MAUL FOSTER ALONGI
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February 7, 2014
Project No. 0380.02.04

Steve King, PE
City of Wenatchee
1350 McKittrick Street, Suite A
Wenatchee, Washington 98801

Re: Data gap investigation summary
Former Public Works Yard Property, Wenatchee, Washington

Dear Mr. King:

To support the City of Wenatchee in resolving legacy contamination concerns at the former Public Works Yard property at 25 North Worthen Street (the Property), Maul Foster & Alongi, Inc. (MFA) conducted a targeted environmental investigation at the Property on November 5 through 7, 2013 (see Figure 1).

The investigation approach, which is documented in a technical memorandum dated October 3, 2013 (MFA, 2013), was developed in collaboration with the Washington State Department of Ecology (Ecology) to address data gaps and environmental concerns on the non-landfill portion of the Property. Additional investigation of the non-landfill portion of the Property (see attached Figure 1) was determined necessary to further define impacts associated with non-landfill-related contaminant sources at the Property. The investigation findings documented in this letter, in combination with findings of prior investigations at the Property, will be used to develop a focused site assessment that identifies the appropriate action(s) for protection of human health and the environment on the non-landfill portion of the Property.

BACKGROUND

In December 1981, a soil gas generation investigation was conducted by Budinger & Associates (B&A) to understand the feasibility of construction of a public park on top of a historical landfill adjacent to the Columbia River. The investigation was conducted on the overall known boundaries of the landfill, which was a larger area that included a portion of the Property. Based on this work, B&A indicated that, while a great deal of refuse landfilling had taken place at the Property and adjoining areas, the vicinity area was suitable for park construction, with some exceptions. B&A recommended the following: a cap of a minimum of 5 feet in thickness of clean, imported cover material, placed throughout the areas to be developed; passive gas well installation throughout the park area to facilitate venting of methane generated during active decomposition of landfilling refuse; air monitoring for methane; construction of park buildings in areas with adequate subsurface conditions

allowing for minimal subsidence; and selective planting of trees that will not have deeply invasive root structures (B&A, 1981).

In June 2000, Ecology and Environment, Inc. (E&E), in coordination with the U.S. Environmental Protection Agency (USEPA), conducted a targeted brownfield assessment and associated subsurface investigation at the Property to assess areas of potential contamination resulting from the known historical landfilling activities. E&E collected 41 soil samples (from ten soil borings) and five groundwater samples and submitted them for laboratory analysis. Soil boring locations were separated into areas interpreted to be from the inferred landfill portion of the Property as well as inferred non-landfilled areas. Analytical results indicated elevated concentrations of many analytes of concern—including heavy metals, carcinogenic polycyclic aromatic hydrocarbons (cPAHs), semivolatile organic compounds, and volatile organic compounds—exceeding Ecology Model Toxics Control Act (MTCA) cleanup levels (CULs) in both soil and groundwater from samples obtained in and outside the landfill area (E&E, 2000).

In October 2010, MFA conducted a subsurface assessment at the Property (MFA, 2011a). This investigation included installation of three piezometers (i.e., PZ1 through PZ3; see attached Figure 1), a combustible gas assessment, a surface soil staining assessment, and a landfill delineation and geologic cross section interpretation based on a directed geophysical evaluation. Piezometers were installed to measure shallow groundwater elevations in order to interpret groundwater migration at the Property. The October 2010 investigation concluded the following:

- Shallow groundwater migration at the Property is approximately south-southwest.
- Combustible gases are present at the Property, but at relatively low concentrations, and engineering controls should be considered during design and implementation at the Property.
- Stained surface soil on the non-landfill portion of the Property is below MTCA Method A CULs for unrestricted land use.
- There is a varied thickness of landfill debris and overburden material above shallow basalt, which varies in depth.

In September 2011, MFA conducted a focused investigation at the Property to delineate cPAH-impacted soil on the non-landfill portion of the Property and define the landfill/native soil boundary (MFA, 2011b). Soil borings were used to delineate cPAH impacts in the southern portion of the Property in the vicinity of a former fueling area and underground storage tanks (USTs). Test pits were used to delineate the landfill/native soil boundary. The results of the focused investigation concluded that impacts at the Property were distinguishable as two separate sites: landfill and non-landfill impacts. The landfill extends

well beyond the Property boundaries to the north, east, and south. The non-landfill portion of the Property has groundwater and soil vapor impacts that appear to be the result of migration from the landfill; independent sources were not identified through multiple investigations. Impacts of cPAHs in soil on the non-landfill portion of the Property likely are related to USTs, which have been removed from the Property.

NOVEMBER 2013 INVESTIGATION

An MFA staff geologist oversaw the field activities, which were conducted using industry standard techniques and in general accordance with the guidelines put forth in Ecology's Guidance on Sampling and Analysis Methods (Ecology, 1995) and the requirements of MTCA (Washington Administrative Code [WAC] 173-340). Soil samples and one groundwater sample were collected from temporary boreholes advanced using a direct-push drill rig, with additional groundwater samples collected from the three existing piezometers. Boring locations were checked for utilities by both public and private utility locators before drilling and were recorded using a handheld global positioning system device. Drilling was completed by Pacific Soil & Water of Tigard, Oregon. Soil and groundwater samples were labeled, preserved (as appropriate), and delivered for analysis to Specialty Analytical of Clackamas, Oregon, under standard chain-of-custody procedures.

Thirty-two soil samples and one groundwater sample were collected from 12 borings (GP11 through GP22), and three groundwater samples were collected from the three existing piezometers (PZ1, PZ2 and PZ3) (Figure 1). Geoprobe™ Macrocore® samplers were used to collect soil cores from the ground surface to a maximum depth of 20 feet below ground surface (bgs). During drilling, lithology, and visual and olfactory observations were recorded on field boring logs (Attachment A). Soil samples were chosen for analysis in accordance with the October 3 investigation approach memorandum (MFA, 2013), with additional soil samples that were not initially chosen for analysis archived for potential follow up analyses. The areas of concern that were investigated are the former fueling area and associated USTs, the former heating oil UST, the oil/water separators (OWSs), surface soil, and groundwater.

In the boring from which a groundwater sample was collected, a Geoprobe temporary well screen was set in the borehole at or near the water table for collection of a groundwater sample. This sample, as well as groundwater samples collected from the existing piezometers, was collected using a peristaltic pump with new, disposable polyethylene tubing.

Selected soil and groundwater samples were screened for petroleum hydrocarbons, using NWTPH-HCID and were analyzed for diesel-range and oil-range petroleum hydrocarbons (diesel and lube oil, respectively) by NWTPH-Dx; benzene, toluene, ethylbenzene, and xylenes (BTEX) by USEPA Method 8021B; polycyclic aromatic hydrocarbons (PAHs) by USEPA Method 8270-SIM; polychlorinated biphenyls (PCBs) by USEPA Method 8082; and/or arsenic and lead by USEPA 6010B.

The boreholes were decommissioned with hydrated bentonite chips in accordance with the WAC for Minimum Standards for Construction and Maintenance of Wells (WAC 173-360). Soil cuttings, purged groundwater, and decontamination fluids were stored on the Property in labeled 55-gallon drums.

Following is a summary of the investigation activities and related findings associated with each potential source/medium identified in the October investigation approach memorandum (MFA, 2013). Analytical results for soil and groundwater are presented in Tables 1 and 2, respectively, and logs associated with the 12 borings are provided in Attachment A. Analytical laboratory reports are provided in Attachment B. A data validation memorandum describing the laboratory data quality is included in Attachment C. The data are considered acceptable for their intended use, with the appropriate data qualifiers assigned.

Former heating oil underground storage tank

Two soil borings (GP11 and GP12) were advanced in the location of the former heating oil UST (see attached Figure 1) to obtain confirmation soil samples to satisfy tank decommissioning requirements.

Soil samples collected at 13 and 7 feet bgs from borings GP11 and GP12, respectively, were analyzed for petroleum hydrocarbon identification. Soil screening indicated the presence of diesel and lube oil; therefore, the laboratory was directed to conduct followup analyses for diesel, lube oil, BTEX, PAHs, and PCBs, following MTCA Table 830-1 analyses for petroleum releases. In addition, the deeper soil samples collected from 17.5 and 11 feet bgs from borings GP11 and GP12, respectively, were analyzed for diesel, lube oil, BTEX, PAH, and PCBs to evaluate vertical extent of contamination.

Petroleum hydrocarbons and their constituents, specifically benzene and PAHs, were detected in samples collected from this area (see Table 1). The only MTCA Method A CUL exceedances were exhibited in boring GP11 for benzene (0.064 milligram per kilogram [mg/kg] at 13 feet bgs), and in boring GP12 for cPAH toxicity equivalence (TEQ) (0.85 mg/kg at 7 feet bgs). Deeper samples collected at these locations indicated no MTCA Method A CUL exceedances. PCBs were not detected in soil samples from these locations. The former heating oil UST did impact the Property, but the impacts are shallow and do not extend to groundwater, and they likely are limited to the immediate vicinity of the former heating oil UST.

Oil/water separators

One soil boring was advanced adjacent to each of the two OWSs (GP13 and GP14; see attached Figure 1) to confirm that the OWSs have not adversely impacted subsurface soil.

Soil samples collected at 10 and 7.5 feet bgs from borings GP13 and GP14, respectively, were analyzed for petroleum hydrocarbon identification. Additional soil samples collected at 13

and 15 feet bgs from GP13 and 11.5 feet bgs from GP14 were submitted to the laboratory but were held, pending results of the shallower samples. Soil screening results indicated the presence of diesel and lube oil in the shallow samples; therefore, the laboratory was directed to conduct followup analyses for diesel, lube oil, BTEX, PAHs, and PCBs. In addition, the deeper soil samples collected from 13 and 11.5 feet bgs from borings GP13 and GP14, respectively, were analyzed for diesel, lube oil, BTEX, and PAHs.

Diesel, lube oil, and PAHs were detected in soil samples from borings GP13 and GP14; however, none were found at concentrations exceeding the MTCA Method A CULs (see Table 1). BTEX and PCBs were not detected in these soil samples. The results indicate that the OWSs have not adversely impacted the Property.

Former fueling area and associated USTs

Eight soil borings were advanced in the vicinity of the former fueling area and associated USTs (see attached Figure 1) to define the lateral extent of cPAH- and lead-impacted soil in this area. MTCA Method A CUL exceedances were previously identified for cPAHs at GP3, GP4, GP5, and GP8 (at 11, 10, 11 and 9 feet bgs, respectively) and in USEPA boring LF14 at 0 to 4 and 8 to 12 feet bgs. In addition, a MTCA Method A CUL exceedance for lead, at the approximate location of GP19, is based on the UST decommissioning report. The sample depth for the lead exceedance is unknown, but is assumed to be near the base of the UST decommissioning excavation.

Soil samples associated with defining the lateral extent of cPAH contamination were collected from borings GP15 through GP18, with analyses following a tiered approach focusing first on samples collected from borings nearest the former fueling area (GP16 and GP17), with samples collected from outer borings (GP15 and GP18) held for later analyses only if the associated interior boring sample indicated a CUL exceedance. As a result, samples were collected at 14 and 12.5 feet bgs from borings GP16 and GP17, respectively, and analyzed for cPAHs.

Soil samples associated with assessing the extent of lead impacts were collected from borings GP17 and GP19 through GP22. Soil samples collected at 16 feet bgs from each of the five borings were analyzed for lead by USEPA 6010B.

Analytical results from borings GP16 and GP17 indicated no detections of cPAHs (see Table 1). Lead was detected only in soil analyzed at depth from GP19, GP20, and GP22 at concentrations ranging from 2.24 mg/kg to 10.1 mg/kg, but all at concentrations below the MTCA Method A CUL of 250 mg/kg (see Table 1). These results bound the lateral extent of cPAH and lead soil exceedances (see Figure 2).

Existing cover/cap soil

Composite soil samples were collected from five of the soil borings (GP11, GP14, GP15, GP17, and GP20) to better characterize potential contamination in the uppermost 6 feet of soil in the non-landfill portion of the Property. Each sample was composited from six discrete samples collected at 1-foot intervals from each of the above identified borings. Each composite sample was analyzed for petroleum hydrocarbon identification, arsenic, lead, and cPAHs.

Because diesel and/or lube oil were identified through the hydrocarbon scan, followup analyses were conducted to quantify diesel-range and oil-range petroleum hydrocarbons, cPAHs, BTEX, and/or PCBs, as appropriate.

The compounds analyzed were below CULs, except for arsenic at GP14 (30.4 mg/kg) and GP15 (68.4 mg/kg) and lead at GP-15 (313 mg/kg; see Table 1).

Groundwater

Previous sampling results indicate that groundwater impacts originating beneath the landfill are migrating under the non-landfill portion of the Property. The objective of the November 2013 sampling for petroleum hydrocarbons was to evaluate if the non-landfill portion of the Property was potentially impacting groundwater. Groundwater samples were analyzed for petroleum hydrocarbons. Groundwater samples collected from boring GP18 and piezometer PZ1, both of which are located outside the boundary of the delineated landfill, did not indicate the presence of petroleum hydrocarbons. Groundwater samples collected from piezometers PZ2 and PZ3, both of which are located within the boundary of the delineated landfill, indicate the presence of diesel- and lube-oil-range petroleum hydrocarbons (see Table 2).

Analytical results of groundwater collected from piezometers PZ2 and PZ3 detected diesel at 1,950 micrograms per liter (μg/L) and 4,110 μg/L, respectively, and lube oil at 1,740 μg/L and 3,490 μg/L, respectively (see Table 2). These concentrations are above the MTCA Method A CUL of 500 μg/L. The results indicate that impacts in groundwater originate from the landfill and not from soil impacts on the non-landfill portion of the Property.

INVESTIGATION CONCLUSIONS

The results of the November field investigation allow for the following conclusions:

Former heating oil underground storage tank

Analytical results of soil samples collected from borings GP11 and GP12 did indicate MTCA Method A CUL exceedances for benzene in GP11 (13 feet bgs) and cPAH TEQ in GP12 (7 feet bgs); however, deeper samples collected from those borings did not indicate CUL exceedances. Therefore, while the former heating oil UST did impact the Property, the

impacts are shallow and do not extend to groundwater, and they likely are limited to the immediate vicinity and footprint of the former UST. As a result, it is unlikely that the contamination is degrading the underlying groundwater.

Oil/water separators

Analytical results did not indicate any CUL exceedances; therefore, the OWSs have not impacted the Property.

Former fueling area and associated USTs

The analytical results of soil samples collected during the November 2013 investigation, when combined with the analytical results of prior investigations, allow for the full delineation of the lateral extent of cPAH contamination associated with the former fueling area/USTs, as well as confirmation that lead contamination is limited to the immediate vicinity of the former UST. Figure 2 presents the inferred lateral extent of cPAH contamination associated with this area.

Existing soil cap/cover

Two of the five composite soil samples collected between 0 and 6 feet bgs indicated the presence of arsenic and lead in excess of MTCA Method A CULs. As a result, the 0-to-6-foot-bgs layer of soil cannot be considered alone as a cap for deeper residual contamination, resulting in the need for institutional controls associated with redevelopment to be implemented at the Property.

Groundwater

Analyses of groundwater samples collected from piezometer PZ1 and boring GP18, both of which are located outside the landfill boundaries, did not indicate the presence of petroleum hydrocarbons, while samples collected from piezometers PZ2 and PZ3, located within the landfill boundaries, did indicate the presence of diesel and lube oil in excess of the MTCA Method A CUL. The results indicate that impacts in groundwater originate from the landfill and not from soil impacts on the non-landfill portion of the Property.

Next steps

Soil impacts have been defined on the non-landfill portion of the Property. The cleanup implementation strategies described in the focused characterization letter (MFA, 2011b) indicate that splitting the parcel based on the landfill boundary and mitigating the chemicals of concern in the non-landfill portion of the Property is a valid approach. Engineering and institutional controls and soil management should be considered during any redevelopment strategy implementation.

cPAHs have been laterally and vertically defined in the vicinity of the former fueling UST area. Soil impacts in the vicinity of the former heating oil UST are minimal and localized.

Groundwater is impacted on the non-landfill portion of the Property through migration from the landfill portion of the Property. Metals impacts exist in the uppermost 6 feet of the existing soil cap material at the Property. The most likely remedial options for the non-landfill parcel would be an environmental covenant restricting groundwater use; requiring vapor mitigation for buildings; and implementation of a soil management plan for impacted soil, including a cap.

Sincerely,

Maul Foster & Alongi, Inc.

Justin L. Clary, PE
Principal Engineer

Kyle Roslund
Project Geologist

Attachments: Limitations
References
Tables
Figures
A—Soil boring logs
B—Laboratory data report
C—Data validation memorandum

cc: Mary Monahan, Washington State Department of Ecology
Matthew Durkee, Washington State Department of Ecology

LIMITATIONS

The services undertaken in completing this report were performed consistent with generally accepted professional consulting principles and practices. No other warranty, express or implied, is made. These services were performed consistent with our agreement with our client. This report is solely for the use and information of our client unless otherwise noted. Any reliance on this report by a third party is at such party's sole risk.

Opinions and recommendations contained in this report apply to conditions existing when services were performed and are intended only for the client, purposes, locations, time frames, and project parameters indicated. We are not responsible for the impacts of any changes in environmental standards, practices, or regulations subsequent to performance of services. We do not warrant the accuracy of information supplied by others, or the use of segregated portions of this report.

The purpose of an environmental assessment is to reasonably evaluate the potential for or actual impact of past practices on a given Property area. In performing an environmental assessment, it is understood that a balance must be struck between a reasonable inquiry into the environmental issues and an exhaustive analysis of each conceivable issue of potential concern. The following paragraphs discuss the assumptions and parameters under which such an opinion is rendered.

No investigation is thorough enough to exclude the presence of hazardous materials at a given Property. If hazardous conditions have not been identified during the assessment, such a finding should not, therefore, be construed as a guarantee of the absence of such materials on the Property.

Environmental conditions that cannot be identified by visual observation may exist at the Property. Where subsurface work was performed, our professional opinions are based in part on interpretation of data from discrete sampling locations that may not represent actual conditions at unsampled locations.

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

REFERENCES

B&A. 1981. Soil investigation. Prepared for Chelan County Public Utility District. Budinger & Associates, Spokane, Washington. December 2.

E&E. 2000. Wenatchee landfill targeted brownfield assessment report. TDD: 98-11-0007. Contract: 68-W-0008. Prepared for U.S. Environmental Protection Agency. Ecology and Environment, Inc. June.

Ecology. 1995. Guidance on sampling and analysis methods. Publication No. 94-49. Washington State Department of Ecology Toxics Cleanup Program. January.

MFA. 2011a. Phase I environmental site assessment. Appendix B, subsurface evaluation. Prepared for City of Wenatchee Department of Public Works. Maul Foster & Alongi, Inc. August 31.

MFA. 2011b. Focused site characterization—25 North Worthen Street property. Prepared for City of Wenatchee Department of Public Works. Maul Foster & Alongi, Inc. December 9.

MFA. 2013. City of Wenatchee Public Works data gaps evaluation—25 North Worthen Street property. Prepared for City of Wenatchee Department of Public Works. Maul Foster & Alongi, Inc. October 3.

TABLES

Table 1
Soil Analytical Results
25 North Worthen Street Property
Wenatchee, Washington

Location:		GP11			GP12		GP13		GP14		
Sample Name:		GP11-COMP	GP11-S-13	GP11-S-17.5	GP12-S-7	GP12-S-11	GP13-S-10	GP13-S-13	GP14-COMP	GP14-S-7.5	GP14-S-11.5
Collection Date:		11/05/2013	11/05/2013	11/05/2013	11/05/2013	11/05/2013	11/05/2013	11/05/2013	11/05/2013	11/05/2013	11/05/2013
Collection Depth (ft bgs):			13	17.5	7	11	10	13		7.5	11.5
	MTCA A										
Total Metals (mg/kg)											
Arsenic	20	10.2	--	--	--	--	--	--	**30.3**	--	--
Lead	250	38.1	--	--	--	--	--	--	190	--	--
Volatile Organic Compounds (mg/kg)											
Benzene	0.03	--	**0.064**	0.025 UJ	0.029	0.022 UJ	0.018 U	0.021 UJ	0.0279 U	0.019 U	0.022 UJ
Ethylbenzene	6	--	0.17 U	0.25 UJ	0.2 U	0.22 UJ	0.18 U	0.21 UJ	0.112 U	0.19 U	0.22 UJ
m,p-Xylene	9	--	0.51 U	0.75 UJ	0.59 U	0.66 UJ	0.53 U	0.64 UJ	0.335 U	0.57 U	0.65 UJ
Toluene	7	--	0.17 U	0.25 UJ	0.2 U	0.22 UJ	0.18 U	0.21 UJ	0.112 UJ	0.19 U	0.22 UJ
Polychlorinated Biphenyls (mg/kg)											
Aroclor 1016	NV	0.000372 U	0.000379 U	--	0.000387 U	--	0.000393 U	--	--	0.00039 U	--
Aroclor 1221	NV	0.000372 U	0.000379 U	--	0.000387 U	--	0.000393 U	--	--	0.00039 U	--
Aroclor 1232	NV	0.000372 U	0.000379 U	--	0.000387 U	--	0.000393 U	--	--	0.00039 U	--
Aroclor 1242	NV	0.000372 U	0.000379 U	--	0.000387 U	--	0.000393 U	--	--	0.00039 U	--
Aroclor 1248	NV	0.000372 U	0.000379 U	--	0.000387 U	--	0.000393 U	--	--	0.00039 U	--
Aroclor 1254	NV	0.000372 U	0.000379 U	--	0.000387 U	--	0.000393 U	--	--	0.00039 U	--
Aroclor 1260	NV	0.000372 U	0.000379 U	--	0.000387 U	--	0.000393 U	--	--	0.00039 U	--
Aroclor 1262	NV	0.000372 U	0.000379 U	--	0.000387 U	--	0.000393 U	--	--	0.00039 U	--
Aroclor 1268	NV	0.000372 U	0.000379 U	--	0.000387 U	--	0.000393 U	--	--	0.00039 U	--
Total PCBs	1	ND	ND	--	ND	--	ND	--	--	ND	--
cPAHs (mg/kg)											
Benzo(a)anthracene	NV	0.00744 U	0.00759 U	--	0.507	0.00758 U	0.0109	--	0.00745 U	0.00781 U	--
Benzo(a)pyrene	0.1	0.00744 U	0.00759 U	--	**0.668**	0.00895	0.0141	--	0.00883	0.00781 U	--
Benzo(b)fluoranthene	NV	0.00988	0.00759 U	--	0.611	0.00919	0.0158	--	0.00891	0.00781 U	--
Benzo(k)fluoranthene	NV	0.00744 U	0.00759 U	--	0.164	0.00758 U	0.00788 U	--	0.00745 U	0.00781 U	--
Chrysene	NV	0.0115	0.00874	--	0.584	0.0104	0.0162	--	0.00745 U	0.00781 U	--
Dibenzo(a,h)anthracene	NV	0.00744 U	0.00759 U	--	0.101	0.00758 U	0.00788 U	--	0.00745 U	0.00781 U	--
Indeno(1,2,3-cd)pyrene	NV	0.00744 U	0.00759 U	--	0.372	0.00758 U	0.00788 U	--	0.00745 U	0.00781 U	--
cPAH TEQ	0.1	0.0063	0.0058	--	**0.85**	0.011	0.018	--	0.011	ND	--
ncPAHs (mg/kg)											
1-Methylnaphthalene	NV	0.0188	0.00759 U	--	0.0212	0.0138	0.155	--	0.00989	0.0274	--
2-Methylnaphthalene	NV	0.0174	0.00759 U	--	0.0159	0.0157	0.216	--	0.00921	0.0285	--
Acenaphthene	NV	0.00744 U	0.00759 U	--	0.024	0.0112	0.0161	--	0.00745 U	0.00781 U	--
Acenaphthylene	NV	0.00744 U	0.00759 U	--	0.151	0.00758 U	0.00788 U	--	0.00745 U	0.00781 U	--
Anthracene	NV	0.00744 U	0.00759 U	--	0.235	0.00758 U	0.0121	--	0.00745 U	0.00781 U	--
Benzo(ghi)perylene	NV	0.00919	0.00906	--	0.504	0.0122	0.0157	--	0.0206	0.00781 U	--
Fluoranthene	NV	0.0107	0.0101	--	0.86	0.0126	0.027	--	0.0108	0.00872	--

Table 1
Soil Analytical Results
25 North Worthen Street Property
Wenatchee, Washington

Location:		GP11			GP12		GP13		GP14		
Sample Name:		GP11-COMP	GP11-S-13	GP11-S-17.5	GP12-S-7	GP12-S-11	GP13-S-10	GP13-S-13	GP14-COMP	GP14-S-7.5	GP14-S-11.5
Collection Date:		11/05/2013	11/05/2013	11/05/2013	11/05/2013	11/05/2013	11/05/2013	11/05/2013	11/05/2013	11/05/2013	11/05/2013
Collection Depth (ft bgs):			13	17.5	7	11	10	13		7.5	11.5
	MTCA A										
Fluorene	NV	0.01	0.00759 U	--	0.0456	0.017	0.024	--	0.00745 U	0.00937	--
Naphthalene	5	0.0101	0.00759 U	--	0.0132	0.00758 U	0.0532	--	0.00906	0.0148	--
Phenanthrene	NV	0.0301	0.0192	--	0.298	0.0411	0.0646	--	0.0133	0.0166	--
Pyrene	NV	0.0285	0.0183	--	1.29	0.0343	0.0466	--	0.0208	0.0152	--
NWTPH-HCID											
Diesel	NV	ND	DETECT	--	DETECT	--	DETECT	--	DETECT	DETECT	--
Gasoline	NV	ND	ND	--	ND	--	ND	--	ND	ND	--
Kerosene	NV	ND	ND	--	ND	--	ND	--	ND	ND	--
Lube Oil	NV	DETECT	DETECT	--	DETECT	--	DETECT	--	DETECT	DETECT	--
Mineral Spirits	NV	ND	ND	--	ND	--	ND	--	ND	ND	--
NWTPH-Dx (mg/kg)											
Diesel	2000	46.5 J	137 J	87.1 J	162 J	463 J	114 J	149 J	51.9 J	116 J	53.1 J
Lube Oil	2000	137	277	254	342	567 J	192	276	216	211	132
TPH	2000	183.5 J	414 J	341.1 J	504 J	1030 J	306 J	425 J	267.9 J	327 J	185.1 J

Table 1
Soil Analytical Results
25 North Worthen Street Property
Wenatchee, Washington

Location:		GP15		GP16	GP17			GP19	GP20		GP21	GP22
Sample Name:		GP15-COMP	GP15-S-14	GP16-S-14	GP17-COMP	GP17-S-12.5	GP17-S-16	GP19-S-16	GP20-COMP	GP20-S-16	GP21-S-16	GP22-S-16
Collection Date:		11/05/2013	11/05/2013	11/05/2013	11/06/2013	11/06/2013	11/06/2013	11/05/2013	11/06/2013	11/06/2013	11/05/2013	11/06/2013
Collection Depth (ft bgs):			14	14		12.5	16	16		16	16	16
	MTCA A											
Total Metals (mg/kg)												
Arsenic	20	**68.4**	--	--	2.08 U	--	--	--	16	--	--	--
Lead	250	**313**	--	--	23.2	--	2.14 U	2.24	68	3.21	2 U	10.1
Volatile Organic Compounds (mg/kg)												
Benzene	0.03	--	--	--	--	--	--	--	--	--	--	--
Ethylbenzene	6	--	--	--	--	--	--	--	--	--	--	--
m,p-Xylene	9	--	--	--	--	--	--	--	--	--	--	--
Toluene	7	--	--	--	--	--	--	--	--	--	--	--
Polychlorinated Biphenyls (mg/kg)												
Aroclor 1016	NV	0.00037 U	--	--	0.000346 U	--	--	--	--	--	--	--
Aroclor 1221	NV	0.00037 U	--	--	0.000346 U	--	--	--	--	--	--	--
Aroclor 1232	NV	0.00037 U	--	--	0.000346 U	--	--	--	--	--	--	--
Aroclor 1242	NV	0.00037 U	--	--	0.000346 U	--	--	--	--	--	--	--
Aroclor 1248	NV	0.00037 U	--	--	0.000346 U	--	--	--	--	--	--	--
Aroclor 1254	NV	0.00037 U	--	--	0.000346 U	--	--	--	--	--	--	--
Aroclor 1260	NV	0.00037 U	--	--	0.000346 U	--	--	--	--	--	--	--
Aroclor 1262	NV	0.00037 U	--	--	0.000346 U	--	--	--	--	--	--	--
Aroclor 1268	NV	0.00037 U	--	--	0.000346 U	--	--	--	--	--	--	--
Total PCBs	1	ND	--	--	ND	--	--	--	--	--	--	--
cPAHs (mg/kg)												
Benzo(a)anthracene	NV	0.00741 U	--	0.00719 U	0.0451	0.00767 U	--	--	0.00729 U	--	--	--
Benzo(a)pyrene	0.1	0.00741 U	--	0.00719 U	0.062	0.00767 U	--	--	0.00967	--	--	--
Benzo(b)fluoranthene	NV	0.00741 U	--	0.00719 U	0.0707	0.00767 U	--	--	0.0106	--	--	--
Benzo(k)fluoranthene	NV	0.00741 U	--	0.00719 U	0.0215	0.00767 U	--	--	0.00729 U	--	--	--
Chrysene	NV	0.00741 U	--	0.00719 U	0.0587	0.00767 U	--	--	0.00729 U	--	--	--
Dibenzo(a,h)anthracene	NV	0.00741 U	--	0.00719 U	0.0161	0.00767 U	--	--	0.00729 U	--	--	--
Indeno(1,2,3-cd)pyrene	NV	0.00741 U	--	0.00719 U	0.0415	0.00767 U	--	--	0.00729 U	--	--	--
cPAH TEQ	0.1	ND	--	ND	0.082	ND	--	--	0.012	--	--	--
ncPAHs (mg/kg)												
1-Methylnaphthalene	NV	0.00741 U	--	0.00719 U	0.00694 U	0.00767 U	--	--	0.00729 U	--	--	--
2-Methylnaphthalene	NV	0.00859	--	0.00719 U	0.00915	0.00767 U	--	--	0.00729 U	--	--	--
Acenaphthene	NV	0.00741 U	--	0.00719 U	0.00694 U	0.00767 U	--	--	0.00729 U	--	--	--
Acenaphthylene	NV	0.00741 U	--	0.00719 U	0.0169	0.00767 U	--	--	0.00729 U	--	--	--
Anthracene	NV	0.00741 U	--	0.00719 U	0.0222	0.00767 U	--	--	0.00729 U	--	--	--
Benzo(ghi)perylene	NV	0.00741 U	--	0.00731	0.061	0.00767 U	--	--	0.0139	--	--	--
Fluoranthene	NV	0.00988	--	0.00719 U	0.0937	0.00767 U	--	--	0.00729 U	--	--	--

Table 1
Soil Analytical Results
25 North Worthen Street Property
Wenatchee, Washington

Location:		GP15		GP16	GP17			GP19	GP20		GP21	GP22
Sample Name:		GP15-COMP	GP15-S-14	GP16-S-14	GP17-COMP	GP17-S-12.5	GP17-S-16	GP19-S-16	GP20-COMP	GP20-S-16	GP21-S-16	GP22-S-16
Collection Date:		11/05/2013	11/05/2013	11/05/2013	11/06/2013	11/06/2013	11/06/2013	11/05/2013	11/06/2013	11/06/2013	11/05/2013	11/06/2013
Collection Depth (ft bgs):			14	14		12.5	16	16		16	16	16
	MTCA A											
Fluorene	NV	0.00741 U	--	0.00719 U	0.00797	0.00767 U	--	--	0.00729 U	--	--	--
Naphthalene	5	0.0232	--	0.00719 U	0.0127	0.00767 U	--	--	0.00729 U	--	--	--
Phenanthrene	NV	0.0205	--	0.00719 U	0.0873	0.00767 U	--	--	0.0108	--	--	--
Pyrene	NV	0.0122	--	0.00719 U	0.142	0.00767 U	--	--	0.0136	--	--	--
NWTPH-HCID												
Diesel	NV	ND	--	--	ND	--	--	--	DETECT	--	--	--
Gasoline	NV	ND	--	--	ND	--	--	--	ND	--	--	--
Kerosene	NV	ND	--	--	ND	--	--	--	ND	--	--	--
Lube Oil	NV	ND	--	--	ND	--	--	--	DETECT	--	--	--
Mineral Spirits	NV	ND	--	--	ND	--	--	--	ND	--	--	--
NWTPH-Dx (mg/kg)												
Diesel	2000	--	16.6 U	--	--	17.2 U	--	--	27.7 J	--	--	--
Lube Oil	2000	--	55.3 U	--	--	57.5 U	--	--	127 J	--	--	--
TPH	2000	--	ND	--	--	ND	--	--	154.7 J	--	--	--

Table 1
Soil Analytical Results
25 North Worthen Street Property
Wenatchee, Washington

NOTES:
Detections that exceed MTCA screening level values are in **bold** font. Non-detect results are not evaluated against MTCA screening level values.
-- = not analyzed.
cPAH = carcinogenic polycyclic aromatic hydrocarbon.
cPAH TEQ = cPAH toxic equivalency quotient.
ft bgs = feet below ground surface.
J = Result is an estimated value.
mg/kg = milligrams per kilogram.
MTCA = Model Toxics Control Act.
MTCA A = MTCA Method A unrestricted land use screening values.
ncPAH = noncarcinogenic polycyclic aromatic hydrocarbon.
ND = not detected.
NV = no value.
NWTPH Dx = Northwest Total Petroleum Hydrocarbons—diesel.
NWTPH-HCID = Northwest Total Petroleum Hydrocarbon Identification.
Total PCBs = sum of polychlorinated biphenyls Aroclors. Non-detect results are not summed.
TPH = Total petroleum hydrocarbons calculated using both diesel and lube oil range.
U = Result is non-detect at or above method reporting limit.
UJ = Result is non-detect at or above method reporting limit. Reported value is estimated.

