Hydrocarbons in the lube oil range are impacting the diesel range result.
- N1 - Hydrocarbons in diesel range are impacting lube oil range results.
- O - Hydrocarbons indicative of heavier fuels are present in the sample and are impacting the gasoline result.
- P - The RPD of the detected concentrations between the two columns is greater than 40.
- Q - Surrogate recovery is outside of the control limits.
- S - Surrogate recovery data is not available due to the necessary dilution of the sample.
- T - The sample chromatogram is not similar to a typical _____.
- U - The analyte was analyzed for, but was not detected above the reported sample quantitation limit.
- U1 - The practical quantitation limit is elevated due to interferences present in the sample.
- V - Matrix Spike/Matrix Spike Duplicate recoveries are outside control limits due to matrix effects.
- W - Matrix Spike/Matrix Spike Duplicate RPD are outside control limits due to matrix effects.
- X - Sample extract treated with a mercury cleanup procedure.
- X1 - Sample extract treated with a Sulfuric acid/Silica gel cleanup procedure.
- Y - The calibration verification for this analyte exceeded the 20% drift specified in method 8260C, and therefore the reported result should be considered an estimate. The overall performance of the calibration verification standard met the acceptance criteria of the method.
- Z -

ND - Not Detected at PQL
 PQL - Practical Quantitation Limit
 RPD - Relative Percent Difference



Analytical Laboratory Testing Services
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Chain of Custody

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03-080

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March 11, 2015

Tasya Gray
AMEC Environment and Infrastructure, Inc.
One Union Square
600 University Street, Suite 600
Seattle, WA 98101

Re: Analytical Data for Project 14697
Laboratory Reference No. 1502-262

Dear Tasya:

Enclosed are the analytical results and associated quality control data for samples submitted on February 27, 2015.

The standard policy of OnSite Environmental, Inc. is to store your samples for 30 days from the date of receipt. If you require longer storage, please contact the laboratory.

We appreciate the opportunity to be of service to you on this project. If you have any questions concerning the data, or need additional information, please feel free to call me.

Sincerely,

A handwritten signature in black ink, appearing to read 'DB', followed by a horizontal line.

David Baumeister
Project Manager

Enclosures

Date of Report: March 11, 2015
Samples Submitted: February 27, 2015
Laboratory Reference: 1502-262
Project: 14697

Case Narrative

Samples were collected on February 27, 2015 and received by the laboratory on February 27, 2015. They were maintained at the laboratory at a temperature of 2°C to 6°C.

General QA/QC issues associated with the analytical data enclosed in this laboratory report will be indicated with a reference to a comment or explanation on the Data Qualifier page. More complex and involved QA/QC issues will be discussed in detail below.

NWTPH Gx/BTEX Analysis

Per EPA Method 5035A, samples were received by the laboratory in pre-weighed 40 mL VOA vials within 48 hours of sample collection. They were stored in a freezer at between -7°C and -20°C until extraction or analysis.

The chromatograms for samples B7-PIPING-B1-5.0, B7-PIPING-B2-5.0, B7-PIPING-S1-4.0 and B7-PIPING-S2-4.0 are similar to mineral spirits with diesel.

The chromatograms for samples B7-PIPING-B3-4.5, B7-PIPING-B4-4.5, B7-PIPING-S3-3.5 and B7-PIPING-S4-3.5 are similar to mineral spirits.

PAHs EPA 8270D/SIM Analysis

Samples B7-PIPING-B2-5.0 and B7-PIPING-S2-4.0, surrogate's recoveries are not available due to necessary dilution of the samples; the surrogates are flagged with an "S" indicator.

Please note that any other QA/QC issues associated with these extractions and analyses will be indicated with a footnote reference and discussed in detail on the Data Qualifier page.

Date of Report: March 11, 2015
 Samples Submitted: February 27, 2015
 Laboratory Reference: 1502-262
 Project: 14697

NWTPH-Gx/BTEX

Matrix: Soil
 Units: mg/kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	B7-PIPING-B1-5.0					
Laboratory ID:	02-262-01					
Benzene	0.097	0.029	EPA 8021B	3-3-15	3-4-15	
Toluene	ND	0.14	EPA 8021B	3-3-15	3-4-15	
Ethyl Benzene	0.62	0.14	EPA 8021B	3-3-15	3-4-15	
m,p-Xylene	3.8	0.14	EPA 8021B	3-3-15	3-4-15	
o-Xylene	ND	1.4	EPA 8021B	3-3-15	3-4-15	U1
Gasoline	2600	360	NWTPH-Gx	3-3-15	3-5-15	Z1
Surrogate:	Percent Recovery	Control Limits				
Fluorobenzene	79	68-123				
Client ID:	B7-PIPING-B2-5.0					
Laboratory ID:	02-262-02					
Benzene	0.41	0.020	EPA 8021B	3-3-15	3-4-15	
Toluene	ND	0.098	EPA 8021B	3-3-15	3-4-15	
Ethyl Benzene	1.2	0.098	EPA 8021B	3-3-15	3-4-15	
m,p-Xylene	8.9	0.098	EPA 8021B	3-3-15	3-4-15	
o-Xylene	4.8	0.098	EPA 8021B	3-3-15	3-4-15	
Gasoline	3000	490	NWTPH-Gx	3-3-15	3-5-15	Z1
Surrogate:	Percent Recovery	Control Limits				
Fluorobenzene	78	68-123				
Client ID:	B7-PIPING-B3-4.5					
Laboratory ID:	02-262-03					
Benzene	0.12	0.020	EPA 8021B	3-3-15	3-4-15	
Toluene	ND	0.10	EPA 8021B	3-3-15	3-4-15	
Ethyl Benzene	0.91	0.10	EPA 8021B	3-3-15	3-4-15	
m,p-Xylene	15	5.1	EPA 8021B	3-3-15	3-5-15	
o-Xylene	4.7	0.10	EPA 8021B	3-3-15	3-4-15	
Gasoline	5800	510	NWTPH-Gx	3-3-15	3-5-15	Z2
Surrogate:	Percent Recovery	Control Limits				
Fluorobenzene	77	68-123				

Date of Report: March 11, 2015
 Samples Submitted: February 27, 2015
 Laboratory Reference: 1502-262
 Project: 14697

NWTPH-Gx/BTEX

Matrix: Soil
 Units: mg/kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID: B7-PIPING-B4-4.5						
Laboratory ID:	02-262-04					
Benzene	0.094	0.024	EPA 8021B	3-3-15	3-4-15	
Toluene	4.9	0.12	EPA 8021B	3-3-15	3-4-15	
Ethyl Benzene	11	0.12	EPA 8021B	3-3-15	3-4-15	
m,p-Xylene	31	1.2	EPA 8021B	3-3-15	3-5-15	
o-Xylene	5.9	0.12	EPA 8021B	3-3-15	3-4-15	
Gasoline	1400	120	NWTPH-Gx	3-3-15	3-5-15	Z2
Surrogate:	Percent Recovery	Control Limits				
Fluorobenzene	74	68-123				
Client ID: B7-PIPING-S1-4.0						
Laboratory ID:	02-262-05					
Benzene	0.11	0.035	EPA 8021B	3-3-15	3-6-15	
Toluene	ND	0.17	EPA 8021B	3-3-15	3-6-15	
Ethyl Benzene	ND	0.17	EPA 8021B	3-3-15	3-6-15	
m,p-Xylene	0.64	0.17	EPA 8021B	3-3-15	3-6-15	
o-Xylene	ND	0.17	EPA 8021B	3-3-15	3-6-15	
Gasoline	250	17	NWTPH-Gx	3-3-15	3-6-15	Z1
Surrogate:	Percent Recovery	Control Limits				
Fluorobenzene	69	68-123				
Client ID: B7-PIPING-S2-4.0						
Laboratory ID:	02-262-06					
Benzene	0.069	0.020	EPA 8021B	3-3-15	3-6-15	
Toluene	ND	0.095	EPA 8021B	3-3-15	3-6-15	
Ethyl Benzene	7.4	0.095	EPA 8021B	3-3-15	3-6-15	
m,p-Xylene	9.5	2.4	EPA 8021B	3-3-15	3-6-15	
o-Xylene	1.0	0.095	EPA 8021B	3-3-15	3-6-15	
Gasoline	1300	240	NWTPH-Gx	3-3-15	3-6-15	Z1
Surrogate:	Percent Recovery	Control Limits				
Fluorobenzene	77	68-123				

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NWTPH-Gx/BTEX

Matrix: Soil
 Units: mg/kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID: B7-PIPING-S3-3.5						
Laboratory ID: 02-262-07						
Benzene	0.28	0.020	EPA 8021B	3-3-15	3-4-15	
Toluene	ND	0.048	EPA 8021B	3-3-15	3-4-15	
Ethyl Benzene	0.96	0.048	EPA 8021B	3-3-15	3-4-15	
m,p-Xylene	7.1	4.8	EPA 8021B	3-3-15	3-6-15	
o-Xylene	3.4	0.048	EPA 8021B	3-3-15	3-4-15	
Gasoline	7900	480	NWTPH-Gx	3-3-15	3-6-15	Z2
<i>Surrogate: Percent Recovery Control Limits</i>						
<i>Fluorobenzene</i>	<i>88</i>	<i>68-123</i>				

Client ID: B7-PIPING-S4-3.5						
Laboratory ID: 02-262-08						
Benzene	0.30	0.022	EPA 8021B	3-3-15	3-4-15	
Toluene	ND	0.11	EPA 8021B	3-3-15	3-4-15	
Ethyl Benzene	1.4	0.11	EPA 8021B	3-3-15	3-4-15	
m,p-Xylene	30	5.5	EPA 8021B	3-3-15	3-5-15	
o-Xylene	7.6	0.11	EPA 8021B	3-3-15	3-4-15	
Gasoline	8700	1100	NWTPH-Gx	3-3-15	3-6-15	Z2
<i>Surrogate: Percent Recovery Control Limits</i>						
<i>Fluorobenzene</i>	<i>78</i>	<i>68-123</i>				

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**NWTPH-Gx/BTEX
 QUALITY CONTROL**

