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November 29, 2010

Portac, Inc.
Fabulich Center
3600 Port of Tacoma Rd., Suite 302
Tacoma, WA 98424

Attention: Mr. Terry Mathern

RE: Third Quarter 2010 Groundwater Monitoring
Former Portac Inc. Site
Tacoma, Washington

Dear Mr. Mathern:

As you have authorized, Whitman Environmental Sciences (WES) has conducted additional groundwater monitoring at the former Portac site. This work was conducted to address the Voluntary Cleanup Program (VCP) review comments of Mr. Tom Middleton, of the Washington Department of Ecology. This monitoring event is the fourth of four quarterly rounds of groundwater sampling requested by Mr. Middleton in his October 18, 2009 opinion letter. This letter addresses the groundwater monitoring procedures and laboratory analyses on groundwater samples.

Groundwater Monitoring Activities

The 3rd Quarter 2010 monitoring included visits to the site for measuring water levels and groundwater sampling. The site and surrounding area are shown in Figure 1. Figure 2 shows the locations of seven groundwater monitoring wells located on the sawmill portion of the Portac site. Six of those wells were installed as part of cleanup and site investigation work conducted in 2008 and 2009. One well (B-5R) was installed as part of 1988 hydrogeologic studies of the site and was rehabilitated in 2009 for continued use as part of this monitoring program.

During the 3rd Quarter, WES contracted Holocene Drilling, Inc. to reconstruct five of the monuments on other old monitoring wells located in the former log yard. These wells appear to be functional and could be used for future water level measurements, if elevations are coordinated with the reference system used for the sawmill area wells.

Water Level Measurements

Water levels were measured in each of the seven sawmill area wells and Wapato Creek to check conditions at varying tidal phases. Water level measurements were taken using a manual Solinst electronic water level meter on August 30th and October 4th, 2010. A summary of the current water level measurements is included in Table 1. The water level elevations noted in the table are relative to the top of pipe of monitoring well MW-4, which was assigned an elevation of 100.00 for the purposes of this study. However, any of the monitoring wells can be used as a reference point now that a survey has established the relative elevations of all of these wells.

Groundwater Sampling and Analyses

Groundwater samples were obtained from five of the seven monitoring wells on August 30th, 2010. The two remaining wells were sampled on October 4th. Each well was purged of a minimum of ten standing water volumes using a peristaltic pump and dedicated polyethylene tubing. All of the wells provided adequate recharge for continuous pumping, except MW-2R, which pumped dry. MW-2R recharged slowly between pumping sequences. Purge water was only slightly turbid, but in all wells was discolored to a yellowish or brown color by naturally occurring organic matter. Field measurements of the purge water pH and temperature were taken immediately before sampling.

The samples were placed in laboratory prepared bottles, chilled and handled under chain-of-custody throughout delivery to the laboratory of Friedman & Bruya, Inc. of Seattle. Samples from each well were analyzed for concentrations of pentachlorophenol, a list of 18 polynuclear aromatic hydrocarbons (PAHs), total petroleum hydrocarbons (TPH) in the diesel and motor oil ranges, and a list of 12 regulated metals. Laboratory analyses were conducted by EPA and Washington State accepted methods, with reporting limits suitable to compare the findings to appropriate regulatory criteria. The samples were not filtered prior to metals analyses, so the reported concentrations represent total concentrations of the metals in groundwater. The laboratory analytical results are summarized in Table 2. Table 3 is a summary of the results in the context of prior monitoring for comparison purposes.

Field Measurements

Field data sheets summarizing the measurements made during purging of each well are attached. During purging, water samples were field tested for pH and temperature. Of the pH measurements, only those obtained from monitoring well MW-2R were notably anomalous. The measured pH of other wells fell within a range of 6.0 to 7.7, which would be considered typical of groundwater. However, the purge water from monitoring well MW-2R had a measured pH of 12.3, highly alkaline. Groundwater temperatures varied from 61° to 65° F.

Laboratory Analytical Results

The laboratory analytical reports are attached to this letter. The testing reported concentrations of pentachlorophenol in the sample from one of the seven monitoring wells; MW-2R in the former dip tank area. The reported concentration of 76 ug/l (units equivalent to parts per billion (ppb)) is comparable to results of prior sampling from this well. The reported concentration exceeds the MTCA Method B standard formula value of 0.73 ug/l. Pentachlorophenol was not detected in any of the other six sampled monitoring wells.

In prior sampling rounds, monitoring well MW-5 (at the former planer building spray booth area) has shown pentachlorophenol concentrations ranging from 1.5 ug/l to 22 ug/l. However, in this sampling event, no detectable concentrations were reported in that well.

A limited number of PAH compounds were identified by the laboratory analyses in samples from monitoring wells MW-2R, MW-6R and B-5R. The highest concentrations of PAHs were found in monitoring well MW-6R, where naphthalene (1.2 ug/l), acenaphthene (13 ug/l), fluorene (0.83 ug/l), and 1 methylnaphthalene (2.4 ug/l) were found. The sample from monitoring well MW-2R contained concentrations of naphthalene (0.3 ug/l), acenaphthene (0.48 ug/l), fluorene (0.23 ug/l), fluoranthene (0.49 ug/l) and pyrene (0.30 ug/l). The sample from monitoring well B-5R contained

a low concentration of only one detected PAH compound; 0.89 ug/l of acenaphthene. The reported results are comparable concentrations found in prior sampling conducted from these wells. PAH compounds were not detected in the four other sampled monitoring wells.

None of the individual detected PAHs exceed MTCA Method B cleanup criteria. The MTCA Method A groundwater cleanup criteria for PAHs uses a Toxic Equivalent Concentration (TEC) to compare the apparent risk of PAH mixtures to that of benzo(a)pyrene. Toxicity equivalency factors are applied to seven carcinogenic PAHs (benz(a)anthracene, chrysene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, indeno(1,2,3-cd)pyrene and dibenz(a,h)anthracene) to calculate a TEC for the mixture as a whole. None of the samples contained any detectable concentrations of any of the seven PAHs used to calculate the TEC. The laboratory reporting limits are low enough that TECs meeting Method A cleanup criteria are calculated based on presumed PAH concentrations at one half of the reporting limit.

Testing for total petroleum hydrocarbons (TPH) was conducted following a silica gel cleanup to remove non-petroleum organic matter. TPH was reported only in the sample from monitoring well MW-2R. The sample contained 54 ug/l of diesel range organics, with no detectable oil range hydrocarbons. None of the samples exceeded MTCA Method A groundwater cleanup criteria for diesel or oil range petroleum hydrocarbons.

Metals analyses included testing for the total concentrations of arsenic, barium, cadmium, chromium, copper, lead, manganese, mercury, molybdenum, nickel, selenium, and zinc. Cadmium and mercury were not detected in any of the samples. All of the monitoring well samples contained barium, chromium, and manganese, all of which are naturally occurring in soil and groundwater. The reported barium concentrations ranged from 28.1 ug/l in MW-5 to 187 ug/l in MW-1. Chromium concentrations ranged from 1.39 ug/l in monitoring well MW-2R to 16.5 ug/l in MW-5. Manganese concentrations ranged from 9.74 ug/l in MW-2R to 8,760 ug/l in MW-6R.

Samples from six of the seven monitoring wells contained concentrations of arsenic, nickel and selenium. Arsenic concentrations ranged from 1.01 to 18.7 ug/l, in wells MW-5 and MW-1, respectively. Nickel was detected at concentrations ranging from 1.37 ug/l to 21.3 ug/l, in wells MW-6R and MW-2R, respectively. Only monitoring well B-5R did not contain detectable arsenic or nickel. Selenium was reported at concentrations from 1.13 ug/l to 6.97 ug/l in wells MW-2R and MW-4, respectively.

Copper and molybdenum were detected in the samples from four monitoring wells. Copper was found at concentrations ranging from 1.98 to 52.9 ug/l. Molybdenum was found at concentrations ranging from 1.31 ug/l to 33.9 ug/l.

Lead was detected in samples from MW-2R and MW-4, at concentrations of 1.06 ug/l and 1.21 ug/l. Zinc was detected only in the sample from monitoring well MW-2R, at a concentration of 2.06 ug/l.

Several of the reported concentrations of arsenic and manganese exceed MTCA Method A or B cleanup criteria. No other metals concentrations exceeded MTCA cleanup criteria. Arsenic concentrations exceed the MTCA Method A groundwater cleanup level of 5 ug/l in monitoring wells MW-1, MW-2R, MW-3 and MW-4. All these wells are located on the western edge of the site,

around the area of the former dip tank. This finding is consistent with prior sampling rounds, although MW-2R has evidenced arsenic levels ranging from 2.85 to 118 ug/l, more variable than the other wells in this area.

The reported concentrations of manganese in the samples from MW-1, MW-3, MW-4 and MW-6R all exceeded the MTCA Method B standard formula value of 2,200 ug/l. However, the former activities at the Portac site involved no known sources of manganese. The reported concentrations are most likely naturally occurring in the brackish water tideflats area and can be considered evidence that site groundwater is not potable for reasons unrelated to contaminants originating from past site releases. The current findings are comparable to prior sampling results.

Groundwater Level Measurements and Inferred Contour Plots

Plots of inferred groundwater contours are shown in Figures 2 and 3, representing measurements of the groundwater surface taken at different tidal stages. Figure 2 is based on measurements taken on August 30th, 2010 when surface water levels were rising from a 4.36 ft. MLLW low tide condition in Commencement Bay that had reached its low approximately an hour earlier. Figure 3 is based on measurements from October 4th, when surface water levels were rising from a 0.8 ft. MLLW low tide, to a high water level of 11.8 ft., reaching its highest point at the time measurements were being taken.

Groundwater and tidal measurements taken during a tidal monitoring study in November 2009 have shown that groundwater levels in the wells along the margin of the site respond to tidal variations, with a lag of one to two hours between the recorded maximum or minimum measurements in the creek versus the corresponding level in the wells. The contour plots shown in Figures 2 and 3 represent conditions while near a low response to the tidal cycle and rising from a significant low water level, respectively.

Figures 2 and 3 show an overall trend of groundwater migration to the northwest, with minor variations along the western margin of the site, where tidal fluctuations are most clearly observed. The localized variations are limited to monitoring wells MW-1 and MW-4 and demonstrate that the tidal variations are limited to the western edge of the site.

In both of the current contour plots, there is a relatively flat gradient over the sawmill area, with a steeper gradient in the northern part of the plots. In the southern portion of the site there is a northwesterly horizontal gradient of approximately 0.0009 ft/ft. In the northern part of the plot, the gradient increases to approximately 0.002 ft/ft. Monitoring well B-5R consistently shows water levels that are lower than any other monitoring point on the site.

Conclusions

The Third Quarter 2010 groundwater monitoring confirms that concentrations of pentachlorophenol in groundwater exceed Washington State MTCA groundwater cleanup criteria at one location on the Portac site; MW-2R in the former dip tank area. The concentration reported is higher than the results of the June 2010 sample from this well, but is consistent with earlier samples taken in 2009 and March 2010. Samples from surrounding wells MW-1, MW-3 or MW-4 do not contain detectable pentachlorophenol.

Pentachlorophenol was not detected in monitoring well MW-5, at the former planer building spray booth area. All prior testing from this well has shown low but detectable pentachlorophenol concentrations exceeding the MTCA Method B standard formula value of 0.73 ug/l. The original sample from this well taken in March, 2009 contained a reported concentration of 22 ug/l of pentachlorophenol. Subsequent samples have been 1.5 ug/l, 4.7 ug/l, 2.4 ug/l and the current finding of no detectable concentrations. The overall findings suggest the initial sample may have been influenced by the disturbance of drilling and installing the monitoring well, a relatively common occurrence.

The purge water from monitoring well MW-2R also evidenced elevated pH of 11.7 to 12.3. Reportedly, soda ash was used as a pH adjustment to maintain an alkaline solution in the former dip tank during the time that pentachlorophenol was used as a sap stain preventative. The elevated groundwater pH could be a residual effect from the dip tank solution. Measurements in surrounding monitoring wells MW-1, MW-3 and MW-4 are in the range of 6.6 to 7.7, indicating that migration is not occurring.

Concentrations of arsenic and manganese were also found to exceed MTCA groundwater cleanup criteria in some of the wells. Both of these regulated metals are relatively pervasive in the area due to naturally occurring conditions and past historical airborne discharges from the former Asarco Ruston smelter. The distribution of arsenic does not suggest it is related to the capped log yard, since monitoring wells MW-6R and B-5R are both closer to the log yard and do not evidence elevated arsenic concentrations. Portac did not use arsenic containing wood treatment compounds in the dip tank.

The former activities at the Portac site involved no known sources of manganese. The reported manganese concentrations are most likely naturally occurring in the brackish water tideflats area and can be considered evidence that site groundwater contains background concentrations of inorganic constituents that make use of the water as a drinking water source not practicable.

The direction of groundwater migration inferred by the water level data indicate that the current monitoring wells are in appropriate locations to monitor groundwater in the vicinity of the expected source areas on the site. Monitoring wells MW-1 and MW-4 adjacent to the former dip tank are well placed to be downgradient under either high or low tidal response conditions, respectively. No additional monitoring wells appear to be needed for future monitoring of the former sawmill source areas.

Five monitoring wells on the log yard cap have been located and the monument covers have been restored for potential future use. These wells could be useful for water level measurements to provide a groundwater contour diagram covering the overall site. However, the wells are over 20 years old and may have settled or been disturbed by natural forces and the loads placed on the logyard cap. The top-of-pipe elevations should be confirmed and coordinated with the reference system used for the sawmill wells in order to develop an overall understanding of groundwater flow directions.

Limitations

The recommendations contained in this report represent our professional opinions and are based on our observations, subcontracted analytical testing and information supplied by third party

sources. These opinions are based on currently available information and are arrived at in accordance with currently accepted environmental assessment practices at this time and location. This report has been prepared for the exclusive use of Portac, Inc., their agents, attorney's and lenders, for specific application to this project, in accordance with our approved scope of work and our General Term and Conditions. In the event that other information becomes known regarding conditions of the site or surrounding properties, the conclusions of this report should be reviewed and if necessary, updated by WES to reflect the new information.

Closure

Thank you for the opportunity to be of service to you in this matter. If you have any questions regarding this report, or if I may be of any further assistance, please feel free to contact me at your convenience.

Respectfully submitted,
Whitman Environmental Sciences



Daniel S. Whitman, L.G.

Attachments:

Table 1 - Groundwater Level Measurements, Monitoring Wells and Wapato Creek
Table 2 - Current Sample Analytical Results
Table 3 - Summary of Historical Groundwater Monitoring Data

Figure 1 - Site Location Map
Figure 2 - Inferred Groundwater Contours - 4:00 p.m. August 30th, 2010
Figure 3 - Inferred Groundwater Contours - 3:00 p.m. October 4th, 2010

Field Sampling Data Sheets
Laboratory Analytical Reports - Friedman & Bruya, Inc.

TABLE 1
Portac Inc.

3rd Quarter 2010 Water Level Measurements

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Measuring Point	Measuring Point Elev.	Date	Time	Depth to Water	Water Elevation
Wapato Creek	91.07	8-30-2010	10:50	5.08	85.99
		10-4-2010	13:18	3.57	87.5
MW-1	99.56	8-30-2010	14:45	0.81	90.26
		10-4-2010	15:15	10.68	88.88
MW-2R	100.07	8-30-2010	13:17	10.73	88.83
		10-4-2010	14:40	10.70	88.86
MW-3	99.67	8-30-2010	15:18	10.66	88.9
		10-4-2010	16:35	10.68	89.39

TABLE 1
Portac Inc.
3rd Quarter 2010 Water Level Measurements

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Measuring Point	Measuring Point Elev.	Date	Time	Depth to Water	Water Elevation
MW-4	100.00	8-30-2010	16:00	11.20	88.8
		10-4-2010	13:16	11.20	88.8
		10-4-2010	14:39	11.06	88.94
MW-5	98.99	8-30-2010	10:37	9.52	89.47
		10-4-2010	13:12	9.46	89.53
		10-4-2010	14:53	9.46	89.53
MW-6R	100.49	8-30-2010	10:32	11.11	89.38
		10-4-2010	13:10	11.12	89.37
		10-4-2010	14:50	11.17	89.32
B-5R	99.77	8-30-2010	14:20	12.17	87.6
		10-4-2010	13:21	12.37	87.4
		10-4-2010	14:46	11.52	88.25

TABLE 2

Portac Inc.

