Groundwater Monitoring Report (Fourth Quarterly Event)

Ione Petroleum Contamination Site
Ione, Washington

for
Washington State Department of Ecology and Science Applications International Corporation

June 29, 2011

GeoEngineers
Earth Science + Technology

Groundwater Monitoring Report (Fourth Quarterly Event)

Ione Petroleum Contamination Site
Ione, Washington

for
Washington State Department of Ecology and Science Applications International Corporation

June 29, 2011

GeoEngineers

523 East Second Avenue
Spokane, Washington 99202
509. 363.3125

30 YEARS 2010

Groundwater Monitoring Report
(Fourth Quarterly Event)

Ione Petroleum Contamination Site
Ione, Washington

File No. 0504-058-00

June 29, 2011

Prepared for:

Washington State Department of Ecology
Toxics Cleanup Program
4601 North Monroe Street
Spokane, Washington 99205

Attention: Doug Ladwig, PG, PHG, Site Manager

Prepared by:

GeoEngineers, Inc.
523 East Second Avenue
Spokane, Washington 99202
509.363.3125

Dave R. Lauder, PE
Senior Engineer

Bruce D. Williams
Principal

DRL:BDW:tlm
http://projects/sites/0050405800/Draft/4th Qrt GW Monitoring/Ione_GWreport_FourthQuarter.docx

cc: SAIC, Glen Vedera, Senior Geologist

GeoEngineers

Table of Contents

INTRODUCTION

This report presents results of the fourth quarterly groundwater monitoring event performed at the Ione Petroleum Contamination Site located near Ione, Washington. Details regarding the site are presented in previous reports for this project including a report titled "Site Characterization Report, Ione Petroleum Contamination Site, Ione, Washington," (GeoEngineers, Inc., October 14, 2010), and an addendum report titled "Supplemental Site Characterization Report, Ione Petroleum Contamination Site, Ione, Washington," (GeoEngineers, Inc., January 3, 2011).

The fourth quarterly groundwater monitoring event was conducted on May 10 through May 12, 2011 in general accordance with the work plan developed for this project. The purpose of the quarterly groundwater monitoring program is to evaluate the nature and extent of contamination in groundwater beneath the site.

The approximate location of the site is shown in the Vicinity Map, Figure 1. Key site features, including general locations of groundwater monitoring wells, are shown in Groundwater Elevations and Flow Direction – May 10, 2011, Figure 2. This report includes a site background, hydrogeologic data, groundwater quality data, and conclusions.

SITE BACKGROUND

Details regarding site history are presented in the Site Characterization Report. Before site characterization activities commenced in April 2010, petroleum hydrocarbons had twice been detected in groundwater samples collected from the domestic well at the Cabin Grill restaurant. Currently, a carbon filtration system to remove petroleum from the water supply is operating at the Cabin Grill.

Potential sources of petroleum contamination included two properties located west (upgradient) of the Cabin Grill. The Airport Kwik Stop previously sold regular and premium gasoline, which was contained in three underground storage tanks (USTs). Two tanks were removed in 1994, and the third tank was reportedly closed in place. Currently, aboveground storage tanks (ASTs) are located behind (west of) the Airport Kwik Stop. In May 2008, a flex pipe beneath the premium fuel dispenser was observed to be spraying gasoline inside the dispenser. The flex pipe was repaired and subsequently, after passing a tightness test, returned to service. The Kwik Stop fueling system has not been in operation since fall 2008. Two USTs were installed at the Ione Airport in about 1974/1975. The tanks were removed in 2008. Soil contamination was discovered during removal of the westernmost tank.

The project site includes the Cabin Grill, Airport Kwik Stop, and Ione Airport properties and other adjacent properties. During site characterization activities, 23 direct-push borings and 5 hollow-stem auger exploratory borings were drilled; and 12 monitoring wells were installed. Results of field screening of soil samples and analytical testing of soil and groundwater samples indicated petroleum-contaminated soil and groundwater was located beneath the Airport Kwik Stop near the fuel dispensers. Petroleum-contaminated soil and groundwater also was observed beneath the Cabin Grill property and the vacant property north of the Cabin Grill.

This report is the third quarterly groundwater monitoring report and fourth groundwater monitoring event for this project. Results of the first quarterly monitoring event are presented in the Site Characterization Report. Results of the second quarterly monitoring event are presented in the report titled "Groundwater Monitoring Report (Second Quarterly Event), Ione Petroleum Contamination Site, Ione, Washington," dated January 25, 2011. The results of the third quarterly monitoring event are presented in the report titled "Groundwater Monitoring Report (Third Quarterly Event), Ione Petroleum Contamination Site, Ione, Washington," dated May 5, 2011.

HYDROGEOLOGIC DATA

General

Fluid (water and petroleum product) levels were measured on May 10, 2011 at the 12 existing site monitoring wells (MW-1 through MW-12). Fluid elevations were calculated by comparing measured fluid depths to wellhead elevations and are referenced to the North American Vertical Datum of 1988 (NAVD 88).

Fluid depths and elevations are presented in Summary of Groundwater Level measurements, Table 1. Groundwater elevation data, and interpreted groundwater elevation distribution and flow direction, are graphically presented in Figure 2. Field methods are described in Appendix A.

Fluid Elevations

Depth to groundwater measurements during the May 10, 2011 monitoring event, referenced to the top rim of the PVC well casing, ranged from 15.23 feet in MW-10 to 39.17 feet in MW-6. Corresponding groundwater elevations ranged from 2,070.33 feet in MW-10 to 2,077.35 feet in MW-1.

Using an interface probe, petroleum product was measured in monitoring well MW-5 at a depth of about 37.97 feet (Elevation 2,071.38 feet) and in monitoring well MW-8 at a depth of about 37.45 feet (Elevation 2,072.27) during the May 10, 2011 monitoring event. Depth to groundwater in MW-5 was about 37.85 feet (Elevation 2,071.43 feet), indicating about 0.35 feet of petroleum product within the well. Depth to groundwater in MW-8 was about 37.70 feet (Elevation 2072.02), indicating about 0.25 feet of petroleum product within the well. The relative densities of gasoline and groundwater were used to develop an estimate for the equivalent groundwater elevations at MW-5 and MW-8 (in the absence of petroleum product) in the following equation:

$$GW = (SG \times T) + IE$$

where GW = equivalent groundwater elevation;
SG = specific gravity of product (0.75 for gasoline);
T = thickness of product measured in water using oil/water interface probe; and
IE = elevation of water/product interface measured in the well.

This analysis yielded an equivalent groundwater elevation estimate of 2,071.69 feet in monitoring well MW-5 and an equivalent groundwater elevation estimate of 2,072.21 in MW-8.