Table 2
Groundwater Analytical Results
25 North Worthen Street Property
Wenatchee, Washington

	Location:	GP18	PZ1	PZ2	PZ3
	Sample Name:	GP18-W	PZ1-W	PZ2-W	PZ3-W
	Collection Date:	11/06/2013	11/05/2013	11/07/2013	11/06/2013
	MTCA A				
NWTPH-HCID					
Diesel	NV	ND	ND	DETECT	DETECT
Gasoline	NV	ND	ND	ND	ND
Kerosene	NV	ND	ND	ND	ND
Lube Oil	NV	ND	ND	DETECT	DETECT
Mineral Spirits	NV	ND	ND	ND	ND
NWTPH-Dx (µg/L)					
Diesel	500	--	--	**4110** J	**1950** J
Lube Oil	500	--	--	**3490** J	**1740** J
TPH	500	--	--	**7600** J	**3690** J

NOTES:

Detections that exceed MTCA screening level values are in **bold** font.

-- = not analyzed.

J = Result is an estimated value.

MTCA = Model Toxics Control Act.

MTCA A = MTCA Method A unrestricted land use screening values.

ND = the result is non-detect.

NWTPH-Dx = total petroleum hydrocarbons—diesel and lube oil.

NWTPH-HCID = Hydrocarbon Identification.

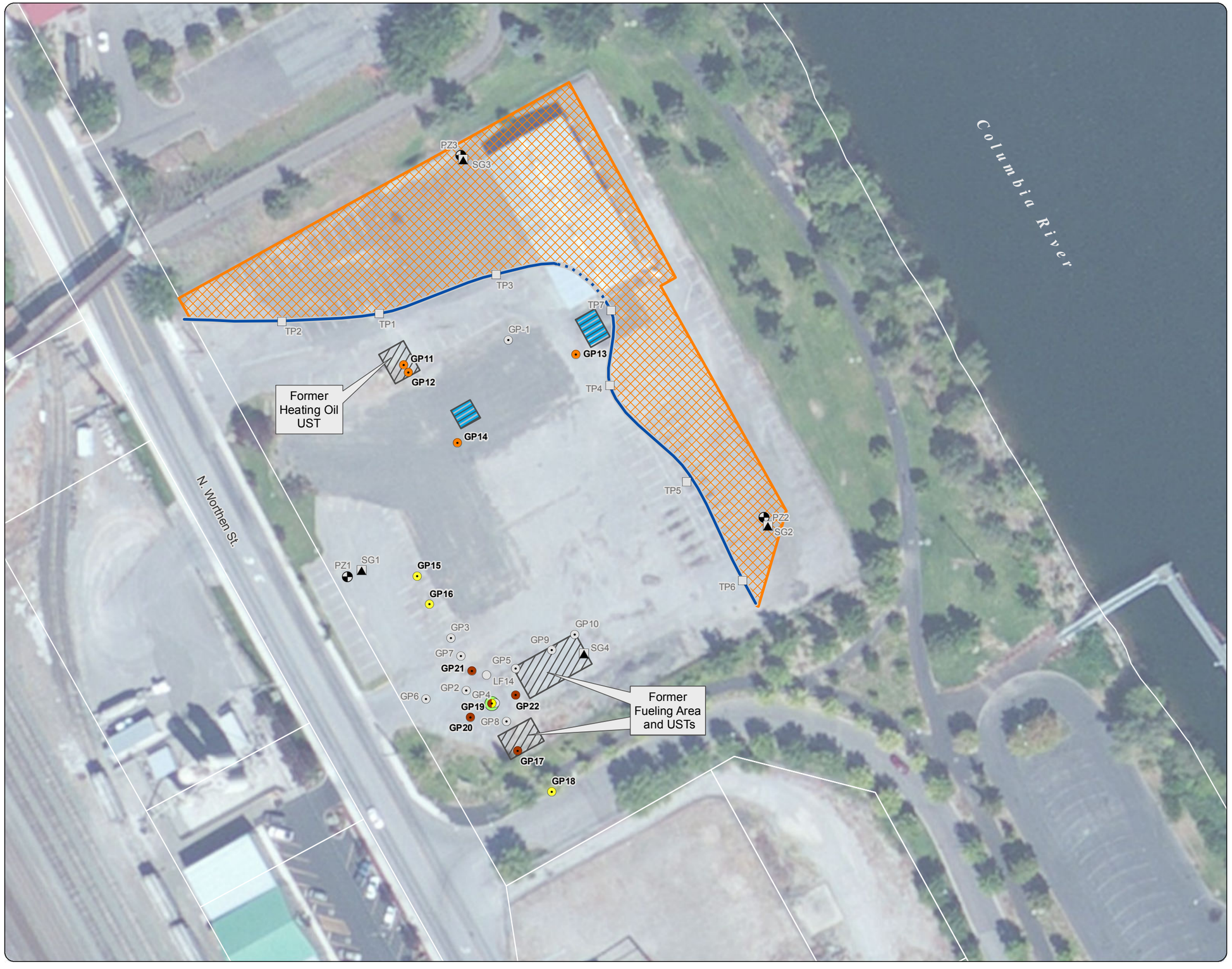
µg/L = micrograms per liter (parts per billion).

TPH = Total petroleum hydrocarbons calculated using both diesel and lube oil range.

FIGURES

Figure 1
Site Features and Investigation Locations

City of Wenatchee
Wenatchee, Washington



Legend

- 2000 Sample Location

2011 Sample Locations

- Geoprobe Boring
- Test Pit
- Soil Gas Sample
- Piezometer

2013 Investigation Locations

- Geoprobe (PAHs)
- Geoprobe (HCID)
- Geoprobe (Lead)
- Groundwater Sample (TPH)
- Landfill Boundary (dashed where approximate)
- Measured Landfill Area
- Former USTs
- Oil Water Separator
- Chelan County Taxlots

Notes:
1. HCID = Hydrocarbon identification
2. PAHs = Polycyclic aromatic hydrocarbons
3. TPH = Total petroleum hydrocarbons
4. USTs = Underground storage tanks

0 35 70
Feet

Source: Aerial photograph obtained from Esri ArcGIS Online; taxlots obtained from Chelan County; 2000 sample location from targeted brownfield assessment conducted by Ecology & Environment, Inc. and is approximate; 2011 and 2013 sample locations surveyed by Maul Foster & Alongi, Inc. using GeoXH 2005.

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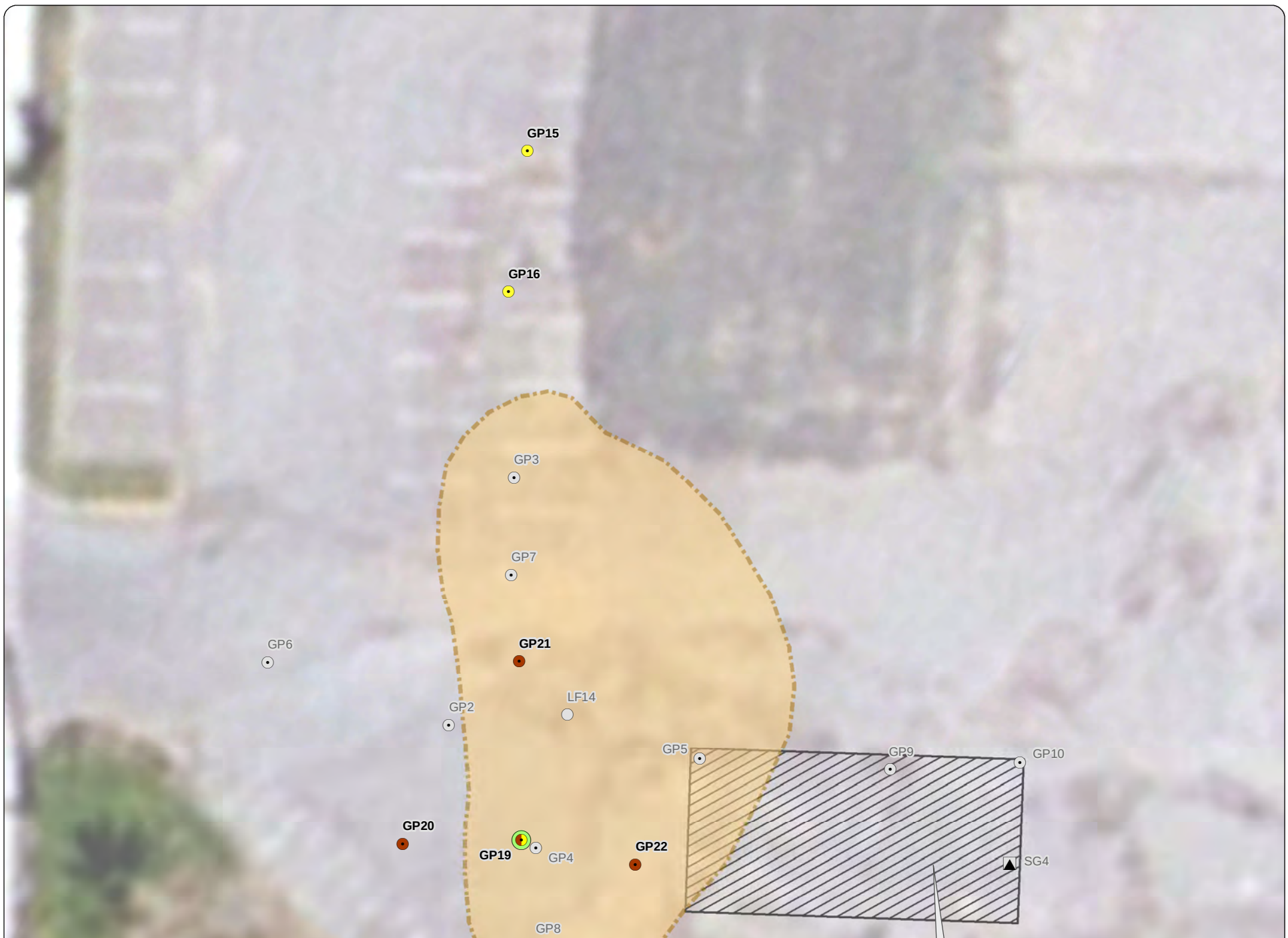
Print Date: 2/9/2014
Approved By: kolslund
Produced By: apadilla
Project: 0380.02.04-03



Source: Aerial photograph obtained from Esri ArcGIS Online; 2000 sample location from targeted brownfield assessment conducted by Ecology & Environment, Inc. and is approximate; 2011 and 2013 sample locations surveyed by Maul Foster & Alongi, Inc. using GeoXH 2005.

Notes:
1. PAHs = Polycyclic aromatic hydrocarbons
2. cPAH = Carcinogenic polycyclic aromatic hydrocarbons
3. TPH = Total petroleum hydrocarbons
4. USTs = Underground storage tanks

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Legend

- Former UST
- Approximate Lateral Extent of cPAH Impacted Soil

Sample and Investigation Locations

- 2000 Sample Location

2011 SAMPLE LOCATION
- Geoprobe Boring
- Soil Gas Sample

2013 INVESTIGATION LOCATIONS
- Geoprobe (PAHs/Lead)
- Geoprobe (PAHs)
- Geoprobe (Lead)
- Groundwater Sample (TPH)

Figure 2
Approximate Lateral Extent of cPAH Impacted Soil

City of Wenatchee
Wenatchee, Washington

0 10 20
Feet

ATTACHMENT A

SOIL BORING LOGS

Maul Foster & Alongi, Inc.

Geologic Borehole Log/Well Construction

Project Number	Well Number	Sheet
0380.02.04	**GP11**	**1 of 1**

Project Name	***City of Wenatchee***	*TOC Elevation (feet)*	
Project Location	***25 North Worthen Street, Wenatchee, WA***	*Surface Elevation (feet)*	
Start/End Date	***11/5/13 to 11/5/13***	*Northing*	
Driller/Equipment	***Pacific Soil and Water (Marcus)/Geoprobe 6600/Truck Mounted***	*Easting*	
Geologist/Engineer	***Andrew Vidourek***	*Hole Depth*	***20.0-feet***
Sample Method	***Direct Push***	*Outer Hole Diam*	***2.25-inch***

Depth (feet, BGS)	Well Details	Sample Data: Interval	Percent Recovery	Collection Method	Number	Name (Type)	Blows/6"	Lithologic Column	Soil Description
1			**100%**	**GP**					*0 to 6.0 feet: GRAVELLY SILT (ML); brown with reddish-brown mottling; 80% fines; 20% gravel, fine to coarse, sub-angular to sub-rounded; trace sand; dry.*
2									
3						**GP11-Comp**			*@ 3.0 feet: Greenish-gray.*
4									
5			**100%**	**GP**					
6									*6.0 to 13.0 feet: SILT with GRAVEL (ML); very dark gray; 90% fines, low plasticity; 10% gravel, fine to coarse, subangular to subrounded; trace sand; moist.*
7									
8									
9									
10			**100%**	**GP**					
11									
12									*@ 12.0 feet: Medium wood debris.*
13						**GP11-S-13**			*13.0 to 19.0 feet: SILT (ML); dark gray; 100% fines, low plasticity; trace gravel, fine to coarse, subangular to subrounded; moist.*
14									
15			**100%**	**GP**					
16									
17									
18						**GP11-S-17.5**			
19									
20									*19.0 to 20.0 feet: GRAVEL (GP); white and green; 100% gravel, fine, subangular to subrounded; dry.* *Total boring depth = 20.0 feet below ground surface.*

NOTES: *(1) Borehole was backfilled with 3/4-inch bentonite chips hydrated with potable water. (2) Soil sample collected 0.5 feet above and below depth provided in sample name. (3) GP = Geoprobe. (4) Composite sample collected from 0 to 6.0 feet below ground surface.*

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Maul Foster & Alongi, Inc.

Geologic Borehole Log/Well Construction

Project Number	Well Number	Sheet
0380.02.04	**GP12**	**1 of 1**

Project Name	**City of Wenatchee**	TOC Elevation (feet)	
Project Location	**25 North Worthen Street, Wenatchee, WA**	Surface Elevation (feet)	
Start/End Date	**11/5/13 to 11/5/13**	Northing	
Driller/Equipment	**Pacific Soil and Water (Marcus)/Geoprobe 6600/Truck Mounted**	Easting	
Geologist/Engineer	**Andrew Vidourek**	Hole Depth	**15.0-feet**
Sample Method	**Direct Push**	Outer Hole Diam	**2.25-inch**

Depth (feet, BGS)	Well Details	Sample Data: Interval	Percent Recovery	Collection Method	Number	Name (Type)	Blows/6"	Lithologic Column	Soil Description
1			**100%**	**GP**					*0 to 5.0 feet: GRAVELLY SILT (ML); brown; 80% fines, nonplastic; 20% gravel, medium to coarse, subangular to subrounded; trace sand; dry.*
2									
3									
4									
5			**100%**	**GP**					*5.0 to 13.5 feet: SILT (ML); very dark gray with brown and red mottling; 95% fines, low plasticity; 5% gravel, fine to medium, subangular to subrounded; trace mica, black staining; moist.*
6									
7						**GP12-S-7**			
8									
9									
10			**100%**	**GP**					
11						**GP12-S-11**			*@ 11.0 feet: slight organic-like odor.*
12									
13									
14						**GP12-S-13.5**			*13.5 to 15.0 feet: SILT (ML); very dark gray; 100% fines, low plasticity; trace gravel, fine to medium; moist.*
15									

Total boring depth = 15.0 feet below ground surface.

NOTES: *(1) Borehole was backfilled with 3/4-inch bentonite chips hydrated with potable water. (2) Soil sample collected 0.5 feet above and below depth provided in sample name. (3) GP = Geoprobe.*

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Maul Foster & Alongi, Inc.

Geologic Borehole Log/Well Construction

Project Number	Well Number	Sheet
0380.02.04	**GP13**	**1 of 1**

Project Name	**City of Wenatchee**	TOC Elevation (feet)	
Project Location	**25 North Worthen Street, Wenatchee, WA**	Surface Elevation (feet)	
Start/End Date	**11/5/13 to 11/5/13**	Northing	
Driller/Equipment	**Pacific Soil and Water (Marcus)/Geoprobe 6600/Truck Mounted**	Easting	
Geologist/Engineer	**Andrew Vidourek**	Hole Depth	**15.0-feet**
Sample Method	**Direct Push**	Outer Hole Diam	**2.25-inch**

Depth (feet, BGS)	Well Details	Sample Data: Interval	Percent Recovery	Collection Method	Number	Name (Type)	Blows/6"	Lithologic Column	Soil Description
0			**100%**	**GP**					*0 to 0.5 feet: GRAVEL FILL; dark reddish-brown; dry.*
1									*0.5 to 2.0 feet: SILTY GRAVEL (GM); greenish gray and white; 40% fines, low plasticity; 60% gravel, medium to coarse, subangular; dry.*
2									
3									*2.0 to 15.0 feet: SILT with GRAVEL (ML); dark greenish-gray; 90% fines, low plasticity; 10% gravel, medium; trace red and black flecks; dry.*
4									
5			**100%**	**GP**					
6									
7									
8									*@ 7.5 feet: 1-inch red lens of fine gravel.*
9									
10			**100%**	**GP**		**GP13-S-10**			
11									
12									
13						**GP13-S-13**			
14									*@ 13.5 feet: 1-inch lens, very dark brown, light chemical-like odor.*
15						**GP13-S-15**			

Total boring depth = 15.0 feet below ground surface.

NOTES: *(1) Borehole was backfilled with 3/4-inch bentonite chips hydrated with potable water. (2) Soil sample collected 0.5 feet above and below depth provided in sample name. (3) GP = Geoprobe.*

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Maul Foster & Alongi, Inc.

Geologic Borehole Log/Well Construction

Project Number	Well Number	Sheet
0380.02.04	**GP14**	**1 of 1**

Project Name	**City of Wenatchee**	TOC Elevation (feet)	
Project Location	**25 North Worthen Street, Wenatchee, WA**	Surface Elevation (feet)	
Start/End Date	**11/5/13 to 11/5/13**	Northing	
Driller/Equipment	**Pacific Soil and Water (Marcus)/Geoprobe 6600/Truck Mounted**	Easting	
Geologist/Engineer	**Andrew Vidourek**	Hole Depth	**15.0-feet**
Sample Method	**Direct Push**	Outer Hole Diam	**2.25-inch**

Depth (feet, BGS)	Well Details	Sample Data: Interval	Percent Recovery	Collection Method	Number	Name (Type)	Blows/6"	Lithologic Column	Soil Description
1			**100%**	**GP**					*0 to 1.0 feet: SILTY GRAVEL (GM); very dark brown; 40% fines, nonplastic; 60% gravel, medium, subangular to subrounded; dry.*
2									*1.0 to 7.0 feet: SILT with GRAVEL (ML); dark brown; 85% fines, low plasticity; 15% gravel, fine to coarse, subangular; moist.*
3						**GP14-Comp**			
4									*@ 4.0 feet: Greenish-gray.*
5			**100%**	**GP**					
6									
7									*7.0 to 15.0 feet: SILT (ML); Greenish-gray; 100% fines, low plasticity; trace gravel; moist.*
8						**GP14-S-7.5**			
9									
10			**100%**	**GP**					
11									
12						**GP14-S-11.5**			
13									
14									
15									

Total boring depth = 15.0 feet below ground surface.

NOTES: *(1) Borehole was backfilled with 3/4-inch bentonite chips hydrated with potable water. (2) Soil sample collected 0.5 feet above and below depth provided in sample name. (3) GP = Geoprobe. (4) Composite sample collected from 0 to 6.0 feet below ground surface.*

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Maul Foster & Alongi, Inc.

Geologic Borehole Log/Well Construction

Project Number	Well Number	Sheet
0380.02.04	**GP15**	**1 of 1**

Project Name	**City of Wenatchee**	TOC Elevation (feet)	
Project Location	**25 North Worthen Street, Wenatchee, WA**	Surface Elevation (feet)	
Start/End Date	**11/5/13 to 11/5/13**	Northing	
Driller/Equipment	**Pacific Soil and Water (Marcus)/Geoprobe 6600/Truck Mounted**	Easting	
Geologist/Engineer	**Andrew Vidourek**	Hole Depth	**15.0-feet**
Sample Method	**Direct Push**	Outer Hole Diam	**2.25-inch**

Depth (feet, BGS)	Well Details	Sample Data: Interval	Percent Recovery	Collection Method	Number	Name (Type)	Blows/6"	Lithologic Column	Soil Description
1			**100%**	**GP**		**GP15-Comp**			*0 to 5.0 feet: SILT with GRAVEL (ML); dark reddish-brown; 90% fines; 10% gravel, medium, subangular to subrounded; moist.*
2									
3									
4									
5			**60%**	**GP**					*5.0 to 7.0 feet: NO RECOVERY.*
6									
7									*7.0 to 10.0 feet: SILT with GRAVEL (ML); brown with white and red; 80% fines, nonplastic; 20% gravel, medium, subangular to subrounded; dry.*
8									
9									
10			**40%**	**GP**					*10.0 to 13.0 feet: NO RECOVERY.*
11									
12									
13									*13.0 to 15.0 feet: SILTY GRAVEL (GM); green, black and red; 30% fines; 70% gravel, medium to coarse, subangular to angular; dry.*
14						**GP15-S-14**			
15									

Total boring depth = 15.0 feet below ground surface.

NOTES: *(1) Borehole was backfilled with 3/4-inch bentonite chips hydrated with potable water. (2) Soil sample collected 0.5 feet above and below depth provided in sample name. (3) GP = Geoprobe. (4) Composite sample collected from 0 to 6.0 feet below ground surface.*

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Geologic Borehole Log/Well Construction

Project Number	Well Number	Sheet
0380.02.04	**GP16**	**1 of 1**

Project Name	**City of Wenatchee**	TOC Elevation (feet)	
Project Location	**25 North Worthen Street, Wenatchee, WA**	Surface Elevation (feet)	
Start/End Date	**11/5/13 to 11/5/13**	Northing	
Driller/Equipment	**Pacific Soil and Water (Marcus)/Geoprobe 6600/Truck Mounted**	Easting	
Geologist/Engineer	**Andrew Vidourek**	Hole Depth	**15.0-feet**
Sample Method	**Direct Push**	Outer Hole Diam	**2.25-inch**

Depth (feet, BGS)	Well Details	Sample Data: Interval	Percent Recovery	Collection Method	Number	Name (Type)	Blows/6"	Lithologic Column	Soil Description
0			**100%**	**GP**					*0 to 0.5 feet: GRAVEL FILL; black and dark gray; dry.*
1									*0.5 to 5.0 feet: GRAVELLY SILT (ML); dark reddish-brown; 80% fines, nonplastic; 20% fine to medium, subangular to angular; dry.*
2									
3									
4						**GP16-S-4**			
5									
			60%	**GP**					*5.0 to 7.0 feet: NO RECOVERY.*
6									
7									*7.0 to 8.0 feet: GRAVELLY SILT (ML); dark reddish-brown; 80% fines, nonplastic; 20% gravel, fine to medium, subangular to angular; dry.*
8									*8.0 to 10.0 feet: GRAVEL with SILT (GW-GM); green, white and brown; 15% fines, nonplastic; 85% gravel, fine to coarse, subangular to angular; trace rock flour from drilling action; dry.*
9									
10									
			60%	**GP**					*10.0 to 12.5 feet: NO RECOVERY.*
11									
12									
13									*12.5 to 15.0 feet: SILT (ML); brown; 95% fines, nonplastic; 5% sand; dry.*
14						**GP16-S-14**			
15									

Total boring depth = 15.0 feet below ground surface.

NOTES: *(1) Borehole was backfilled with 3/4-inch bentonite chips hydrated with potable water. (2) Soil sample collected 0.5 feet above and below depth provided in sample name. (3) GP = Geoprobe.*

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Maul Foster & Alongi, Inc.

Geologic Borehole Log/Well Construction

Project Number	Well Number	Sheet
0380.02.04	**GP17**	**1 of 2**

Project Name	**City of Wenatchee**	TOC Elevation (feet)	
Project Location	**25 North Worthen Street, Wenatchee, WA**	Surface Elevation (feet)	
Start/End Date	**11/6/13 to 11/6/13**	Northing	
Driller/Equipment	**Pacific Soil and Water (Marcus)/Geoprobe 6600/Truck Mounted**	Easting	
Geologist/Engineer	**Andrew Vidourek**	Hole Depth	**21.0-feet**
Sample Method	**Direct Push**	Outer Hole Diam	**2.25-inch**

Depth (feet, BGS)	Well Details	Sample Data: Interval	Percent Recovery	Collection Method	Number	Name (Type)	Blows/6"	Lithologic Column	Soil Description
1			**20%**	**GP**					*0 to 0.5 feet: GRAVELLY SILT (ML); dark brown; 70% fines, nonplastic; 30% gravel, subrounded to rounded; trace rootlets; dry.*
									0.5 to 4.5 feet: NO RECOVERY.
3						**GP17-Comp**			
5			**60%**	**GP**					*4.5 to 12.5 feet: SANDY GRAVEL (GW); dark brown; 5% fines, nonplastic; 40% sand, fine to coarse; 55% gravel, fine to medium, subrounded to rounded; dry.*
10			**100%**	**GP**					
13						**GP17-S-12.5**			*12.5 to 14.5 feet: SILT (ML); dark brown; 100% fines, nonplastic; dry.*
15			**100%**	**GP**					*14.5 to 19.0 feet: SILTY SAND (SM); strong brown; 30% fines; 70% sand, fine; dry.*
16						**GP17-S-16**			
19									*19.0 to 21.0 feet: GRAVELLY SILT (ML); dark grayish-brown; 80% fines; 20% gravel, fine to coarse, subangular to subrounded; dry.*

NOTES: *(1) Borehole was backfilled with 3/4-inch bentonite chips hydrated with potable water. (2) Soil sample collected 0.5 feet above and below depth provided in sample name. (3) GP = Geoprobe. (4) Composite sample collected from 0 to 6.0 feet below ground surface.*

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Geologic Borehole Log/Well Construction

Project Number	Well Number	Sheet
0380.02.04	**GP17**	**2 of 2**

Depth (feet, BGS)	Well Details	Sample Data: Interval	Percent Recovery	Collection Method	Number	Name (Type)	Blows/6"	Lithologic Column	Soil Description
21			**100%**	**GP**		**GP20-S-20**			

Total boring depth = 21.0 feet below ground surface.

NOTES: *(1) Borehole was backfilled with 3/4-inch bentonite chips hydrated with potable water. (2) Soil sample collected 0.5 feet above and below depth provided in sample name. (3) GP = Geoprobe. (4) Composite sample collected from 0 to 6.0 feet below ground surface.*

Maul Foster & Alongi, Inc.

Geologic Borehole Log/Well Construction

Project Number	Well Number	Sheet
0380.02.04	**GP18**	**1 of 2**

Project Name	**City of Wenatchee**	TOC Elevation (feet)	
Project Location	**25 North Worthen Street, Wenatchee, WA**	Surface Elevation (feet)	
Start/End Date	**11/6/13 to 11/6/13**	Northing	
Driller/Equipment	**Pacific Soil and Water (Marcus)/Geoprobe 6600/Truck Mounted**	Easting	
Geologist/Engineer	**Andrew Vidourek**	Hole Depth	**25.0-feet**
Sample Method	**Direct Push**	Outer Hole Diam	**2.25-inch**

Depth (feet, BGS)	Well Details	Sample Data: Interval	Percent Recovery	Collection Method	Number	Name (Type)	Blows/6"	Lithologic Column	Soil Description
1			**80%**	**GP**					*0 to 0.5 feet: GRAVEL FILL.*
									0.5 to 7.0 feet: GRAVELLY SILT (ML); brown; 50% fines, nonplastic; 10% sand; 40% gravel, fine to coarse, subangular to subrounded; dry.
5			**100%**	**GP**					
7						**GP18-S-7**			*7.0 to 11.0 feet: SILT (ML); brown; 100% fines; dry.*
10			**100%**	**GP**					
11						**GP18-S-11**			*11.0 to 11.5 feet: SAND (SP); strong brown; 100% sand, fine; dry.*
									11.5 to 16.0 feet: SILT (ML); strong brown; 100% fines; dry.
15			**100%**	**GP**		**GP18-S-15**			
16									*16.0 to 17.0 feet: GRAVELLY SILT (ML); strong brown; 70% fines; 30% gravel, fine to coarse, subangular to subrounded; dry.*
17									*17.0 to 25.0 feet: SANDY GRAVEL (GW); strong brown with white and black mottling; 5% fines, low plasticity; 35% sand, medium; 60% gravel, fine to coarse, subangular to subrounded; trace orangish-tan gravel; dry.*
20									

NOTES: *(1) Borehole was backfilled with 3/4-inch bentonite chips hydrated with potable water. (2) Soil sample collected 0.5 feet above and below depth provided in sample name. (3) GP = Geoprobe. (4) Groundwater sample collected using a 4-foot long temporary screen.*

▽ ***Water level 20.1 feet measured using water level indicator after temporary screen set.***

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Geologic Borehole Log/Well Construction

Project Number	Well Number	Sheet
0380.02.04	**GP18**	**2 of 2**

Depth (feet, BGS)	Well Details	Sample Data: Interval	Percent Recovery	Collection Method	Number	Name (Type)	Blows/6"	Lithologic Column	Soil Description
21			**100%**	**GP**					
22				**GW**		**GP18-W**			
23									
24									
25									

Total boring depth = 25.0 feet below ground surface.