August-September, 2010 Groundwater Sampling

WES-1400

Page 1

Current Sample Analytical Results

Monitoring Well ID	Pentachloro phenol (ug/l)	Other Semi-Volatile Organic Compounds (ug/l)	Total Petroleum Hydrocarbons (ug/l)	Regulated Metals (ug/l)
MW-1	ND (<0.5)	Analyzed PAH compounds: Naphthalene - ND (<0.1) Acenaphthylene - ND (<0.1) Acenaphthene - ND (<0.1) Fluorene ND (<0.1) Phenanthrene - ND (<0.1) Anthracene - ND (<0.1) Fluoranthene - ND (<0.1) Pyrene - ND (<0.1) Benz(a)anthracene - ND (<0.1) Chrysene - ND (<0.1) Benzo(a)pyrene - ND (<0.1) Benzo(b)fluoranthene - ND (<0.1) Benzo(k)fluoranthene - ND (<0.1) Indeno(1,2,3-cd)pyrene - ND (<0.1) Dibenz(a,h)anthracene - ND (<0.1) Benzo(g,h,l)perylene - ND (<0.1) 1 Methylnaphthalene - ND (<0.1) 2 Methylnaphthalene - ND (<0.1) Sample TEC ² - 0.1 based on ½ detection limit of cPAHs	Diesel - ND (<50) Motor Oil- ND (<250)	Arsenic - 18.7 Barium - 187 Cadmium - ND (<1) Chromium - 4.53 Copper - ND (<1) Lead - ND (<1) Manganese - 7,260 Mercury - ND (<0.2) Molybdenum - 1.31 Nickel - 2.87 Selenium - 4.93 Zinc - ND (<1)
MW-2R	76	Analyzed PAH compounds: Naphthalene - 0.30 Acenaphthylene - ND (<0.1) Acenaphthene - 0.48 Fluorene 0.23 Phenanthrene - 0.20 Anthracene - ND (<0.1) Fluoranthene - 0.49 Pyrene - 0.30 Benz(a)anthracene - ND (<0.1) Chrysene - ND (<0.1) Benzo(a)pyrene - ND (<0.1) Benzo(b)fluoranthene - ND (<0.1) Benzo(k)fluoranthene - ND (<0.1) Indeno(1,2,3-cd)pyrene - ND (<0.1) Dibenz(a,h)anthracene - ND (<0.1) Benzo(g,h,l)perylene - ND (<0.1) 1 Methylnaphthalene - 0.20 2 Methylnaphthalene - ND (<0.1) Sample TEC ² - 0.1 based on ½ detection limit of cPAHs	Diesel - 54 Motor Oil- ND (<250)	Arsenic - 7.11 Barium - 102 Cadmium - ND (<1) Chromium - 1.39 Copper - 52.9 Lead - 1.21 Manganese - 9.74 Mercury - ND (<0.2) Molybdenum - 33.9 Nickel - 21.3 Selenium - 1.13 Zinc - 2.06

TABLE 2

Portac Inc.

August-September, 2010 Groundwater Sampling

WES-1400

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Current Sample Analytical Results

Monitoring Well ID	Pentachloro phenol (ug/l)	Other Semi-Volatile Organic Compounds (ug/l)	Total Petroleum Hydrocarbons (ug/l)	Regulated Metals (ug/l)
MW-3	ND (<0.5)	Analyzed PAH compounds: Naphthalene - ND (<0.1) Acenaphthylene - ND (<0.1) Acenaphthene - ND (<0.1) Fluorene ND (<0.1) Phenanthrene - ND (<0.1) Anthracene - ND (<0.1) Fluoranthene - ND (<0.1) Pyrene - ND (<0.1) Benz(a)anthracene - ND (<0.1) Chrysene - ND (<0.1) Benzo(a)pyrene - ND (<0.1) Benzo(b)fluoranthene - ND (<0.1) Benzo(k)fluoranthene - ND (<0.1) Indeno(1,2,3-cd)pyrene - ND (<0.1) Dibenz(a,h)anthracene - ND (<0.1) Benzo(g,h,l)perylene - ND (<0.1) 1 Methylnaphthalene - ND (<0.1) 2 Methylnaphthalene - ND (<0.1) Sample TEC ² - 0.1 based on ½ detection limit of cPAHs	Diesel - ND (<50) Motor Oil - ND (<250)	Arsenic - 8.23 Barium - 88.5 Cadmium - ND (<1) Chromium - 3.00 Copper - ND (<1) Lead - ND (<1) Manganese - 2,570 Mercury - ND (<0.2) Molybdenum ND(<1) Nickel - 1.78 Selenium - 3.74 Zinc - ND (<1)
MW-4	ND (<0.5)	Analyzed PAH compounds: Naphthalene - ND (<0.1) Acenaphthylene - ND (<0.1) Acenaphthene - ND (<0.1) Fluorene ND (<0.1) Phenanthrene - ND (<0.1) Anthracene - ND (<0.1) Fluoranthene - ND (<0.1) Pyrene - ND (<0.1) Benz(a)anthracene - ND (<0.1) Chrysene - ND (<0.1) Benzo(a)pyrene - ND (<0.1) Benzo(b)fluoranthene - ND (<0.1) Benzo(k)fluoranthene - ND (<0.1) Indeno(1,2,3-cd)pyrene - ND (<0.1) Dibenz(a,h)anthracene - ND (<0.1) Benzo(g,h,l)perylene - ND (<0.1) 1 Methylnaphthalene - ND (<0.1) 2 Methylnaphthalene - ND (<0.1) Sample TEC ² - 0.1 based on ½ detection limit of cPAHs	Diesel - ND (<50) Motor Oil - ND (<250)	Arsenic - 10.3 Barium - 153 Cadmium - ND (<1) Chromium - 2.35 Copper - 1.98 Lead - 1.06 Manganese - 4,810 Mercury - ND (<0.2) Molybdenum ND(<1) Nickel - 2.03 Selenium - 6.97 Zinc - ND (<1)

TABLE 2**Portac Inc.****August-September, 2010 Groundwater Sampling****WES-1400****Page 3****Current Sample Analytical Results**

Monitoring Well ID	Pentachloro phenol (ug/l)	Other Semi-Volatile Organic Compounds (ug/l)	Total Petroleum Hydrocarbons (ug/l)	Regulated Metals (ug/l)
MW-5	ND (<0.5)	Analyzed PAH compounds: Naphthalene - ND (<0.1) Acenaphthylene - ND (<0.1) Acenaphthene - ND (<0.1) Fluorene ND (<0.1) Phenanthrene - ND (<0.1) Anthracene - ND (<0.1) Fluoranthene - ND (<0.1) Pyrene - ND (<0.1) Benz(a)anthracene - ND (<0.1) Chrysene - ND (<0.1) Benzo(a)pyrene - ND (<0.1) Benzo(b)fluoranthene - ND (<0.1) Benzo(k)fluoranthene - ND (<0.1) Indeno(1,2,3-cd)pyrene - ND (<0.1) Dibenz(a,h)anthracene - ND (<0.1) Benzo(g,h,l)perylene - ND (<0.1) 1 Methylnaphthalene - ND (<0.1) 2 Methylnaphthalene - ND (<0.1) Sample TEC ² - 0.1 based on ½ detection limit of cPAHs	Diesel - ND (<50) Motor Oil - ND (<250)	Arsenic - 1.01 Barium - 28.1 Cadmium - ND (<1) Chromium - 16.5 Copper - 11.1 Lead - ND (<1) Manganese - 97.9 Mercury - ND (<0.2) Molybdenum - 3.02 Nickel - 1.59 Selenium - ND (<1) Zinc - ND (<1)
MW-6R	ND (<0.5)	Analyzed PAH compounds: Naphthalene - 1.2 Acenaphthylene - ND (<0.1) Acenaphthene - 13 Fluorene 0.83 Phenanthrene - ND (<0.1) Anthracene - ND (<0.1) Fluoranthene - ND (<0.1) Pyrene - ND (<0.1) Benz(a)anthracene - ND (<0.1) Chrysene - ND (<0.1) Benzo(a)pyrene - ND (<0.1) Benzo(b)fluoranthene - ND (<0.1) Benzo(k)fluoranthene - ND (<0.1) Indeno(1,2,3-cd)pyrene - ND (<0.1) Dibenz(a,h)anthracene - ND (<0.1) Benzo(g,h,l)perylene - ND (<0.1) 1 Methylnaphthalene - 2.4 2 Methylnaphthalene - ND (<0.1) Sample TEC ² - 0.1 based on ½ detection limit of cPAHs	Diesel - ND (<50) Motor Oil - ND (<250)	Arsenic - 2.84 Barium - 125 Cadmium - ND (<1) Chromium - 4.46 Copper - 19.0 Lead - ND (<1) Manganese - 8,760 Mercury - ND (<0.2) Molybdenum - 2.83 Nickel - 1.37 Selenium - 1.45 Zinc - ND (<1)

TABLE 2**Portac Inc.****August-September, 2010 Groundwater Sampling****WES-1400****Page 4****Current Sample Analytical Results**

Monitoring Well ID	Pentachloro phenol (ug/l)	Other Semi-Volatile Organic Compounds (ug/l)	Total Petroleum Hydrocarbons (ug/l)	Regulated Metals (ug/l)
B5-R	ND (<0.5)	Analyzed PAH compounds: Naphthalene - ND (<0.1) Acenaphthylene - ND (<0.1) Acenaphthene - 1.1 Fluorene ND (<0.1) Phenanthrene - ND (<0.1) Anthracene - ND (<0.1) Fluoranthene - ND (<0.1) Pyrene - ND (<0.1) Benz(a)anthracene - ND (<0.1) Chrysene - ND (<0.1) Benzo(a)pyrene - ND (<0.1) Benzo(b)fluoranthene - ND (<0.1) Benzo(k)fluoranthene - ND (<0.1) Indeno(1,2,3-cd)pyrene - ND (<0.1) Dibenz(a,h)anthracene - ND (<0.1) Benzo(g,h,l)perylene - ND (<0.1) 1 Methylnaphthalene - ND (<0.1) 2 Methylnaphthalene - ND (<0.1) Sample TEC ² - 0.1 based on ½ detection limit of cPAHs	Diesel - ND (<50) Motor Oil- ND (<250)	Arsenic - ND (<1) Barium - 58.8 Cadmium - ND (<1) Chromium - 3.17 Copper - ND (<1) Lead - ND (<1) Manganese - 1,340 Mercury - ND (<0.2) Molybdenum ND(<1) Nickel - ND (<1) Selenium - 2.57 Zinc - ND (<1)

TABLE 2

Portac Inc.

August-September, 2010 Groundwater Sampling

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Monitoring Well ID	Pentachloro phenol (ug/l)	Other Semi-Volatile Organic Compounds (ug/l)	Total Petroleum Hydrocarbons (ug/l)	Regulated Metals (ug/l)
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MTCA Groundwater Cleanup Criteria (ug/l)					
--	Method B - 0.73	Method A	Method A	Method A	Method A
		Naphthalene -	160	Gasoline -	1,000 ¹
		Benzo(a)pyrene -	0.1	Diesel -	500
		TEC ² of other cPAHs -	0.1	Motor Oil -	500
		Method B			
		Naphthalene -	160		
		Acenaphthylene -	--		
		Acenaphthene -	960		
		Fluorene	640		
		Phenanthrene -	--		
		Anthracene -	4,800		
		Fluoranthene -	640		
		Pyrene -	480		
		Benz(a)anthracene* -	--*		
		Chrysene* -	--*		
		Benzo(a)pyrene* -	0.012*		
		Benzo(b)fluoranthene* -	--*		
		Benzo(k)fluoranthene* -	--*		
		Indeno(1,2,3-cd)pyrene* -	--*		
		Dibenz(a,h)anthracene* -	--*		
		Benzo(g,h,l)perylene -	--		
		1 MethylNaphthalene -	--		
		2 MethylNaphthalene -	32		

Table 2 Notes:

NA - Sample not analyzed for the listed parameter.

ND (<XXX) - Analyzed parameter not detected above the noted concentration.

¹ - MTCA Method A groundwater cleanup criteria for gasoline range organics where no benzene has been detected in groundwater. Other criteria apply if benzene is present.

Total Petroleum Hydrocarbons in the Diesel and Oil ranges analyzed by method NWTPH-D(extended), with silica gel cleanup to remove organic matter.

Regulated metals by EPA Method 200.8, except mercury, by EPA Method 1631E.

² - TEC - Toxic Equivalent Concentration - The summed concentration of seven carcinogenic PAH compounds, after applying a toxicity equivalency factor (TEF) to each compound, based on its relative toxicity compared to benzo-(a)-pyrene.

Summary of Historical Groundwater Monitoring Data

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TABLE 3
Portac Inc.
Summary of Historical Groundwater Monitoring Data

WES-1400
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Monitoring Well ID	Sample Date	Pentachloro phenol (ug/l)	Other Semi-Volatile Organic Compounds (ug/l)	Volatile Organic Compounds (ug/l)	Total Petroleum Hydrocarbons (ug/l)	Regulated Metals (ug/l)	
MW-1 (Continued)	3-16-2010	ND (<0.5)	Analyzed PAH compounds: Naphthalene - ND (<0.1) Acenaphthylene - ND (<0.1) Acenaphthene - ND (<0.1) Fluorene - ND (<0.1) Phenanthrene - ND (<0.1) Anthracene - ND (<0.1) Fluoranthene - ND (<0.1) Pyrene - ND (<0.1) Benz(a)anthracene - ND (<0.1) Chrysene - ND (<0.1) Benzo(a)pyrene - ND (<0.1) Benzo(b)fluoranthene - ND (<0.1) Benzo(k)fluoranthene - ND (<0.1) Indeno(1,2,3- <i>cd</i>)pyrene - ND (<0.1) Dibenz(a,h)anthracene - ND (<0.1) Benzo(g,h,i)perylene - ND (<0.1) 1 Methylnaphthalene - ND (<0.1) 2 Methylnaphthalene - ND (<0.1)	NA	Diesel - ND (<50) Motor Oil - ND (<250)	ND (<50) ND	Arsenic - 26.9 Barium - 181 Cadmium - ND (<5) Chromium - 8.92 Copper - ND (<5) Lead - ND (<5) Manganese - 6,440 Mercury - ND (<0.2) Molybdenum - ND(<5) Nickel - ND (<5) Selenium - ND (<5) Zinc - ND (<5)

Sample TEC³ - 0.1 based on
 $\frac{1}{2}$ detection limit of cPAHs

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Monitoring Well ID	Sample Date	Pentachloro phenol (ug/l)	Other Semi-Volatile Organic Compounds (ug/l)	Volatile Organic Compounds (ug/l)	Total Petroleum Hydrocarbons (ug/l)	Regulated Metals (ug/l)	
MW-1 (Continued)	6-30-2010	ND (<0.5)	Analyzed PAH compounds: Naphthalene - ND (<0.1) Acenaphthylene - ND (<0.1) Acenaphthene - ND (<0.1) Fluorene - ND (<0.1) Phenanthrene - ND (<0.1) Anthracene - ND (<0.1) Fluoranthene - ND (<0.1) Pyrene - ND (<0.1) Benz(a)anthracene - ND (<0.1) Chrysene - ND (<0.1) Benzo(a)pyrene - ND (<0.1) Benzo(b)fluoranthene - ND (<0.1) Benzo(k)fluoranthene - ND (<0.1) Indeno(1,2,3- <i>cd</i>)pyrene - ND (<0.1) Dibenz(a,h)anthracene - ND (<0.1) Benzo(g,h,i)perylene - ND (<0.1) 1 Methylnaphthalene - ND (<0.1) 2 Methylnaphthalene - ND (<0.1)	NA	Diesel - ND (<50) Motor Oil - ND (<250)	ND (<50) ND (<250)	Arsenic - 22.2 Barium - 192 Cadmium - ND (<1) Chromium - 4.55 Copper - 1.72 Lead - ND (<1) Manganese - 6,610 Mercury - ND (<0.2) Molybdenum - 3.77 Nickel - 3.50 Selenium - 5.83 Zinc - ND (<1)

Sample TEC³ - 0.1 based on
 $\frac{1}{2}$ detection limit of cPAHs

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Monitoring Well ID	Sample Date	Pentachloro phenol (ug/l)	Other Semi-Volatile Organic Compounds (ug/l)	Volatile Organic Compounds (ug/l)	Total Petroleum Hydrocarbons (ug/l)	Regulated Metals (ug/l)	
MW-1 (Continued)	8-30-2010	ND (<0.5)	Analyzed PAH compounds: Naphthalene - ND (<0.1) Acenaphthylene - ND (<0.1) Acenaphthene - ND (<0.1) Fluorene - ND (<0.1) Phenanthrene - ND (<0.1) Anthracene - ND (<0.1) Fluoranthene - ND (<0.1) Pyrene - ND (<0.1) Benz(a)anthracene - ND (<0.1) Chrysene - ND (<0.1) Benzo(a)pyrene - ND (<0.1) Benzo(b)fluoranthene - ND (<0.1) Benzo(k)fluoranthene - ND (<0.1) Indeno(1,2,3- <i>cd</i>)pyrene - ND (<0.1) Dibenz(a,h)anthracene - ND (<0.1) Benzo(g,h,i)perylene - ND (<0.1) 1 Methylnaphthalene - ND (<0.1) 2 Methylnaphthalene - ND (<0.1)	NA	Diesel - ND (<50) Motor Oil - ND (<250)	ND (ND)	Arsenic - 18.7 Barium - ND (<1) Cadmium - 4.53 Chromium - ND (<1) Copper - ND (<1) Lead - ND (<1) Manganese - 7,260 Mercury - ND (<0.2) Molybdenum - 1.31 Nickel - 2.87 Selenium - 4.93 Zinc - ND (<1)

Sample TEC² - 0.1 based on
½ detection limit of cPAHs

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<i>Monitoring Well ID</i>	<i>Sample Date</i>	<i>Pentachloro phenol (ug/l)</i>	<i>Other Semi-Volatile Organic Compounds (ug/l)</i>	<i>Volatile Organic Compounds (ug/l)</i>	<i>Total Petroleum Hydrocarbons (ug/l)</i>	<i>Regulated Metals (ug/l)</i>
MW-2R	5-19-2009	69	NA	Acetone - Naphthalene - ND (62 other volatile compounds)	98 2.5	Diesel - Motor Oil - 1,000 4,900
	12-4-2009	61	Analyzed PAH compounds:	NA	Diesel - Motor Oil - ND (<50) ND (<250)	Arsenic - Barium - Cadmium - Chromium - Lead - Mercury - 12.1 ND (<1) 12.6 1.13 ND (<0.2)