Groundwater elevations increased in all site monitoring wells relative to the previous groundwater monitoring event conducted on February 9, 2011. Monitoring well MW-10 was observed to have the most significant change in groundwater elevation, increasing 0.82 feet relative to the previous monitoring event. Monitoring well MW-7 was observed to have the least change in groundwater elevation, increasing 0.41 feet relative to the previous monitoring event. Groundwater elevations on average increased about 0.61 feet relative to the previous monitoring event (February 9, 2011). Additionally, groundwater was measured at higher elevations at all twelve monitoring wells than any of the previous monitoring events.

Hydraulic Gradient and Groundwater Flow Direction

Interpreted groundwater flow direction during the May 10, 2011 groundwater monitoring event generally was east-southeast; away from upland recharge areas to the west and towards the Pend Oreille River to the east. However, the local distribution in groundwater elevation, flow direction and gradient observed at the site was relatively complex. Within the west portion of the site (approximately between monitoring wells MW-1 and MW-8), hydraulic gradient was relatively steep at about 2×10^{-2} feet per foot (about 90 feet per mile) and groundwater flowed east. Within the east portion of the site (approximately between monitoring wells MW-8 and MW-10), hydraulic gradient flattened significantly, averaging about 1.4×10^{-3} feet per foot (about 7.5 feet per mile) and groundwater flowed southeast. Variation in hydraulic gradient could be caused by soil permeability variation across the site (an increase in permeability to the east), the geometry of perching layers, and/or Pend Oreille River stage. Indications of a cone of depression centered around the Cabin Grill well and groundwater mounding related to the septic drain field located to the east of the Cabin Grill were not observed. The interpreted flow direction and gradients were similar to those observed during the previous monitoring events.

GROUNDWATER ANALYTICAL RESULTS

General

Groundwater samples were collected from monitoring wells MW-1 through MW-4, MW-6, MW-7, MW-9 through MW-12 and from the Cabin Grill well between May 11 and 12, 2011 and submitted to Anatek Laboratories (Anatek) in Spokane, Washington for analysis of gasoline-range petroleum hydrocarbons (GRPH) and volatile organic compounds (VOCs).

Groundwater samples from the monitoring wells were collected using a portable bladder pump consistent with the U.S. Environmental Protection Agency (EPA) low-flow groundwater sampling procedure and summarized in Appendix A of this report. Purge water was retained in 55-gallon drums for subsequent disposal. The sample from the Cabin Grill well was collected from a port located within the Cabin Grill well house. The port is located upstream (before treatment) from the storage tanks and carbon filtration system.

During the May 2011 monitoring event, a laboratory-blind duplicate was collected from monitoring well MW-4 and labeled “Duplicate-1.” A trip blank also was collected.

Groundwater analytical results for the fourth quarterly groundwater sampling event in May 2011 are provided in Summary of Groundwater Chemical Analytical Results – Monitoring Well Samples, Table 2. Copies of original laboratory certificates are included in Appendix B. Analytical results for

GRPH and benzene, toluene, ethylbenzene, and total xylenes (BTEX) also are presented on Figure 2.

Upon review of laboratory analytical data, contaminant concentrations for the Risk Based Corrective Action (RBCA) volatiles list and the full 8260C list for the RBCA analytes were not equivalent for the samples collected from well MW-4 (samples MW-4-021711 and Duplicate-1). The discrepancy was discussed with the analytical lab, who indicated that the RBCA analyses and full VOC analyses were completed using two separate preserved samples. Note that the purpose of the RBCA analyses was to evaluate concentrations of certain VOCs, particularly 1,2-dibromoethane (EDB), at practical quantitation limits (PQLs) at or below Model Toxics Control Act (MTCA) Method A cleanup levels.

The VOC analytes showing a discrepancy between the RBCA volatiles list and the full 8260C list included: benzene, ethylbenzene, m+p-Xylene, naphthalene, o-Xylene, and toluene. The results from the full 8260C VOC analyses are reported in Table 2 and discussed in this report.

Ione Airport

GRPH and VOCs were not detected in the sample from MW-2. PQLs were reported at concentrations less than the MTCA Method A cleanup levels for groundwater (with the exception of vinyl chloride).

Airport Kwik Stop

Because of the previous high concentrations of GRPH and BTEX compounds detected in groundwater samples from monitoring well MW-8, and because free petroleum product was measured during the May 2011 sampling event, a groundwater sample was not collected from MW-8. The decision to forego sampling in MW-8 was discussed with and approved by Ecology during the quarterly sampling event.

GRPH and VOCs were either not detected or were detected at concentrations less than the MTCA Method A cleanup levels in the samples from MW-1 and MW-7. Wells MW-1 and MW-7 are located upgradient of the Airport Kwik Stop fuel dispensers.

Cabin Grill

Because of the previous high concentrations of GRPH and BTEX compounds detected in groundwater samples from monitoring well MW-5, and because free petroleum product was measured during the May 2011 sampling event, a groundwater sample was not collected from MW-5. The decision to forego sampling in MW-5 was discussed with and approved by Ecology during the quarterly sampling event.

GRPH was detected in samples from MW-6 and the Cabin Grill well at concentrations (6,850 µg/L and 14,000 µg/L, respectively) greater than the MTCA Method A cleanup level (800 µg/L). Benzene was detected in these two samples at concentrations (2,560 µg/L and 540 µg/L, respectively) greater than the MTCA Method A cleanup level (5 µg/L). Total xylenes also were detected in the sample from MW-6 at a concentration (1,672 µg/L), greater than the MTCA Method A cleanup level (1,000 µg/L). Monitoring well MW-6 and the Cabin Grill well are located downgradient of the Airport Kwik Stop fuel dispensers.

Ethylbenzene (325 µg/L and 414 µg/L, respectively), toluene (642 µg/L and 982 µg/L, respectively) and naphthalene (59.0 µg/L and 92.3 µg/L, respectively), were detected in the samples from MW-6 and the Cabin Grill well at concentrations less than the MTCA Method A cleanup levels (700 µg/L, 1,000 µg/L and 160 µg/L, respectively). Total xylenes also were detected in the sample from MW-6 at a concentrations (890 µg/L), less than the MTCA Method A cleanup level.

1,2,4-trimethlybenzene and 1,3,5-trimethybenzene also were detected in the groundwater sample from MW-6 at concentrations of 62.8 µg/L and 59.1 µg/L, respectively. 1,2,4-trimethylbenzene, 1,3,5-trimethybenzene and n-propylbenzene were detected in the groundwater sample for the Cabin Grill well at concentrations of 99.0 µg/L, 107 µg/L and 43.9 µg/L, respectively. MTCA Method A cleanup levels have not been established for these contaminants. Other VOCs were not detected. However, the reported PQLs for the non-detect VOCs with established MTCA Method A cleanup levels (with the exception of 1,1,1-trichloroethane) were elevated to greater than the applicable cleanup levels because the high concentrations of BTEX contaminants required dilution of the samples before analyzation.

The sample from MW-4 and the duplicate sample (Duplicate-1) from MW-4 contained GRPH and BTEX compounds less than MTCA Method A cleanup levels. Other VOCs were not detected, or were detected at concentrations less than the MTCA Method A cleanup levels. The PQL for vinyl chloride was greater than the MTCA Method A cleanup level.

