

5508 35th Avenue NE, Suite 108 Seattle, WA 98105

Phone: (206) 523-3505 Whitenviro@yahoo.com

March 25, 2013

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

Attention: Mr. Gary Takahashi

RE: First Quarter 2013 Groundwater Monitoring

Former Portac Inc. Site Tacoma, Washington

Dear Mr. Takahashi:

As you have authorized, Whitman Environmental Sciences (WES) has conducted additional groundwater monitoring at the former Portac site. This work was conducted to update information about the site as part of the Washington Department of Ecology Voluntary Cleanup Program (VCP). This monitoring event is the first new groundwater sampling event conducted since the 3rd Quarter of 2010. This letter addresses the groundwater monitoring procedures and laboratory analyses on groundwater samples.

Groundwater Monitoring Activities

The current groundwater monitoring included a single visit to the site to measure water levels and obtain groundwater samples. 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 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.

Water Level Measurements

Water levels were measured in each of the seven sawmill area wells. At the time, the water level in Wapato Creek was at a relatively low tidal phase. Water level measurements were taken using a manual Solinst electronic water level meter on January 31st, 2013. 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.

Groundwater Sampling and Analyses

Groundwater samples were obtained from all seven of the monitoring wells on January 31st, 2013. Each well was purged of a minimum of six standing water volumes using a peristaltic pump and dedicated polyethylene tubing. All of the wells provided adequate recharge for continuous pumping. 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 during the purging and immediately before sampling.

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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 and total arsenic. 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

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 6.2 to 6.75, which would be considered typical of groundwater. However, the purge water from monitoring well MW-2R had a measured pH of 11.4 to 11.75, highly alkaline. Groundwater temperatures varied from 53° to 57° F.

Laboratory Analytical Results

The laboratory analytical report is attached to this letter. The testing reported concentrations of pentachlorophenol in the samples from two of the seven monitoring wells; MW-2R in the former dip tank area and MW-5 in the former planer building area. Monitoring well MW-2R contained a reported concentration of 15 ug/l (units equivalent to parts per billion (ppb)). The reported concentration exceeds the site specific MTCA Method B cleanup level of 8.2 ug/l, but is considerably lower the results of prior sampling from this well, which have ranged from 76 to 37 ug/l.

The sample from monitoring well MW-5 contained a pentachlorophenol concentration of 1.3 ug/l. The reported concentration is below the site specific Method B cleanup level. Prior sample results have ranged from 22 ug/l to below the detection limit of 0.5 ug/l. After the initial sampling of this well in March 2009, no sample has exceeded the site specific Method B cleanup level.

Pentachlorophenol was not detected in any of the other five sampled monitoring wells.

Samples from five of the seven monitoring wells contained concentrations of arsenic. Arsenic concentrations ranged from 1.6 ug/l in well MW-2R to 18.0 ug/l in MW-1. Monitoring wells MW-5 and B-5R did not contain detectable arsenic.

The reported concentrations of arsenic in MW-1, MW-3 and MW-4 exceed the MTCA Method A groundwater cleanup level of 5 ug/l. These wells are located on the western edge of the site, around the area of the former dip tank. The reported concentrations in these wells are consistent with prior sampling rounds. Samples from MW-2R, in the dip tank area have previously contained arsenic levels ranging from 2.85 to 118 ug/l, more variable than the other wells in this area. The concentration in the current sample is lower than any previously reported level.

Groundwater Level Measurements and Inferred Contour Plots

Figure 2 includes a plot of the inferred groundwater contours representing measurements of the groundwater surface taken at the beginning of the sampling event. 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

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the corresponding level in the wells. The contour plots shown in Figure 2 represent conditions while near a low response to the tidal cycle.

Figure 2 shows an overall trend of groundwater migration to the northwest, with mounding in the vicinity of the former dip tank. This could be a result of seasonal precipitation and the gravel surface over the dip tank excavation, while the surrounding area remains asphalt paved. There is a relatively flat horizontal gradient of approximately 0.001 ft/ft over the monitored area. Monitoring well B-5R consistently shows water levels that are lower than any other monitoring point on the site.

Conclusions

The current 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 less than half that of any previous sample from this well, suggesting natural attenuation has occurred since the prior sampling in 2009 and 2010. Samples from surrounding wells MW-1, MW-3 or MW-4 do not contain detectable pentachlorophenol.

Pentachlorophenol was detected in monitoring well MW-5, at the former planer building spray booth area. 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 less than the detection limit of 0.5 ug/l. 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. But since that time, no sample has exceeded the site specific Method B cleanup level.

The purge water from monitoring well MW-2R evidenced elevated pH of 11.4 to 11.75. 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 6.4 to 6.7, indicating that migration is not occurring.

Concentrations of arsenic were also found to exceed MTCA groundwater cleanup criteria in some of the wells. 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 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.

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, attorneys 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 - 8:00 a.m. January 31st, 2013

Laboratory Analytical Reports - Friedman & Bruya, Inc.

Monitoring Well	Measuring Point Elev.	Time	Depth to Water	Water Elevation
MW-1	99.56	7:53	9.67	89.89
MW-2R	100.07	7:55	6.42	93.65
MW-3	99.67	7:56	9.22	90.45
MW-4	100.00	7:59	9.88	90.12
MW-5	98.99	8:05	8.03	90.96
MW-6R	100.49	7:50	10.07	90.42
B-5R	99.77	8:40	10.11	89.66

TABLE 2 Portac Inc. January 31, 2013 Groundwater Sampling Current Sample Analytical Results

WES-1400

Monitoring Well I.D.	Pentach	lorophenol (ug/l)	Total Arsenic (ug/l)
MW-1		ND (<0.5)	18.0
MW-2R		15	1.60
MW-3		ND (<0.5)	12.0
MW-4		ND (<0.5)	10.0
MW-5		1.3	ND (<1)
MW-6R		ND (<0.5)	2.52
B5-R		ND (<0.5)	ND (<1)
MTCA Groundwater Cleanup Criteria (ug/l)	Site Specific Method B -	8.2	Method A - 5

Table 2 Notes:

ND (<XXX) - Analyzed parameter not detected above the noted concentration. Pentachlorophenol by EPA Method 8270D SIM $\,$

Total arsenic by EPA Method 200.8.

Washington State MTCA Method B site specific cleanup criteria for pentachlorophenol based on a surface water ARAR National Toxics Rule, 40 CFR 131, based on marine chronic values for protection of human health.

Table 3 - Summary of Groundwater Monitoring Data Portac, Inc.