Sample TEC³ - 0.1 based on
 $\frac{1}{2}$ detection limit of cPAHs

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Monitoring Well ID	Sample Date	Pentachloro phenol (ug/l)	Other Semi-Volatile Organic Compounds (ug/l)	Volatile Organic Compounds (ug/l)	Total Petroleum Hydrocarbons (ug/l)	Regulated Metals (ug/l)
MW-2R (Continued)	3-17-2010	66	Analyzed PAH compounds: Naphthalene - ND (<0.1) Acenaphthylene - ND (<0.1) Acenaphthene - 1.9 Fluorene - 0.58 Phenanthrene - 1.2 Anthracene - ND (<0.1) Fluoranthene - 0.32 Pyrene - 0.20 Benz(a)anthracene - ND (<0.1) Chrysene - ND (<0.1) Benzo(a)pyrene - ND (<0.1) Benzo(b)fluoranthene - ND (<0.1) Benzo(k)fluoranthene - ND (<0.1) Indeno(1,2,3- <i>cd</i>)pyrene - ND (<0.1) Dibenz(a,h)anthracene - ND (<0.1) Benzo(g,h,i)perylene - ND (<0.1) 1 Methylnaphthalene - 0.51 2 Methylnaphthalene - 0.11	NA	Diesel - ND (<50) Motor Oil - ND (<250)	16.6 Arsenic - Barium - 67.3 Cadmium - ND (<1) Chromium - 4.5 Copper - 29.6 Lead - ND (<1) Manganese - 36.9 Mercury - ND (<0.2) Molybdenum - 17.5 Nickel - 3.88 Selenium - ND (<1) Zinc - ND (<1)

Sample TEC³ - 0.1 based on
 $\frac{1}{2}$ detection limit of cPAHs

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Monitoring Well ID	Sample Date	Pentachloro phenol (ug/l)	Other Semi-Volatile Organic Compounds (ug/l)	Volatile Organic Compounds (ug/l)	Total Petroleum Hydrocarbons (ug/l)	Regulated Metals (ug/l)	
MW-2R (Continued)	6-30-2010	37	Analyzed PAH compounds: Naphthalene - ND (<0.1) Acenaphthylene - ND (<0.1) Acenaphthene - 0.21 Fluorene - 0.12 Phenanthrene - ND (<0.1) Anthracene - ND (<0.1) Fluoranthene - 0.55 Pyrene - 0.36 Benz(a)anthracene - ND (<0.1) Chrysene - ND (<0.1) Benzo(a)pyrene - ND (<0.1) Benzo(b)fluoranthene - ND (<0.1) Benzo(k)fluoranthene - ND (<0.1) Indeno(1,2,3- <i>cd</i>)pyrene - ND (<0.1) Dibenz(a,h)anthracene - ND (<0.1) Benzo(g,h,i)perylene - ND (<0.1) 1 Methylnaphthalene - ND (<0.1) 2 Methylnaphthalene - ND (<0.1)	NA	Diesel - ND (<50) Motor Oil - ND (<250)	ND (<50) ND (<250)	Arsenic - 2.85 Barium - 194 Cadmium - ND (<1) Chromium - 7.13 Copper - 78.6 Lead - ND (<1) Manganese - 4.91 Mercury - ND (<0.2) Molybdenum - 12.3 Nickel - 14.1 Selenium - ND (<1) Zinc - ND (<1)

Sample TEC³ - 0.1 based on
 $\frac{1}{2}$ detection limit of cPAHs

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Monitoring Well ID	Sample Date	Pentachloro phenol (ug/l)	Other Semi-Volatile Organic Compounds (ug/l)	Volatile Organic Compounds (ug/l)	Total Petroleum Hydrocarbons (ug/l)	Regulated Metals (ug/l)	
MW-2R (Continued)	8-30-2010	76	Analyzed PAH compounds: Naphthalene - Acenaphthylene - Acenaphthene - Fluorene Phenanthrene - Anthracene - Fluoranthene - Pyrene - Benz(a)anthracene - Chrysene - Benzo(a)pyrene - Benzo(b)fluoranthene - Benzo(k)fluoranthene - Indeno(1,2,3- <i>cd</i>)pyrene - Dibenz(a,h)anthracene - Benzo(g,h,i)perylene - 1 Methylnaphthalene - 2 Methylnaphthalene -	NA 0.30 ND (<0.1) 0.48 0.23 0.20 ND (<0.1) 0.49 0.30 ND (<0.1) ND (<0.1) ND (<0.1) ND (<0.1) ND (<0.1) ND (<0.1) ND (<0.1) ND (<0.1) ND (<0.1) ND (<0.1)	Diesel - Motor Oil - ND (<250)	54 ND	Arsenic - Barium - Cadmium - Chromium - Copper - Lead - Manganese - Mercury - Molybdenum - Nickel - Selenium - Zinc -

Sample TEC² - 0.1 based on
 $\frac{1}{2}$ detection limit of cPAHs

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Monitoring Well ID	Sample Date	Pentachloro phenol (ug/l)	Other Semi-Volatile Organic Compounds (ug/l)	Volatile Organic Compounds (ug/l)	Total Petroleum Hydrocarbons (ug/l)	Regulated Metals (ug/l)
MW-3	9-23-2008 (CDM)	<0.5	NA	NA	Diesel - Motor Oil - ND (<200) ND (<500)	NA
3-5-2009	ND (<3.4) ¹	ND (64 additional semi-volatile compounds)	NA	NA	NA	ND (<1) ND (<10) ND (<10)
4-7-2009	ND (<0.5)	NA	NA	NA	NA	ND (<10)
12-3-2009	ND (<0.5)	Analyzed PAH compounds: Naphthalene - Acenaphthylene - Acenaphthene - Fluorene Phenanthrene - Anthracene - Fluoranthene - Pyrene - Benz(a)anthracene - Chrysene - Benzo(a)pyrene - Benzo(b)fluoranthene - Benzo(k)fluoranthene - Indeno(1,2,3-od)pyrene - Dibenz(a,h)anthracene - Benzo(g,h,i)perylene - 1 Methylnaphthalene - 2 Methylnaphthalene -	NA	Diesel - Motor Oil - ND (<250)	Arsenic - Barium - Cadmium - Chromium - Copper - Lead - ND (<102) ND (<1) ND (<10) ND (<10) ND (<10) Manganese - 2,350 Mercury - Molybdenum - ND (<0.2) Nickel - ND (<10) Selenium - ND (<10) Zinc - ND (<10)	

Sample TEC ³ - 0.1 based on ½ detection limit of cPAHs

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Monitoring Well ID	Sample Date	Pentachloro phenol (ug/l)	Other Semi-Volatile Organic Compounds (ug/l)	Volatile Organic Compounds (ug/l)	Total Petroleum Hydrocarbons (ug/l)	Regulated Metals (ug/l)	
MW-3 (Continued)	3-17-2010	ND (<0.5)	Analyzed PAH compounds: Naphthalene - ND (<0.1) Acenaphthylene - ND (<0.1) Acenaphthene - ND (<0.1) Fluorene - ND (<0.1) Phenanthrene - ND (<0.1) Anthracene - ND (<0.1) Fluoranthene - ND (<0.1) Pyrene - ND (<0.1) Benz(a)anthracene - ND (<0.1) Chrysene - ND (<0.1) Benz(a)pyrene - ND (<0.1) Benz(b)fluoranthene - ND (<0.1) Benz(k)fluoranthene - ND (<0.1) Indeno(1,2,3-cd)pyrene - ND (<0.1) Dibenz(a,h)anthracene - ND (<0.1) Benzo(g,h,i)perylene - ND (<0.1) 1 Methylnaphthalene - ND (<0.1) 2 Methylnaphthalene - ND (<0.1)	NA	Diesel - Motor Oil - ND (<250)	ND (<50)	Arsenic - Barium - ND (<5) Cadmium - Chromium - 6.27 Copper - Lead - ND (<5) Manganese - 2,000 Mercury - ND (<0.2) Molybdenum - ND(<5) Nickel - ND (<5) Selenium - ND (<5) Zinc - ND (<5)

Sample TEC³- 0.1 based on
 $\frac{1}{2}$ detection limit of cPAHs

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Monitoring Well ID	Sample Date	Pentachloro phenol (ug/l)	Other Semi-Volatile Organic Compounds (ug/l)	Volatile Organic Compounds (ug/l)	Total Petroleum Hydrocarbons (ug/l)	Regulated Metals (ug/l)
MW-3 (Continued)	6-30-2010	<0.5	Analyzed PAH compounds: Naphthalene - Acenaphthylene - Acenaphthene - Fluorene - Phenanthrene - Anthracene - Fluoranthene - Pyrene - Benz(a)anthracene - Chrysene - Benz(a)pyrene - Benz(b)fluoranthene - Benz(k)fluoranthene - Indeno(1,2,3-cd)pyrene - Dibenz(a,h)anthracene - Benzo(g,h,i)perylene - 1 Methylnaphthalene - 2 Methylnaphthalene -	NA 0.21 ND (<0.1) ND (<0.1)	Diesel - Motor Oil - ND (<250) ND (ND (<50)	Arsenic - Barium - Cadmium - Chromium - Copper - Lead - Manganese - Mercury - Molybdenum - Nickel - Selenium - Zinc - 13.7 77.4 ND (<1) 3.95 1.14 ND (<1) 2,030 ND (<0.2) 1.13 2.59 3.52 ND (<1)

Sample TEC³- 0.1 based on
 $\frac{1}{2}$ detection limit of cPAHs

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Monitoring Well ID	Sample Date	Pentachloro phenol (ug/l)	Other Semi-Volatile Organic Compounds (ug/l)	Volatile Organic Compounds (ug/l)	Total Petroleum Hydrocarbons (ug/l)	Regulated Metals (ug/l)	
MW-3 (Continued)	8-30-2010	ND (<0.5)	Analyzed PAH compounds: Naphthalene - ND (<0.1) Acenaphthylene - ND (<0.1) Acenaphthene - ND (<0.1) Fluorene - ND (<0.1) Phenanthrene - ND (<0.1) Anthracene - ND (<0.1) Fluoranthene - ND (<0.1) Pyrene - ND (<0.1) Benz(a)anthracene - ND (<0.1) Chrysene - ND (<0.1) Benz(a)pyrene - ND (<0.1) Benz(b)fluoranthene - ND (<0.1) Benz(k)fluoranthene - ND (<0.1) Indeno(1,2,3-cd)pyrene - ND (<0.1) Dibenz(a,h)anthracene - ND (<0.1) Benzo(g,h,i)perylene - ND (<0.1) 1 Methylnaphthalene - ND (<0.1) 2 Methylnaphthalene - ND (<0.1)	NA	Diesel - Motor Oil - ND (<50) ND (ND (<250))	ND (ND (<50))	Arsenic - 8.23 Barium - 88.5 Cadmium - ND (<1) Chromium - 3.00 Copper - ND (<1) Lead - ND (<1) Manganese - 2,570 Mercury - ND (<0.2) Molybdenum - ND (<1) Nickel - 1.78 Selenium - 3.74 Zinc - ND (<1)

Sample TEC²- 0.1 based on
 $\frac{1}{2}$ detection limit of cPAHs

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Monitoring Well ID	Sample Date	Pentachloro phenol (ug/l)	Other Semi-Volatile Organic Compounds (ug/l)	Volatile Organic Compounds (ug/l)	Total Petroleum Hydrocarbons (ug/l)	Regulated Metals (ug/l)	
MW-4	9-23-2008 (CDM)	<0.5	Analyzed PAH compounds: Naphthalene - ND (<0.1) Acenaphthylene - ND (<0.1) Acenaphthene - ND (<0.1) Fluorene - ND (<0.1) Phenanthrene - ND (<0.1) Anthracene - ND (<0.1) Fluoranthene - ND (<0.1) Pyrene - ND (<0.1) Benz(a)anthracene - ND (<0.1) Chrysene - ND (<0.1) Benzo(a)pyrene - ND (<0.1) Benzo(b)fluoranthene - ND (<0.1) Benzo(k)fluoranthene - ND (<0.1) Indeno(1,2,3-cd)pyrene - ND (<0.1) Dibenz(a,h)anthracene - ND (<0.1) Benzo(g,h,i)perylene - ND (<0.1) 1 Methylnaphthalene - ND (<0.1) 2 Methylnaphthalene - ND (<0.1)	NA	NA	Diesel - ND (<200) Motor Oil - ND (<500)	NA
			Sample TEC ² - 0.1 based on $\frac{1}{2}$ detection limit of cPAHs	ND (64 different volatile compounds)	NA	NA	
3-5-2009	ND (<3.4) ¹	ND (64 additional semi-volatile compounds)	NA	NA	NA	NA	
4-7-2009	ND (<0.5)	NA	NA	NA	NA	NA	

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Monitoring Well ID	Sample Date	Pentachloro phenol (ug/l)	Other Semi-Volatile Organic Compounds (ug/l)	Volatile Organic Compounds (ug/l)	Total Petroleum Hydrocarbons (ug/l)	Regulated Metals (ug/l)	
MW-4 (Continued)	12-3-2009	ND (<0.5)	Analyzed PAH compounds: Naphthalene - ND (<0.1) Acenaphthylenne - ND (<0.1) Acenaphthene - ND (<0.1) Fluorene - ND (<0.1) Phenanthrene - ND (<0.1) Anthracene - ND (<0.1) Fluoranthene - ND (<0.1) Pyrene - ND (<0.1) Benz(a)anthracene - ND (<0.1) Chrysene - ND (<0.1) Benzo(a)pyrene - ND (<0.1) Benzo(b)fluoranthene - ND (<0.1) Benzo(k)fluoranthene - ND (<0.1) Indeno(1,2,3-od)pyrene - ND (<0.1) Dibenz(a,h)anthracene - ND (<0.1) Benzo(g,h,i)perylene - ND (<0.1) 1 Methylnaphthalene - ND (<0.1) 2 Methylnaphthalene - ND (<0.1)	NA	Diesel - Motor Oil- ND (<250)	160	Arsenic - 10.2 Barium - 213 Cadmium - ND (<1) Chromium - ND(<10) Copper - ND (<10) Lead - ND (<10) Manganese - 6,260 Mercury - ND (<0.2) Molybdenum - ND(<10) Nickel - ND (<10) Selenium - ND (<10) Zinc - ND (<10)

Sample TEC³ - 0.1 based on
 $\frac{1}{2}$ detection limit of cPAHs

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Monitoring Well ID	Sample Date	Pentachloro phenol (ug/l)	Other Semi-Volatile Organic Compounds (ug/l)	Volatile Organic Compounds (ug/l)	Total Petroleum Hydrocarbons (ug/l)	Regulated Metals (ug/l)	
MW-4 (Continued)	3-16-2010	ND (<0.5)	Analyzed PAH compounds: Naphthalene - ND (<0.1) Acenaphthylene - ND (<0.1) Acenaphthene - ND (<0.1) Fluorene - ND (<0.1) Phenanthrene - ND (<0.1) Anthracene - ND (<0.1) Fluoranthene - ND (<0.1) Pyrene - ND (<0.1) Benz(a)anthracene - ND (<0.1) Chrysene - ND (<0.1) Benzo(a)pyrene - ND (<0.1) Benzol(b)fluoranthene - ND (<0.1) Benzol(k)fluoranthene - ND (<0.1) Indeno(1,2,3- <i>cd</i>)pyrene - ND (<0.1) Dibenz(a,h)anthracene - ND (<0.1) Benzol(g,h,i)perylene - ND (<0.1) 1 Methylnaphthalene - ND (<0.1) 2 Methylnaphthalene - ND (<0.1)	NA	Diesel - ND (<50) Motor Oil - ND (<250)	ND (<50) ND (<50)	Arsenic - 12.5 Barium - 161 Cadmium - ND (<5) Chromium - ND (<5) Copper - ND (<5) Lead - ND (<5) Manganese - 5,410 Mercury - ND (<0.2) Molybdenum - ND (<5) Nickel - ND (<5) Selenium - ND (<5) Zinc - ND (<5)

Sample TEC³ - 0.1 based on
½ detection limit of cPAHs

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Monitoring Well ID	Sample Date	Pentachloro phenol (ug/l)	Other Semi-Volatile Organic Compounds (ug/l)	Volatile Organic Compounds (ug/l)	Total Petroleum Hydrocarbons (ug/l)	Regulated Metals (ug/l)	
MW-4 (Continued)	6-30-2010	ND (<0.5)	Analyzed PAH compounds: Naphthalene - ND (<0.1) Acenaphthylene - ND (<0.1) Acenaphthene - ND (<0.1) Fluorene - ND (<0.1) Phenanthrene - ND (<0.1) Anthracene - ND (<0.1) Fluoranthene - ND (<0.1) Pyrene - ND (<0.1) Benz(a)anthracene - ND (<0.1) Chrysene - ND (<0.1) Benzo(a)pyrene - ND (<0.1) Benzo(b)fluoranthene - ND (<0.1) Benzo(k)fluoranthene - ND (<0.1) Indeno(1,2,3- <i>cd</i>)pyrene - ND (<0.1) Dibenz(a,h)anthracene - ND (<0.1) Benzo(g,h,i)perylene - ND (<0.1) 1 Methylnaphthalene - ND (<0.1) 2 Methylnaphthalene - ND (<0.1)	NA	Diesel - Motor Oil - ND (<250)	ND (<50)	Arsenic - 13.1 Barium - 122 Cadmium - ND (<1) Chromium - 2.06 Copper - 2.00 Lead - ND (<1) Manganese - 3,960 Mercury - ND (<0.2) Molybdenum - ND(<1) Nickel - 2.14 Selenium - 5.81 Zinc - ND (<1)