Vacant Property

GRPH was detected in the groundwater sample collected from MW-3 at a concentration (40,300 µg/L) greater than the MTCA Method A cleanup level. Benzene, toluene, ethylbenzene and total xylenes were detected at concentrations (2,460 µg/L, 4,980 µg/L, 963 µg/L and 4,390 µg/L, respectively) greater than MTCA Method A cleanup levels. Naphthalene was detected at a concentrations of 109 µg/L, less than MTCA Method A cleanup level. 1,2,4-trimethylbenzene, 1,3,5-trimethylbenzene and n-propylbenzene were detected in the groundwater sample from MW-3 at concentrations of 363 µg/L, 168 µg/ and 61.2 µg/L, respectively. Other VOCs from the sample from MW-3 were not detected. However, the reported PQLs for the non-detected VOCs with established MTCA Method A cleanup levels were elevated to greater than the applicable cleanup levels because the high concentrations of BTEX contaminants required dilution of the samples before analyzation.

GRPH and VOCs were not detected in the groundwater samples collected from MW-9 through MW-12. The PQLs for the groundwater samples were below the MTCA Method A cleanup levels (with the exception of vinyl chloride).

SUMMARY AND CONCLUSIONS

During the May 2011 monitoring event, groundwater depths in monitoring wells MW-1 through MW-12 ranged from 15.23 feet to 39.17 feet below the top of the well casings and groundwater elevations ranged from 2,070.33 feet to 2,077.35 feet. Groundwater elevations ranged from 0.41 to 0.82 feet higher than elevations measured in February 2011. About 0.35 feet of product was measured on the groundwater surface in well MW-5, and about 0.25 feet of product was

measured on the groundwater surface in well MW-8, based on the oil-water interface probe measurements. A disposable bailer also was lowered into MW-5 and MW-8 to sample across the oil-water interface. We measured approximately 5 inches of floating gasoline product at MW-5 and about 2 inches of product in MW-8. Disposable bailers also were lowered into wells MW-3, MW-4 and MW-6. Floating product was not observed in these wells.

Groundwater flow during the May 2011 monitoring event generally was towards the east-southeast, under varying hydraulic gradients, ranging between about 1.4×10^{-3} feet per foot (ft/ft) within eastern portions of the site to about 2×10^{-2} ft/ft within western portions of the site. This magnitude is consistent with previous measurements at the site.

Groundwater samples were collected for chemical analysis in monitoring wells MW-1 through MW-4, MW-6, MW-7 and MW-9 through MW-12 and from the Cabin Grill domestic well during the May 2011 sampling event. Chemical analytical results are summarized by the following:

- GRPH and/or BTEX concentrations exceeded MTCA Method A cleanup levels in groundwater samples from MW-3, MW-6 and the Cabin Grill domestic well. These wells are located downgradient and east-southeast of the Airport Kwik Stop fuel dispensers. Well MW-6 is located about 600 feet from the dispensers.
- GRPH and VOCs were not detected in groundwater samples from upgradient wells MW-1 and MW-7, nor in crossgradient well MW-2.
- GRPH and VOCs were not detected in the cross- and downgradient wells MW-9 through MW-12.
- The highest concentration of GRPH detected during the fourth quarterly groundwater monitoring event was from the sample collected in monitoring well MW-3 at a concentration of 40,300 µg/L (about 50 times greater than the MTCA Method A cleanup level).
- The highest concentration of benzene detected during the fourth quarterly groundwater monitoring event was from the sample collected in monitoring well MW-6 at a concentration of 2,560 µg/L (about 500 times greater than the MTCA Method A cleanup level).

The following bulleted items summarize changes in concentrations from the fourth quarterly sampling event relative to the previously-collected samples (third quarterly event) in each site monitoring well:

- Concentrations of GRPH and BTEX compounds increased in well MW-3 (and were the highest of the four quarterly events).
- Concentrations of GRPH and BTEX compounds (with the exception of toluene) were similar to or increased in well MW-4.
- Concentrations of GRPH and BTEX compounds (with the exception of toluene) decreased in well MW-6.
- Concentrations of GRPH and BTEX compounds (with the exception of benzene) decreased in the Cabin Grill domestic well.
- Benzene concentrations increased in well MW-3 and the Cabin Grill domestic well, and decreased in MW-6. Benzene concentrations remained unchanged in MW-4.

Based on review of all four sampling events, concentrations of GRPH and BTEX compounds from groundwater samples from the contaminated wells MW-3 and the Cabin Grill domestic well have not indicated any specific trends. Results from well MW-6 have shown a general trend of decreasing GRPH and BTEX concentrations. Groundwater monitoring well MW-5 contained free product for the third consecutive monitoring event. The May 2011 event marks the first occurrence where free product was observed in well MW-8.

Results of analytical testing indicate the shallow aquifer underlying the Airport Kwik Stop; Cabin Grill and vacant properties is contaminated with GRPH and VOCs, particularly BTEX compounds. Results also indicate the edges of the plume likely is located between wells MW-4 and MW-12 on the south (results of previous analytical testing indicate that the edge of the plume might have reached MW-12), between wells MW-6, MW-10 and MW-11 (results of previous analytical testing indicate that the edge of the plume might have reached MW-10 and MW-11) near the central portion of the plume, and between wells MW-3 and MW-9 on the north. The increase in GRPH and BTEX concentrations at MW-3 and the presence of product in well MW-8 could be the result of mobilization of vadose zone contaminates into groundwater due to higher groundwater elevations, and possibly downward migration of contaminates due to infiltration of surface water through contaminated vadose zone soil.

.