Matrix: Soil
 Units: mg/kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0303S2					
Benzene	ND	0.020	EPA 8021B	3-3-15	3-4-15	
Toluene	ND	0.050	EPA 8021B	3-3-15	3-4-15	
Ethyl Benzene	ND	0.050	EPA 8021B	3-3-15	3-4-15	
m,p-Xylene	ND	0.050	EPA 8021B	3-3-15	3-4-15	
o-Xylene	ND	0.050	EPA 8021B	3-3-15	3-4-15	
Gasoline	ND	5.0	NWTPH-Gx	3-3-15	3-4-15	
Surrogate:	Percent Recovery	Control Limits				
Fluorobenzene	91	68-123				

Analyte	Result	Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE								
Laboratory ID:	02-255-06							
	ORIG	DUP						
Benzene	ND	ND	NA	NA	NA	NA	NA	30
Toluene	ND	ND	NA	NA	NA	NA	NA	30
Ethyl Benzene	ND	ND	NA	NA	NA	NA	NA	30
m,p-Xylene	ND	ND	NA	NA	NA	NA	NA	30
o-Xylene	ND	ND	NA	NA	NA	NA	NA	30
Gasoline	ND	ND	NA	NA	NA	NA	NA	30
Surrogate:								
Fluorobenzene				90	96	68-123		

SPIKE BLANKS

Laboratory ID:	SB0303S1								
	SB	SBD	SB	SBD	SB	SBD			
Benzene	0.928	0.969	1.00	1.00	93	97	75-117	4	13
Toluene	0.935	0.978	1.00	1.00	94	98	78-118	4	12
Ethyl Benzene	0.923	0.973	1.00	1.00	92	97	78-118	5	12
m,p-Xylene	0.932	0.979	1.00	1.00	93	98	78-121	5	13
o-Xylene	0.924	0.960	1.00	1.00	92	96	77-119	4	13
Surrogate:									
Fluorobenzene					93	96	68-123		

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NWTPH-Dx

Matrix: Soil
 Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID: B7-PIPING-B1-5.0						
Laboratory ID:	02-262-01					
Diesel Range Organics	3300	35	NWTPH-Dx	3-5-15	3-6-15	M
Lube Oil	370	70	NWTPH-Dx	3-5-15	3-6-15	N1
Surrogate:	Percent Recovery	Control Limits				
o-Terphenyl	80	50-150				
Client ID: B7-PIPING-B2-5.0						
Laboratory ID:	02-262-02					
Diesel Range Organics	4100	29	NWTPH-Dx	3-5-15	3-6-15	M
Lube Oil	710	59	NWTPH-Dx	3-5-15	3-6-15	N1
Surrogate:	Percent Recovery	Control Limits				
o-Terphenyl	90	50-150				
Client ID: B7-PIPING-B3-4.5						
Laboratory ID:	02-262-03					
Diesel Range Organics	ND	1600	NWTPH-Dx	3-5-15	3-6-15	U1,M1
Lube Oil	67	55	NWTPH-Dx	3-5-15	3-6-15	
Surrogate:	Percent Recovery	Control Limits				
o-Terphenyl	90	50-150				
Client ID: B7-PIPING-B4-4.5						
Laboratory ID:	02-262-04					
Diesel Range Organics	1300	30	NWTPH-Dx	3-5-15	3-6-15	M
Lube Oil	350	60	NWTPH-Dx	3-5-15	3-6-15	
Surrogate:	Percent Recovery	Control Limits				
o-Terphenyl	95	50-150				
Client ID: B7-PIPING-S1-4.0						
Laboratory ID:	02-262-05					
Diesel Range Organics	14000	210	NWTPH-Dx	3-5-15	3-6-15	
Lube Oil	6100	410	NWTPH-Dx	3-5-15	3-6-15	N1
Surrogate:	Percent Recovery	Control Limits				
o-Terphenyl	106	50-150				
Client ID: B7-PIPING-S2-4.0						
Laboratory ID:	02-262-06					
Diesel Range Organics	7400	150	NWTPH-Dx	3-5-15	3-6-15	
Lube Oil Range Organics	5600	300	NWTPH-Dx	3-5-15	3-6-15	
Surrogate:	Percent Recovery	Control Limits				
o-Terphenyl	120	50-150				

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NWTPH-Dx

Matrix: Soil
 Units: mg/Kg (ppm)

Units: mg/kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	B7-PIPING-S3-3.5					
Laboratory ID:	02-262-07					
Diesel Range Organics	ND	1900	NWTPH-Dx	3-5-15	3-6-15	U1,M1
Lube Oil	61	57	NWTPH-Dx	3-5-15	3-6-15	
Surrogate:	Percent Recovery	Control Limits				
o-Terphenyl	84	50-150				
Client ID:	B7-PIPING-S4-3.5					
Laboratory ID:	02-262-08					
Diesel Range Organics	ND	2900	NWTPH-Dx	3-5-15	3-6-15	U1,M1
Lube Oil Range Organics	ND	55	NWTPH-Dx	3-5-15	3-6-15	
Surrogate:	Percent Recovery	Control Limits				
o-Terphenyl	99	50-150				

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**NWTPH-Dx
QUALITY CONTROL**

Matrix: Soil
 Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0305S2					
Diesel Range Organics	ND	25	NWTPH-Dx	3-5-15	3-5-15	
Lube Oil Range Organics	ND	50	NWTPH-Dx	3-5-15	3-5-15	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	<i>85</i>	<i>50-150</i>				

Analyte	Result	Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE								
Laboratory ID:	03-020-03							
	ORIG	DUP						
Mineral Oil	ND	ND	NA	NA	NA	NA	NA	X1
<i>Surrogate:</i>								
<i>o-Terphenyl</i>				116	113	50-150		

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**TOTAL METALS
 EPA 6010C/7471B**

Matrix: Soil
 Units: mg/kg (ppm)

				Date	Date	
Analyte	Result	PQL	EPA Method	Prepared	Analyzed	Flags
<hr/>						
Lab ID:	02-262-01					
Client ID:	B7-PIPING-B1-5.0					
<hr/>						
Arsenic	ND	14	6010C	3-6-15	3-6-15	
Barium	24	3.5	6010C	3-6-15	3-6-15	
Cadmium	ND	0.70	6010C	3-6-15	3-6-15	
Chromium	7.8	0.70	6010C	3-6-15	3-6-15	
Lead	ND	7.0	6010C	3-6-15	3-6-15	
Mercury	ND	0.35	7471B	3-6-15	3-6-15	
Selenium	ND	14	6010C	3-6-15	3-6-15	
Silver	ND	1.4	6010C	3-6-15	3-6-15	

Lab ID:	02-262-02				
Client ID:	B7-PIPING-B2-5.0				
<hr/>					
Arsenic	ND	12	6010C	3-6-15	3-6-15
Barium	21	2.9	6010C	3-6-15	3-6-15
Cadmium	ND	0.59	6010C	3-6-15	3-6-15
Chromium	9.3	0.59	6010C	3-6-15	3-6-15
Lead	ND	5.9	6010C	3-6-15	3-6-15
Mercury	ND	0.29	7471B	3-6-15	3-6-15
Selenium	ND	12	6010C	3-6-15	3-6-15
Silver	ND	1.2	6010C	3-6-15	3-6-15

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**TOTAL METALS
 EPA 6010C/7471B**

Matrix: Soil
 Units: mg/kg (ppm)

Analyte	Result	PQL	EPA Method	Date Prepared	Date Analyzed	Flags
Lab ID:	02-262-03					
Client ID:	B7-PIPING-B3-4.5					
Arsenic	ND	11	6010C	3-6-15	3-6-15	
Barium	41	2.8	6010C	3-6-15	3-6-15	
Cadmium	ND	0.55	6010C	3-6-15	3-6-15	
Chromium	9.9	0.55	6010C	3-6-15	3-6-15	
Lead	ND	5.5	6010C	3-6-15	3-6-15	
Mercury	ND	0.28	7471B	3-6-15	3-6-15	
Selenium	ND	11	6010C	3-6-15	3-6-15	
Silver	ND	1.1	6010C	3-6-15	3-6-15	

Lab ID: 02-262-04
Client ID: B7-PIPING-B4-4.5

Arsenic	ND	12	6010C	3-6-15	3-6-15	
Barium	98	3.0	6010C	3-6-15	3-6-15	
Cadmium	ND	0.60	6010C	3-6-15	3-6-15	
Chromium	18	0.60	6010C	3-6-15	3-6-15	
Lead	24	6.0	6010C	3-6-15	3-6-15	
Mercury	ND	0.30	7471B	3-6-15	3-6-15	
Selenium	ND	12	6010C	3-6-15	3-6-15	
Silver	ND	1.2	6010C	3-6-15	3-6-15	

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**TOTAL METALS
 EPA 6010C/7471B**

Matrix: Soil
 Units: mg/kg (ppm)

Analyte	Result	PQL	EPA Method	Date Prepared	Date Analyzed	Flags
Lab ID:	02-262-05					
Client ID:	B7-PIPING-S1-4.0					
Arsenic	ND	17	6010C	3-6-15	3-6-15	
Barium	710	4.1	6010C	3-6-15	3-6-15	
Cadmium	ND	0.83	6010C	3-6-15	3-6-15	
Chromium	47	0.83	6010C	3-6-15	3-6-15	
Lead	660	8.3	6010C	3-6-15	3-6-15	
Mercury	0.52	0.41	7471B	3-6-15	3-6-15	
Selenium	ND	17	6010C	3-6-15	3-6-15	
Silver	ND	1.7	6010C	3-6-15	3-6-15	

Lab ID:	02-262-06					
Client ID:	B7-PIPING-S2-4.0					
Arsenic	ND	12	6010C	3-6-15	3-6-15	
Barium	100	3.0	6010C	3-6-15	3-6-15	
Cadmium	ND	0.60	6010C	3-6-15	3-6-15	
Chromium	24	0.60	6010C	3-6-15	3-6-15	
Lead	30	6.0	6010C	3-6-15	3-6-15	
Mercury	ND	0.30	7471B	3-6-15	3-6-15	
Selenium	ND	12	6010C	3-6-15	3-6-15	
Silver	ND	1.2	6010C	3-6-15	3-6-15	

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**TOTAL METALS
 EPA 6010C/7471B**

Matrix: Soil
 Units: mg/kg (ppm)