Sample TEC³. 0.1 based on
 $\frac{1}{2}$ detection limit of cPAHs

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Monitoring Well ID	Sample Date	Pentachloro phenol (ug/l)	Other Semi-Volatile Organic Compounds (ug/l)	Volatile Organic Compounds (ug/l)	Total Petroleum Hydrocarbons (ug/l)	Regulated Metals (ug/l)	
MW-4 (Continued)	8-30-2010	ND (<0.5)	Analyzed PAH compounds: Naphthalene - ND (<0.1) Acenaphthylene - ND (<0.1) Acenaphthene - ND (<0.1) Fluorene - ND (<0.1) Phenanthrene - ND (<0.1) Anthracene - ND (<0.1) Fluoranthene - ND (<0.1) Pyrene - ND (<0.1) Benz(a)anthracene - ND (<0.1) Chrysene - ND (<0.1) Benzo(a)pyrene - ND (<0.1) Benzo(b)fluoranthene - ND (<0.1) Benzo(k)fluoranthene - ND (<0.1) Indeno(1,2,3- <i>cd</i>)pyrene - ND (<0.1) Dibenz(a,h)anthracene - ND (<0.1) Benzo(g,h,i)perylene - ND (<0.1) 1 Methylnaphthalene - ND (<0.1) 2 Methylnaphthalene - ND (<0.1)	NA	Diesel - Motor Oil - ND (<250)	ND (<50)	Arsenic - 10.3 Barium - 153 Cadmium - ND (<1) Chromium - 2.35 Copper - 1.98 Lead - 1.06 Manganese - 4,810 Mercury - ND (<0.2) Molybdenum - ND(<1) Nickel - 2.03 Selenium - 6.97 Zinc - ND (<1)

Sample TEC²- 0.1 based on
 $\frac{1}{2}$ detection limit of cPAHs

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Monitoring Well ID	Sample Date	Pentachloro phenol (ug/l)	Other Semi-Volatile Organic Compounds (ug/l)	Volatile Organic Compounds (ug/l)	Total Petroleum Hydrocarbons (ug/l)	Regulated Metals (ug/l)
MW-5	3-5-2009	22	ND (64 additional semi-volatile compounds)	NA	NA	NA

12-4-2009	1.5	Analyzed PAH compounds: Naphthalene - ND (<0.1) Acenaphthylene - ND (<0.1) Acenaphthene - ND (<0.1) Fluorene - ND (<0.1) Phenanthrene - ND (<0.1) Anthracene - ND (<0.1) Fluoranthene - ND (<0.1) Pyrene - ND (<0.1) Benz(a)anthracene - ND (<0.1) Chrysene - ND (<0.1) Benzo(a)pyrene - ND (<0.1) Benzo(b)fluoranthene - ND (<0.1) Benzo(k)fluoranthene - ND (<0.1) Indeno(1,2,3-cd)pyrene - ND (<0.1) Dibenz(a,h)anthracene - ND (<0.1) Benzo(g,h,i)perylene - ND (<0.1) 1 Methylnaphthalene - ND (<0.1) 2 Methylnaphthalene - ND (<0.1)	Diesel - ND (<50) Motor Oil- ND (<250)	NA	NA	Arsenic - ND (<5) Barium - 41.7 Cadmium - ND (<1) Chromium - 27.0 Copper - 29.9 Lead - ND (<5) Manganese - 144 Mercury - 0.22 Molybdenum - ND(<5) Nickel - ND (<5) Selenium - ND (<5) Zinc - 5.45
Sample TEC ³ - 0.1 based on $\frac{1}{2}$ detection limit of cPAHs						

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Monitoring Well ID	Sample Date	Pentachloro phenol (ug/l)	Other Semi-Volatile Organic Compounds (ug/l)	Volatile Organic Compounds (ug/l)	Total Petroleum Hydrocarbons (ug/l)	Regulated Metals (ug/l)	
MW-5 (Continued)	3-16-2010	4.7	Analyzed PAH compounds: Naphthalene - ND (<0.1) Acenaphthylene - ND (<0.1) Acenaphthene - ND (<0.1) Fluorene - ND (<0.1) Phenanthrene - ND (<0.1) Anthracene - ND (<0.1) Fluoranthene - ND (<0.1) Pyrene - ND (<0.1) Benz(a)anthracene - ND (<0.1) Chrysene - ND (<0.1) Benzo(a)pyrene - ND (<0.1) Benzo(b)fluoranthene - ND (<0.1) Benzo(k)fluoranthene - ND (<0.1) Indeno(1,2,3- <i>cd</i>)pyrene - ND (<0.1) Dibenz(a,h)anthracene - ND (<0.1) Benzo(g,h,i)perylene - ND (<0.1) 1 Methylnaphthalene - ND (<0.1) 2 Methylnaphthalene - ND (<0.1)	NA	Diesel - ND (<50) Motor Oil - ND (<250)	ND (50-250)	Arsenic - 1.29 Barium - 28.8 Cadmium - ND (<1) Chromium - 9.97 Copper - 7.51 Lead - ND (<1) Manganese - 126 Mercury - ND (<0.2) Molybdenum - 2.44 Nickel - 1.83 Selenium - ND (<1) Zinc - ND (<1)

Sample TEC³ - 0.1 based on
½ detection limit of cPAHs

TABLE 3
Portac Inc.
Summary of Historical Groundwater Monitoring Data

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Monitoring Well ID	Sample Date	Pentachloro phenol (ug/l)	Other Semi-Volatile Organic Compounds (ug/l)	Volatile Organic Compounds (ug/l)	Total Petroleum Hydrocarbons (ug/l)	Regulated Metals (ug/l)	
MW-5 (Continued)	6-30-2010	2.4	Analyzed PAH compounds: Naphthalene - ND (<0.1) Acenaphthylene - ND (<0.1) Acenaphthene - ND (<0.1) Fluorene - ND (<0.1) Phenanthrene - ND (<0.1) Anthracene - ND (<0.1) Fluoranthene - ND (<0.1) Pyrene - ND (<0.1) Benz(a)anthracene - ND (<0.1) Chrysene - ND (<0.1) Benzo(a)pyrene - ND (<0.1) Benzo(b)fluoranthene - ND (<0.1) Benzo(k)fluoranthene - ND (<0.1) Indeno(1,2,3- <i>cd</i>)pyrene - ND (<0.1) Dibenz(a,h)anthracene - ND (<0.1) Benzo(g,h,i)perylene - ND (<0.1) 1 Methylnaphthalene - ND (<0.1) 2 Methylnaphthalene - ND (<0.1)	NA	Diesel - ND (<50) Motor Oil - ND (<250)	ND (<50) ND (<250)	Arsenic - 1.35 Barium - 25.1 Cadmium - ND (<1) Chromium - 11.0 Copper - 8.23 Lead - ND (<1) Manganese - 92.2 Mercury - ND (<0.2) Molybdenum - 2.84 Nickel - 1.71 Selenium - ND (<1) Zinc - ND (<1)

Sample TEC³. 0.1 based on
 $\frac{1}{2}$ detection limit of cPAHs

TABLE 3
Portac Inc.
Summary of Historical Groundwater Monitoring Data

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Monitoring Well ID	Sample Date	Pentachloro phenol (ug/l)	Other Semi-Volatile Organic Compounds (ug/l)	Volatile Organic Compounds (ug/l)	Total Petroleum Hydrocarbons (ug/l)	Regulated Metals (ug/l)		
MW-5 (Continued)	8-30-2010	ND (<0.5)	Analyzed PAH compounds: Naphthalene - ND (<0.1) Acenaphthylene - ND (<0.1) Acenaphthene - ND (<0.1) Fluorene - ND (<0.1) Phenanthrene - ND (<0.1) Anthracene - ND (<0.1) Fluoranthene - ND (<0.1) Pyrene - ND (<0.1) Benz(a)anthracene - ND (<0.1) Chrysene - ND (<0.1) Benzo(a)pyrene - ND (<0.1) Benzo(b)fluoranthene - ND (<0.1) Benzo(k)fluoranthene - ND (<0.1) Indeno(1,2,3- <i>cd</i>)pyrene - ND (<0.1) Dibenz(a,h)anthracene - ND (<0.1) Benzo(g,h,i)perylene - ND (<0.1) 1 Methylnaphthalene - ND (<0.1) 2 Methylnaphthalene - ND (<0.1)	NA	Diesel - Motor Oil - ND (<250)	ND (<50)	Arsenic - Barium - Cadmium - Chromium - Copper - Lead - Manganese - Mercury - Molybdenum - Nickel - Selenium - Zinc -	1.01 28.1 ND (<1) 16.5 11.1 ND (<1) 97.9 ND (<0.2) 3.02 1.59 ND (<1) ND (<1)

Sample TEC²- 0.1 based on
 $\frac{1}{2}$ detection limit of cPAHs

TABLE 3
Portac Inc.

Summary of Historical Groundwater Monitoring Data

Monitoring Well ID	Sample Date	Pentachlorophenol (ug/l)	Other Semi-Volatile Organic Compounds (ug/l)	Volatile Organic Compounds (ug/l)	Total Petroleum Hydrocarbons (ug/l)	Regulated Metals (ug/l)
MW-6R	5-19-2009	ND (<0.5)	NA	NA	NA	Arsenic - ND (<1) Cadmium - 5.79 Chromium - 1.26 Lead - ND (<0.2) Mercury - ND
12-4-2009	ND (<0.5)	Analyzed PAH compounds:	Naphthalene - 27 Acenaphthylene - ND (<0.1) Acenaphthene - 14 Fluorene - 1.4 Phenanthrene - ND (<0.1) Anthracene - ND (<0.1) Fluoranthene - ND (<0.1) Pyrene - ND (<0.1) Benz(a)anthracene - ND (<0.1) Chrysene - ND (<0.1) Benzo(a)pyrene - ND (<0.1) Benzo(b)fluoranthene - ND (<0.1) Benzo(k)fluoranthene - ND (<0.1) Indeno(1,2,3- <i>o</i>)pyrene - ND (<0.1) Dibenz(a,h)anthracene - ND (<0.1) Benzo(g,h,i)perylene - ND (<0.1) 1 Methylnaphthalene - 5.3 2 Methylnaphthalene - 2.5	Diesel - Motor Oil- ND (<250)	400	Arsenic - Barium - 115 Cadmium - ND (<1) Chromium - 6.34 Copper - ND (<5) Lead - ND (<5) Manganese - 7,850 Mercury - ND (<0.2) Molybdenum - ND (<5) Nickel - ND (<5) Selenium - ND (<5) Zinc - ND

TABLE 3
Portac Inc.
Summary of Historical Groundwater Monitoring Data

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Monitoring Well ID	Sample Date	Pentachloro phenol (ug/l)	Other Semi-Volatile Organic Compounds (ug/l)	Volatile Organic Compounds (ug/l)	Total Petroleum Hydrocarbons (ug/l)	Regulated Metals (ug/l)	
MW-6R (Continued)	3-16-2010	ND (<0.5)	Analyzed PAH compounds: Naphthalene - 11 Acenaphthylene - ND (<0.1) Acenaphthene - 9.5 Fluorene - 0.73 Phenanthrene - ND (<0.1) Anthracene - ND (<0.1) Fluoranthene - ND (<0.1) Pyrene - ND (<0.1) Benz(a)anthracene - ND (<0.1) Chrysene - ND (<0.1) Benzo(a)pyrene - ND (<0.1) Benzo(b)fluoranthene - ND (<0.1) Benzo(k)fluoranthene - ND (<0.1) Indeno(1,2,3- <i>cd</i>)pyrene - ND (<0.1) Dibenz(a,h)anthracene - ND (<0.1) Benzo(g,h,i)perylene - ND (<0.1) 1 Methylnaphthalene - 3.6 2 Methylnaphthalene - 0.12	NA	Diesel - Motor Oil - ND (<250)	52	Arsenic - Barium - Cadmium - Chromium - Copper - Lead - Manganese - 6,400 Mercury - ND (<0.2) Molybdenum - 2.66 Nickel - 1.38 Selenium - 1.14 Zinc - 1.08

Sample TEC³ - 0.1 based on
 $\frac{1}{2}$ detection limit of cPAHs

TABLE 3
Portac Inc.

Summary of Historical Groundwater Monitoring Data

Monitoring Well ID	Sample Date	Pentachlorophenol (ug/l)	Other Semi-Volatile Organic Compounds (ug/l)	Volatile Organic Compounds (ug/l)	Total Petroleum Hydrocarbons (ug/l)	Regulated Metals (ug/l)
MW-6R (Continued)	10-5-2010	ND (<0.5)	Analyzed PAH compounds: Naphthalene - 1.2 Acenaphthylene - ND (<0.1) Acenaphthene - 13 Fluorene 0.83 Phenanthrene - ND (<0.1) Anthracene - ND (<0.1) Fluoranthene - ND (<0.1) Pyrene - ND (<0.1) Benz(a)anthracene - ND (<0.1) Chrysene - ND (<0.1) Benzo(a)pyrene - ND (<0.1) Benzo(b)fluoranthene - ND (<0.1) Benzo(k)fluoranthene - ND (<0.1) Indeno(1,2,3-od)pyrene - ND (<0.1) Dibenz(a,h)anthracene - ND (<0.1) Benzo(g,h,i)perylene - ND (<0.1) 1 Methylnaphthalene - 2.4 2 Methylnaphthalene - ND (<0.1)	NA	Diesel - ND (<50) Motor Oil - ND (<250)	Arsenic - 2.84 Barium - 125 Cadmium - ND (<1) Chromium - 4.46 Copper - 19.0 Lead - ND (<1) Manganese - 8.760 Mercury - ND (<0.2) Molybdenum - 2.83 Nickel - 1.37 Selenium - 1.45 Zinc - ND (<1)

TABLE 3
Portac Inc.

Summary of Historical Groundwater Monitoring Data

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Monitoring Well ID	Sample Date	Pentachlorophenol (ug/l)	Other Semi-Volatile Organic Compounds (ug/l)	Volatile Organic Compounds (ug/l)	Total Petroleum Hydrocarbons (ug/l)	Regulated Metals (ug/l)
B-5R	5-19-2009	NA	NA	Isopropylbenzene - ND (63 other volatile compounds)	Gasoline - <100 Diesel - 150 Motor Oil - <250	Arsenic - ND (<1) Cadmium - ND (<1) Chromium - 2.68 Lead - 1.53 Mercury - ND (<0.2)
	12-3-2009	ND (<0.5)	Analyzed PAH compounds:	NA	Diesel - ND (<50) Motor Oil - ND (<250)	Arsenic - Barium - 67.1 Cadmium - ND (<1) Chromium - ND (<10) Copper - ND (<10) Lead - ND (<10) Manganese - 1,250 Mercury - ND (<0.2) Molybdenum - ND (<10) Nickel - ND (<10) Selenium - ND (<10) Zinc - ND (<10)

TABLE 3
Portac Inc.
Summary of Historical Groundwater Monitoring Data

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Monitoring Well ID	Sample Date	Pentachloro phenol (ug/l)	Other Semi-Volatile Organic Compounds (ug/l)	Volatile Organic Compounds (ug/l)	Total Petroleum Hydrocarbons (ug/l)	Regulated Metals (ug/l)	
B-5R (Continued)	3-16-2010	ND (<0.5)	Analyzed PAH compounds: Naphthalene - ND (<0.1) Acenaphthylene - ND (<0.1) Acenaphthene - 0.76 Fluorene - ND (<0.1) Phenanthrene - ND (<0.1) Anthracene - ND (<0.1) Fluoranthene - ND (<0.1) Pyrene - ND (<0.1) Benz(a)anthracene - ND (<0.1) Chrysene - ND (<0.1) Benzo(a)pyrene - ND (<0.1) Benzo(b)fluoranthene - ND (<0.1) Benzo(k)fluoranthene - ND (<0.1) Indeno(1,2,3- <i>cd</i>)pyrene - ND (<0.1) Dibenz(a,h)anthracene - ND (<0.1) Benzo(g,h,i)perylene - ND (<0.1) 1 Methylnaphthalene - ND (<0.1) 2 Methylnaphthalene - ND (<0.1)	NA	Diesel - ND (<50) Motor Oil - ND (<250)	ND (<50) ND	Arsenic - ND (<1) Barium - 54.4 Cadmium - ND (<1) Chromium - 2.47 Copper - ND (<1) Lead - ND (<1) Manganese - 1,130 Mercury - ND (<0.2) Molybdenum - ND(<1) Nickel - ND (<1) Selenium - 1.48 Zinc - ND (<1)

