# UST SITE CLOSURE REPORT

**FOR**

VISTA FIELD AIRPORT
6915 W. Grandridge Blvd.
Kennewick, WA 99336

April 30, 2014

Prepared for:

Port of Kennewick
Attn: Larry Peterson
350 Clover Island Dr.
Kennewick, WA 99336

Prepared by:
Yancy Meyer
*Environmental Professional*
*And*
Peter Trabusiner
*Senior Engineer*

Blue Mountain Environmental and Consulting Company, Inc.
PO Box 545/125 Main St.
Waitsburg, WA 99361
509-520-6519

## PROJECT SUMMARY

| | |
|---|---|
| Client: | Port of Kennewick<br>350 Clover Island Dr.<br>Kennewick, WA 99336 |
| Point of Contact: | Mr. Larry Peterson |
| Property: | Vista Field Airport<br>6915 W. Grandridge Blvd.<br>Kennewick, Washington 99362 |
| Major Commercial Activity: | Former Fuel Station for Airplanes |
| UBI Number: | 601-644-713 |
| Facility Site ID Number: | 11009 |
| Decommissioning Supervisors: | Peter Trabusiner, Senior Engineer<br>Yancy Meyer, BMEC, Inc. |
| License Number/Expiration: | UST Decommissioning # 24070, expires 12/7/2015<br>WA Site Assessment # 5226971, expires 12/7/2015 |
| Project Number: | E2014/0105 |
| Report Date: | April 30, 2014 |

Legal Description: Parcel number 1-3299-100-0003-015, in the southwest quarter of Section 32, in Township 9 N., Range 29 E.W.M.

## CONTENTS



## APPENDIX:

Site Location Map
Site Photographs
Sample Location Map
Laboratory Report
UST Disposal Receipt

## 1.0 EXECUTIVE SUMMARY

The Port of Kennewick retained Blue Mountain Environmental and Consulting Company, Inc. (BMEC) to supervise the underground storage tank (UST) removal with confirmation sampling at Vista Field Airport, located at 6915 W. Grandridge Blvd., in Kennewick, Washington. Two USTs formerly used to fuel aircraft were located at the site after the closure of the airport, including a 12,000-gallon UST formerly used for 100 II Aviation fuel, and a 6,000-gallon UST formerly used for Jet A fuel (diesel). Both USTs were fiberglass-lined steel tanks with no cathodic protection. Product was pumped from both USTs on December 19, 2013, and the 30-day Notice was filed with the Washington Department of Ecology (DOE) on January 22, 2014. Excavation and UST removal and disposal started on March 3, 2014 and concluded on March 6, 2014. Removal was performed by 3-Kings Environmental of Battleground, Washington, under the supervision of BMEC. The soil sampling and the site assessment for the Washington State Department of Ecology (DOE) was done by Yancy Meyer, State registered UST Site Assessor and Decommissioning Supervisor, and employee of BMEC.

Twelve soil samples were taken from the excavation after the UST removal by BMEC to be analyzed for NWTPH-HCID, with selected samples also analyzed for NWTPH-Dx, NWTPH-Gx/BTEX, poly-aromatic hydrocarbons (PAHs), RCRA metals, and TCLP metals. Confirmation samples taken from the excavation indicated no detectable hydrocarbons. Small amounts of contaminated soil were removed from under the Jet A fuel dispenser, which did not have containment, and around the fill pipe for the Jet A fuel UST during removal. Approximately 15 tons of petroleum-contaminated soil was excavated and stored on-site in plastic containment. A soil sample taken from the stockpile indicated levels of diesel above MTCA cleanup levels, and additional sampling was performed for soil characterization for disposal. All samples were sent to On-Site Environmental Laboratory in Redmond, Washington, for analysis.

Confirmation sampling indicated no petroleum contamination above detection levels in the UST excavation. The USTs were intact and in good condition prior to being rendered unusable and cleaned out for recycling as scrap. Approximately 15 tons of petroleum-contaminated soil (PCS) was excavated and stored on-site in plastic containment. A soil sample taken from the stockpile indicated levels of diesel above MTCA cleanup levels, and additional sampling was performed for soil characterization for disposal. The USTs were transported to Twin City Metals in Kennewick, Washington, for disposal as scrap. Disposal receipts are included in the Appendix. The PCS is scheduled for disposal, and a disposal receipt will be included as an addendum to this report.

It is the opinion of BMEC that there was no release from the USTs at the site. PCS was removed from under the Jet A fuel dispenser and from around the Jet A fuel UST fill pipe, and sampling after soil removal confirmed no PCS above detection levels in the UST excavation and under the Jet A fuel dispenser. It is the opinion of BMEC that the former USTs do not represent a recognized environmental condition at the site, and no further investigation is recommended.

On April 30, 2014, the PCS was hauled to Waste Management's Columbia Ridge Landfill facility in Arlington, Oregon for disposal. Copies of the disposal permit and receipt are included in the Appendix.

Site photographs, a site location map, a sample location map, laboratory analysis, and disposal receipts are included in the Appendix.

### 1.1 Action Summary:

On March 3-4, 2014, BMEC observed the excavation and removal of two USTs which were located east of the FOB building (see site map). The USTs were pumped dry, inerted, excavated, and removed from the excavation. Visual observation indicated no significant corrosion or holes in the UST, and there was no evidence of petroleum-contaminated soil in the excavation. The USTs were rendered unusable and transported to Twin City Metals for disposal as scrap. Copies of the disposal receipts are included in the Appendix.

Approximately 15 tons of petroleum-contaminated soil (PCS) was excavated and stored on-site in plastic containment. A soil sample taken from the stockpile indicated levels of diesel above MTCA cleanup levels, and additional sampling was performed for soil characterization for disposal. On April 30, 2014, the PCS was hauled to Waste Management's Columbia Ridge Landfill facility in Arlington, Oregon for disposal. Copies of the disposal permit and receipt are included in the Appendix.

### 1.2 Site Background:

The subject site has been an airfield since the 1940s, when it was a backup airstrip for the Navy air base located in Pasco. According to DOE records, the USTs were installed at the site in the forties, and upgraded in 1991. The airport was closed in December 31, 2013, and the USTs have not been used since that time.

### 1.3 Purpose:

The UST removal was conducted as a part of the closure of Vista Field Airport.

### 1.4 Protocol:

The procedure for this soil investigation was to perform in practical and reasonable steps, employing currently available technology, existing regulations, and generally acceptable engineering practices, an investigation to ascertain the possibility, presence, or absence of petroleum releases.

## 2.0 SUBJECT PROPERTY SITE DESCRIPTION

### 2.1 Physical Setting Source:

The property is located in Kennewick, Washington. The United States Geological Survey (USGS) 7.5 Minute Topographic map was used for this assessment. The USGS 7.5 Minute Quad Map has an approximate scale of 1 inch to 2,000 feet, and shows physical features such as wetlands, water bodies, roadways, mines, and buildings.

The map indicated that the subject property is located within the city limits. The site is surrounded primarily by commercial properties. The subject property consists of approximately 100 acres and is developed with an approximately 4,500 square-foot, office/hangar building, one 8,000 square foot hanger, one 14,000 square foot hangar, and one 3,150 square foot hangar. The ground surface at the site slopes gradually to the north. Groundcover consists primarily of tarmac and sparsely vegetated soil. The subject property can be accessed from the northwest via an entrance from W. Grandridge Blvd.

### 2.2 Topography, Geology, and Hydrology

The subject site was identified along a terrace of the Columbia River, at an elevation of approximately 529 feet above mean sea level. Topography at and adjacent to the subject site was relatively flat, with slight regional slope to the north-northeast, toward the Columbia River located approximately 1.25 miles north of the subject site. Elevations decrease steadily along the Columbia River.

According to the U.S. Department of Agriculture *Soil Survey of Benton County, Washington*, the subject site is underlain by the Burbank loamy fine sand. Burbank soils is considered very deep and moderately well drained soils with moderate coarse textures.

A typical cross-section of the Burbank loamy fine sand includes an 12-inch thick surface layer of light brown and brown loam, underlain by an approximate twenty-inch thick layer of pale brown very gravelly sandy clay loam with interspersed with medium river rock, and completely underlain by light yellowish brown and pale brown very gravelly sand measuring in excess of 60 inches thick.

Based on topography and surface water body presence, the predominant groundwater flow direction is presumably to the northeast. No groundwater was encountered during the UST removal, and the groundwater level in the area varies from 15 to 25 feet below ground surface.

## 3.0 Sampling Methodology:

Several samples were field tested for petroleum hydrocarbons using PID. Field testing during the excavation was done by utilizing the "head space" field screening method to detect the volatiles as measured by a Combustible Gas Instrument (CGI) and Photo Ionization Detector (PID). PID readings were collected by obtaining several hundred grams of soil and placing that sample aliquot in a Ziploc baggie, sealing the baggie, and allowing the sealed sample to "heat up" on the hood of a vehicle for 10 to 15 minutes, prior to inserting the tip of the PID probe into the Ziploc baggie to obtain the PID measurement. PID measurements indicate the presence or absence of volatile compounds with some indication of concentration.

Soil sampling was conducted by Mr. Meyer. Discrete grab samples were collected from the sidewalls, 6" under the bottom of the USTs, and under both of the dispensers. Each sample was placed in one four ounce, pre-cleaned glass container with Teflon lined lid, and into four 40-oz. pre-weighed vials containing preservative. The samples were stored in a cool environment (4 degrees C) until released, with a chain-of-custody, to the laboratory. The sampling tools were decontaminated between samples, or disposed of.

## 4.0 Laboratory Results:

Soil samples 3-4-01 through 3-4-12 were all sampled for gasoline, diesel and lube oil hydrocarbons by NWTPH-HCID:

Matrix: Soil Units: mg/Kg (ppm)

| Sample Number (a) | | 3-4-1 | 3-4-2 | 3-4-3 | 3-4-4 | 3-4-5 | 3-4-6 |
|---|---|---|---|---|---|---|---|
| Sample Depth (ft) | | 13 | 13 | 13 | 13 | 13 | 14 |
| Analyte | MTCA Criteria | | | | | | |
| Gasoline | 30/100 | <21 | <21 | <21 | <21 | <21 | <22 |
| Diesel | 2000 | <54 | <53 | <54 | <52 | <53 | <55 |
| Lube Oil | 2000 | <110 | <110 | <110 | <100 | <110 | <110 |

| Sample Number (a) | | 3-4-7 | 3-4-8 | 3-4-9 | 3-4-10 | 3-4-11 | 3-4-12 |
|---|---|---|---|---|---|---|---|
| Sample Depth (ft) | | 14 | 14 | 14 | 14 | 4 | 4 |
| Analyte | MTCA Criteria | | | | | | |
| Gasoline | 30/100 | <21 | <21 | <21 | <21 | <22 | <22 |
| Diesel | 2000 | <53 | <53 | <54 | <53 | <54 | <54 |
| Lube Oil | 2000 | <110 | <110 | <110 | <110 | <110 | <110 |

Soil samples 3-4-06 and 3-4-08, from under the 100 II Aviation fuel UST, as well as the stockpile sample 3-4-13, were analyzed for gasoline and BTEX by NWTPH Gx/BTEX:

| Sample Number (a) | | 3-4-06 | 3-4-08 | 3-4-13 |
|---|---|---|---|---|
| Sample Depth (ft) | | 14 | 14 | NA |
| Analyte | MTCA Criteria(b) | | | |
| Benzene | 0.03 | <0.021 | <0.020 | <0.020 |
| Toluene | 7.0 | <0.11 | <0.064 | <0.072 |
| Ethylbenzene | 6.0 | <0.11 | <0.064 | 0.31 |
| Xylenes | 9.0 | <0.11 | <0.064 | 10.13 |
| TPH Gasoline (c) | 30/100 | <11 | <6.4 | <7.2 |

Additionally, the stockpile sample 3-4-13 was analyzed for diesel and lube oil by NWTPH-Dx:

| Sample Number (a) | | 3-4-13 |
|---|---|---|
| Sample Depth (ft) | | NA |
| Analyte | MTCA Criteria(b) | |
| Diesel | 2000 | 32000 |
| Lube Oil | 2000 | <550 |