Analyte	Result	PQL	EPA Method	Date Prepared	Date Analyzed	Flags
Lab ID:	02-262-07					
Client ID:	B7-PIPING-S3-3.5					
Arsenic	ND	11	6010C	3-6-15	3-6-15	
Barium	52	2.8	6010C	3-6-15	3-6-15	
Cadmium	ND	0.57	6010C	3-6-15	3-6-15	
Chromium	8.6	0.57	6010C	3-6-15	3-6-15	
Lead	ND	5.7	6010C	3-6-15	3-6-15	
Mercury	ND	0.28	7471B	3-6-15	3-6-15	
Selenium	ND	11	6010C	3-6-15	3-6-15	
Silver	ND	1.1	6010C	3-6-15	3-6-15	

Lab ID: 02-262-08
Client ID: B7-PIPING-S4-3.5

Arsenic	ND	11	6010C	3-6-15	3-6-15	
Barium	33	2.8	6010C	3-6-15	3-6-15	
Cadmium	ND	0.55	6010C	3-6-15	3-6-15	
Chromium	8.5	0.55	6010C	3-6-15	3-6-15	
Lead	ND	5.5	6010C	3-6-15	3-6-15	
Mercury	ND	0.28	7471B	3-6-15	3-6-15	
Selenium	ND	11	6010C	3-6-15	3-6-15	
Silver	ND	1.1	6010C	3-6-15	3-6-15	

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**TOTAL METALS
EPA 6010C
METHOD BLANK QUALITY CONTROL**

Date Extracted: 3-6-15
Date Analyzed: 3-6-15

Matrix: Soil
Units: mg/kg (ppm)

Lab ID: MB0306SM2

Analyte	Method	Result	PQL
Arsenic	6010C	ND	10
Barium	6010C	ND	2.5
Cadmium	6010C	ND	0.50
Chromium	6010C	ND	0.50
Lead	6010C	ND	5.0
Selenium	6010C	ND	10
Silver	6010C	ND	1.0

Date of Report: March 11, 2015
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Project: 14697

**TOTAL MERCURY
EPA 7471B
METHOD BLANK QUALITY CONTROL**

Date Extracted: 3-6-15
Date Analyzed: 3-6-15

Matrix: Soil
Units: mg/kg (ppm)

Lab ID: MB0306S1

Analyte	Method	Result	PQL
Mercury	7471B	ND	0.25

Date of Report: March 11, 2015
Samples Submitted: February 27, 2015
Laboratory Reference: 1502-262
Project: 14697

**TOTAL METALS
EPA 6010C
DUPLICATE QUALITY CONTROL**

Date Extracted: 3-6-15

Date Analyzed: 3-6-15

Matrix: Soil

Units: mg/kg (ppm)

Lab ID: 02-262-03

Analyte	Sample Result	Duplicate Result	RPD	PQL	Flags
Arsenic	ND	ND	NA	10	
Barium	37.0	39.3	6	2.5	
Cadmium	ND	ND	NA	0.50	
Chromium	8.95	8.90	1	0.50	
Lead	ND	ND	NA	5.0	
Selenium	ND	ND	NA	10	
Silver	ND	ND	NA	1.0	

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Laboratory Reference: 1502-262
Project: 14697

**TOTAL MERCURY
EPA 7471B
DUPLICATE QUALITY CONTROL**

Date Extracted: 3-6-15

Date Analyzed: 3-6-15

Matrix: Soil

Units: mg/kg (ppm)

Lab ID: 03-037-01

Analyte	Sample Result	Duplicate Result	RPD	PQL	Flags
Mercury	ND	ND	NA	0.25	

Date of Report: March 11, 2015
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 Project: 14697

**TOTAL METALS
 EPA 6010C
 MS/MSD QUALITY CONTROL**

Date Extracted: 3-6-15

Date Analyzed: 3-6-15

Matrix: Soil

Units: mg/kg (ppm)

Lab ID: 02-262-03

Analyte	Spike Level	MS	Percent Recovery	MSD	Percent Recovery	RPD	Flags
Arsenic	100	96.8	97	97.2	97	0	
Barium	100	151	114	141	104	6	
Cadmium	50.0	49.4	99	49.4	99	0	
Chromium	100	106	97	105	96	1	
Lead	250	252	101	251	100	0	
Selenium	100	96.5	96	94.1	94	3	
Silver	25.0	25.1	100	25.1	100	0	

Date of Report: March 11, 2015
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TOTAL MERCURY
EPA 7471B
MS/MSD QUALITY CONTROL

Date Extracted: 3-6-15

Date Analyzed: 3-6-15

Matrix: Soil

Units: mg/kg (ppm)

Lab ID: 03-037-01

Analyte	Spike Level	MS	Percent Recovery	MSD	Percent Recovery	RPD	Flags
Mercury	0.500	0.486	97	0.486	97	0	

Date of Report: March 11, 2015
 Samples Submitted: February 27, 2015
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 Project: 14697

cPAHs EPA 8270D/SIM

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	B7-PIPING-B1-5.0					
Laboratory ID:	02-262-01					
Benzo[a]anthracene	0.45	0.19	EPA 8270D/SIM	3-8-15	3-10-15	
Chrysene	0.47	0.19	EPA 8270D/SIM	3-8-15	3-10-15	
Benzo[b]fluoranthene	0.26	0.19	EPA 8270D/SIM	3-8-15	3-10-15	
Benzo(j,k)fluoranthene	0.27	0.19	EPA 8270D/SIM	3-8-15	3-10-15	
Benzo[a]pyrene	0.42	0.19	EPA 8270D/SIM	3-8-15	3-10-15	
Indeno(1,2,3-c,d)pyrene	ND	0.19	EPA 8270D/SIM	3-8-15	3-10-15	
Dibenz[a,h]anthracene	ND	0.19	EPA 8270D/SIM	3-8-15	3-10-15	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>2-Fluorobiphenyl</i>	<i>97</i>	<i>32 - 114</i>				
<i>Pyrene-d10</i>	<i>80</i>	<i>33 - 121</i>				
<i>Terphenyl-d14</i>	<i>76</i>	<i>31 - 116</i>				

Date of Report: March 11, 2015
 Samples Submitted: February 27, 2015
 Laboratory Reference: 1502-262
 Project: 14697

cPAHs EPA 8270D/SIM

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	B7-PIPING-B2-5.0					
Laboratory ID:	02-262-02					
Benzo[a]anthracene	4.1	0.31	EPA 8270D/SIM	3-8-15	3-10-15	
Chrysene	4.3	0.31	EPA 8270D/SIM	3-8-15	3-10-15	
Benzo[b]fluoranthene	3.2	0.31	EPA 8270D/SIM	3-8-15	3-10-15	
Benzo(j,k)fluoranthene	3.7	0.31	EPA 8270D/SIM	3-8-15	3-10-15	
Benzo[a]pyrene	4.6	0.31	EPA 8270D/SIM	3-8-15	3-10-15	
Indeno(1,2,3-c,d)pyrene	1.9	0.31	EPA 8270D/SIM	3-8-15	3-10-15	
Dibenz[a,h]anthracene	0.73	0.31	EPA 8270D/SIM	3-8-15	3-10-15	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>2-Fluorobiphenyl</i>	<i>.--</i>	<i>32 - 114</i>				<i>S</i>
<i>Pyrene-d10</i>	<i>.--</i>	<i>33 - 121</i>				<i>S</i>
<i>Terphenyl-d14</i>	<i>.--</i>	<i>31 - 116</i>				<i>S</i>

Date of Report: March 11, 2015
 Samples Submitted: February 27, 2015
 Laboratory Reference: 1502-262
 Project: 14697

cPAHs EPA 8270D/SIM

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	B7-PIPING-B3-4.5					
Laboratory ID:	02-262-03					
Benzo[a]anthracene	ND	0.015	EPA 8270D/SIM	3-8-15	3-9-15	
Chrysene	0.020	0.015	EPA 8270D/SIM	3-8-15	3-9-15	
Benzo[b]fluoranthene	0.020	0.015	EPA 8270D/SIM	3-8-15	3-9-15	
Benzo(j,k)fluoranthene	ND	0.015	EPA 8270D/SIM	3-8-15	3-9-15	
Benzo[a]pyrene	0.027	0.015	EPA 8270D/SIM	3-8-15	3-9-15	
Indeno(1,2,3-c,d)pyrene	0.044	0.015	EPA 8270D/SIM	3-8-15	3-9-15	
Dibenz[a,h]anthracene	ND	0.015	EPA 8270D/SIM	3-8-15	3-9-15	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>2-Fluorobiphenyl</i>	<i>104</i>	<i>32 - 114</i>				
<i>Pyrene-d10</i>	<i>98</i>	<i>33 - 121</i>				
<i>Terphenyl-d14</i>	<i>83</i>	<i>31 - 116</i>				

Date of Report: March 11, 2015
 Samples Submitted: February 27, 2015
 Laboratory Reference: 1502-262
 Project: 14697

cPAHs EPA 8270D/SIM

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	B7-PIPING-B4-4.5					
Laboratory ID:	02-262-04					
Benzo[a]anthracene	0.19	0.016	EPA 8270D/SIM	3-8-15	3-10-15	
Chrysene	0.17	0.016	EPA 8270D/SIM	3-8-15	3-10-15	
Benzo[b]fluoranthene	0.31	0.016	EPA 8270D/SIM	3-8-15	3-10-15	
Benzo(j,k)fluoranthene	0.12	0.016	EPA 8270D/SIM	3-8-15	3-10-15	
Benzo[a]pyrene	0.17	0.016	EPA 8270D/SIM	3-8-15	3-10-15	
Indeno(1,2,3-c,d)pyrene	0.13	0.016	EPA 8270D/SIM	3-8-15	3-10-15	
Dibenz[a,h]anthracene	0.052	0.016	EPA 8270D/SIM	3-8-15	3-10-15	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>2-Fluorobiphenyl</i>	<i>95</i>	<i>32 - 114</i>				
<i>Pyrene-d10</i>	<i>90</i>	<i>33 - 121</i>				
<i>Terphenyl-d14</i>	<i>104</i>	<i>31 - 116</i>				