Sample TEC³ - 0.1 based on
 $\frac{1}{2}$ detection limit of cPAHs

TABLE 3
Portac Inc.
Summary of Historical Groundwater Monitoring Data

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Monitoring Well ID	Sample Date	Pentachloro phenol (ug/l)	Other Semi-Volatile Organic Compounds (ug/l)	Volatile Organic Compounds (ug/l)	Total Petroleum Hydrocarbons (ug/l)	Regulated Metals (ug/l)	
B5-R (Continued)	6-30-2010	ND (<0.5)	Analyzed PAH compounds: Naphthalene - ND (<0.1) Acenaphthylene - ND (<0.1) Acenaphthene - 0.89 Fluorene - ND (<0.1) Phenanthrene - ND (<0.1) Anthracene - ND (<0.1) Fluoranthene - ND (<0.1) Pyrene - ND (<0.1) Benz(a)anthracene - ND (<0.1) Chrysene - ND (<0.1) Benzo(a)pyrene - ND (<0.1) Benzo(b)fluoranthene - ND (<0.1) Benzo(k)fluoranthene - ND (<0.1) Indeno(1,2,3- <i>cd</i>)pyrene - ND (<0.1) Dibenz(a,h)anthracene - ND (<0.1) Benzo(g,h,i)perylene - ND (<0.1) 1 Methylnaphthalene - ND (<0.1) 2 Methylnaphthalene - ND (<0.1)	NA	Diesel - ND (<50) Motor Oil - ND (<250)	ND (ND (<50))	Arsenic - 1.11 Barium - 59.9 Cadmium - ND (<1) Chromium - 2.63 Copper - 1.43 Lead - ND (<1) Manganese - 1,230 Mercury - ND (<0.2) Molybdenum - ND (<1) Nickel - 1.03 Selenium - 2.55 Zinc - ND (<1)

Sample TEC³ - 0.1 based on
 $\frac{1}{2}$ detection limit of cPAHs

TABLE 3
Portac Inc.
Summary of Historical Groundwater Monitoring Data

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Monitoring Well ID	Sample Date	Pentachloro phenol (ug/l)	Other Semi-Volatile Organic Compounds (ug/l)	Volatile Organic Compounds (ug/l)	Total Petroleum Hydrocarbons (ug/l)	Regulated Metals (ug/l)	
B-5R (Continued)	8-30-2010	ND (<0.5)	Analyzed PAH compounds: Naphthalene - ND (<0.1) Acenaphthylene - ND (<0.1) Acenaphthene - 1.1 Fluorene - ND (<0.1) Phenanthrene - ND (<0.1) Anthracene - ND (<0.1) Fluoranthene - ND (<0.1) Pyrene - ND (<0.1) Benz(a)anthracene - ND (<0.1) Chrysene - ND (<0.1) Benzo(a)pyrene - ND (<0.1) Benzo(b)fluoranthene - ND (<0.1) Benzo(k)fluoranthene - ND (<0.1) Indeno(1,2,3- <i>cd</i>)pyrene - ND (<0.1) Dibenz(a,h)anthracene - ND (<0.1) Benzo(g,h,i)perylene - ND (<0.1) 1 Methylnaphthalene - ND (<0.1) 2 Methylnaphthalene - ND (<0.1)	NA	Diesel - ND (<50) Motor Oil - ND (<250)	ND (<50) ND	Arsenic - ND (<1) Barium - 58.8 Cadmium - ND (<1) Chromium - 3.17 Copper - ND (<1) Lead - ND (<1) Manganese - 1,340 Mercury - ND (<0.2) Molybdenum - ND(<1) Nickel - ND (<1) Selenium - 2.57 Zinc - ND (<1)

Sample TEC² - 0.1 based on
 $\frac{1}{2}$ detection limit of cPAHs

TABLE 3
Portac Inc.
Summary of Historical Groundwater Monitoring Data

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Monitoring Well ID	Sample Date	Pentachloro phenol (ug/l)	Other Semi-Volatile Organic Compounds (ug/l)	Volatile Organic Compounds (ug/l)	Total Petroleum Hydrocarbons (ug/l)	Regulated Metals (ug/l)			
MTCA Groundwater Cleanup Criteria (ug/l)	Method B - 0.73	Method A Naphthalene - Benzo(a)pyrene - TEC ² of other cPAHs -	160 0.1	Method A Naphthalene - Method B Acetone - Isopropylbenzene --	160 0.1 800	Method A Gasoline - Diesel - Motor Oil -	1,000 ² 500 500	Method A Arsenic - Cadmium - Chromium - Lead - Mercury -	5 5 50 15 2
		Method B Naphthalene - Acenaphthylene - Acenaphthene - Fluorene Phenanthrene - Anthracene - Fluoranthene - Pyrene - Benz(a)anthracene - Chrysene * - Benzo(a)pyrene * - Benzo(b)fluoranthene * - Benzo(k)fluoranthene * - Indeno(1,2,3-cd)pyrene * - Dibenz(a,h)anthracene * - Benzo(g,h,i)perylene - 1 Methyl/naphthalene - 2 Methyl/naphthalene -	-- 160 -- 960 640 -- 4,800 640 480 -- -- 0.012* -- -- -- -- -- -- 32	Other Undetected Parameters Vary			Method B Arsenic - Barium - Cadmium - Chromium III - Copper - Lead - Manganese - Mercury - Molybdenum - Nickel - Selenium - Zinc -		4.8 3,200 8 24,000 590 -- 2,200 4.8 80 3,200 80 4,800

* - carcinogenic PAH compounds used to calculate the Toxicity Equivalent Concentration (TEC)

TABLE 3
Portac Inc.
Summary of Historical Groundwater Monitoring Data

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Table 3 Notes:

NA - Sample not analyzed for the listed parameter.

ND (<XXX) - Analyzed parameter not detected above the noted concentration.
¹ - Denotes the laboratory's Method Detection Limit (MDL) for pentachlorophenol by EPA Method 8270D. This method was used in March 2009 analyses to identify a wide list of semi-volatile aromatic compounds to demonstrate that no other semi-volatile compounds are present in groundwater. However, by this method the detection limit for pentachlorophenol is not low enough to compare to Method B regulatory criteria. Analyses for Pentachlorophenol since that time were conducted by EPA Method 8270SIM, with reporting limits suitable for comparison to MTCA Method B groundwater cleanup criteria.

Volatile organic compounds by EPA Method 8260C.

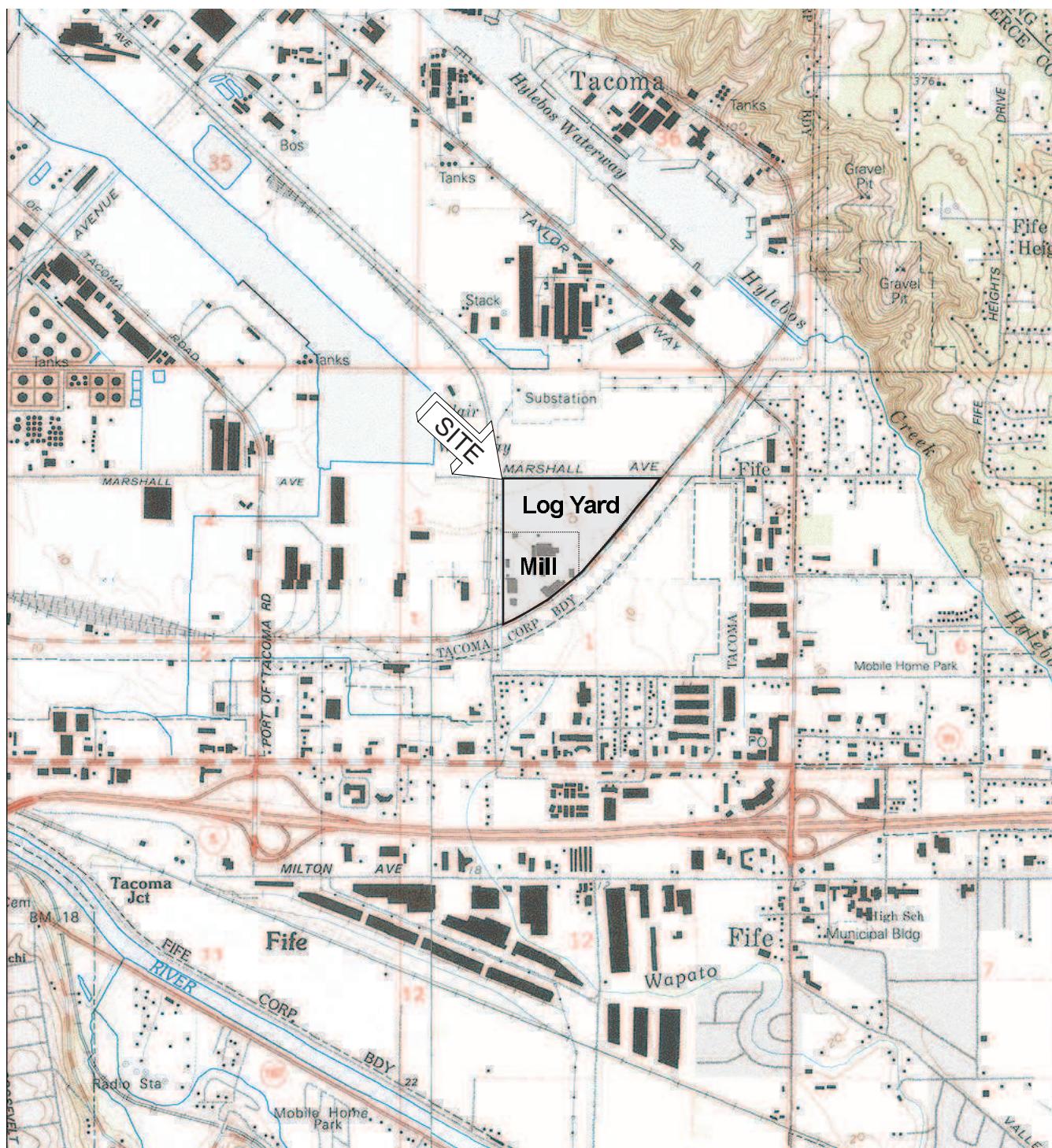
² - MTCA Method A groundwater cleanup criteria for gasoline range organics where no benzene has been detected in groundwater. Other criteria apply if benzene is present.

Total Petroleum Hydrocarbons in the gasoline range analyzed by method NWTPH-G.

Total Petroleum Hydrocarbons in the Diesel and Oil ranges analyzed by method NWTPH-D(extended), with silica gel cleanup to remove organic matter.

Regulated metals by EPA Method 200.8, except mercury, by EPA Method 1631E.

³ - TEC - Toxic Equivalent Concentration - The summed concentration of seven carcinogenic PAH compounds, after applying a toxicity equivalency factor (TEF) to each compound, based on its relative toxicity compared to benzo-(a)-pyrene.



North



0 2000'
Scale 1 : 24,000

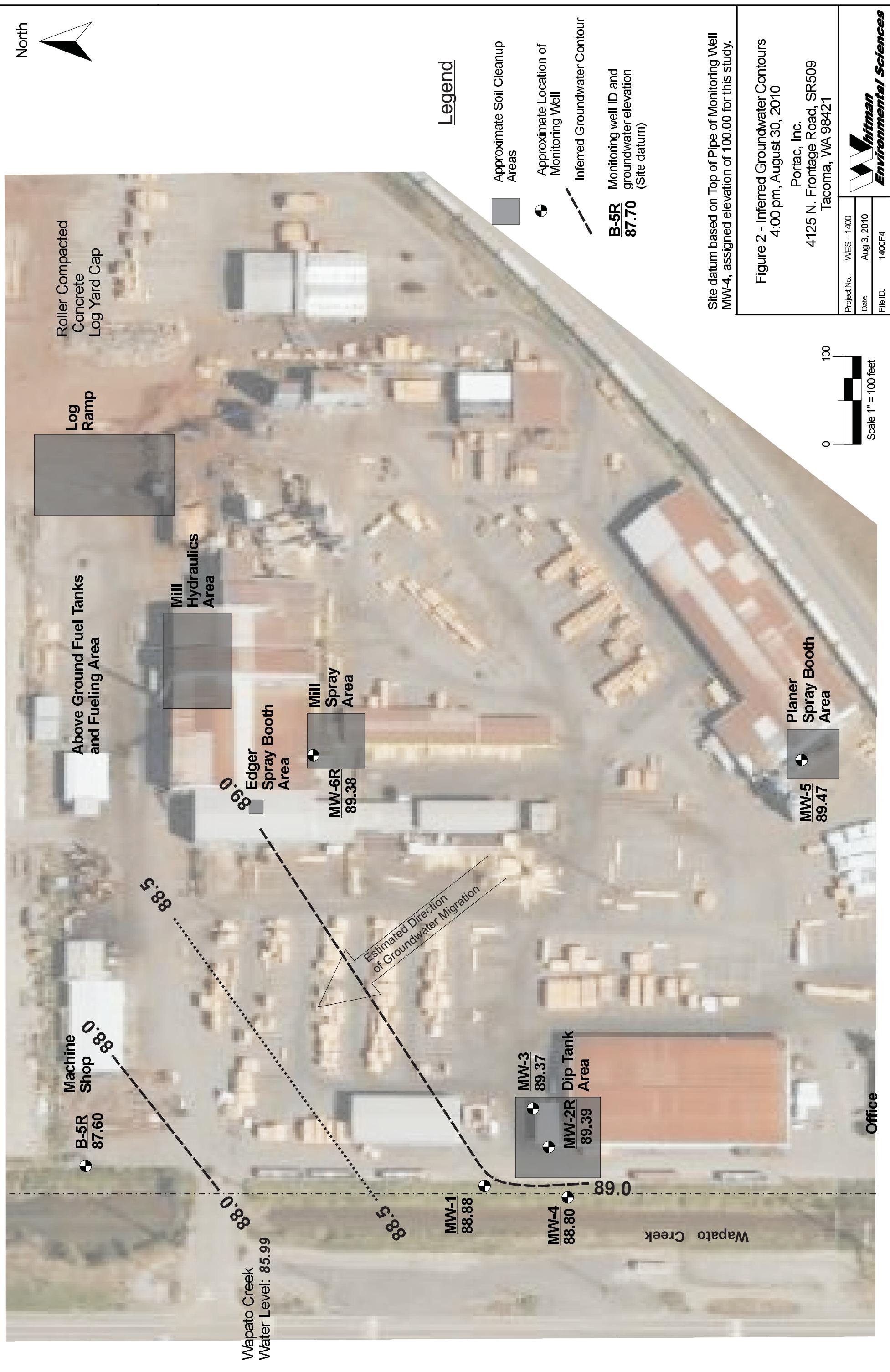
From U.S.G.S.

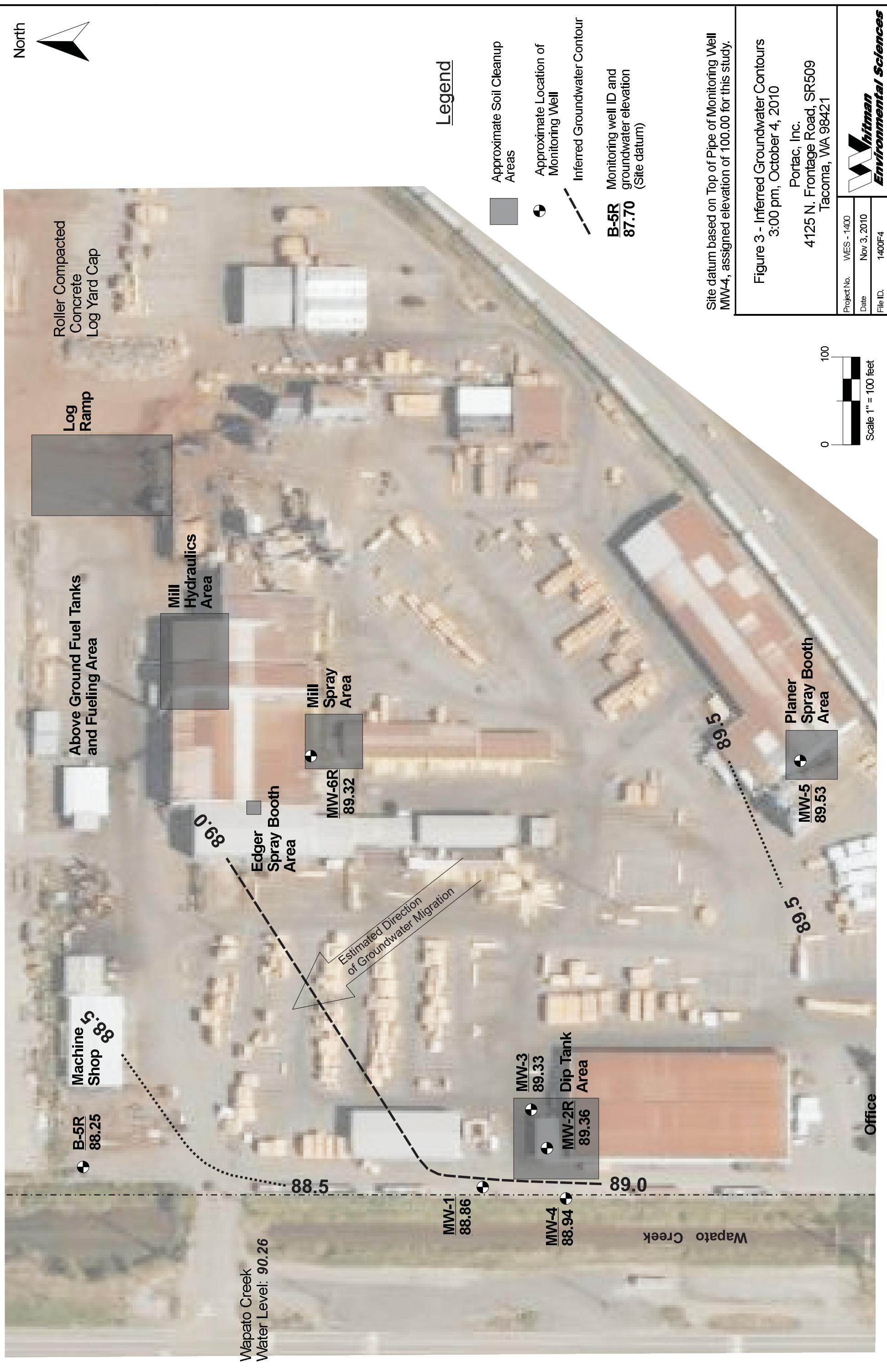
Figure 1 - Site Location Map

Portac, Inc. Mill and Log Yard
4215 North Frontage Road, SR509
Tacoma, Washington 98421

Project No.	WES - 1400
Date	Nov 8, 2008
File ID.	1400F1

Whitman
Environmental Sciences





Field Sampling Data Sheets

GROUNDWATER SAMPLE FIELD DATA SUMMARY

Site:	<i>Bearcat</i>				
Weather at Time of Sampling:	<i>Sunny</i>				
Sampling Point:	<i>B-5R</i>	Date:	<i>8-30-10</i>	Time:	<i>2:50</i>
Visual Observations: (Yes or No)					
Water level (BTOP)	Oil Sheen?	Solids?	Muddy?	Odor?	
<i>12.17</i>	<i>NO</i>	<i>NO</i>	<i>CLEAR yellow</i>	<i>NO</i>	

Comments: Identify any maintenance needed.