NOTES: *(1) Borehole was backfilled with 3/4-inch bentonite chips hydrated with potable water. (2) Soil sample collected 0.5 feet above and below depth provided in sample name. (3) GP = Geoprobe. (4) Groundwater sample collected using a 4-foot long temporary screen.*

▽ ***Water level 20.1 feet measured using water level indicator after temporary screen set.***

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Geologic Borehole Log/Well Construction

Project Number	Well Number	Sheet
0380.02.04	**GP19**	**1 of 2**

Project Name	**City of Wenatchee**	TOC Elevation (feet)	
Project Location	**25 North Worthen Street, Wenatchee, WA**	Surface Elevation (feet)	
Start/End Date	**11/5/13 to 11/6/13**	Northing	
Driller/Equipment	**Pacific Soil and Water (Marcus)/Geoprobe 6600/Truck Mounted**	Easting	
Geologist/Engineer	**Andrew Vidourek**	Hole Depth	**25.0-feet**
Sample Method	**Direct Push**	Outer Hole Diam	**2.25-inch**

Depth (feet, BGS)	Well Details	Sample Data: Interval	Percent Recovery	Collection Method	Number	Name (Type)	Blows/6"	Lithologic Column	Soil Description
0			**100%**	**GP**					*0 to 0.5 feet: GRAVEL FILL; black and dark gray.*
1									*0.5 to 11.5 feet: GRAVELLY SILT (ML); dark brown with green, white and black gravel; 70% fines; 30% gravel, medium to coarse, subangular to angular; dry.*
2									*@ 2.0 to 3.0 feet: Gray.*
3									
4									
5			**100%**	**GP**					
6									
7									
8									*@ 8.0 feet: 1-inch lens of greenish-gray sand.*
9									
10			**100%**	**GP**					
11									
12									*11.5 to 12.0 feet: SAND (SP); dark brown and white; 100% sand, medium; dry.*
13									*12.0 to 19.5 feet: SILT (ML); dark brown; 100% fines, nonplastic; dry.*
14									
15			**100%**	**GP**					
16						**GP19-S-16**			
17									
18									
19									
20									*19.5 to 25.0 feet: SILT with GRAVEL (ML); dark brown; 85% fines,*

NOTES: *(1) Borehole was backfilled with 3/4-inch bentonite chips hydrated with potable water. (2) Soil sample collected 0.5 feet above and below depth provided in sample name. (3) GP = Geoprobe.*

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Geologic Borehole Log/Well Construction

Project Number	Well Number	Sheet
0380.02.04	**GP19**	**2 of 2**

Depth (feet, BGS)	Well Details	Sample Data: Interval	Percent Recovery	Collection Method	Number	Name (Type)	Blows/6"	Lithologic Column	Soil Description
21			**100%**	**GP**		**GP19-S-20**			*nonplastic; 15% gravel, medium, subangular; dry.*
22									
23									
24									
25									

Total boring depth = 25.0 feet below ground surface.

NOTES: *(1) Borehole was backfilled with 3/4-inch bentonite chips hydrated with potable water. (2) Soil sample collected 0.5 feet above and below depth provided in sample name. (3) GP = Geoprobe.*

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Geologic Borehole Log/Well Construction

Project Number	Well Number	Sheet
0380.02.04	**GP20**	**1 of 2**

Project Name	**City of Wenatchee**	TOC Elevation (feet)	
Project Location	**25 North Worthen Street, Wenatchee, WA**	Surface Elevation (feet)	
Start/End Date	**11/6/13 to 11/6/13**	Northing	
Driller/Equipment	**Pacific Soil and Water (Marcus)/Geoprobe 6600/Truck Mounted**	Easting	
Geologist/Engineer	**Andrew Vidourek**	Hole Depth	**20.0-feet**
Sample Method	**Direct Push**	Outer Hole Diam	**2.25-inch**

Depth (feet, BGS)	Well Details	Sample Data: Interval	Percent Recovery	Collection Method	Number	Name (Type)	Blows/6"	Lithologic Column	Soil Description
1			**80%**	**GP**					*0 to 11.0 feet: GRAVELLY SILT (ML); dark brown; 70% fines, nonplastic; 30% gravel, fine to coarse, angular to subrounded; dry.*
2									
3						**GP20-Comp**			
4									
5			**80%**	**GP**					
6									
7									
8									
9									
10			**100%**	**GP**					
11									*11.0 to 19.0 feet: SILT (ML); strong brown; 70% fines, nonplastic; 30% sand, fine; dry.*
12									
13									
14									
15			**100%**	**GP**					
16						**GP20-S-16**			
17									
18									
19									*19.0 to 20.0 feet: SILTY GRAVEL (GM); dark grayish-brown; 30% fines; 70% gravel, fine to coarse, angular to subrounded; trace rock flour from drilling action; dry.*
20						**GP20-S-20**			

NOTES: *(1) Borehole was backfilled with 3/4-inch bentonite chips hydrated with potable water. (2) Soil sample collected 0.5 feet above and below depth provided in sample name. (3) GP = Geoprobe. (4) Composite sample collected from 0 to 6.0 feet below ground surface.*

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Geologic Borehole Log/Well Construction

Project Number	Well Number	Sheet
0380.02.04	**GP20**	**2 of 2**

Depth (feet, BGS)	Well Details	Sample Data: Interval	Percent Recovery	Collection Method	Number	Name (Type)	Blows/6"	Lithologic Column	Soil Description
									Total boring depth = 20.0 feet below ground surface.

NOTES: *(1) Borehole was backfilled with 3/4-inch bentonite chips hydrated with potable water. (2) Soil sample collected 0.5 feet above and below depth provided in sample name. (3) GP = Geoprobe. (4) Composite sample collected from 0 to 6.0 feet below ground surface.*

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Geologic Borehole Log/Well Construction

Project Number	Well Number	Sheet
0380.02.04	**GP21**	**1 of 2**

Project Name	**City of Wenatchee**	TOC Elevation (feet)	
Project Location	**25 North Worthen Street, Wenatchee, WA**	Surface Elevation (feet)	
Start/End Date	**11/5/13 to 11/5/13**	Northing	
Driller/Equipment	**Pacific Soil and Water (Marcus)/Geoprobe 6600/Truck Mounted**	Easting	
Geologist/Engineer	**Andrew Vidourek**	Hole Depth	**20.0-feet**
Sample Method	**Direct Push**	Outer Hole Diam	**2.25-inch**

Depth (feet, BGS)	Well Details	Sample Data: Interval	Percent Recovery	Collection Method	Number	Name (Type)	Blows/6"	Lithologic Column	Soil Description
1			**100%**	**GP**					*0 to 7.0 feet: GRAVELLY SILT (ML); dark brown soil with white and black gravel; 80% fines, nonplastic; 20% gravel, medium to coarse, angular to subangular; dry.*
2									
3									
4									
5									*@ 4.5 feet: 2-inch lens of white and black gravel.*
6			**100%**	**GP**					
7									
8									*7.0 to 12.0 feet: GRAVELLY SILT (ML); dark brown soil with white and black gravel; 70% fines, nonplastic; 30% gravel, coarse, angular to subangular; trace rock flour; dry.*
9									
10			**100%**	**GP**					
11									
12									*12.0 to 19.0 feet: SILT (ML); brown; 100% fines; dry.*
13									
14									
15			**100%**	**GP**					
16						**GP21-S-16**			
17									
18									
19									*19.0 to 20.0 feet: SILT with GRAVEL (ML); brown; 90% fines, nonplastic; 10% gravel, medium to coarse, angular to subangular; dry.*
20						**GP21-S-20**			

NOTES: *(1) Borehole was backfilled with 3/4-inch bentonite chips hydrated with potable water. (2) Soil sample collected 0.5 feet above and below depth provided in sample name. (3) GP = Geoprobe.*

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Geologic Borehole Log/Well Construction

Project Number	Well Number	Sheet
0380.02.04	**GP21**	**2 of 2**

Depth (feet, BGS)	Well Details	Sample Data: Interval	Percent Recovery	Collection Method	Number	Name (Type)	Blows/6"	Lithologic Column	Soil Description
									Total boring depth = 20.0 feet below ground surface.

NOTES: *(1) Borehole was backfilled with 3/4-inch bentonite chips hydrated with potable water. (2) Soil sample collected 0.5 feet above and below depth provided in sample name. (3) GP = Geoprobe.*

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Geologic Borehole Log/Well Construction

Project Number	Well Number	Sheet
0380.02.04	**GP22**	**1 of 2**

Project Name	**City of Wenatchee**	TOC Elevation (feet)	
Project Location	**25 North Worthen Street, Wenatchee, WA**	Surface Elevation (feet)	
Start/End Date	**11/6/13 to 11/6/13**	Northing	
Driller/Equipment	**Pacific Soil and Water (Marcus)/Geoprobe 6600/Truck Mounted**	Easting	
Geologist/Engineer	**Andrew Vidourek**	Hole Depth	**20.0-feet**
Sample Method	**Direct Push**	Outer Hole Diam	**2.25-inch**

Depth (feet, BGS)	Well Details	Sample Data: Interval	Percent Recovery	Collection Method	Number	Name (Type)	Blows/6"	Lithologic Column	Soil Description
0			**100%**	**GP**					*0 to 0.5 feet: GRAVEL FILL; black and dark gray.*
1									*0.5 to 10.0 feet: GRAVELLY SILT (ML); reddish-brown soil with red, white and black gravel; 70% fines, nonplastic; 30% gravel, fine to coarse, angular to subrounded; trace rock flour from drilling action; moist.*
2									
3									
4									
5			**100%**	**GP**					
6									
7									
8									
9									
10			**0%**	**GP**					*10.0 to 15.0 feet: NO RECOVERY.*
11									
12									
13									
14									
15			**80%**	**GP**					*15.0 to 19.0 feet: SILTY SAND (SM); strong brown; 40% fines, nonplastic; 60% sand, fine; dry.*
16						**GP22-S-16**			
17									
18									
19									*19.0 to 20.0 feet: GRAVELLY SAND (SW); dark brown soil with black and white gravel; 5% fines, nonplastic; 65% sand, fine to medium; 30% gravel, fine to coarse, subangular to subrounded; dry.*
20						**GP22-S-20**			

NOTES: *(1) Borehole was backfilled with 3/4-inch bentonite chips hydrated with potable water. (2) Soil sample collected 0.5 feet above and below depth provided in sample name. (3) GP = Geoprobe.*

Maul Foster & Alongi, Inc.

Geologic Borehole Log/Well Construction

Project Number	Well Number	Sheet
0380.02.04	**GP22**	**2 of 2**

Depth (feet, BGS)	Well Details	Sample Data: Interval	Percent Recovery	Collection Method	Number	Name (Type)	Blows/6"	Lithologic Column	Soil Description
									Total boring depth = 20.0 feet below ground surface.

NOTES: *(1) Borehole was backfilled with 3/4-inch bentonite chips hydrated with potable water. (2) Soil sample collected 0.5 feet above and below depth provided in sample name. (3) GP = Geoprobe.*

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Geologic Borehole Log/Well Construction

Project Number	Well Number	Sheet
0380.02.01	**PZ1**	**1 of 2**

Project Name	**City of Wenatchee**	TOC Elevation (feet)	**641.42**
Project Location	**25 North Worthen St**	Surface Elevation (feet)	**641.6**
Start/End Date	**10/6/2010 to 10/6/2010**	Northing	**156037.3**
Driller/Equipment	**Frank S/6600 truck mounted Geoprope**	Easting	**1770236.0**
Geologist/Engineer	**Justin Pounds**	Hole Depth	**29.2-feet**
Sample Method	**Geoprobe**	Outer Hole Diam	**3.25-inch**

Depth (feet, BGS)	Well Details	Sample Data: Interval	Percent Recovery	Collection Method	Number	Name (Type)	Blows/6"	Lithologic Column	Soil Description
1			**100**	**GP**	**1**				*0.0 to 0.3 feet: ASPHALT; black.*
									0.3 to 0.6 feet: SANDY GRAVEL; dark gray; loose; dry.
									0.6 to 3.0 feet: SANDY SILT; dark gray; 60% fines; 40% sand, fine to medium; moist.
4			**100**	**GP**	**2**				
7									*6.2 to 7.1 feet: SANDY SILT; dark gray; 80% fines; 20% sand, fine; dense; moist.*
									7.1 to 8.0 feet: SILTY SANDY GRAVEL; brown; 10% fines; 30% sand, fine to medium; 60% gravel, rounded, fine to medium; dry.
8			**100**	**GP**	**3**				*8.0 to 12.5 feet: SANDY GRAVEL; dark gray; 30% sand, medium to coarse; 70% gravel, medium to coarse; dry.*
12			**50**	**GP**	**4**				
13									*12.5 to 14.1 feet: SAND; brown; 100% sand, medium to coarse; dry.*
14									*14.1 to 16.0 feet: No Recovery.*
16			**100**	**GP**	**5**				*16.0 to 25.5 feet: SANDY GRAVEL; brownish gray; 40% sand, fine to coarse; 60% gravel, fine to cobbles, dense.*

NOTES:

▽ ***Observed Water Level during drilling.***

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Geologic Borehole Log/Well Construction

Project Number	Well Number	Sheet
0380.02.01	**PZ1**	**2 of 2**

Depth (feet, BGS)	Well Details	Sample Data: Interval	Percent Recovery	Collection Method	Number	Name (Type)	Blows/6"	Lithologic Column	Soil Description
21			**100**	**GP**	**6**				
22									
23									
24			**100**	**GP**	**7**				
25									
26	▽								*25.5 to 25.8 feet: GRANITE; white.*
27									*25.8 to 29.16 feel: SANDY GRAVEL; dark gray; 50% sand, fine to coarse; 50% gravel, fine to medium; wet.*
28			**25**	**GP**	**8**				
29									

Refusal: 29.16 feet below ground surface.

NOTES:

▽ ***Observed Water Level during drilling.***

Maul Foster & Alongi, Inc.

Geologic Borehole Log/Well Construction

Project Number	Well Number	Sheet
0380.02.01	**PZ2**	**1 of 2**

Project Name	**City of Wenatchee**	TOC Elevation (feet)	**641.22**
Project Location	**25 North Worthen St**	Surface Elevation (feet)	**641.3**
Start/End Date	**10/6/2010 to 10/6/2010**	Northing	**156080.4**
Driller/Equipment	**Frank S/6600 truck mounted Geoprope**	Easting	**1770540.0**
Geologist/Engineer	**Justin Pounds**	Hole Depth	**36.0-feet**
Sample Method	**Geoprobe**	Outer Hole Diam	**3.25-inch**

Depth (feet, BGS)	Well Details	Sample Data: Interval	Percent Recovery	Collection Method	Number	Name (Type)	Blows/6"	Lithologic Column	Soil Description
1			75	GP	1				0.0 to 0.3 feet: ASPHALT; black.
									0.3 to 2.5 feet: SILTY SANDY GRAVEL; dark gray; 15% fines; 25% sand, fine to medium; 60% gravel, fine to coarse, angular; dry.
2									
3									2.5 to 3.0 feet: SANDY SILT; dark brown; 70% fines; 30% sand; damp.
									3.0 to 4.0 feet: No Recovery.
4			25	GP	2				4.0 to 5.0 feet: SANDY SILT; dark brown; 70% fines; 30% sand; damp.
5									5.0 to 24.0 feet: No Recovery.
6									
7									
8			0	GP	3				
9									
10									
11									
12			0	GP	4				@ 12.0 feet: Trash (paper products).
13									
14									
15									
16			0	GP	5				
17									
18									
19									
20									

NOTES:

▽ **Observed Water Level during drilling.**

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Maul Foster & Alongi, Inc.

Geologic Borehole Log/Well Construction

Project Number	Well Number	Sheet
0380.02.01	**PZ2**	**2 of 2**

Depth (feet, BGS)	Well Details	Sample Data: Interval	Percent Recovery	Collection Method	Number	Name (Type)	Blows/6"	Lithologic Column	Soil Description
21			**0**	**GP**	**6**				
22									
23									
24	▽		**100**	**GP**	**7**				*24.0 to 27.0 feet: CLAY; light gray; dense; wet.*
25									
26									
27									*27.0 to 28.8 feet: SILT; damp.*
28			**20**	**GP**	**8**				
29									*28.0 to 32.0 feet: No Recovery.*
30									
31									
32			**55**	**GP**	**9**				*32.0 to 34.3 feet: SANDY SILT; brown; 60% fines; 40 % sand, fine to medium; wet.*
33									
34									
35									*34.3 to 36.0 feet: SILT; dark gray; dense; wet.*
36									

Total depth: 36.0 feet below ground surface.

NOTES:

▽ ***Observed Water Level during drilling.***

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Geologic Borehole Log/Well Construction

Project Number	Well Number	Sheet
0380.02.01	**PZ3**	**1 of 2**

Project Name	**City of Wenatchee**	TOC Elevation (feet)	**642.48**
Project Location	**25 North Worthen St**	Surface Elevation (feet)	**642.4**
Start/End Date	**10/6/2010 to 10/6/2010**	Northing	**156344.7**
Driller/Equipment	**Frank S/6600 truck mounted Geoprope**	Easting	**1770318.0**
Geologist/Engineer	**Justin Pounds**	Hole Depth	**32.0-feet**
Sample Method	**Geoprobe**	Outer Hole Diam	**3.25-inch**

Depth (feet, BGS)	Well Details	Sample Data: Interval	Percent Recovery	Collection Method	Number	Name (Type)	Blows/6"	Lithologic Column	Soil Description
1			**50**	**GP**	**1**				*0.0 to 0.2 feet: ASPHALT: black.*
									0.2 to 1.8 feet: SANDY GRAVEL; dark gray; 10% fines; 30% sand, medium to coarse, angular; 60% gravel, rounded, fine to medium; dry.
2									*1.8 to 2.3 feet: GRAVELLY SILT; dark brown; 75% fines; 25% gravel, rounded; dry.*
3									*2.3 to 4.0 feet: No Recovery.*
4			**20**	**GP**	**2**				*4.0 to 4.8 feet: SILTY SANDY GRAVEL; dark brown; with organics (wood); 20% fines; 20% sand, fine to medium; 60% gravel; dry.*
5									*4.8 to 12.0 feet: No Recovery.*
6									
7									
8			**0**	**GP**	**3**				
9									
10									
11									
12			**60**	**GP**	**4**				*12.0 to 13.8 feet: SILTY SANDY GRAVEL; dark gray; fill; dry.*
13									
14									*13.8 to 14.4 feet: WOODY DEBRIS; black; damp.*
15									*14.4 to 16.0 feet: No recovery.*
16			**0.15**	**GP**	**5**				*16.0 to 16.4 feet: FILL. dark gray.*
17									*16.4 to 16.5 feet: RUBBER; black.*
									16.5 to 16.6 feet: WOODY DEBRIS; moist.
18									*16.6 to 20.0 feet: No Recovery.*
19									
20									

NOTES:

▽ ***Observed Water Level during drilling.***

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Maul Foster & Alongi, Inc.

Geologic Borehole Log/Well Construction

Project Number	Well Number	Sheet
0380.02.01	**PZ3**	**2 of 2**

Depth (feet, BGS)	Well Details	Sample Data: Interval	Percent Recovery	Collection Method	Number	Name (Type)	Blows/6"	Lithologic Column	Soil Description
21			**30**	**GP**	**6**				*20.0 to 21.2 feet: SILTY SANDY GRAVEL; dark gray; 10% fines; 30% sand, fine to medium; 60% gravel, coarse; moist.*
22									*21.2 to 24.0 feet: No Recovery.*
23									
24	▽		**57**	**GP**	**7**				*24.0 to 26.3 feet: SILTY SANDY GRAVEL; dark gray; 10% fines; 30% sand, fine to medium; 60% gravel, coarse; wet.*
25									
26									*26.3 to 28.0 feet: No Recovery.*
27									
28			**100**	**GP**	**8**				*28.0 to 29.1 feet: SILTY SANDY GRAVEL; dark gray; 10% fines; 30% sand; 60% gravel, fine to medium; wet.*
29									*29.1 to 31.4 feet: SILT; brown; stiff; damp.*
30									
31									
32									*31.4 to 32.0 feet: SANDY SILT; brown; 30% sand, fine to medium; 70% fines; wet.*

Total depth: 32.0 feet below ground surface.

NOTES:

▽ ***Observed Water Level during drilling.***

ATTACHMENT B

LABORATORY DATA REPORT

Specialty Analytical

11711 SE Capps Road, Ste B
Clackamas, Oregon 97015
TEL: 503-607-1331 FAX: 503-607-1336
Website: www.specialtyanalytical.com

February 07, 2014

Alan Hughes
Maul Foster & Alongi
400 E. Mill Plain Blvd.
Suite 400
Vancouver, WA 98660

TEL: (360) 694-2691
FAX (360) 906-1958

RE: City of Wenatchee / 0380.02.04

Dear Alan Hughes: Order No.: 1311104

Specialty Analytical received 37 sample(s) on 11/8/2013 for the analyses presented in the following report.

REVISED REPORT: Please see case narrative for information on revision.

There were no problems with the analysis and all data for associated QC met EPA or laboratory specifications, except where noted in the Case Narrative, or as qualified with flags. Results apply only to the samples analyzed. Without approval of the laboratory, the reproduction of this report is only permitted in its entirety.

If you have any questions regarding these tests, please feel free to call.

Sincerely,

Marty French
Lab Director

Case Narrative

WO#: **1311104**
Date: **2/7/2014**

Specialty Analytical

CLIENT: Maul Foster & Alongi
Project: City of Wenatchee / 0380.02.04

Report Revision 2

At the clients request sample names PZ2-W and PZ2-3 (1311104-036 and 1311104-037) were switched in the field. This report reflects the correction.

Report Revision 1

This report includes the orginal data with a correction to the Benzene reporting limit on the BTEX by 8021/5035 for Specialty Analytical samples 1311104-003, 005, 009 and 011.

Specialty Analytical

Date Reported: 07-Feb-14

CLIENT: Maul Foster & Alongi
Collection Date: 11/5/2013 10:35:00 AM
Project: City of Wenatchee / 0380.02.04
Lab ID: 1311104-001
Client Sample ID: GP11-Comp
Matrix: SOIL

Analyses	Result	RL	Qual	Unit	DF	Date Analyzed
NWTPH-HCID		**NWHCID**				Analyst: **ZP**
Gasoline	ND	22.3		mg/Kg-dry	1	11/12/2013 12:52:15 PM
Mineral Spirits	ND	22.3		mg/Kg-dry	1	11/12/2013 12:52:15 PM
Kerosene	ND	55.8		mg/Kg-dry	1	11/12/2013 12:52:15 PM
Diesel	ND	55.8		mg/Kg-dry	1	11/12/2013 12:52:15 PM
Lube Oil	LUBE OIL	112		mg/Kg-dry	1	11/12/2013 12:52:15 PM
Surr: BFB	69.5	50-150		%REC	1	11/12/2013 12:52:15 PM
Surr: o-Terphenyl	84.4	50-150		%REC	1	11/12/2013 12:52:15 PM
NWTPH-DX		**NWTPH-DX**				Analyst: **ZP**
Diesel	46.5	16.7	A1	mg/Kg-dry	1	11/19/2013 3:51:49 PM
Lube Oil	137	55.8		mg/Kg-dry	1	11/19/2013 3:51:49 PM
Surr: o-Terphenyl	79.0	50-150		%REC	1	11/19/2013 3:51:49 PM
ICP METALS- TOTAL RECOVERABLE		**SW6010C**				Analyst: **VAS**
Arsenic	10.2	2.07		mg/Kg-dry	1	11/13/2013 8:14:38 PM
Lead	38.1	2.07		mg/Kg-dry	1	11/13/2013 8:14:38 PM
PAH'S BY GC/MS - LOW LEVEL		**SW8270D**				Analyst: **bda**
1-Methylnaphthalene	18.8	7.44		µg/Kg-dry	1	11/19/2013 3:38:00 PM
2-Methylnaphthalene	17.4	7.44		µg/Kg-dry	1	11/19/2013 3:38:00 PM
Acenaphthene	ND	7.44		µg/Kg-dry	1	11/19/2013 3:38:00 PM
Acenaphthylene	ND	7.44		µg/Kg-dry	1	11/19/2013 3:38:00 PM
Anthracene	ND	7.44		µg/Kg-dry	1	11/19/2013 3:38:00 PM
Benz(a)anthracene	ND	7.44		µg/Kg-dry	1	11/19/2013 3:38:00 PM
Benzo(a)pyrene	ND	7.44		µg/Kg-dry	1	11/19/2013 3:38:00 PM
Benzo(b)fluoranthene	9.88	7.44		µg/Kg-dry	1	11/19/2013 3:38:00 PM
Benzo(g,h,i)perylene	9.19	7.44		µg/Kg-dry	1	11/19/2013 3:38:00 PM
Benzo(k)fluoranthene	ND	7.44		µg/Kg-dry	1	11/19/2013 3:38:00 PM
Chrysene	11.5	7.44		µg/Kg-dry	1	11/19/2013 3:38:00 PM
Dibenz(a,h)anthracene	ND	7.44		µg/Kg-dry	1	11/19/2013 3:38:00 PM
Fluoranthene	10.7	7.44		µg/Kg-dry	1	11/19/2013 3:38:00 PM
Fluorene	10.0	7.44		µg/Kg-dry	1	11/19/2013 3:38:00 PM
Indeno(1,2,3-cd)pyrene	ND	7.44		µg/Kg-dry	1	11/19/2013 3:38:00 PM
Naphthalene	10.1	7.44		µg/Kg-dry	1	11/19/2013 3:38:00 PM
Phenanthrene	30.1	7.44		µg/Kg-dry	1	11/19/2013 3:38:00 PM
Pyrene	28.5	7.44		µg/Kg-dry	1	11/19/2013 3:38:00 PM
Surr: 2-Fluorobiphenyl	60.5	42.6-128		%REC	1	11/19/2013 3:38:00 PM
Surr: Nitrobenzene-d5	70.8	21.7-155		%REC	1	11/19/2013 3:38:00 PM
Surr: p-Terphenyl-d14	69.8	44.9-155		%REC	1	11/19/2013 3:38:00 PM

Specialty Analytical

Date Reported: 07-Feb-14

CLIENT: Maul Foster & Alongi
Collection Date: 11/5/2013 10:35:00 AM
Project: City of Wenatchee / 0380.02.04
Lab ID: 1311104-001
Client Sample ID: GP11-Comp
Matrix: SOIL

Analyses	Result	RL	Qual	Unit	DF	Date Analyzed
PCB'S IN SOLIDS		**SW 8082A**				Analyst: **ajr**
Aroclor 1016	ND	0.372		µg/Kg-dry	1	11/18/2013 4:36:00 PM
Aroclor 1221	ND	0.372		µg/Kg-dry	1	11/18/2013 4:36:00 PM
Aroclor 1232	ND	0.372		µg/Kg-dry	1	11/18/2013 4:36:00 PM
Aroclor 1242	ND	0.372		µg/Kg-dry	1	11/18/2013 4:36:00 PM
Aroclor 1248	ND	0.372		µg/Kg-dry	1	11/18/2013 4:36:00 PM
Aroclor 1254	ND	0.372		µg/Kg-dry	1	11/18/2013 4:36:00 PM
Aroclor 1260	ND	0.372		µg/Kg-dry	1	11/18/2013 4:36:00 PM
Aroclor 1262	ND	0.372		µg/Kg-dry	1	11/18/2013 4:36:00 PM
Aroclor 1268	ND	0.372		µg/Kg-dry	1	11/18/2013 4:36:00 PM
Surr: Decachlorobiphenyl	58.3	56.5-130		%REC	1	11/18/2013 4:36:00 PM

Specialty Analytical

Date Reported: 07-Feb-14

CLIENT: Maul Foster & Alongi
Collection Date: 11/5/2013 10:45:00 AM
Project: City of Wenatchee / 0380.02.04
Lab ID: 1311104-002
Client Sample ID: GP11-S-13
Matrix: SOIL

Analyses	Result	RL	Qual	Unit	DF	Date Analyzed
NWTPH-HCID		**NWHCID**				Analyst: **ZP**
Gasoline	ND	22.8		mg/Kg-dry	1	11/12/2013 1:36:18 PM
Mineral Spirits	ND	22.8		mg/Kg-dry	1	11/12/2013 1:36:18 PM
Kerosene	ND	56.9		mg/Kg-dry	1	11/12/2013 1:36:18 PM
Diesel	DIESEL	56.9		mg/Kg-dry	1	11/12/2013 1:36:18 PM
Lube Oil	LUBE OIL	114		mg/Kg-dry	1	11/12/2013 1:36:18 PM
Surr: BFB	65.0	50-150		%REC	1	11/12/2013 1:36:18 PM
Surr: o-Terphenyl	87.3	50-150		%REC	1	11/12/2013 1:36:18 PM
NWTPH-DX		**NWTPH-DX**				Analyst: **ZP**
Diesel	137	17.1	A1	mg/Kg-dry	1	11/19/2013 6:31:06 PM
Lube Oil	277	56.9		mg/Kg-dry	1	11/19/2013 6:31:06 PM
Surr: o-Terphenyl	79.8	50-150		%REC	1	11/19/2013 6:31:06 PM
BTEX BY 8021/5035		**SW8021B**				Analyst: **ZP**
Benzene	0.064	0.017		mg/Kg-dry	1	11/14/2013 10:37:02 PM
Ethylbenzene	ND	0.17		mg/Kg-dry	1	11/14/2013 10:37:02 PM
Toluene	ND	0.17		mg/Kg-dry	1	11/14/2013 10:37:02 PM
Xylenes, Total	ND	0.51		mg/Kg-dry	1	11/14/2013 10:37:02 PM
Surr: 4-Bromofluorobenzene	67.6	42.6-126		%REC	1	11/14/2013 10:37:02 PM
PAH'S BY GC/MS - LOW LEVEL		**SW8270D**				Analyst: **bda**
1-Methylnaphthalene	ND	7.59		µg/Kg-dry	1	11/19/2013 4:02:00 PM
2-Methylnaphthalene	ND	7.59		µg/Kg-dry	1	11/19/2013 4:02:00 PM
Acenaphthene	ND	7.59		µg/Kg-dry	1	11/19/2013 4:02:00 PM
Acenaphthylene	ND	7.59		µg/Kg-dry	1	11/19/2013 4:02:00 PM
Anthracene	ND	7.59		µg/Kg-dry	1	11/19/2013 4:02:00 PM
Benz(a)anthracene	ND	7.59		µg/Kg-dry	1	11/19/2013 4:02:00 PM
Benzo(a)pyrene	ND	7.59		µg/Kg-dry	1	11/19/2013 4:02:00 PM
Benzo(b)fluoranthene	ND	7.59		µg/Kg-dry	1	11/19/2013 4:02:00 PM
Benzo(g,h,i)perylene	9.06	7.59		µg/Kg-dry	1	11/19/2013 4:02:00 PM
Benzo(k)fluoranthene	ND	7.59		µg/Kg-dry	1	11/19/2013 4:02:00 PM
Chrysene	8.74	7.59		µg/Kg-dry	1	11/19/2013 4:02:00 PM
Dibenz(a,h)anthracene	ND	7.59		µg/Kg-dry	1	11/19/2013 4:02:00 PM
Fluoranthene	10.1	7.59		µg/Kg-dry	1	11/19/2013 4:02:00 PM
Fluorene	ND	7.59		µg/Kg-dry	1	11/19/2013 4:02:00 PM
Indeno(1,2,3-cd)pyrene	ND	7.59		µg/Kg-dry	1	11/19/2013 4:02:00 PM
Naphthalene	ND	7.59		µg/Kg-dry	1	11/19/2013 4:02:00 PM
Phenanthrene	19.2	7.59		µg/Kg-dry	1	11/19/2013 4:02:00 PM
Pyrene	18.3	7.59		µg/Kg-dry	1	11/19/2013 4:02:00 PM

Specialty Analytical

Date Reported: 07-Feb-14

CLIENT: Maul Foster & Alongi
Collection Date: 11/5/2013 10:45:00 AM
Project: City of Wenatchee / 0380.02.04
Lab ID: 1311104-002
Client Sample ID: GP11-S-13
Matrix: SOIL