Date of Report: March 11, 2015
 Samples Submitted: February 27, 2015
 Laboratory Reference: 1502-262
 Project: 14697

cPAHs EPA 8270D/SIM

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	B7-PIPING-S1-4.0					
Laboratory ID:	02-262-05					
Benzo[a]anthracene	3.2	0.11	EPA 8270D/SIM	3-8-15	3-10-15	
Chrysene	3.1	0.11	EPA 8270D/SIM	3-8-15	3-10-15	
Benzo[b]fluoranthene	9.2	0.11	EPA 8270D/SIM	3-8-15	3-10-15	
Benzo(j,k)fluoranthene	2.4	0.11	EPA 8270D/SIM	3-8-15	3-10-15	
Benzo[a]pyrene	7.8	0.11	EPA 8270D/SIM	3-8-15	3-10-15	
Indeno(1,2,3-c,d)pyrene	9.1	0.11	EPA 8270D/SIM	3-8-15	3-10-15	
Dibenz[a,h]anthracene	2.1	0.11	EPA 8270D/SIM	3-8-15	3-10-15	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>2-Fluorobiphenyl</i>	97	32 - 114				
<i>Pyrene-d10</i>	67	33 - 121				
<i>Terphenyl-d14</i>	66	31 - 116				

Date of Report: March 11, 2015
 Samples Submitted: February 27, 2015
 Laboratory Reference: 1502-262
 Project: 14697

cPAHs EPA 8270D/SIM

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	B7-PIPING-S2-4.0					
Laboratory ID:	02-262-06					
Benzo[a]anthracene	50	1.6	EPA 8270D/SIM	3-8-15	3-10-15	
Chrysene	52	1.6	EPA 8270D/SIM	3-8-15	3-10-15	
Benzo[b]fluoranthene	53	1.6	EPA 8270D/SIM	3-8-15	3-10-15	
Benzo(j,k)fluoranthene	44	1.6	EPA 8270D/SIM	3-8-15	3-10-15	
Benzo[a]pyrene	51	1.6	EPA 8270D/SIM	3-8-15	3-10-15	
Indeno(1,2,3-c,d)pyrene	28	1.6	EPA 8270D/SIM	3-8-15	3-10-15	
Dibenz[a,h]anthracene	12	1.6	EPA 8270D/SIM	3-8-15	3-10-15	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
2-Fluorobiphenyl	.--	32 - 114				S
Pyrene-d10	.--	33 - 121				S
Terphenyl-d14	.--	31 - 116				S

Date of Report: March 11, 2015
 Samples Submitted: February 27, 2015
 Laboratory Reference: 1502-262
 Project: 14697

cPAHs EPA 8270D/SIM

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	B7-PIPING-S3-3.5					
Laboratory ID:	02-262-07					
Benzo[a]anthracene	ND	0.0076	EPA 8270D/SIM	3-8-15	3-11-15	
Chrysene	ND	0.0076	EPA 8270D/SIM	3-8-15	3-11-15	
Benzo[b]fluoranthene	ND	0.0076	EPA 8270D/SIM	3-8-15	3-11-15	
Benzo(j,k)fluoranthene	ND	0.0076	EPA 8270D/SIM	3-8-15	3-11-15	
Benzo[a]pyrene	ND	0.0076	EPA 8270D/SIM	3-8-15	3-11-15	
Indeno(1,2,3-c,d)pyrene	ND	0.0076	EPA 8270D/SIM	3-8-15	3-11-15	
Dibenz[a,h]anthracene	ND	0.0076	EPA 8270D/SIM	3-8-15	3-11-15	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>2-Fluorobiphenyl</i>	<i>79</i>	<i>32 - 114</i>				
<i>Pyrene-d10</i>	<i>78</i>	<i>33 - 121</i>				
<i>Terphenyl-d14</i>	<i>80</i>	<i>31 - 116</i>				

Date of Report: March 11, 2015
 Samples Submitted: February 27, 2015
 Laboratory Reference: 1502-262
 Project: 14697

cPAHs EPA 8270D/SIM

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	B7-PIPING-S4-3.5					
Laboratory ID:	02-262-08					
Benzo[a]anthracene	ND	0.0074	EPA 8270D/SIM	3-8-15	3-10-15	
Chrysene	0.0095	0.0074	EPA 8270D/SIM	3-8-15	3-10-15	
Benzo[b]fluoranthene	0.013	0.0074	EPA 8270D/SIM	3-8-15	3-10-15	
Benzo(j,k)fluoranthene	0.0081	0.0074	EPA 8270D/SIM	3-8-15	3-10-15	
Benzo[a]pyrene	0.027	0.0074	EPA 8270D/SIM	3-8-15	3-10-15	
Indeno(1,2,3-c,d)pyrene	0.052	0.0074	EPA 8270D/SIM	3-8-15	3-10-15	
Dibenz[a,h]anthracene	0.0081	0.0074	EPA 8270D/SIM	3-8-15	3-10-15	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>2-Fluorobiphenyl</i>	<i>89</i>	<i>32 - 114</i>				
<i>Pyrene-d10</i>	<i>88</i>	<i>33 - 121</i>				
<i>Terphenyl-d14</i>	<i>81</i>	<i>31 - 116</i>				

Date of Report: March 11, 2015
 Samples Submitted: February 27, 2015
 Laboratory Reference: 1502-262
 Project: 14697

**cPAHs EPA 8270D/SIM
 METHOD BLANK QUALITY CONTROL**

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<hr/>						
Laboratory ID:	MB0308S1					
Benzo[a]anthracene	ND	0.0067	EPA 8270D/SIM	3-8-15	3-9-15	
Chrysene	ND	0.0067	EPA 8270D/SIM	3-8-15	3-9-15	
Benzo[b]fluoranthene	ND	0.0067	EPA 8270D/SIM	3-8-15	3-9-15	
Benzo(j,k)fluoranthene	ND	0.0067	EPA 8270D/SIM	3-8-15	3-9-15	
Benzo[a]pyrene	ND	0.0067	EPA 8270D/SIM	3-8-15	3-9-15	
Indeno(1,2,3-c,d)pyrene	ND	0.0067	EPA 8270D/SIM	3-8-15	3-9-15	
Dibenz[a,h]anthracene	ND	0.0067	EPA 8270D/SIM	3-8-15	3-9-15	
<hr/>						
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>2-Fluorobiphenyl</i>	<i>92</i>	<i>32 - 114</i>				
<i>Pyrene-d10</i>	<i>88</i>	<i>33 - 121</i>				
<i>Terphenyl-d14</i>	<i>79</i>	<i>31 - 116</i>				

Date of Report: March 11, 2015
 Samples Submitted: February 27, 2015
 Laboratory Reference: 1502-262
 Project: 14697

cPAHs EPA 8270D/SIM
MS/MSD QUALITY CONTROL

Matrix: Soil
 Units: mg/Kg

Analyte	Result		Spike Level		Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
MATRIX SPIKES										
Laboratory ID:	03-023-03									
	MS	MSD	MS	MSD		MS	MSD			
Benzo[a]anthracene	0.0555	0.0706	0.0833	0.0833	ND	67	85	42 - 134	24	27
Chrysene	0.0697	0.0724	0.0833	0.0833	ND	84	87	45 - 114	4	27
Benzo[b]fluoranthene	0.0739	0.0909	0.0833	0.0833	ND	89	109	38 - 131	20	33
Benzo(j,k)fluoranthene	0.0667	0.0753	0.0833	0.0833	ND	80	90	44 - 114	12	34
Benzo[a]pyrene	0.0751	0.0826	0.0833	0.0833	ND	90	99	40 - 136	10	29
Indeno(1,2,3-c,d)pyrene	0.0682	0.0769	0.0833	0.0833	ND	82	92	45 - 126	12	30
Dibenz[a,h]anthracene	0.0692	0.0773	0.0833	0.0833	ND	83	93	46 - 121	11	28
Surrogate:										
2-Fluorobiphenyl						79	91	32 - 114		
Pyrene-d10						80	86	33 - 121		
Terphenyl-d14						66	74	31 - 116		

Date of Report: March 11, 2015
Samples Submitted: February 27, 2015
Laboratory Reference: 1502-262
Project: 14697

% MOISTURE

Date Analyzed: 3-3-15

Client ID	Lab ID	% Moisture
B7-PIPING-B1-5.0	02-262-01	28
B7-PIPING-B2-5.0	02-262-02	15
B7-PIPING-B3-4.5	02-262-03	9
B7-PIPING-B4-4.5	02-262-04	17
B7-PIPING-S1-4.0	02-262-05	40
B7-PIPING-S2-4.0	02-262-06	17
B7-PIPING-S3-3.5	02-262-07	12
B7-PIPING-S4-3.5	02-262-08	9



Data Qualifiers and Abbreviations

- A - Due to a high sample concentration, the amount spiked is insufficient for meaningful MS/MSD recovery data.
- B - The analyte indicated was also found in the blank sample.
- C - The duplicate RPD is outside control limits due to high result variability when analyte concentrations are within five times the quantitation limit.
- E - The value reported exceeds the quantitation range and is an estimate.
- F - Surrogate recovery data is not available due to the high concentration of coeluting target compounds.
- H - The analyte indicated is a common laboratory solvent and may have been introduced during sample preparation, and be impacting the sample result.
- I - Compound recovery is outside of the control limits.
- J - The value reported was below the practical quantitation limit. The value is an estimate.
- K - Sample duplicate RPD is outside control limits due to sample inhomogeneity. The sample was re-extracted and re-analyzed with similar results.
- L - The RPD is outside of the control limits.
- M - Hydrocarbons in the gasoline range are impacting the diesel range result.
- M1 - Hydrocarbons in the gasoline range (toluene-naphthalene) are present in the sample.
- N - Hydrocarbons in the lube oil range are impacting the diesel range result.
- N1 - Hydrocarbons in diesel range are impacting lube oil range results.
- O - Hydrocarbons indicative of heavier fuels are present in the sample and are impacting the gasoline result.
- P - The RPD of the detected concentrations between the two columns is greater than 40.
- Q - Surrogate recovery is outside of the control limits.
- S - Surrogate recovery data is not available due to the necessary dilution of the sample.
- T - The sample chromatogram is not similar to a typical _____.
- U - The analyte was analyzed for, but was not detected above the reported sample quantitation limit.
- U1 - The practical quantitation limit is elevated due to interferences present in the sample.
- V - Matrix Spike/Matrix Spike Duplicate recoveries are outside control limits due to matrix effects.
- W - Matrix Spike/Matrix Spike Duplicate RPD are outside control limits due to matrix effects.
- X - Sample extract treated with a mercury cleanup procedure.
- X1 - Sample extract treated with a Sulfuric acid/Silica gel cleanup procedure.
- Y - The calibration verification for this analyte exceeded the 20% drift specified in method 8260C, and therefore the reported result should be considered an estimate. The overall performance of the calibration verification standard met the acceptance criteria of the method.
- Z1 - The sample chromatogram is similar to mineral spirits with diesel.
- Z2 - The sample chromatogram is similar to mineral spirits.