None

Volume Pumped:	<i>6 gallons</i>			
Sample Bottles Taken:	<i>3 NUMBER 1 LITER, 1 PLASTIC 500ML 1 PLASTIC 500ML</i>			
Field Measurements:		D.O.:		
pH:	<i>6.0F</i>	EC:	<i>NOT OPERATING PROPERLY? VARYING QUANTITIES</i>	
Salinity:		TDS:	<i>RECENT</i>	
Temp:	<i>64.90F</i>	Turbidity:		

Sampling Point:	<i>MW-1</i>	Date:	<i>8-30-10</i>	Time:	<i>3:15</i>
Visual Observations: (Yes or No)					
Water level (BTOP)	Oil Sheen?	Solids?	Muddy?	Odor?	
<i>12.55</i>	<i>NO</i>	<i>NO</i>	<i>CLEAR yellow</i>	<i>NO</i>	

Comments: Identify any maintenance needed.

*NEW WELL 12.55 FT DEEP
SINCE LAST SAMPLING*

Volume Pumped:	<i>6 gal</i>			
Sample Bottles Taken:	<i>3 NUMBER 1 LITER 1 PLASTIC 500ML 1 PLASTIC 500ML</i>			
Field Measurements:		D.O.:		
pH:	<i>6.61</i>	EC:		
Salinity:		TDS:		
Temp:	<i>63.89F</i>	Turbidity:		

GROUNDWATER SAMPLE FIELD DATA SUMMARY

Site: <i>Bearne</i>				
Weather at Time of Sampling: <i>Sunny</i>				
Sampling Point: <i>MD-4</i>		Date: <i>8-30-10</i>	Time: <i>4:00</i>	
Visual Observations: (Yes or No)				
Water level (BTOP)	Oil Sheen?	Solids?	Muddy?	Odor?
<i>1.20</i>	<i>NO</i>	<i>NO</i>	<i>CLEAR Yellow</i>	<i>NO</i>
Comments: Identify any maintenance needed. <i>None</i>				
Volume Pumped: <i>7 Gallons</i>				
Sample Bottles Taken: <i>3 Amber 1L. / Amber 500mL / Poly 500mL</i>				
Field Measurements:				
pH:	<i>7.13</i>	EC:	<i>/</i>	
Salinity:		TDS:	<i>/</i>	
Temp:	<i>64.7°F</i>	Turbidity:		

Sampling Point: <i>MD-2R</i>		Date: <i>8-30-10</i>	Time: <i>4:55</i>	
Visual Observations: (Yes or No)				
Water level (BTOP)	Oil Sheen?	Solids?	Muddy?	Odor?
<i>1.63</i>	<i>NO</i>	<i>NO</i>	<i>CLEAR Yellow</i>	<i>NO</i>
Comments: Identify any maintenance needed. <i>None</i>				
Volume Pumped: <i>Pumped 7.8 @ 4 Gallons</i>				
Sample Bottles Taken: <i>3 Amber 1L. / Amber 500mL / Poly 500mL</i>				
Field Measurements:				
pH:	<i>11.7/12.3</i>	EC:	<i>/</i>	
Salinity:		TDS:	<i>/</i>	
Temp:	<i>68.7</i>	Turbidity:		

GROUNDWATER SAMPLE FIELD DATA SUMMARY

Site: <i>Dam</i>				
Weather at Time of Sampling: <i>Sunny</i>				
Sampling Point: <i>M2-3</i>		Date: <i>8-30-10</i>	Time: <i>5:40</i>	
Visual Observations: (Yes or No)				
Water level (BTOP)	Oil Sheen?	Solids?	Muddy?	Odor?
	<i>No</i>	<i>No</i>	<i>Very little</i>	<i>No</i>
Comments: Identify any maintenance needed.				
Volume Pumped: <i>6.5 gallons</i>				
Sample Bottles Taken: <i>3 amber 16. 1 amber 50ml 1 poly 50ml</i>				
Field Measurements:		D.O.:		
pH:		<i>7.71</i>	EC:	
Salinity:			TDS:	
Temp:		<i>63.7°F</i>	Turbidity:	

Sampling Point:		Date:	Time:
Visual Observations: (Yes or No)			
Water level (BTOP)	Oil Sheen?	Solids?	Muddy?
Comments: Identify any maintenance needed.			
Volume Pumped:			
Sample Bottles Taken:			
Field Measurements:		D.O.:	
pH:			
Salinity:			
Temp:			
Turbidity:			

GROUNDWATER SAMPLE FIELD DATA SUMMARY

Site: <u>Berm</u>				
Weather at Time of Sampling: <u>Sunny</u>				
Sampling Point: <u>Mis-6R</u>		Date: <u>10-4-10</u>	Time: <u>1:40</u>	
Visual Observations: (Yes or No)				
Water level (BTOP)	Oil Sheen?	Solids?	Muddy?	Odor?
<u>11.12</u>	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>
Comments: Identify any maintenance needed. <u>None</u>				
Volume Pumped: <u>1:49 to 1:59 @ 4.2 / 5 min = 6 GALS</u>				
Sample Bottles Taken: <u>3 AMBER LITE 1 SCOTT-POLY 1 5TH AMBER</u>				
Field Measurements:		D.O.:		
pH:	<u>6.4 BY TAP</u>	EC:		
Salinity:		TDS:		
Temp:	<u>61.0°F</u>	Turbidity:		

Sampling Point: <u>Mis-5</u>		Date: <u>10-4-10</u>	Time: <u>2:10</u>	
Visual Observations: (Yes or No)				
Water level (BTOP)	Oil Sheen?	Solids?	Muddy?	Odor?
<u>11.13</u>	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>
Comments: Identify any maintenance needed. <u>None</u>				
Volume Pumped: <u>2:44 to 2:55</u>				
Sample Bottles Taken:				
Field Measurements:		D.O.:		
pH:	<u>6.7 BY TAP</u>	EC:		
Salinity:		TDS:		
Temp:		Turbidity:		

Laboratory Analytical Reports

FRIEDMAN & BRUYA, INC.

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FAX: (206) 283-5044
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September 16, 2010

Dan Whitman, Project Manager
Whitman Environmental Sciences
5508 35th Ave. NE
Seattle, WA 98105

Dear Mr. Whitman:

Included are the results from the testing of material submitted on August 31, 2010 from the Portac WES 140Q, F&BI 008364 project. There are 30 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you should have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures
WES0916R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on August 31, 2010 by Friedman & Bruya, Inc. from the Whitman Environmental Sciences Portac WES 1400, F&BI 008364 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>Whitman Environmental Sciences</u>
008364-01	MW-1
008364-02	MW-2R
008364-03	MW-3
008364-04	MW-4
008364-05	B-5R

A 200.8 internal standard failed the acceptance criteria for several samples due to matrix interference. The affected samples were diluted and reanalyzed to remove the interference.

All other quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 09/16/10

Date Received: 08/31/10

Project: Portac WES 1400, F&BI 008364

Date Extracted: 09/02/10

Date Analyzed: 09/07/10

**RESULTS FROM THE ANALYSIS OF WATER SAMPLES
FOR TOTAL PETROLEUM HYDROCARBONS AS
DIESEL AND MOTOR OIL
USING METHOD NWTPH-Dx**
**Sample Extracts Passed Through a
Silica Gel Column Prior to Analysis**
Results Reported as ug/L (ppb)

<u>Sample ID</u> Laboratory ID	<u>Diesel Range</u> (C ₁₀ -C ₂₅)	<u>Motor Oil Range</u> (C ₂₅ -C ₃₆)	Surrogate (% Recovery) (Limit 51-134)
MW-1 00836401	<50	<250	62
MW-2R 00836402	54 x	<250	57
MW-3 00836403	<50	<250	80
MW-4 00836404	<50	<250	70
B-5R 00836405	<50	<250	62
Method Blank 00-1399MB	<50	<250	75

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	MW-1	Client:	Whitman Environmental Sciences
Date Received:	08/31/10	Project:	Portac WES 1400, F&BI 008364
Date Extracted:	09/01/10	Lab ID:	008364-01
Date Analyzed:	09/01/10	Data File:	008364-01.063
Matrix:	Water	Instrument:	ICPMS 1
Units:	ug L (ppb)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Germanium	172%	60	125
Indium	104	60	125
Holmium	101	60	125

Analyte:	Concentration ug L (ppb)
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Chromium	453 J
Nickel	287 J
Copper	<1 J
Zinc	<1 J
Arsenic	16.9
Selenium	4.93
Molybdenum	1.31
Cadmium	<1
Barium	187
Lead	<1
Manganese	3,980 J

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	MW-1	Client:	Whitman Environmental Sciences
Date Received:	08/31/10	Project:	Portac WES 1400, F&BI 008364
Date Extracted:	09/01/10	Lab ID:	008364-01x 10
Date Analyzed:	09/01/10	Data File:	008364-01x 10.068
Matrix:	Water	Instrument:	ICPMS 1
Units:	ug L (ppb)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Germanium	109	60	125
Indium	99	60	125
Holmium	99	60	125

Analyte:	Concentration ug L (ppb)
----------	-----------------------------

Chromium	< 10
Nickel	< 10
Copper	< 10
Zinc	< 10
Arsenic	18.7
Selenium	< 10
Molybdenum	< 10
Cadmium	< 10
Barium	187
Lead	< 10
Manganese	7,260

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	MW-2R	Client:	Whitman Environmental Sciences
Date Received:	08/31/10	Project:	Portac WES 1400, F&BI 008364
Date Extracted:	09/01/10	Lab ID:	008364-02
Date Analyzed:	09/01/10	Data File:	008364-02064
Matrix:	Water	Instrument:	ICPMS 1
Units:	ug L (ppb)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Germanium	99	60	125
Indium	105	60	125
Holmium	101	60	125

Analyte:	Concentration ug L (ppb)
----------	-----------------------------

Chromium	1.39
Nickel	21.3
Copper	52.9
Zinc	20.6
Arsenic	7.11
Selenium	1.13
Molybdenum	33.9
Cadmium	<1
Barium	102
Lead	1.21
Manganese	9.74

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	MW-3	Client:	Whitman Environmental Sciences
Date Received:	08/31/10	Project:	Portac WES 1400, F&BI 008364
Date Extracted:	09/01/10	Lab ID:	008364-03
Date Analyzed:	09/01/10	Data File:	008364-03065
Matrix:	Water	Instrument:	ICPMS 1
Units:	ug L (ppb)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Germanium	157%	60	125
Indium	109	60	125
Holmium	103	60	125

Analyte:	Concentration ug L (ppb)
----------	-----------------------------

Chromium	300 J
Nickel	1.78 J
Copper	< 1 J
Zinc	< 1 J
Arsenic	823
Selenium	374
Molybdenum	< 1
Cadmium	< 1
Barium	87.7
Lead	< 1
Manganese	1,600 J

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	MW-3	Client:	Whitman Environmental Sciences
Date Received:	08/31/10	Project:	Portac WES 1400, F&BI 008364
Date Extracted:	09/01/10	Lab ID:	008364-03x 10
Date Analyzed:	09/01/10	Data File:	008364-03x 10.069
Matrix:	Water	Instrument:	ICPMS 1
Units:	ug L (ppb)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Germanium	105	60	125
Indium	100	60	125
Holmium	96	60	125

Concentration
Analyte: ug L (ppb)

Chromium	< 10
Nickel	< 10
Copper	< 10
Zinc	< 10
Arsenic	< 10
Selenium	< 10
Molybdenum	< 10
Cadmium	< 10
Barium	885
Lead	< 10
Manganese	2,570

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	MW-4	Client:	Whitman Environmental Sciences
Date Received:	08/31/10	Project:	Portac WES 1400, F&BI 008364
Date Extracted:	09/01/10	Lab ID:	008364-04
Date Analyzed:	09/01/10	Data File:	008364-04-066
Matrix:	Water	Instrument:	ICPMS 1
Units:	ug L (ppb)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Germanium	172%	60	125
Indium	104	60	125
Holmium	99	60	125

Analyte:	Concentration ug L (ppb)
----------	-----------------------------

Chromium	235 J
Nickel	203 J
Copper	1.98 J
Zinc	<1 J
Arsenic	10.3
Selenium	6.97
Molybdenum	<1
Cadmium	<1
Barium	153
Lead	1.06
Manganese	2,900 J

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	MW-4	Client:	Whitman Environmental Sciences
Date Received:	08/31/10	Project:	Portac WES 1400, F&BI 008364
Date Extracted:	09/01/10	Lab ID:	008364-04x 10
Date Analyzed:	09/01/10	Data File:	008364-04x 10070
Matrix:	Water	Instrument:	ICPMS 1
Units:	ug L (ppb)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Germanium	114	60	125
Indium	104	60	125
Holmium	99	60	125

Concentration
Analyte: ug L (ppb)

Chromium	< 10
Nickel	< 10
Copper	< 10
Zinc	< 10
Arsenic	10.2
Selenium	< 10
Molybdenum	< 10
Cadmium	< 10
Barium	151
Lead	< 10
Manganese	4,810

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	B-5R	Client:	Whitman Environmental Sciences
Date Received:	08/31/10	Project:	Portac WES 1400, F&BI 008364
Date Extracted:	09/01/10	Lab ID:	008364-05
Date Analyzed:	09/01/10	Data File:	008364-05.067
Matrix:	Water	Instrument:	ICPMS 1
Units:	ug L (ppb)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Germanium	118	60	125
Indium	100	60	125
Holmium	96	60	125

Analyte:	Concentration ug L (ppb)
----------	-----------------------------

Chromium	3.17
Nickel	< 1
Copper	< 1
Zinc	< 1
Arsenic	< 1
Selenium	2.57
Molybdenum	< 1
Cadmium	< 1
Barium	588
Lead	< 1
Manganese	1,340

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	Method Blank	Client:	Whitman Environmental Sciences
Date Received:	NA	Project:	Portac WES 1400, F&BI 008364
Date Extracted:	09/01/10	Lab ID:	IO-473mb
Date Analyzed:	09/01/10	Data File:	IO-473mb.048
Matrix:	Water	Instrument:	ICPMS 1
Units:	ug L (ppb)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Germanium	98	60	125
Indium	104	60	125
Holmium	101	60	125

Analyte:	Concentration ug L (ppb)
----------	-----------------------------

Chromium	< 1
Nickel	< 1
Copper	< 1
Zinc	< 1
Arsenic	< 1
Selenium	< 1
Molybdenum	< 1
Cadmium	< 1
Barium	< 1
Lead	< 1
Manganese	< 1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 09/16/10

Date Received: 08/31/10

Project: Portac WES 1400, F&BI 008364

Date Extracted: 09/02/10

Date Analyzed: 09/03/10

**RESULTS FROM THE ANALYSIS OF THE WATER SAMPLES
FOR TOTAL MERCURY
USING EPA METHOD 1631E**
Results Reported as ug/L (ppb)

<u>Sample ID</u>	<u>Total Mercury</u>
Laboratory ID	
MW-1 008364-01	<0.2
MW-2R 008364-02	<0.2
MW-3 008364-03	<0.2
MW-4 008364-04	<0.2
B-5R 008364-05	<0.2
Method Blank	<0.2

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID: MW-1
Date Received: 08/31/10
Date Extracted: 09/02/10
Date Analyzed: 09/14/10
Matrix: Water
Units: ug L (ppb)

Client: Whitman Environmental Sciences
Project: Portac WES 1400, F&BI 008364
Lab ID: 008364-01
Data File: 091415.D
Instrument: GCMS6
Operator: YA

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d 10	96	50	150
Benzo(a)anthracene-d 12	105	50	129