Analyses	Result	RL	Qual	Unit	DF	Date Analyzed
PAH'S BY GC/MS - LOW LEVEL		**SW8270D**				Analyst: **bda**
Surr: 2-Fluorobiphenyl	53.3	42.6-128		%REC	1	11/19/2013 4:02:00 PM
Surr: Nitrobenzene-d5	71.6	21.7-155		%REC	1	11/19/2013 4:02:00 PM
Surr: p-Terphenyl-d14	76.9	44.9-155		%REC	1	11/19/2013 4:02:00 PM
PCB'S IN SOLIDS		**SW 8082A**				Analyst: **ajr**
Aroclor 1016	ND	0.379		µg/Kg-dry	1	11/18/2013 4:53:00 PM
Aroclor 1221	ND	0.379		µg/Kg-dry	1	11/18/2013 4:53:00 PM
Aroclor 1232	ND	0.379		µg/Kg-dry	1	11/18/2013 4:53:00 PM
Aroclor 1242	ND	0.379		µg/Kg-dry	1	11/18/2013 4:53:00 PM
Aroclor 1248	ND	0.379		µg/Kg-dry	1	11/18/2013 4:53:00 PM
Aroclor 1254	ND	0.379		µg/Kg-dry	1	11/18/2013 4:53:00 PM
Aroclor 1260	ND	0.379		µg/Kg-dry	1	11/18/2013 4:53:00 PM
Aroclor 1262	ND	0.379		µg/Kg-dry	1	11/18/2013 4:53:00 PM
Aroclor 1268	ND	0.379		µg/Kg-dry	1	11/18/2013 4:53:00 PM
Surr: Decachlorobiphenyl	69.6	56.5-130		%REC	1	11/18/2013 4:53:00 PM

Specialty Analytical

Date Reported: 07-Feb-14

CLIENT: Maul Foster & Alongi
Collection Date: 11/5/2013 10:55:00 AM
Project: City of Wenatchee / 0380.02.04
Lab ID: 1311104-003
Client Sample ID: GP11-S-17.5
Matrix: SOIL

Analyses	Result	RL	Qual	Unit	DF	Date Analyzed
NWTPH-DX		**NWTPH-DX**				Analyst: **ZP**
Diesel	87.1	18.6	A1	mg/Kg-dry	1	11/19/2013 6:09:13 PM
Lube Oil	254	62.1		mg/Kg-dry	1	11/19/2013 6:09:13 PM
Surr: o-Terphenyl	76.6	50-150		%REC	1	11/19/2013 6:09:13 PM
BTEX BY 8021/5035		**SW8021B**				Analyst: **ZP**
Benzene	ND	0.025	HT	mg/Kg-dry	1	11/20/2013 12:57:44 AM
Ethylbenzene	ND	0.25	HT	mg/Kg-dry	1	11/20/2013 12:57:44 AM
Toluene	ND	0.25	HT	mg/Kg-dry	1	11/20/2013 12:57:44 AM
Xylenes, Total	ND	0.75	HT	mg/Kg-dry	1	11/20/2013 12:57:44 AM
Surr: 4-Bromofluorobenzene	59.0	42.6-126	HT	%REC	1	11/20/2013 12:57:44 AM

Specialty Analytical

Date Reported: 07-Feb-14

CLIENT: Maul Foster & Alongi
Collection Date: 11/5/2013 11:00:00 AM
Project: City of Wenatchee / 0380.02.04
Lab ID: 1311104-004
Client Sample ID: GP12-S-7
Matrix: SOIL

Analyses	Result	RL	Qual	Unit	DF	Date Analyzed
NWTPH-HCID		**NWHCID**				Analyst: **ZP**
Gasoline	ND	23.2		mg/Kg-dry	1	11/12/2013 1:58:14 PM
Mineral Spirits	ND	23.2		mg/Kg-dry	1	11/12/2013 1:58:14 PM
Kerosene	ND	58.1		mg/Kg-dry	1	11/12/2013 1:58:14 PM
Diesel	DIESEL	58.1		mg/Kg-dry	1	11/12/2013 1:58:14 PM
Lube Oil	LUBE OIL	116		mg/Kg-dry	1	11/12/2013 1:58:14 PM
Surr: BFB	67.9	50-150		%REC	1	11/12/2013 1:58:14 PM
Surr: o-Terphenyl	93.5	50-150		%REC	1	11/12/2013 1:58:14 PM
NWTPH-DX		**NWTPH-DX**				Analyst: **ZP**
Diesel	162	17.4	A1	mg/Kg-dry	1	11/19/2013 6:52:59 PM
Lube Oil	342	58.1		mg/Kg-dry	1	11/19/2013 6:52:59 PM
Surr: o-Terphenyl	86.2	50-150		%REC	1	11/19/2013 6:52:59 PM
BTEX BY 8021/5035		**SW8021B**				Analyst: **ZP**
Benzene	0.029	0.020		mg/Kg-dry	1	11/14/2013 11:02:36 PM
Ethylbenzene	ND	0.20		mg/Kg-dry	1	11/14/2013 11:02:36 PM
Toluene	ND	0.20		mg/Kg-dry	1	11/14/2013 11:02:36 PM
Xylenes, Total	ND	0.59		mg/Kg-dry	1	11/14/2013 11:02:36 PM
Surr: 4-Bromofluorobenzene	72.0	42.6-126		%REC	1	11/14/2013 11:02:36 PM
PAH'S BY GC/MS - LOW LEVEL		**SW8270D**				Analyst: **bda**
1-Methylnaphthalene	21.2	7.75		µg/Kg-dry	1	11/19/2013 4:26:00 PM
2-Methylnaphthalene	15.9	7.75		µg/Kg-dry	1	11/19/2013 4:26:00 PM
Acenaphthene	24.0	7.75		µg/Kg-dry	1	11/19/2013 4:26:00 PM
Acenaphthylene	151	7.75		µg/Kg-dry	1	11/19/2013 4:26:00 PM
Anthracene	235	7.75		µg/Kg-dry	1	11/19/2013 4:26:00 PM
Benz(a)anthracene	507	7.75		µg/Kg-dry	1	11/19/2013 4:26:00 PM
Benzo(a)pyrene	668	7.75		µg/Kg-dry	1	11/19/2013 4:26:00 PM
Benzo(b)fluoranthene	611	7.75		µg/Kg-dry	1	11/19/2013 4:26:00 PM
Benzo(g,h,i)perylene	504	7.75		µg/Kg-dry	1	11/19/2013 4:26:00 PM
Benzo(k)fluoranthene	164	7.75		µg/Kg-dry	1	11/19/2013 4:26:00 PM
Chrysene	584	7.75		µg/Kg-dry	1	11/19/2013 4:26:00 PM
Dibenz(a,h)anthracene	101	7.75		µg/Kg-dry	1	11/19/2013 4:26:00 PM
Fluoranthene	860	7.75		µg/Kg-dry	1	11/19/2013 4:26:00 PM
Fluorene	45.6	7.75		µg/Kg-dry	1	11/19/2013 4:26:00 PM
Indeno(1,2,3-cd)pyrene	372	7.75		µg/Kg-dry	1	11/19/2013 4:26:00 PM
Naphthalene	13.2	7.75		µg/Kg-dry	1	11/19/2013 4:26:00 PM
Phenanthrene	298	7.75		µg/Kg-dry	1	11/19/2013 4:26:00 PM
Pyrene	1290	7.75		µg/Kg-dry	1	11/19/2013 4:26:00 PM

Specialty Analytical

Date Reported: 07-Feb-14

CLIENT: Maul Foster & Alongi
Collection Date: 11/5/2013 11:00:00 AM
Project: City of Wenatchee / 0380.02.04
Lab ID: 1311104-004
Client Sample ID: GP12-S-7
Matrix: SOIL

Analyses	Result	RL	Qual	Unit	DF	Date Analyzed
PAH'S BY GC/MS - LOW LEVEL		**SW8270D**				Analyst: **bda**
Surr: 2-Fluorobiphenyl	65.4	42.6-128		%REC	1	11/19/2013 4:26:00 PM
Surr: Nitrobenzene-d5	83.8	21.7-155		%REC	1	11/19/2013 4:26:00 PM
Surr: p-Terphenyl-d14	76.8	44.9-155		%REC	1	11/19/2013 4:26:00 PM
PCB'S IN SOLIDS		**SW 8082A**				Analyst: **ajr**
Aroclor 1016	ND	0.387		µg/Kg-dry	1	11/18/2013 5:10:00 PM
Aroclor 1221	ND	0.387		µg/Kg-dry	1	11/18/2013 5:10:00 PM
Aroclor 1232	ND	0.387		µg/Kg-dry	1	11/18/2013 5:10:00 PM
Aroclor 1242	ND	0.387		µg/Kg-dry	1	11/18/2013 5:10:00 PM
Aroclor 1248	ND	0.387		µg/Kg-dry	1	11/18/2013 5:10:00 PM
Aroclor 1254	ND	0.387		µg/Kg-dry	1	11/18/2013 5:10:00 PM
Aroclor 1260	ND	0.387		µg/Kg-dry	1	11/18/2013 5:10:00 PM
Aroclor 1262	ND	0.387		µg/Kg-dry	1	11/18/2013 5:10:00 PM
Aroclor 1268	ND	0.387		µg/Kg-dry	1	11/18/2013 5:10:00 PM
Surr: Decachlorobiphenyl	98.2	56.5-130		%REC	1	11/18/2013 5:10:00 PM

Specialty Analytical

Date Reported: 07-Feb-14

CLIENT: Maul Foster & Alongi
Collection Date: 11/5/2013 11:10:00 AM
Project: City of Wenatchee / 0380.02.04
Lab ID: 1311104-005
Client Sample ID: GP12-S-11
Matrix: SOIL

Analyses	Result	RL	Qual	Unit	DF	Date Analyzed
NWTPH-DX		**NWTPH-DX**				Analyst: **ZP**
Diesel	463	17.0	A1	mg/Kg-dry	1	11/19/2013 10:51:47 PM
Lube Oil	567	56.8	A2	mg/Kg-dry	1	11/19/2013 10:51:47 PM
Surr: o-Terphenyl	93.5	50-150		%REC	1	11/19/2013 10:51:47 PM
BTEX BY 8021/5035		**SW8021B**				Analyst: **ZP**
Benzene	ND	0.022	HT	mg/Kg-dry	1	11/20/2013 1:23:16 AM
Ethylbenzene	ND	0.22	HT	mg/Kg-dry	1	11/20/2013 1:23:16 AM
Toluene	ND	0.22	HT	mg/Kg-dry	1	11/20/2013 1:23:16 AM
Xylenes, Total	ND	0.66	HT	mg/Kg-dry	1	11/20/2013 1:23:16 AM
Surr: 4-Bromofluorobenzene	60.6	42.6-126	HT	%REC	1	11/20/2013 1:23:16 AM
PAH'S BY GC/MS - LOW LEVEL		**SW8270D**				Analyst: **bda**
1-Methylnaphthalene	13.8	7.58		µg/Kg-dry	1	11/20/2013 2:47:00 PM
2-Methylnaphthalene	15.7	7.58		µg/Kg-dry	1	11/20/2013 2:47:00 PM
Acenaphthene	11.2	7.58		µg/Kg-dry	1	11/20/2013 2:47:00 PM
Acenaphthylene	ND	7.58		µg/Kg-dry	1	11/20/2013 2:47:00 PM
Anthracene	ND	7.58		µg/Kg-dry	1	11/20/2013 2:47:00 PM
Benz(a)anthracene	ND	7.58		µg/Kg-dry	1	11/20/2013 2:47:00 PM
Benzo(a)pyrene	8.95	7.58		µg/Kg-dry	1	11/20/2013 2:47:00 PM
Benzo(b)fluoranthene	9.19	7.58		µg/Kg-dry	1	11/20/2013 2:47:00 PM
Benzo(g,h,i)perylene	12.2	7.58		µg/Kg-dry	1	11/20/2013 2:47:00 PM
Benzo(k)fluoranthene	ND	7.58		µg/Kg-dry	1	11/20/2013 2:47:00 PM
Chrysene	10.4	7.58		µg/Kg-dry	1	11/20/2013 2:47:00 PM
Dibenz(a,h)anthracene	ND	7.58		µg/Kg-dry	1	11/20/2013 2:47:00 PM
Fluoranthene	12.6	7.58		µg/Kg-dry	1	11/20/2013 2:47:00 PM
Fluorene	17.0	7.58		µg/Kg-dry	1	11/20/2013 2:47:00 PM
Indeno(1,2,3-cd)pyrene	ND	7.58		µg/Kg-dry	1	11/20/2013 2:47:00 PM
Naphthalene	ND	7.58		µg/Kg-dry	1	11/20/2013 2:47:00 PM
Phenanthrene	41.1	7.58		µg/Kg-dry	1	11/20/2013 2:47:00 PM
Pyrene	34.3	7.58		µg/Kg-dry	1	11/20/2013 2:47:00 PM
Surr: 2-Fluorobiphenyl	43.3	42.6-128		%REC	1	11/20/2013 2:47:00 PM
Surr: Nitrobenzene-d5	54.9	21.7-155		%REC	1	11/20/2013 2:47:00 PM
Surr: p-Terphenyl-d14	56.2	44.9-155		%REC	1	11/20/2013 2:47:00 PM

Specialty Analytical

Date Reported: 07-Feb-14

CLIENT:	Maul Foster & Alongi	**Collection Date:**	11/5/2013 11:20:00 AM
Project:	City of Wenatchee / 0380.02.04		
Lab ID:	1311104-006		
Client Sample ID:	GP12-S-13.5	**Matrix:**	SOIL

Analyses	Result	RL	Qual	Unit	DF	Date Analyzed
HOLD PER CLIENT REQUEST		**PER CLIENT**				Analyst: **knb**
Hold	Hold	0			1	11/25/2013 9:09:10 AM

Specialty Analytical

Date Reported: 07-Feb-14

CLIENT: Maul Foster & Alongi
Collection Date: 11/5/2013 11:50:00 AM
Project: City of Wenatchee / 0380.02.04
Lab ID: 1311104-007
Client Sample ID: GP14-Comp
Matrix: SOIL

Analyses	Result	RL	Qual	Unit	DF	Date Analyzed
NWTPH-HCID		**NWHCID**				Analyst: **ZP**
Gasoline	ND	22.3		mg/Kg-dry	1	11/12/2013 2:20:16 PM
Mineral Spirits	ND	22.3		mg/Kg-dry	1	11/12/2013 2:20:16 PM
Kerosene	ND	55.8		mg/Kg-dry	1	11/12/2013 2:20:16 PM
Diesel	DIESEL	55.8		mg/Kg-dry	1	11/12/2013 2:20:16 PM
Lube Oil	LUBE OIL	112		mg/Kg-dry	1	11/12/2013 2:20:16 PM
Surr: BFB	88.2	50-150		%REC	1	11/12/2013 2:20:16 PM
Surr: o-Terphenyl	96.7	50-150		%REC	1	11/12/2013 2:20:16 PM
NWTPH-DX		**NWTPH-DX**				Analyst: **ZP**
Diesel	51.9	16.7	A1	mg/Kg-dry	1	11/19/2013 10:30:11 PM
Lube Oil	216	55.8		mg/Kg-dry	1	11/19/2013 10:30:11 PM
Surr: o-Terphenyl	75.0	50-150		%REC	1	11/19/2013 10:30:11 PM
BTEX - RBC		**SW8021B**				Analyst: **ZP**
Benzene	ND	0.0279		mg/Kg-dry	1	11/14/2013 8:28:57 PM
Toluene	ND	0.112		mg/Kg-dry	1	11/14/2013 8:28:57 PM
Ethylbenzene	ND	0.112		mg/Kg-dry	1	11/14/2013 8:28:57 PM
Xylenes, Total	ND	0.335		mg/Kg-dry	1	11/14/2013 8:28:57 PM
Surr: 4-Bromofluorobenzene	53.2	42.6-126		%REC	1	11/14/2013 8:28:57 PM
ICP METALS- TOTAL RECOVERABLE		**SW6010C**				Analyst: **VAS**
Arsenic	30.3	2.23		mg/Kg-dry	1	11/13/2013 8:19:37 PM
Lead	190	2.23		mg/Kg-dry	1	11/13/2013 8:19:37 PM
PAH'S BY GC/MS - LOW LEVEL		**SW8270D**				Analyst: **bda**
1-Methylnaphthalene	9.89	7.45		µg/Kg-dry	1	11/19/2013 1:36:00 PM
2-Methylnaphthalene	9.21	7.45		µg/Kg-dry	1	11/19/2013 1:36:00 PM
Acenaphthene	ND	7.45		µg/Kg-dry	1	11/19/2013 1:36:00 PM
Acenaphthylene	ND	7.45		µg/Kg-dry	1	11/19/2013 1:36:00 PM
Anthracene	ND	7.45		µg/Kg-dry	1	11/19/2013 1:36:00 PM
Benz(a)anthracene	ND	7.45		µg/Kg-dry	1	11/19/2013 1:36:00 PM
Benzo(a)pyrene	8.83	7.45		µg/Kg-dry	1	11/19/2013 1:36:00 PM
Benzo(b)fluoranthene	8.91	7.45		µg/Kg-dry	1	11/19/2013 1:36:00 PM
Benzo(g,h,i)perylene	20.6	7.45		µg/Kg-dry	1	11/19/2013 1:36:00 PM
Benzo(k)fluoranthene	ND	7.45		µg/Kg-dry	1	11/19/2013 1:36:00 PM
Chrysene	ND	7.45		µg/Kg-dry	1	11/19/2013 1:36:00 PM
Dibenz(a,h)anthracene	ND	7.45		µg/Kg-dry	1	11/19/2013 1:36:00 PM
Fluoranthene	10.8	7.45		µg/Kg-dry	1	11/19/2013 1:36:00 PM
Fluorene	ND	7.45		µg/Kg-dry	1	11/19/2013 1:36:00 PM

Specialty Analytical

Date Reported: 07-Feb-14

CLIENT: Maul Foster & Alongi
Collection Date: 11/5/2013 11:50:00 AM
Project: City of Wenatchee / 0380.02.04
Lab ID: 1311104-007
Client Sample ID: GP14-Comp
Matrix: SOIL

Analyses	Result	RL	Qual	Unit	DF	Date Analyzed
PAH'S BY GC/MS - LOW LEVEL		**SW8270D**				Analyst: **bda**
Indeno(1,2,3-cd)pyrene	ND	7.45		µg/Kg-dry	1	11/19/2013 1:36:00 PM
Naphthalene	9.06	7.45		µg/Kg-dry	1	11/19/2013 1:36:00 PM
Phenanthrene	13.3	7.45		µg/Kg-dry	1	11/19/2013 1:36:00 PM
Pyrene	20.8	7.45		µg/Kg-dry	1	11/19/2013 1:36:00 PM
Surr: 2-Fluorobiphenyl	67.9	42.6-128		%REC	1	11/19/2013 1:36:00 PM
Surr: Nitrobenzene-d5	94.8	21.7-155		%REC	1	11/19/2013 1:36:00 PM
Surr: p-Terphenyl-d14	77.3	44.9-155		%REC	1	11/19/2013 1:36:00 PM

Specialty Analytical

Date Reported: 07-Feb-14

CLIENT: Maul Foster & Alongi
Collection Date: 11/5/2013 12:00:00 PM
Project: City of Wenatchee / 0380.02.04
Lab ID: 1311104-008
Client Sample ID: GP14-S-7.5
Matrix: SOIL

Analyses	Result	RL	Qual	Unit	DF	Date Analyzed
NWTPH-HCID		**NWHCID**				Analyst: **ZP**
Gasoline	ND	23.4		mg/Kg-dry	1	11/12/2013 2:42:15 PM
Mineral Spirits	ND	23.4		mg/Kg-dry	1	11/12/2013 2:42:15 PM
Kerosene	ND	58.5		mg/Kg-dry	1	11/12/2013 2:42:15 PM
Diesel	DIESEL	58.5		mg/Kg-dry	1	11/12/2013 2:42:15 PM
Lube Oil	LUBE OIL	117		mg/Kg-dry	1	11/12/2013 2:42:15 PM
Surr: BFB	67.1	50-150		%REC	1	11/12/2013 2:42:15 PM
Surr: o-Terphenyl	89.8	50-150		%REC	1	11/12/2013 2:42:15 PM
NWTPH-DX		**NWTPH-DX**				Analyst: **ZP**
Diesel	116	17.6	A1	mg/Kg-dry	1	11/19/2013 5:25:23 PM
Lube Oil	211	58.5		mg/Kg-dry	1	11/19/2013 5:25:23 PM
Surr: o-Terphenyl	86.1	50-150		%REC	1	11/19/2013 5:25:23 PM
BTEX BY 8021/5035		**SW8021B**				Analyst: **ZP**
Benzene	ND	0.019		mg/Kg-dry	1	11/14/2013 11:28:11 PM
Ethylbenzene	ND	0.19		mg/Kg-dry	1	11/14/2013 11:28:11 PM
Toluene	ND	0.19		mg/Kg-dry	1	11/14/2013 11:28:11 PM
Xylenes, Total	ND	0.57		mg/Kg-dry	1	11/14/2013 11:28:11 PM
Surr: 4-Bromofluorobenzene	58.2	42.6-126		%REC	1	11/14/2013 11:28:11 PM
PAH'S BY GC/MS - LOW LEVEL		**SW8270D**				Analyst: **bda**
1-Methylnaphthalene	27.4	7.81		µg/Kg-dry	1	11/19/2013 2:00:00 PM
2-Methylnaphthalene	28.5	7.81		µg/Kg-dry	1	11/19/2013 2:00:00 PM
Acenaphthene	ND	7.81		µg/Kg-dry	1	11/19/2013 2:00:00 PM
Acenaphthylene	ND	7.81		µg/Kg-dry	1	11/19/2013 2:00:00 PM
Anthracene	ND	7.81		µg/Kg-dry	1	11/19/2013 2:00:00 PM
Benz(a)anthracene	ND	7.81		µg/Kg-dry	1	11/19/2013 2:00:00 PM
Benzo(a)pyrene	ND	7.81		µg/Kg-dry	1	11/19/2013 2:00:00 PM
Benzo(b)fluoranthene	ND	7.81		µg/Kg-dry	1	11/19/2013 2:00:00 PM
Benzo(g,h,i)perylene	ND	7.81		µg/Kg-dry	1	11/19/2013 2:00:00 PM
Benzo(k)fluoranthene	ND	7.81		µg/Kg-dry	1	11/19/2013 2:00:00 PM
Chrysene	ND	7.81		µg/Kg-dry	1	11/19/2013 2:00:00 PM
Dibenz(a,h)anthracene	ND	7.81		µg/Kg-dry	1	11/19/2013 2:00:00 PM
Fluoranthene	8.72	7.81		µg/Kg-dry	1	11/19/2013 2:00:00 PM
Fluorene	9.37	7.81		µg/Kg-dry	1	11/19/2013 2:00:00 PM
Indeno(1,2,3-cd)pyrene	ND	7.81		µg/Kg-dry	1	11/19/2013 2:00:00 PM
Naphthalene	14.8	7.81		µg/Kg-dry	1	11/19/2013 2:00:00 PM
Phenanthrene	16.6	7.81		µg/Kg-dry	1	11/19/2013 2:00:00 PM
Pyrene	15.2	7.81		µg/Kg-dry	1	11/19/2013 2:00:00 PM

Specialty Analytical

Date Reported: 07-Feb-14

CLIENT: Maul Foster & Alongi
Collection Date: 11/5/2013 12:00:00 PM
Project: City of Wenatchee / 0380.02.04
Lab ID: 1311104-008
Client Sample ID: GP14-S-7.5
Matrix: SOIL

Analyses	Result	RL	Qual	Unit	DF	Date Analyzed
PAH'S BY GC/MS - LOW LEVEL		**SW8270D**				Analyst: **bda**
Surr: 2-Fluorobiphenyl	54.3	42.6-128		%REC	1	11/19/2013 2:00:00 PM
Surr: Nitrobenzene-d5	84.9	21.7-155		%REC	1	11/19/2013 2:00:00 PM
Surr: p-Terphenyl-d14	74.5	44.9-155		%REC	1	11/19/2013 2:00:00 PM
PCB'S IN SOLIDS		**SW 8082A**				Analyst: **ajr**
Aroclor 1016	ND	0.390		µg/Kg-dry	1	11/18/2013 5:26:00 PM
Aroclor 1221	ND	0.390		µg/Kg-dry	1	11/18/2013 5:26:00 PM
Aroclor 1232	ND	0.390		µg/Kg-dry	1	11/18/2013 5:26:00 PM
Aroclor 1242	ND	0.390		µg/Kg-dry	1	11/18/2013 5:26:00 PM
Aroclor 1248	ND	0.390		µg/Kg-dry	1	11/18/2013 5:26:00 PM
Aroclor 1254	ND	0.390		µg/Kg-dry	1	11/18/2013 5:26:00 PM
Aroclor 1260	ND	0.390		µg/Kg-dry	1	11/18/2013 5:26:00 PM
Aroclor 1262	ND	0.390		µg/Kg-dry	1	11/18/2013 5:26:00 PM
Aroclor 1268	ND	0.390		µg/Kg-dry	1	11/18/2013 5:26:00 PM
Surr: Decachlorobiphenyl	99.8	56.5-130		%REC	1	11/18/2013 5:26:00 PM

Specialty Analytical

Date Reported: 07-Feb-14

CLIENT: Maul Foster & Alongi
Collection Date: 11/5/2013 12:10:00 PM
Project: City of Wenatchee / 0380.02.04
Lab ID: 1311104-009
Client Sample ID: GP14-S-11.5
Matrix: SOIL

Analyses	Result	RL	Qual	Unit	DF	Date Analyzed
NWTPH-DX		**NWTPH-DX**				Analyst: **ZP**
Diesel	53.1	18.0	A1	mg/Kg-dry	1	11/19/2013 4:19:46 PM
Lube Oil	132	60.1		mg/Kg-dry	1	11/19/2013 4:19:46 PM
Surr: o-Terphenyl	72.2	50-150		%REC	1	11/19/2013 4:19:46 PM
BTEX BY 8021/5035		**SW8021B**				Analyst: **ZP**
Benzene	ND	0.022	HT	mg/Kg-dry	1	11/20/2013 1:48:52 AM
Ethylbenzene	ND	0.22	HT	mg/Kg-dry	1	11/20/2013 1:48:52 AM
Toluene	ND	0.22	HT	mg/Kg-dry	1	11/20/2013 1:48:52 AM
Xylenes, Total	ND	0.65	HT	mg/Kg-dry	1	11/20/2013 1:48:52 AM
Surr: 4-Bromofluorobenzene	65.9	42.6-126	HT	%REC	1	11/20/2013 1:48:52 AM

Specialty Analytical

Date Reported: 07-Feb-14

CLIENT: Maul Foster & Alongi
Collection Date: 11/5/2013 1:10:00 PM
Project: City of Wenatchee / 0380.02.04
Lab ID: 1311104-010
Client Sample ID: GP13-S-10
Matrix: SOIL

Analyses	Result	RL	Qual	Unit	DF	Date Analyzed
NWTPH-HCID		**NWHCID**				Analyst: **ZP**
Gasoline	ND	23.6		mg/Kg-dry	1	11/12/2013 3:04:15 PM
Mineral Spirits	ND	23.6		mg/Kg-dry	1	11/12/2013 3:04:15 PM
Kerosene	ND	59.1		mg/Kg-dry	1	11/12/2013 3:04:15 PM
Diesel	DIESEL	59.1		mg/Kg-dry	1	11/12/2013 3:04:15 PM
Lube Oil	LUBE OIL	118		mg/Kg-dry	1	11/12/2013 3:04:15 PM
Surr: BFB	68.4	50-150		%REC	1	11/12/2013 3:04:15 PM
Surr: o-Terphenyl	93.3	50-150		%REC	1	11/12/2013 3:04:15 PM
NWTPH-DX		**NWTPH-DX**				Analyst: **ZP**
Diesel	114	17.7	A1	mg/Kg-dry	1	11/19/2013 5:03:33 PM
Lube Oil	192	59.1		mg/Kg-dry	1	11/19/2013 5:03:33 PM
Surr: o-Terphenyl	81.5	50-150		%REC	1	11/19/2013 5:03:33 PM
BTEX BY 8021/5035		**SW8021B**				Analyst: **ZP**
Benzene	ND	0.018		mg/Kg-dry	1	11/14/2013 11:53:45 PM
Ethylbenzene	ND	0.18		mg/Kg-dry	1	11/14/2013 11:53:45 PM
Toluene	ND	0.18		mg/Kg-dry	1	11/14/2013 11:53:45 PM
Xylenes, Total	ND	0.53		mg/Kg-dry	1	11/14/2013 11:53:45 PM
Surr: 4-Bromofluorobenzene	58.4	42.6-126		%REC	1	11/14/2013 11:53:45 PM
PAH'S BY GC/MS - LOW LEVEL		**SW8270D**				Analyst: **bda**
1-Methylnaphthalene	155	7.88		µg/Kg-dry	1	11/19/2013 2:25:00 PM
2-Methylnaphthalene	216	7.88		µg/Kg-dry	1	11/19/2013 2:25:00 PM
Acenaphthene	16.1	7.88		µg/Kg-dry	1	11/19/2013 2:25:00 PM
Acenaphthylene	ND	7.88		µg/Kg-dry	1	11/19/2013 2:25:00 PM
Anthracene	12.1	7.88		µg/Kg-dry	1	11/19/2013 2:25:00 PM
Benz(a)anthracene	10.9	7.88		µg/Kg-dry	1	11/19/2013 2:25:00 PM
Benzo(a)pyrene	14.1	7.88		µg/Kg-dry	1	11/19/2013 2:25:00 PM
Benzo(b)fluoranthene	15.8	7.88		µg/Kg-dry	1	11/19/2013 2:25:00 PM
Benzo(g,h,i)perylene	15.7	7.88		µg/Kg-dry	1	11/19/2013 2:25:00 PM
Benzo(k)fluoranthene	ND	7.88		µg/Kg-dry	1	11/19/2013 2:25:00 PM
Chrysene	16.2	7.88		µg/Kg-dry	1	11/19/2013 2:25:00 PM
Dibenz(a,h)anthracene	ND	7.88		µg/Kg-dry	1	11/19/2013 2:25:00 PM
Fluoranthene	27.0	7.88		µg/Kg-dry	1	11/19/2013 2:25:00 PM
Fluorene	24.0	7.88		µg/Kg-dry	1	11/19/2013 2:25:00 PM
Indeno(1,2,3-cd)pyrene	ND	7.88		µg/Kg-dry	1	11/19/2013 2:25:00 PM
Naphthalene	53.2	7.88		µg/Kg-dry	1	11/19/2013 2:25:00 PM
Phenanthrene	64.6	7.88		µg/Kg-dry	1	11/19/2013 2:25:00 PM
Pyrene	46.6	7.88		µg/Kg-dry	1	11/19/2013 2:25:00 PM

Specialty Analytical

Date Reported: 07-Feb-14

CLIENT: Maul Foster & Alongi
Collection Date: 11/5/2013 1:10:00 PM
Project: City of Wenatchee / 0380.02.04
Lab ID: 1311104-010
Client Sample ID: GP13-S-10
Matrix: SOIL

Analyses	Result	RL	Qual	Unit	DF	Date Analyzed
PAH'S BY GC/MS - LOW LEVEL		**SW8270D**				Analyst: **bda**
Surr: 2-Fluorobiphenyl	62.6	42.6-128		%REC	1	11/19/2013 2:25:00 PM
Surr: Nitrobenzene-d5	88.2	21.7-155		%REC	1	11/19/2013 2:25:00 PM
Surr: p-Terphenyl-d14	85.3	44.9-155		%REC	1	11/19/2013 2:25:00 PM
PCB'S IN SOLIDS		**SW 8082A**				Analyst: **ajr**
Aroclor 1016	ND	0.393		µg/Kg-dry	1	11/18/2013 5:43:00 PM
Aroclor 1221	ND	0.393		µg/Kg-dry	1	11/18/2013 5:43:00 PM
Aroclor 1232	ND	0.393		µg/Kg-dry	1	11/18/2013 5:43:00 PM
Aroclor 1242	ND	0.393		µg/Kg-dry	1	11/18/2013 5:43:00 PM
Aroclor 1248	ND	0.393		µg/Kg-dry	1	11/18/2013 5:43:00 PM
Aroclor 1254	ND	0.393		µg/Kg-dry	1	11/18/2013 5:43:00 PM
Aroclor 1260	ND	0.393		µg/Kg-dry	1	11/18/2013 5:43:00 PM
Aroclor 1262	ND	0.393		µg/Kg-dry	1	11/18/2013 5:43:00 PM
Aroclor 1268	ND	0.393		µg/Kg-dry	1	11/18/2013 5:43:00 PM
Surr: Decachlorobiphenyl	75.2	56.5-130		%REC	1	11/18/2013 5:43:00 PM