TABLES

GeoEngineers

Table 1

Summary of Groundwater Level Measurements

Ione Petroleum Contamination

Ione, Washington

Well Number	Date Measured	Top of Casing Elevation[1] (feet)	Depth to Water[2] (feet)	Groundwater Elevation (feet)
MW-1	08/05/10	2,106.45	29.41	2,077.04
	11/10/10	2,106.45	29.40	2,077.05
	02/09/11	2,106.45	29.76	2,076.69
	05/10/11	2,106.45	29.10	2,077.35
MW-2	08/05/10	2,109.36	37.54	2,071.82
	11/10/10	2,109.36	37.53	2,071.83
	02/09/11	2,109.36	37.67	2,071.69
	05/10/11	2,109.36	37.02	2,072.34
MW-3	08/05/10	2,110.17	38.66	2,071.51
	11/10/10	2,110.17	38.63	2,071.54
	02/09/11	2,110.17	38.73	2,071.44
	05/10/11	2,110.17	38.19	2,071.98
MW-4	08/05/10	2,109.31	38.17	2,071.14
	11/10/10	2,109.31	38.14	2,071.17
	02/09/11	2,109.31	38.26	2,071.05
	05/10/11	2,109.31	37.69	2,071.62
MW-5	08/05/10	2,109.28	38.57	2,070.71
	11/10/10	2,109.28	37.90/38.51[3]	2,071.23[4]
	02/09/11	2,109.28	37.97/38.72[3]	2,071.12[4]
	05/10/11	2,109.28	37.50/37.85[3]	2,071.69[4]
MW-6	08/05/10	2,110.34	39.72	2,070.62
	11/10/10	2,110.34	39.68	2,070.66
	02/09/11	2,110.34	39.80	2,070.54
	05/10/11	2,110.34	39.17	2,071.17
MW-7	08/05/10	2,109.31	36.27	2,073.04
	11/10/10	2,109.31	36.27	2,073.04
	02/09/11	2,109.31	36.38	2,072.93
	05/10/11	2,109.31	35.97	2,073.34
MW-8	08/05/10	2,109.72	37.93	2,071.79
	11/10/10	2,109.72	37.90	2,071.82
	02/09/11	2,109.72	38.01	2,071.71
	05/10/11	2,109.72	37.45/37.70[3]	2,072.21[4]
MW-9	11/10/10	2,109.43	38.43	2,071.00
	02/09/11	2,109.43	38.53	2,070.90
	05/10/11	2,109.43	37.95	2,071.48
MW-10	11/10/10	2,085.56	15.96	2,069.60
	02/09/11	2,085.56	16.05	2,069.51
	05/10/11	2,085.56	15.23	2,070.33

Well Number	Date Measured	Top of Casing Elevation[1] (feet)	Depth to Water[2] (feet)	Groundwater Elevation (feet)
MW-11	11/10/10	2,093.44	23.33	2,070.11
	02/09/11	2,093.44	23.43	2,070.01
	05/10/11	2,093.44	22.66	2,070.78
MW-12	11/10/10	2,108.87	37.98	2,070.89
	02/09/11	2,108.87	38.11	2,070.76
	05/10/11	2,108.87	37.51	2,071.36

Notes:

[1]Top of casing elevation survey performed by Thomas, Dean & Hoskins, Inc. (TD&H). Elevations are referenced to NAVD 88.

[2]Depth to water measurements referenced to the top of PVC casing.

[3]For MW-5, 37.50/37.85, and MW-8, 37.45/37.70 indicates depth to top of free product/depth to groundwater measured using an oil-water interface probe.

[4]Groundwater elevation at MW-5 for the November 2010 , February 2011 and May 2011 monitoring events, and MW-8 for the May 2011 monitoring event, was calculated using the following equation:

GW = SG x T + IE; where GW = equivalent groundwater elevation, SG = specific gravity of free product (0.75 for gasoline), T = thickness of product measured in water using oil/water interface probe , IE = elevation of water/product interface measured in the well.

https://projects.geoengineers.com/sites/0050405800/Final/4th Qtr GW Monitoring/[Ione GW Monitoring Tables Q4.xlsx]Table 1

Table 2

Summary of Groundwater Chemical Analytical Results - Monitoring Well Samples[1]

Ione Petroleum Contamination

Ione, Washington

Analyte	Unit	MTCA Method A Cleanup Level	Well No. / Sample Number / Date	MW-1 MW-1-080510 08/05/10	MW-1 MW-1-111010 11/10/10	MW-1 MW-1-021611 02/16/11	MW-1 MW-1-051111 05/11/11	MW-2 MW-2-080610 08/06/10	MW-2 MW-2-111010 11/10/10	MW-2 MW-2-021611 02/16/11	MW-2 MW-2-051111 05/11/11	MW-3 MW-3-080610 08/06/10	MW-3 MW-3-111010 11/11/10	MW-3 MW-3-021611 02/16/11	MW-3 MW-3-051111 05/11/11
DRPH[2]	µg/L	500		<100				<100				<100			
ORPH[2]	µg/L	500		<500				<100				<500			
GRPH[3]	µg/L	800		<100	<100	<100	<100	<100	<100	<100	<100	**24,500**	**20,200**	**24,200**	**40,300**
Volatile Organic Compounds[4]															
Benzene	µg/L	5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	**2,680**	**1,940**	**1,980**	**2,460**
Ethylbenzene	µg/L	700		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	**831**	314 (u)[9]	647	**963**
Toluene	µg/L	1,000		1.81	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	**3,330**	**2870 (u)**[9]	**3,350**	**4,980**
m,p-Xylene	µg/L	1,000[5]		1.93	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	**1,940**	**1680 (u)**[9]	**2,230**	**3,110**
o-Xylene	µg/L			0.89	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	**615**	**653**	**771**	**1,280**
1,1,1,2-Tetrachloroethane	µg/L	NE		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<50	<5	<100	<50
1,1,1-Trichloroethane	µg/L	200		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<50	<5	<100	<50
1,1,2,2-Tetrachloroethane	µg/L	NE		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<50	<5	<100	<50
1,1,2-Trichloroethane	µg/L	NE		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<50	<5	<100	<50
1,1-Dichloroethane	µg/L	NE		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<50	<5	<100	<50
1,1-Dichloroethene	µg/L	NE		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<50	<5	<100	<50
1,1-Dichloropropene	µg/L	NE		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<50	<5	<100	<50
1,2,3-Trichlorobenzene	µg/L	NE		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<50	<5	<100	<50
1,2,3-Trichloropropane	µg/L	NE		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<50	<5	<100	<50
1,2,4-Trichlorobenzene	µg/L	NE		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<50	<5	<100	<50
1,2,4-Trimethylbenzene	µg/L	NE		0.62	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	305	259	353	363
1,2-Dibromo-3-chloropropane (DBCP)	µg/L	NE		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<50	<5	<100	<50
1,2-Dibromoethane (EDB)	µg/L	0.01		<0.01	<0.01	<0.01	<0.01	0.01	<0.01	<0.01	<0.01	<50	<5	<100	<50
1,2-Dichlorobenzene	µg/L	NE		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<50	<5	<100	<50
1,2-Dichloroethane (EDC)	µg/L	5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<50	<5	<100	<50
1,2-Dichloropropane	µg/L	NE		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<50	<5	<100	<50
1,3,5-Trimethylbenzene	µg/L	NE		0.58	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<50	136	171	168
1,3-Dichlorobenzene	µg/L	NE		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<50	<5	<100	<50
1,3-Dichloropropane	µg/L	NE		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<50	<5	<100	<50
1,4-Dichlorobenzene	µg/L	NE		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<50	<5	<100	<50
2,2-Dichloropropane	µg/L	NE		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<50	<5	<100	<50
2-Chlorotoluene	µg/L	NE		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<50	<5	<100	<50
2-Hexanone	µg/L	NE		<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<250	<25	<500	<250
4-Chlorotoluene	µg/L	NE		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<50	<5	<100	<50
Acetone	µg/L	NE		<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<250	<25	<500	<250
Acrylonitrile	µg/L	NE		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<50	<5	<100	<50
Bromobenzene	µg/L	NE		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<50	<5	<100	<50
Bromochloromethane	µg/L	NE		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<50	<5	<100	<50
Bromodichloromethane	µg/L	NE		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<50	<5	<100	<50
Bromoform	µg/L	NE		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<50	<5	<100	<50
Bromomethane	µg/L	NE		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<50	<5	<100	<50
Carbon disulfide	µg/L	NE		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<50	<5	<100	<50
Carbon Tetrachloride	µg/L	NE		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<50	<5	<100	<50
Chlorobenzene	µg/L	NE		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<50	<5	<100	<50
Chloroethane	µg/L	NE		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<50	<5	<100	<50
Chloroform	µg/L	NE		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<50	<5	<100	<50
Chloromethane	µg/L	NE		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<50	<5	<100	<50
cis-1,2-Dichloroethene	µg/L	NE		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<50	<5	<100	<50