Compounds:	Concentration ug L (ppb)
Naphthalene	<0.1
Acenaphthylene	<0.1
Acenaphthene	<0.1
Fluorene	<0.1
Phenanthrene	<0.1
Anthracene	<0.1
Fluoranthene	<0.1
Pyrene	<0.1
Benz(a)anthracene	<0.1
Chrysene	<0.1
Benzo(a)pyrene	<0.1
Benzo(b)fluoranthene	<0.1
Benzo(k)fluoranthene	<0.1
Indeno(1,2,3cd)pyrene	<0.1
Dibenz(a,h)anthracene	<0.1
Benzo(g,h,i)perylene	<0.1
1-Methylnaphthalene	<0.1
2-Methylnaphthalene	<0.1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	MW-2R	Client:	Whitman Environmental Sciences
Date Received:	08/31/10	Project:	Portac WES 1400, F&BI 008364
Date Extracted:	09/02/10	Lab ID:	008364-02
Date Analyzed:	09/14/10	Data File:	091416D
Matrix:	Water	Instrument:	GCMS6
Units:	ug L (ppb)	Operator:	YA

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d 10	100	50	150
Benzo(a)anthracene-d 12	108	50	129

Compounds:	Concentration ug L (ppb)
Naphthalene	0.30
Acenaphthylene	<0.1
Acenaphthene	0.48
Fluorene	0.23
Phenanthrene	0.20
Anthracene	<0.1
Fluoranthene	0.49
Pyrene	0.30
Benz(a)anthracene	<0.1
Chrysene	<0.1
Benzo(a)pyrene	<0.1
Benzo(b)fluoranthene	<0.1
Benzo(k)fluoranthene	<0.1
Indeno(1,2,3cd)pyrene	<0.1
Dibenz(a,h)anthracene	<0.1
Benzo(g,h,i)perylene	<0.1
1-Methylnaphthalene	0.20
2-Methylnaphthalene	<0.1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID: MW-3
Date Received: 08/31/10
Date Extracted: 09/02/10
Date Analyzed: 09/14/10
Matrix: Water
Units: ug L (ppb)

Client: Whitman Environmental Sciences
Project: Portac WES 1400, F&BI 008364
Lab ID: 008364-03
Data File: 091417.D
Instrument: GCMS6
Operator: YA

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d 10	102	50	150
Benzo(a)anthracene-d 12	111	50	129

Compounds:	Concentration ug L (ppb)
Naphthalene	<0.1
Acenaphthylene	<0.1
Acenaphthene	<0.1
Fluorene	<0.1
Phenanthrene	<0.1
Anthracene	<0.1
Fluoranthene	<0.1
Pyrene	<0.1
Benz(a)anthracene	<0.1
Chrysene	<0.1
Benzo(a)pyrene	<0.1
Benzo(b)fluoranthene	<0.1
Benzo(k)fluoranthene	<0.1
Indeno(1,2,3cd)pyrene	<0.1
Dibenz(a,h)anthracene	<0.1
Benzo(g,h,i)perylene	<0.1
1-Methylnaphthalene	<0.1
2-Methylnaphthalene	<0.1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	MW-4	Client:	Whitman Environmental Sciences
Date Received:	08/31/10	Project:	Portac WES 1400, F&BI 008364
Date Extracted:	09/02/10	Lab ID:	008364-04
Date Analyzed:	09/14/10	Data File:	091418D
Matrix:	Water	Instrument:	GCMS6
Units:	ug L (ppb)	Operator:	YA

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d 10	102	50	150
Benzo(a)anthracene-d 12	106	50	129

Compounds:	Concentration ug L (ppb)
Naphthalene	<0.1
Acenaphthylene	<0.1
Acenaphthene	<0.1
Fluorene	<0.1
Phenanthrene	<0.1
Anthracene	<0.1
Fluoranthene	<0.1
Pyrene	<0.1
Benz(a)anthracene	<0.1
Chrysene	<0.1
Benzo(a)pyrene	<0.1
Benzo(b)fluoranthene	<0.1
Benzo(k)fluoranthene	<0.1
Indeno(1,2,3cd)pyrene	<0.1
Dibenz(a,h)anthracene	<0.1
Benzo(g,h,i)perylene	<0.1
1-Methylnaphthalene	<0.1
2-Methylnaphthalene	<0.1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	B-5R	Client:	Whitman Environmental Sciences
Date Received:	08/31/10	Project:	Portac WES 1400, F&BI 008364
Date Extracted:	09/02/10	Lab ID:	008364-05
Date Analyzed:	09/14/10	Data File:	091419.D
Matrix:	Water	Instrument:	GCMS6
Units:	ug L (ppb)	Operator:	YA

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d 10	102	50	150
Benzo(a)anthracene-d 12	107	50	129

Compounds:	Concentration ug L (ppb)
Naphthalene	<0.1
Acenaphthylene	<0.1
Acenaphthene	1.1
Fluorene	<0.1
Phenanthrene	<0.1
Anthracene	<0.1
Fluoranthene	<0.1
Pyrene	<0.1
Benz(a)anthracene	<0.1
Chrysene	<0.1
Benzo(a)pyrene	<0.1
Benzo(b)fluoranthene	<0.1
Benzo(k)fluoranthene	<0.1
Indeno(1,2,3cd)pyrene	<0.1
Dibenz(a,h)anthracene	<0.1
Benzo(g,h,i)perylene	<0.1
1-Methylnaphthalene	<0.1
2-Methylnaphthalene	<0.1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	Method Blank	Client:	Whitman Environmental Sciences
Date Received:	NA	Project:	Portac WES 1400, F&BI 008364
Date Extracted:	09/02/10	Lab ID:	00-1396mb
Date Analyzed:	09/05/10	Data File:	090517.D
Matrix:	Water	Instrument:	GCMS6
Units:	ug L (ppb)	Operator:	YA

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d 10	107	50	150
Benzo(a)anthracene-d 12	118	50	129

Compounds:	Concentration ug L (ppb)
Naphthalene	<0.1
Acenaphthylene	<0.1
Acenaphthene	<0.1
Fluorene	<0.1
Phenanthrene	<0.1
Anthracene	<0.1
Fluoranthene	<0.1
Pyrene	<0.1
Benz(a)anthracene	<0.1
Chrysene	<0.1
Benzo(a)pyrene	<0.1
Benzo(b)fluoranthene	<0.1
Benzo(k)fluoranthene	<0.1
Indeno(1,2,3cd)pyrene	<0.1
Dibenz(a,h)anthracene	<0.1
Benzo(g,h,i)perylene	<0.1
1-Methylnaphthalene	<0.1
2-Methylnaphthalene	<0.1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis for Semivolatile Phenols By EPA Method 8270D SIM

Client Sample ID: MW-1
Date Received: 08/31/10
Date Extracted: 09/02/10
Date Analyzed: 09/15/10
Matrix: Water
Units: ug/L (ppb)

Client: Whitman Environmental Sciences
Project: Portac WES 1400, F&BI 008364
Lab ID: 008364-01
Data File: 091425.D
Instrument: GCMS3
Operator: YA

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
2,4,6Tribromophenol	109	10	154

Compounds: Concentration
Pentachlorophenol ug/L (ppb) <0.5

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis for Semivolatile Phenols By EPA Method 8270D SIM

Client Sample ID:	MW-2R	Client:	Whitman Environmental Sciences
Date Received:	08/31/10	Project:	Portac WES 1400, F&BI 008364
Date Extracted:	09/02/10	Lab ID:	008364-02 1400
Date Analyzed:	09/15/10	Data File:	091510.D
Matrix:	Water	Instrument:	GCMS3
Units:	ug L (ppb)	Operator:	YA

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
2,4,6Tribromophenol	102 ca	10	154

Compounds:	Concentration ug L (ppb)
Pentachlorophenol	76

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis for Semivolatile Phenols By EPA Method 8270D SIM

Client Sample ID: MW-3
Date Received: 08/31/10
Date Extracted: 09/02/10
Date Analyzed: 09/15/10
Matrix: Water
Units: ug/L (ppb)

Client: Whitman Environmental Sciences
Project: Portac WES 1400, F&BI 008364
Lab ID: 008364-03
Data File: 091427.D
Instrument: GCMS3
Operator: YA

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
2,4,6Tribromophenol	101	10	154

Compounds: Concentration
Pentachlorophenol ug/L (ppb) <0.5

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis for Semivolatile Phenols By EPA Method 8270D SIM

Client Sample ID:	MW-4	Client:	Whitman Environmental Sciences
Date Received:	08/31/10	Project:	Portac WES 1400, F&BI 008364
Date Extracted:	09/02/10	Lab ID:	008364-04
Date Analyzed:	09/15/10	Data File:	091428D
Matrix:	Water	Instrument:	GCMS3
Units:	ug L (ppb)	Operator:	YA

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
2,4,6Tribromophenol	95	10	154

Compounds:	Concentration ug L (ppb)
Pentachlorophenol	<0.5

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis for Semivolatile Phenols By EPA Method 8270D SIM

Client Sample ID:	B-5R	Client:	Whitman Environmental Sciences
Date Received:	08/31/10	Project:	Portac WES 1400, F&BI 008364
Date Extracted:	09/02/10	Lab ID:	008364-05
Date Analyzed:	09/15/10	Data File:	091426D
Matrix:	Water	Instrument:	GCMS3
Units:	ug L (ppb)	Operator:	YA

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
2,4,6Tribromophenol	94	10	154

Compounds:	Concentration ug L (ppb)
Pentachlorophenol	<0.5

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis for Semivolatile Phenols By EPA Method 8270D SIM

Client Sample ID: Method Blank Client: Whitman Environmental Sciences
Date Received: NA Project: Portac WES 1400, F&BI 008364
Date Extracted: 09/02/10 Lab ID: OO-1395mb
Date Analyzed: 09/14/10 Data File: 091422.D
Matrix: Water Instrument: GCMS3
Units: ug L (ppb) Operator: YA

		Lower	Upper
Surrogates:	% Recovery:	Limit:	Limit:
2,4,6Tribromophenol	89	10	154
Compounds:	Concentration		
Pentachlorophenol	ug L (ppb)		
	<0.5		

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 09/16/10

Date Received: 08/31/10

Project: Portac WES 1400, F&BI 008364

**QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER SAMPLES
FOR TOTAL PETROLEUM HYDROCARBONS AS
DIESEL EXTENDED USING METHOD NWTPH-Dx**

Laboratory Code: Laboratory Control Sample Silica Gel

Analyte	Reporting Units	Spike Level	Percent	Percent	Acceptance Criteria	RPD (Limit 20)
			Recovery LCS	Recovery LCSD		
Diesel Extended	ug/L (ppb)	2,500	89	97	58-134	9

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 09/16/10

Date Received: 08/31/10

Project: Portac WES 1400, F&BI 008364

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF WATER SAMPLES
FOR TOTAL METALS USING EPA METHOD 200.8**

Laboratory Code: 008365-01 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Chromium	ug L (ppb)	20	< 1	101	101	67-132	0
Nickel	ug L (ppb)	20	1.47	100	100	73-119	0
Copper	ug L (ppb)	20	63.1	107b	99b	50-144	8b
Zinc	ug L (ppb)	50	68.8	102b	99b	46-148	3b
Arsenic	ug L (ppb)	10	< 1	104	106	56-167	2
Selenium	ug L (ppb)	5	< 1	103	103	54-170	0
Molybdenum	ug L (ppb)	50	< 1	102	104	74-132	2
Cadmium	ug L (ppb)	5	< 1	101	105	86-118	4
Barium	ug L (ppb)	50	204	100b	86b	63-133	15b
Lead	ug L (ppb)	10	1.01	96	96	76-125	0
Manganese	ug L (ppb)	20	5.01	97	96	50-150	1

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Chromium	ug L (ppb)	20	102	66-135
Nickel	ug L (ppb)	20	105	67-134
Copper	ug L (ppb)	20	102	66-134
Zinc	ug L (ppb)	50	107	57-135
Arsenic	ug L (ppb)	10	99	55-128
Selenium	ug L (ppb)	5	103	59-134
Molybdenum	ug L (ppb)	50	99	64-134
Cadmium	ug L (ppb)	5	98	66-135
Barium	ug L (ppb)	50	102	66-133
Lead	ug L (ppb)	10	101	67-135
Manganese	ug L (ppb)	20	103	70-130

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 09/16/10

Date Received: 08/31/10

Project: Portac WES 1400, F&BI 008364

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF WATER SAMPLES FOR
TOTAL MERCURY
USING EPA METHOD 1631E**

Laboratory Code: 008364.02 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Mercury	ug L (ppb)	0.5	<0.2	94	102	48-160	8

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Mercury	ug L (ppb)	0.5	98	79-126

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 09/16/10

Date Received: 08/31/10

Project: Portac WES 1400, F&BI 008364

**QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER SAMPLES
FOR PNA'S BY EPA METHOD 8270D SIM**

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Naphthalene	ug L (ppb)	5	82	86	68-101	5
2-Methylnaphthalene	ug L (ppb)	5	81	84	48-116	4
1-Methylnaphthalene	ug L (ppb)	5	79	82	61-105	4
Acenaphthylene	ug L (ppb)	5	84	88	68-102	5
Acenaphthene	ug L (ppb)	5	84	88	69-104	5
Fluorene	ug L (ppb)	5	86	91	63-109	6
Phenanthrene	ug L (ppb)	5	82	88	66-106	7
Anthracene	ug L (ppb)	5	80	85	67-112	6
Fluoranthene	ug L (ppb)	5	86	94	69-116	9
Pyrene	ug L (ppb)	5	86	93	68-115	8
Benz(a)anthracene	ug L (ppb)	5	80	85	65-102	6
Chrysene	ug L (ppb)	5	83	89	66-103	7
Benzo(b)fluoranthene	ug L (ppb)	5	86	93	66-112	8
Benzo(k)fluoranthene	ug L (ppb)	5	89	94	64-116	5
Benzo(a)pyrene	ug L (ppb)	5	86	92	61-108	7
Indeno(1,2,3cd)pyrene	ug L (ppb)	5	94	102	50-120	8
Dibenz(a,h)anthracene	ug L (ppb)	5	88	95	51-115	8
Benzo(g,h,i)perylene	ug L (ppb)	5	87	94	50-113	8

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 09/16/10

Date Received: 08/31/10

Project: Portac WES 1400, F&BI 008364

**QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER SAMPLES
FOR PENTACHLOROPHENOL BY EPA METHOD 8270D SIM**

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Pentachlorophenol	ug L (ppb)	7.5	110	108	15-124	2

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Data Qualifiers & Definitions

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

A1 – More than one compound of similar molecule structure was identified with equal probability.

b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.

ca - The calibration results for this range fell outside of acceptance criteria. The value reported is an estimate.

c - The presence of the analyte indicated may be due to carryover from previous sample injections.

d - The sample was diluted. Detection limits may be raised due to dilution.

ds - The sample was diluted. Detection limits are raised due to dilution and surrogate recoveries may not be meaningful.

dv - Insufficient sample was available to achieve normal reporting limits and limits are raised accordingly.

fb - Analyte present in the blank and the sample.

fc – The compound is a common laboratory and field contaminant.

hr - The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. The variability is attributed to sample inhomogeneity.

ht - Analysis performed outside the method or client-specified holding time requirement.

ip - Recovery fell outside of normal control limits. Compounds in the sample matrix interfered with the quantitation of the analyte.

j – The result is below normal reporting limits. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The analyte result in the laboratory control sample is out of control limits. The reported concentration should be considered an estimate.

jr - The rpd result in laboratory control sample associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

lc - The presence of the compound indicated is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

pc – The sample was received in a container not approved by the method. The value reported should be considered an estimate.

pr – The sample was received with incorrect preservation. The value reported should be considered an estimate.

ve - Estimated concentration calculated for an analyte response above the valid instrument calibration range. A dilution is required to obtain an accurate quantification of the analyte.

vo - The value reported fell outside the control limits established for this analyte.

x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

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SAMPLE CHAIN OF CUSTODY

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Send Report To Dan Whitman

Company _____ Whitman Environmental Sciences

Address 5508 35th Ave. NE

City, State, ZIP Seattle, WA 98105

Phone # (206) 523-3505 Fax # (206) 523-0224

SAMPLES (signature)	ME 08/31/10
PROJECT NAME/N.	██████████
REMARKS	<p><i>Same as Element</i> <i>Ex) Penta.</i></p> <p><i>100</i></p> <p><i>100</i></p>

TURNAROUND TIME	
<input checked="" type="checkbox"/>	Standard (2 Weeks)
<input type="checkbox"/>	RUSH
Rush charges authorized by:	
<u>SAMPLE DISPOSAL</u>	
<input type="checkbox"/> Dispose after 30 days	
<input type="checkbox"/> Return samples	
<input type="checkbox"/> Will call with instructions	

Friedman & Bruyl, Inc.

3012 16th Avenue West

Seattle, WA 98119-2029

Pl. (206) 285-8282

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FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
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3012 16th Avenue West
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TEL: (206) 285-8282
FAX: (206) 283-5044
e-mail: fbi@isomedia.com

October 29, 2010

Dan Whitman, Project Manager
Whitman Environmental Sciences
5508 35th Ave. NE
Seattle, WA 98105

Dear Mr. Whitman:

Included are the results from the testing of material submitted on October 5, 2010 from the Portac WES-1400, F&BI O10060 project. There are 19 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you should have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures
WES1029R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on October 5, 2010 by Friedman & Bruya, Inc. from the Whitman Environmental Sciences Portac WES-1400, F&BI 010060 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>Whitman Environmental Sciences</u>
010060-01	MW-5
010060-02	MW-6R

A 200.8 metals internal standard failed the acceptance criteria for sample MW-6R due to matrix effect. The data were flagged accordingly. The sample was diluted and reanalyzed.