Specialty Analytical

Date Reported: 07-Feb-14

CLIENT: Maul Foster & Alongi
Collection Date: 11/5/2013 1:20:00 PM
Project: City of Wenatchee / 0380.02.04
Lab ID: 1311104-011
Client Sample ID: GP13-S-13
Matrix: SOIL

Analyses	Result	RL	Qual	Unit	DF	Date Analyzed
NWTPH-DX		**NWTPH-DX**				Analyst: **ZP**
Diesel	149	17.2	A1	mg/Kg-dry	1	11/19/2013 5:47:24 PM
Lube Oil	276	57.5		mg/Kg-dry	1	11/19/2013 5:47:24 PM
Surr: o-Terphenyl	116	50-150		%REC	1	11/19/2013 5:47:24 PM
BTEX BY 8021/5035		**SW8021B**				Analyst: **ZP**
Benzene	ND	0.021	HT	mg/Kg-dry	1	11/20/2013 2:14:22 AM
Ethylbenzene	ND	0.21	HT	mg/Kg-dry	1	11/20/2013 2:14:22 AM
Toluene	ND	0.21	HT	mg/Kg-dry	1	11/20/2013 2:14:22 AM
Xylenes, Total	ND	0.64	HT	mg/Kg-dry	1	11/20/2013 2:14:22 AM
Surr: 4-Bromofluorobenzene	70.1	42.6-126	HT	%REC	1	11/20/2013 2:14:22 AM

Specialty Analytical

Date Reported: 07-Feb-14

CLIENT:	Maul Foster & Alongi	**Collection Date:**	11/5/2013 1:30:00 PM
Project:	City of Wenatchee / 0380.02.04		
Lab ID:	1311104-012		
Client Sample ID:	GP13-S-15	**Matrix:**	SOIL

Analyses	Result	RL	Qual	Unit	DF	Date Analyzed
HOLD PER CLIENT REQUEST		**PER CLIENT**				Analyst: **knb**
Hold	Hold	0			1	11/25/2013 9:09:10 AM

Specialty Analytical

Date Reported: 07-Feb-14

CLIENT: Maul Foster & Alongi
Collection Date: 11/5/2013 2:15:00 PM
Project: City of Wenatchee / 0380.02.04
Lab ID: 1311104-013
Client Sample ID: GP15-Comp
Matrix: SOIL

Analyses	Result	RL	Qual	Unit	DF	Date Analyzed
NWTPH-HCID		**NWHCID**				Analyst: **ZP**
Gasoline	ND	22.2		mg/Kg-dry	1	11/12/2013 3:26:20 PM
Mineral Spirits	ND	22.2		mg/Kg-dry	1	11/12/2013 3:26:20 PM
Kerosene	ND	55.5		mg/Kg-dry	1	11/12/2013 3:26:20 PM
Diesel	ND	55.5		mg/Kg-dry	1	11/12/2013 3:26:20 PM
Lube Oil	ND	111		mg/Kg-dry	1	11/12/2013 3:26:20 PM
Surr: BFB	60.0	50-150		%REC	1	11/12/2013 3:26:20 PM
Surr: o-Terphenyl	80.9	50-150		%REC	1	11/12/2013 3:26:20 PM
ICP METALS- TOTAL RECOVERABLE		**SW6010C**				Analyst: **VAS**
Arsenic	68.4	2.06		mg/Kg-dry	1	11/13/2013 8:24:38 PM
Lead	313	2.06		mg/Kg-dry	1	11/13/2013 8:24:38 PM
PAH'S BY GC/MS - LOW LEVEL		**SW8270D**				Analyst: **bda**
1-Methylnaphthalene	ND	7.41		µg/Kg-dry	1	11/19/2013 12:47:00 PM
2-Methylnaphthalene	8.59	7.41		µg/Kg-dry	1	11/19/2013 12:47:00 PM
Acenaphthene	ND	7.41		µg/Kg-dry	1	11/19/2013 12:47:00 PM
Acenaphthylene	ND	7.41		µg/Kg-dry	1	11/19/2013 12:47:00 PM
Anthracene	ND	7.41		µg/Kg-dry	1	11/19/2013 12:47:00 PM
Benz(a)anthracene	ND	7.41		µg/Kg-dry	1	11/19/2013 12:47:00 PM
Benzo(a)pyrene	ND	7.41		µg/Kg-dry	1	11/19/2013 12:47:00 PM
Benzo(b)fluoranthene	ND	7.41		µg/Kg-dry	1	11/19/2013 12:47:00 PM
Benzo(g,h,i)perylene	ND	7.41		µg/Kg-dry	1	11/19/2013 12:47:00 PM
Benzo(k)fluoranthene	ND	7.41		µg/Kg-dry	1	11/19/2013 12:47:00 PM
Chrysene	ND	7.41		µg/Kg-dry	1	11/19/2013 12:47:00 PM
Dibenz(a,h)anthracene	ND	7.41		µg/Kg-dry	1	11/19/2013 12:47:00 PM
Fluoranthene	9.88	7.41		µg/Kg-dry	1	11/19/2013 12:47:00 PM
Fluorene	ND	7.41		µg/Kg-dry	1	11/19/2013 12:47:00 PM
Indeno(1,2,3-cd)pyrene	ND	7.41		µg/Kg-dry	1	11/19/2013 12:47:00 PM
Naphthalene	23.2	7.41		µg/Kg-dry	1	11/19/2013 12:47:00 PM
Phenanthrene	20.5	7.41		µg/Kg-dry	1	11/19/2013 12:47:00 PM
Pyrene	12.2	7.41		µg/Kg-dry	1	11/19/2013 12:47:00 PM
Surr: 2-Fluorobiphenyl	68.2	42.6-128		%REC	1	11/19/2013 12:47:00 PM
Surr: Nitrobenzene-d5	103	21.7-155		%REC	1	11/19/2013 12:47:00 PM
Surr: p-Terphenyl-d14	75.8	44.9-155		%REC	1	11/19/2013 12:47:00 PM
PCB'S IN SOLIDS		**SW 8082A**				Analyst: **ajr**
Aroclor 1016	ND	0.370		µg/Kg-dry	1	11/18/2013 6:00:00 PM
Aroclor 1221	ND	0.370		µg/Kg-dry	1	11/18/2013 6:00:00 PM
Aroclor 1232	ND	0.370		µg/Kg-dry	1	11/18/2013 6:00:00 PM

Specialty Analytical

Date Reported: 07-Feb-14

CLIENT: Maul Foster & Alongi
Collection Date: 11/5/2013 2:15:00 PM
Project: City of Wenatchee / 0380.02.04
Lab ID: 1311104-013
Client Sample ID: GP15-Comp
Matrix: SOIL

Analyses	Result	RL	Qual	Unit	DF	Date Analyzed
PCB'S IN SOLIDS		**SW 8082A**				Analyst: **ajr**
Aroclor 1242	ND	0.370		µg/Kg-dry	1	11/18/2013 6:00:00 PM
Aroclor 1248	ND	0.370		µg/Kg-dry	1	11/18/2013 6:00:00 PM
Aroclor 1254	ND	0.370		µg/Kg-dry	1	11/18/2013 6:00:00 PM
Aroclor 1260	ND	0.370		µg/Kg-dry	1	11/18/2013 6:00:00 PM
Aroclor 1262	ND	0.370		µg/Kg-dry	1	11/18/2013 6:00:00 PM
Aroclor 1268	ND	0.370		µg/Kg-dry	1	11/18/2013 6:00:00 PM
Surr: Decachlorobiphenyl	106	56.5-130		%REC	1	11/18/2013 6:00:00 PM

Specialty Analytical

Date Reported: 07-Feb-14

CLIENT:	Maul Foster & Alongi	**Collection Date:**	11/5/2013 2:40:00 PM
Project:	City of Wenatchee / 0380.02.04		
Lab ID:	1311104-014		
Client Sample ID:	GP15-S-14	**Matrix:**	SOIL

Analyses	Result	RL	Qual	Unit	DF	Date Analyzed
NWTPH-DX		**NWTPH-DX**				Analyst: **ZP**
Diesel	ND	16.6		mg/Kg-dry	1	11/19/2013 1:05:33 PM
Lube Oil	ND	55.3		mg/Kg-dry	1	11/19/2013 1:05:33 PM
Surr: o-Terphenyl	73.0	50-150		%REC	1	11/19/2013 1:05:33 PM

Specialty Analytical

Date Reported: 07-Feb-14

CLIENT:	Maul Foster & Alongi	**Collection Date:**	11/5/2013 3:15:00 PM
Project:	City of Wenatchee / 0380.02.04		
Lab ID:	1311104-015		
Client Sample ID:	GP16-S-4	**Matrix:**	SOIL

Analyses	Result	RL	Qual	Unit	DF	Date Analyzed
HOLD PER CLIENT REQUEST		**PER CLIENT**				Analyst: **knb**
Hold	Hold	0			1	11/25/2013 9:09:10 AM

Specialty Analytical

Date Reported: 07-Feb-14

CLIENT: Maul Foster & Alongi
Collection Date: 11/5/2013 3:20:00 PM
Project: City of Wenatchee / 0380.02.04
Lab ID: 1311104-016
Client Sample ID: GP16-S-14
Matrix: SOIL

Analyses	Result	RL	Qual	Unit	DF	Date Analyzed
PAH'S BY GC/MS - LOW LEVEL		**SW8270D**				Analyst: **bda**
1-Methylnaphthalene	ND	7.19		µg/Kg-dry	1	11/19/2013 12:23:00 PM
2-Methylnaphthalene	ND	7.19		µg/Kg-dry	1	11/19/2013 12:23:00 PM
Acenaphthene	ND	7.19		µg/Kg-dry	1	11/19/2013 12:23:00 PM
Acenaphthylene	ND	7.19		µg/Kg-dry	1	11/19/2013 12:23:00 PM
Anthracene	ND	7.19		µg/Kg-dry	1	11/19/2013 12:23:00 PM
Benz(a)anthracene	ND	7.19		µg/Kg-dry	1	11/19/2013 12:23:00 PM
Benzo(a)pyrene	ND	7.19		µg/Kg-dry	1	11/19/2013 12:23:00 PM
Benzo(b)fluoranthene	ND	7.19		µg/Kg-dry	1	11/19/2013 12:23:00 PM
Benzo(g,h,i)perylene	7.31	7.19		µg/Kg-dry	1	11/19/2013 12:23:00 PM
Benzo(k)fluoranthene	ND	7.19		µg/Kg-dry	1	11/19/2013 12:23:00 PM
Chrysene	ND	7.19		µg/Kg-dry	1	11/19/2013 12:23:00 PM
Dibenz(a,h)anthracene	ND	7.19		µg/Kg-dry	1	11/19/2013 12:23:00 PM
Fluoranthene	ND	7.19		µg/Kg-dry	1	11/19/2013 12:23:00 PM
Fluorene	ND	7.19		µg/Kg-dry	1	11/19/2013 12:23:00 PM
Indeno(1,2,3-cd)pyrene	ND	7.19		µg/Kg-dry	1	11/19/2013 12:23:00 PM
Naphthalene	ND	7.19		µg/Kg-dry	1	11/19/2013 12:23:00 PM
Phenanthrene	ND	7.19		µg/Kg-dry	1	11/19/2013 12:23:00 PM
Pyrene	ND	7.19		µg/Kg-dry	1	11/19/2013 12:23:00 PM
Surr: 2-Fluorobiphenyl	61.7	42.6-128		%REC	1	11/19/2013 12:23:00 PM
Surr: Nitrobenzene-d5	80.8	21.7-155		%REC	1	11/19/2013 12:23:00 PM
Surr: p-Terphenyl-d14	76.7	44.9-155		%REC	1	11/19/2013 12:23:00 PM

Specialty Analytical

Date Reported: 07-Feb-14

CLIENT:	Maul Foster & Alongi	**Collection Date:**	11/5/2013 4:10:00 PM
Project:	City of Wenatchee / 0380.02.04		
Lab ID:	1311104-017		
Client Sample ID:	GP21-S-16	**Matrix:**	SOIL

Analyses	Result	RL	Qual	Unit	DF	Date Analyzed
ICP METALS- TOTAL RECOVERABLE		**SW6010C**				Analyst: **VAS**
Lead	ND	2.00		mg/Kg-dry	1	11/13/2013 8:29:53 PM

Specialty Analytical

Date Reported: 07-Feb-14

CLIENT:	Maul Foster & Alongi	**Collection Date:**	11/5/2013 4:20:00 PM
Project:	City of Wenatchee / 0380.02.04		
Lab ID:	1311104-018		
Client Sample ID:	GP21-S-20	**Matrix:**	SOIL

Analyses	Result	RL	Qual	Unit	DF	Date Analyzed
HOLD PER CLIENT REQUEST		**PER CLIENT**				Analyst: **knb**
Hold	Hold	0			1	11/25/2013 9:09:10 AM

Specialty Analytical

Date Reported: 07-Feb-14

CLIENT:	Maul Foster & Alongi	**Collection Date:**	11/5/2013 5:00:00 PM
Project:	City of Wenatchee / 0380.02.04		
Lab ID:	1311104-019		
Client Sample ID:	GP19-S-16	**Matrix:**	SOIL

Analyses	Result	RL	Qual	Unit	DF	Date Analyzed
ICP METALS- TOTAL RECOVERABLE		**SW6010C**				Analyst: **VAS**
Lead	2.24	2.02		mg/Kg-dry	1	11/13/2013 8:55:18 PM

Specialty Analytical

Date Reported: 07-Feb-14

CLIENT:	Maul Foster & Alongi	**Collection Date:**	11/5/2013 5:10:00 PM
Project:	City of Wenatchee / 0380.02.04		
Lab ID:	1311104-020		
Client Sample ID:	GP19-S-20	**Matrix:**	SOIL

Analyses	Result	RL	Qual	Unit	DF	Date Analyzed
HOLD PER CLIENT REQUEST		**PER CLIENT**				Analyst: **knb**
Hold	Hold	0			1	11/25/2013 9:09:10 AM

Specialty Analytical

Date Reported: 07-Feb-14

CLIENT: Maul Foster & Alongi
Collection Date: 11/5/2013 3:55:00 PM
Project: City of Wenatchee / 0380.02.04
Lab ID: 1311104-021
Client Sample ID: PZ1-W
Matrix: WATER

Analyses	Result	RL	Qual	Unit	DF	Date Analyzed
NWTPH HCID		**NWHCID**				Analyst: **ZP**
Diesel	ND	0.638		mg/L	1	11/13/2013
Gasoline	ND	0.253		mg/L	1	11/13/2013
Kerosene	ND	0.638		mg/L	1	11/13/2013
Lube Oil	ND	0.638		mg/L	1	11/13/2013
Mineral Spirits	ND	0.253		mg/L	1	11/13/2013
Surr: BFB	92.9	30.2-133		%REC	1	11/13/2013
Surr: o-Terphenyl	88.9	50-150		%REC	1	11/13/2013

Specialty Analytical

Date Reported: 07-Feb-14

CLIENT:	Maul Foster & Alongi	**Collection Date:**	11/6/2013 8:00:00 AM
Project:	City of Wenatchee / 0380.02.04		
Lab ID:	1311104-022		
Client Sample ID:	GP22-S-16	**Matrix:**	SOIL

Analyses	Result	RL	Qual	Unit	DF	Date Analyzed
ICP METALS- TOTAL RECOVERABLE		**SW6010C**				Analyst: **VAS**
Lead	10.1	2.20		mg/Kg-dry	1	11/13/2013 9:00:16 PM

Specialty Analytical

Date Reported: 07-Feb-14

CLIENT:	Maul Foster & Alongi	**Collection Date:**	11/6/2013 8:10:00 AM
Project:	City of Wenatchee / 0380.02.04		
Lab ID:	1311104-023		
Client Sample ID:	GP22-S-20	**Matrix:**	SOIL

Analyses	Result	RL	Qual	Unit	DF	Date Analyzed
HOLD PER CLIENT REQUEST		**PER CLIENT**				Analyst: **knb**
Hold	Hold	0			1	11/25/2013 9:09:10 AM

Specialty Analytical

Date Reported: 07-Feb-14

CLIENT:	Maul Foster & Alongi	**Collection Date:**	11/5/2013
Project:	City of Wenatchee / 0380.02.04		
Lab ID:	1311104-024		
Client Sample ID:	Trip Blank	**Matrix:**	AQUEOUS

Analyses	Result	RL	Qual	Unit	DF	Date Analyzed
HOLD PER CLIENT REQUEST		**PER CLIENT**				Analyst: **knb**
Hold	Hold	0			1	11/25/2013 9:09:10 AM

Specialty Analytical

Date Reported: 07-Feb-14

CLIENT: Maul Foster & Alongi
Collection Date: 11/6/2013 8:40:00 AM
Project: City of Wenatchee / 0380.02.04
Lab ID: 1311104-025
Client Sample ID: GP17-Comp
Matrix: SOIL

Analyses	Result	RL	Qual	Unit	DF	Date Analyzed
NWTPH-HCID		**NWHCID**				Analyst: **ZP**
Gasoline	ND	20.8		mg/Kg-dry	1	11/12/2013 3:48:18 PM
Mineral Spirits	ND	20.8		mg/Kg-dry	1	11/12/2013 3:48:18 PM
Kerosene	ND	52.0		mg/Kg-dry	1	11/12/2013 3:48:18 PM
Diesel	ND	52.0		mg/Kg-dry	1	11/12/2013 3:48:18 PM
Lube Oil	ND	104		mg/Kg-dry	1	11/12/2013 3:48:18 PM
Surr: BFB	67.9	50-150		%REC	1	11/12/2013 3:48:18 PM
Surr: o-Terphenyl	85.6	50-150		%REC	1	11/12/2013 3:48:18 PM
ICP METALS- TOTAL RECOVERABLE		**SW6010C**				Analyst: **VAS**
Arsenic	ND	2.08		mg/Kg-dry	1	11/14/2013 11:56:51 AM
Lead	23.2	2.08		mg/Kg-dry	1	11/13/2013 9:05:16 PM
PAH'S BY GC/MS - LOW LEVEL		**SW8270D**				Analyst: **bda**
1-Methylnaphthalene	ND	6.94		µg/Kg-dry	1	11/19/2013 2:49:00 PM
2-Methylnaphthalene	9.15	6.94		µg/Kg-dry	1	11/19/2013 2:49:00 PM
Acenaphthene	ND	6.94		µg/Kg-dry	1	11/19/2013 2:49:00 PM
Acenaphthylene	16.9	6.94		µg/Kg-dry	1	11/19/2013 2:49:00 PM
Anthracene	22.2	6.94		µg/Kg-dry	1	11/19/2013 2:49:00 PM
Benz(a)anthracene	45.1	6.94		µg/Kg-dry	1	11/19/2013 2:49:00 PM
Benzo(a)pyrene	62.0	6.94		µg/Kg-dry	1	11/19/2013 2:49:00 PM
Benzo(b)fluoranthene	70.7	6.94		µg/Kg-dry	1	11/19/2013 2:49:00 PM
Benzo(g,h,i)perylene	61.0	6.94		µg/Kg-dry	1	11/19/2013 2:49:00 PM
Benzo(k)fluoranthene	21.5	6.94		µg/Kg-dry	1	11/19/2013 2:49:00 PM
Chrysene	58.7	6.94		µg/Kg-dry	1	11/19/2013 2:49:00 PM
Dibenz(a,h)anthracene	16.1	6.94		µg/Kg-dry	1	11/19/2013 2:49:00 PM
Fluoranthene	93.7	6.94		µg/Kg-dry	1	11/19/2013 2:49:00 PM
Fluorene	7.97	6.94		µg/Kg-dry	1	11/19/2013 2:49:00 PM
Indeno(1,2,3-cd)pyrene	41.5	6.94		µg/Kg-dry	1	11/19/2013 2:49:00 PM
Naphthalene	12.7	6.94		µg/Kg-dry	1	11/19/2013 2:49:00 PM
Phenanthrene	87.3	6.94		µg/Kg-dry	1	11/19/2013 2:49:00 PM
Pyrene	142	6.94		µg/Kg-dry	1	11/19/2013 2:49:00 PM
Surr: 2-Fluorobiphenyl	54.8	42.6-128		%REC	1	11/19/2013 2:49:00 PM
Surr: Nitrobenzene-d5	64.6	21.7-155		%REC	1	11/19/2013 2:49:00 PM
Surr: p-Terphenyl-d14	78.5	44.9-155		%REC	1	11/19/2013 2:49:00 PM
PCB'S IN SOLIDS		**SW 8082A**				Analyst: **ajr**
Aroclor 1016	ND	0.346		µg/Kg-dry	1	11/18/2013 6:17:00 PM
Aroclor 1221	ND	0.346		µg/Kg-dry	1	11/18/2013 6:17:00 PM
Aroclor 1232	ND	0.346		µg/Kg-dry	1	11/18/2013 6:17:00 PM

Specialty Analytical

Date Reported: 07-Feb-14

CLIENT: Maul Foster & Alongi
Collection Date: 11/6/2013 8:40:00 AM
Project: City of Wenatchee / 0380.02.04
Lab ID: 1311104-025
Client Sample ID: GP17-Comp
Matrix: SOIL

Analyses	Result	RL	Qual	Unit	DF	Date Analyzed
PCB'S IN SOLIDS		**SW 8082A**				Analyst: **ajr**
Aroclor 1242	ND	0.346		µg/Kg-dry	1	11/18/2013 6:17:00 PM
Aroclor 1248	ND	0.346		µg/Kg-dry	1	11/18/2013 6:17:00 PM
Aroclor 1254	ND	0.346		µg/Kg-dry	1	11/18/2013 6:17:00 PM
Aroclor 1260	ND	0.346		µg/Kg-dry	1	11/18/2013 6:17:00 PM
Aroclor 1262	ND	0.346		µg/Kg-dry	1	11/18/2013 6:17:00 PM
Aroclor 1268	ND	0.346		µg/Kg-dry	1	11/18/2013 6:17:00 PM
Surr: Decachlorobiphenyl	90.4	56.5-130		%REC	1	11/18/2013 6:17:00 PM

Specialty Analytical

Date Reported: 07-Feb-14

CLIENT: Maul Foster & Alongi
Collection Date: 11/6/2013 8:50:00 AM
Project: City of Wenatchee / 0380.02.04
Lab ID: 1311104-026
Client Sample ID: GP17-S-12.5
Matrix: SOIL

Analyses	Result	RL	Qual	Unit	DF	Date Analyzed
NWTPH-DX		**NWTPH-DX**				Analyst: **ZP**
Diesel	ND	17.2		mg/Kg-dry	1	11/19/2013 12:43:33 PM
Lube Oil	ND	57.5		mg/Kg-dry	1	11/19/2013 12:43:33 PM
Surr: o-Terphenyl	71.2	50-150		%REC	1	11/19/2013 12:43:33 PM
PAH'S BY GC/MS - LOW LEVEL		**SW8270D**				Analyst: **bda**
1-Methylnaphthalene	ND	7.67		µg/Kg-dry	1	11/19/2013 1:12:00 PM
2-Methylnaphthalene	ND	7.67		µg/Kg-dry	1	11/19/2013 1:12:00 PM
Acenaphthene	ND	7.67		µg/Kg-dry	1	11/19/2013 1:12:00 PM
Acenaphthylene	ND	7.67		µg/Kg-dry	1	11/19/2013 1:12:00 PM
Anthracene	ND	7.67		µg/Kg-dry	1	11/19/2013 1:12:00 PM
Benz(a)anthracene	ND	7.67		µg/Kg-dry	1	11/19/2013 1:12:00 PM
Benzo(a)pyrene	ND	7.67		µg/Kg-dry	1	11/19/2013 1:12:00 PM
Benzo(b)fluoranthene	ND	7.67		µg/Kg-dry	1	11/19/2013 1:12:00 PM
Benzo(g,h,i)perylene	ND	7.67		µg/Kg-dry	1	11/19/2013 1:12:00 PM
Benzo(k)fluoranthene	ND	7.67		µg/Kg-dry	1	11/19/2013 1:12:00 PM
Chrysene	ND	7.67		µg/Kg-dry	1	11/19/2013 1:12:00 PM
Dibenz(a,h)anthracene	ND	7.67		µg/Kg-dry	1	11/19/2013 1:12:00 PM
Fluoranthene	ND	7.67		µg/Kg-dry	1	11/19/2013 1:12:00 PM
Fluorene	ND	7.67		µg/Kg-dry	1	11/19/2013 1:12:00 PM
Indeno(1,2,3-cd)pyrene	ND	7.67		µg/Kg-dry	1	11/19/2013 1:12:00 PM
Naphthalene	ND	7.67		µg/Kg-dry	1	11/19/2013 1:12:00 PM
Phenanthrene	ND	7.67		µg/Kg-dry	1	11/19/2013 1:12:00 PM
Pyrene	ND	7.67		µg/Kg-dry	1	11/19/2013 1:12:00 PM
Surr: 2-Fluorobiphenyl	52.9	42.6-128		%REC	1	11/19/2013 1:12:00 PM
Surr: Nitrobenzene-d5	66.5	21.7-155		%REC	1	11/19/2013 1:12:00 PM
Surr: p-Terphenyl-d14	73.8	44.9-155		%REC	1	11/19/2013 1:12:00 PM

Specialty Analytical

Date Reported: 07-Feb-14

CLIENT:	Maul Foster & Alongi	**Collection Date:**	11/6/2013 9:00:00 AM
Project:	City of Wenatchee / 0380.02.04		
Lab ID:	1311104-027		
Client Sample ID:	GP17-S-16	**Matrix:**	SOIL

Analyses	Result	RL	Qual	Unit	DF	Date Analyzed
ICP METALS- TOTAL RECOVERABLE		**SW6010C**				Analyst: **VAS**
Lead	ND	2.14		mg/Kg-dry	1	11/13/2013 9:10:17 PM

Specialty Analytical

Date Reported: 07-Feb-14

CLIENT:	Maul Foster & Alongi	**Collection Date:**	11/6/2013 9:10:00 AM
Project:	City of Wenatchee / 0380.02.04		
Lab ID:	1311104-028		
Client Sample ID:	GP17-S-20	**Matrix:**	SOIL

Analyses	Result	RL	Qual	Unit	DF	Date Analyzed
HOLD PER CLIENT REQUEST		**PER CLIENT**				Analyst: **knb**
Hold	Hold	0			1	11/25/2013 9:09:10 AM

Specialty Analytical

Date Reported: 07-Feb-14

CLIENT:	Maul Foster & Alongi	**Collection Date:**	11/6/2013 10:00:00 AM
Project:	City of Wenatchee / 0380.02.04		
Lab ID:	1311104-029		
Client Sample ID:	GP18-S-7	**Matrix:**	SOIL

Analyses	Result	RL	Qual	Unit	DF	Date Analyzed
HOLD PER CLIENT REQUEST		**PER CLIENT**				Analyst: **knb**
Hold	Hold	0			1	11/25/2013 9:09:10 AM

Specialty Analytical

Date Reported: 07-Feb-14

CLIENT:	Maul Foster & Alongi	**Collection Date:**	11/6/2013 10:10:00 AM
Project:	City of Wenatchee / 0380.02.04		
Lab ID:	1311104-030		
Client Sample ID:	GP18-S-11	**Matrix:**	SOIL

Analyses	Result	RL	Qual	Unit	DF	Date Analyzed
HOLD PER CLIENT REQUEST		**PER CLIENT**				Analyst: **knb**
Hold	Hold	0			1	11/25/2013 9:09:10 AM

Specialty Analytical

Date Reported: 07-Feb-14

CLIENT:	Maul Foster & Alongi	**Collection Date:**	11/6/2013 10:20:00 AM
Project:	City of Wenatchee / 0380.02.04		
Lab ID:	1311104-031		
Client Sample ID:	GP18-S-15	**Matrix:**	SOIL

Analyses	Result	RL	Qual	Unit	DF	Date Analyzed
HOLD PER CLIENT REQUEST		**PER CLIENT**				Analyst: **knb**
Hold	Hold	0			1	11/25/2013 9:09:10 AM

Specialty Analytical

Date Reported: 07-Feb-14

CLIENT: Maul Foster & Alongi
Collection Date: 11/6/2013 11:45:00 AM
Project: City of Wenatchee / 0380.02.04
Lab ID: 1311104-032
Client Sample ID: GP18-W
Matrix: WATER

Analyses	Result	RL	Qual	Unit	DF	Date Analyzed
NWTPH HCID		**NWHCID**				Analyst: **ZP**
Diesel	ND	0.645		mg/L	1	11/13/2013
Gasoline	ND	0.256		mg/L	1	11/13/2013
Kerosene	ND	0.645		mg/L	1	11/13/2013
Lube Oil	ND	0.645		mg/L	1	11/13/2013
Mineral Spirits	ND	0.256		mg/L	1	11/13/2013
Surr: BFB	59.8	30.2-133		%REC	1	11/13/2013
Surr: o-Terphenyl	90.3	50-150		%REC	1	11/13/2013

Specialty Analytical

Date Reported: 07-Feb-14

CLIENT: Maul Foster & Alongi
Collection Date: 11/6/2013 12:50:00 PM
Project: City of Wenatchee / 0380.02.04
Lab ID: 1311104-033
Client Sample ID: GP20-Comp
Matrix: SOIL

Analyses	Result	RL	Qual	Unit	DF	Date Analyzed
NWTPH-HCID		**NWHCID**				Analyst: **ZP**
Gasoline	ND	21.9		mg/Kg-dry	1	11/12/2013 4:10:14 PM
Mineral Spirits	ND	21.9		mg/Kg-dry	1	11/12/2013 4:10:14 PM
Kerosene	ND	54.6		mg/Kg-dry	1	11/12/2013 4:10:14 PM
Diesel	DIESEL	54.6		mg/Kg-dry	1	11/12/2013 4:10:14 PM
Lube Oil	LUBE OIL	109		mg/Kg-dry	1	11/12/2013 4:10:14 PM
Surr: BFB	77.0	50-150		%REC	1	11/12/2013 4:10:14 PM
Surr: o-Terphenyl	87.7	50-150		%REC	1	11/12/2013 4:10:14 PM
NWTPH-DX		**NWTPH-DX**				Analyst: **ZP**
Diesel	27.7	16.4	A1	mg/Kg-dry	1	11/21/2013 1:01:11 PM
Lube Oil	127	54.6		mg/Kg-dry	1	11/21/2013 1:01:11 PM
Surr: o-Terphenyl	31.1	50-150	SMI	%REC	1	11/21/2013 1:01:11 PM
ICP METALS- TOTAL RECOVERABLE		**SW6010C**				Analyst: **VAS**
Arsenic	16.0	2.19		mg/Kg-dry	1	11/14/2013 12:01:51 PM
Lead	68.0	2.19		mg/Kg-dry	1	11/13/2013 9:15:19 PM
PAH'S BY GC/MS - LOW LEVEL		**SW8270D**				Analyst: **bda**
1-Methylnaphthalene	ND	7.29		µg/Kg-dry	1	11/19/2013 3:13:00 PM
2-Methylnaphthalene	ND	7.29		µg/Kg-dry	1	11/19/2013 3:13:00 PM
Acenaphthene	ND	7.29		µg/Kg-dry	1	11/19/2013 3:13:00 PM
Acenaphthylene	ND	7.29		µg/Kg-dry	1	11/19/2013 3:13:00 PM
Anthracene	ND	7.29		µg/Kg-dry	1	11/19/2013 3:13:00 PM
Benz(a)anthracene	ND	7.29		µg/Kg-dry	1	11/19/2013 3:13:00 PM
Benzo(a)pyrene	9.67	7.29		µg/Kg-dry	1	11/19/2013 3:13:00 PM
Benzo(b)fluoranthene	10.6	7.29		µg/Kg-dry	1	11/19/2013 3:13:00 PM
Benzo(g,h,i)perylene	13.9	7.29		µg/Kg-dry	1	11/19/2013 3:13:00 PM
Benzo(k)fluoranthene	ND	7.29		µg/Kg-dry	1	11/19/2013 3:13:00 PM
Chrysene	ND	7.29		µg/Kg-dry	1	11/19/2013 3:13:00 PM
Dibenz(a,h)anthracene	ND	7.29		µg/Kg-dry	1	11/19/2013 3:13:00 PM
Fluoranthene	ND	7.29		µg/Kg-dry	1	11/19/2013 3:13:00 PM
Fluorene	ND	7.29		µg/Kg-dry	1	11/19/2013 3:13:00 PM
Indeno(1,2,3-cd)pyrene	ND	7.29		µg/Kg-dry	1	11/19/2013 3:13:00 PM
Naphthalene	ND	7.29		µg/Kg-dry	1	11/19/2013 3:13:00 PM
Phenanthrene	10.8	7.29		µg/Kg-dry	1	11/19/2013 3:13:00 PM
Pyrene	13.6	7.29		µg/Kg-dry	1	11/19/2013 3:13:00 PM
Surr: 2-Fluorobiphenyl	57.4	42.6-128		%REC	1	11/19/2013 3:13:00 PM
Surr: Nitrobenzene-d5	59.5	21.7-155		%REC	1	11/19/2013 3:13:00 PM
Surr: p-Terphenyl-d14	73.1	44.9-155		%REC	1	11/19/2013 3:13:00 PM