Analyte	Unit	MTCA Method A Cleanup Level	Well No. / Sample Number / Date	MW-1				MW-2				MW-3			
				MW-1-080510 08/05/10	MW-1-111010 11/10/10	MW-1-021611 02/16/11	MW-1-051111 05/11/11	MW-2-080610 08/06/10	MW-2-111010 11/10/10	MW-2-021611 02/16/11	MW-2-051111 05/11/11	MW-3-080610 08/06/10	MW-3-111010 11/11/10	MW-3-021611 02/16/11	MW-3-051111 05/11/11
cis-1,3-Dichloropropene	µg/L	NE		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<50	<5	<100	<50
Dibromochloromethane	µg/L	NE		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<50	<5	<100	<50
Dibromomethane	µg/L	NE		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<50	<5	<100	<50
Dichlorodifluoromethane	µg/L	NE		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<50	<5	<100	<50
Hexachlorobutadiene	µg/L	NE		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<50	<5	<100	<50
Isopropylbenzene	µg/L	NE		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	104	<5	<100	<50
Methyl ethyl ketone (MEK)	µg/L	NE		<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<250	<25	<500	<250
Methyl isobutyl ketone (MIBK)	µg/L	NE		<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<250	<25	<500	<250
Methylene chloride	µg/L	5		<2.5	<2.5	0.850	<2.5	<2.5	<2.5	<2.5	<2.5	<250	<25	<500	<250
Methyl tert buytl ether (MTBE)	µg/L	20		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<50	<5	<100	<50
Naphthalene	µg/L	160		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	80.1	84.3	107	109
n-Butylbenzene	µg/L	NE		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<50	<5	<100	<50
n-Propylbenzene	µg/L	NE		0.55	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	92.2	<5	<100	61.2
p-Isopropyltoluene	µg/L	NE		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<50	<5	<100	<50
sec-Butylbenzene	µg/L	NE		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<50	<5	<100	<50
Styrene	µg/L	NE		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<50	<5	<100	<50
tert-Butylbenzene	µg/L	NE		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<50	<5	<100	<50
Tetrachloroethene	µg/L	5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<50	<5	<100	<50
trans-1,2-Dichloroethene	µg/L	NE		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<50	<5	<100	<50
trans-1,3-Dichloropropene	µg/L	NE		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<50	<5	<100	<50
Trichloroethene	µg/L	5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<50	<5	<100	<50
Trichlorofluoromethane	µg/L	NE		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<50	<5	<100	<50
Vinyl chloride	µg/L	0.2		<0.2	<0.5	<0.5	<0.5	<0.2	<0.5	<0.5	<0.5	<50	<5	<100	<50
Dissolved Lead[5]	µg/L	15		<1				<1				<1			
Lead[6]	µg/L	15		<1	<1			<1	<1			<1	<1		

Notes:

[1]Chemical analyses conducted by Anatek Labs, Inc. located in Spokane, Washington.

[2]Diesel and Lube Oil analyzed using Northwest Method NWTPH-Dx.

[3]Gasoline analyzed using Northwest Method NWTPH-Gx.

[4]Volatile organic compounds analyzed using by EPA Methods 8260B/8260C.

[5]Cleanup level for total xylenes is 1,000 µg/L.

[6]Lead and dissolved lead analyzed using by EPA Method 200.8. Note that laboratory reports are in units of mg/L and are converted to µg/L in this table.

[7] VOC results reported from RBCA volatiles list due to discrepancy between the RBCA volatiles list and the full 8260C list. Reported result is the higher of the two reported values.

[8](J) Flag qualifier indicates an estimated value. See Appendix B Data Quality Assessment Summary.

[9](U) - Concentrations of toluene qualified as non-detect due to trip blank contamination. Refer to Quarterly Groundwater Monitoring Report dated January 25, 2011 for additional information and discussion.

µg/L - micrograms per liter; mg/L = milligrams per liter; NE = not established; MTCA = Model Toxics Control Act