Samples 3-4-09 and 3-4-10, from under the Jet A fuel (diesel) UST, and the stockpile sample 3-4-13 were also analyzed for PAHs:

| | DOE SOIL METHOD A UNRESTRICTED LAND USE | DOE SOIL METHOD A INDUSTRIAL LAND USE | DOE SOIL METHOD B CARCINOGEN | DOE SOIL METHOD B NON-CARCINOGEN | 3-4-09 SAMPLE DEPTH 14' | 3-4-10 SAMPLE DEPTH 14' | 3-4-13 SAMPLE DEPTH NA |
|---|---|---|---|---|---|---|---|
| PAHs (EPA 8270D) | | | | | | | |
| Naphthalene | 5 | 5 | NR | 1600 | <0.0072 | <0.0072 | 7.6 |
| 2-Methylnaphthalene | NR | NR | NR | 320 | <0.0072 | <0.0072 | 37 |
| 1-Methylnaphthalene | NR | NR | 35 | NR | <0.0072 | <0.0072 | 44 |
| Acenaphthylene | NR | NR | NR | NR | <0.0072 | <0.0072 | 1.7 |
| Acenaphthene | ND | ND | NR | 4800 | <0.0072 | <0.0072 | 3.4 |
| Fluorene | ND | ND | NR | 3200 | <0.0072 | <0.0072 | 7.6 |
| Phenanthrene | NR | NR | NR | NR | <0.0072 | <0.0072 | 1.5 |
| Anthracene | ND | ND | NR | 24000 | <0.0072 | <0.0072 | <0.73 |
| Fluoranthene | ND | ND | NR | 3200 | <0.0072 | <0.0072 | <0.73 |
| Pyrene | ND | ND | NR | 2400 | <0.0072 | <0.0072 | <0.73 |
| Benzo[a]anthracene | ND | ND | 1.4 | NR | <0.0072 | <0.0072 | <0.73 |
| Chrysene | ND | ND | 140 | NR | <0.0072 | <0.0072 | <0.73 |
| Benzo[b]fluoranthene | ND | ND | 1.4 | NR | <0.0072 | <0.0072 | 0.017 |
| Benzo(j,k)fluoranthene | ND | ND | ND | NR | <0.0072 | <0.0072 | 0.011 |
| Benzo[a]pyrene | 0.1 | 2.0 | 0.14 | NR | <0.0072 | <0.0072 | <0.0073 |
| Indeno[1,2,3-cd]pyrene | ND | ND | 1.4 | NR | <0.0072 | <0.0072 | 0.0077 |
| Dibenz[a,h]anthracene | ND | ND | 0.14 | NR | <0.0072 | <0.0072 | <0.0073 |
| Benzo[g,h,i]perylene | NR | NR | NR | NR | <0.0072 | <0.0072 | 0.015 |

Samples 3-4-06, 3-4-08, 3-4-09, 3-4-10, and 3-4-12 were analyzed for RCRA metals by EPA 6010C/7471B and for TCLP metals by EPA 1311/6010C/7470A. The stockpile sample was analyzed for total lead by EPA 6010C:

| Sample Number (a) | | 3-4-06 | 3-4-08 | 3-4-09 | 3-4-10 | 3-4-12 | 3-4-13 |
|---|---|---|---|---|---|---|---|
| Sample Depth (ft) | | 14 | 14 | 14 | 14 | 4 | NA |
| Analyte | MTCA Criteria(b) | | | | | | |
| Arsenic | 20 | <11 | <11 | <11 | <11 | <11 | NT |
| Barium | NA | 66 | 61 | 71 | 65 | 71 | NT |
| Cadmium | 2 | <0.56 | <0.55 | <0.56 | <0.54 | <0.56 | NT |
| Chromium | NA | 9.5 | 11 | 7.7 | 9.2 | 9.1 | NT |
| Lead | 250 | 7.4 | <5.5 | 6.6 | <5.4 | 110 | 410 |
| Mercury | 2 | <0.28 | <0.28 | <0.28 | <0.27 | <0.28 | NT |
| TCLP Arsenic | NA | <0.40 | <0.40 | <0.40 | <0.40 | <0.40 | NT |
| TCLP Cadmium | NA | <0.02 | <0.02 | <0.02 | <0.02 | <0.02 | NT |
| TCLP Chromium | NA | <0.02 | <0.02 | <0.02 | <0.02 | <0.02 | NT |
| TCLP Lead | 5 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | NT |
| TCLP Mercury | NA | <0.005 | <0.005 | <0.005 | <0.005 | <0.005 | NT |

Notes:
(a) Samples taken on March 4, 2014
(b) MTCA – Model Toxics Control Act, Washington State
(c) 30 mg/kg for Gasoline range TPH with Benzene present; 100 mg/kg for Gasoline range TPH without Benzene, and with Ethylbenzene, Toluene, and Xylenes less than 1% of gasoline mixture
Concentrations for all chemicals and MTCA criteria in mg/kg
MTCA – Model Toxics Control Act
Analyses by OnSite Environmental, Redmond, WA
NWTPH Gx/BTEX analysis for gasoline, BTEX
See laboratory data sheets in Appendix A for complete list of analytes.

## 5.0 Conclusions:

Confirmation sampling indicated no petroleum contamination above detection levels in the UST excavation. The USTs were intact and in good condition prior to being rendered unusable and cleaned out for recycling as scrap. Approximately 15 tons of petroleum-contaminated soil (PCS) was excavated and stored on-site in plastic containment. A soil sample taken from the stockpile indicated levels of diesel above MTCA cleanup levels, and additional sampling was performed for soil characterization for disposal. The USTs were transported to Twin City Metals in Kennewick, Washington, for disposal as scrap. Disposal receipts are included in the Appendix. On April 30, 2014, the PCS was hauled to Waste Management's Columbia Ridge Landfill facility in Arlington, Oregon for disposal. Copies of the disposal permit and receipt are included in the Appendix.

It is the opinion of BMEC that there was no release from the USTs at the site. PCS was removed from under the Jet A fuel dispenser and from around the Jet A fuel UST fill pipe, and sampling after soil removal confirmed no PCS above detection levels in the UST excavation and under the Jet A fuel dispenser. It is the opinion of BMEC that the former USTs do not represent a recognized environmental condition at the site, and no further investigation is recommended.

A site map, a sample location map, site photographs, the disposal receipt, and copies of the laboratory reports are included in the Appendix.

## 6.0 Statement of the Environmental Professionals

### Statement of Quality Assurance

I have performed this Assessment in accordance with generally accepted environmental practices and procedures, as of the date of this report. I have employed the degree of care and skill ordinarily exercised under similar circumstances by reputable environmental professionals practicing in this area. The conclusions contained within this Assessment are based upon site conditions I readily observed or which were reasonably ascertainable and present at the time of the site inspection.

The conclusions and recommendations stated in this report are based upon personal observations made by employees of BMEC and upon information provided by others. I have no reason to suspect or believe that the information provided by others is inaccurate.

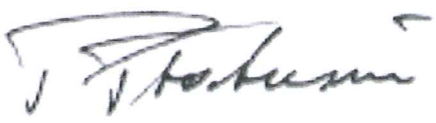
Blue Mountain Environmental Consulting, Inc.


Yancy Meyer, WA USTs Site Assessor

### Statement of Quality Control

The objective of this Environmental Site Assessment was to ascertain the potential presence or absence of environmental problems that could impact the subject property, as delineated by the Scope of Work. The procedure was to perform reasonable steps in accordance with the existing regulations, currently available technology, and generally accepted engineering practices in order to accomplish the stated objective.
To the best of my knowledge, this site investigation has been performed in compliance with BMEC's Standard Operating Procedures protocol for Environmental Site Assessments.

Blue Mountain Environmental Consulting, Inc.



Peter H. Trabusiner, Engineer

**Report Limitations:**

The enclosed site assessment has been performed for the exclusive use of the Port of Kennewick, or agents specified by them, for the transaction at issue concerning the subject property, located at 6915 W. Grandridge Blvd., in Kennewick, Washington.

The purpose of an environmental investigation is to evaluate potential or actual effects of past or current practices on a given site. In performing an environmental investigation, a balance must be struck between reasonable inquiry into environmental issues and an exhaustive analysis of every conceivable issue of possible concern. This environmental assessment contains BMEC opinion regarding environmental issues of concern and/or additional issues that may need to be addressed. In rendering our professional opinion, BMEC warrants that the services provided within the scope of this assessment were performed, within the limits described, in accordance with generally accepted environmental consulting principles and practices. No other warranty, expressed or implied, is made. The following paragraphs describe the assumptions and standard parameters under which such opinion is rendered.

Any opinions and/or recommendations presented in this report apply to site conditions existing at the time of performance of services. BMEC is unable to report on or accurately predict events that may affect the site after performance of services, whether occurring naturally or caused by human forces. BMEC assumes no responsibility for conditions BMEC did not investigate, or conditions not generally recognized as environmentally unacceptable at the time services were performed.

Where subsurface work was performed, BMEC professional opinions are based in part on the interpretation of data from discrete sample locations that may not represent actual conditions at the non-sampled locations.

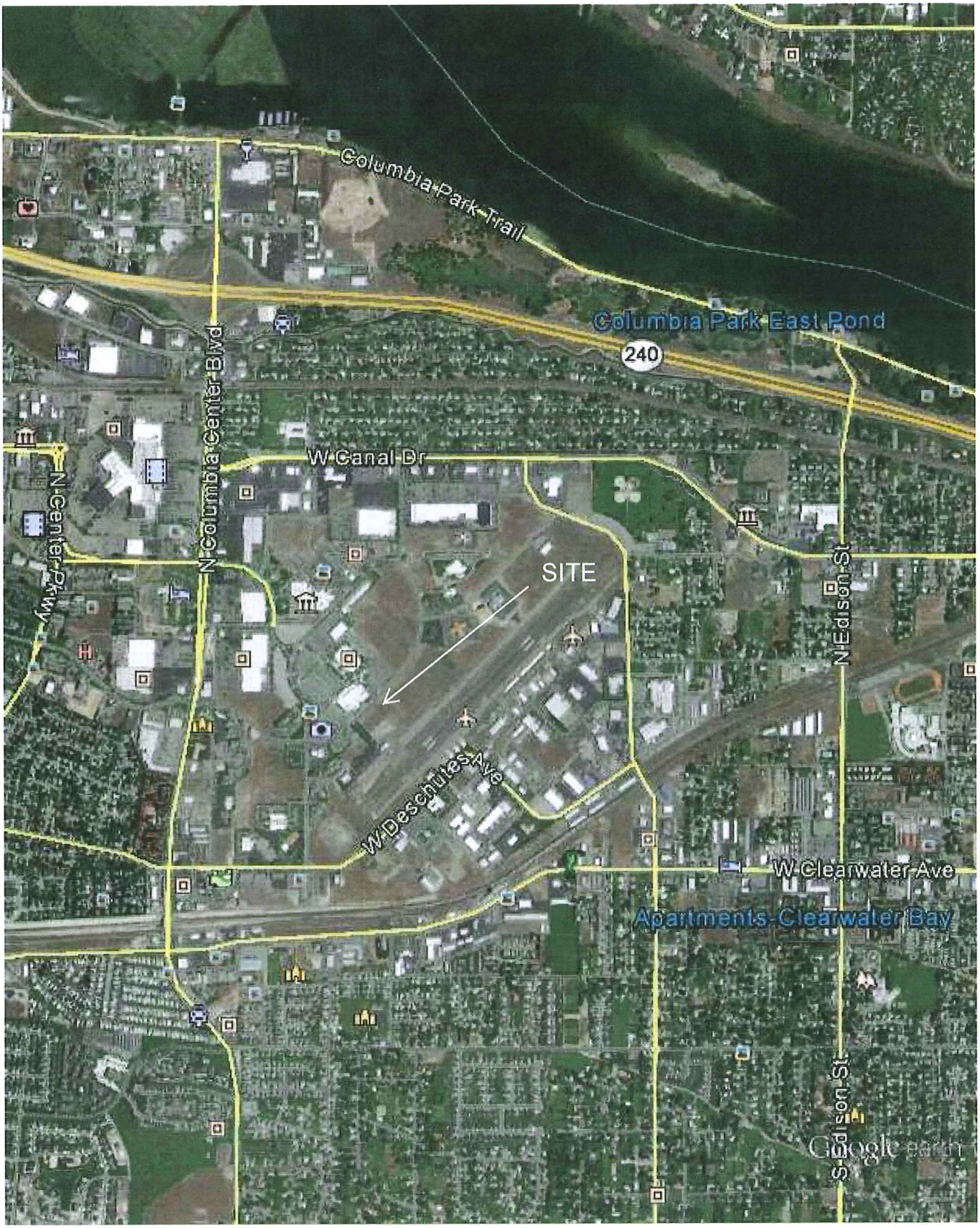
Except where there is expressed concern of our client, or where specific environmental contaminants have previously been reported by others, naturally occurring toxic substances, potential environmental contaminants located inside buildings, or contaminant concentrations not of current environmental concern, may not be addressed in this document.

No assessment is thorough enough to exclude the presence of hazardous materials at a given site. Therefore, if specific hazardous materials have not been identified during this assessment, the lack of such identifications should not be construed as a guarantee of the absence of hazardous materials, but merely as the result of services performed within the scope, limitations, and cost of work done.

BMEC is not responsible for the effects of changes in applicable environmental standards, practices, or regulations after the performance of services.

Services provided for this assessment were performed in accordance with BMEC's agreement and understanding with our client, which may not be fully disclosed in this report. Opinions and/or recommendations are intended for the client, purpose, site, location, time frame, and project parameters indicated.

This report was prepared solely for the use of our client, and should be reviewed in its entirety; BMEC is not responsible for subsequent separation, detachment, or partial use of this document. Any reliance on this report by a third party shall be at such party's sole risk.




Google earth

miles 1
km 1


SITE PRIOR TO EXCAVATION


REMOVING RESIDUAL FUEL


EXCAVATION OF USTs.