Monitoring Well - M	W-1	1		1									
		Model Toxics Control Act	;	Sample Da	te				VCP Comp	liance Samp	oles		
Analyzed Parameter		Groundwater Cleanup Crite		5-7-2008 (CDM)	7-9-2008 (CDM)	9-23-2008 (CDM)	3-5-2009	4-7-2009	12-3-2009	3-16-2010	6-30-2010	8-30-2010	1-31-2013
Pentachlorophenol	(ug/l)	Site Method B -	8.2	ND (<0.25)	0.69	ND (<0.5)	ND (<3.4) ¹	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<0.5)
Other Semi-Volatile Organ	ic Compounds	1		<u> </u>		1				<u>I</u>	<u> </u>	l.	<u>I</u>
Napthalene	(ug/l)	Method A -	160				ND (<2)		ND (<0.1)	ND (<0.1)	ND (<0.1)	ND (<0.1)	
Acenaphthylene	(ug/l)						ND (<2)		ND (<0.1)	ND (<0.1)	ND (<0.1)	ND (<0.1)	
Acenaphthene	(ug/l)	Method B -	960				ND (<2)		ND (<0.1)	ND (<0.1)	ND (<0.1)	ND (<0.1)	
Fluorene	(ug/l)	Method B -	640				ND (<2)		ND (<0.1)	ND (<0.1)	ND (<0.1)	ND (<0.1)	
Phenanthrene	(ug/l)						ND (<2)		ND (<0.1)	ND (<0.1)	ND (<0.1)	ND (<0.1)	
Anthracene	(ug/l)	Method B -	4,800				ND (<2)		ND (<0.1)	ND (<0.1)	ND (<0.1)	ND (<0.1)	
Fluoranthene	(ug/l)	Method B -	640				ND (<2)		ND (<0.1)	ND (<0.1)	ND (<0.1)	ND (<0.1)	
Pyrene	(ug/l)	Method B -	480				ND (<2)		ND (<0.1)	ND (<0.1)	ND (<0.1)	ND (<0.1)	
Benz(a)anthracene	(ug/l)	_* TEC					ND (<2)		ND (<0.1)	ND (<0.1)	ND (<0.1)	ND (<0.1)	
Chrysene	(ug/l)	-* TEC					ND (<2)		ND (<0.1)	ND (<0.1)	ND (<0.1)	ND (<0.1)	
Benzo(a)pyrene	(ug/l)	Method A - Method B -	0.1 0.012*				ND (<2)		ND (<0.1)	ND (<0.1)	ND (<0.1)	ND (<0.1)	
Benzo(b)fluoranthene	(ug/l)	-* TEC					ND (<2)		ND (<0.1)	ND (<0.1)	ND (<0.1)	ND (<0.1)	
Benzo(k)fluoranthene	(ug/l)	-* TEC					ND (<2)		ND (<0.1)	ND (<0.1)	ND (<0.1)	ND (<0.1)	
Indeno(1,2,3-cd)pyren	e (ug/l)	-* TEC					ND (<2)		ND (<0.1)	ND (<0.1)	ND (<0.1)	ND (<0.1)	
Dibenz(a,h)anthracene	e (ug/l)	-* TEC		_	-	_	ND (<2)		ND (<0.1)	ND (<0.1)	ND (<0.1)	ND (<0.1)	
Benzo(g,h,l)perylene	(ug/l)						ND (<2)		ND (<0.1)	ND (<0.1)	ND (<0.1)	ND (<0.1)	
1 Methylnaphthalene	(ug/l)								ND (<0.1)	ND (<0.1)	ND (<0.1)	ND (<0.1)	
2 Methylnaphthalene	(ug/l)	Method B -	32				ND (<2)		ND (<0.1)	ND (<0.1)	ND (<0.1)	ND (<0.1)	
Calculated TEC ²	(ug/l)	Method A -	0.1 ²						0.1 ²	0.1 ²	0.1 ²	0.1 ²	
Total Petroleum Hydrocarl	bons												
Gasoline Range	(ug/l)	Method A -	1,000 ³										
Diesel Range	(ug/l)	Method A -	500	ND (<630)	ND (<250)	ND (<200)			ND (<50)	ND (<50)	ND (<50)	ND (<50)	
Motor Oil Range	(ug/l)	Method A -	500	ND (<630)	ND (<500)	ND (<500)			ND (<250)	ND (<250)	ND (<250)	ND (<250)	
Regulated Metals													
Arsenic	(ug/l)	Method A - Method B -	5 8						25.2	26.9	22.2	18.7	18.0
Barium	(ug/l)	Method B -	3,200						203	181	192	187	
Cadmium	(ug/l)	Method A - Method B -	5 8				-		ND (<1)	ND (<1)	ND (<1)	ND (<1)	
Chromium	(ug/l)	Method A -	50						ND (<10)	8.92	4.55	4.53	
Copper	(ug/l)	Method B -	590						ND (<10)	ND (<5)	1.72	ND (<1)	
Lead	(ug/l)	Method A -	15						ND (<10)	ND (<5)	ND (<1)	ND (<1)	
Manganese	(ug/l)	Method B -	2,200						6,680	6,440	6,610	7,260	
Mercury	(ug/l)	Method A - Method B -	2 4.8						ND (<0.2)	ND (<0.2)	ND (<0.2)	ND (<0.2)	
Molybdenum	(ug/l)	Method B -	80						ND (<10)	ND (<5)	3.77	1.31	
Nickel	(ug/l)	Method B -	3,200						ND (<10)	ND (<5)	3.50	2.87	
Selenium	(ug/l)	Method B -	80						ND (<10)	ND (<5)	5.83	4.93	
Zinc	(ug/l)	Method B -	4,800				1		ND (<10)	ND (<5)	ND (<1)	ND (<1)	

Table 3 - Summary of Groundwater Monitoring Data (Continued) Portac, Inc.

		Model Toxics Control Act	5		2R installed ch was destr				VCP Compliance Samples					
Analyzed Parameter		Groundwater Cleanup Crit						5-19-2009	12-4-2009	3-17-2010	6-30-2010	8-30-2010	1-31-2013	
Pentachlorophenol	(ug/l)	Site Method B -	8.2					69	61	66	37	76	15	
Other Semi-Volatile Organ	nic Compound	s		_ !	<u>.</u>		<u>.</u>	<u>. </u>			•			
Napthalene	- (u		160					2.5³	0.48	ND (<0.1)	ND (<0.1)	0.30		
Acenaphthylene	(u								ND (<0.1)	ND (<0.1)	ND (<0.1)	ND (<0.1)		
Acenaphthene	(ug		960						0.72	1.9	0.21	0.48		
Fluorene	(u		640						0.45	0.58	0.12	0.23		
Phenanthrene	(ug								0.14	1.2	ND (<0.1)	0.20		
Anthracene	(u		4,800						ND (<0.1)	ND (<0.1)	ND (<0.1)	ND (<0.1)		
Fluoranthene	(ug		640						0.26	0.32	0.55	0.49		
Pyrene	(u		480						0.16	0.20	0.36	0.30		
Benz(a)anthracene	(ug								ND (<0.1)	ND (<0.1)	ND (<0.1)	ND (<0.1)		
Chrysene	(ug								ND (<0.1)	ND (<0.1)	ND (<0.1)	ND (<0.1)		
Benzo(a)pyrene	(u		0.1 0.012*				-		ND (<0.1)	ND (<0.1)	ND (<0.1)	ND (<0.1)		
Benzo(b)fluoranthene	e (u	/I) _* TEC							ND (<0.1)	ND (<0.1)	ND (<0.1)	ND (<0.1)		
Benzo(k)fluoranthene	e (u	/I) _* TEC							ND (<0.1)	ND (<0.1)	ND (<0.1)	ND (<0.1)		
Indeno(1,2,3-cd)pyrer	ne (u	/I) _* TEC							ND (<0.1)	ND (<0.1)	ND (<0.1)	ND (<0.1)		
Dibenz(a,h)anthracen	e (u	/I) _* TEC		-	_	-	-	-	ND (<0.1)	ND (<0.1)	ND (<0.1)	ND (<0.1)		
Benzo(g,h,l)perylene	(u	/l) –							ND (<0.1)	ND (<0.1)	ND (<0.1)	ND (<0.1)		
1 Methylnaphthalene	(u								0.34	0.51	ND (<0.1)	0.20		
2 Methylnaphthalene	(u	/I) Method B -	32						0.24	0.11	ND (<0.1)	ND (<0.1)		
Calculated TEC ²	(ug/) Method A -	0.1 ²						0.1 ²	0.1 ²	0.1 ²	0.1 ²		
Total Petroleum Hydrocar	bons													
Gasoline Range	(ug/l)	Method A -	1,000 ³											
Diesel Range	(ug/l)	Method A -	500					1,000	ND (<50)	ND (<50)	ND (<50)	54		
Motor Oil Range	(ug/l)	Method A -	500					4,900	ND (<250)	ND (<250)	ND (<250)	ND (<250)		
Regulated Metals														
Arsenic	(ug/l)	Method A - Method B -	5 8					12.1	118	16.6	2.85	7.11	1.6	
Barium	(ug/l)	Method B -	3,200						33.3	67.3	194	102		
Cadmium	(ug/l)	Method A - Method B -	5 8					ND (<1)	ND (<1)	ND (<1)	ND (<1)	ND (<1)		
Chromium	(ug/l)	Method A -	50					12.6	ND (<5)	4.5	7.13	1.39		
Copper	(ug/l)	Method B -	590						63.7	29.6	78.6	52.9		
Lead	(ug/l)	Method A -	15					1.13	ND (<5)	ND (<1)	ND (<1)	1.21		
Manganese	(ug/l)	Method B -	2,200						71.7	36.9	4.91	9.74		
Mercury	(ug/l)	Method A - Method B -	2 4.8					ND (<0.2)	ND (<0.2)	ND (<0.2)	ND (<0.2)	ND (<0.2)		
Molybdenum	(ug/l)	Method B -	80						41.8	17.5	12.3	33.9		
Nickel	(ug/l)	Method B -	3,200						ND (<5)	3.88	14.1	21.3		
Selenium	(ug/l)	Method B -	80						ND (<5)	ND (<1)	ND (<1)	1.13		
Zinc	(ug/l)	Method B -	4,800						ND (<5)	ND (<1)	ND (<1)	2.06		

Table 3 - Summary of Groundwater Monitoring Data (Continued) Portac, Inc.