Specialty Analytical

Date Reported: 07-Feb-14

CLIENT:	Maul Foster & Alongi	**Collection Date:**	11/6/2013 1:00:00 PM
Project:	City of Wenatchee / 0380.02.04		
Lab ID:	1311104-034		
Client Sample ID:	GP20-S-16	**Matrix:**	SOIL

Analyses	Result	RL	Qual	Unit	DF	Date Analyzed
ICP METALS- TOTAL RECOVERABLE		**SW6010C**				Analyst: **VAS**
Lead	3.21	2.38		mg/Kg-dry	1	11/13/2013 9:20:19 PM

Specialty Analytical

Date Reported: 07-Feb-14

CLIENT:	Maul Foster & Alongi	**Collection Date:**	11/6/2013 1:10:00 PM
Project:	City of Wenatchee / 0380.02.04		
Lab ID:	1311104-035		
Client Sample ID:	GP20-S-20	**Matrix:**	SOIL

Analyses	Result	RL	Qual	Unit	DF	Date Analyzed
HOLD PER CLIENT REQUEST		**PER CLIENT**				Analyst: **knb**
Hold	Hold	0			1	11/25/2013 9:09:10 AM

Specialty Analytical

Date Reported: 07-Feb-14

CLIENT: Maul Foster & Alongi
Collection Date: 11/6/2013 4:13:00 PM
Project: City of Wenatchee / 0380.02.04
Lab ID: 1311104-036
Client Sample ID: PZ3-W
Matrix: WATER

Analyses	Result	RL	Qual	Unit	DF	Date Analyzed
NWTPH-DX - RBC		**NWTPH-DX**				Analyst: **ZP**
Diesel	1.95	0.0820	BA1	mg/L	1	11/20/2013 2:06:42 AM
Lube Oil	1.74	0.205	BA2	mg/L	1	11/20/2013 2:06:42 AM
Surr: o-Terphenyl	161	50-150	SMI	%REC	1	11/20/2013 2:06:42 AM
NWTPH HCID		**NWHCID**				Analyst: **ZP**
Diesel	DIESEL	0.639		mg/L	1	11/13/2013
Gasoline	ND	0.254		mg/L	1	11/13/2013
Kerosene	ND	0.639		mg/L	1	11/13/2013
Lube Oil	LUBE OIL	0.639		mg/L	1	11/13/2013
Mineral Spirits	ND	0.254		mg/L	1	11/13/2013
Surr: BFB	76.3	30.2-133		%REC	1	11/13/2013
Surr: o-Terphenyl	108	50-150		%REC	1	11/13/2013

Specialty Analytical

Date Reported: 07-Feb-14

CLIENT: Maul Foster & Alongi
Collection Date: 11/7/2013 9:15:00 AM
Project: City of Wenatchee / 0380.02.04
Lab ID: 1311104-037
Client Sample ID: PZ2-W
Matrix: WATER

Analyses	Result	RL	Qual	Unit	DF	Date Analyzed
NWTPH-DX - RBC		**NWTPH-DX**				Analyst: **ZP**
Diesel	4.11	0.0825	BA1	mg/L	1	11/20/2013 2:28:43 AM
Lube Oil	3.49	0.206	BA2	mg/L	1	11/20/2013 2:28:43 AM
Surr: o-Terphenyl	120	50-150		%REC	1	11/20/2013 2:28:43 AM
NWTPH HCID		**NWHCID**				Analyst: **ZP**
Diesel	DIESEL	0.634		mg/L	1	11/13/2013
Gasoline	ND	0.252		mg/L	1	11/13/2013
Kerosene	ND	0.634		mg/L	1	11/13/2013
Lube Oil	LUBE OIL	0.634		mg/L	1	11/13/2013
Mineral Spirits	ND	0.252		mg/L	1	11/13/2013
Surr: BFB	53.6	30.2-133		%REC	1	11/13/2013
Surr: o-Terphenyl	71.9	50-150		%REC	1	11/13/2013

QC SUMMARY REPORT

WO#: **1311104**

07-Feb-14

Specialty Analytical

Client: Maul Foster & Alongi

Project: City of Wenatchee / 0380.02.04 **TestCode: 6010_S**

Sample ID: **ICV** SampType: **ICV** TestCode: **6010_S** Units: **mg/Kg** Prep Date: RunNo: **12374**

Client ID: **ICV** Batch ID: **6256** TestNo: **SW6010C** **SW3050B** Analysis Date: **11/13/2013** SeqNo: **158381**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	104	2.00	100.0	0	104	90	110				
Lead	104	2.00	100.0	0	104	90	110				

Sample ID: **CCV** SampType: **CCV** TestCode: **6010_S** Units: **mg/Kg** Prep Date: RunNo: **12374**

Client ID: **CCV** Batch ID: **6256** TestNo: **SW6010C** **SW3050B** Analysis Date: **11/13/2013** SeqNo: **158382**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	108	2.00	100.0	0	108	90	110				
Lead	107	2.00	100.0	0	107	90	110				

Sample ID: **MBLK-6256** SampType: **MBLK** TestCode: **6010_S** Units: **mg/Kg** Prep Date: RunNo: **12374**

Client ID: **PBS** Batch ID: **6256** TestNo: **SW6010C** **SW3050B** Analysis Date: **11/13/2013** SeqNo: **158383**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	ND	2.00									
Lead	ND	2.00									

Sample ID: **LCS-6256** SampType: **LCS** TestCode: **6010_S** Units: **mg/Kg** Prep Date: **11/13/2013** RunNo: **12374**

Client ID: **LCSS** Batch ID: **6256** TestNo: **SW6010C** **SW3050B** Analysis Date: **11/13/2013** SeqNo: **158384**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	107	2.00	100.0	0	107	85.1	107				

Qualifiers:

B Analyte detected in the associated Method Blank

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

O RSD is greater than RSDlimit

R RPD outside accepted recovery limits

S Spike Recovery outside accepted recov

QC SUMMARY REPORT

WO#: **1311104**

Specialty Analytical

07-Feb-14

Client: Maul Foster & Alongi

Project: City of Wenatchee / 0380.02.04 **TestCode: 6010_S**

Sample ID: **LCS-6256**	SampType: **LCS**	TestCode: **6010_S**	Units: **mg/Kg**	Prep Date: **11/13/2013**	RunNo: **12374**
Client ID: **LCSS**	Batch ID: **6256**	TestNo: **SW6010C**	**SW3050B**	Analysis Date: **11/13/2013**	SeqNo: **158384**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	108	2.00	100.0	0	108	84.9	109				

Sample ID: **1310269-001ADUP**	SampType: **DUP**	TestCode: **6010_S**	Units: **mg/Kg**	Prep Date: **11/13/2013**	RunNo: **12374**
Client ID: **ZZZZZZ**	Batch ID: **6256**	TestNo: **SW6010C**	**SW3050B**	Analysis Date: **11/13/2013**	SeqNo: **158386**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	ND	2.00						0	0	20	
Lead	18.5	2.00						19.87	7.36	20	

Sample ID: **1310269-001AMS**	SampType: **MS**	TestCode: **6010_S**	Units: **mg/Kg**	Prep Date: **11/13/2013**	RunNo: **12374**
Client ID: **ZZZZZZ**	Batch ID: **6256**	TestNo: **SW6010C**	**SW3050B**	Analysis Date: **11/13/2013**	SeqNo: **158387**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	98.8	1.92	96.15	1.460	101	86.1	109				
Lead	124	1.92	96.15	19.87	108	84.9	109				

Sample ID: **1310269-001AMSD**	SampType: **MSD**	TestCode: **6010_S**	Units: **mg/Kg**	Prep Date: **11/13/2013**	RunNo: **12374**
Client ID: **ZZZZZZ**	Batch ID: **6256**	TestNo: **SW6010C**	**SW3050B**	Analysis Date: **11/13/2013**	SeqNo: **158388**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	105	2.00	100.0	1.460	103	86.1	109	98.85	5.66	20	
Lead	122	2.00	100.0	19.87	102	84.9	109	123.6	1.27	20	

Qualifiers:
B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recov

QC SUMMARY REPORT

WO#: **1311104**

Specialty Analytical

07-Feb-14

Client: Maul Foster & Alongi

Project: City of Wenatchee / 0380.02.04 **TestCode: 6010_S**

Sample ID: **1310269-001AMSD**	SampType: **MSD**	TestCode: **6010_S**	Units: **mg/Kg**	Prep Date: **11/13/2013**	RunNo: **12374**
Client ID: **ZZZZZZ**	Batch ID: **6256**	TestNo: **SW6010C**	**SW3050B**	Analysis Date: **11/13/2013**	SeqNo: **158388**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Sample ID: **CCV**	SampType: **CCV**	TestCode: **6010_S**	Units: **mg/Kg**	Prep Date:	RunNo: **12374**
Client ID: **CCV**	Batch ID: **6256**	TestNo: **SW6010C**	**SW3050B**	Analysis Date: **11/13/2013**	SeqNo: **158392**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	109	2.00	100.0	0	109	90	110				
Lead	108	2.00	100.0	0	108	90	110				

Sample ID: **CCV**	SampType: **CCV**	TestCode: **6010_S**	Units: **mg/Kg**	Prep Date:	RunNo: **12374**
Client ID: **CCV**	Batch ID: **6256**	TestNo: **SW6010C**	**SW3050B**	Analysis Date: **11/13/2013**	SeqNo: **158402**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	109	2.00	100.0	0	109	90	110				
Lead	108	2.00	100.0	0	108	90	110				

Sample ID: **ICV**	SampType: **ICV**	TestCode: **6010_S**	Units: **mg/Kg**	Prep Date:	RunNo: **12374**
Client ID: **ICV**	Batch ID: **6256**	TestNo: **SW6010C**	**SW3050B**	Analysis Date: **11/14/2013**	SeqNo: **158519**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	104	2.00	100.0	0	104	90	110				

Qualifiers:

B	Analyte detected in the associated Method Blank	H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	R	RPD outside accepted recovery limits	S	Spike Recovery outside accepted recov

QC SUMMARY REPORT

WO#: **1311104**

07-Feb-14

Specialty Analytical

Client: Maul Foster & Alongi

Project: City of Wenatchee / 0380.02.04 **TestCode: 6010_S**

Sample ID: **CCV** SampType: **CCV** TestCode: **6010_S** Units: **mg/Kg** Prep Date: RunNo: **12374**

Client ID: **CCV** Batch ID: **6256** TestNo: **SW6010C** **SW3050B** Analysis Date: **11/14/2013** SeqNo: **158531**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	105	2.00	100.0	0	105	90	110				

Qualifiers:

B	Analyte detected in the associated Method Blank	H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	R	RPD outside accepted recovery limits	S	Spike Recovery outside accepted recov

QC SUMMARY REPORT

WO#: **1311104**

07-Feb-14

Specialty Analytical

Client: Maul Foster & Alongi

Project: City of Wenatchee / 0380.02.04 **TestCode: 8082LL_S**

Sample ID: **1016/1260 CCV 1** SampType: **CCV** TestCode: **8082LL_S** Units: **µg/Kg** Prep Date: RunNo: **12433**
Client ID: **CCV** Batch ID: **6267** TestNo: **SW 8082A** **3545_8082LL** Analysis Date: **11/15/2013** SeqNo: **159121**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aroclor 1016/1260	66.9	0.333	66.67	0	100	85	115				
Aroclor 1260	64.3	0.333	66.67	0	96.4	85	115				

Sample ID: **1311144-003BMS** SampType: **MS** TestCode: **8082LL_S** Units: **µg/Kg** Prep Date: **11/14/2013** RunNo: **12433**
Client ID: **ZZZZZZ** Batch ID: **6267** TestNo: **SW 8082A** **3545_8082LL** Analysis Date: **11/15/2013** SeqNo: **159125**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aroclor 1016/1260	66.8	0.333	66.67	0	100	56.6	123				

Sample ID: **1311144-003BMSD** SampType: **MSD** TestCode: **8082LL_S** Units: **µg/Kg** Prep Date: **11/14/2013** RunNo: **12433**
Client ID: **ZZZZZZ** Batch ID: **6267** TestNo: **SW 8082A** **3545_8082LL** Analysis Date: **11/15/2013** SeqNo: **159126**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aroclor 1016/1260	47.4	0.333	66.67	0	71.1	56.6	123	66.80	34.0	20	RMI

Sample ID: **MBLK-6267** SampType: **MBLK** TestCode: **8082LL_S** Units: **µg/Kg** Prep Date: RunNo: **12433**
Client ID: **PBS** Batch ID: **6267** TestNo: **SW 8082A** **3545_8082LL** Analysis Date: **11/15/2013** SeqNo: **159131**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aroclor 1016	ND	0.333									
Aroclor 1221	ND	0.333									
Aroclor 1232	ND	0.333									

Qualifiers:
B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recov

QC SUMMARY REPORT

WO#: **1311104**

07-Feb-14

Specialty Analytical

Client: Maul Foster & Alongi

Project: City of Wenatchee / 0380.02.04 **TestCode: 8082LL_S**

Sample ID: **MBLK-6267** SampType: **MBLK** TestCode: **8082LL_S** Units: **µg/Kg** Prep Date: RunNo: **12433**

Client ID: **PBS** Batch ID: **6267** TestNo: **SW 8082A** **3545_8082LL** Analysis Date: **11/15/2013** SeqNo: **159131**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aroclor 1242	ND	0.333									
Aroclor 1248	ND	0.333									
Aroclor 1254	ND	0.333									
Aroclor 1260	ND	0.333									
Aroclor 1262	ND	0.333									
Aroclor 1268	ND	0.333									
Surr: Decachlorobiphenyl	6190		6667		92.9	56.5	130				

Sample ID: **LCS-6267** SampType: **LCS** TestCode: **8082LL_S** Units: **µg/Kg** Prep Date: **11/14/2013** RunNo: **12433**

Client ID: **LCSS** Batch ID: **6267** TestNo: **SW 8082A** **3545_8082LL** Analysis Date: **11/15/2013** SeqNo: **159132**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aroclor 1016/1260	30.2	0.333	66.67	0	45.3	44.3	137				

Sample ID: **1016/1260 CCV 1** SampType: **CCV** TestCode: **8082LL_S** Units: **µg/Kg** Prep Date: RunNo: **12454**

Client ID: **CCV** Batch ID: **6267** TestNo: **SW 8082A** **3545_8082LL** Analysis Date: **11/18/2013** SeqNo: **159396**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aroclor 1016/1260	64.7	0.333	66.67	0	97.0	85	115				

Qualifiers:

B Analyte detected in the associated Method Blank

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

O RSD is greater than RSDlimit

R RPD outside accepted recovery limits

S Spike Recovery outside accepted recov

QC SUMMARY REPORT

WO#: **1311104**

07-Feb-14

Specialty Analytical

Client: Maul Foster & Alongi

Project: City of Wenatchee / 0380.02.04 **TestCode: 8082LL_S**

Sample ID: **1016/1260 CCV 1** SampType: **CCV** TestCode: **8082LL_S** Units: **µg/Kg** Prep Date: RunNo: **12454**

Client ID: **CCV** Batch ID: **6267** TestNo: **SW 8082A** **3545_8082LL** Analysis Date: **11/18/2013** SeqNo: **159404**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aroclor 1016/1260	64.9	0.333	66.67	0	97.3	85	115				

Sample ID: **1254 CCV 1.0** SampType: **CCV** TestCode: **8082LL_S** Units: **µg/Kg** Prep Date: RunNo: **12433**

Client ID: **CCV** Batch ID: **6267** TestNo: **SW 8082A** **3545_8082LL** Analysis Date: **12/4/2013** SeqNo: **164707**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aroclor 1254	69.0	0.333	66.67	0	104	85	115				

Sample ID: **1254 CCV 1.0** SampType: **CCV** TestCode: **8082LL_S** Units: **µg/Kg** Prep Date: RunNo: **12433**

Client ID: **CCV** Batch ID: **6267** TestNo: **SW 8082A** **3545_8082LL** Analysis Date: **12/4/2013** SeqNo: **164709**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aroclor 1254	72.0	0.333	66.67	0	108	85	115				

Qualifiers:

B Analyte detected in the associated Method Blank

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

O RSD is greater than RSDlimit

R RPD outside accepted recovery limits

S Spike Recovery outside accepted recov

QC SUMMARY REPORT

WO#: **1311104**

07-Feb-14

Specialty Analytical

Client: Maul Foster & Alongi

Project: City of Wenatchee / 0380.02.04 **TestCode:** **BTEXRBC_S**

Sample ID: **LCS-6273** SampType: **LCS** TestCode: **BTEXRBC_S** Units: **mg/Kg** Prep Date: **11/14/2013** RunNo: **12413**

Client ID: **LCSS** Batch ID: **6273** TestNo: **SW8021B** **5030** Analysis Date: **11/14/2013** SeqNo: **158843**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	1.10	0.0250	1.250	0	88.0	68.7	117				
Toluene	1.20	0.100	1.250	0	95.7	71.4	115				
Ethylbenzene	1.03	0.100	1.250	0	82.7	76.3	115				
Xylenes, Total	3.53	0.300	3.750	0	94.0	70.1	116				

Sample ID: **MB-6273** SampType: **MBLK** TestCode: **BTEXRBC_S** Units: **mg/Kg** Prep Date: **11/14/2013** RunNo: **12413**

Client ID: **PBS** Batch ID: **6273** TestNo: **SW8021B** **5030** Analysis Date: **11/14/2013** SeqNo: **158844**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	ND	0.0250									
Toluene	ND	0.100									
Ethylbenzene	ND	0.100									
Xylenes, Total	ND	0.300									
Surr: 4-Bromofluorobenzene	2.87		5.000		57.4	42.6	126				

Sample ID: **1311104-007AMS** SampType: **MS** TestCode: **BTEXRBC_S** Units: **mg/Kg-dry** Prep Date: **11/14/2013** RunNo: **12413**

Client ID: **GP14-Comp** Batch ID: **6273** TestNo: **SW8021B** **5030** Analysis Date: **11/14/2013** SeqNo: **158846**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	1.03	0.0279	1.395	0.4019	44.8	32.2	108				
Toluene	1.09	0.112	1.395	0.5693	37.2	56.7	110				S
Ethylbenzene	0.970	0.112	1.395	0.3349	45.5	53.3	107				S
Xylenes, Total	3.36	0.335	4.186	1.663	40.5	47.5	119				S

Qualifiers:

B Analyte detected in the associated Method Blank

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

O RSD is greater than RSDlimit

R RPD outside accepted recovery limits

S Spike Recovery outside accepted recov

QC SUMMARY REPORT

WO#: **1311104**

07-Feb-14

Specialty Analytical

Client: Maul Foster & Alongi

Project: City of Wenatchee / 0380.02.04 **TestCode:** **BTEXRBC_S**

Sample ID: **1311104-007AMS**	SampType: **MS**	TestCode: **BTEXRBC_S**	Units: **mg/Kg-dry**	Prep Date: **11/14/2013**	RunNo: **12413**
Client ID: **GP14-Comp**	Batch ID: **6273**	TestNo: **SW8021B**	**5030**	Analysis Date: **11/14/2013**	SeqNo: **158846**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Sample ID: **1311104-007AMSD**	SampType: **MSD**	TestCode: **BTEXRBC_S**	Units: **mg/Kg-dry**	Prep Date: **11/14/2013**	RunNo: **12413**
Client ID: **GP14-Comp**	Batch ID: **6273**	TestNo: **SW8021B**	**5030**	Analysis Date: **11/14/2013**	SeqNo: **158847**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	1.13	0.0279	1.395	0.4019	52.0	32.2	108	1.026	9.38	20	
Toluene	1.21	0.112	1.395	0.5693	45.9	56.7	110	1.089	10.5	20	S
Ethylbenzene	1.08	0.112	1.395	0.3349	53.4	53.3	107	0.9701	10.7	20	
Xylenes, Total	3.70	0.335	4.186	1.663	48.7	47.5	119	3.360	9.69	20	

Sample ID: **CCV**	SampType: **CCV**	TestCode: **BTEXRBC_S**	Units: **mg/Kg**	Prep Date:	RunNo: **12413**
Client ID: **CCV**	Batch ID: **6273**	TestNo: **SW8021B**	**5030**	Analysis Date: **11/14/2013**	SeqNo: **158849**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	2.29	0.0250	2.500	0	91.6	85	115				
Toluene	2.34	0.100	2.500	0	93.4	85	115				
Ethylbenzene	2.20	0.100	2.500	0	87.9	85	115				
Xylenes, Total	7.08	0.300	7.500	0	94.4	85	115				

Qualifiers:

B	Analyte detected in the associated Method Blank	H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	R	RPD outside accepted recovery limits	S	Spike Recovery outside accepted recov

QC SUMMARY REPORT

WO#: **1311104**

07-Feb-14

Specialty Analytical

Client: Maul Foster & Alongi

Project: City of Wenatchee / 0380.02.04 **TestCode:** **BTEXRBC_S**

Sample ID: **CCV**	SampType: **CCV**	TestCode: **BTEXRBC_S**	Units: **mg/Kg**	Prep Date:	RunNo: **12413**
Client ID: **CCV**	Batch ID: **6273**	TestNo: **SW8021B**	**5030**	Analysis Date: **11/15/2013**	SeqNo: **159150**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	2.47	0.0250	2.500	0	98.6	85	115				
Toluene	2.50	0.100	2.500	0	100	85	115				
Ethylbenzene	2.38	0.100	2.500	0	95.3	85	115				
Xylenes, Total	7.60	0.300	7.500	0	101	85	115				

Sample ID: **CCB**	SampType: **CCB**	TestCode: **BTEXRBC_S**	Units: **mg/Kg**	Prep Date:	RunNo: **12413**
Client ID: **CCB**	Batch ID: **6273**	TestNo: **SW8021B**	**5030**	Analysis Date: **11/15/2013**	SeqNo: **159405**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	ND	0.0250									
Toluene	ND	0.100									
Ethylbenzene	ND	0.100									
Xylenes, Total	ND	0.300									
Surr: 4-Bromofluorobenzene	4.67		5.000		93.5	42.6	126				

Qualifiers:

B	Analyte detected in the associated Method Blank	H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	R	RPD outside accepted recovery limits	S	Spike Recovery outside accepted recov

QC SUMMARY REPORT

WO#: **1311104**

07-Feb-14

Specialty Analytical

Client: Maul Foster & Alongi

Project: City of Wenatchee / 0380.02.04 **TestCode:** **BTEXRBC_SA**

Sample ID: **A1311104-007AMS** SampType: **MS** TestCode: **BTEXRBC_S** Units: **mg/Kg-dry** Prep Date: **11/14/2013** RunNo: **12414**

Client ID: **ZZZZZZ** Batch ID: **6274** TestNo: **SW8021B** **5035** Analysis Date: **11/14/2013** SeqNo: **158851**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	1.0	0.028	1.395	0.02009	72.1	32.2	108				
Ethylbenzene	0.97	0.11	1.395	0.01674	68.3	53.3	107				
Toluene	1.1	0.11	1.395	0.02847	76.0	56.7	101				
Xylenes, Total	3.4	0.33	4.186	0.08316	78.3	47.5	119				

Sample ID: **A1311104-007AMSD** SampType: **MSD** TestCode: **BTEXRBC_S** Units: **mg/Kg-dry** Prep Date: **11/14/2013** RunNo: **12414**

Client ID: **ZZZZZZ** Batch ID: **6274** TestNo: **SW8021B** **5035** Analysis Date: **11/14/2013** SeqNo: **158852**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	1.1	0.028	1.395	0.02009	79.4	32.2	108	1.026	9.38	20	
Ethylbenzene	1.1	0.11	1.395	0.01674	76.2	53.3	107	0.9701	10.7	20	
Toluene	1.2	0.11	1.395	0.02847	84.7	56.7	101	1.089	10.5	20	
Xylenes, Total	3.7	0.33	4.186	0.08316	86.4	47.5	119	3.360	9.69	20	

Sample ID: **LCS-6274** SampType: **LCS** TestCode: **BTEXRBC_S** Units: **mg/Kg** Prep Date: **11/14/2013** RunNo: **12414**

Client ID: **LCSS** Batch ID: **6274** TestNo: **SW8021B** **5035** Analysis Date: **11/14/2013** SeqNo: **158853**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	1.1	0.010	1.250	0	88.0	68.7	117				
Ethylbenzene	1.0	0.10	1.250	0	82.7	76.3	115				
Toluene	1.2	0.10	1.250	0	95.7	71.4	115				
Xylenes, Total	3.5	0.30	3.750	0	94.0	70.1	116				
Surr: 4-Bromofluorobenzene	3.4										

Qualifiers:
B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recov

QC SUMMARY REPORT

WO#: **1311104**

07-Feb-14

Specialty Analytical

Client: Maul Foster & Alongi

Project: City of Wenatchee / 0380.02.04 **TestCode:** **BTEXRBC_SA**

Sample ID: **LCS-6274**	SampType: **LCS**	TestCode: **BTEXRBC_S**	Units: **mg/Kg**	Prep Date: **11/14/2013**	RunNo: **12414**
Client ID: **LCSS**	Batch ID: **6274**	TestNo: **SW8021B**	**5035**	Analysis Date: **11/14/2013**	SeqNo: **158853**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Sample ID: **MB-6274**	SampType: **MBLK**	TestCode: **BTEXRBC_S**	Units: **mg/Kg**	Prep Date: **11/14/2013**	RunNo: **12414**
Client ID: **PBS**	Batch ID: **6274**	TestNo: **SW8021B**	**5035**	Analysis Date: **11/14/2013**	SeqNo: **158854**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	ND	0.010									
Ethylbenzene	ND	0.10									
Toluene	ND	0.10									
Xylenes, Total	ND	0.30									
Surr: 4-Bromofluorobenzene	2.9		5.000		57.4	42.6	126				

Sample ID: **CCV**	SampType: **CCV**	TestCode: **BTEXRBC_S**	Units: **mg/Kg**	Prep Date:	RunNo: **12414**
Client ID: **CCV**	Batch ID: **6274**	TestNo: **SW8021B**	**5035**	Analysis Date: **11/14/2013**	SeqNo: **158859**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	2.3	0.025	2.500	0	91.6	85	115				
Ethylbenzene	2.2	0.10	2.500	0	87.9	85	115				
Toluene	2.3	0.10	2.500	0	93.4	85	115				
Xylenes, Total	7.1	0.30	7.500	0	94.4	85	115				
Surr: 4-Bromofluorobenzene	5.3										

Qualifiers:

B	Analyte detected in the associated Method Blank	H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	R	RPD outside accepted recovery limits	S	Spike Recovery outside accepted recov

QC SUMMARY REPORT

WO#: **1311104**

07-Feb-14

Specialty Analytical

Client: Maul Foster & Alongi

Project: City of Wenatchee / 0380.02.04 **TestCode:** **BTEXRBC_SA**

Sample ID: **LCS-6301** SampType: **LCS** TestCode: **BTEXRBC_S** Units: **mg/Kg** Prep Date: **11/19/2013** RunNo: **12524**

Client ID: **LCSS** Batch ID: **6301** TestNo: **SW8021B** **5035** Analysis Date: **11/19/2013** SeqNo: **160566**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	1.1	0.010	1.250	0	88.2	68.7	117				
Ethylbenzene	0.99	0.10	1.250	0	78.8	76.3	115				
Toluene	1.2	0.10	1.250	0	93.1	71.4	115				
Xylenes, Total	3.3	0.30	3.750	0	88.5	70.1	116				

Sample ID: **MB-6301** SampType: **MBLK** TestCode: **BTEXRBC_S** Units: **mg/Kg** Prep Date: **11/19/2013** RunNo: **12524**

Client ID: **PBS** Batch ID: **6301** TestNo: **SW8021B** **5035** Analysis Date: **11/20/2013** SeqNo: **160568**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	ND	0.010									
Ethylbenzene	ND	0.10									
Toluene	ND	0.10									
Xylenes, Total	ND	0.30									
Surr: 4-Bromofluorobenzene	2.8		5.000		56.6	42.6	126				

Sample ID: **CCV** SampType: **CCV** TestCode: **BTEXRBC_S** Units: **mg/Kg** Prep Date: RunNo: **12524**

Client ID: **CCV** Batch ID: **6301** TestNo: **SW8021B** **5035** Analysis Date: **11/19/2013** SeqNo: **160599**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	2.4	0.025	2.500	0	95.1	85	115				
Ethylbenzene	2.3	0.10	2.500	0	93.9	85	115				
Toluene	2.4	0.10	2.500	0	98.0	85	115				
Xylenes, Total	7.4	0.30	7.500	0	98.1	85	115				

Qualifiers:

B Analyte detected in the associated Method Blank

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

O RSD is greater than RSDlimit

R RPD outside accepted recovery limits

S Spike Recovery outside accepted recov

QC SUMMARY REPORT

WO#: **1311104**

Specialty Analytical

07-Feb-14

Client: Maul Foster & Alongi

Project: City of Wenatchee / 0380.02.04 **TestCode:** **BTEXRBC_SA**

Sample ID: **CCV**	SampType: **CCV**	TestCode: **BTEXRBC_S**	Units: **mg/Kg**	Prep Date:	RunNo: **12524**
Client ID: **CCV**	Batch ID: **6301**	TestNo: **SW8021B**	**5035**	Analysis Date: **11/19/2013**	SeqNo: **160599**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Sample ID: **CCV**	SampType: **CCV**	TestCode: **BTEXRBC_S**	Units: **mg/Kg**	Prep Date:	RunNo: **12524**
Client ID: **CCV**	Batch ID: **6301**	TestNo: **SW8021B**	**5035**	Analysis Date: **11/20/2013**	SeqNo: **160600**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	2.5	0.025	2.500	0	101	85	115				
Ethylbenzene	2.5	0.10	2.500	0	99.5	85	115				
Toluene	2.6	0.10	2.500	0	104	85	115				
Xylenes, Total	7.9	0.30	7.500	0	105	85	115				

Sample ID: **1311104-003BMS**	SampType: **MS**	TestCode: **BTEXRBC_S**	Units: **mg/Kg-dry**	Prep Date:	RunNo: **12524**
Client ID: **GP11-S-17.5**	Batch ID: **6301**	TestNo: **SW8021B**	**5035**	Analysis Date: **11/22/2013**	SeqNo: **161304**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	2.9	0.025	3.107	0	93.0	32.2	108				HT
Ethylbenzene	3.0	0.25	3.107	0	96.4	53.3	107				HT
Toluene	3.3	0.25	3.107	0.07359	104	56.7	101				SHT
Xylenes, Total	9.8	0.75	9.322	0.1422	104	47.5	119				HT