EXCAVATION OF USTs


REMOVED PUMP ISLAND


REMOVAL OF 12000 GALLON UST


12000 GALLON UST AFTER REMOVAL

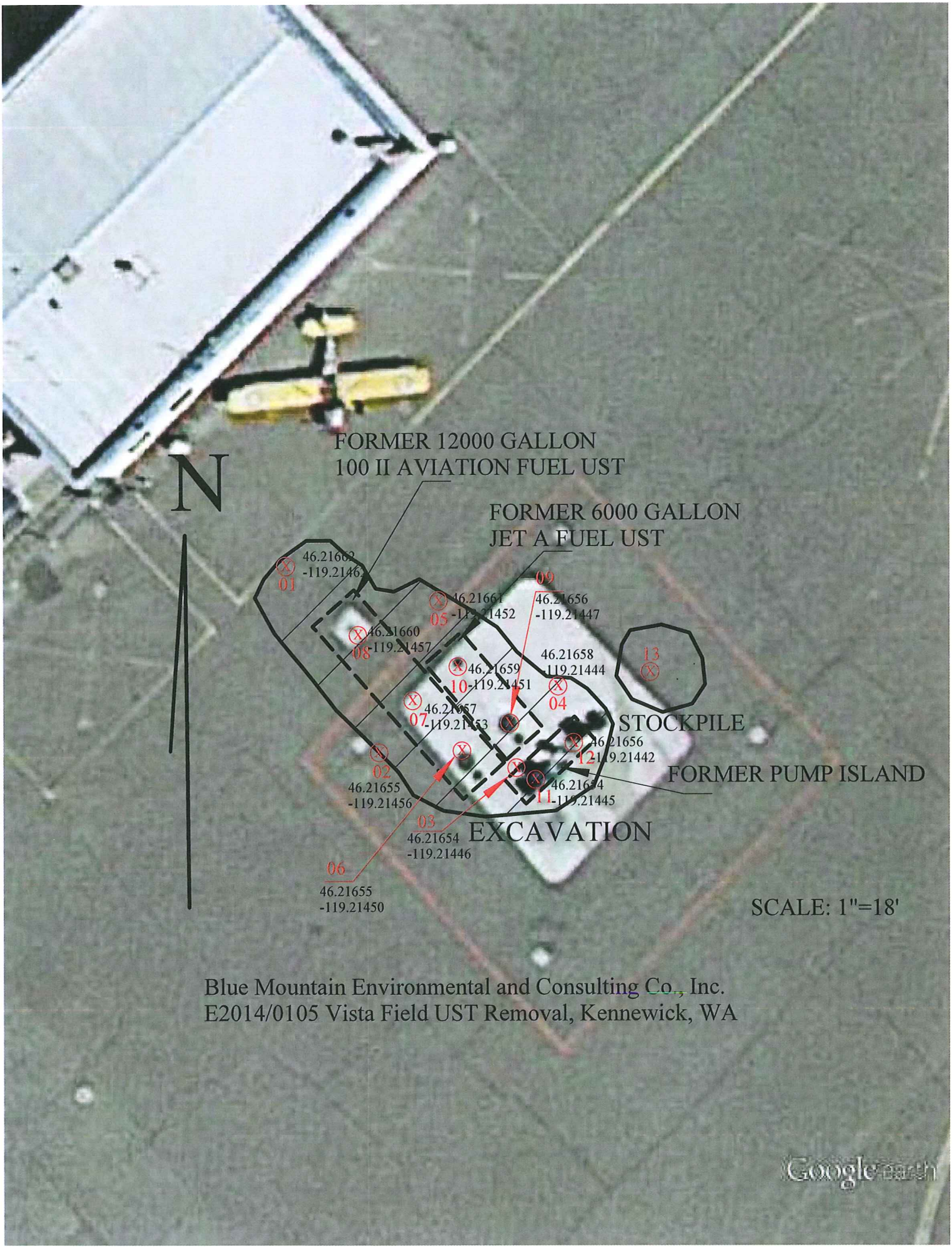

6000 GALLON UST AFTER REMOVAL AND STOCKPILED SOIL


6000 GALLON UST SECURED FOR TRANSPORT


12000 GALLON UST SECURED FOR TRANSPORT


BACKFILLING EXCAVATION


SITE AFTER BACKFILLING AND UST REMOVAL




Blue Mountain Environmental and Consulting Co., Inc.
E2014/0105 Vista Field UST Removal, Kennewick, WA

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

March 11, 2014

Peter Trabusiner
Blue Mountain Environmental, Inc.
1500 Adair Drive
Richland, WA 99352

Re: Analytical Data for Project E2014/0105
Laboratory Reference No. 1403-040

Dear Peter:

Enclosed are the analytical results and associated quality control data for samples submitted on March 6, 2014.

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,

David Baumeister
Project Manager

Enclosures

Date of Report: March 11, 2014
Samples Submitted: March 6, 2014
Laboratory Reference: 1403-040
Project: E2014/0105

**Case Narrative**

Samples were collected on March 4, 2014 and received by the laboratory on March 6, 2014. 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.

PAHs EPA 8270D/SIM Analysis

Sample 3-4-13 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 11, 2014
Samples Submitted: March 6, 2014
Laboratory Reference: 1403-040
Project: E2014/0105

**NWTPH-HCID**

Matrix: Soil
Units: mg/Kg (ppm)

| Analyte | Result | PQL | Method | Date Prepared | Date Analyzed | Flags |
|---|---|---|---|---|---|---|
| **Client ID:** | **3-4-01** | | | | | |
| Laboratory ID: | 03-040-01 | | | | | |
| Gasoline Range Organics | **ND** | 21 | NWTPH-HCID | 3-10-14 | 3-10-14 | |
| Diesel Range Organics | **ND** | 54 | NWTPH-HCID | 3-10-14 | 3-10-14 | |
| Lube Oil Range Organics | **ND** | 110 | NWTPH-HCID | 3-10-14 | 3-10-14 | |
| *Surrogate:* | *Percent Recovery* | *Control Limits* | | | | |
| *o-Terphenyl* | *101* | *50-150* | | | | |
| **Client ID:** | **3-4-02** | | | | | |
| Laboratory ID: | 03-040-02 | | | | | |
| Gasoline Range Organics | **ND** | 21 | NWTPH-HCID | 3-10-14 | 3-10-14 | |
| Diesel Range Organics | **ND** | 53 | NWTPH-HCID | 3-10-14 | 3-10-14 | |
| Lube Oil Range Organics | **ND** | 110 | NWTPH-HCID | 3-10-14 | 3-10-14 | |
| *Surrogate:* | *Percent Recovery* | *Control Limits* | | | | |
| *o-Terphenyl* | *104* | *50-150* | | | | |
| **Client ID:** | **3-4-03** | | | | | |
| Laboratory ID: | 03-040-03 | | | | | |
| Gasoline Range Organics | **ND** | 21 | NWTPH-HCID | 3-10-14 | 3-10-14 | |
| Diesel Range Organics | **ND** | 54 | NWTPH-HCID | 3-10-14 | 3-10-14 | |
| Lube Oil Range Organics | **ND** | 110 | NWTPH-HCID | 3-10-14 | 3-10-14 | |
| *Surrogate:* | *Percent Recovery* | *Control Limits* | | | | |
| *o-Terphenyl* | *96* | *50-150* | | | | |
| **Client ID:** | **3-4-04** | | | | | |
| Laboratory ID: | 03-040-04 | | | | | |
| Gasoline Range Organics | **ND** | 21 | NWTPH-HCID | 3-10-14 | 3-10-14 | |
| Diesel Range Organics | **ND** | 52 | NWTPH-HCID | 3-10-14 | 3-10-14 | |
| Lube Oil Range Organics | **ND** | 100 | NWTPH-HCID | 3-10-14 | 3-10-14 | |
| *Surrogate:* | *Percent Recovery* | *Control Limits* | | | | |
| *o-Terphenyl* | *95* | *50-150* | | | | |
| **Client ID:** | **3-4-05** | | | | | |
| Laboratory ID: | 03-040-05 | | | | | |
| Gasoline Range Organics | **ND** | 21 | NWTPH-HCID | 3-10-14 | 3-10-14 | |
| Diesel Range Organics | **ND** | 53 | NWTPH-HCID | 3-10-14 | 3-10-14 | |
| Lube Oil Range Organics | **ND** | 110 | NWTPH-HCID | 3-10-14 | 3-10-14 | |
| *Surrogate:* | *Percent Recovery* | *Control Limits* | | | | |
| *o-Terphenyl* | *95* | *50-150* | | | | |

Date of Report: March 11, 2014
Samples Submitted: March 6, 2014
Laboratory Reference: 1403-040
Project: E2014/0105

**NWTPH-HCID**

Matrix: Soil
Units: mg/Kg (ppm)

| Analyte | Result | PQL | Method | Date Prepared | Date Analyzed | Flags |
|---|---|---|---|---|---|---|
| **Client ID:** | **3-4-06** | | | | | |
| Laboratory ID: | 03-040-06 | | | | | |
| Gasoline Range Organics | **ND** | 22 | NWTPH-HCID | 3-10-14 | 3-10-14 | |
| Diesel Range Organics | **ND** | 55 | NWTPH-HCID | 3-10-14 | 3-10-14 | |
| Lube Oil Range Organics | **ND** | 110 | NWTPH-HCID | 3-10-14 | 3-10-14 | |
| *Surrogate:* | *Percent Recovery* | *Control Limits* | | | | |
| *o-Terphenyl* | *94* | *50-150* | | | | |
| **Client ID:** | **3-4-07** | | | | | |
| Laboratory ID: | 03-040-07 | | | | | |
| Gasoline Range Organics | **ND** | 21 | NWTPH-HCID | 3-10-14 | 3-10-14 | |
| Diesel Range Organics | **ND** | 53 | NWTPH-HCID | 3-10-14 | 3-10-14 | |
| Lube Oil Range Organics | **ND** | 110 | NWTPH-HCID | 3-10-14 | 3-10-14 | |
| *Surrogate:* | *Percent Recovery* | *Control Limits* | | | | |
| *o-Terphenyl* | *98* | *50-150* | | | | |
| **Client ID:** | **3-4-08** | | | | | |
| Laboratory ID: | 03-040-08 | | | | | |
| Gasoline Range Organics | **ND** | 21 | NWTPH-HCID | 3-10-14 | 3-10-14 | |
| Diesel Range Organics | **ND** | 53 | NWTPH-HCID | 3-10-14 | 3-10-14 | |
| Lube Oil Range Organics | **ND** | 110 | NWTPH-HCID | 3-10-14 | 3-10-14 | |
| *Surrogate:* | *Percent Recovery* | *Control Limits* | | | | |
| *o-Terphenyl* | *92* | *50-150* | | | | |
| **Client ID:** | **3-4-09** | | | | | |
| Laboratory ID: | 03-040-09 | | | | | |
| Gasoline Range Organics | **ND** | 21 | NWTPH-HCID | 3-10-14 | 3-10-14 | |
| Diesel Range Organics | **ND** | 54 | NWTPH-HCID | 3-10-14 | 3-10-14 | |
| Lube Oil Range Organics | **ND** | 110 | NWTPH-HCID | 3-10-14 | 3-10-14 | |
| *Surrogate:* | *Percent Recovery* | *Control Limits* | | | | |
| *o-Terphenyl* | *94* | *50-150* | | | | |
| **Client ID:** | **3-4-10** | | | | | |
| Laboratory ID: | 03-040-10 | | | | | |
| Gasoline Range Organics | **ND** | 21 | NWTPH-HCID | 3-10-14 | 3-10-14 | |
| Diesel Range Organics | **ND** | 53 | NWTPH-HCID | 3-10-14 | 3-10-14 | |
| Lube Oil Range Organics | **ND** | 110 | NWTPH-HCID | 3-10-14 | 3-10-14 | |
| *Surrogate:* | *Percent Recovery* | *Control Limits* | | | | |
| *o-Terphenyl* | *94* | *50-150* | | | | |

Date of Report: March 11, 2014
Samples Submitted: March 6, 2014
Laboratory Reference: 1403-040
Project: E2014/0105

**NWTPH-HCID**

Matrix: Soil
Units: mg/Kg (ppm)

| Analyte | Result | PQL | Method | Date Prepared | Date Analyzed | Flags |
|---|---|---|---|---|---|---|
| **Client ID:** | **3-4-11** | | | | | |
| Laboratory ID: | 03-040-11 | | | | | |
| Gasoline Range Organics | **ND** | 22 | NWTPH-HCID | 3-10-14 | 3-10-14 | |
| Diesel Range Organics | **ND** | 54 | NWTPH-HCID | 3-10-14 | 3-10-14 | |
| Lube Oil Range Organics | **ND** | 110 | NWTPH-HCID | 3-10-14 | 3-10-14 | |
| *Surrogate:* | *Percent Recovery* | *Control Limits* | | | | |
| *o-Terphenyl* | *95* | *50-150* | | | | |
| **Client ID:** | **3-4-12** | | | | | |
| Laboratory ID: | 03-040-12 | | | | | |
| Gasoline Range Organics | **ND** | 22 | NWTPH-HCID | 3-10-14 | 3-10-14 | |
| Diesel Range Organics | **ND** | 54 | NWTPH-HCID | 3-10-14 | 3-10-14 | |
| Lube Oil Range Organics | **ND** | 110 | NWTPH-HCID | 3-10-14 | 3-10-14 | |
| *Surrogate:* | *Percent Recovery* | *Control Limits* | | | | |
| *o-Terphenyl* | *97* | *50-150* | | | | |

Date of Report: March 11, 2014
Samples Submitted: March 6, 2014
Laboratory Reference: 1403-040
Project: E2014/0105