Monitoring Well - MW-3	3												
		Model Toxics Control Act		Sample Da	te				VCP Comp	liance Samp	oles		
Analyzed Parameter		Groundwater Cleanup Crite	eria¹			9-23-2008 (CDM)	3-5-2009	4-7-2009	12-3-2009	3-17-2010	6-30-2010	8-30-2010	1-31-2013
Pentachlorophenol	(ug/l)	Site Method B -	8.2			ND (<0.5)	ND (<3.4) ¹	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<0.5)
Other Semi-Volatile Organic O	Compounds	Į.		ı	ı				l		ı		
Napthalene	(ug/l)	Method A -	160			<u> </u>	ND (<2)		ND (<0.1)	ND (<0.1)	0.21	ND (<0.1)	
Acenaphthylene	(ug/l)						ND (<2)		ND (<0.1)	ND (<0.1)	ND (<0.1)	ND (<0.1)	
Acenaphthene	(ug/l)	Method B -	960				ND (<2)		ND (<0.1)	ND (<0.1)	ND (<0.1)	ND (<0.1)	
Fluorene	(ug/l)	Method B -	640				ND (<2)		ND (<0.1)	ND (<0.1)	ND (<0.1)	ND (<0.1)	
Phenanthrene	(ug/l)						ND (<2)		ND (<0.1)	ND (<0.1)	ND (<0.1)	ND (<0.1)	
Anthracene	(ug/l)	Method B -	4,800				ND (<2)		ND (<0.1)	ND (<0.1)	ND (<0.1)	ND (<0.1)	
Fluoranthene	(ug/l)	Method B -	640				ND (<2)		ND (<0.1)	ND (<0.1)	ND (<0.1)	ND (<0.1)	
Pyrene	(ug/l)	Method B -	480				ND (<2)		ND (<0.1)	ND (<0.1)	ND (<0.1)	ND (<0.1)	
Benz(a)anthracene	(ug/l)	-* TEC	100				ND (<2)		ND (<0.1)	ND (<0.1)	ND (<0.1)	ND (<0.1)	
Chrysene	(ug/l)	-* TEC					ND (<2)		ND (<0.1)	ND (<0.1)	ND (<0.1)	ND (<0.1)	
Benzo(a)pyrene	(ug/l)	Method A - Method B -	0.1 0.012*				ND (<2)		ND (<0.1)	ND (<0.1)	ND (<0.1)	ND (<0.1)	
Benzo(b)fluoranthene	(ug/l)	-* TEC					ND (<2)		ND (<0.1)	ND (<0.1)	ND (<0.1)	ND (<0.1)	
Benzo(k)fluoranthene	(ug/l)	-* TEC					ND (<2)		ND (<0.1)	ND (<0.1)	ND (<0.1)	ND (<0.1)	
Indeno(1,2,3-cd)pyrene	(ug/l)	-* TEC					ND (<2)		ND (<0.1)	ND (<0.1)	ND (<0.1)	ND (<0.1)	
Dibenz(a,h)anthracene	(ug/l)	-* TEC		_	_	_	ND (<2)		ND (<0.1)	ND (<0.1)	ND (<0.1)	ND (<0.1)	
Benzo(g,h,l)perylene	(ug/l)	-* TEC					ND (<2)		ND (<0.1)	ND (<0.1)	ND (<0.1)	ND (<0.1)	
1 Methylnaphthalene	(ug/l)								ND (<0.1)	ND (<0.1)	ND (<0.1)	ND (<0.1)	
2 Methylnaphthalene	(ug/l)	Method B -	32				ND (<2)		ND (<0.1)	ND (<0.1)	ND (<0.1)	ND (<0.1)	
Calculated TEC ²	(ug/l)	Method A -	0.1 ²						0.1 ²	0.1 ²	0.1 ²	0.1 ²	
Total Petroleum Hydrocarbon		l		l .	l .				I		I	I	
Gasoline Range	(ug/l)	Method A -	1,000³										
Diesel Range	(ug/l)	Method A -	500			ND (<250)			ND (<50)	ND (<50)	ND (<50)	ND (<50)	
Motor Oil Range	(ug/l)	Method A -	500			ND (<500)			ND (<250)	ND (<250)	ND (<250)	ND (<250)	
Regulated Metals		l		l .	l .				, ,	. ,	. ,	, ,	
Arsenic	(ug/l)	Method A - Method B -	5 8						10.1	11.3	13.7	8.23	12.0
Barium	(ug/l)	Method B -	3,200						102	78.2	77.4	88.5	
Cadmium	(ug/l)	Method A - Method B -	5 8					-	ND (<1)	ND (<5)	ND (<1)	ND (<1)	
Chromium	(ug/l)	Method A -	50						ND (<10)	6.27	3.95	3.00	
Copper	(ug/l)	Method B -	590						ND (<10)	ND (<5)	1.14	ND (<1)	
Lead	(ug/l)	Method A -	15						ND (<10)	ND (<5)	ND (<1)	ND (<1)	
Manganese	(ug/l)	Method B -	2,200						2,350	2,000	2,030	2,570	
Mercury	(ug/l)	Method A - Method B -	2 4.8					-	ND (<0.2)	ND (<0.2)	ND (<0.2)	ND (<0.2)	
Molybdenum	(ug/l)	Method B -	80						ND (<10)	ND (<5)	1.13	ND (<1)	
Nickel	(ug/l)	Method B -	3,200						ND (<10)	ND (<5)	2.59	1.78	
Selenium	(ug/l)	Method B -	80						ND (<10)	ND (<5)	3.52	3.74	
Zinc	(ug/l)	Method B -	4,800						ND (<10)	ND (<5)			

Table 3 - Summary of Groundwater Monitoring Data (Continued) Portac, Inc.