OnSite Environmental Inc.
Analytical Laboratory Testing Services
14648 NE 95th Street • Redmond, WA 98052
Phone: (425) 883-3881 • www.onsite-env.com

Chain of Custody

Page 1 of 1

Turnaround Request
(in working days)

Laboratory Number:

02-262

(Check One)

☐ Same Day ☐ 1 Day

☐ 2 Days ☐ 3 Days

☒ Standard (7 Days)
(TPH analysis 5 Days)

☐ _____
(other)

Company: Ame
Project Number: Kelly-Moore Soil EX.
Project Name: 14697
Project Manager: Tanya Gray
Sampled by: Nathan Moxley

Lab ID Sample Identification

Number of Containers

NWTPH-HCID

NWTPH-Gx/BTEX

NWTPH-Gx

NWTPH-Dx

Volatiles 8260C

Halogenated Volatiles 8260C

Semivolatiles 8270D/SIM
(with low-level PAHs)

PAHs 8270D/SIM (low-level)

PCBs 8082A

Organochlorine Pesticides 8081B

Organophosphorus Pesticides 8270D/SIM

Chlorinated Acid Herbicides 8151A

Total RCRA Metals

Total MTCA Metals

TCLP Metals

HEM (oil and grease) 1664A

CPAHs

% Moisture

Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	Number of Containers	NWTPH-HCID	NWTPH-Gx/BTEX	NWTPH-Gx	NWTPH-Dx	Volatiles 8260C	Halogenated Volatiles 8260C	Semivolatiles 8270D/SIM (with low-level PAHs)	PAHs 8270D/SIM (low-level)	PCBs 8082A	Organochlorine Pesticides 8081B	Organophosphorus Pesticides 8270D/SIM	Chlorinated Acid Herbicides 8151A	Total RCRA Metals	Total MTCA Metals	TCLP Metals	HEM (oil and grease) 1664A	CPAHs	% Moisture	
1	B7-piping-B1-5.0	2/27/15	1000	Soil	2		X		X										X				X	
2	B7-piping-B2-5.0		1005		2																			
3	B7-piping-B3-4.5		1010		2																			
4	B7-piping-B4-4.5		1015		2																			
5	B7-piping-S1-4.0		1020		2																			
6	B7-piping-S2-4.0		1025		2																			
7	B7-piping-S3-3.5		1030		3																			
8	B7-piping-S4-3.5		1035		3																			

Signature	Company	Date	Time	Comments/Special Instructions
-----------	---------	------	------	-------------------------------

Relinquished [Signature] Ame 2/27/15 1400

Received [Signature] GR200-1 2/27/15 1401

Relinquished [Signature] SP200-1 2/27/15 1404

Received [Signature] Q8E 2/27/15 1546

Relinquished [Signature]

Received [Signature]

Reviewed/Date [Signature] Reviewed/Date

Data Package: Standard ☐ Level III ☐ Level IV ☐

Electronic Data Deliverables (EDDs) ☐

Chromatograms with final report ☐



14648 NE 95th Street, Redmond, WA 98052 • (425) 883-3881

March 24, 2015

Tasya Gray
AMEC Environment and Infrastructure, Inc.
One Union Square
600 University Street, Suite 600
Seattle, WA 98101

Re: Analytical Data for Project 14697
Laboratory Reference No. 1503-144

Dear Tasya:

Enclosed are the analytical results and associated quality control data for samples submitted on March 16, 2015.

The standard policy of OnSite Environmental, Inc. is to store your samples for 30 days from the date of receipt. If you require longer storage, please contact the laboratory.

We appreciate the opportunity to be of service to you on this project. If you have any questions concerning the data, or need additional information, please feel free to call me.

Sincerely,

A handwritten signature in black ink, appearing to read 'DB', with a long horizontal line extending to the right.

David Baumeister
Project Manager

Enclosures

Date of Report: March 24, 2015
Samples Submitted: March 16, 2015
Laboratory Reference: 1503-144
Project: 14697

Case Narrative

Samples were collected on March 13, 2015 and received by the laboratory on March 16, 2015. They were maintained at the laboratory at a temperature of 2°C to 6°C.

General QA/QC issues associated with the analytical data enclosed in this laboratory report will be indicated with a reference to a comment or explanation on the Data Qualifier page. More complex and involved QA/QC issues will be discussed in detail below.

NWTPH Gx/BTEX Analysis

Per EPA method 5035A, samples were received by the laboratory in pre-weighed 40 ml VOA vials preserved with either Methanol or Sodium Bisulfate.

The chromatograms for samples B7-piping-B5-5.0 and B7-piping-S1B-4.0 are similar to mineral spirits with diesel.

cPAHs EPA 8270D/SIM Analysis

The method blank and a matrix spike had one surrogate recovery out of control limits. This is within allowance of our standard operating procedure as long as the recovery is above 10%.

Please note that any other QA/QC issues associated with these extractions and analyses will be indicated with a footnote reference and discussed in detail on the Data Qualifier page.

Date of Report: March 24, 2015
 Samples Submitted: March 16, 2015
 Laboratory Reference: 1503-144
 Project: 14697

NWTPH-Gx/BTEX

Matrix: Soil
 Units: mg/kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	B7-piping-B5-5.0					
Laboratory ID:	03-144-01					
Benzene	0.13	0.023	EPA 8021B	3-16-15	3-18-15	
Toluene	ND	0.12	EPA 8021B	3-16-15	3-18-15	
Ethyl Benzene	0.27	0.12	EPA 8021B	3-16-15	3-18-15	
m,p-Xylene	1.4	0.12	EPA 8021B	3-16-15	3-18-15	
o-Xylene	ND	0.12	EPA 8021B	3-16-15	3-18-15	
Gasoline	1100	120	NWTPH-Gx	3-16-15	3-17-15	Z
Surrogate:	Percent Recovery	Control Limits				
Fluorobenzene	99	68-123				
Client ID:	B7-piping-S1B-4.0					
Laboratory ID:	03-144-02					
Benzene	0.27	0.047	EPA 8021B	3-16-15	3-17-15	
Toluene	ND	0.23	EPA 8021B	3-16-15	3-17-15	
Ethyl Benzene	0.69	0.23	EPA 8021B	3-16-15	3-17-15	
m,p-Xylene	3.6	0.23	EPA 8021B	3-16-15	3-17-15	
o-Xylene	ND	1.2	EPA 8021B	3-16-15	3-17-15	U1
Gasoline	3900	470	NWTPH-Gx	3-16-15	3-20-15	Z
Surrogate:	Percent Recovery	Control Limits				
Fluorobenzene	106	68-123				

Date of Report: March 24, 2015
 Samples Submitted: March 16, 2015
 Laboratory Reference: 1503-144
 Project: 14697

**NWTPH-Gx/BTEX
 QUALITY CONTROL**

Matrix: Soil
 Units: mg/kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0316S1					
Benzene	ND	0.020	EPA 8021B	3-16-15	3-16-15	
Toluene	ND	0.050	EPA 8021B	3-16-15	3-16-15	
Ethyl Benzene	ND	0.050	EPA 8021B	3-16-15	3-16-15	
m,p-Xylene	ND	0.050	EPA 8021B	3-16-15	3-16-15	
o-Xylene	ND	0.050	EPA 8021B	3-16-15	3-16-15	
Gasoline	ND	5.0	NWTPH-Gx	3-16-15	3-16-15	
Surrogate:	Percent Recovery	Control Limits				
Fluorobenzene	89	68-123				

Analyte	Result	Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE								
Laboratory ID:	03-151-01							
	ORIG	DUP						
Benzene	ND	ND	NA	NA	NA	NA	NA	30
Toluene	ND	ND	NA	NA	NA	NA	NA	30
Ethyl Benzene	ND	ND	NA	NA	NA	NA	NA	30
m,p-Xylene	ND	ND	NA	NA	NA	NA	NA	30
o-Xylene	ND	ND	NA	NA	NA	NA	NA	30
Gasoline	ND	ND	NA	NA	NA	NA	NA	30
Surrogate:								
Fluorobenzene				98	99	68-123		

SPIKE BLANKS

Laboratory ID:	SB0316S1									
	SB	SBD	SB	SBD	SB	SBD				
Benzene	0.889	0.920	1.00	1.00	89	92	75-117	3	13	
Toluene	0.920	0.936	1.00	1.00	92	94	78-118	2	12	
Ethyl Benzene	0.915	0.928	1.00	1.00	92	93	78-118	1	12	
m,p-Xylene	0.941	0.939	1.00	1.00	94	94	78-121	0	13	
o-Xylene	0.923	0.925	1.00	1.00	92	93	77-119	0	13	
Surrogate:										
Fluorobenzene					87	91	68-123			

Date of Report: March 24, 2015
 Samples Submitted: March 16, 2015
 Laboratory Reference: 1503-144
 Project: 14697

NWTPH-Dx

Matrix: Soil
 Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	B7-piping-B5-5.0					
Laboratory ID:	03-144-01					
Diesel Fuel #2	7800	160	NWTPH-Dx	3-17-15	3-19-15	
Lube Oil Range Organics	ND	970	NWTPH-Dx	3-17-15	3-19-15	U1
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	87	50-150				

Client ID:	B7-piping-S1B-4.0					
Laboratory ID:	03-144-02					
Diesel Fuel #2	11000	140	NWTPH-Dx	3-17-15	3-19-15	
Lube Oil Range Organics	ND	1300	NWTPH-Dx	3-17-15	3-19-15	U1
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	92	50-150				

Date of Report: March 24, 2015
 Samples Submitted: March 16, 2015
 Laboratory Reference: 1503-144
 Project: 14697

**NWTPH-Dx
QUALITY CONTROL**

Matrix: Soil
 Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0317S2					
Diesel Range Organics	ND	25	NWTPH-Dx	3-17-15	3-17-15	
Lube Oil Range Organics	ND	50	NWTPH-Dx	3-17-15	3-17-15	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	94	50-150				

Analyte	Result		Spike Level		Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE										
Laboratory ID:	03-115-01									
	ORIG	DUP								
Diesel Range	ND	ND	NA	NA		NA	NA	NA	NA	
Lube Oil Range	ND	ND	NA	NA		NA	NA	NA	NA	
Surrogate:										
o-Terphenyl						92	86	50-150		