Qualifiers:

B Analyte detected in the associated Method Blank

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

O RSD is greater than RSDlimit

R RPD outside accepted recovery limits

S Spike Recovery outside accepted recov

QC SUMMARY REPORT

WO#: **1311104**

07-Feb-14

Specialty Analytical

Client: Maul Foster & Alongi

Project: City of Wenatchee / 0380.02.04 **TestCode:** **BTEXRBC_SA**

Sample ID: **1311104-003BMSD** SampType: **MSD** TestCode: **BTEXRBC_S** Units: **mg/Kg-dry** Prep Date: RunNo: **12524**

Client ID: **GP11-S-17.5** Batch ID: **6301** TestNo: **SW8021B** **5035** Analysis Date: **11/22/2013** SeqNo: **161305**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	2.9	0.025	3.107	0	94.5	32.2	108	2.890	1.62	20	HT
Ethylbenzene	2.7	0.25	3.107	0	88.5	53.3	107	2.995	8.57	20	HT
Toluene	3.3	0.25	3.107	0.07359	102	56.7	101	3.317	2.01	20	SHT
Xylenes, Total	9.0	0.75	9.322	0.1422	95.2	47.5	119	9.805	8.40	20	HT

Sample ID: **CCV** SampType: **CCV** TestCode: **BTEXRBC_S** Units: **mg/Kg** Prep Date: RunNo: **12524**

Client ID: **CCV** Batch ID: **6301** TestNo: **SW8021B** **5035** Analysis Date: **11/22/2013** SeqNo: **161306**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	2.5	0.025	2.500	0	101	85	115				
Ethylbenzene	2.5	0.10	2.500	0	98.5	85	115				
Toluene	2.6	0.10	2.500	0	104	85	115				
Xylenes, Total	7.9	0.30	7.500	0	105	85	115				

Qualifiers:

B Analyte detected in the associated Method Blank

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

O RSD is greater than RSDlimit

R RPD outside accepted recovery limits

S Spike Recovery outside accepted recov

QC SUMMARY REPORT

WO#: **1311104**

07-Feb-14

Specialty Analytical

Client: Maul Foster & Alongi

Project: City of Wenatchee / 0380.02.04 **TestCode:** **HCID_NW**

Sample ID: **MB-6236** SampType: **MBLK** TestCode: **HCID_NW** Units: **mg/Kg** Prep Date: **11/11/2013** RunNo: **12353**

Client ID: **PBS** Batch ID: **6236** TestNo: **NWHCID** Analysis Date: **11/12/2013** SeqNo: **158099**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline	ND	20.0									
Mineral Spirits	ND	20.0									
Kerosene	ND	50.0									
Diesel	ND	50.0									
Lube Oil	ND	100									
Surr: BFB	93.4		100.0		93.4	50	150				
Surr: o-Terphenyl	90.6		100.0		90.6	50	150				

Sample ID: **1311076-001ADUP** SampType: **DUP** TestCode: **HCID_NW** Units: **mg/Kg-dry** Prep Date: **11/11/2013** RunNo: **12353**

Client ID: **ZZZZZZ** Batch ID: **6236** TestNo: **NWHCID** Analysis Date: **11/12/2013** SeqNo: **158101**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline	ND	24.5						0	0	20	
Mineral Spirits	ND	24.5						0	0	20	
Kerosene	ND	61.1						0	0	20	
Diesel	DIESEL	61.1						100.6	5.05	20	
Lube Oil	LUBE OIL	122						876.8	17.5	20	

Sample ID: **1311104-001ADUP** SampType: **DUP** TestCode: **HCID_NW** Units: **mg/Kg-dry** Prep Date: **11/11/2013** RunNo: **12353**

Client ID: **GP11-Comp** Batch ID: **6236** TestNo: **NWHCID** Analysis Date: **11/12/2013** SeqNo: **158103**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline	ND	22.3						0	0	20	

Qualifiers:

B Analyte detected in the associated Method Blank

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

O RSD is greater than RSDlimit

R RPD outside accepted recovery limits

S Spike Recovery outside accepted recov

QC SUMMARY REPORT

WO#: **1311104**

07-Feb-14

Specialty Analytical

Client: Maul Foster & Alongi

Project: City of Wenatchee / 0380.02.04 **TestCode:** **HCID_NW**

Sample ID: **1311104-001ADUP** SampType: **DUP** TestCode: **HCID_NW** Units: **mg/Kg-dry** Prep Date: **11/11/2013** RunNo: **12353**

Client ID: **GP11-Comp** Batch ID: **6236** TestNo: **NWHCID** Analysis Date: **11/12/2013** SeqNo: **158103**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mineral Spirits	ND	22.3						0	0	20	
Kerosene	ND	55.8						0	0	20	
Diesel	DIESEL	55.8						0	0	20	RF
Lube Oil	LUBE OIL	112						157.0	20.1	20	R

Sample ID: **1311108-001ADUP** SampType: **DUP** TestCode: **HCID_NW** Units: **mg/Kg-dry** Prep Date: **11/11/2013** RunNo: **12353**

Client ID: **ZZZZZZ** Batch ID: **6236** TestNo: **NWHCID** Analysis Date: **11/12/2013** SeqNo: **158113**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline	ND	21.7						0	0	20	
Mineral Spirits	ND	21.7						0	0	20	
Kerosene	ND	54.2						0	0	20	
Diesel	DIESEL	54.2						0	0	20	RF
Lube Oil	LUBE OIL	108						224.3	25.3	20	R

Qualifiers:

B Analyte detected in the associated Method Blank

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

O RSD is greater than RSDlimit

R RPD outside accepted recovery limits

S Spike Recovery outside accepted recov

QC SUMMARY REPORT

WO#: **1311104**

07-Feb-14

Specialty Analytical

Client: Maul Foster & Alongi

Project: City of Wenatchee / 0380.02.04 **TestCode:** **NWTPHDX_S**

Sample ID: **LCS-6284** SampType: **LCS** TestCode: **NWTPHDX_S** Units: **mg/Kg** Prep Date: **11/15/2013** RunNo: **12482**
Client ID: **LCSS** Batch ID: **6284** TestNo: **NWTPH-Dx** **SW3545A** Analysis Date: **11/19/2013** SeqNo: **159823**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	185	15.0	166.5	0	111	76.3	125				
Lube Oil	148	50.0	166.5	0	89.1	69.9	127				

Sample ID: **MB-6284** SampType: **MBLK** TestCode: **NWTPHDX_S** Units: **mg/Kg** Prep Date: **11/15/2013** RunNo: **12482**
Client ID: **PBS** Batch ID: **6284** TestNo: **NWTPH-Dx** **SW3545A** Analysis Date: **11/19/2013** SeqNo: **159824**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	ND	15.0									
Lube Oil	ND	50.0									
Surr: o-Terphenyl	24.0		33.30		72.1	50	150				

Sample ID: **1311104-009ADUP** SampType: **DUP** TestCode: **NWTPHDX_S** Units: **mg/Kg-dry** Prep Date: **11/15/2013** RunNo: **12482**
Client ID: **GP14-S-11.5** Batch ID: **6284** TestNo: **NWTPH-Dx** **SW3545A** Analysis Date: **11/19/2013** SeqNo: **159834**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	78.5	18.0						53.06	38.7	20	RA1
Lube Oil	169	60.1						131.9	24.7	20	R

Sample ID: **1311108-002ADUP** SampType: **DUP** TestCode: **NWTPHDX_S** Units: **mg/Kg-dry** Prep Date: **11/15/2013** RunNo: **12482**
Client ID: **ZZZZZZ** Batch ID: **6284** TestNo: **NWTPH-Dx** **SW3545A** Analysis Date: **11/19/2013** SeqNo: **159844**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Qualifiers:
B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recov

QC SUMMARY REPORT

WO#: **1311104**

07-Feb-14

Specialty Analytical

Client: Maul Foster & Alongi

Project: City of Wenatchee / 0380.02.04 **TestCode:** **NWTPHDX_S**

Sample ID: **1311108-002ADUP** SampType: **DUP** TestCode: **NWTPHDX_S** Units: **mg/Kg-dry** Prep Date: **11/15/2013** RunNo: **12482**
Client ID: **ZZZZZZ** Batch ID: **6284** TestNo: **NWTPH-Dx** **SW3545A** Analysis Date: **11/19/2013** SeqNo: **159844**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	2060	33.4						1254	48.7	20	RA1
Lube Oil	2210	111						1364	47.5	20	RA2

Sample ID: **CCV** SampType: **CCV** TestCode: **NWTPHDX_S** Units: **mg/Kg** Prep Date: RunNo: **12482**
Client ID: **CCV** Batch ID: **6284** TestNo: **NWTPH-Dx** **SW3545A** Analysis Date: **11/19/2013** SeqNo: **159845**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	978	15.0	1014	0	96.4	85	115				
Lube Oil	478	50.0	522.7	0	91.4	85	115				

Sample ID: **CCV** SampType: **CCV** TestCode: **NWTPHDX_S** Units: **mg/Kg** Prep Date: RunNo: **12482**
Client ID: **CCV** Batch ID: **6284** TestNo: **NWTPH-Dx** **SW3545A** Analysis Date: **11/19/2013** SeqNo: **159846**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	1290	15.0	1352	0	95.2	85	115				
Lube Oil	591	50.0	696.9	0	84.7	85	115				

Sample ID: **CCV** SampType: **CCV** TestCode: **NWTPHDX_S** Units: **mg/Kg** Prep Date: RunNo: **12482**
Client ID: **CCV** Batch ID: **6284** TestNo: **NWTPH-Dx** **SW3545A** Analysis Date: **11/20/2013** SeqNo: **159867**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	1020	15.0	1014	0	100	85	115				

Qualifiers:
B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recov

QC SUMMARY REPORT

WO#: **1311104**

07-Feb-14

Specialty Analytical

Client: Maul Foster & Alongi

Project: City of Wenatchee / 0380.02.04 **TestCode: NWTPHDX_S**

Sample ID: **CCV** SampType: **CCV** TestCode: **NWTPHDX_S** Units: **mg/Kg** Prep Date: RunNo: **12482**
Client ID: **CCV** Batch ID: **6284** TestNo: **NWTPH-Dx** **SW3545A** Analysis Date: **11/20/2013** SeqNo: **159867**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lube Oil	457	50.0	522.7	0	87.4	85	115				

Sample ID: **LCS-6302** SampType: **LCS** TestCode: **NWTPHDX_S** Units: **mg/Kg** Prep Date: **11/19/2013** RunNo: **12514**
Client ID: **LCSS** Batch ID: **6302** TestNo: **NWTPH-Dx** **SW3545A** Analysis Date: **11/20/2013** SeqNo: **160296**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	179	15.0	166.5	0	108	76.3	125				
Lube Oil	182	50.0	166.5	0	109	69.9	127				

Sample ID: **MB-6302** SampType: **MBLK** TestCode: **NWTPHDX_S** Units: **mg/Kg** Prep Date: **11/19/2013** RunNo: **12514**
Client ID: **PBS** Batch ID: **6302** TestNo: **NWTPH-Dx** **SW3545A** Analysis Date: **11/20/2013** SeqNo: **160297**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	ND	15.0									
Lube Oil	ND	50.0									
Surr: o-Terphenyl	20.1		33.30		60.4	50	150				

Sample ID: **1311061-006ADUP** SampType: **DUP** TestCode: **NWTPHDX_S** Units: **mg/Kg-dry** Prep Date: **11/19/2013** RunNo: **12514**
Client ID: **ZZZZZZ** Batch ID: **6302** TestNo: **NWTPH-Dx** **SW3545A** Analysis Date: **11/20/2013** SeqNo: **160301**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	ND	22.2						0	0	20	HT

Qualifiers:
B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recov

QC SUMMARY REPORT

WO#: **1311104**

07-Feb-14

Specialty Analytical

Client: Maul Foster & Alongi

Project: City of Wenatchee / 0380.02.04 **TestCode:** **NWTPHDX_S**

Sample ID: **1311061-006ADUP** SampType: **DUP** TestCode: **NWTPHDX_S** Units: **mg/Kg-dry** Prep Date: **11/19/2013** RunNo: **12514**
Client ID: **ZZZZZZ** Batch ID: **6302** TestNo: **NWTPH-Dx** **SW3545A** Analysis Date: **11/20/2013** SeqNo: **160301**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lube Oil	ND	74.1						0	0	20	HT

Sample ID: **1311200-004ADUP** SampType: **DUP** TestCode: **NWTPHDX_S** Units: **mg/Kg-dry** Prep Date: **11/19/2013** RunNo: **12514**
Client ID: **ZZZZZZ** Batch ID: **6302** TestNo: **NWTPH-Dx** **SW3545A** Analysis Date: **11/20/2013** SeqNo: **160311**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	22.9	16.3						306.8	172	20	R
Lube Oil	ND	54.4						95.74	200	20	RF

Sample ID: **CCV** SampType: **CCV** TestCode: **NWTPHDX_S** Units: **mg/Kg** Prep Date: RunNo: **12514**
Client ID: **CCV** Batch ID: **6302** TestNo: **NWTPH-Dx** **SW3545A** Analysis Date: **11/20/2013** SeqNo: **160318**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	995	15.0	1014	0	98.1	85	115				
Lube Oil	566	50.0	522.7	0	108	85	115				

Sample ID: **CCV** SampType: **CCV** TestCode: **NWTPHDX_S** Units: **mg/Kg** Prep Date: RunNo: **12514**
Client ID: **CCV** Batch ID: **6302** TestNo: **NWTPH-Dx** **SW3545A** Analysis Date: **11/20/2013** SeqNo: **160319**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	1270	15.0	1352	0	94.2	85	115				
Lube Oil	717	50.0	696.9	0	103	85	115				

Qualifiers:
B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recov

QC SUMMARY REPORT

WO#: **1311104**

Specialty Analytical

07-Feb-14

Client: Maul Foster & Alongi

Project: City of Wenatchee / 0380.02.04 **TestCode: NWTPHDX_S**

Sample ID: **CCV** SampType: **CCV** TestCode: **NWTPHDX_S** Units: **mg/Kg** Prep Date: RunNo: **12514**
Client ID: **CCV** Batch ID: **6302** TestNo: **NWTPH-Dx** **SW3545A** Analysis Date: **11/20/2013** SeqNo: **160319**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Sample ID: **CCV** SampType: **CCV** TestCode: **NWTPHDX_S** Units: **mg/Kg** Prep Date: RunNo: **12514**
Client ID: **CCV** Batch ID: **6302** TestNo: **NWTPH-Dx** **SW3545A** Analysis Date: **11/21/2013** SeqNo: **160665**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	891	15.0	1014	0	87.8	85	115				
Lube Oil	482	50.0	522.7	0	92.2	85	115				

Sample ID: **CCV** SampType: **CCV** TestCode: **NWTPHDX_S** Units: **mg/Kg** Prep Date: RunNo: **12514**
Client ID: **CCV** Batch ID: **6302** TestNo: **NWTPH-Dx** **SW3545A** Analysis Date: **11/21/2013** SeqNo: **160666**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	1190	15.0	1352	0	88.3	85	115				
Lube Oil	607	50.0	696.9	0	87.1	85	115				

Qualifiers:

B	Analyte detected in the associated Method Blank	H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	R	RPD outside accepted recovery limits	S	Spike Recovery outside accepted recov

QC SUMMARY REPORT

WO#: **1311104**

07-Feb-14

Specialty Analytical

Client: Maul Foster & Alongi

Project: City of Wenatchee / 0380.02.04 **TestCode:** **NWTPHDXLL_W**

Sample ID: **LCS-6293** SampType: **LCS** TestCode: **NWTPHDXLL** Units: **mg/L** Prep Date: **11/18/2013** RunNo: **12485**
Client ID: **LCSW** Batch ID: **6293** TestNo: **NWTPH-Dx** **SW3510B** Analysis Date: **11/20/2013** SeqNo: **159873**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	1.01	0.0800	1.000	0	101	60.7	121				B
Lube Oil	0.934	0.200	1.000	0	93.4	64	126				B

Sample ID: **LCSD-6293** SampType: **LCSD** TestCode: **NWTPHDXLL** Units: **mg/L** Prep Date: **11/18/2013** RunNo: **12485**
Client ID: **LCSS02** Batch ID: **6293** TestNo: **NWTPH-Dx** **SW3510B** Analysis Date: **11/20/2013** SeqNo: **159874**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	1.01	0.0800	1.000	0	101	60.7	121	1.011	0.290	20	B
Lube Oil	0.953	0.200	1.000	0	95.3	64	126	0.9335	2.07	20	B

Sample ID: **MB-6293** SampType: **MBLK** TestCode: **NWTPHDXLL** Units: **mg/L** Prep Date: **11/18/2013** RunNo: **12485**
Client ID: **PBW** Batch ID: **6293** TestNo: **NWTPH-Dx** **SW3510B** Analysis Date: **11/20/2013** SeqNo: **159875**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	0.0990	0.0800									
Lube Oil	0.268	0.200									
Surr: o-Terphenyl	0.100		0.2000		50.1	50	150				

Sample ID: **CCV** SampType: **CCV** TestCode: **NWTPHDXLL** Units: **mg/L** Prep Date: RunNo: **12485**
Client ID: **CCV** Batch ID: **6293** TestNo: **NWTPH-Dx** **SW3510B** Analysis Date: **11/20/2013** SeqNo: **159882**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Qualifiers:
B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recov

QC SUMMARY REPORT

WO#: **1311104**

Specialty Analytical

07-Feb-14

Client: Maul Foster & Alongi

Project: City of Wenatchee / 0380.02.04 **TestCode: NWTPHDXLL_W**

Sample ID: **CCV**	SampType: **CCV**	TestCode: **NWTPHDXLL**	Units: **mg/L**	Prep Date:	RunNo: **12485**
Client ID: **CCV**	Batch ID: **6293**	TestNo: **NWTPH-Dx**	**SW3510B**	Analysis Date: **11/20/2013**	SeqNo: **159882**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	6.10	0.0800	6.090	0	100	85	115				B
Lube Oil	2.74	0.200	3.139	0	87.4	85	115				B

Sample ID: **CCV**	SampType: **CCV**	TestCode: **NWTPHDXLL**	Units: **mg/L**	Prep Date:	RunNo: **12485**
Client ID: **CCV**	Batch ID: **6293**	TestNo: **NWTPH-Dx**	**SW3510B**	Analysis Date: **11/19/2013**	SeqNo: **159886**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	7.73	0.0800	8.120	0	95.2	85	115				B
Lube Oil	3.55	0.200	4.186	0	84.7	85	115				B

Qualifiers:

B	Analyte detected in the associated Method Blank	H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	R	RPD outside accepted recovery limits	S	Spike Recovery outside accepted recov

QC SUMMARY REPORT

WO#: **1311104**

07-Feb-14

Specialty Analytical

Client: Maul Foster & Alongi

Project: City of Wenatchee / 0380.02.04

TestCode: **NWTPHHCID_W**

Sample ID: **MB-6252** SampType: **MBLK** TestCode: **NWTPHHCID_** Units: **mg/L** Prep Date: **11/12/2013** RunNo: **12383**

Client ID: **PBW** Batch ID: **6252** TestNo: **NWHCID** **HCID_W** Analysis Date: **11/13/2013** SeqNo: **158477**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	ND	0.630									
Gasoline	ND	0.250									
Kerosene	ND	0.630									
Lube Oil	ND	0.630									
Mineral Spirits	ND	0.250									
Surr: BFB	0.911		1.000		91.1	30.2	133				
Surr: o-Terphenyl	0.911		1.000		91.1	50	150				

Qualifiers:
B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recov

QC SUMMARY REPORT

WO#: **1311104**

07-Feb-14

Specialty Analytical

Client: Maul Foster & Alongi

Project: City of Wenatchee / 0380.02.04 **TestCode: PAHLL_S**

Sample ID: **CCV-6292**	SampType: **CCV**	TestCode: **PAHLL_S**	Units: **µg/Kg**	Prep Date:	RunNo: **12451**
Client ID: **CCV**	Batch ID: **6292**	TestNo: **SW8270D**	**SW 3545A**	Analysis Date: **11/19/2013**	SeqNo: **159380**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1-Methylnaphthalene	122	6.67	133.3	0	91.7	80	120				
2-Methylnaphthalene	142	6.67	133.3	0	106	80	120				
Acenaphthene	113	6.67	133.3	0	84.8	80	120				
Acenaphthylene	125	6.67	133.3	0	93.8	80	120				
Anthracene	110	6.67	133.3	0	82.6	80	120				
Benz(a)anthracene	114	6.67	133.3	0	85.6	80	120				
Benzo(a)pyrene	119	6.67	133.3	0	89.3	80	120				
Benzo(b)fluoranthene	115	6.67	133.3	0	86.3	80	120				
Benzo(g,h,i)perylene	121	6.67	133.3	0	91.0	80	120				
Benzo(k)fluoranthene	115	6.67	133.3	0	86.5	80	120				
Carbazole	118	6.67	133.3	0	88.2	80	120				
Chrysene	110	6.67	133.3	0	82.2	80	120				
Dibenz(a,h)anthracene	120	6.67	133.3	0	89.8	80	120				
Dibenzofuran	116	6.67	133.3	0	87.3	80	120				
Fluoranthene	112	6.67	133.3	0	84.3	80	120				
Fluorene	119	6.67	133.3	0	89.4	80	120				
Indeno(1,2,3-cd)pyrene	122	6.67	133.3	0	91.3	80	120				
Naphthalene	120	6.67	133.3	0	89.9	80	120				
Phenanthrene	115	6.67	133.3	0	86.5	80	120				
Pyrene	119	6.67	133.3	0	89.2	80	120				

Qualifiers:

B Analyte detected in the associated Method Blank

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

O RSD is greater than RSDlimit

R RPD outside accepted recovery limits

S Spike Recovery outside accepted recov

QC SUMMARY REPORT

WO#: **1311104**

07-Feb-14

Specialty Analytical

Client: Maul Foster & Alongi

Project: City of Wenatchee / 0380.02.04 **TestCode: PAHLL_S**

Sample ID: **LCS-6292** SampType: **LCS** TestCode: **PAHLL_S** Units: **µg/Kg** Prep Date: **11/18/2013** RunNo: **12451**

Client ID: **LCSS** Batch ID: **6292** TestNo: **SW8270D** **SW 3545A** Analysis Date: **11/19/2013** SeqNo: **159381**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1-Methylnaphthalene	225	6.67	333.4	0	67.6	29.1	109				
2-Methylnaphthalene	305	6.67	333.4	0	91.5	29.1	109				
Acenaphthene	222	6.67	333.4	0	66.5	39.6	107				
Benzo(a)pyrene	253	6.67	333.4	0	75.8	37.7	137				
Benzo(g,h,i)perylene	292	6.67	333.4	0	87.5	49.7	135				
Naphthalene	202	6.67	333.4	0	60.7	29.1	109				
Phenanthrene	231	6.67	333.4	0	69.4	48.4	115				
Pyrene	254	6.67	333.4	0	76.2	47.2	134				

Sample ID: **MB-6292** SampType: **MBLK** TestCode: **PAHLL_S** Units: **µg/Kg** Prep Date: **11/18/2013** RunNo: **12451**

Client ID: **PBS** Batch ID: **6292** TestNo: **SW8270D** **SW 3545A** Analysis Date: **11/19/2013** SeqNo: **159383**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1-Methylnaphthalene	ND	6.67									
2-Methylnaphthalene	ND	6.67									
Acenaphthene	ND	6.67									
Acenaphthylene	ND	6.67									
Anthracene	ND	6.67									
Benz(a)anthracene	ND	6.67									
Benzo(a)pyrene	ND	6.67									
Benzo(b)fluoranthene	ND	6.67									
Benzo(g,h,i)perylene	ND	6.67									
Benzo(k)fluoranthene	ND	6.67									
Chrysene	ND	6.67									

Qualifiers:

B Analyte detected in the associated Method Blank

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

O RSD is greater than RSDlimit

R RPD outside accepted recovery limits

S Spike Recovery outside accepted recov

Specialty Analytical

Client: Maul Foster & Alongi

Project: City of Wenatchee / 0380.02.04 **TestCode:** **PAHLL_S**

Sample ID: **MB-6292** SampType: **MBLK** TestCode: **PAHLL_S** Units: **µg/Kg** Prep Date: **11/18/2013** RunNo: **12451**

Client ID: **PBS** Batch ID: **6292** TestNo: **SW8270D** **SW 3545A** Analysis Date: **11/19/2013** SeqNo: **159383**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dibenz(a,h)anthracene	ND	6.67									
Fluoranthene	ND	6.67									
Fluorene	ND	6.67									
Indeno(1,2,3-cd)pyrene	ND	6.67									
Naphthalene	ND	6.67									
Phenanthrene	ND	6.67									
Pyrene	ND	6.67									
Surr: 2-Fluorobiphenyl	3.69		6.667		55.4	42.6	128				
Surr: Nitrobenzene-d5	4.75		6.667		71.3	21.7	155				
Surr: p-Terphenyl-d14	4.78		6.667		71.7	44.9	155				

Sample ID: **1311104-007AMS** SampType: **MS** TestCode: **PAHLL_S** Units: **µg/Kg-dry** Prep Date: **11/18/2013** RunNo: **12451**

Client ID: **GP14-Comp** Batch ID: **6292** TestNo: **SW8270D** **SW 3545A** Analysis Date: **11/19/2013** SeqNo: **159681**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Acenaphthene	244	37.2	372.1	1.871	65.0	33.7	111				
Benzo(a)pyrene	305	37.2	372.1	8.834	79.7	64.6	110				
Benzo(g,h,i)perylene	320	37.2	372.1	20.64	80.4	15	128				
Naphthalene	200	37.2	372.1	9.062	51.3	27.7	108				
Phenanthrene	281	37.2	372.1	13.33	71.8	20.2	139				
Pyrene	307	37.2	372.1	20.80	77.0	26.8	142				

Specialty Analytical

Client: Maul Foster & Alongi

Project: City of Wenatchee / 0380.02.04 **TestCode:** **PAHLL_S**

Sample ID: **1311104-007AMSD** SampType: **MSD** TestCode: **PAHLL_S** Units: **µg/Kg-dry** Prep Date: **11/18/2013** RunNo: **12451**

Client ID: **GP14-Comp** Batch ID: **6292** TestNo: **SW8270D** **SW 3545A** Analysis Date: **11/19/2013** SeqNo: **159682**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Acenaphthene	247	37.2	372.1	1.871	65.9	33.7	111	243.9	1.25	20	
Benzo(a)pyrene	330	37.2	372.1	8.834	86.3	64.6	110	305.3	7.74	20	
Benzo(g,h,i)perylene	335	37.2	372.1	20.64	84.4	15	128	319.7	4.55	20	
Naphthalene	214	37.2	372.1	9.062	55.1	27.7	108	199.9	6.83	20	
Phenanthrene	274	37.2	372.1	13.33	70.2	20.2	139	280.7	2.28	20	
Pyrene	284	37.2	372.1	20.80	70.7	26.8	142	307.2	7.89	20	

Sample ID: **CCV-6292** SampType: **CCV** TestCode: **PAHLL_S** Units: **µg/Kg** Prep Date: RunNo: **12451**

Client ID: **CCV** Batch ID: **6292** TestNo: **SW8270D** **SW 3545A** Analysis Date: **11/20/2013** SeqNo: **160071**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1-Methylnaphthalene	115	6.67	133.3	0	86.3	80	120				
2-Methylnaphthalene	145	6.67	133.3	0	109	80	120				
Acenaphthene	114	6.67	133.3	0	85.7	80	120				
Acenaphthylene	130	6.67	133.3	0	97.4	80	120				
Anthracene	116	6.67	133.3	0	86.8	80	120				
Benz(a)anthracene	118	6.67	133.3	0	88.9	80	120				
Benzo(a)pyrene	127	6.67	133.3	0	95.4	80	120				
Benzo(b)fluoranthene	118	6.67	133.3	0	88.4	80	120				
Benzo(g,h,i)perylene	138	6.67	133.3	0	104	80	120				
Benzo(k)fluoranthene	120	6.67	133.3	0	90.0	80	120				
Carbazole	120	6.67	133.3	0	90.3	80	120				
Chrysene	113	6.67	133.3	0	85.0	80	120				
Dibenz(a,h)anthracene	139	6.67	133.3	0	104	80	120				

Qualifiers:

B Analyte detected in the associated Method Blank

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

O RSD is greater than RSDlimit

R RPD outside accepted recovery limits

S Spike Recovery outside accepted recov

Specialty Analytical

Client: Maul Foster & Alongi

Project: City of Wenatchee / 0380.02.04 **TestCode:** **PAHLL_S**

Sample ID: **CCV-6292** SampType: **CCV** TestCode: **PAHLL_S** Units: **µg/Kg** Prep Date: RunNo: **12451**

Client ID: **CCV** Batch ID: **6292** TestNo: **SW8270D** **SW 3545A** Analysis Date: **11/20/2013** SeqNo: **160071**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dibenzofuran	117	6.67	133.3	0	88.1	80	120				
Fluoranthene	122	6.67	133.3	0	91.5	80	120				
Fluorene	121	6.67	133.3	0	91.1	80	120				
Indeno(1,2,3-cd)pyrene	140	6.67	133.3	0	105	80	120				
Naphthalene	120	6.67	133.3	0	90.3	80	120				
Phenanthrene	118	6.67	133.3	0	88.8	80	120				
Pyrene	115	6.67	133.3	0	86.5	80	120				

Sample ID: **CCB-6292** SampType: **CCB** TestCode: **PAHLL_S** Units: **µg/Kg** Prep Date: RunNo: **12451**

Client ID: **CCB** Batch ID: **6292** TestNo: **SW8270D** **SW 3545A** Analysis Date: **11/20/2013** SeqNo: **160072**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1-Methylnaphthalene	ND	6.67									
2-Methylnaphthalene	ND	6.67									
Acenaphthene	ND	6.67									
Acenaphthylene	ND	6.67									
Anthracene	ND	6.67									
Benz(a)anthracene	ND	6.67									
Benzo(a)pyrene	ND	6.67									
Benzo(b)fluoranthene	ND	6.67									
Benzo(g,h,i)perylene	ND	6.67									
Benzo(k)fluoranthene	ND	6.67									
Carbazole	ND	6.67									
Chrysene	ND	6.67									

Qualifiers:

B	Analyte detected in the associated Method Blank	H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	R	RPD outside accepted recovery limits	S	Spike Recovery outside accepted recov

Specialty Analytical

Client: Maul Foster & Alongi

Project: City of Wenatchee / 0380.02.04 **TestCode:** **PAHLL_S**

Sample ID: **CCB-6292** SampType: **CCB** TestCode: **PAHLL_S** Units: **µg/Kg** Prep Date: RunNo: **12451**

Client ID: **CCB** Batch ID: **6292** TestNo: **SW8270D** **SW 3545A** Analysis Date: **11/20/2013** SeqNo: **160072**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dibenz(a,h)anthracene	ND	6.67									
Dibenzofuran	ND	6.67									
Fluoranthene	ND	6.67									
Fluorene	ND	6.67									
Indeno(1,2,3-cd)pyrene	ND	6.67									
Naphthalene	ND	6.67									
Phenanthrene	ND	6.67									
Pyrene	ND	6.67									
Surr: 2-Fluorobiphenyl	3.60		6.667		53.9	42.6	128				
Surr: Nitrobenzene-d5	4.84		6.667		72.6	21.7	155				
Surr: p-Terphenyl-d14	4.55		6.667		68.3	44.9	155				

Sample ID: **CCV-6299** SampType: **CCV** TestCode: **PAHLL_S** Units: **µg/Kg** Prep Date: RunNo: **12501**

Client ID: **CCV** Batch ID: **6299** TestNo: **SW8270D** **SW 3545A** Analysis Date: **11/20/2013** SeqNo: **160078**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1-Methylnaphthalene	115	6.67	133.3	0	86.3	80	120				
2-Methylnaphthalene	145	6.67	133.3	0	109	80	120				
Acenaphthene	114	6.67	133.3	0	85.7	80	120				
Acenaphthylene	130	6.67	133.3	0	97.4	80	120				
Anthracene	116	6.67	133.3	0	86.8	80	120				
Benz(a)anthracene	118	6.67	133.3	0	88.9	80	120				
Benzo(a)pyrene	127	6.67	133.3	0	95.4	80	120				
Benzo(b)fluoranthene	118	6.67	133.3	0	88.4	80	120				