**NWTPH-HCID**
**QUALITY CONTROL**

Matrix: Soil
Units: mg/Kg (ppm)

| Analyte | Result | PQL | Method | Date Prepared | Date Analyzed | Flags |
|---|---|---|---|---|---|---|
| **METHOD BLANK** | | | | | | |
| Laboratory ID: | MB0310S1 | | | | | |
| Gasoline Range Organics | **ND** | 20 | NWTPH-HCID | 3-10-14 | 3-10-14 | |
| Diesel Range Organics | **ND** | 50 | NWTPH-HCID | 3-10-14 | 3-10-14 | |
| Lube Oil Range Organics | **ND** | 100 | NWTPH-HCID | 3-10-14 | 3-10-14 | |
| *Surrogate:* | *Percent Recovery* | *Control Limits* | | | | |
| *o-Terphenyl* | *100* | *50-150* | | | | |

Date of Report: March 11, 2014
Samples Submitted: March 6, 2014
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Project: E2014/0105

## NWTPH-Gx/BTEX

Matrix: Soil
Units: mg/kg (ppm)

| Analyte | Result | PQL | Method | Date Prepared | Date Analyzed | Flags |
|---|---|---|---|---|---|---|
| **Client ID:** | **3-4-06** | | | | | |
| Laboratory ID: | 03-040-06 | | | | | |
| Benzene | **ND** | 0.021 | EPA 8021B | 3-6-14 | 3-7-14 | |
| Toluene | **ND** | 0.11 | EPA 8021B | 3-6-14 | 3-7-14 | |
| Ethyl Benzene | **ND** | 0.11 | EPA 8021B | 3-6-14 | 3-7-14 | |
| m,p-Xylene | **ND** | 0.11 | EPA 8021B | 3-6-14 | 3-7-14 | |
| o-Xylene | **ND** | 0.11 | EPA 8021B | 3-6-14 | 3-7-14 | |
| Gasoline | **ND** | 11 | NWTPH-Gx | 3-6-14 | 3-7-14 | |
| *Surrogate:* | *Percent Recovery* | *Control Limits* | | | | |
| *Fluorobenzene* | *99* | *71-121* | | | | |
| **Client ID:** | **3-4-08** | | | | | |
| Laboratory ID: | 03-040-08 | | | | | |
| Benzene | **ND** | 0.020 | EPA 8021B | 3-6-14 | 3-7-14 | |
| Toluene | **ND** | 0.064 | EPA 8021B | 3-6-14 | 3-7-14 | |
| Ethyl Benzene | **ND** | 0.064 | EPA 8021B | 3-6-14 | 3-7-14 | |
| m,p-Xylene | **ND** | 0.064 | EPA 8021B | 3-6-14 | 3-7-14 | |
| o-Xylene | **ND** | 0.064 | EPA 8021B | 3-6-14 | 3-7-14 | |
| Gasoline | **ND** | 6.4 | NWTPH-Gx | 3-6-14 | 3-7-14 | |
| *Surrogate:* | *Percent Recovery* | *Control Limits* | | | | |
| *Fluorobenzene* | *90* | *71-121* | | | | |
| **Client ID:** | **3-4-13** | | | | | |
| Laboratory ID: | 03-040-13 | | | | | |
| Benzene | **ND** | 0.020 | EPA 8021B | 3-6-14 | 3-7-14 | |
| Toluene | **ND** | 0.072 | EPA 8021B | 3-6-14 | 3-7-14 | |
| Ethyl Benzene | **0.31** | 0.072 | EPA 8021B | 3-6-14 | 3-7-14 | |
| m,p-Xylene | **5.9** | 0.072 | EPA 8021B | 3-6-14 | 3-7-14 | |
| o-Xylene | **4.4** | 0.072 | EPA 8021B | 3-6-14 | 3-7-14 | |
| Gasoline | **ND** | 7.2 | NWTPH-Gx | 3-6-14 | 3-7-14 | |
| *Surrogate:* | *Percent Recovery* | *Control Limits* | | | | |
| *Fluorobenzene* | *101* | *71-121* | | | | |

Date of Report: March 11, 2014
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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: | MB0306S2 | | | | | |
| Benzene | **ND** | 0.020 | EPA 8021B | 3-6-14 | 3-7-14 | |
| Toluene | **ND** | 0.050 | EPA 8021B | 3-6-14 | 3-7-14 | |
| Ethyl Benzene | **ND** | 0.050 | EPA 8021B | 3-6-14 | 3-7-14 | |
| m,p-Xylene | **ND** | 0.050 | EPA 8021B | 3-6-14 | 3-7-14 | |
| o-Xylene | **ND** | 0.050 | EPA 8021B | 3-6-14 | 3-7-14 | |
| Gasoline | **ND** | 5.0 | NWTPH-Gx | 3-6-14 | 3-7-14 | |
| *Surrogate:* | *Percent Recovery* | *Control Limits* | | | | |
| *Fluorobenzene* | *99* | *71-121* | | | | |

| Analyte | Result | | Spike Level | | Source Result | Percent Recovery | | Recovery Limits | RPD | RPD Limit | Flags |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **DUPLICATE** | | | | | | | | | | | |
| Laboratory ID: | 03-029-16 | | | | | | | | | | |
| | 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* | | | | | | *93* | *88* | *71-121* | | | |
| **SPIKE BLANKS** | | | | | | | | | | | |
| Laboratory ID: | SB0306S1 | | | | | | | | | | |
| | SB | SBD | SB | SBD | | SB | SBD | | | | |
| Benzene | **1.02** | **1.08** | 1.00 | 1.00 | | **102** | **108** | 73-121 | 6 | 10 | |
| Toluene | **1.02** | **1.07** | 1.00 | 1.00 | | **102** | **107** | 75-124 | 5 | 10 | |
| Ethyl Benzene | **1.02** | **1.08** | 1.00 | 1.00 | | **102** | **108** | 75-125 | 6 | 9 | |
| m,p-Xylene | **1.03** | **1.07** | 1.00 | 1.00 | | **103** | **107** | 75-126 | 4 | 9 | |
| o-Xylene | **1.02** | **1.04** | 1.00 | 1.00 | | **102** | **104** | 74-123 | 2 | 8 | |
| *Surrogate:* | | | | | | | | | | | |
| *Fluorobenzene* | | | | | | *88* | *95* | *71-121* | | | |

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Samples Submitted: March 6, 2014
Laboratory Reference: 1403-040
Project: E2014/0105

**NWTPH-Dx**

Matrix: Soil
Units: mg/Kg (ppm)

| Analyte | Result | PQL | Method | Date Prepared | Date Analyzed | Flags |
|---|---|---|---|---|---|---|
| **Client ID:** | **3-4-13** | | | | | |
| Laboratory ID: | 03-040-13 | | | | | |
| Diesel Fuel #1 | **32000** | 280 | NWTPH-Dx | 3-7-14 | 3-10-14 | |
| Lube Oil Range Organics | **ND** | 550 | NWTPH-Dx | 3-7-14 | 3-10-14 | |
| *Surrogate:* | *Percent Recovery* | *Control Limits* | | | | |
| *o-Terphenyl* | --- | *50-150* | | | | S |

Date of Report: March 11, 2014
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Project: E2014/0105

**NWTPH-Dx**
**QUALITY CONTROL**

Matrix: Soil
Units: mg/Kg (ppm)

| Analyte | Result | PQL | Method | Date Prepared | Date Analyzed | Flags |
|---|---|---|---|---|---|---|
| **METHOD BLANK** | | | | | | |
| Laboratory ID: | MB0307S1 | | | | | |
| Diesel Range Organics | **ND** | 25 | NWTPH-Dx | 3-7-14 | 3-7-14 | |
| Lube Oil Range Organics | **ND** | 50 | NWTPH-Dx | 3-7-14 | 3-7-14 | |
| *Surrogate:* | *Percent Recovery* | *Control Limits* | | | | |
| *o-Terphenyl* | *94* | *50-150* | | | | |

| Analyte | Result | | Spike Level | | Source Result | Percent Recovery | | Recovery Limits | RPD | RPD Limit | Flags |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **DUPLICATE** | | | | | | | | | | | |
| Laboratory ID: | 03-040-13 | | | | | | | | | | |
| | ORIG | DUP | | | | | | | | | |
| Diesel Fuel #1 | **29400** | **27400** | NA | NA | | NA | | NA | 7 | NA | |
| Lube Oil Range | **ND** | **ND** | NA | NA | | NA | | NA | NA | NA | |
| *Surrogate:* | | | | | | | | | | | |
| *o-Terphenyl* | | | | | | --- | --- | *50-150* | | | S,S |

Date of Report: March 11, 2014
Samples Submitted: March 6, 2014
Laboratory Reference: 1403-040
Project: E2014/0105

## PAHs EPA 8270D/SIM

Matrix: Soil
Units: mg/Kg

| Analyte | Result | PQL | Method | Date Prepared | Date Analyzed | Flags |
|---|---|---|---|---|---|---|
| **Client ID:** | **3-4-09** | | | | | |
| Laboratory ID: | 03-040-09 | | | | | |
| Naphthalene | **ND** | 0.0072 | EPA 8270D/SIM | 3-7-14 | 3-10-14 | |
| 2-Methylnaphthalene | **ND** | 0.0072 | EPA 8270D/SIM | 3-7-14 | 3-10-14 | |
| 1-Methylnaphthalene | **ND** | 0.0072 | EPA 8270D/SIM | 3-7-14 | 3-10-14 | |
| Acenaphthylene | **ND** | 0.0072 | EPA 8270D/SIM | 3-7-14 | 3-10-14 | |
| Acenaphthene | **ND** | 0.0072 | EPA 8270D/SIM | 3-7-14 | 3-10-14 | |
| Fluorene | **ND** | 0.0072 | EPA 8270D/SIM | 3-7-14 | 3-10-14 | |
| Phenanthrene | **ND** | 0.0072 | EPA 8270D/SIM | 3-7-14 | 3-10-14 | |
| Anthracene | **ND** | 0.0072 | EPA 8270D/SIM | 3-7-14 | 3-10-14 | |
| Fluoranthene | **ND** | 0.0072 | EPA 8270D/SIM | 3-7-14 | 3-10-14 | |
| Pyrene | **ND** | 0.0072 | EPA 8270D/SIM | 3-7-14 | 3-10-14 | |
| Benzo[a]anthracene | **ND** | 0.0072 | EPA 8270D/SIM | 3-7-14 | 3-10-14 | |
| Chrysene | **ND** | 0.0072 | EPA 8270D/SIM | 3-7-14 | 3-10-14 | |
| Benzo[b]fluoranthene | **ND** | 0.0072 | EPA 8270D/SIM | 3-7-14 | 3-7-14 | |
| Benzo(j,k)fluoranthene | **ND** | 0.0072 | EPA 8270D/SIM | 3-7-14 | 3-7-14 | |
| Benzo[a]pyrene | **ND** | 0.0072 | EPA 8270D/SIM | 3-7-14 | 3-7-14 | |
| Indeno(1,2,3-c,d)pyrene | **ND** | 0.0072 | EPA 8270D/SIM | 3-7-14 | 3-7-14 | |
| Dibenz[a,h]anthracene | **ND** | 0.0072 | EPA 8270D/SIM | 3-7-14 | 3-7-14 | |
| Benzo[g,h,i]perylene | **ND** | 0.0072 | EPA 8270D/SIM | 3-7-14 | 3-7-14 | |
| *Surrogate:* | *Percent Recovery* | *Control Limits* | | | | |
| *2-Fluorobiphenyl* | *58* | *43 - 116* | | | | |
| *Pyrene-d10* | *64* | *33 - 124* | | | | |
| *Terphenyl-d14* | *59* | *38 - 125* | | | | |

Date of Report: March 11, 2014
Samples Submitted: March 6, 2014
Laboratory Reference: 1403-040
Project: E2014/0105

**PAHs EPA 8270D/SIM**

Matrix: Soil
Units: mg/Kg

| Analyte | Result | PQL | Method | Date Prepared | Date Analyzed | Flags |
|---|---|---|---|---|---|---|
| **Client ID:** | **3-4-10** | | | | | |
| Laboratory ID: | 03-040-10 | | | | | |
| Naphthalene | **ND** | 0.0072 | EPA 8270D/SIM | 3-7-14 | 3-10-14 | |
| 2-Methylnaphthalene | **ND** | 0.0072 | EPA 8270D/SIM | 3-7-14 | 3-10-14 | |
| 1-Methylnaphthalene | **ND** | 0.0072 | EPA 8270D/SIM | 3-7-14 | 3-10-14 | |
| Acenaphthylene | **ND** | 0.0072 | EPA 8270D/SIM | 3-7-14 | 3-10-14 | |
| Acenaphthene | **ND** | 0.0072 | EPA 8270D/SIM | 3-7-14 | 3-10-14 | |
| Fluorene | **ND** | 0.0072 | EPA 8270D/SIM | 3-7-14 | 3-10-14 | |
| Phenanthrene | **ND** | 0.0072 | EPA 8270D/SIM | 3-7-14 | 3-10-14 | |
| Anthracene | **ND** | 0.0072 | EPA 8270D/SIM | 3-7-14 | 3-10-14 | |
| Fluoranthene | **ND** | 0.0072 | EPA 8270D/SIM | 3-7-14 | 3-10-14 | |
| Pyrene | **ND** | 0.0072 | EPA 8270D/SIM | 3-7-14 | 3-10-14 | |
| Benzo[a]anthracene | **ND** | 0.0072 | EPA 8270D/SIM | 3-7-14 | 3-10-14 | |
| Chrysene | **ND** | 0.0072 | EPA 8270D/SIM | 3-7-14 | 3-10-14 | |
| Benzo[b]fluoranthene | **ND** | 0.0072 | EPA 8270D/SIM | 3-7-14 | 3-7-14 | |
| Benzo(j,k)fluoranthene | **ND** | 0.0072 | EPA 8270D/SIM | 3-7-14 | 3-7-14 | |
| Benzo[a]pyrene | **ND** | 0.0072 | EPA 8270D/SIM | 3-7-14 | 3-7-14 | |
| Indeno(1,2,3-c,d)pyrene | **ND** | 0.0072 | EPA 8270D/SIM | 3-7-14 | 3-7-14 | |
| Dibenz[a,h]anthracene | **ND** | 0.0072 | EPA 8270D/SIM | 3-7-14 | 3-7-14 | |
| Benzo[g,h,i]perylene | **ND** | 0.0072 | EPA 8270D/SIM | 3-7-14 | 3-7-14 | |
| *Surrogate:* | *Percent Recovery* | *Control Limits* | | | | |
| *2-Fluorobiphenyl* | *58* | *43 - 116* | | | | |
| *Pyrene-d10* | *64* | *33 - 124* | | | | |
| *Terphenyl-d14* | *59* | *38 - 125* | | | | |