All other quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 10/29/10

Date Received: 10/05/10

Project: Portac WES-1400, F&BI 010060

Date Extracted: 10/06/10

Date Analyzed: 10/08/10

**RESULTS FROM THE ANALYSIS OF WATER SAMPLES
FOR TOTAL PETROLEUM HYDROCARBONS AS
DIESEL AND MOTOR OIL
USING METHOD NWTPH-Dx**
**Sample Extracts Passed Through a
Silica Gel Column Prior to Analysis**
Results Reported as ug/L (ppb)

<u>Sample ID</u> Laboratory ID	<u>Diesel Range</u> (C ₁₀ -C ₂₅)	<u>Motor Oil Range</u> (C ₂₅ -C ₃₆)	Surrogate (% Recovery) (Limit 51-134)
MW-5 010060-01	<50	<250	66
MW-6R 010060-02	<50	<250	67
Method Blank 00-1585 MB2	<50	<250	68

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	MW-5	Client:	Whitman Environmental Sciences
Date Received:	10/05/10	Project:	Portac WES-1400, F&BI 010060
Date Extracted:	10/08/10	Lab ID:	010060-01
Date Analyzed:	10/08/10	Data File:	010060-01.056
Matrix:	Water	Instrument:	ICPMS 1
Units:	ugL (ppb)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Germanium	109	60	125
Indium	92	60	125
Holmium	102	60	125

Analyte:	Concentration ugL (ppb)
----------	----------------------------

Chromium	16.5
Nickel	1.59
Copper	11.1
Zinc	<1
Arsenic	1.01
Selenium	<1
Molybdenum	3.02
Cadmium	<1
Barium	28.1
Lead	<1
Manganese	97.9

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	MW-6R	Client:	Whitman Environmental Sciences
Date Received:	10/05/10	Project:	Portac WES-1400, F&BI 010060
Date Extracted:	10/08/10	Lab ID:	010060-02
Date Analyzed:	10/08/10	Data File:	010060-02.057
Matrix:	Water	Instrument:	ICPMS 1
Units:	ugL (ppb)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Germanium	141 vo	60	125
Indium	90	60	125
Holmium	99	60	125

Analyte:	Concentration ugL (ppb)
----------	----------------------------

Chromium	4.46 J
Nickel	1.37 J
Copper	1.70 J
Zinc	<1 J
Arsenic	2.84
Selenium	1.45
Molybdenum	2.83
Cadmium	<1
Barium	124
Lead	<1
Manganese	6,290

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	MW-6R	Client:	Whitman Environmental Sciences
Date Received:	10/05/10	Project:	Portac WES-1400, F&BI 010060
Date Extracted:	10/08/10	Lab ID:	010060-02 x10
Date Analyzed:	10/08/10	Data File:	010060-02 x10.058
Matrix:	Water	Instrument:	ICPMS 1
Units:	ugL (ppb)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Germanium	100	60	125
Indium	96	60	125
Holmium	99	60	125

Analyte:	Concentration ugL (ppb)
----------	----------------------------

Chromium	<10
Nickel	<10
Copper	19.0
Zinc	<10
Arsenic	<10
Selenium	<10
Molybdenum	<10
Cadmium	<10
Barium	125
Lead	<10
Manganese	8,760

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	Method Blank	Client:	Whitman Environmental Sciences
Date Received:	NA	Project:	Portac WES-1400, F&BI 010060
Date Extracted:	10/08/10	Lab ID:	IO-572 mb
Date Analyzed:	10/08/10	Data File:	IO-572 mb.051
Matrix:	Water	Instrument:	ICPMS1
Units:	ugL (ppb)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Germanium	101	60	125
Indium	94	60	125
Holmium	98	60	125

Analyte:	Concentration ugL (ppb)
----------	----------------------------

Chromium	<1
Nickel	<1
Copper	<1
Zinc	<1
Arsenic	<1
Selenium	<1
Molybdenum	<1
Cadmium	<1
Barium	<1
Lead	<1
Manganese	<1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 10/29/10

Date Received: 10/05/10

Project: Portac WES-1400, F&BI 010060

Date Extracted: 10/12/10

Date Analyzed: 10/13/10

**RESULTS FROM THE ANALYSIS OF THE WATER SAMPLES
FOR TOTAL MERCURY
USING EPA METHOD 1631E**
Results Reported as ug/L (ppb)

<u>Sample ID</u>	<u>Total Mercury</u>
Laboratory ID	
MW-5 010060-01	<0.2
MW-6R 010060-02	<0.2
Method Blank	<0.2

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	MW-5	Client:	Whitman Environmental Sciences
Date Received:	10/05/10	Project:	Portac WES-1400, F&BI 010060
Date Extracted:	10/06/10	Lab ID:	010060-01
Date Analyzed:	10/07/10	Data File:	100709.D
Matrix:	Water	Instrument:	GCMS 6
Units:	ugL (ppb)	Operator:	YA

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	83	50	150
Benzo(a)anthracene-d12	88	50	129

Compounds:	Concentration ugL (ppb)
Naphthalene	<0.1
Acenaphthylene	<0.1
Acenaphthene	<0.1
Fluorene	<0.1
Phenanthrene	<0.1
Anthracene	<0.1
Fluoranthene	<0.1
Pyrene	<0.1
Benz(a)anthracene	<0.1
Chrysene	<0.1
Benzo(a)pyrene	<0.1
Benzo(b)fluoranthene	<0.1
Benzo(k)fluoranthene	<0.1
Indeno(1,2,3-cd)pyrene	<0.1
Dibenz(a,h)anthracene	<0.1
Benzo(g,h,i)perylene	<0.1
1-Methylnaphthalene	<0.1
2-Methylnaphthalene	<0.1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	MW-6R	Client:	Whitman Environmental Sciences
Date Received:	10/05/10	Project:	Portac WES-1400, F&BI 010060
Date Extracted:	10/06/10	Lab ID:	010060-02
Date Analyzed:	10/07/10	Data File:	100710.D
Matrix:	Water	Instrument:	GCMS 6
Units:	ugL (ppb)	Operator:	YA

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	81	50	150
Benzo(a)anthracene-d12	87	50	129

Compounds:	Concentration ugL (ppb)
Naphthalene	1.2
Acenaphthylene	<0.1
Acenaphthene	13 ve
Fluorene	0.83
Phenanthrene	<0.1
Anthracene	<0.1
Fluoranthene	<0.1
Pyrene	<0.1
Benz(a)anthracene	<0.1
Chrysene	<0.1
Benzo(a)pyrene	<0.1
Benzo(b)fluoranthene	<0.1
Benzo(k)fluoranthene	<0.1
Indeno(1,2,3-cd)pyrene	<0.1
Dibenz(a,h)anthracene	<0.1
Benzo(g,h,i)perylene	<0.1
1-Methylnaphthalene	2.4
2-Methylnaphthalene	<0.1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	MW-6R	Client:	Whitman Environmental Sciences
Date Received:	10/05/10	Project:	Portac WES-1400, F&BI 010060
Date Extracted:	10/06/10	Lab ID:	010060-02 1/50
Date Analyzed:	10/11/10	Data File:	101110.D
Matrix:	Water	Instrument:	GCMS 6
Units:	ug/L (ppb)	Operator:	YA

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	118	50	150
Benzo(a)anthracene-d12	98	50	129

Compounds:	Concentration ug/L (ppb)
Naphthalene	<5
Acenaphthylene	<5
Acenaphthene	13
Fluorene	<5
Phenanthrene	<5
Anthracene	<5
Fluoranthene	<5
Pyrene	<5
Benz(a)anthracene	<5
Chrysene	<5
Benzo(a)pyrene	<5
Benzo(b)fluoranthene	<5
Benzo(k)fluoranthene	<5
Indeno(1,2,3-cd)pyrene	<5
Dibenz(a,h)anthracene	<5
Benzo(g,h,i)perylene	<5
1-Methylnaphthalene	<5
2-Methylnaphthalene	<5

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID: Method Blank Client: Whitman Environmental Sciences
Date Received: NA Project: Portac WES-1400, F&BI 010060
Date Extracted: 10/05/10 Lab ID: 00-1588 mb2
Date Analyzed: 10/07/10 Data File: 100706.D
Matrix: Water Instrument: GCMS 6
Units: ug/L (ppb) Operator: YA

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	85	50	150
Benzo(a)anthracene-d12	94	50	129

Compounds:	Concentration ug/L (ppb)
Naphthalene	<0.1
Acenaphthylene	<0.1
Acenaphthene	<0.1
Fluorene	<0.1
Phenanthrene	<0.1
Anthracene	<0.1
Fluoranthene	<0.1
Pyrene	<0.1
Benz(a)anthracene	<0.1
Chrysene	<0.1
Benzo(a)pyrene	<0.1
Benzo(b)fluoranthene	<0.1
Benzo(k)fluoranthene	<0.1
Indeno(1,2,3-cd)pyrene	<0.1
Dibenz(a,h)anthracene	<0.1
Benzo(g,h,i)perylene	<0.1
1-Methylnaphthalene	<0.1
2-Methylnaphthalene	<0.1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis for Semivolatile Phenols By EPA Method 8270D SIM

Client Sample ID: MW-5 Client: Whitman Environmental Sciences
Date Received: 10/05/10 Project: Portac WES-1400, F&BI 010060
Date Extracted: 10/11/10 Lab ID: 010160-01
Date Analyzed: 10/22/10 Data File: 102134.D
Matrix: Water Instrument: GCMS 3
Units: ug/L (ppb) Operator: YA

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
2,4,6-Tribromophenol	99	10	154

Compounds:	Concentration
	ug/L (ppb)
Pentachlorophenol	<0.5

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis for Semivolatile Phenols By EPA Method 8270D SIM

Client Sample ID: MW-6R Client: Whitman Environmental Sciences
Date Received: 10/05/10 Project: Portac WES-1400, F&BI 010060
Date Extracted: 10/11/10 Lab ID: 010160-02
Date Analyzed: 10/22/10 Data File: 102135.D
Matrix: Water Instrument: GCMS 3
Units: ug/L (ppb) Operator: YA

		Lower	Upper
Surrogates:	% Recovery:	Limit:	Limit:
2,4,6-Tribromophenol	105	10	154
Compounds:	Concentration		
Pentachlorophenol	ug/L (ppb)	<0.5	

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 10/29/10

Date Received: 10/05/10

Project: Portac WES-1400, F&BI 010060

**QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER SAMPLES
FOR TOTAL PETROLEUM HYDROCARBONS AS
DIESEL EXTENDED USING METHOD NWTPH-Dx**

Laboratory Code: Laboratory Control Sample Silica Gel

Analyte	Reporting Units	Spike Level	Percent	Percent	Acceptance Criteria	RPD (Limit 20)
			Recovery LCS	Recovery LCSD		
Diesel Extended	ug/L (ppb)	2,500	99	99	58-134	0

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 10/29/10

Date Received: 10/05/10

Project: Portac WES-1400, F&BI 010060

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF WATER SAMPLES
FOR TOTAL METALS USING EPA METHOD 200.8**

Laboratory Code: 010054-01 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Chromium	ug/L (ppb)	20	5.72	85 b	88 b	67-132	3 b
Nickel	ug/L (ppb)	20	4.39	100 b	105 b	73-119	5 b
Copper	ug/L (ppb)	20	2,120	282 b	222 b	50-144	24 b
Zinc	ug/L (ppb)	50	2,060	253 b	228 b	46-148	10
Arsenic	ug/L (ppb)	10	3.45	113 b	111 b	56-167	2 b
Selenium	ug/L (ppb)	5	2.47	111 b	115 b	54-170	4 b
Molybdenum	ug/L (ppb)	50	69.3	126 b	132 b	74-132	5 b
Cadmium	ug/L (ppb)	5	3.01	104 b	105 b	86-118	1 b
Barium	ug/L (ppb)	50	63.3	101 b	127 b	63-133	23 b
Lead	ug/L (ppb)	10	28.1	0 b	0 b	76-125	0
Manganese	ug/L (ppb)	20	308	141 b	121 b	50-150	15 b

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Chromium	ug/L (ppb)	20	104	66-135
Nickel	ug/L (ppb)	20	106	67-134
Copper	ug/L (ppb)	20	105	66-134
Zinc	ug/L (ppb)	50	104	57-135
Arsenic	ug/L (ppb)	10	107	55-128
Selenium	ug/L (ppb)	5	110	59-134
Molybdenum	ug/L (ppb)	50	108	64-134
Cadmium	ug/L (ppb)	5	104	66-135
Barium	ug/L (ppb)	50	105	66-133
Lead	ug/L (ppb)	10	102	67-135
Manganese	ug/L (ppb)	20	101	70-130

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 10/29/10

Date Received: 10/05/10

Project: Portac WES-1400, F&BI 010060

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF WATER SAMPLES FOR
TOTAL MERCURY
USING EPA METHOD 1631E**

Laboratory Code: 010099-01 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery y MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Mercury	ugL (ppb)	0.5	<0.2	97	100	48-160	3

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery y LCS	Acceptance Criteria
Mercury	ugL (ppb)	0.5	107	79-126

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 10/29/10

Date Received: 10/05/10

Project: Portac WES-1400, F&BI 010060

**QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER SAMPLES
FOR PNA'S BY EPA METHOD 8270D SIM**

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Naphthalene	ug/L (ppb)	5	77	81	68-101	5
2-Methylnaphthalene	ug/L (ppb)	5	84	88	48-116	5
1-Methylnaphthalene	ug/L (ppb)	5	85	89	61-105	5
Acenaphthylene	ug/L (ppb)	5	88	90	68-102	2
Acenaphthene	ug/L (ppb)	5	89	92	69-104	3
Fluorene	ug/L (ppb)	5	89	92	63-109	3
Phenanthrene	ug/L (ppb)	5	83	85	66-106	2
Anthracene	ug/L (ppb)	5	76	79	67-112	4
Fluoranthene	ug/L (ppb)	5	82	84	69-116	2
Pyrene	ug/L (ppb)	5	82	85	68-115	4
Benz(a)anthracene	ug/L (ppb)	5	83	83	65-102	0
Chrysene	ug/L (ppb)	5	85	87	66-103	2
Benzo(b)fluoranthene	ug/L (ppb)	5	89	98	66-112	10
Benzo(k)fluoranthene	ug/L (ppb)	5	78	83	64-116	6
Benzo(a)pyrene	ug/L (ppb)	5	83	91	61-108	9
Indeno(1,2,3-cd)pyrene	ug/L (ppb)	5	81	95	50-120	16
Dibenz(a,h)anthracene	ug/L (ppb)	5	75	86	51-115	14
Benzo(g,h,i)perylene	ug/L (ppb)	5	72	85	50-113	17

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 10/29/10

Date Received: 10/05/10

Project: Portac WES-1400, F&BI 010060

**QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER SAMPLES
FOR SEMIVOLATILE PHENOLS BY EPA METHOD 8270D SIM**

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Pentachlorophenol	ug/L (ppb)	7.5	84	89	15-124	6

FRIEDMAN & BRUYA, INC.

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Data Qualifiers & Definitions

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

A1 - More than one compound of similar molecule structure was identified with equal probability.

b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.

ca - The calibration results for this range fell outside of acceptance criteria. The value reported is an estimate.

c - The presence of the analyte indicated may be due to carryover from previous sample injections.

d - The sample was diluted. Detection limits may be raised due to dilution.

ds - The sample was diluted. Detection limits are raised due to dilution and surrogate recoveries may not be meaningful.

dv - Insufficient sample was available to achieve normal reporting limits and limits are raised accordingly.

fb - Analyte present in the blank and the sample.

fc - The compound is a common laboratory and field contaminant.

hr - The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. The variability is attributed to sample inhomogeneity.

ht - Analysis performed outside the method or client-specified holding time requirement.

ip - Recovery fell outside of normal control limits. Compounds in the sample matrix interfered with the quantitation of the analyte.

j - The result is below normal reporting limits. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The analyte result in the laboratory control sample is out of control limits. The reported concentration should be considered an estimate.

jr - The rpd result in laboratory control sample associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

lc - The presence of the compound indicated is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

pc - The sample was received in a container not approved by the method. The value reported should be considered an estimate.

pr - The sample was received with incorrect preservation. The value reported should be considered an estimate.

ve - Estimated concentration calculated for an analyte response above the valid instrument calibration range. A dilution is required to obtain an accurate quantification of the analyte.

vo - The value reported fell outside the control limits established for this analyte.

x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

09060

SAMPLE CHAIN OF CUSTODY

ME 10/05710

A_{TG} /

Send Report To Mark L. Johnson
Company Edmundson Services
Address 5225 35th Ave NE
City, State, ZIP Seattle, WA 98103
Phone # 206-583-3555 Fax #

SAMPLERS (signature)	
PROJECT NAME/NO.	PO #
<i>Project</i>	<i>2055-100</i>
REMARKS	<i>Sample to Glomer, on the 10th floor, 100</i>

Page #	of	7
TURNAROUND TIME		
<input type="checkbox"/> Standard (2 Weeks) <input type="checkbox"/> RUSH Rush charges authorized by: _____		
SAMPLE DISPOSAL		
<input type="checkbox"/> Dispense after 30 days <input type="checkbox"/> Return samples <input type="checkbox"/> Will call with instructions		

Samples received at 14 °C