Date of Report: March 24, 2015
 Samples Submitted: March 16, 2015
 Laboratory Reference: 1503-144
 Project: 14697

**TOTAL METALS
 EPA 6010C/7471B**

Matrix: Soil
 Units: mg/kg (ppm)

				Date	Date	
Analyte	Result	PQL	EPA Method	Prepared	Analyzed	Flags
<hr/>						
Lab ID:	03-144-01					
Client ID:	B7-piping-B5-5.0					
<hr/>						
Arsenic	ND	13	6010C	3-17-17	3-17-15	
Barium	49	3.2	6010C	3-17-17	3-17-15	
Cadmium	ND	0.65	6010C	3-17-17	3-17-15	
Chromium	8.4	0.65	6010C	3-17-17	3-17-15	
Lead	ND	6.5	6010C	3-17-17	3-17-15	
Mercury	ND	0.32	7471B	3-17-17	3-17-15	
Selenium	ND	13	6010C	3-17-17	3-17-15	
Silver	ND	1.3	6010C	3-17-17	3-17-15	

Lab ID: 03-144-02
Client ID: B7-piping-S1B-4.0

<hr/>						
Arsenic	ND	11	6010C	3-17-17	3-17-15	
Barium	33	2.7	6010C	3-17-17	3-17-15	
Cadmium	ND	0.54	6010C	3-17-17	3-17-15	
Chromium	9.5	0.54	6010C	3-17-17	3-17-15	
Lead	ND	5.4	6010C	3-17-17	3-17-15	
Mercury	ND	0.27	7471B	3-17-17	3-17-15	
Selenium	ND	11	6010C	3-17-17	3-17-15	
Silver	ND	1.1	6010C	3-17-17	3-17-15	

Date of Report: March 24, 2015
Samples Submitted: March 16, 2015
Laboratory Reference: 1503-144
Project: 14697

**TOTAL METALS
EPA 6010C/7471B
METHOD BLANK QUALITY CONTROL**

Date Extracted: 3-17-17

Date Analyzed: 3-17-15

Matrix: Soil

Units: mg/kg (ppm)

Lab ID: MB0317SM1&MB0317S1

Analyte	Method	Result	PQL
Arsenic	6010C	ND	10
Barium	6010C	ND	2.5
Cadmium	6010C	ND	0.50
Chromium	6010C	ND	0.50
Lead	6010C	ND	5.0
Mercury	7471B	ND	0.25
Selenium	6010C	ND	10
Silver	6010C	ND	1.0

Date of Report: March 24, 2015
 Samples Submitted: March 16, 2015
 Laboratory Reference: 1503-144
 Project: 14697

**TOTAL METALS
 EPA 6010C/7471B
 DUPLICATE QUALITY CONTROL**

Date Extracted: 3-17-17

Date Analyzed: 3-17-15

Matrix: Soil

Units: mg/kg (ppm)

Lab ID: 03-144-02

Analyte	Sample Result	Duplicate Result	RPD	PQL	Flags
Arsenic	ND	ND	NA	10	
Barium	30.6	30.7	0	2.5	
Cadmium	ND	ND	NA	0.50	
Chromium	8.80	8.45	4	0.50	
Lead	ND	ND	NA	5.0	
Mercury	ND	ND	NA	0.25	
Selenium	ND	ND	NA	10	
Silver	ND	ND	NA	1.0	

Date of Report: March 24, 2015
 Samples Submitted: March 16, 2015
 Laboratory Reference: 1503-144
 Project: 14697

**TOTAL METALS
 EPA 6010C/7471B
 MS/MSD QUALITY CONTROL**

Date Extracted: 3-17-17

Date Analyzed: 3-17-15

Matrix: Soil

Units: mg/kg (ppm)

Lab ID: 03-144-02

Analyte	Spike Level	MS	Percent Recovery	MSD	Percent Recovery	RPD	Flags
Arsenic	100	98.3	98	96.6	97	2	
Barium	100	136	106	129	99	5	
Cadmium	50.0	49.1	98	47.7	95	3	
Chromium	100	108	99	105	96	3	
Lead	250	248	99	244	97	2	
Mercury	0.500	0.513	103	0.523	105	2	
Selenium	100	98.4	98	94.0	94	5	
Silver	25.0	25.0	100	24.4	98	2	

Date of Report: March 24, 2015
 Samples Submitted: March 16, 2015
 Laboratory Reference: 1503-144
 Project: 14697

cPAHs EPA 8270D/SIM

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	B7-piping-B5-5.0					
Laboratory ID:	03-144-01					
Benzo[a]anthracene	4.5	0.086	EPA 8270D/SIM	3-19-15	3-23-15	
Chrysene	3.6	0.086	EPA 8270D/SIM	3-19-15	3-23-15	
Benzo[b]fluoranthene	3.8	0.086	EPA 8270D/SIM	3-19-15	3-23-15	
Benzo(j,k)fluoranthene	1.5	0.086	EPA 8270D/SIM	3-19-15	3-23-15	
Benzo[a]pyrene	3.7	0.086	EPA 8270D/SIM	3-19-15	3-23-15	
Indeno(1,2,3-c,d)pyrene	1.3	0.086	EPA 8270D/SIM	3-19-15	3-23-15	
Dibenz[a,h]anthracene	0.42	0.086	EPA 8270D/SIM	3-19-15	3-23-15	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>2-Fluorobiphenyl</i>	<i>97</i>	<i>32 - 114</i>				
<i>Pyrene-d10</i>	<i>92</i>	<i>33 - 121</i>				
<i>Terphenyl-d14</i>	<i>88</i>	<i>31 - 116</i>				

Date of Report: March 24, 2015
 Samples Submitted: March 16, 2015
 Laboratory Reference: 1503-144
 Project: 14697

cPAHs EPA 8270D/SIM

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	B7-piping-S1B-4.0					
Laboratory ID:	03-144-02					
Benzo[a]anthracene	0.45	0.072	EPA 8270D/SIM	3-19-15	3-23-15	
Chrysene	0.30	0.072	EPA 8270D/SIM	3-19-15	3-23-15	
Benzo[b]fluoranthene	0.29	0.072	EPA 8270D/SIM	3-19-15	3-23-15	
Benzo(j,k)fluoranthene	0.16	0.072	EPA 8270D/SIM	3-19-15	3-23-15	
Benzo[a]pyrene	0.28	0.072	EPA 8270D/SIM	3-19-15	3-23-15	
Indeno(1,2,3-c,d)pyrene	0.095	0.072	EPA 8270D/SIM	3-19-15	3-23-15	
Dibenz[a,h]anthracene	ND	0.072	EPA 8270D/SIM	3-19-15	3-23-15	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>2-Fluorobiphenyl</i>	<i>95</i>	<i>32 - 114</i>				
<i>Pyrene-d10</i>	<i>90</i>	<i>33 - 121</i>				
<i>Terphenyl-d14</i>	<i>87</i>	<i>31 - 116</i>				

Date of Report: March 24, 2015
 Samples Submitted: March 16, 2015
 Laboratory Reference: 1503-144
 Project: 14697

**cPAHs EPA 8270D/SIM
 METHOD BLANK QUALITY CONTROL**

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<hr/>						
Laboratory ID:	MB0319S1					
Benzo[a]anthracene	ND	0.0067	EPA 8270D/SIM	3-19-15	3-20-15	
Chrysene	ND	0.0067	EPA 8270D/SIM	3-19-15	3-20-15	
Benzo[b]fluoranthene	ND	0.0067	EPA 8270D/SIM	3-19-15	3-20-15	
Benzo(j,k)fluoranthene	ND	0.0067	EPA 8270D/SIM	3-19-15	3-20-15	
Benzo[a]pyrene	ND	0.0067	EPA 8270D/SIM	3-19-15	3-20-15	
Indeno(1,2,3-c,d)pyrene	ND	0.0067	EPA 8270D/SIM	3-19-15	3-20-15	
Dibenz[a,h]anthracene	ND	0.0067	EPA 8270D/SIM	3-19-15	3-20-15	
<hr/>						
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>2-Fluorobiphenyl</i>	<i>115</i>	<i>32 - 114</i>				
<i>Pyrene-d10</i>	<i>84</i>	<i>33 - 121</i>				
<i>Terphenyl-d14</i>	<i>81</i>	<i>31 - 116</i>				

Q

Date of Report: March 24, 2015
 Samples Submitted: March 16, 2015
 Laboratory Reference: 1503-144
 Project: 14697

**cPAHs EPA 8270D/SIM
 MS/MSD QUALITY CONTROL**

Matrix: Soil
 Units: mg/Kg

Analyte	Result		Spike Level		Source Result	Percent Recovery	Recovery Limits		RPD	RPD Limit	Flags
MATRIX SPIKES											
Laboratory ID:	03-107-01										
	MS	MSD	MS	MSD		MS	MSD				
Benzo[a]anthracene	0.0826	0.0682	0.0833	0.0833	ND	99	82	42 - 134	19	27	
Chrysene	0.0694	0.0589	0.0833	0.0833	ND	83	71	45 - 114	16	27	
Benzo[b]fluoranthene	0.0726	0.0624	0.0833	0.0833	ND	87	75	38 - 131	15	33	
Benzo(j,k)fluoranthene	0.0703	0.0616	0.0833	0.0833	ND	84	74	44 - 114	13	34	
Benzo[a]pyrene	0.0808	0.0665	0.0833	0.0833	ND	97	80	40 - 136	19	29	
Indeno(1,2,3-c,d)pyrene	0.0710	0.0591	0.0833	0.0833	ND	85	71	45 - 126	18	30	
Dibenz[a,h]anthracene	0.0713	0.0594	0.0833	0.0833	ND	86	71	46 - 121	18	28	
Surrogate:											
2-Fluorobiphenyl						120	91	32 - 114			Q
Pyrene-d10						82	69	33 - 121			
Terphenyl-d14						78	66	31 - 116			

Date of Report: March 24, 2015
Samples Submitted: March 16, 2015
Laboratory Reference: 1503-144
Project: 14697

% MOISTURE

Date Analyzed: 3-17-15

Client ID	Lab ID	% Moisture
B7-piping-B5-5.0	03-144-01	23
B7-piping-S1B-4.0	03-144-02	8