Date of Report: March 11, 2014
Samples Submitted: March 6, 2014
Laboratory Reference: 1403-040
Project: E2014/0105

## PAHs EPA 8270D/SIM

Matrix: Soil
Units: mg/Kg

| Analyte | Result | PQL | Method | Date Prepared | Date Analyzed | Flags |
|---|---|---|---|---|---|---|
| **Client ID:** | **3-4-13** | | | | | |
| Laboratory ID: | 03-040-13 | | | | | |
| Naphthalene | **7.6** | 0.73 | EPA 8270D/SIM | 3-7-14 | 3-10-14 | |
| 2-Methylnaphthalene | **37** | 0.73 | EPA 8270D/SIM | 3-7-14 | 3-10-14 | |
| 1-Methylnaphthalene | **44** | 0.73 | EPA 8270D/SIM | 3-7-14 | 3-10-14 | |
| Acenaphthylene | **1.7** | 0.73 | EPA 8270D/SIM | 3-7-14 | 3-10-14 | |
| Acenaphthene | **3.4** | 0.73 | EPA 8270D/SIM | 3-7-14 | 3-10-14 | |
| Fluorene | **7.6** | 0.73 | EPA 8270D/SIM | 3-7-14 | 3-10-14 | |
| Phenanthrene | **1.5** | 0.73 | EPA 8270D/SIM | 3-7-14 | 3-10-14 | |
| Anthracene | **ND** | 0.73 | EPA 8270D/SIM | 3-7-14 | 3-10-14 | |
| Fluoranthene | **ND** | 0.73 | EPA 8270D/SIM | 3-7-14 | 3-10-14 | |
| Pyrene | **ND** | 0.73 | EPA 8270D/SIM | 3-7-14 | 3-10-14 | |
| Benzo[a]anthracene | **ND** | 0.73 | EPA 8270D/SIM | 3-7-14 | 3-10-14 | |
| Chrysene | **ND** | 0.73 | EPA 8270D/SIM | 3-7-14 | 3-10-14 | |
| Benzo[b]fluoranthene | **0.017** | 0.0073 | EPA 8270D/SIM | 3-7-14 | 3-7-14 | |
| Benzo(j,k)fluoranthene | **0.011** | 0.0073 | EPA 8270D/SIM | 3-7-14 | 3-7-14 | |
| Benzo[a]pyrene | **ND** | 0.0073 | EPA 8270D/SIM | 3-7-14 | 3-7-14 | |
| Indeno(1,2,3-c,d)pyrene | **0.0077** | 0.0073 | EPA 8270D/SIM | 3-7-14 | 3-7-14 | |
| Dibenz[a,h]anthracene | **ND** | 0.0073 | EPA 8270D/SIM | 3-7-14 | 3-7-14 | |
| Benzo[g,h,i]perylene | **0.015** | 0.0073 | EPA 8270D/SIM | 3-7-14 | 3-7-14 | |
| *Surrogate:* | *Percent Recovery* | *Control Limits* | | | | |
| *2-Fluorobiphenyl* | *40* | *43 - 116* | | | | Q |
| *Pyrene-d10* | *84* | *33 - 124* | | | | |
| *Terphenyl-d14* | *83* | *38 - 125* | | | | |

Date of Report: March 11, 2014
Samples Submitted: March 6, 2014
Laboratory Reference: 1403-040
Project: E2014/0105

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

Matrix: Soil
Units: mg/Kg

| Analyte | Result | PQL | Method | Date Prepared | Date Analyzed | Flags |
|---|---|---|---|---|---|---|
| Laboratory ID: | MB0307S1 | | | | | |
| Naphthalene | **ND** | 0.0067 | EPA 8270D/SIM | 3-7-14 | 3-7-14 | |
| 2-Methylnaphthalene | **ND** | 0.0067 | EPA 8270D/SIM | 3-7-14 | 3-7-14 | |
| 1-Methylnaphthalene | **ND** | 0.0067 | EPA 8270D/SIM | 3-7-14 | 3-7-14 | |
| Acenaphthylene | **ND** | 0.0067 | EPA 8270D/SIM | 3-7-14 | 3-7-14 | |
| Acenaphthene | **ND** | 0.0067 | EPA 8270D/SIM | 3-7-14 | 3-7-14 | |
| Fluorene | **ND** | 0.0067 | EPA 8270D/SIM | 3-7-14 | 3-7-14 | |
| Phenanthrene | **ND** | 0.0067 | EPA 8270D/SIM | 3-7-14 | 3-7-14 | |
| Anthracene | **ND** | 0.0067 | EPA 8270D/SIM | 3-7-14 | 3-7-14 | |
| Fluoranthene | **ND** | 0.0067 | EPA 8270D/SIM | 3-7-14 | 3-7-14 | |
| Pyrene | **ND** | 0.0067 | EPA 8270D/SIM | 3-7-14 | 3-7-14 | |
| Benzo[a]anthracene | **ND** | 0.0067 | EPA 8270D/SIM | 3-7-14 | 3-7-14 | |
| Chrysene | **ND** | 0.0067 | EPA 8270D/SIM | 3-7-14 | 3-7-14 | |
| Benzo[b]fluoranthene | **ND** | 0.0067 | EPA 8270D/SIM | 3-7-14 | 3-7-14 | |
| Benzo(j,k)fluoranthene | **ND** | 0.0067 | EPA 8270D/SIM | 3-7-14 | 3-7-14 | |
| Benzo[a]pyrene | **ND** | 0.0067 | EPA 8270D/SIM | 3-7-14 | 3-7-14 | |
| Indeno(1,2,3-c,d)pyrene | **ND** | 0.0067 | EPA 8270D/SIM | 3-7-14 | 3-7-14 | |
| Dibenz[a,h]anthracene | **ND** | 0.0067 | EPA 8270D/SIM | 3-7-14 | 3-7-14 | |
| Benzo[g,h,i]perylene | **ND** | 0.0067 | EPA 8270D/SIM | 3-7-14 | 3-7-14 | |
| *Surrogate:* | *Percent Recovery* | *Control Limits* | | | | |
| *2-Fluorobiphenyl* | *96* | *43 - 116* | | | | |
| *Pyrene-d10* | *106* | *33 - 124* | | | | |
| *Terphenyl-d14* | *98* | *38 - 125* | | | | |

Date of Report: March 11, 2014
Samples Submitted: March 6, 2014
Laboratory Reference: 1403-040
Project: E2014/0105

**PAHs 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: | SB0307S1 | | | | | | | | | |
| | SB | SBD | SB | SBD | SB | SBD | | | | |
| Naphthalene | **0.0794** | **0.0747** | 0.0833 | 0.0833 | 95 | 90 | 45 - 109 | 6 | 29 | |
| Acenaphthylene | **0.0862** | **0.0780** | 0.0833 | 0.0833 | 103 | 94 | 54 - 118 | 10 | 18 | |
| Acenaphthene | **0.0797** | **0.0730** | 0.0833 | 0.0833 | 96 | 88 | 60 - 108 | 9 | 14 | |
| Fluorene | **0.0791** | **0.0729** | 0.0833 | 0.0833 | 95 | 88 | 61 - 113 | 8 | 13 | |
| Phenanthrene | **0.0787** | **0.0719** | 0.0833 | 0.0833 | 94 | 86 | 63 - 106 | 9 | 13 | |
| Anthracene | **0.104** | **0.0950** | 0.0833 | 0.0833 | 125 | 114 | 55 - 130 | 9 | 13 | |
| Fluoranthene | **0.0849** | **0.0775** | 0.0833 | 0.0833 | 102 | 93 | 66 - 118 | 9 | 13 | |
| Pyrene | **0.0841** | **0.0773** | 0.0833 | 0.0833 | 101 | 93 | 69 - 112 | 8 | 12 | |
| Benzo[a]anthracene | **0.0937** | **0.0836** | 0.0833 | 0.0833 | 112 | 100 | 58 - 115 | 11 | 13 | |
| Chrysene | **0.0809** | **0.0728** | 0.0833 | 0.0833 | 97 | 87 | 64 - 114 | 11 | 11 | |
| Benzo[b]fluoranthene | **0.0830** | **0.0742** | 0.0833 | 0.0833 | 100 | 89 | 52 - 125 | 11 | 19 | |
| Benzo(j,k)fluoranthene | **0.0800** | **0.0719** | 0.0833 | 0.0833 | 96 | 86 | 50 - 126 | 11 | 22 | |
| Benzo[a]pyrene | **0.0960** | **0.0856** | 0.0833 | 0.0833 | 115 | 103 | 43 - 123 | 11 | 16 | |
| Indeno(1,2,3-c,d)pyrene | **0.0825** | **0.0741** | 0.0833 | 0.0833 | 99 | 89 | 55 - 118 | 11 | 16 | |
| Dibenz[a,h]anthracene | **0.0819** | **0.0738** | 0.0833 | 0.0833 | 98 | 89 | 57 - 120 | 10 | 15 | |
| Benzo[g,h,i]perylene | **0.0787** | **0.0711** | 0.0833 | 0.0833 | 94 | 85 | 58 - 113 | 10 | 18 | |
| *Surrogate:* | | | | | | | | | | |
| *2-Fluorobiphenyl* | | | | | *92* | *85* | *43 - 116* | | | |
| *Pyrene-d10* | | | | | *102* | *93* | *33 - 124* | | | |
| *Terphenyl-d14* | | | | | *97* | *85* | *38 - 125* | | | |

Date of Report: March 11, 2014
Samples Submitted: March 6, 2014
Laboratory Reference: 1403-040
Project: E2014/0105

**TOTAL LEAD**
**EPA 6010C**

Matrix: Soil
Units: mg/kg (ppm)

| Analyte | Result | PQL | EPA Method | Date Prepared | Date Analyzed | Flags |
|---|---|---|---|---|---|---|
| Lab ID: | 03-040-13 | | | | | |
| **Client ID:** | **3-4-13** | | | | | |
| Lead | **410** | 5.5 | 6010C | 3-7-14 | 3-10-14 | |

Date of Report: March 11, 2014
Samples Submitted: March 6, 2014
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Project: E2014/0105

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

| | |
|---|---|
| Date Extracted: | 3-7-14 |
| Date Analyzed: | 3-10-14 |
| Matrix: | Soil |
| Units: | mg/kg (ppm) |
| Lab ID: | MB0307SM1 |

| Analyte | Method | Result | PQL |
|---|---|---|---|
| Lead | 6010C | **ND** | 5.0 |

Date of Report: March 11, 2014
Samples Submitted: March 6, 2014
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Project: E2014/0105

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

Date Extracted: 3-7-14
Date Analyzed: 3-10-14

Matrix: Soil
Units: mg/kg (ppm)

Lab ID: 02-040-13

| Analyte | Sample Result | Duplicate Result | RPD | PQL | Flags |
|---|---|---|---|---|---|
| Lead | **368** | **399** | 8 | 5.0 | |

Date of Report: March 11, 2014
Samples Submitted: March 6, 2014
Laboratory Reference: 1403-040
Project: E2014/0105

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

Date Extracted: 3-7-14
Date Analyzed: 3-10-14

Matrix: Soil
Units: mg/kg (ppm)

Lab ID: 02-040-13

| Analyte | Spike Level | MS | Percent Recovery | MSD | Percent Recovery | RPD | Flags |
|---|---|---|---|---|---|---|---|
| Lead | 250 | **611** | 97 | **632** | 106 | 4 | |

Date of Report: March 11, 2014
Samples Submitted: March 6, 2014
Laboratory Reference: 1403-040
Project: E2014/0105