Qualifiers:

B Analyte detected in the associated Method Blank

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

O RSD is greater than RSDlimit

R RPD outside accepted recovery limits

S Spike Recovery outside accepted recov

QC SUMMARY REPORT

WO#: **1311104**

07-Feb-14

Specialty Analytical

Client: Maul Foster & Alongi

Project: City of Wenatchee / 0380.02.04 **TestCode: PAHLL_S**

Sample ID: **CCV-6299** SampType: **CCV** TestCode: **PAHLL_S** Units: **µg/Kg** Prep Date: RunNo: **12501**

Client ID: **CCV** Batch ID: **6299** TestNo: **SW8270D** **SW 3545A** Analysis Date: **11/20/2013** SeqNo: **160078**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzo(g,h,i)perylene	138	6.67	133.3	0	104	80	120				
Benzo(k)fluoranthene	120	6.67	133.3	0	90.0	80	120				
Carbazole	120	6.67	133.3	0	90.3	80	120				
Chrysene	113	6.67	133.3	0	85.0	80	120				
Dibenz(a,h)anthracene	139	6.67	133.3	0	104	80	120				
Dibenzofuran	117	6.67	133.3	0	88.1	80	120				
Fluoranthene	122	6.67	133.3	0	91.5	80	120				
Fluorene	121	6.67	133.3	0	91.1	80	120				
Indeno(1,2,3-cd)pyrene	140	6.67	133.3	0	105	80	120				
Naphthalene	120	6.67	133.3	0	90.3	80	120				
Phenanthrene	118	6.67	133.3	0	88.8	80	120				
Pyrene	115	6.67	133.3	0	86.5	80	120				

Sample ID: **LCS-6299** SampType: **LCS** TestCode: **PAHLL_S** Units: **µg/Kg** Prep Date: **11/19/2013** RunNo: **12501**

Client ID: **LCSS** Batch ID: **6299** TestNo: **SW8270D** **SW 3545A** Analysis Date: **11/20/2013** SeqNo: **160079**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Acenaphthene	171	6.67	333.4	0	51.4	39.6	107				
Benzo(a)pyrene	156	6.67	333.4	0	46.8	37.7	137				
Benzo(g,h,i)perylene	208	6.67	333.4	0	62.4	49.7	135				
Naphthalene	163	6.67	333.4	0	48.8	29.1	109				
Phenanthrene	181	6.67	333.4	0	54.3	48.4	115				
Pyrene	196	6.67	333.4	0	58.9	47.2	134				

Qualifiers:
B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recov

QC SUMMARY REPORT

WO#: **1311104**

07-Feb-14

Specialty Analytical

Client: Maul Foster & Alongi

Project: City of Wenatchee / 0380.02.04 **TestCode:** **PAHLL_S**

Sample ID: **MB-6299**	SampType: **MBLK**	TestCode: **PAHLL_S**	Units: **µg/Kg**	Prep Date: **11/19/2013**	RunNo: **12501**
Client ID: **PBS**	Batch ID: **6299**	TestNo: **SW8270D**	**SW 3545A**	Analysis Date: **11/20/2013**	SeqNo: **160080**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1-Methylnaphthalene	ND	6.67									
2-Methylnaphthalene	ND	6.67									
Acenaphthene	ND	6.67									
Acenaphthylene	ND	6.67									
Anthracene	ND	6.67									
Benz(a)anthracene	ND	6.67									
Benzo(a)pyrene	ND	6.67									
Benzo(b)fluoranthene	ND	6.67									
Benzo(g,h,i)perylene	ND	6.67									
Benzo(k)fluoranthene	ND	6.67									
Carbazole	ND	6.67									
Chrysene	ND	6.67									
Dibenz(a,h)anthracene	ND	6.67									
Dibenzofuran	ND	6.67									
Fluoranthene	ND	6.67									
Fluorene	ND	6.67									
Indeno(1,2,3-cd)pyrene	ND	6.67									
Naphthalene	ND	6.67									
Phenanthrene	ND	6.67									
Pyrene	ND	6.67									
Surr: 2-Fluorobiphenyl	4.48		6.667		67.3	42.6	128				
Surr: Nitrobenzene-d5	6.07		6.667		91.1	21.7	155				
Surr: p-Terphenyl-d14	4.79		6.667		71.8	44.9	155				

Qualifiers:

B	Analyte detected in the associated Method Blank	H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	R	RPD outside accepted recovery limits	S	Spike Recovery outside accepted recov

QC SUMMARY REPORT

WO#: **1311104**

07-Feb-14

Specialty Analytical

Client: Maul Foster & Alongi

Project: City of Wenatchee / 0380.02.04 **TestCode: PAHLL_S**

Sample ID: **1311104-005AMS** SampType: **MS** TestCode: **PAHLL_S** Units: **µg/Kg-dry** Prep Date: **11/19/2013** RunNo: **12501**

Client ID: **GP12-S-11** Batch ID: **6299** TestNo: **SW8270D** **SW 3545A** Analysis Date: **11/20/2013** SeqNo: **160083**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1-Methylnaphthalene	235	7.58	378.7	13.76	58.4	27.7	108				
2-Methylnaphthalene	318	7.58	378.7	15.69	79.9	27.7	108				
Acenaphthene	220	7.58	378.7	11.19	55.1	33.7	111				
Acenaphthylene	235	7.58	378.7	3.051	61.2	32.3	125				
Anthracene	235	7.58	378.7	6.513	60.3	42.7	121				
Benz(a)anthracene	244	7.58	378.7	6.639	62.8	63.4	121				S
Benzo(a)pyrene	273	7.58	378.7	8.946	69.7	64.6	110				
Benzo(b)fluoranthene	270	7.58	378.7	9.192	68.8	41.6	172				
Benzo(g,h,i)perylene	277	7.58	378.7	12.24	69.8	15	128				
Benzo(k)fluoranthene	216	7.58	378.7	0.5755	57.0	47.9	140				
Chrysene	230	7.58	378.7	10.43	58.0	37.5	125				
Dibenz(a,h)anthracene	280	7.58	378.7	0.6973	73.6	23.6	125				
Fluoranthene	267	7.58	378.7	12.60	67.2	56.8	141				
Fluorene	227	7.58	378.7	16.96	55.5	48.6	117				
Indeno(1,2,3-cd)pyrene	282	7.58	378.7	0.8914	74.3	26.8	133				
Naphthalene	192	7.58	378.7	7.534	48.7	27.7	108				
Phenanthrene	267	7.58	378.7	41.07	59.7	20.2	139				
Pyrene	280	7.58	378.7	34.28	64.8	26.8	142				

Sample ID: **1311104-005AMSD** SampType: **MSD** TestCode: **PAHLL_S** Units: **µg/Kg-dry** Prep Date: **11/19/2013** RunNo: **12501**

Client ID: **GP12-S-11** Batch ID: **6299** TestNo: **SW8270D** **SW 3545A** Analysis Date: **11/20/2013** SeqNo: **160084**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1-Methylnaphthalene	213	7.58	378.7	13.76	52.6	27.7	108	235.0	9.78	20	

Qualifiers:

B Analyte detected in the associated Method Blank

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

O RSD is greater than RSDlimit

R RPD outside accepted recovery limits

S Spike Recovery outside accepted recov

QC SUMMARY REPORT

WO#: **1311104**

07-Feb-14

Specialty Analytical

Client: Maul Foster & Alongi

Project: City of Wenatchee / 0380.02.04 **TestCode: PAHLL_S**

Sample ID: **1311104-005AMSD** SampType: **MSD** TestCode: **PAHLL_S** Units: **µg/Kg-dry** Prep Date: **11/19/2013** RunNo: **12501**

Client ID: **GP12-S-11** Batch ID: **6299** TestNo: **SW8270D** **SW 3545A** Analysis Date: **11/20/2013** SeqNo: **160084**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
2-Methylnaphthalene	307	7.58	378.7	15.69	77.0	27.7	108	318.3	3.45	20	
Acenaphthene	213	7.58	378.7	11.19	53.4	33.7	111	219.9	3.02	20	
Acenaphthylene	231	7.58	378.7	3.051	60.1	32.3	125	234.7	1.75	20	
Anthracene	212	7.58	378.7	6.513	54.3	42.7	121	235.0	10.2	20	
Benz(a)anthracene	227	7.58	378.7	6.639	58.3	63.4	121	244.5	7.28	20	S
Benzo(a)pyrene	249	7.58	378.7	8.946	63.3	64.6	110	272.9	9.27	20	S
Benzo(b)fluoranthene	232	7.58	378.7	9.192	58.9	41.6	172	269.7	14.9	20	
Benzo(g,h,i)perylene	260	7.58	378.7	12.24	65.4	15	128	276.7	6.31	20	
Benzo(k)fluoranthene	215	7.58	378.7	0.5755	56.7	47.9	140	216.3	0.526	20	
Chrysene	201	7.58	378.7	10.43	50.3	37.5	125	230.0	13.5	20	
Dibenz(a,h)anthracene	259	7.58	378.7	0.6973	68.2	23.6	125	279.6	7.58	20	
Fluoranthene	235	7.58	378.7	12.60	58.6	56.8	141	267.2	13.0	20	
Fluorene	246	7.58	378.7	16.96	60.4	48.6	117	227.1	7.95	20	
Indeno(1,2,3-cd)pyrene	260	7.58	378.7	0.8914	68.4	26.8	133	282.3	8.31	20	
Naphthalene	185	7.58	378.7	7.534	46.8	27.7	108	191.8	3.79	20	
Phenanthrene	243	7.58	378.7	41.07	53.3	20.2	139	267.3	9.52	20	
Pyrene	250	7.58	378.7	34.28	56.8	26.8	142	279.8	11.4	20	

Qualifiers:

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recov

KEY TO FLAGS

Rev. May 12, 2010

A	This sample contains a Gasoline Range Organic not identified as a specific hydrocarbon product. The result was quantified against gasoline calibration standards
A1	This sample contains a Diesel Range Organic not identified as a specific hydrocarbon product. The result was quantified against diesel calibration standards.
A2	This sample contains a Lube Oil Range Organic not identified as a specific hydrocarbon product. The result was quantified against a lube oil calibration standard.
A3	The result was determined to be Non-Detect based on hydrocarbon pattern recognition. The product was carry-over from another hydrocarbon type.
A4	The product appears to be aged or degraded diesel.
B	The blank exhibited a positive result great than the reporting limit for this compound.
CN	See Case Narrative.
D	Result is based from a dilution.
E	Result exceeds the calibration range for this compound. The result should be considered as estimate.
F	The positive result for this hydrocarbon is due to single component contamination. The product does not match any hydrocarbon in the fuels library.
G	Result may be biased high due to biogenic interferences. Clean up is recommended.
H	Sample was analyzed outside recommended holding time.
HT	At clients request, samples was analyzed outside of recommended holding time.
J	The result for this analyte is between the MDL and the PQL and should be considered as estimated concentration.
K	Diesel result is biased high due to amount of Oil contained in the sample.
L	Diesel result is biased high due to amount of Gasoline contained in the sample.
M	Oil result is biased high due to amount of Diesel contained in the sample.
MC	Sample concentration is greater than 4x the spiked value, the spiked value is considered insignificant.
MI	Result is outside control limits due to matrix interference.
MSA	Value determined by Method of Standard Addition.
O	Laboratory Control Standard (LCS) exceeded laboratory control limits, but meets CCV criteria. Data meets EPA requirements.
Q	Detection levels elevated due to sample matrix.
R	RPD control limits were exceeded.
RF	Duplicate failed due to result being at or near the method-reporting limit.
RP	Matrix spike values exceed established QC limits; post digestion spike is in control.
S	Recovery is outside control limits.
SC	Closing CCV or LCS exceeded high recovery control limits, but associated samples are non-detect. Data meets EPA requirements.
*	The result for this parameter was greater that the maximum contaminant level of the TCLP regulatory limit.

CHAIN OF CUSTODY RECORD

Specialty Analytical
11711 SE Capps Road
Clackamas, OR 97015
Phone: 503-607-1331
Fax: 503-607-1336

Contact Person/Project Manager: Alan Hughes
Company: MFA
Address: 400 E Mill Plain Blvd
Vancouver WA 98660
Phone: _____ Fax: _____
Project No. 0380.02.04 Project Name: City of Wenatchee
Project Site Location OR: _____ WA: X Other: _____
Invoice To: MFA P.O. No.: _____

Collected By:
Signature: _____
Printed: Andrew Vidourek
Signature: _____
Printed: _____

Turn Around Time
☒ Normal 5-7 Business Days
☐ Rush _____
Specify
Rush Analyses Must Be Scheduled With The Lab In Advance

For Laboratory Use
Lab Job No. 1311104
Shipped Via: Specialty
Air Bill No. _____
Temperature On Receipt 4 °C
Specialty Analytical Containers? Y / N
Specialty Analytical Trip Blanks? Y / N

Date	Time	Sample I.D.	Matrix	No. of Containers	Analyses: HCID	NWTPH-Dx	NWTPH-Gx	VOCs	PAHs	Metals	XPH	XAS	Comments	Lab I.D.
11/5/13	1035	GP11-Comp	S 2	6	X				X		X	X		
	1045	GP11-S-13	S	6	X									
	1055	GP11-S-17.5	S	6										
	1100	GP12-S-7	S	6	X									
	1110	GP12-S-11	S	6										
	1120	GP12-S-13.5	S	6										
	1150	GP14-Comp	S 2	6	X				X		X	X		
	1200	GP14-S-7.5	S	6	X									
	1210	GP14-S-11.5	S	6										
	1310	GP13-S-10	S	6	X									
	1320	GP13-S-13	S	6										
	1330	GP13-S-15	S	6										

Relinquished By	Company	Date	Time	Received By	Company
Andrew Vidourek	MFA	11/7/13	1800		

Relinquished By	Company	Date	Time	Received For Lab By	Date	Time
	SA	8/7/13	1400	Cindy Hallyard	11/8/13	14:00

Unless Reclaimed, Samples Will Be Disposed of 60 Days After Receipt.
Samples held beyond 60 days subject to storage fee(s)

Copies: White-Original Yellow-Project File Pink-Customer Copy

CHAIN OF CUSTODY RECORD

Specialty Analytical
11711 SE Capps Road
Clackamas, OR 97015
Phone: 503-607-1331
Fax: 503-607-1336

Contact Person/Project Manager: Alan Hughes
Company: MFA
Address: 400 E Mill Plain Blvd
Vancouver WA 98660
Phone: _____ Fax: _____
Project No. 0380.02.04 Project Name: City of Wenatchee
Project Site Location OR: _____ WA: X Other: _____
Invoice To: MFA P.O. No.: _____

Collected By:
Signature: _____
Printed: Andrew Vidacak
Signature: _____
Printed: _____

Turn Around Time
☒ Normal 5-7 Business Days
☐ Rush _____
Specify
Rush Analyses Must Be Scheduled With The Lab In Advance

Date	Time	Sample I.D.	Matrix	No. of Containers	Analyses: HCID	NWTPH-Dx	NWTPH-Gx	VOCs	PAHs	Metals	PCB	As	Comments	Lab I.D.
11/5/13	1415	GP15-Comp	S	2	X				X		X	X		
11/5/13	1440	GP15-S-14	S	1										
11/5/13	1515	GP16-S-4	S	1										
11/5/13	1520	GP16-S-14	S	1					X					
11/5/13	1610	GP21-S-16	S	1							X			
11/5/13	1620	GP21-S-20	S	1										
11/5/13	1700	GP19-S-16	S	1							X			
11/5/13	1710	GP19-S-20	S	1										
11/5/13	1555	PZ1-W	W	9	X									
11/6/13	0800	GP22-S-16	S	1							X			
11/6/13	0810	GP22-S-20	S	1										
11/5/13		Trip Blank	W	2										

For Laboratory Use
Lab Job No. 131104
Shipped Via Specialty
Air Bill No. _____
Temperature On Receipt 4 °C
Specialty Analytical Containers? Y / N
Specialty Analytical Trip Blanks? Y / N

Relinquished By	Date	Time	Received By	Relinquished By	Date	Time
Andrew Vidacak	11/7/13	1800			8/NOV/13	1400
Company: MFA			Company: SA	Company: SA		

Unless Reclaimed, Samples Will Be Disposed of 60 Days After Receipt.
Samples held beyond 60 days subject to storage fee(s)

Received For Lab By: Cindy Hilliard — Date: 11/8/13 — Time: 14:00

Copies: White-Original Yellow-Project File Pink-Customer Copy

CHAIN OF CUSTODY RECORD

Specialty Analytical
11711 SE Capps Road
Clackamas, OR 97015
Phone: 503-607-1331
Fax: 503-607-1336

Contact Person/Project Manager: Alan Hughes
Company: MFA
Address: 400 E Mill Plain Blvd
Vancouver WA 98660
Phone: _____ Fax: _____
Project No. 0380.02.04 Project Name: City of Wenatchee
Project Site Location OR: _____ WA: X Other: _____
Invoice To: MFA P.O. No.: _____

Collected By:
Signature: _____
Printed: Andrew Vidourek
Signature: _____
Printed: _____

Turn Around Time
☒ Normal 5-7 Business Days
☐ Rush _____
Specify
Rush Analyses Must Be Scheduled With The Lab In Advance

For Laboratory Use
Lab Job No. 1311104
Shipped Via: Specialty
Air Bill No. _____
Temperature On Receipt 4 °C
Specialty Analytical Containers? Y / N
Specialty Analytical Trip Blanks? Y / N

Date	Time	Sample I.D.	Matrix	No. of Containers	Analyses: HCID	NWTPH-Dx	NWTPH-Gx	VOCs	PAHs	Metals	PH	As			Comments	Lab I.D.
11/6/13	0840	GP17-Comp	S	2	X				X		X	X				
	0850	GP17-S-12.5	S	1					X							
	0900	GP17-S-16	S	1							X					
	0910	GP17-S-20	S	1												
	1000	GP18-S-7	S	1												
	1010	GP18-S-11	S	1												
	1020	GP18-S-15	S	1												
	1145	GP18-W	W	9	X											
	1250	GP20-Comp	S	2	X				X		X	X				
	1300	GP20-S-16	S	1							X					
	1310	GP20-S-20	S	1												
	1613	PZ2-W	W	9	X											

Relinquished By	Date	Time	Received By	Relinquished By	Date	Time
Andrew Vidourek	11/7/13	1800	SA	SA	8NOV13	1400
Company: MFA			Company:	Company:		

Unless Reclaimed, Samples Will Be Disposed of 60 Days After Receipt.
Samples held beyond 60 days subject to storage fee(s)

Received For Lab By: Cindy Hilyard — Date: 11/8/13 — Time: 1400

Copies: White-Original Yellow-Project File Pink-Customer Copy

CHAIN OF CUSTODY RECORD

Specialty Analytical
11711 SE Capps Road
Clackamas, OR 97015
Phone: 503-607-1331
Fax: 503-607-1336

Contact Person/Project Manager: Alan Hughes
Company: MFA
Address: 400 E Mill Plain Blvd
Vancouver WA 98660
Phone: _____ Fax: _____
Project No. 0380.02.04 Project Name: _____
Project Site Location OR: _____ WA: X Other: _____
Invoice To: MFA P.O. No.: _____

Collected By:
Signature: _____
Printed: Andrew Vidourek
Signature: _____
Printed: _____

Turn Around Time
☒ Normal 5-7 Business Days
☐ Rush _____
Specify
Rush Analyses Must Be Scheduled With The Lab In Advance

For Laboratory Use
Lab Job No. 131104
Shipped Via: Specialty
Air Bill No.: _____
Temperature On Receipt 4 °C
Specialty Analytical Containers? Y / N
Specialty Analytical Trip Blanks? Y / N

Date	Time	Sample I.D.	Matrix	No. of Containers	Analyses: HCID	NWTPH-Dx	NWTPH-Gx	VOCs	PAHs	Metals	Pb	As	Comments	Lab I.D.
11/7/13	0915	PZ3-W	W	9	X									

Relinquished By	Date	Time	Received By	Relinquished By	Date	Time
Andrew Vidourek	11/7/13	1800			8 NOV 13	1400
Company: MFA			Company:	Company: SA		

Unless Reclaimed, Samples Will Be Disposed of 60 Days After Receipt.
Samples held beyond 60 days subject to storage fee(s)

Received For Lab By: Cindy Hillyard — Date: 11/8/13 — Time: 0400

Copies: White-Original Yellow-Project File Pink-Customer Copy

ATTACHMENT C

DATA VALIDATION MEMORANDUM

DATA QUALITY ASSURANCE/QUALITY CONTROL REVIEW

PROJECT NO. 0380.02.04 | DECEMBER 4, 2013 | CITY OF WENATCHEE

This report reviews the analytical results for groundwater and soil samples collected by the Maul Foster & Alongi, Inc. project team on the property located at 25 North Worthen Street, Wenatchee, Washington. The samples were collected in November 2013.

Specialty Analytical, Inc. (SA) performed the analyses. SA report number 1311104rev1 was reviewed. The analyses performed are listed below. Some analyses may not have been performed on all samples.

Analysis	Reference
BTEX by 8021/5035	USEPA 8021
Diesel and Lube Oil	NWTPH-Dx
NWTPH-HCID	NWTPH-HCID
Polycyclic Aromatic Hydrocarbons	USEPA 8270D
Polychlorinated Biphenyls	USEPA 8082A
Semivolatile Organic Compounds	USEPA 8270D
Total Metals	USEPA 6020

BTEX = benzene, toluene, ethylbenzene, and xylene.
HCID = Hydrocarbon Identification.
NWTPH = Northwest Total Petroleum Hydrocarbons.
USEPA = U.S. Environmental Protection Agency.

DATA QUALIFICATIONS

Analytical results were evaluated according to applicable sections of USEPA procedures (USEPA, 2008, 2010) and appropriate laboratory, method-specific guidelines (SA, 2013; USEPA, 1986).

Data validation procedures were modified, as appropriate, to accommodate quality-control requirements for methods not specifically addressed by the functional guidelines (i.e., NWTPH-Dx and NWTPH-HCID analyses).

Some NWTPH-Dx diesel and lube oil results were identified and documented by the laboratory as containing compounds not identified as specific hydrocarbon products. The reviewer qualified these results with "J," as estimated.

Sample	Component	Original Result (mg/kg)	Qualified Result (mg/kg)
GP11-Comp	Diesel	46.5	46.5 J
GP11-S-13	Diesel	137	137 J
GP11-S-17.5	Diesel	87.1	87.1 J
GP12-S-7	Diesel	162	162 J
GP12-S-11	Diesel	463	463 J

Sample	Component	Original Result (mg/kg)	Qualified Result (mg/kg)
GP12-S-11	Lube Oil	567	567 J
GP14-Comp	Diesel	51.9	51.9 J
GP14-S-7.5	Diesel	116	116 J
GP14-S-11.5	Diesel	53.1	53.1 J
GP13-S-10	Diesel	114	114 J
GP13-S-13	Diesel	149	149 J
GP20-Comp	Diesel	27.7	27.7 J

mg/kg = milligrams per kilogram.

Sample	Component	Original Result (mg/L)	Qualified Result (mg/L)
PZ2-W	Diesel	1.95	1.95 J
PZ2-W	Lube Oil	1.74	1.74 J
PZ3-W	Diesel	4.11	4.11 J
PZ3-W	Lube Oil	3.49	3.49 J

mg/L = milligrams per liter.

The data are considered acceptable for their intended use, with the appropriate data qualifiers assigned.

HOLDING TIMES, PRESERVATION, AND SAMPLE STORAGE

Holding Times

Samples GP11-S-17.5, GP12-S-11, GP14-S-11.5, and GP13-S-13 were analyzed by USEPA Method 8021B one day past the recommended 14-day holding time. The reviewer qualified the results "UJ," as non-detect and estimated.

Sample	Component	Original Result (mg/kg)	Qualified Result (mg/kg)
GP11-S-17.5	Benzene	0.062 U	0.062 UJ
GP11-S-17.5	Ethylbenzene	0.25 U	0.25 UJ
GP11-S-17.5	Toluene	0.25 U	0.25 UJ
GP11-S-17.5	Total Xylenes	0.75 U	0.75 UJ
GP12-S-11	Benzene	0.055 U	0.055 UJ
GP12-S-11	Ethylbenzene	0.22 U	0.22 UJ
GP12-S-11	Toluene	0.22 U	0.22 UJ
GP12-S-11	Total Xylenes	0.66 U	0.66 UJ
GP14-S-11.5	Benzene	0.054 U	0.054 UJ
GP14-S-11.5	Ethylbenzene	0.22 U	0.22 UJ
GP14-S-11.5	Toluene	0.22 U	0.22 UJ
GP14-S-11.5	Total Xylenes	0.65 U	0.65 UJ
GP13-S-13	Benzene	0.054 U	0.054 UJ

Sample	Component	Original Result (mg/kg)	Qualified Result (mg/kg)
GP13-S-13	Ethylbenzene	0.21 U	0.21 UJ
GP13-S-13	Toluene	0.21 U	0.21 UJ
GP13-S-13	Total Xylenes	0.64 U	0.64 UJ

The remaining extractions and analyses were performed within the recommended holding time criteria.

Preservation and Sample Storage

The samples were preserved and stored appropriately.

BLANKS

Method Blanks

Laboratory method blank analyses were performed at the required frequencies. For purposes of data qualification, the method blanks were associated with all samples prepared in the analytical batch. For an analyte detected in a sample and in the associated method blank, the sample result was qualified if the concentration was less than five times the method blank concentration. Method reporting limits (MRLs) were elevated to the concentration detected in the samples, and results were qualified as not detected, "U," at the elevated MRL.

Diesel and lube oil were detected in the NWTPH-Dx water method blank. The associated sample results were greater than five times the method blank concentrations; thus, no results were qualified.

All remaining laboratory method blanks were non-detect.

CONTINUING CALIBRATION BLANK

Continuing calibration blanks (CCBs) were reported for some analyses. All CCBs were non-detect.

Trip Blanks

A trip blank was submitted with sample delivery group (SDG) 1311104. The trip blank was not analyzed.

Equipment Rinsate Blanks

Equipment rinsate blanks were not collected for this sampling event. Equipment was decontaminated after each composite sample was collected, and discrete samples were collected using dedicated, single-use equipment.

SURROGATE RECOVERY RESULTS

When appropriate, individual samples were spiked with surrogate compounds to evaluate laboratory performance. The laboratory appropriately documented and qualified surrogate outliers. Associated batch quality assurance/quality control for samples with surrogate outliers was within acceptance limits.

Results for the surrogate o-terphenyl, as part of the NWTPH-Dx analysis, exceeded the lower acceptance limit for samples GP20-Comp and PZ2-W because of matrix interference. The reviewer qualified the associated results with "J," as estimated. The GP20-Comp diesel result and the results for PZ2-W were qualified for containing compounds not identified as specific hydrocarbon patterns; qualifications are documented in the data qualifications section above.

Sample	Component	Original Result (mg/kg)	Qualified Result (mg/kg)
GP20-Comp	Lube Oil	127	127 J

All remaining surrogate recoveries were within acceptance limits.

MATRIX SPIKE/MATRIX SPIKE DUPLICATE RESULTS

Matrix spike/matrix spike duplicate (MS/MSD) results are used to evaluate laboratory precision and accuracy. All MS/MSD samples were extracted and analyzed at the required frequency.

The USEPA Method 8082A MS/MSD exceeded the relative percent difference (RPD) acceptance limit for Aroclor 1016/1260 because of matrix interference. The sample used to prepare the MS/MSD was from a different SDG; thus, the MS/MSD matrices do not represent the soil samples submitted in SDG 1311104. The remaining batch quality control met acceptance criteria. No results were qualified.

The USEPA Method 8021B batch 6273 MS exceeded lower percent recovery acceptance limits for toluene, ethylbenzene, and total xylenes, and the MSD exceeded the lower acceptance limit for toluene. The remaining batch quality control met acceptance criteria. The ethylbenzene and total xylenes percent recovery exceedances were minor; thus, no results were qualified. The associated sample was non-detect for toluene and was qualified with "UJ," as non-detect and estimated.

Sample	Component	Original Result (mg/kg)	Qualified Result (mg/kg)
GP14-Comp	Toluene	2.23 U	2.23 UJ

The USEPA Method 8021B batch 6301 MS and MSD exceeded the upper acceptance limit for toluene. The exceedances were minor; thus no results were qualified.

The USEPA Method 8270D MS/MSD for batch 6299 exceeded the lower percent recovery acceptance limit for benzo(a)anthracene, and the MSD exceeded the lower percent recovery

acceptance limit for benzo(a)pyrene. The exceedances were minor and the remaining batch quality control met acceptance criteria; thus, no results were qualified.

All remaining recoveries were within acceptance limits for percent recovery and RPDs.

LABORATORY DUPLICATE RESULTS

Duplicate results are used to evaluate laboratory precision. All duplicate samples were extracted and analyzed at the required frequency.

Two of the NWTPH-HCID laboratory duplicates analyzed on 11/12/2013 exceeded RPD limits for diesel and lube oil. The NWTPH-HCID results are qualitative; thus, no results were qualified.

Both NWTPH-Dx batch 6284 laboratory duplicates exceeded RPD acceptance limits for diesel and lube oil. One laboratory duplicate with significant RPD exceedances was prepared with a sample from a different SDG. The second laboratory duplicate was prepared with sample GP14-S-11.5, and the RPD exceedances were relatively minor. No results were qualified.

One of the laboratory duplicates for NWTPH-Dx batch 6302 exceeded RPD acceptance limits for diesel and lube oil. The laboratory duplicate was prepared with a sample from a different SDG and the remaining batch quality control had acceptable recoveries; however, the RPD exceedances were significant and the second laboratory duplicate for this batch was non-detect for diesel and lube oil. The diesel result was qualified for containing compounds not identified as specific hydrocarbon patterns; qualifications are documented in the data qualifications section above. The lube oil result was qualified as estimated because of low surrogate percent recovery in the surrogate recovery results section above.

All remaining laboratory duplicate RPDs were within acceptance limits.

LABORATORY CONTROL SAMPLE/LABORATORY CONTROL SAMPLE DUPLICATE RESULTS

A laboratory control sample/laboratory control sample duplicate (LCS/LCSD) is spiked with target analytes to provide information on laboratory precision and accuracy.

The NWTPH-HCID water matrix batch quality control did not include an LCS. The remaining LCS/LCSD samples were extracted and analyzed at the required frequency.

All LCS/LCSD analytes were within acceptance limits for percent recovery.

FIELD DUPLICATE RESULTS

Field duplicate samples measure both field and laboratory precision. Field duplicates were not submitted for analysis.

CONTINUING CALIBRATION VERIFICATION RESULTS

Continuing calibration verification (CCV) results are used to demonstrate instrument precision and accuracy through the end of the sample batch. All CCVs were within acceptance limits for percent recovery.

REPORTING LIMITS

SA used routine reporting limits for non-detect results, except when samples required dilutions because of limited sample or extract volume, high analyte concentrations, and/or matrix interferences.

DATA PACKAGE

The data packages were reviewed for transcription errors, omissions, and anomalies.

Some analyses, such as BTEX by USEPA Method 8021B and NWTPH-Dx, were added after samples were received by the laboratory. A record of the request for analysis was not included in the report.

No additional issues were found.

SA. 2013. Quality assurance manual. Specialty Analytical, Inc., Clackamas, Oregon.

USEPA. 1986. Test methods for evaluating solid waste: physical/chemical methods. EPA-530/SW-846. U.S. Environmental Protection Agency, Office of Solid Waste and Emergency Response. September (revision 6, February 2007).

USEPA. 2008. USEPA contract laboratory program, national functional guidelines for organics data review. EPA 540/R-08/01. U.S. Environmental Protection Agency, Office of Emergency and Remedial Response. June.

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