Analyte	Unit	MTCA Method A Cleanup Level	Well No. / Sample Number / Date	MW-4 MW-4-080610 08/06/10	MW-4 MW-4-111010 11/11/10	MW-4 MW-4-021711 02/17/11	MW-4 MW-4-051111 05/11/11	MW-5 MW-5-080610 08/06/10	MW-5 MW-5-111010 11/11/10	MW-5 MW-5-021711 02/17/11	MW-6 MW-6-080610 08/06/10	MW-6 MW-6-111010 11/11/10	MW-6 MW-6-021711 02/17/11	MW-6 MW-6-051111 05/11/11
DRPH[2]	µg/L	500		<100				<100			<100			
ORPH[2]	µg/L	500		<500				<500			<500			
GRPH [3]	µg/L	800		**4,940**	**1,190**	359	394	**188,000**	**80,600**	**110,000**	**76,400**	**16,600**	**15,600**	**6,850**
Volatile Organic Compounds [4]														
Benzene	µg/L	5		**21.3**	**9.36**	1.27 (J)[7,8]	1.19	**2,210**	**525**	**1,010**	**9,880**	**3,900**	**3,820**	**2,560**
Ethylbenzene	µg/L	700		80.6	7.04 (u)[9]	1.34 (J)[7,8]	1.82	**3,210**	**2120 (u)**	**2,200**	**1,640**	**873 (u)[9]**	628	325
Toluene	µg/L	1,000		462	78.3 (u)[9]	11.8 (J)[7,8]	9.12	**37,900**	**8420 (u)**	**13,800**	**14,400**	466 (u)[9]	262	642
m,p-Xylene	µg/L	1,000[5]		425	94.5 (u)[9]	16.8 [7,8]	30.4	**13,900**	**9330 (u)**	**9,080**	**5,180**	**1410 (u)[9]**	**656**	530
o-Xylene	µg/L			189	55.6	16.6 (J)[7,8]	31.1	**5,510**	**3,360**	**3,840**	**2,720**	**1,280**	**1,250**	360
1,1,1,2-Tetrachloroethane	µg/L	NE		188	<5	<0.5	<0.5	<500	<250	<25	<250	<125	<100	<50
1,1,1-Trichloroethane	µg/L	200		<5	<5	<0.5	<0.5	<500	<250	<25	<250	<125	<100	<50
1,1,2,2-Tetrachloroethane	µg/L	NE		<5	<5	<0.5	<0.5	<500	<250	<25	<250	<125	<100	<50
1,1,2-Trichloroethane	µg/L	NE		<5	<5	<0.5	<0.5	<500	<250	<25	<250	<125	<100	<50
1,1-Dichloroethane	µg/L	NE		<5	<5	<0.5	<0.5	<500	<250	<25	<250	<125	<100	<50
1,1-Dichloroethene	µg/L	NE		<5	<5	<0.5	<0.5	<500	<250	<25	<250	<125	<100	<50
1,1-Dichloropropene	µg/L	NE		<5	<5	<0.5	<0.5	<500	<250	<25	<250	<125	<100	<50
1,2,3-Trichlorobenzene	µg/L	NE		<5	<5	<0.5	<0.5	<500	<250	<25	<250	<125	<100	<50
1,2,3-Trichloropropane	µg/L	NE		<5	<5	<0.5	<0.5	<500	<250	<25	<250	<125	<100	<50
1,2,4-Trichlorobenzene	µg/L	NE		<5	<5	<0.5	<0.5	<500	<250	<25	<250	<125	<100	<50
1,2,4-Trimethylbenzene	µg/L	NE		154	24.9	1.82	15.7	2,000	1,060	2,250	376	162	<100	62.8
1,2-Dibromo-3-chloropropane (DBCP)	µg/L	NE		<5	<5	<0.5	<0.5	<500	<250	<25	<250	<125	<100	<50
1,2-Dibromoethane (EDB)	µg/L	0.01		<5	<5	<0.01	<0.01	<500	<250	<25	<250	<125	<100	<50
1,2-Dichlorobenzene	µg/L	NE		<5	<5	<0.5	<0.5	<500	<250	<25	<250	<125	<100	<50
1,2-Dichloroethane (EDC)	µg/L	5		<5	<5	<0.5	<0.5	<500	<250	<25	<250	<125	<100	<50
1,2-Dichloropropane	µg/L	NE		<5	<5	<0.5	<0.5	<500	<250	<25	<250	<125	<100	<50
1,3,5-Trimethylbenzene	µg/L	NE		68.3	19.3	10.2	9.57	968	376	850	<250	193	<100	59.1
1,3-Dichlorobenzene	µg/L	NE		<5	<5	<0.5	<0.5	<500	<250	<25	<250	<125	<100	<50
1,3-Dichloropropane	µg/L	NE		<5	<5	<0.5	<0.5	<500	<250	<25	<250	<125	<100	<50
1,4-Dichlorobenzene	µg/L	NE		<5	<5	<0.5	<0.5	<500	<250	<25	<250	<125	<100	<50
2,2-Dichloropropane	µg/L	NE		<5	<5	<0.5	<0.5	<500	<250	<25	<250	<125	<100	<50
2-Chlorotoluene	µg/L	NE		<5	<5	<0.5	<0.5	<500	<250	<25	<250	<125	<100	<50
2-Hexanone	µg/L	NE		<25	<25	<2.5	<2.5	<2,500	<1,250	<125	<250	<625	<500	<250
4-Chlorotoluene	µg/L	NE		<5	<5	<0.5	<0.5	<500	<250	<25	<250	<125	<100	<50
Acetone	µg/L	NE		36.0	<25	<2.5	<2.5	<2,500	<1,250	<125	<1,250	<625	<500	<250
Acrylonitrile	µg/L	NE		<5	<5	<0.5	<0.5	<500	<250	<25	<250	<125	<100	<50
Bromobenzene	µg/L	NE		<5	<5	<0.5	<0.5	<500	<250	<25	<250	<125	<100	<50
Bromochloromethane	µg/L	NE		<5	<5	<0.5	<0.5	<500	<250	<25	<250	<125	<100	<50
Bromodichloromethane	µg/L	NE		<5	<5	<0.5	<0.5	<500	<250	<25	<250	<125	<100	<50
Bromoform	µg/L	NE		<5	<5	<0.5	<0.5	<500	<250	<25	<250	<125	<100	<50
Bromomethane	µg/L	NE		<5	<5	<0.5	<0.5	<500	<250	<25	<250	<125	<100	<50
Carbon disulfide	µg/L	NE		<5	<5	<0.5	<0.5	<500	<250	<25	<250	<125	<100	<50
Carbon Tetrachloride	µg/L	NE		<5	<5	<0.5	<0.5	<500	<250	<25	<250	<125	<100	<50
Chlorobenzene	µg/L	NE		<5	<5	<0.5	<0.5	<500	<250	<25	<250	<125	<100	<50
Chloroethane	µg/L	NE		<5	<5	<0.5	<0.5	<500	<250	<25	<250	<125	<100	<50
Chloroform	µg/L	NE		<5	<5	<0.5	<0.5	<500	<250	<25	<250	<125	<100	<50
Chloromethane	µg/L	NE		<5	<5	<0.5	<0.5	<500	<250	<25	<250	<125	<100	<50
cis-1,2-Dichloroethene	µg/L	NE		<5	<5	<0.5	<0.5	<500	<250	<25	<250	<125	<100	<50