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

Matrix: Soil
Units: mg/kg (ppm)

| Analyte | Result | PQL | EPA Method | Date Prepared | Date Analyzed | Flags |
|---|---|---|---|---|---|---|
| Lab ID: | 03-040-06 | | | | | |
| **Client ID:** | **3-4-06** | | | | | |
| Arsenic | **ND** | 11 | 6010C | 3-7-14 | 3-7-14 | |
| Barium | **66** | 2.8 | 6010C | 3-7-14 | 3-7-14 | |
| Cadmium | **ND** | 0.56 | 6010C | 3-7-14 | 3-7-14 | |
| Chromium | **9.5** | 0.56 | 6010C | 3-7-14 | 3-7-14 | |
| Lead | **7.4** | 5.6 | 6010C | 3-7-14 | 3-7-14 | |
| Mercury | **ND** | 0.28 | 7471B | 3-7-14 | 3-7-14 | |
| Selenium | **ND** | 11 | 6010C | 3-7-14 | 3-7-14 | |
| Silver | **ND** | 1.1 | 6010C | 3-7-14 | 3-7-14 | |
| Lab ID: | 03-040-08 | | | | | |
| **Client ID:** | **3-4-08** | | | | | |
| Arsenic | **ND** | 11 | 6010C | 3-7-14 | 3-7-14 | |
| Barium | **61** | 2.8 | 6010C | 3-7-14 | 3-7-14 | |
| Cadmium | **ND** | 0.55 | 6010C | 3-7-14 | 3-7-14 | |
| Chromium | **11** | 0.55 | 6010C | 3-7-14 | 3-7-14 | |
| Lead | **ND** | 5.5 | 6010C | 3-7-14 | 3-7-14 | |
| Mercury | **ND** | 0.28 | 7471B | 3-7-14 | 3-7-14 | |
| Selenium | **ND** | 11 | 6010C | 3-7-14 | 3-7-14 | |
| Silver | **ND** | 1.1 | 6010C | 3-7-14 | 3-7-14 | |

Date of Report: March 11, 2014
Samples Submitted: March 6, 2014
Laboratory Reference: 1403-040
Project: E2014/0105

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

Matrix: Soil
Units: mg/kg (ppm)

| Analyte | Result | PQL | EPA Method | Date Prepared | Date Analyzed | Flags |
|---|---|---|---|---|---|---|
| Lab ID: | 03-040-09 | | | | | |
| **Client ID:** | **3-4-09** | | | | | |
| Arsenic | **ND** | 11 | 6010C | 3-7-14 | 3-7-14 | |
| Barium | **71** | 2.8 | 6010C | 3-7-14 | 3-7-14 | |
| Cadmium | **ND** | 0.56 | 6010C | 3-7-14 | 3-7-14 | |
| Chromium | **7.7** | 0.56 | 6010C | 3-7-14 | 3-7-14 | |
| Lead | **6.6** | 5.6 | 6010C | 3-7-14 | 3-7-14 | |
| Mercury | **ND** | 0.28 | 7471B | 3-7-14 | 3-7-14 | |
| Selenium | **ND** | 11 | 6010C | 3-7-14 | 3-7-14 | |
| Silver | **ND** | 1.1 | 6010C | 3-7-14 | 3-7-14 | |
| Lab ID: | 03-040-10 | | | | | |
| **Client ID:** | **3-4-10** | | | | | |
| Arsenic | **ND** | 11 | 6010C | 3-7-14 | 3-7-14 | |
| Barium | **65** | 2.7 | 6010C | 3-7-14 | 3-7-14 | |
| Cadmium | **ND** | 0.54 | 6010C | 3-7-14 | 3-7-14 | |
| Chromium | **9.2** | 0.54 | 6010C | 3-7-14 | 3-7-14 | |
| Lead | **ND** | 5.4 | 6010C | 3-7-14 | 3-7-14 | |
| Mercury | **ND** | 0.27 | 7471B | 3-7-14 | 3-7-14 | |
| Selenium | **ND** | 11 | 6010C | 3-7-14 | 3-7-14 | |
| Silver | **ND** | 1.1 | 6010C | 3-7-14 | 3-7-14 | |

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Samples Submitted: March 6, 2014
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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: | 03-040-12 | | | | | |
| **Client ID:** | **3-4-12** | | | | | |
| Arsenic | **ND** | 11 | 6010C | 3-7-14 | 3-7-14 | |
| Barium | **71** | 2.8 | 6010C | 3-7-14 | 3-7-14 | |
| Cadmium | **ND** | 0.56 | 6010C | 3-7-14 | 3-7-14 | |
| Chromium | **9.1** | 0.56 | 6010C | 3-7-14 | 3-7-14 | |
| Lead | **110** | 5.6 | 6010C | 3-7-14 | 3-7-14 | |
| Mercury | **ND** | 0.28 | 7471B | 3-7-14 | 3-7-14 | |
| Selenium | **ND** | 11 | 6010C | 3-7-14 | 3-7-14 | |
| Silver | **ND** | 1.1 | 6010C | 3-7-14 | 3-7-14 | |

Date of Report: March 11, 2014
Samples Submitted: March 6, 2014
Laboratory Reference: 1403-040
Project: E2014/0105

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

| | |
|---|---|
| Date Extracted: | 3-7-14 |
| Date Analyzed: | 3-7-14 |
| Matrix: | Soil |
| Units: | mg/kg (ppm) |
| Lab ID: | MB0307SM1&MB0307S1 |

| 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 11, 2014
Samples Submitted: March 6, 2014
Laboratory Reference: 1403-040
Project: E2014/0105

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

Date Extracted: 3-7-14
Date Analyzed: 3-7-14

Matrix: Soil
Units: mg/kg (ppm)

Lab ID: 02-040-06

| Analyte | Sample Result | Duplicate Result | RPD | PQL | Flags |
|---|---|---|---|---|---|
| Arsenic | **ND** | **ND** | NA | 10 | |
| Barium | **58.6** | **58.0** | 1 | 2.5 | |
| Cadmium | **ND** | **ND** | NA | 0.50 | |
| Chromium | **8.45** | **9.65** | 13 | 0.50 | |
| Lead | **6.60** | **6.65** | 1 | 5.0 | |
| Mercury | **ND** | **ND** | NA | 0.25 | |
| Selenium | **ND** | **ND** | NA | 10 | |
| Silver | **ND** | **ND** | NA | 1.0 | |

Date of Report: March 11, 2014
Samples Submitted: March 6, 2014
Laboratory Reference: 1403-040
Project: E2014/0105

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

Date Extracted: 3-7-14
Date Analyzed: 3-7-14

Matrix: Soil
Units: mg/kg (ppm)

Lab ID: 02-040-06

| Analyte | Spike Level | MS | Percent Recovery | MSD | Percent Recovery | RPD | Flags |
|---|---|---|---|---|---|---|---|
| Arsenic | 100 | **88.2** | 88 | **88.3** | 88 | 0 | |
| Barium | 100 | **156** | 97 | **157** | 98 | 1 | |
| Cadmium | 50.0 | **44.2** | 88 | **45.0** | 90 | 2 | |
| Chromium | 100 | **99.0** | 91 | **100** | 92 | 1 | |
| Lead | 250 | **229** | 89 | **234** | 91 | 2 | |
| Mercury | 0.500 | **0.442** | 88 | **0.447** | 89 | 1 | |
| Selenium | 100 | **87.3** | 87 | **86.4** | 86 | 1 | |
| Silver | 25.0 | **22.1** | 88 | **22.2** | 89 | 0 | |

Date of Report: March 11, 2014
Samples Submitted: March 6, 2014
Laboratory Reference: 1403-040
Project: E2014/0105

**TCLP METALS**
**EPA 1311/6010C/7470A**

Matrix: TCLP Extract
Units: mg/L (ppm)

| Analyte | Result | PQL | EPA Method | Date Prepared | Date Analyzed | Flags |
|---|---|---|---|---|---|---|
| Lab ID: | 03-040-06 | | | | | |
| **Client ID:** | **3-4-06** | | | | | |
| Arsenic | **ND** | 0.40 | 6010C | 3-7-14 | 3-7-14 | |
| Cadmium | **ND** | 0.020 | 6010C | 3-7-14 | 3-7-14 | |
| Chromium | **ND** | 0.020 | 6010C | 3-7-14 | 3-7-14 | |
| Lead | **ND** | 0.20 | 6010C | 3-7-14 | 3-7-14 | |
| Mercury | **ND** | 0.0050 | 7470A | 3-7-14 | 3-7-14 | |
| Lab ID: | 03-040-08 | | | | | |
| **Client ID:** | **3-4-08** | | | | | |
| Arsenic | **ND** | 0.40 | 6010C | 3-7-14 | 3-7-14 | |
| Cadmium | **ND** | 0.020 | 6010C | 3-7-14 | 3-7-14 | |
| Chromium | **ND** | 0.020 | 6010C | 3-7-14 | 3-7-14 | |
| Lead | **ND** | 0.20 | 6010C | 3-7-14 | 3-7-14 | |
| Mercury | **ND** | 0.0050 | 7470A | 3-7-14 | 3-7-14 | |
| Lab ID: | 03-040-09 | | | | | |
| **Client ID:** | **3-4-09** | | | | | |
| Arsenic | **ND** | 0.40 | 6010C | 3-7-14 | 3-7-14 | |
| Cadmium | **ND** | 0.020 | 6010C | 3-7-14 | 3-7-14 | |
| Chromium | **ND** | 0.020 | 6010C | 3-7-14 | 3-7-14 | |
| Lead | **ND** | 0.20 | 6010C | 3-7-14 | 3-7-14 | |
| Mercury | **ND** | 0.0050 | 7470A | 3-7-14 | 3-7-14 | |

Date of Report: March 11, 2014
Samples Submitted: March 6, 2014
Laboratory Reference: 1403-040
Project: E2014/0105

**TCLP METALS**
**EPA 1311/6010C/7470A**

Matrix: TCLP Extract
Units: mg/L (ppm)

| Analyte | Result | PQL | EPA Method | Date Prepared | Date Analyzed | Flags |
|---|---|---|---|---|---|---|
| Lab ID: | 03-040-10 | | | | | |
| **Client ID:** | **3-4-10** | | | | | |
| Arsenic | **ND** | 0.40 | 6010C | 3-7-14 | 3-7-14 | |
| Cadmium | **ND** | 0.020 | 6010C | 3-7-14 | 3-7-14 | |
| Chromium | **ND** | 0.020 | 6010C | 3-7-14 | 3-7-14 | |
| Lead | **ND** | 0.20 | 6010C | 3-7-14 | 3-7-14 | |
| Mercury | **ND** | 0.0050 | 7470A | 3-7-14 | 3-7-14 | |
| Lab ID: | 03-040-12 | | | | | |
| **Client ID:** | **3-4-12** | | | | | |
| Arsenic | **ND** | 0.40 | 6010C | 3-7-14 | 3-7-14 | |
| Cadmium | **ND** | 0.020 | 6010C | 3-7-14 | 3-7-14 | |
| Chromium | **ND** | 0.020 | 6010C | 3-7-14 | 3-7-14 | |
| Lead | **ND** | 0.20 | 6010C | 3-7-14 | 3-7-14 | |
| Mercury | **ND** | 0.0050 | 7470A | 3-7-14 | 3-7-14 | |

Date of Report: March 11, 2014
Samples Submitted: March 6, 2014
Laboratory Reference: 1403-040
Project: E2014/0105

**TCLP METALS**
**EPA 1311/6010C/7470A**
**METHOD BLANK QUALITY CONTROL**

| | |
|---|---|
| Date Prepared: | 3-7-14 |
| Date Extracted: | 3-10-14 |
| Date Analyzed: | 3-10-14 |
| Matrix: | TCLP Extract |
| Units: | mg/L (ppm) |
| Lab ID: | MB0307T1&MB0307T2 |

| Analyte | Method | Result | PQL |
|---|---|---|---|
| Arsenic | 6010C | **ND** | 0.40 |
| Cadmium | 6010C | **ND** | 0.020 |
| Chromium | 6010C | **ND** | 0.020 |
| Lead | 6010C | **ND** | 0.20 |
| Mercury | 7470A | **ND** | 0.0050 |

Date of Report: March 11, 2014
Samples Submitted: March 11, 2014
Laboratory Reference: 1403-040
Project: E2014/0105

**TCLP METALS**
**EPA 1311/6010C/7470A**
**DUPLICATE QUALITY CONTROL**

Date Prepared: 3-7-14
Date Extracted: 3-10-14
Date Analyzed: 3-10-14

Matrix: TCLP Extract
Units: mg/L (ppm)

Lab ID: 02-040-06

| Analyte | Sample Result | Duplicate Result | RPD | PQL | Flags |
|---|---|---|---|---|---|
| Arsenic | **ND** | **ND** | NA | 0.40 | |
| Cadmium | **ND** | **ND** | NA | 0.020 | |
| Chromium | **ND** | **ND** | NA | 0.020 | |
| Lead | **ND** | **ND** | NA | 0.20 | |
| Mercury | **ND** | **ND** | NA | 0.0050 | |

Date of Report: March 11, 2014
Samples Submitted: March 11, 2014
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**TCLP METALS**
**EPA 1311/6010C/7470A**
**MS/MSD QUALITY CONTROL**

Date Prepared: 3-7-14
Date Extracted: 3-10-14
Date Analyzed: 3-10-14

Matrix: TCLP Extract
Units: mg/L (ppm)

Lab ID: 02-040-06

| Analyte | Spike Level | MS | Percent Recovery | MSD | Percent Recovery | RPD | Flags |
|---|---|---|---|---|---|---|---|
| Arsenic | 4.00 | **3.87** | 97 | **3.76** | 94 | 3 | |
| Cadmium | 2.00 | **1.94** | 97 | **1.92** | 96 | 1 | |
| Chromium | 4.00 | **3.86** | 97 | **3.83** | 96 | 1 | |
| Lead | 10.0 | **9.43** | 94 | **9.33** | 93 | 1 | |
| Mercury | 0.0500 | **0.0477** | 95 | **0.0485** | 97 | 2 | |

Date of Report: March 11, 2014
Samples Submitted: March 6, 2014
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Project: E2014/0105

## % MOISTURE

Date Analyzed: 3-7-14

| Client ID | Lab ID | % Moisture |
|---|---|---|
| 3-4-01 | 03-040-01 | 7 |
| 3-4-02 | 03-040-02 | 5 |
| 3-4-03 | 03-040-03 | 7 |
| 3-4-04 | 03-040-04 | 4 |
| 3-4-05 | 03-040-05 | 6 |
| 3-4-06 | 03-040-06 | 10 |
| 3-4-07 | 03-040-07 | 6 |
| 3-4-08 | 03-040-08 | 6 |
| 3-4-09 | 03-040-09 | 6 |
| 3-4-10 | 03-040-10 | 6 |
| 3-4-11 | 03-040-11 | 7 |
| 3-4-12 | 03-040-12 | 7 |
| 3-4-13 | 03-040-13 | 9 |

OnSite Environmental Inc.