			Model Toxic	es	Sample Da	ite				VCP Compliance Samples					
Analyzed Parameter			Groundwater Cleanup Criteria ¹				9-23-2008 (CDM)	3-5-2009	4-7-2009	12-3-2009	3-17-2010	6-30-2010	8-30-2010	1-31-2013	
Pentachlorophenol	(ug/l)		Site Method B -	8.2			ND (<0.5)	ND (<3.4) ¹	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<0.5)	
Other Semi-Volatile Organ	nic Compou	ınds			1	1	L			l	l	1	l	<u>I</u>	
Napthalene			Method A -	160			ND (<0.1)	ND (<2)		ND (<0.1)	ND (<0.1)	ND (<0.1)	ND (<0.1)		
Acenaphthylene		(ug/l)					ND (<0.1)	ND (<2)		ND (<0.1)	ND (<0.1)	ND (<0.1)	ND (<0.1)		
Acenaphthene		(ug/l)	Method B -	960			ND (<0.1)	ND (<2)		ND (<0.1)	ND (<0.1)	ND (<0.1)	ND (<0.1)		
Fluorene		(ug/l)	Method B -	640			ND (<0.1)	ND (<2)		ND (<0.1)	ND (<0.1)	ND (<0.1)	ND (<0.1)		
Phenanthrene		(ug/l)		0.10			ND (<0.1)	ND (<2)		ND (<0.1)	ND (<0.1)	ND (<0.1)	ND (<0.1)		
Anthracene		(ug/l)	Method B -	4,800			ND (<0.1)	ND (<2)		ND (<0.1)	ND (<0.1)	ND (<0.1)	ND (<0.1)		
Fluoranthene		(ug/l)	Method B -	640			ND (<0.1)	ND (<2)		ND (<0.1)	ND (<0.1)	ND (<0.1)	ND (<0.1)		
Pyrene		(ug/l)	Method B -	480			ND (<0.1)	ND (<2)		ND (<0.1)	ND (<0.1)	ND (<0.1)	ND (<0.1)		
Benz(a)anthracene		(ug/l)	_* TE(ND (<0.1)	ND (<2)		ND (<0.1)	ND (<0.1)	ND (<0.1)	ND (<0.1)		
Chrysene			_* TE(ND (<0.1)	ND (<2)		ND (<0.1)	ND (<0.1)	ND (<0.1)	ND (<0.1)		
Benzo(a)pyrene		(ug/l) (ug/l)	Method A - Method B -	0.1 0.012*			ND (<0.1)	ND (<2)		ND (<0.1)	ND (<0.1)	ND (<0.1)	ND (<0.1)		
Benzo(b)fluoranthene	e ((ug/l)	_* TE(ND (<0.1)	ND (<2)		ND (<0.1)	ND (<0.1)	ND (<0.1)	ND (<0.1)		
Benzo(k)fluoranthene		(ug/l)	_* TE(ND (<0.1)	ND (<2)		ND (<0.1)	ND (<0.1)	ND (<0.1)	ND (<0.1)		
Indeno(1,2,3-cd)pyrer		(ug/l)	_* TE(ND (<0.1)	ND (<2)		ND (<0.1)	ND (<0.1)	ND (<0.1)	ND (<0.1)		
Dibenz(a,h)anthracen	-	(ug/l)	_* TE(_	ND (<0.1)	ND (<2)		ND (<0.1)	ND (<0.1)	ND (<0.1)	ND (<0.1)		
Benzo(g,h,l)perylene	•	(ug/l)	<u> </u>			<u>-</u>	ND (<0.1)	ND (<2)		ND (<0.1)	ND (<0.1)	ND (<0.1)	ND (<0.1)		
1 Methylnaphthalene		(ug/l)					ND (<0.1)			ND (<0.1)	ND (<0.1)	ND (<0.1)	ND (<0.1)		
2 Methylnaphthalene		(ug/l)	Method B -	32			ND (<0.1)	ND (<2)		ND (<0.1)	ND (<0.1)	ND (<0.1)	ND (<0.1)		
Calculated TEC ²	(ug/l)	ug/i)	Method A -	0.1 ²			0.1 ³			0.1 ²	0.1 ²	0.1 ²	0.1 ²		
Total Petroleum Hydrocar			Welliod A -	0.1			0.1			0.1	0.1	0.1	0.1		
Gasoline Range		1	Method A -	1,000 ³	T					Ι		I		l	
	(ug/l)									160					
Diesel Range	(ug/l)		Method A -	500			ND (<250)				ND (<50)	ND (<50)	ND (<50)		
Motor Oil Range	(ug/l)		Method A -	500			ND (<500)			ND (<250)	ND (<250)	ND (<250)	ND (<250)		
Regulated Metals Arsenic	(ug/l)		Method A - Method B -	5 8						10.2	12.5	13.1	10.3	10.0	
Barium	(ug/l)	1	Method B -	3,200						213	161	122	153		
Cadmium	(ug/l)		Method A - Method B -	5 8						ND (<1)	ND (<5)	ND (<1)	ND (<1)		
Chromium	(ug/l)		Method A -	50						ND (<10)	ND (<5)	2.06	2.35		
Copper	(ug/l)		Method B -	590						ND (<10)	ND (<5)	2.00	1.98		
Lead	(ug/l)		Method A -	15						ND (<10)	ND (<5)	ND (<1)	1.06		
Manganese	(ug/l)		Method B -	2,200						6,260	5,410	3,960	4,810		
Mercury	(ug/l)		Method A - Method B -	2 4.8						ND (<0.2)	ND (<0.2)	ND (<0.2)	ND (<0.2)		
Molybdenum	(ug/l)		Method B -	80						ND (<10)	ND (<5)	ND (<1)	ND (<1)		
Nickel	(ug/l)		Method B -	3,200						ND (<10)	ND (<5)	2.14	2.03		
Selenium	(ug/l)		Method B -	80						ND (<10)	ND (<5)	5.81	6.97		
Zinc	(ug/l)		Method B -	4,800						ND (<10)	ND (<5)	ND (<1)	ND (<1)		

Table 3 - Summary of Groundwater Monitoring Data (Continued) Portac, Inc.

		Model Toxics Control Act	;	Sample Da	nte				VCP Comp	liance Samp	oles		
Analyzed Parameter		Groundwater Cleanup Crite						3-5-2009	12-4-2009	3-17-2010	6-30-2010	8-30-2010	1-31-2013
Pentachlorophenol	(u	y/I) Site Method B -	8.2					22	1.5	4.7	2.4	ND (<0.5)	1.3
Other Semi-Volatile Organ	ic Compoun	ds		ı	I	1	1	I	l	l		l	<u> </u>
Napthalene	(ug		160					ND (<2)	ND (<0.1)	ND (<0.1)	ND (<0.1)	ND (<0.1)	
Acenaphthylene	(u	, ,						ND (<2)	ND (<0.1)	ND (<0.1)	ND (<0.1)	ND (<0.1)	
Acenaphthene	(u		960					ND (<2)	ND (<0.1)	ND (<0.1)	ND (<0.1)	ND (<0.1)	
Fluorene	(u:	, ,	640					ND (<2)	ND (<0.1)	ND (<0.1)	ND (<0.1)	ND (<0.1)	
Phenanthrene	(u;	, ,						ND (<2)	ND (<0.1)	ND (<0.1)	ND (<0.1)	ND (<0.1)	
Anthracene	(u:		4,800					ND (<2)	ND (<0.1)	ND (<0.1)	ND (<0.1)	ND (<0.1)	
		, ,	640					ND (<2)	ND (<0.1)	ND (<0.1)		ND (<0.1)	
Fluoranthene	(u <u>ı</u>	<u>, , </u>	480					ND (<2)	ND (<0.1) ND (<0.1)	ND (<0.1) ND (<0.1)	ND (<0.1) ND (<0.1)	ND (<0.1) ND (<0.1)	
Pyrene	(u	, , <u> </u>								, ,			
Benz(a)anthracene	(u							ND (<2)	ND (<0.1)	ND (<0.1)	ND (<0.1)	ND (<0.1)	
Chrysene		J/I) –* TEC						ND (<2)	ND (<0.1)	ND (<0.1)	ND (<0.1)	ND (<0.1)	
Benzo(a)pyrene	(u	y/I) Method A - Method B -	0.1 0.012*					ND (<2)	ND (<0.1)	ND (<0.1)	ND (<0.1)	ND (<0.1)	
Benzo(b)fluoranthene	(u	g/I) _* TEC						ND (<2)	ND (<0.1)	ND (<0.1)	ND (<0.1)	ND (<0.1)	
Benzo(k)fluoranthene	(ug	μ/I) –* TEC						ND (<2)	ND (<0.1)	ND (<0.1)	ND (<0.1)	ND (<0.1)	
Indeno(1,2,3-cd)pyren	e (u	ı/l) –* TEC						ND (<2)	ND (<0.1)	ND (<0.1)	ND (<0.1)	ND (<0.1)	
Dibenz(a,h)anthracen				_	_	_	_	ND (<2)	ND (<0.1)	ND (<0.1)	ND (<0.1)	ND (<0.1)	
Benzo(g,h,l)perylene		g/l) –						ND (<2)	ND (<0.1)	ND (<0.1)	ND (<0.1)	ND (<0.1)	
1 Methylnaphthalene		g/l)						ND (<2)	ND (<0.1)	ND (<0.1)	ND (<0.1)	ND (<0.1)	
2 Methylnaphthalene	(ug		32					ND (<2)	ND (<0.1)	ND (<0.1)	ND (<0.1)	ND (<0.1)	
Calculated TEC ²	(ug		0.1 ²					0.1 ²	0.12	0.1 ²	0.12	0.12	
Total Petroleum Hydrocar		, 1		1	<u> </u>	1	<u> </u>	1	<u>I</u>	<u>I</u>		<u>I</u>	<u> </u>
Gasoline Range	(ug/l)	Method A -	1,000³										
Diesel Range	(ug/l)	Method A -	500						ND (<50)	ND (<50)	ND (<50)	ND (<50)	
Motor Oil Range	(ug/l)	Method A -	500						ND (<250)	ND (<250)	ND (<250)	ND (<250)	
Regulated Metals	(4.9.1)			ı	1	1	1	<u>I</u>	()	(=== /	(===)	()	
Arsenic	(ug/l)	Method A - Method B -	5 8						ND (<5)	1.29	1.35	1.01	ND (<1)
Barium	(ug/l)	Method B -	3,200						41.7	28.8	25.1	28.1	
Cadmium	(ug/l)	Method A - Method B -	5 8						ND (<1)	ND (<1)	ND (<1)	ND (<1)	
Chromium	(ug/l)	Method A -	50						27.0	9.97	11.0	16.5	
Copper	(ug/l)	Method B -	590						29.9	7.51	8.23	11.1	
Lead	(ug/l)	Method A -	15						ND (<5)	ND (<1)	ND (<1)	ND (<1)	
Manganese	(ug/l)	Method B -	2,200						144	126	92.2	97.9	
Mercury	(ug/l)	Method A - Method B -	2 4.8						0.22	ND (<0.2)	ND (<0.2)	ND (<0.2)	
Molybdenum	(ug/l)	Method B -	80						ND (<5)	2.44	2.84	3.02	
Nickel	(ug/l)	Method B -	3,200						ND (<5)	1.83	1.71	1.59	
Selenium	(ug/l)	Method B -	80						ND (<5)	ND (<1)	ND (<1)	ND (<1)	
Zinc	(ug/l)	Method B -	4,800						5.45	ND (<1)	ND (<1)	ND (<1)	

Table 3 - Summary of Groundwater Monitoring Data (Continued) Portac, Inc.