Data Qualifiers and Abbreviations

- A - Due to a high sample concentration, the amount spiked is insufficient for meaningful MS/MSD recovery data.
- B - The analyte indicated was also found in the blank sample.
- C - The duplicate RPD is outside control limits due to high result variability when analyte concentrations are within five times the quantitation limit.
- E - The value reported exceeds the quantitation range and is an estimate.
- F - Surrogate recovery data is not available due to the high concentration of coeluting target compounds.
- H - The analyte indicated is a common laboratory solvent and may have been introduced during sample preparation, and be impacting the sample result.
- I - Compound recovery is outside of the control limits.
- J - The value reported was below the practical quantitation limit. The value is an estimate.
- K - Sample duplicate RPD is outside control limits due to sample inhomogeneity. The sample was re-extracted and re-analyzed with similar results.
- L - The RPD is outside of the control limits.
- M - Hydrocarbons in the gasoline range are impacting the diesel range result.
- M1 - Hydrocarbons in the gasoline range (toluene-naphthalene) are present in the sample.
- N - Hydrocarbons in the lube oil range are impacting the diesel range result.
- N1 - Hydrocarbons in diesel range are impacting lube oil range results.
- O - Hydrocarbons indicative of heavier fuels are present in the sample and are impacting the gasoline result.
- P - The RPD of the detected concentrations between the two columns is greater than 40.
- Q - Surrogate recovery is outside of the control limits.
- S - Surrogate recovery data is not available due to the necessary dilution of the sample.
- T - The sample chromatogram is not similar to a typical _____.
- U - The analyte was analyzed for, but was not detected above the reported sample quantitation limit.
- U1 - The practical quantitation limit is elevated due to interferences present in the sample.
- V - Matrix Spike/Matrix Spike Duplicate recoveries are outside control limits due to matrix effects.
- W - Matrix Spike/Matrix Spike Duplicate RPD are outside control limits due to matrix effects.
- X - Sample extract treated with a mercury cleanup procedure.
- X1 - Sample extract treated with a Sulfuric acid/Silica gel cleanup procedure.
- Y - The calibration verification for this analyte exceeded the 20% drift specified in method 8260C, and therefore the reported result should be considered an estimate. The overall performance of the calibration verification standard met the acceptance criteria of the method.
- Z - The sample chromatograms are similar to mineral spirits with diesel.

ND - Not Detected at PQL
 PQL - Practical Quantitation Limit
 RPD - Relative Percent Difference



**Onsite
Environmental Inc.**

Analytical Laboratory Testing Services
14648 NE 95th Street • Redmond, WA 98052
Phone: (425) 883-3881 • www.onsite-env.com

Chain of Custody

Page 1 of 1

Turnaround Request
(in working days)

Laboratory Number:

03-144

(Check One)

☐ Same Day ☐ 1 Day

☐ 2 Days ☐ 3 Days

☒ Standard (7 Days)
(TPH analysis 5 Days)

☐ _____
(other)

Number of Containers

NWTPH-HCID

NWTPH-Gx/BTEX

NWTPH-Gx

NWTPH-Dx

Volatiles 8260C

Halogenated Volatiles 8260C

Semivolatiles 8270D/SIM
(with low-level PAHs)

PAHs 8270D/SIM (low-level)

PCBs 8082A

Organochlorine Pesticides 8081B

Organophosphorus Pesticides 8270D/SIM

Chlorinated Acid Herbicides 8151A

Total RCRA Metals

Total MTCA Metals

TCLP Metals

HEM (oil and grease) 1664A

% Moisture

Company: **AHEC**
Project Number: **Kelly-Moore Soil Ex**
Project Name: **14097**
Project Manager: **Tasha Gray**
Sampled by: **Nathan Moxley**

Lab ID Sample Identification

Date Sampled Time Sampled Matrix

1 BT-piping - BS-5.0
2 BT-piping - SIB-4.0

03/13/15 0750 Soil 1
0755 Soil 2

2 2
X X
X X

X X
X X
X X

X X

AM

Signature

Company

Date

Time

Comments/Special Instructions

Relinquished

[Signature]

AHEC

3/15/15

2040

Received

[Signature]

APC

3/16/15

123

Relinquished

[Signature]

APC

3/16/15

1120

Received

[Signature]

APC

3/16/15

1121

Relinquished

[Signature]

APC

3/16/15

1121

Received

[Signature]

APC

3/16/15

1121

Reviewed/Date

Reviewed/Date

Chromatograms with final report ☐

Data Package: Standard ☐ Level III ☐ Level IV ☐

Electronic Data Deliverables (EDDs) ☐

APPENDIX I

Soil Disposal Tickets

TE Roosevelt Landfill 500 Roosevelt Grade Rd Roosevelt Wa, 99356
CUSTOMER 010385 Rhine Demolition 1124-112th St. E. Tacoma, WA 98445 TB-12157

SITE 3A	TICKET # 328979	CELL 241041
WEIGHMASTER Janice F.		
DATE/TIME IN 02-28-2015 11:40 am		DATE/TIME OUT 02-28-2015 12:01 pm
VEHICLE 7327		CONTAINER TOLU456780
REFERENCE INVOICE		
BILL OF LADING BNSF231172 02/26/2015 0		

SCALE IN	GROSS WEIGHT	116,720	NET TONS	34.13	
SCALE OUT	TARE WEIGHT	48,460	NET WEIGHT	68,260	INBOUND

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
28.00	YD	TRACKING QTY				
34.13	TN	Contaminated Debris Seattle				
1.00		CONTAINER/CHASIS RENTAL				

The undersigned individual signing this document on behalf of Customer acknowledges that he or she has read and understands the terms and conditions on the reverse side and that he or she has the authority to sign this document on behalf of the customer.

NET AMOUNT
TENDERED
CHANGE
CHECK#

RS-F042UPR (07/12)

SIGNATURE _____

TE Roosevelt Landfill 500 Roosevelt Grade Rd Roosevelt Wa, 99356
CUSTOMER 010385 Rhine Demolition LLC 1124-112th St. E. Tacoma, WA 98445 TB-12157

SITE 3A	TICKET # 329052	CELL 240893
WEIGHMASTER Gail H.		
DATE/TIME IN 03-02-2015 12:29 pm		DATE/TIME OUT 03-2-2015 12:57 pm
VEHICLE 0330		CONTAINER RBS0200329
REFERENCE INVOICE		
BILL OF LADING BNSF231136 02/27/2015 0		

SCALE IN	GROSS WEIGHT	107,200	NET TONS	29.55	
SCALE OUT	TARE WEIGHT	48,100	NET WEIGHT	59,100	INBOUND

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
28.00	YD	TRACKING QTY				
29.55	TN	Contaminated Debris Seattle				
1.00		CONTAINER/CHASIS RENTAL				

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CHECK#

RS-F042UPR (07/12)

SIGNATURE _____

TE Roosevelt Landfill 500 Roosevelt Grade Rd Roosevelt Wa, 99356
CUSTOMER 010385 Rhine Demolition LLC 1124-112th St. E. Tacoma, WA 98445 TB-12157

SITE 3A	TICKET # 329053	CELL 240887
WEIGHMASTER Gail H.		
DATE/TIME IN 03-02-2015 12:35 pm		DATE/TIME OUT 03-2-2015 1:01 pm
VEHICLE 7327		CONTAINER TOL0453274
REFERENCE INVOICE		
BILL OF LADING BNSF231136 02/27/2015 0		

SCALE IN	GROSS WEIGHT	103,500	NET TONS	28.87	
SCALE OUT	TARE WEIGHT	45,760	NET WEIGHT	57,740	INBOUND

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
28.00	YD	TRACKING QTY				
28.87	TN	Contaminated Debris Seattle				
1.00		CONTAINER/CHASIS RENTAL				

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NET AMOUNT
TENDERED
CHANGE
CHECK#

SIGNATURE _____

TE Roosevelt Landfill 500 Roosevelt Grade Rd Roosevelt Wa, 99356
CUSTOMER 010385 Rhine Demolition LLC 1124-112th St. E. Tacoma, WA 98445 TB-12157

SITE 3A	TICKET # 329055	CELL 240890
WEIGHMASTER Gail H.		
DATE/TIME IN 03-02-2015 12:24 pm		DATE/TIME OUT 03-2-2015 1:02 pm
VEHICLE 6181		CONTAINER RBS0200402
REFERENCE INVOICE		
BILL OF LADING BNSF231136 02/27/2015 0		

SCALE IN	GROSS WEIGHT	89,700	NET TONS	21.72	
SCALE OUT	TARE WEIGHT	46,260	NET WEIGHT	43,440	INBOUND

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
28.00	YD	TRACKING QTY				
21.72	TN	Contaminated Debris Seattle				
1.00		CONTAINER/CHASIS RENTAL				

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NET AMOUNT
TENDERED
CHANGE
CHECK#

SIGNATURE _____

010385
Rhine Demolition LLC
1124-112th St. E.
Tacoma, WA 98445
TB-12157

SITE 3A	TICKET # 329056	CELL 241035
WEIGHMASTER Gail H.		
DATE/TIME IN 03-02-2015 12:23 pm		DATE/TIME OUT 03-2-2015 1:03 pm
VEHICLE 0332		CONTAINER TOLU460811
REFERENCE		
BILL OF LADING BNSF231136		INVOICE 02/27/2015

SCALE IN	GROSS WEIGHT	108,200	NET TONS	30.41	
SCALE OUT	TARE WEIGHT	47,380	NET WEIGHT	60,820	INBOUND

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
28.00	YD	TRACKING QTY				
30.41	TN	Contaminated Debris				
1.00		CONTAINER/CHASIS RENTAL				
		Seattle				

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NET AMOUNT
TENDERED
CHANGE
CHECK#

ITE Roosevelt Landfill 500 Roosevelt Grade Rd Roosevelt Wa, 99356
USTOMER 010385 Rhine Demolition LLC 1124-112th St. E. Tacoma, WA 98445 TB-12157

SITE 3A	TICKET # 329058	CELL 240891
WEIGHMASTER Gail H.		
DATE/TIME IN 03-02-2015 12:48 pm		DATE/TIME OUT 03-2-2015 1:11 pm
VEHICLE 6180		CONTAINER RBS0200385
REFERENCE INVOICE		
BILL OF LADING BNSF231056 02/27/2015 0		