**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-napthalene) 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

# Chain of Custody



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

Company: BMEC
Project Number: E2014/0105
Project Name: VISTA FIELD UST
Project Manager: P. TRABUSINER
Sampled by: Y. MEYER

**Turnaround Request (in working days)**
(Check One)
☐ Same Day ☐ 1 Day
☐ 2 Days ☐ 3 Days
☒ Standard (7 Days) (TPH analysis 5 Days)
☐ _____ (other)

**Laboratory Number:** 03-040

| 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/ MTCA Metals (circle one) | TCLP Metals | HEM (oil and grease) 1664A | % Moisture |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 3-4-01 | 3-4-14 | 1018 | Soil | 2 | X | | | | | | | | | | | | | | | X |
| 2 | 3-4-02 | | 1025 | | | X | | | | | | | | | | | | | | | |
| 3 | 3-4-03 | | 1037 | | | X | | | | | | | | | | | | | | | |
| 4 | 3-4-04* | | 1044 | | | X | | | | | | | | | | | | | | | |
| 5 | 3-4-05* | | 1051 | | | X | | | | | | | | | | | | | | | |
| 6 | 3-4-06* YM | | 1100 | | | X | X | | | | | | | | | | | X | X | | |
| 7 | 3-4-07 | | 1109 | | | X | | | | | | | | | | | | | | | |
| 8 | 3-4-08** YM | | 1118 | | | X | X | | | | | | | | | | | X | X | | |
| 9 | 3-4-09** YM | | 1127 | | | X | | | | | | | X | | | | | X | X | | |
| 10 | 3-4-10** YM | ↓ | 1135 | ↓ | ↓ | X | | | | | | | X | | | | | X | X | | |

| | Signature | Company | Date | Time |
|---|---|---|---|---|
| Relinquished | | BMEC | 3-5-14 | 1200 |
| Received | | CORE | 3/6/14 | 1100 |
| Relinquished | | | | |
| Received | | | | |
| Relinquished | | | | |
| Received | | | | |

**Comments/Special Instructions**

* FOLLOW UP ON POSITIVE WITH NWTPH-Gx/BTEX/MTBE AND TOTAL LEAD

** FOLLOW UP ON POSITIVE WITH NWTPH-Dx, PAH'S, AND BTEX

Reviewed/Date | Reviewed/Date | Chromatograms with final report

Data Package: Level III Level IV | Electronic Data Deliverables (EDDs) _____

# Chain of Custody



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

Company: BMEC
Project Number: E2014/0105
Project Name: VISTA FIELD UST
Project Manager: P. TRABUSINER
Sampled by: Y. MEYER

**Turnaround Request (in working days)**

(Check One)

- ☐ Same Day
- ☐ 1 Day
- ☐ 2 Days
- ☐ 3 Days
- ☒ Standard (7 Days) (TPH analysis 5 Days)
- ☐ _____ (other)

**Laboratory Number:** 03-040

| 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 Pest cides 8081B | Organophosphorus Pesticides 8270D/SIM | Chlorinated Acid Herbicides 8151A | Total RCRA Metals/ MTCA Metals (circle one) | TCLP Metals | HEM (oil and grease) 1664A | TOTAL LEAD | % Moisture |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 11 | 3-4-11* | 3-4-14 | 1144 | SOIL | 2 | X | | | | | | | | | | | | | | | | X |
| 12 | 3-4-12* | ↓ | 1150 | ↓ | ↓ | X | | | | | | | | | | | | XX | | | | ↓ |
| 13 | 3-4-13** | ↓ | 1114 | ↓ | ↓ | | X | | X | | | | X | | | | | | | | X | |

| | Signature | Company | Date | Time | Comments/Special Instructions |
|---|---|---|---|---|---|
| Relinquished | [signature] | BMEC | 3-5-14 | 1200 | * FOLLOW UP ON POSITIVE WITH NWTPH-Gx/BTEX AND NWTPH-Dx |
| Received | | ONE | 3/6/14 | 1100 | ** PLEASE DO 3-4-13 ON A 3-DAY TURNAROUND |
| Relinquished | | | | | |
| Received | | | | | |
| Relinquished | | | | | |
| Received | | | | | |
| Reviewed/Date | | Reviewed/Date | | | Chromatograms with final report |

Data Package: Level III | Level IV

Electronic Data Deliverables (EDDs) _____

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

April 16, 2014

Peter Trabusiner
Blue Mountain Environmental, Inc.
1500 Adair Drive
Richland, WA 99352

Re: Analytical Data for Project E2014/0105; Vista Field UST
Laboratory Reference No. 1403-040B

Dear Peter:

Enclosed are the analytical results and associated quality control data for samples submitted on March 6, 2014.

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,

David Baumeister
Project Manager

Enclosures

Date of Report: April 16, 2014
Samples Submitted: March 6, 2014
Laboratory Reference: 1403-040B
Project: E2014/0105; Vista Field UST

**Case Narrative**

Samples were collected on March 4, 2014 and received by the laboratory on March 6, 2014. 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.

TCLP Metals EPA 1311/6010C/7470A Analysis

Sample was analyzed out of holding time for mercury.

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: April 16, 2014
Samples Submitted: March 6, 2014
Laboratory Reference: 1403-040B
Project: E2014/0105; Vista Field UST

**TCLP METALS**
**EPA 1311/6010C/7470A**

Matrix: TCLP Extract
Units: mg/L (ppm)

| Analyte | Result | PQL | EPA Method | Date Prepared | Date Analyzed | Flags |
|---|---|---|---|---|---|---|
| Lab ID: | 03-040-13 | | | | | |
| **Client ID:** | **3/4/2013** | | | | | |
| Arsenic | **ND** | 0.40 | 6010C | 4-15-14 | 4-15-14 | |
| Barium | **0.42** | 0.20 | 6010C | 4-15-14 | 4-15-14 | |
| Cadmium | **0.18** | 0.020 | 6010C | 4-15-14 | 4-15-14 | |
| Chromium | **ND** | 0.020 | 6010C | 4-15-14 | 4-15-14 | |
| Lead | **0.80** | 0.20 | 6010C | 4-15-14 | 4-15-14 | |
| Mercury | **ND** | 0.0050 | 7470A | 4-15-14 | 4-15-14 | |
| Selenium | **ND** | 0.40 | 6010C | 4-15-14 | 4-15-14 | |
| Silver | **ND** | 0.040 | 6010C | 4-15-14 | 4-15-14 | |

Date of Report: April 16, 2014
Samples Submitted: March 6, 2014
Laboratory Reference: 1403-040B
Project: E2014/0105; Vista Field UST

**TCLP METALS**
**EPA 1311/6010C/7470A**
**METHOD BLANK QUALITY CONTROL**

| | |
|---|---|
| Date Prepared: | 4-14-14 |
| Date Extracted: | 4-15-14 |
| Date Analyzed: | 4-15-14 |
| Matrix: | TCLP Extract |
| Units: | mg/L (ppm) |
| Lab ID: | MB0415TM2&MB0415T1 |

| Analyte | Method | Result | PQL |
|---|---|---|---|
| Arsenic | 6010C | **ND** | 0.40 |
| Barium | 6010C | **ND** | 0.20 |
| Cadmium | 6010C | **ND** | 0.020 |
| Chromium | 6010C | **ND** | 0.020 |
| Lead | 6010C | **ND** | 0.20 |
| Mercury | 7470A | **ND** | 0.0050 |
| Selenium | 6010C | **ND** | 0.40 |
| Silver | 6010C | **ND** | 0.040 |

Date of Report: April 16, 2014
Samples Submitted: March 6, 2014
Laboratory Reference: 1403-040B
Project: E2014/0105; Vista Field UST

**TCLP METALS**
**EPA 1311/6010C/7470A**
**DUPLICATE QUALITY CONTROL**

Date Prepared: 4-14-14
Date Extracted: 4-15-14
Date Analyzed: 4-15-14

Matrix: TCLP Extract
Units: mg/L (ppm)

Lab ID: 03-040-13

| Analyte | Sample Result | Duplicate Result | RPD | PQL | Flags |
|---|---|---|---|---|---|
| Arsenic | **ND** | **ND** | NA | 0.40 | |
| Barium | **0.424** | **0.412** | 3 | 0.20 | |
| Cadmium | **0.176** | **0.170** | 4 | 0.020 | |
| Chromium | **ND** | **ND** | NA | 0.020 | |
| Lead | **0.794** | **0.760** | 4 | 0.20 | |
| Mercury | **ND** | **ND** | NA | 0.0050 | |
| Selenium | **ND** | **ND** | NA | 0.40 | |
| Silver | **ND** | **ND** | NA | 0.040 | |

Date of Report: April 16, 2014
Samples Submitted: March 6, 2014
Laboratory Reference: 1403-040B
Project: E2014/0105; Vista Field UST

**TCLP METALS**
**EPA 1311/6010C/7470A**
**MS/MSD QUALITY CONTROL**

Date Prepared: 4-14-14
Date Extracted: 4-15-14
Date Analyzed: 4-15-14

Matrix: TCLP Extract
Units: mg/L (ppm)

Lab ID: 03-040-13

| Analyte | Spike Level | MS | Percent Recovery | MSD | Percent Recovery | RPD | Flags |
|---|---|---|---|---|---|---|---|
| Arsenic | 4.00 | **3.78** | 94 | **3.73** | 93 | 1 | |
| Barium | 4.00 | **3.98** | 89 | **4.02** | 90 | 1 | |
| Cadmium | 2.00 | **2.02** | 92 | **2.01** | 92 | 1 | |
| Chromium | 4.00 | **3.79** | 95 | **3.76** | 94 | 1 | |
| Lead | 10.0 | **10.1** | 93 | **10.0** | 92 | 1 | |
| Mercury | 0.0500 | **0.0454** | 91 | **0.0450** | 90 | 1 | |
| Selenium | 4.00 | **3.74** | 94 | **3.76** | 94 | 1 | |
| Silver | 1.00 | **0.914** | 91 | **0.902** | 90 | 1 | |

OnSite Environmental Inc.

**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-napthalene) 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

# Chain of Custody

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

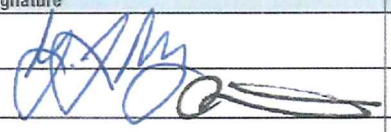


Company: BMEC
Project Number: E2014/0105
Project Name: VISTA FIELD UST
Project Manager: P. TRABUSINER
Sampled by: Y. MEYER

**Turnaround Request (in working days)**
(Check One)
☐ Same Day ☐ 1 Day
☐ 2 Days ☐ 3 Days
☒ Standard (7 Days) (TPH analysis 5 Days)
☐ _____ (other)

**Laboratory Number:** 03-040

| 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/ MTCA Metals (circle one) | TCLP Metals | HEM (oil and grease) 1664A | % Moisture |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 3-4-01 | 3-4-14 | 1018 | Soil | 2 | X | | | | | | | | | | | | | | | X |
| 2 | 3-4-02 | | 1025 | | | X | | | | | | | | | | | | | | | |
| 3 | 3-4-03 | | 1037 | | | X | | | | | | | | | | | | | | | |
| 4 | 3-4-04* | | 1044 | | | X | | | | | | | | | | | | | | | |
| 5 | 3-4-05* | | 1051 | | | X | | | | | | | | | | | | | | | |
| 6 | 3-4-06* | | 1100 | | | X | | | | | | | | | | | | | | | |
| 7 | 3-4-07 | | 1109 | | | X | | | | | | | | | | | | | | | |
| 8 | 3-4-08** | | 1118 | | | X | | | | | | | | | | | | | | | |
| 9 | 3-4-09** | | 1127 | | | X | | | | | | | | | | | | | | | |
| 10 | 3-4-10** | ↓ | 1135 | ↓ | ↓ | X | | | | | | | | | | | | | | | ↓ |

| | Signature | Company | Date | Time |
|---|---|---|---|---|
| Relinquished |  | BMEC CORE | 3-5-14 | 1200 |
| Received | | | 3/6/14 | 1100 |
| Relinquished | | | | |
| Received | | | | |
| Relinquished | | | | |
| Received | | | | |
| Reviewed/Date | | Reviewed/Date | | |

**Comments/Special Instructions**
* FOLLOW UP ON POSITIVE WITH NWTPH-Gx/BTEX/MTBE AND TOTAL LEAD
** FOLLOW UP ON POSITIVE WITH NWTPH-Dx, PAH's, AND BTEX
(X) Added 4/11/14. DB (3 day TAT)