Monitoring Well - M	****UK		Model Toxics		Note: MW-	6R installed	4/22/2009 a	s a replacen	ment for	VCP Comp	liance Samp	oles		
			Control Act			ch was destr		•						
Analyzed Parameter			Groundwater Cleanup Crite	ria¹					5-19-2009	12-4-2009	3-16-2010	6-30-2010	10-5-2010	1-31-2013
Pentachlorophenol	(ug/l)		Site Method B -	8.2					ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<0.5)
Other Semi-Volatile Organ		nounds			<u> </u>		<u> </u>	<u> </u>						
Napthalene		(ug/l)	Method A -	160						0.27	11	8.2	1.2	
Acenaphthylene		(ug/l)								ND (<0.1)	ND (<0.1)	ND (<0.1)	ND (<0.1)	
Acenaphthene		(ug/l)	Method B -	960						14	9.5	8.4	13	
Fluorene		(ug/l)	Method B -	640						0.14	0.73	0.59	0.83	
Phenanthrene		(ug/l)		010						ND (<0.1)	ND (<0.1)	ND (<0.1)	ND (<0.1)	
Anthracene		(ug/l)	Method B -	4,800						ND (<0.1)	ND (<0.1)	ND (<0.1)	ND (<0.1)	
Fluoranthene		(ug/l)	Method B -	640						ND (<0.1)	ND (<0.1)	ND (<0.1)	ND (<0.1)	
Pyrene		(ug/l)	Method B -	480						ND (<0.1)	ND (<0.1)	ND (<0.1)	ND (<0.1)	
Benz(a)anthracene			-* TEC	+00						ND (<0.1)	ND (<0.1)	ND (<0.1)	ND (<0.1)	
· /		(ug/l)	-* TEC							ND (<0.1)	ND (<0.1)	ND (<0.1)	ND (<0.1)	
Chrysene Benzo(a)pyrene		(ug/l) (ug/l)	Method A - Method B -	0.1 0.012*						ND (<0.1)	ND (<0.1)	ND (<0.1)	ND (<0.1)	
Benzo(b)fluoranthene	e	(ug/l)	-* TEC							ND (<0.1)	ND (<0.1)	ND (<0.1)	ND (<0.1)	
Benzo(k)fluoranthene		(ug/l)	-* TEC							ND (<0.1)	ND (<0.1)	ND (<0.1)	ND (<0.1)	
Indeno(1,2,3-cd)pyrer		(ug/l)	-* TEC							ND (<0.1)	ND (<0.1)	ND (<0.1)	ND (<0.1)	
Dibenz(a,h)anthracer		(ug/l)	-* TEC		_	_	_	_	_	ND (<0.1)	ND (<0.1)	ND (<0.1)	ND (<0.1)	
Benzo(g,h,l)perylene		(ug/l)	_							ND (<0.1)	ND (<0.1)	ND (<0.1)	ND (<0.1)	
1 Methylnaphthalene		(ug/l)								5.3	3.6	3.0	2.4	
2 Methylnaphthalene		(ug/l)	Method B -	32						2.5	0.12	ND (<0.1)	ND (<0.1)	
Calculated TEC ²		(ug/l)	Method A -	0.1 ²						0.12	0.1 ²	0.12	0.12	
Total Petroleum Hydrocai	rbons	(9)			1	ı			1	-		1	<u> </u>	
Gasoline Range	(ug/l)		Method A -	1,000 ³										
Diesel Range	(ug/l)		Method A -	500						400	52	50	ND (<50)	
Motor Oil Range	(ug/l)		Method A -	500						ND (<250)	ND (<250)	ND (<250)	ND (<250)	
Regulated Metals	(49/1)				1	l	1	1	1	(200)	(200)	(200)	(200)	
Arsenic	(ug/l)		Method A - Method B -	5 8					3.43	ND (<5)	3.41	3.46	2.84	2.52
Barium	(ug/l)		Method B -	3,200						115	98.3	109	125	
Cadmium	(ug/l)		Method A - Method B -	5 8					ND (<1)	ND (<1)	ND (<1)	ND (<1)	ND (<1)	
Chromium	(ug/l)		Method A -	50					5.79	6.34	4.03	3.23	4.46	
Copper	(ug/l)		Method B -	590						ND (<5)	1.26	2.70	19	
Lead	(ug/l)		Method A -	15					1.26	ND (<5)	ND (<1)	ND (<1)	ND (<1)	
Manganese	(ug/l)		Method B -	2,200						7,850	6,400	7,890	8,760	
Mercury	(ug/l)		Method A - Method B -	2 4.8					ND (<0.2)	ND (<0.2)	ND (<0.2)	ND (<0.2)	ND (<0.2)	
Molybdenum	(ug/l)		Method B -	80						ND (<5)	2.66	3.22	2.83	
Nickel	(ug/l)		Method B -	3,200						ND (<5)	1.38	1.56	1.37	
Selenium	(ug/l)		Method B -	80						ND (<5)	1.14	1.66	1.45	
Zinc	(ug/l)		Method B -	4,800						ND (<5)	1.08	ND (<1)	ND (<1)	

Table 3 - Summary of Groundwater Monitoring Data (Continued)
Portac, Inc.