Analyte	Unit	MTCA Method A Cleanup Level	Well No. / Sample Number / Date	MW-4				MW-5			MW-6			
				MW-4-080610 08/06/10	MW-4-111010 11/11/10	MW-4-021711 02/17/11	MW-4-051111 05/11/11	MW-5-080610 08/06/10	MW-5-111010 11/11/10	MW-5-021711 02/17/11	MW-6-080610 08/06/10	MW-6-111010 11/11/10	MW-6-021711 02/17/11	MW-6-051111 05/11/11
cis-1,3-Dichloropropene	µg/L	NE		<5	<5	<0.5	<0.5	<500	<250	<25	<250	<125	<100	<50
Dibromochloromethane	µg/L	NE		<5	<5	<0.5	<0.5	<500	<250	<25	<250	<125	<100	<50
Dibromomethane	µg/L	NE		<5	<5	<0.5	<0.5	<500	<250	<25	<250	<125	<100	<50
Dichlorodifluoromethane	µg/L	NE		<5	<5	<0.5	<0.5	<500	<250	<25	<250	<125	<100	<50
Hexachlorobutadiene	µg/L	NE		<5	<5	<0.5	<0.5	<500	<250	<25	<250	<125	<100	<50
Isopropylbenzene	µg/L	NE		6.39	<5	<0.5	<0.5	945	<250	118	466	162	<100	<50
Methyl ethyl ketone (MEK)	µg/L	NE		<25	<25	<2.5	<2.5	<2,500	<1,250	<125	<1,250	<625	<500	<250
Methyl isobutyl ketone (MIBK)	µg/L	NE		<25	<25	<2.5	<2.5	<2,500	<1,250	<125	<1,250	<625	<500	<250
Methylene chloride	µg/L	5		<25	<25	<2.5	<2.5	<2,500	<1,250	<125	<1,250	<625	<500	<250
Methyl tert buytl ether (MTBE)	µg/L	20		<25	<5	<0.5	<0.5	<500	<250	<25	<250	<125	<100	<50
Naphthalene	µg/L	160		10.3	<5	0.89 (J)[7,8]	0.75	<500	<250	**364**	<250	**200**	147	59.0
n-Butylbenzene	µg/L	NE		<5	<5	<0.5	<0.5	<500	<250	94.6	<250	<125	<100	<50
n-Propylbenzene	µg/L	NE		15.1	<5	<0.5	0.53	691	<250	346	312	144	<100	<50
p-Isopropyltoluene	µg/L	NE		<5	<5	0.54	0.63	<500	<250	<25	<250	<125	<100	<50
sec-Butylbenzene	µg/L	NE		<5	<5	<0.5	<0.5	<500	<250	<25	<250	<125	<100	<50
Styrene	µg/L	NE		<5	<5	<0.5	<0.5	<500	<250	<25	<250	<125	<100	<50
tert-Butylbenzene	µg/L	NE		<5	<5	<0.5	<0.5	<500	<250	<25	<250	<125	<100	<50
Tetrachloroethene	µg/L	5		<5	<5	<0.5	<0.5	<500	<250	<25	<250	<125	<100	<50
trans-1,2-Dichloroethene	µg/L	NE		<5	<5	<0.5	<0.5	<500	<250	<25	<250	<125	<100	<50
trans-1,3-Dichloropropene	µg/L	NE		<5	<5	<0.5	<0.5	<500	<250	<25	<250	<125	<100	<50
Trichloroethene	µg/L	5		<5	<5	<0.5	<0.5	<500	<250	<25	<250	<125	<100	<50
Trichlorofluoromethane	µg/L	NE		<5	<5	<0.5	<0.5	<500	<250	<25	<250	<125	<100	<50
Vinyl chloride	µg/L	0.2		<5	<5	<0.5	<0.5	<500	<250	<25	<250	<125	<100	<50
Dissolved Lead[5]	µg/L	15		<1				<1			<1			
Lead[6]	µg/L	15		<1	<1			<1			<1	<1		

Notes:

[1]Chemical analyses conducted by Anatek Labs, Inc. located in Spokane, Washington.

[2]Diesel and Lube Oil analyzed using Northwest Method NWTPH-Dx.

[3]Gasoline analyzed using Northwest Method NWTPH-Gx.

[4]Volatile organic compounds analyzed using by EPA Methods 8260B/8260C.

[5]Cleanup level for total xylenes is 1,000 µg/L.

[6]Lead and dissolved lead analyzed using by EPA Method 200.8. Note that laboratory reports are in units of mg/L and are converted to µg/L in this table.

[7] VOC results reported from RBCA volatiles list due to discrepancy between the RBCA volatiles list and the full 8260C list. Reported result is the higher of the two reported values.

[8](J) Flag qualifier indicates an estimated value. See Appendix B Data Quality Assessment Summary.

[9](U) - Concentrations of toluene qualified as non-detect due to trip blank contamination. Refer to Quarterly Groundwater Monitoring Report dated January 25, 2011 for additional information and discussion.

µg/L - micrograms per liter; mg/L = milligrams per liter; NE = not established; MTCA = Model Toxics Control Act