Chromatograms with final report ☐

Data Package: Level III ☐ Level IV ☐ Electronic Data Deliverables (EDDs) ☐ _____

# Chain of Custody



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

Company: BMEC
Project Number: E2014/0105
Project Name: VISTA FIELD UST
Project Manager: P. TRABUSINER
Sampled by: Y. MEYER

**Turnaround Request (in working days)**
(Check One)
☐ Same Day ☐ 1 Day
☐ 2 Days ☐ 3 Days
☒ Standard (7 Days) (TPH analysis 5 Days)
☐ _____ (other)

**Laboratory Number:** 03-040

| 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/ MTCA Metals (circle one) | TCLP Metals | HEM (oil and grease) 1664A | TOTAL LEAD | [illegible] | | | | % Moisture |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 11 | 3-4-11* | 3-4-14 | 1144 | SOIL | 2 | X | | | | | | | | | | | | | | | | | | | | X |
| 12 | 3-4-12* | ↓ | 1150 | ↓ | ↓ | X | | | | | | | | | | | | | | | | | | | | ↓ |
| 13 | 3-4-13** | ↓ | 1114 | ↓ | ↓ | | X | | X | | | | X | | | | | | X | | X | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| | | | | | | | | | | | | | | | | | | | | | | | | | | |

| | Signature | Company | Date | Time |
|---|---|---|---|---|
| Relinquished | [signature] | BMEC | 3-5-14 | 1200 |
| Received | | OBE | 3/6/14 | 1100 |
| Relinquished | | | | |
| Received | | | | |
| Relinquished | | | | |
| Received | | | | |

**Comments/Special Instructions**
* FOLLOW UP ON POSITIVE WITH NWTPH-Gx/BTEX AND NWTPH-Dx
** PLEASE DO 3-4-13 ON A 3-DAY TURNAROUND

Reviewed/Date | Reviewed/Date | Chromatograms with final report ☐

Data Package: Level III ☐ Level IV ☐ Electronic Data Deliverables (EDDs) ☐ _____

# TWIN CITY METALS

455 East Bruneau
P.O. Box 6484
Kennewick, WA 99336
(509) 582-8207

Purchase Receipt

Seller Three Kings Date 3-5 (20)14

Street _____ Lic. No./State _____

City _____ State _____ Zip _____ Make/Mdl. _____

SO # _____ Inv. # _____ P.O. # _____

| Code | Description | Net Wt. | Price | Amount |
|---|---|---|---|---|
| | #1 Copper | | | |
| | #2 Copper | | | |
| | | | | |
| | | | | |
| 110 | Insulated Copper Wire | | | |
| | | | | |
| 201 | Red Brass | 2140 23.2 | | |
| | | | | |
| 203 | Yellow Brass | | | |
| | | | | |
| 213 | Radiators | | | |
| | | | | |
| | | | | |
| | | | | |
| 301 | Aluminum-Cast | | | |
| 302 | Aluminum-Sheet | | | |
| | | Tank | | |
| | | | | |
| | Alum/Copper Rad. | | | |
| | | | | |
| 399 | Irony Aluminum | | | |
| | | 3000 | | |
| | Scrap Iron | | | |
| | | | | |
| | Scrap Tin | | | |
| 401 | Stainless Steel (18/8) | | | |
| | | | | |
| | | | | |
| | Die Cast | | | |
| | Total | | | |

## TERMS AND CONDITIONS

I have read the current list of materials Twin City Metals will not accept for regulatory and environmental reasons. I warrant that the materials I am selling Twin City Metals do not contain any of the materials described on the list or contain hazardous or toxic wastes for which disposal in a municipal landfill is restricted or prohibited. I warrant that all materials, including tanks, sealed motors and metal borings have been fully and lawfully drained of all oils and oil products. I further warrant that any items that contained ozone depleting compounds, such as CFC's or Freon, have been emptied in accordance with appplicable laws.

I warrant that I am the lawful owner of the materials being sold and that I have the right to sell them to Twin City Metals. I acknowledge that for the payment I received in full, I sell and convey title to the materials to Twin City Metals. I also understand that Twin City Metals is not responsible for accidents to the materials or to vehicles while loading or unloading.

I agree to indemnify and hold harmless Twin City Metals against all claims and expenses arising out of any breach of these warranties.

495 W

TIME _____ CHECK NO. _____

TWIN CITY METALS, INC.

# TWIN CITY METALS

455 East Bruneau
P.O. Box 6484
Kennewick, WA 99336
(509) 582-8207

## Purchase Receipt

Seller Three Kings Date MAR. 5, 2014

Street _____ Lic. No./State _____

City _____ State _____ Zip _____ Make/Mdl. _____

SO # _____ Inv. # _____ P.O. # _____

| Code | Description | Net Wt. | Price | Amount |
|---|---|---|---|---|
| | #1 Copper | | | |
| | #2 Copper | | | |
| | | | | |
| | | | | |
| 110 | Insulated Copper Wire | | | |
| | | | | |
| 201 | Red Brass | | | |
| | | | | |
| 203 | Yellow Brass | | | |
| | | | | |
| 213 | Radiators | CK 97 | | |
| | | | | |
| | | | | |
| | | | | |
| 301 | Aluminum-Cast | | 2.14/023.42 | |
| 302 | Aluminum-Sheet | | | |
| | | | | |
| | | TANK | | |
| | Alum/Copper Rad. | | | |
| | | | | |
| 399 | Iron-Aluminum | | | |
| | | 11380 | | |
| | Scrap Iron | | | |
| | | | | |
| | Scrap Tin | | | |
| 401 | Stainless Steel (18/8) | | | |
| | | | | |
| | | | | |
| | Die Cast | | | |
| | Total | | | |

### TERMS AND CONDITIONS

I have read the current list of materials Twin City Metals will not accept for regulatory and environmental reasons. I warrant that the materials I am selling Twin City Metals do not contain any of the materials described on the list or contain hazardous or toxic wastes for which disposal in a municipal landfill is restricted or prohibited. I warrant that all materials, including tanks, sealed motors and metal borings have been fully and lawfully drained of all oils and oil products. I further warrant that any items that contained ozone depleting compounds, such as CFC's or Freon, have been emptied in accordance with appplicable laws.

I warrant that I am the lawful owner of the materials being sold and that I have the right to sell them to Twin City Metals. I acknowledge that for the payment I received in full, I sell and convey title to the materials to Twin City Metals. I also understand that Twin City Metals is not responsible for accidents to the materials or to vehicles while loading or unloading.

I agree to indemnify and hold harmless Twin City Metals against all claims and expenses arising out of any breach of these warranties.

290.00

TIME _____ CHECK NO. _____

*WASTE MANAGEMENT, INC ....NON HAZARDOUS WASTE DISPOSAL SOLUTIONS FOR THE PACIFIC NORTHWEST*

# Columbia Ridge Landfill

**18177 Cedar Springs Lane, Arlington Oregon 97812**

# Profile # 115256OR

## *PERMIT TO DISPOSE OF NON-HAZARDOUS MATERIALS*

**This permit authorizes disposal of Customer's waste materials in accordance with the Industrial Waste & Disposal Services Agreement dated ____ _____.**

***EXPIRES: 4/18/2015***

***GENERATOR: PORT OF KENNEWICK***

| | |
|---|---|
| **DESCRIPTION:** *PCS*<br>☐ **SPECIAL WASTE** ☒ **PCS** ☒ **CLEAN-UP MATERIAL** | **VOLUME:** *25* |
| **LOCATION:** *KENNEWICK, WASHINGTON*<br>*6915 W. GRANDRIDGE BLVD* | **COUNTY:** ** Benton* |
| | |
| **CONTACT:** *YANCY MEYER* | **PHONE:** *509-520-4416* |
| | **FAX :**<br>*ymeyer@bmecww.com* |
| | |

| | | |
|---|---|---|
| **BILLING:** *Landfill account BMEC, INC.* | **PO#:** *N/A* | **JOB#:** *N/A* |

**TYPE OF DISPOSAL/ SPECIAL HANDLING/LOAD TYPE:** *BULK, ADC,*

**********

**ALL LOADS MUST BE SCHEDULED 24 HOURS IN ADVANCE.**
**CONTACT GREG AT 541-454-3220**

APPROVED: KC *KRISTIN CASTNER* DATE: ***04/18/14 2:43:42 PM***

***A COPY OF THIS PERMIT MUST BE SHOWN BY EACH DRIVER***

**WASTE MANAGEMENT**

**HAZARDOUS WASTE IS STRICTLY PROHIBITED**

| Date | Profile # | Manifest # | Ticket # | Material | Facility | Tons / Tonnes | Material Quantity | Material Unit |
|---|---|---|---|---|---|---|---|---|
| 04/30/2014 | 115256OR | N/A | 201434 | DC-PCS~BMEC INC~PORT OF KENNEWICK~115256OR | Columbia Ridge Landfill & Recycling Center | 13.17 | 13.17 | TON |

WASHINGTON STATE DEPARTMENT OF ECOLOGY

# UNDERGROUND STORAGE TANK
## Site Check/Site Assessment Checklist

FOR OFFICE USE ONLY
Site #:_____
Facility Site ID #:_____

## INSTRUCTIONS

When a release has not been confirmed and reported, this Site Check/Site Assessment Checklist must be completed and signed by a person certified by ICC or a Washington registered professional engineer who is competent, by means of examination, experience, or education, to perform site assessments. **The results of the site check or site assessment must be included with this checklist.** This form must be submitted to Ecology at the address shown below within 30 days after completion of the site check/site assessment.

**SITE INFORMATION:** Include the Ecology site ID number if the tanks are registered with Ecology. This number may be found on the tank owner's invoice or tank permit.

**TANK INFORMATION:** Please list all tanks for which the site check or site assessment is being conducted. Use the owner's tank ID numbers if available, and indicate tank capacity and substance stored.

**REASON FOR CONDUCTING SITE CHECK/SITE ASSESSMENT:** Please check the appropriate item.

**CHECKLIST**: Please initial each item in the appropriate box.

**SITE ASSESSOR INFORMATION**: This information must be signed by the registered site assessor who is responsible for conducting the site check/site assessment.

**Underground Storage Tank Section**
**Department of Ecology**
**PO Box 47655**
**Olympia WA 98504-7655**

## SITE INFORMATION

Site ID Number (Available from Ecology if the tanks are registered): 11009
Site/Business Name: Vista Field Airport
Site Address: 6915 W. Grandridge Blvd. (Street) Telephone: (509)586-1186
Kennewick (City) WA (State) 99336 (Zip Code)

## TANK INFORMATION

| Tank ID No. | Tank Capacity | Substance Stored |
|---|---|---|
| 1 | 12000 gallon | 100 II Aviation Fuel |
| 2 | 6000 gallon | Jet A Fuel |
| | | |

## REASON FOR CONDUCTING SITE CHECK/SITE ASSESSMENT

Check one:

_____ Investigate suspected release due to on-site environmental contamination.
_____ Investigate suspected release due to off-site environmental contamination.
_____ Extend temporary closure of UST system for more than 12 months.
_____ UST system undergoing change-in-service.
__X__ UST system permanently closed with tank removed.
_____ Abandoned tank containing product.
_____ Required by Ecology or delegated agency for UST system closed before 12/22/88.
_____ Other (describe): _____

## CHECKLIST

| Each item of the following checklist shall be initialed by the person registered with the Department of Ecology whose signature appears below. | YES | NO |
|---|---|---|
| 1. The location of the UST site is shown on a vicinity map. | X | |
| 2. A brief summary of information obtained during the site inspection is provided. (see Section 3.2 in site assessment guidance) | X | |
| 3. A summary of UST system data is provided. (see Section 3.1.) | X | |
| 4. The soils characteristics at the UST site are described. (see Section 5.2) | X | |
| 5. Is there any apparent groundwater in the tank excavation? | | X |
| 6. A brief description of the surrounding land use is provided. (see Section 3.1) | X | |
| 7. Information has been provided indicating the number and types of samples collected, methods used to collect and analyze the samples, and the name and address of the laboratory used to perform the analyses. | X | |
| 8. A sketch or sketches showing the following items is provided: | | |
| - location and ID number for all field samples collected | X | |
| - groundwater samples distinguished from soil samples (if applicable) | X | |
| - samples collected from stockpiled excavated soil | X | |
| - tank and piping locations and limits of excavation pit | X | |
| - adjacent structures and streets | X | |
| - approximate locations of any on-site and nearby utilities | X | |
| 9. If sampling procedures different from those specified in the guidance were used, has justification for using these alternative sampling procedures been provided? (see Section 3.4) | | |
| 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. | X | |
| 11. Any factors that may have compromised the quality of the data or validity of the results are described. | X | |

| | | |
|---|---|---|
| *12. The results of this site check/site assessment indicate that a confirmed release of a regulated substance has occurred.* | X | |

## SITE ASSESSOR INFORMATION

Yancy Meyer — Person registered with Ecology

Blue Mountain Environmental and Consulting Co., Inc — Firm Affiliated with

Business Address: PO Box 545/125 Main St. — Street

Telephone: (509) 520-4416

Waitsburg — City

WA — State

99361 — Zip Code

*I hereby certify that I have been in responsible charge of performing the site check/site assessment described above. Persons submitting false information are subject to penalties under Chapter 173.360 WAC.*

04/09/2014 — Date

Yancy Meyer, E.P. — son Registered with Ecology

*If you need this publication in an alternate format, please contact Toxics Cleanup Program at (360) 407-7170. For persons with a speech or hearing impairment call 711 for relay service or 800-833-6388 for TTY.*