			Model Toxics Control Act		Note: B-5R use on 5/1		ted 4/22/200	9 and rede	veloped for	VCP Comp	liance Samp	oles		
Analyzed Parameter			Groundwater Cleanup Criter	ria¹					5-19-2009	12-3-2009	3-16-2010	6-30-2010	8-30-2010	1-31-2013
Pentachlorophenol	(ug/l)		Method B -	0.73						ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<0.5)
Other Semi-Volatile Orga	nic Comp	ounds												
Napthalene		(ug/l)	Method A -	160	—					ND (<0.1)	ND (<0.1)	ND (<0.1)	ND (<0.1)	
Acenaphthylene		(ug/l)								ND (<0.1)	ND (<0.1)	ND (<0.1)	ND (<0.1)	
Acenaphthene		(ug/l)	Method B -	960						0.81	0.76	0.89	1.1	
Fluorene		(ug/l)	Method B -	640						ND (<0.1)	ND (<0.1)	ND (<0.1)	ND (<0.1)	
Phenanthrene		(ug/l)								ND (<0.1)	ND (<0.1)	ND (<0.1)	ND (<0.1)	
Anthracene		(ug/l)	Method B -	4,800						ND (<0.1)	ND (<0.1)	ND (<0.1)	ND (<0.1)	
Fluoranthene		(ug/l)	Method B -	640						ND (<0.1)	ND (<0.1)	ND (<0.1)	ND (<0.1)	
Pyrene		(ug/l)	Method B -	480						ND (<0.1)	ND (<0.1)	ND (<0.1)	ND (<0.1)	
Benz(a)anthracene		(ug/l)	-* TEC	400						ND (<0.1)	ND (<0.1)	ND (<0.1)	ND (<0.1)	
Chrysene		(ug/l)	_* TEC							ND (<0.1)	ND (<0.1)	ND (<0.1)	ND (<0.1)	
Benzo(a)pyrene		(ug/l)	Method A -	0.1 0.012*						ND (<0.1)	ND (<0.1)	ND (<0.1)	ND (<0.1)	
Benzo(b)fluoranthen	е	(ug/l)	-* TEC							ND (<0.1)	ND (<0.1)	ND (<0.1)	ND (<0.1)	
Benzo(k)fluoranthene		(ug/l)	-* TEC							ND (<0.1)	ND (<0.1)	ND (<0.1)	ND (<0.1)	
Indeno(1,2,3-cd)pyrei		(ug/l)	-* TEC							ND (<0.1)	ND (<0.1)	ND (<0.1)	ND (<0.1)	
Dibenz(a,h)anthracer		(ug/l)	-* TEC		_	_	_	_	_	ND (<0.1)	ND (<0.1)	ND (<0.1)	ND (<0.1)	
Benzo(g,h,l)perylene		(ug/l)								ND (<0.1)	ND (<0.1)	ND (<0.1)	ND (<0.1)	
1 Methylnaphthalene		(ug/l)					 			ND (<0.1)	ND (<0.1)	ND (<0.1)	ND (<0.1)	
2 Methylnaphthalene		(ug/l)	Method B -	32						ND (<0.1)	ND (<0.1)	ND (<0.1)	ND (<0.1)	
Calculated TEC ²		(ug/l)	Method A -	0.1 ²						0.12	0.12	0.12	0.12	
Total Petroleum Hydroca	rhons	(49/1)				<u> </u>	1							
Gasoline Range	(ug/l)		Method A -	1,000 ³	<u> </u>			T	ND (<100)			l		
Diesel Range	(ug/l)		Method A -	500					150	ND (<50)	ND (<50)	ND (<50)	ND (<50)	
Motor Oil Range			Method A -	500					ND (<250)	ND (<250)	ND (<250)	ND (<250)	ND (<250)	
Regulated Metals	(ug/i)		Wilder of the second of the se		ı	ı	1	1	112 (200)	112 (200)	112 (200)	112 (200)	113 (200)	
Arsenic	(ug/l)		Method A - Method B -	5 8					ND (<1)	ND (<1)	ND (<1)	1.11	ND (<1)	ND (<1)
Barium	(ug/l)		Method B -	3,200						67.1	54.4	59.9	58.8	
Cadmium	(ug/l)		Method A - Method B -	5 8					ND (<1)	ND (<1)	ND (<1)	ND (<1)	ND (<1)	
Chromium	(ug/l)		Method A -	50					2.68	ND (<10)	2.47	2.63	3.17	
Copper	(ug/l)		Method B -	590						ND (<10)	ND (<1)	1.43	ND (<1)	
Lead	(ug/l)		Method A -	15					1.53	ND (<10)	ND (<1)	ND (<1)	ND (<1)	
Manganese	(ug/l)		Method B -	2,200						1,250	1,130	1,230	1,340	
Mercury	(ug/l)		Method A - Method B -	2 4.8					ND (<0.2)	ND (<0.2)	ND (<0.2)	ND (<0.2)	ND (<0.2)	
Molybdenum	(ug/l)		Method B -	80						ND (<10)	ND (<1)	ND (<1)	ND (<1)	
Nickel	(ug/l)		Method B -	3,200						ND (<10)	ND (<1)	1.03	ND (<1)	
Selenium	(ug/l)		Method B -	80						ND (<10)	1.48	2.55	2.57	
Zinc	(ug/l)		Method B -	4,800						ND (<10)	ND (<1)	ND (<1)	ND (<1)	

Table 3 Notes:

¹ - Model Toxics Control Act Groundwater Cleanup Criteria. Method A cleanup levels from WAC 173-340-900, Table 720-1.

Site specific Method B groundwater cleanup level for pentachlorophenol based on a surface water ARAR National Toxics Rule, 40 CFR 131, using marine chronic values for protection of human health.

Method B standard formula values from Ecology CLARC database. Method B standard formula values are based on potable groundwater and may not represent final cleanup levels established for the site.

-- - Sample not analyzed for the listed parameter.

ND (<XX) - Analyzed parameter not detected at or above the noted concentration.

Analyses for Pentachlorophenol and other semi-volatile organic compounds conducted by EPA Method 8270D SIM

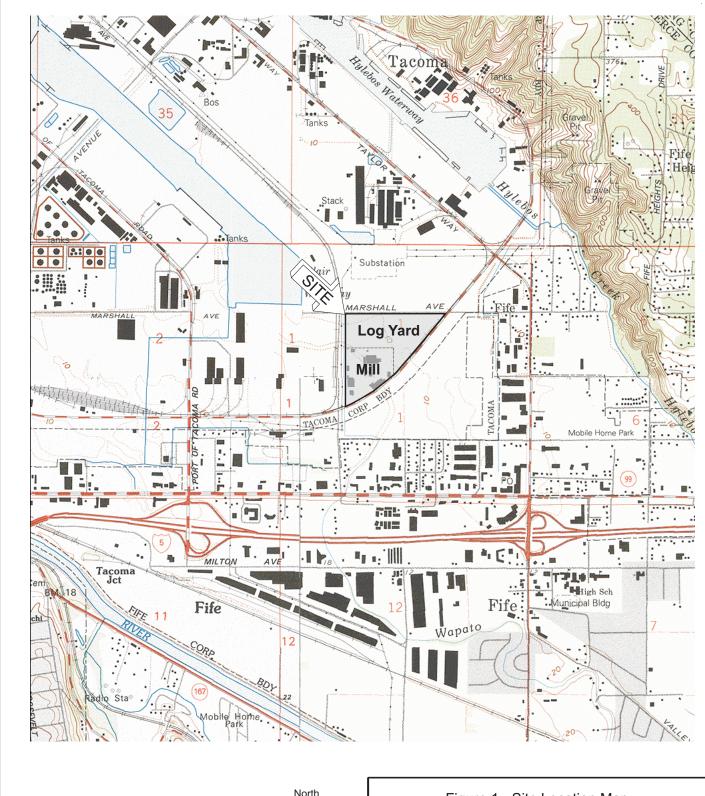
Total Petroleum Hydrocarbons in the gasoline range analyzed by method NWTPH-G.

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

- 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.
- * Identifies PAH compunds used to calculate TEC. In all cases, the TEC is a calculation using ½ the laboratory reporting limit of individual component concentrations, since none of the compounds were detected.
- ³ 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.

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

Laboratory analyses for volatile organic compounds in samples prior to December 2009 not included in this summary. These data were previously reported in WES' groundwater monitoring reports. No detected volatle organic compounds approach MTCA groundwater cleanup criteria.