SCALE IN	GROSS WEIGHT	93,540	NET TONS	23.57	
SCALE OUT	TARE WEIGHT	46,400	NET WEIGHT	47,140	INBOUND

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
28.00	YD	TRACKING QTY				
23.57	TN	Contaminated Debris Seattle				
1.00		CONTAINER/CHASIS RENTAL				

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NET AMOUNT

TENDERED

CHANGE

CHECK#

SIGNATURE _____

CUSTOMER
010385
Rhine Demolition LLC
1124-112th St. E.
Tacoma, WA 98445
TB-12157

SITE 3A	TICKET # 329415	CELL 240894
WEIGHMASTER Janice F.		
DATE/TIME IN 03-07-2015 6:42 am		DATE/TIME OUT 03-7-2015 7:05 am
VEHICLE 6181		CONTAINER RBSU200368
REFERENCE		INVOICE
BILL OF LADING BNSF 231078		03/05/2015

SCALE IN	GROSS WEIGHT	92,300	NET TONS	23.08	
SCALE OUT	TARE WEIGHT	46,140	NET WEIGHT	46,160	INBOUND

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
28.00	YD	TRACKING QTY				
23.08	TN	Contaminated Debris				
1.00		CONTAINER/CHASIS RENTAL				
		Seattle				

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RS-F042UPR (07/12)

SIGNATURE _____

NET AMOUNT
TENDERED
CHANGE
CHECK#

JSTOMER
010385
Rhine Demolition LLC
1124-112th St. E.
Tacoma, WA 98445
TB-12157

SITE 3A	TICKET # 330047	CELL 241001
WEIGHMASTER Gail H.		
DATE/TIME IN 03-16-2015 7:32 am		DATE/TIME OUT 03-16-2015 7:56 am
VEHICLE 3450		CONTAINER GCEU425933
REFERENCE INVOICE		
BNS OF 201113 03/13/2015		

SCALE IN	GROSS WEIGHT	111,380	NET TONS	31.42	
SCALE OUT	TARE WEIGHT	48,540	NET WEIGHT	62,840	INBOUND

QTY	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
28.00	YD	TRACKING QTY				
31.42	TN	Contaminated Debris	Seattle			
1.00		CONTAINER/CHASIS RENTAL				

The undersigned individual signing this document on behalf of Customer acknowledges that he or she has read and understands the terms and conditions on the reverse side and that he or she has the authority to sign this document on behalf of the customer.

RS-F042UPR (07/12)

SIGNATURE _____

NET AMOUNT
TENDERED
CHANGE
CHECK#

USTOMER
010385
Rhine Demolition LLC
1124-112th St. E.
Tacoma, WA 98445
TB-12157

DATE	TIME	WEIGHMASTER	WEIGHT	DATE	TIME	WEIGHMASTER	WEIGHT
05-16-2015	2:04 pm	Gail H.	241000	05-16-2015	2:23 pm	Gail H.	241000
VEHICLE	CONTAINER	REFERENCE	INVOICE	VEHICLE	CONTAINER	REFERENCE	INVOICE
7327	FOL0458607	BNSF230038	03/13/2015	7327	FOL0458607	BNSF230038	03/13/2015

SCALE IN	GROSS WEIGHT	108,080	NET TONS	30.04	
SCALE OUT	TARE WEIGHT	48,000	NET WEIGHT	60,080	INBOUND

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
28.00	YD	TRACKING QTY				
30.04	TN	Contaminated Debris	Seattle			
1.00		CONTAINER/CHASIS RENTAL				

RS-F042UPR (07/12)

SIGNATURE _____

NET AMOUNT
TENDERED
CHANGE
CHECK#

Roosevelt Landfill 500 Roosevelt Grade Rd Roosevelt Wa, 99356
CUSTOMER 010385 Rhine Demolition LLC 1124-112th St. E. Tacoma, WA 98445 TB-12157

SITE 3A	TICKET # 330084	CELL 241941
WEIGHMASTER Gail H.		
DATE/TIME IN 03-16-2015 2:02 pm		DATE/TIME OUT 03-16-2015 2:24 pm
VEHICLE 6811		CONTAINER GCEU425315
REFERENCE INVOICE		
BINS OF 2500 18 03/13/2015		

SCALE IN	GROSS WEIGHT	102,960	NET TONS	27.91	
SCALE OUT	TARE WEIGHT	47,140	NET WEIGHT	55,820	INBOUND

QTY	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
28.00	YD	TRACKING QTY				
27.91	TN	Contaminated Debris Seattle				
1.00		CONTAINER/CHASIS RENTAL				

NET AMOUNT
TENDERED
CHANGE
CHECK#

The undersigned individual signing this document on behalf of Customer acknowledges that he or she has read and understands the terms and conditions on the reverse side and that he or she has the authority to sign this document on behalf of the customer.

SIGNATURE _____

Roosevelt Landfill

500 Roosevelt Grade Rd

Roosevelt Wa, 99356

CUSTOMER
010385

Rhine Demolition LLC

1124-112th St. E.

Tacoma, WA 98445

TB-12157

SITE 3A	TICKET # 330085	CELL 240958
WEIGHMASTER Gail H.		
DATE/TIME IN 03-16-2015 2:12 pm		DATE/TIME OUT 03-16-2015 2:54 pm
VEHICLE 8648		CONTAINER EGTU420670
REFERENCE		INVOICE
BIN # 2801671 03/13/2015		

MANUAL IN	GROSS WEIGHT	113,400	NET TONS	33.53
SCALE OUT	TARE WEIGHT	46,340	NET WEIGHT	67,060

INBOUND

QTY	UNIT	TRACKING QTY	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
28.00	YD						
33.53	TN		Contaminated Debris Seattle				
1.00			CONTAINER/CHASIS RENTAL				

The undersigned individual signing this document on behalf of Customer acknowledges that he or she has read and understands the terms and conditions on the reverse side and that he or she has the authority to sign this document on behalf of the customer.

NET AMOUNT

TENDERED

CHANGE

CHECK#

SIGNATURE _____

APPENDIX J

Site Assessment Checklist



SITE CHECK/SITE ASSESSMENT CHECKLIST FOR UNDERGROUND STORAGE TANKS

UST ID #: _____

County: _____

This checklist certifies that site check or site assessment activities were performed in accordance with Chapter 173-360 WAC. Instructions are found on the last page.

I. UST FACILITY		II. OWNER/OPERATOR INFORMATION	
Facility Compliance Tag #:	N/A	Owner/Operator Name:	Dan Jenkins
UST ID #:	N/A	Business Name:	NCD Georgetown, LLC
Site Name:	New Core Development LLC	Address:	11112 Rainier Ave S.
Site Address:	5400 Airport Way S.	City:	Seattle State: WA Zip: 98178
City:	Seattle, WA	Phone:	206-679-8568
Phone:		Email:	dan@newcoredevelopment.com
III. CERTIFIED SITE ASSESSOR			
Service Provider Name:	Nathan Moxley	Company Name:	Amec Foster Wheeler
Cell Phone:	Email: nathan.moxley@amec-fw.com	Address:	600 University St., Suite 600
Certification #:	8198685	Exp. Date:	3/15/15 City: Seattle State: WA Zip: 98101
IV. TANK INFORMATION			
TANK ID	TANK CAPACITY	LAST SUBSTANCE STORED	DATE SITE CHECK OR ASSESSMENT CONDUCTED
N/A	~ 500 gal.	unknown	3/11/2015
V. REASON FOR CONDUCTING SITE CHECK/SITE ASSESSMENT (check one)			
<input checked="" type="checkbox"/> Release investigation following permanent UST system closure (i.e. tank removal or closure-in-place).			
<input type="checkbox"/> Release investigation following a failed tank and/or line tightness test.			
<input type="checkbox"/> Release investigation following discovery of contaminated soil and/or groundwater.			
<input type="checkbox"/> Release investigation directed by Ecology to determine if the UST system is the source of offsite impacts.			
<input type="checkbox"/> UST system is undergoing a "change-in-service", which is changing from storing a regulated substance (e.g. gasoline) to storing a non-regulated substance (e.g. water).			
<input type="checkbox"/> Directed by Ecology for UST system permanently closed or abandoned before 12/22/1988.			
<input type="checkbox"/> Other (describe):			

VI. CHECKLIST

The site assessor must check each of the following items and include it in the report.
Sections referenced below can be found in the Ecology publication
Guidance for Site Checks and Site Assessments for Underground Storage Tanks.

	YES	NO
1. The location of the UST site is shown on a vicinity map.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2. A brief summary of information obtained during the site inspection is provided (Section 3.2)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3. A summary of UST system data is provided (Section 3.1)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
4. The soils characteristics at the UST site are described. (Section 5.2)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
5. Is there any apparent groundwater in the tank excavation?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
6. A brief description of the surrounding land use is provided. (Section 3.1)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
7. The name and address of the laboratory used to perform analyses is provided. The methods used to collect and analyze the samples, including the number and types of samples collected, are also documented in the report. The data from the laboratory is appended to the report.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
8. The following items are provided in one or more sketches:		
• Location and ID number for all field samples collected	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• If applicable, groundwater samples are distinguished from soil samples N/A	<input type="checkbox"/>	<input type="checkbox"/>
• Location of samples collected from stockpiled excavated soil N/A	<input type="checkbox"/>	<input type="checkbox"/>
• Tank and piping locations and limits of excavation pit	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• Adjacent structures and streets	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• Approximate locations of any on-site and nearby utilities N/A	<input type="checkbox"/>	<input type="checkbox"/>
9. If sampling procedures are different from those specified in the guidance, has justification for using these alternative sampling procedures been provided? (Section 3.4)	<input type="checkbox"/>	<input type="checkbox"/>
10. A table is provided showing laboratory results for each sample collected including; sample ID number, constituents analyzed for and corresponding concentration, analytical method, and detection limit for that method. Any sample exceeding MTCA Method A cleanup standards are highlighted or bolded.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
11. Any factors that may have compromised the quality of the data or validity of the results are described.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
12. The results of this site check/site assessment indicate that a confirmed release of a regulated substance has occurred. The requirements for reporting confirmed releases can be found in WAC 173-360-372.	<input checked="" type="checkbox"/>	<input type="checkbox"/>

VII. REQUIRED SIGNATURES

Signature acknowledges the Site Check or Site Assessment complies with UST regulations WAC 173-360-360 through -395.

Nathan Moxley
Print or Type Name

Nathan Moxley
Signature of Certified Site Assessor

3/14/15
Date