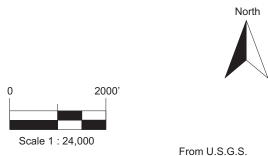
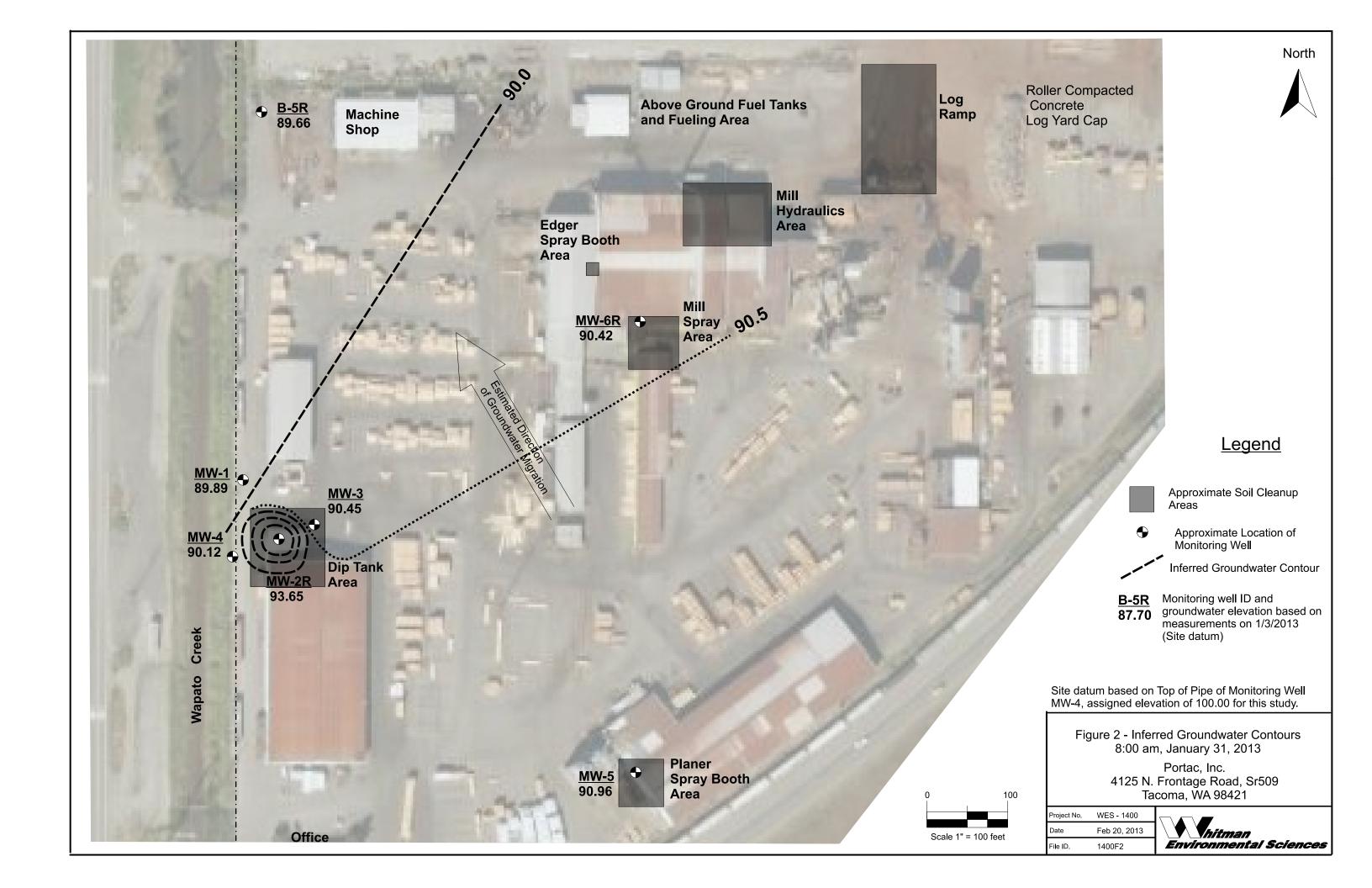


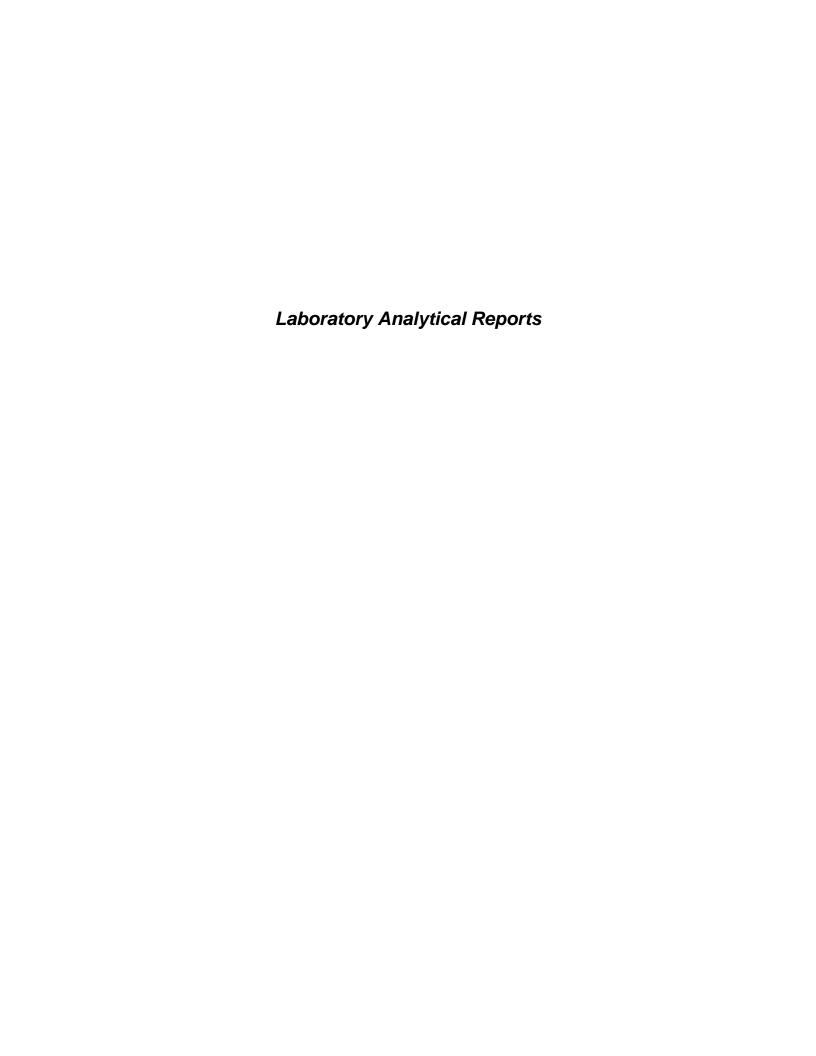
Figure 1 - Site Location Map

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







ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D. Yelena Aravkina, M.S. Bradley T. Benson, B.S. Kurt Johnson, B.S. 3012 16th Avenue West Seattle, WA 98119-2029 TEL: (206) 285-8282 e-mail: fbi@isomedia.com

February 12, 2013

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 February 1, 2013 from the Portac WES 1400, F&BI 302017 project. There are 20 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
WES0212R.DOC

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on February 1, 2013 by Friedman & Bruya, Inc. from the Whitman Environmental Sciences Portac WES 1400, F&BI 302017 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	Whitman Environmental Sciences
302017 -01	MW-1
302017 -02	MW-2R
302017 -03	MW-3
302017 -04	MW-4
302017 -05	MW-5
302017 -06	MW-6R
302017 -07	B-5R

All quality control requirements were acceptable.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID: MW-1 Client: Whitman Environmental Sciences
Date Received: 02/01/13 Project: Portac WES 1400, F&BI 302017

Date Extracted: 02/04/13 Lab ID: 302017-01 x10
Date Analyzed: 02/04/13 Data File: 302017-01 x10.067

Matrix: Water Instrument: ICPMS1 Units: ug/L (ppb) Operator: AP

Lower Upper Internal Standard: % Recovery: Limit: Limit: Indium 98 60 125

Concentration

Analyte: ug/L (ppb)

Arsenic 18.0

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID: MW-2R Client: Whitman Environmental Sciences
Date Received: 02/01/13 Project: Portac WES 1400, F&BI 302017

Lab ID: Date Extracted: 302017-02 02/04/13 Date Analyzed: 02/04/13 Data File: 302017-02.068 Matrix: Water Instrument: ICPMS1 Units: ug/L (ppb) Operator: AP

Lower Upper Internal Standard: % Recovery: Limit: Limit:

Indium 102 60 125

Concentration
Analyte: ug/L (ppb)

Arsenic 1.60

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID: MW-3 Client: Whitman Environmental Sciences
Date Received: 02/01/13 Project: Portac WES 1400, F&BI 302017

Date Extracted: 02/04/13 Lab ID: 302017-03 x10
Date Analyzed: 02/04/13 Data File: 302017-03 x10.069

Matrix: Water Instrument: ICPMS1 Units: ug/L (ppb) Operator: AP

Lower Upper Internal Standard: % Recovery: Limit: Limit: Indium 103 60 125

Concentration

Analyte: ug/L (ppb)

Arsenic 12.0

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID: MW-4 Client: Whitman Environmental Sciences
Date Received: 02/01/13 Project: Portac WES 1400, F&BI 302017

Date Extracted: 02/04/13 Lab ID: 302017-04 x10
Date Analyzed: 02/04/13 Data File: 302017-04 x10.070

Matrix: Water Instrument: ICPMS1 Units: ug/L (ppb) Operator: AP

Lower Upper Internal Standard: % Recovery: Limit: Limit:

Indium 104 60 125

Arsenic 10.0

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID: MW-5 Client: Whitman Environmental Sciences Date Received: 02/01/13 Project: Portac WES 1400, F&BI 302017

Lab ID: Date Extracted: 302017-05 02/04/13 Date Analyzed: 02/04/13 Data File: 302017-05.071 Matrix: Water Instrument: ICPMS1 Units: ug/L (ppb) Operator: AP

Lower Upper **Internal Standard:** Limit: % Recovery: Limit:

Indium 101 60 125

Concentration Analyte: ug/L (ppb)

Arsenic <1

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID: MW-6R Client: Whitman Environmental Sciences Date Received: 02/01/13 Project: Portac WES 1400, F&BI 302017

Lab ID: Date Extracted: 302017-06 02/04/13 Date Analyzed: 02/04/13 Data File: 302017-06.073 Matrix: Water Instrument: ICPMS1 Units: ug/L (ppb) Operator: AP

Lower Upper **Internal Standard:** Limit: % Recovery: Limit:

Indium 98 60 125

Concentration Analyte: ug/L (ppb)

Arsenic 2.52

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID: B-5R Client: Whitman Environmental Sciences Date Received: 02/01/13 Project: Portac WES 1400, F&BI 302017

Lab ID: Date Extracted: 302017-07 02/04/13 Date Analyzed: 02/04/13 Data File: 302017-07.089 Matrix: Water Instrument: ICPMS1 Units: ug/L (ppb) Operator: AP

Lower Upper **Internal Standard:** Limit: % Recovery: Limit:

Indium 99 60 125

Concentration Analyte: ug/L (ppb)

Arsenic <1

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID: Method Blank Client: Whitman Environmental Sciences
Date Received: Not Applicable Project: Portac WES 1400, F&BI 302017

02/04/13 Lab ID: Date Extracted: I3-44 mb Date Analyzed: 02/04/13 Data File: I3-44 mb.051 Matrix: Water Instrument: ICPMS1 Units: ug/L (ppb) Operator: AP

Lower Upper Internal Standard: % Recovery: Limit: Limit:

Indium 98 60 125

 $\begin{array}{ccc} & & & Concentration \\ Analyte: & & ug/L \ (ppb) \end{array}$

Arsenic <1

ENVIRONMENTAL CHEMISTS

Client:

Analysis for Semivolatile Phenols By EPA Method 8270D SIM

Client Sample ID: MW-1
Date Received: 02/01/13
Date Extracted: 02/05/13
Date Analyzed: 02/06/13
Matrix: Water
Units: ug/L (ppb)

Pentachlorophenol

Project: Portac WES 1400, F&BI 302017
Lab ID: 302017-01
Data File: 020528.D
Instrument: GCMS8
Operator: ya

Whitman Environmental Sciences

< 0.5

Compounds: Concentration ug/L (ppb)

ENVIRONMENTAL CHEMISTS

Analysis for Semivolatile Phenols By EPA Method 8270D SIM

Client Sample ID: MW-2R Client: Whitman Environmental Sciences Date Received: 02/01/13 Project: Portac WES 1400, F&BI 302017 Lab ID: Date Extracted: 02/05/13 302017-02 1/5 02/07/13 Data File: 020716.D Date Analyzed:

Date Analyzed: 02/07/13 Data File: 020716.D

Matrix: Water Instrument: GCMS8

Units: ug/L (ppb) Operator: VM

Concentration Compounds: ug/L (ppb)

Pentachlorophenol 15

ENVIRONMENTAL CHEMISTS

Client:

Analysis for Semivolatile Phenols By EPA Method 8270D SIM

Client Sample ID: MW-3
Date Received: 02/01/13
Date Extracted: 02/05/13
Date Analyzed: 02/05/13
Matrix: Water
Units: ug/L (ppb)

Project: Portac WES 1400, F&BI 302017 Lab ID: 302017-03 Data File: 020523.D Instrument: GCMS8 Operator: ya

Whitman Environmental Sciences

Concentration ug/L (ppb)

Pentachlorophenol <0.5

Compounds:

ENVIRONMENTAL CHEMISTS

Analysis for Semivolatile Phenols By EPA Method 8270D SIM

Client Sample ID: MW-4 Client: Whitman Environmental Sciences Date Received: 02/01/13 Project: Portac WES 1400, F&BI 302017 Lab ID: Date Extracted: 02/05/13 302017-04 02/05/13 Data File: 020524.D Date Analyzed: Matrix: Instrument: Water GCMS8

Units: ug/L (ppb) Operator: ya

ug/L (ppb)

Concentration

Pentachlorophenol <0.5

Compounds:

ENVIRONMENTAL CHEMISTS

Analysis for Semivolatile Phenols By EPA Method 8270D SIM

Client Sample ID: MW-5 Client: Whitman Environmental Sciences Date Received: 02/01/13 Project: Portac WES 1400, F&BI 302017 Lab ID: Date Extracted: 02/05/13 302017-05 02/06/13 Data File: 020629.D Date Analyzed: Matrix: Instrument: GCMS8 Water Units: ug/L (ppb) Operator: VM

Concentration

Compounds: ug/L (ppb)

Pentachlorophenol 1.3

ENVIRONMENTAL CHEMISTS

Analysis for Semivolatile Phenols By EPA Method 8270D SIM

Client Sample ID: MW-6R Client: Whitman Environmental Sciences Date Received: 02/01/13 Project: Portac WES 1400, F&BI 302017 Lab ID: Date Extracted: 02/05/13 302017-06 02/06/13 Data File: 020526.D Date Analyzed:

Matrix: Water Instrument: GCMS8 Units: ug/L (ppb) Operator: ya

Surrogates: % Recovery: Limit: Limit: 2,4,6-Tribromophenol 125 50 150

ug/L (ppb)

Concentration

Pentachlorophenol <0.5

Compounds:

ENVIRONMENTAL CHEMISTS

Client:

Analysis for Semivolatile Phenols By EPA Method 8270D SIM

Client Sample ID: B-5R
Date Received: 02/01/13
Date Extracted: 02/05/13
Date Analyzed: 02/06/13
Matrix: Water
Units: ug/L (ppb)

Project: Portac WES 1400, F&BI 302017
Lab ID: 302017-07
Data File: 020527.D
Instrument: GCMS8
Operator: ya

Whitman Environmental Sciences

 $\begin{array}{c} & \quad \quad & \quad &$

Pentachlorophenol <0.5

ENVIRONMENTAL CHEMISTS

Analysis for Semivolatile Phenols By EPA Method 8270D SIM

Client Sample ID: Method Blank Client: Whitman Environmental Sciences
Date Received: Not Applicable Project: Portac WES 1400, F&BI 302017

Lab ID: Date Extracted: 02/05/13 03-0218 mb 02/05/13 Data File: 020521.D Date Analyzed: Matrix: Water Instrument: GCMS8 Units: ug/L (ppb) Operator: ya

Concentration

Compounds: ug/L (ppb)

Pentachlorophenol <0.5

ENVIRONMENTAL CHEMISTS

Date of Report: 02/12/13 Date Received: 02/01/13

Project: Portac WES 1400, F&BI 302017

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

Laboratory Code: 301363-02 (Matrix Spike)

				Percent	Percent		
	Reporting	Spike	Sample	Recovery	Recovery	Acceptance	RPD
Analyte	Units	Level	Result	MS	MSD	Criteria	(Limit 20)
Arsenic	ug/L (ppb)	10	60.5	89 b	72 b	51-167	21 b

Laboratory Code: Laboratory Control Sample

		Percent									
	Reporting	Spike	Recovery	Acceptance							
Analyte	Units	Level	LCS	Criteria							
Arsenic	ug/L (ppb)	10	99	81-118							

ENVIRONMENTAL CHEMISTS

Date of Report: 02/12/13 Date Received: 02/01/13

Project: Portac WES 1400, F&BI 302017

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

Laboratory Code: Laboratory Control Sample

			Percent	Percent		
	Reporting	Spike	Recovery	Recovery	Acceptance	RPD
Analyte	Units	Level	LCS	LCSD	Criteria	(Limit 30)
Pentachlorophenol	ug/L (ppb)	2.5	57	44	23-185	26

ENVIRONMENTAL CHEMISTS

Data Qualifiers & Definitions

- \boldsymbol{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.

Company__

Send Report To_

Address SESS CX STATION 1/16

City, State, ZIR Dereck WWW. Bloss

SAMPLE CHAIN OF CUSTODY MG 02/01/13

Page # of TURNAROUND TIME

SAMPLERS (signature) REMARKS PROJECT NAME/NO. N PO#

Selevies

Standard (2 Weeks) Rush charges authorized by:

SAMPLE DISPOSAL

Dispose after 30 days

O Return samples
O Will call with instructions

Phone # See See Fax #

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Samples received at 10 °C