Analyte	Unit	MTCA Method A Cleanup Level	Well No. / Sample Number / Date	MW-7				MW-8			MW-9		
				MW-7-080610 08/06/10	MW-7-111010 11/11/10	MW-7-021611 02/16/11	MW-7-051111 05/11/11	MW-8-080610 08/06/10	MW-8-111010 11/11/10	MW-8-021711 02/17/11	MW-9-111010 11/11/10	MW-9-021611 02/16/11	MW-9-051111 05/11/11
DRPH[2]	µg/L	500		<100				<100					
ORPH[2]	µg/L	500		<500				<500					
GRPH[3]	µg/L	800		<100	<100	<100	<100	**14,800**	**12,000**	**13,400**	<100	<100	<100
Volatile Organic Compounds [4]													
Benzene	µg/L	5		<0.5	<0.5	<0.5	<0.5	**2,620**	**2,670**	**3,280**	0.50	<0.5	<0.5
Ethylbenzene	µg/L	700		<0.5	<0.5	<0.5	<0.5	334	321	421	<0.5	<0.5	<0.5
Toluene	µg/L	1,000		<0.5	<0.5	<0.5	<0.5	**1,750**	**1360 (u)[9]**	**2,010**	<0.5	<0.5	<0.5
m,p-Xylene	µg/L	1,000[5]		<0.5	<0.5	<0.5	<0.5	**902**	**756**	**1,490**	<0.5	<0.5	<0.5
o-Xylene	µg/L			<0.5	<0.5	<0.5	<0.5	**403**	**187**	**548**	<0.5	<0.5	<0.5
1,1,1,2-Tetrachloroethane	µg/L	NE		<0.5	<0.5	<0.5	<0.5	<25	<50	<50	<0.5	<0.5	<0.5
1,1,1-Trichloroethane	µg/L	200		<0.5	<0.5	<0.5	<0.5	<25	<50	<50	<0.5	<0.5	<0.5
1,1,2,2-Tetrachloroethane	µg/L	NE		<0.5	<0.5	<0.5	<0.5	<25	<50	<50	<0.5	<0.5	<0.5
1,1,2-Trichloroethane	µg/L	NE		<0.5	<0.5	<0.5	<0.5	<25	<50	<50	<0.5	<0.5	<0.5
1,1-Dichloroethane	µg/L	NE		<0.5	<0.5	<0.5	<0.5	<25	<50	<50	<0.5	<0.5	<0.5
1,1-Dichloroethene	µg/L	NE		<0.5	<0.5	<0.5	<0.5	<25	<50	<50	<0.5	<0.5	<0.5
1,1-Dichloropropene	µg/L	NE		<0.5	<0.5	<0.5	<0.5	<25	<50	<50	<0.5	<0.5	<0.5
1,2,3-Trichlorobenzene	µg/L	NE		<0.5	<0.5	<0.5	<0.5	<25	<50	<50	<0.5	<0.5	<0.5
1,2,3-Trichloropropane	µg/L	NE		<0.5	<0.5	<0.5	<0.5	<25	<50	<50	<0.5	<0.5	<0.5
1,2,4-Trichlorobenzene	µg/L	NE		<0.5	<0.5	<0.5	<0.5	<25	<50	<50	<0.5	<0.5	<0.5
1,2,4-Trimethylbenzene	µg/L	NE		<0.5	<0.5	<0.5	<0.5	186	112	191	<0.5	<0.5	<0.5
1,2-Dibromo-3-chloropropane (DBCP)	µg/L	NE		<0.5	<0.5	<0.5	<0.5	<25	<50	<50	<0.5	<0.5	<0.5
1,2-Dibromoethane (EDB)	µg/L	0.01		<0.01	<0.01	<0.01	<0.01	<25	<50	<50	<0.01	<0.01	<0.01
1,2-Dichlorobenzene	µg/L	NE		<0.5	<0.5	<0.5	<0.5	<25	<50	<50	<0.5	<0.5	<0.5
1,2-Dichloroethane (EDC)	µg/L	5		<0.5	<0.5	<0.5	<0.5	<25	<50	<50	<0.5	<0.5	<0.5
1,2-Dichloropropane	µg/L	NE		<0.5	<0.5	<0.5	<0.5	<25	<50	<50	<0.5	<0.5	<0.5
1,3,5-Trimethylbenzene	µg/L	NE		<0.5	<0.5	<0.5	<0.5	70.7	94.2	85.7	<0.5	<0.5	<0.5
1,3-Dichlorobenzene	µg/L	NE		<0.5	<0.5	<0.5	<0.5	<25	<50	<50	<0.5	<0.5	<0.5
1,3-Dichloropropane	µg/L	NE		<0.5	<0.5	<0.5	<0.5	<25	<50	<50	<0.5	<0.5	<0.5
1,4-Dichlorobenzene	µg/L	NE		<0.5	<0.5	<0.5	<0.5	<25	<50	<50	<0.5	<0.5	<0.5
2,2-Dichloropropane	µg/L	NE		<0.5	<0.5	<0.5	<0.5	<25	<50	<50	<0.5	<0.5	<0.5
2-Chlorotoluene	µg/L	NE		<0.5	<0.5	<0.5	<0.5	<25	<50	<50	<0.5	<0.5	<0.5
2-Hexanone	µg/L	NE		<2.5	<2.5	<2.5	<2.5	<125	<250	<250	<2.5	<2.5	<2.5
4-Chlorotoluene	µg/L	NE		<0.5	<0.5	<0.5	<0.5	<25	<50	<50	<0.5	<0.5	<0.5
Acetone	µg/L	NE		2.93	<2.5	<2.5	<2.5	<125	<250	<250	<2.5	<2.5	<2.5
Acrylonitrile	µg/L	NE		<0.5	<0.5	<0.5	<0.5	<25	<50	<50	<0.5	<0.5	<0.5
Bromobenzene	µg/L	NE		<0.5	<0.5	<0.5	<0.5	<25	<50	<50	<0.5	<0.5	<0.5
Bromochloromethane	µg/L	NE		<0.5	<0.5	<0.5	<0.5	<25	<50	<50	<0.5	<0.5	<0.5
Bromodichloromethane	µg/L	NE		<0.5	<0.5	<0.5	<0.5	<25	<50	<50	<0.5	<0.5	<0.5
Bromoform	µg/L	NE		<0.5	<0.5	<0.5	<0.5	<25	<50	<50	<0.5	<0.5	<0.5
Bromomethane	µg/L	NE		<0.5	<0.5	<0.5	<0.5	<25	<50	<50	<0.5	<0.5	<0.5
Carbon disulfide	µg/L	NE		<0.5	<0.5	<0.5	<0.5	<25	<50	<50	<0.5	<0.5	<0.5
Carbon Tetrachloride	µg/L	NE		<0.5	<0.5	<0.5	<0.5	<25	<50	<50	<0.5	<0.5	<0.5
Chlorobenzene	µg/L	NE		<0.5	<0.5	<0.5	<0.5	<25	<50	<50	<0.5	<0.5	<0.5
Chloroethane	µg/L	NE		<0.5	<0.5	<0.5	<0.5	<25	<50	<50	<0.5	<0.5	<0.5
Chloroform	µg/L	NE		<0.5	<0.5	<0.5	<0.5	<25	<50	<50	0.54	<0.5	<0.5
Chloromethane	µg/L	NE		<0.5	<0.5	<0.5	<0.5	<25	<50	<50	<0.5	<0.5	<0.5
cis-1,2-Dichloroethene	µg/L	NE		<0.5	<0.5	<0.5	<0.5	<25	<50	<50	<0.5	<0.5	<0.5

Analyte	Unit	MTCA Method A Cleanup Level	Well No. / Sample Number / Date	MW-7				MW-8			MW-9		
				MW-7-080610 08/06/10	MW-7-111010 11/11/10	MW-7-021611 02/16/11	MW-7-051111 05/11/11	MW-8-080610 08/06/10	MW-8-111010 11/11/10	MW-8-021711 02/17/11	MW-9-111010 11/11/10	MW-9-021611 02/16/11	MW-9-051111 05/11/11
cis-1,3-Dichloropropene	µg/L	NE		<0.5	<0.5	<0.5	<0.5	<25	<50	<50	<0.5	<0.5	<0.5
Dibromochloromethane	µg/L	NE		<0.5	<0.5	<0.5	<0.5	<25	<50	<50	<0.5	<0.5	<0.5
Dibromomethane	µg/L	NE		<0.5	<0.5	<0.5	<0.5	<25	<50	<50	<0.5	<0.5	<0.5
Dichlorodifluoromethane	µg/L	NE		<0.5	<0.5	<0.5	<0.5	<25	<50	<50	<0.5	<0.5	<0.5
Hexachlorobutadiene	µg/L	NE		<0.5	<0.5	<0.5	<0.5	<25	<50	<50	<0.5	<0.5	<0.5
Isopropylbenzene	µg/L	NE		<0.5	<0.5	<0.5	<0.5	<25	<50	<50	<0.5	<0.5	<0.5
Methyl ethyl ketone (MEK)	µg/L	NE		<2.5	<2.5	<2.5	<2.5	<125	<250	<250	<2.5	<2.5	<2.5
Methyl isobutyl ketone (MIBK)	µg/L	NE		<2.5	<2.5	<2.5	<2.5	<125	<250	<250	<2.5	<2.5	<2.5
Methylene chloride	µg/L	5		<2.5	<2.5	<2.5	<2.5	<125	<250	<250	<2.5	<2.5	<2.5
Methyl tert buytl ether (MTBE)	µg/L	20		<0.5	<0.5	<0.5	<0.5	<25	<50	<50	<0.5	<0.5	<0.5
Naphthalene	µg/L	160		<0.5	<0.5	<0.5	<0.5	<25	72.3	<50	<0.5	<0.5	<0.5
n-Butylbenzene	µg/L	NE		<0.5	<0.5	<0.5	<0.5	<25	<50	<50	<0.5	<0.5	<0.5
n-Propylbenzene	µg/L	NE		<0.5	<0.5	<0.5	<0.5	37.1	60.8	<50	<0.5	<0.5	<0.5
p-Isopropyltoluene	µg/L	NE		<0.5	<0.5	<0.5	<0.5	<25	<50	<50	<0.5	<0.5	<0.5
sec-Butylbenzene	µg/L	NE		<0.5	<0.5	<0.5	<0.5	<25	<50	<50	<0.5	<0.5	<0.5
Styrene	µg/L	NE		<0.5	<0.5	<0.5	<0.5	<25	<50	<50	<0.5	<0.5	<0.5
tert-Butylbenzene	µg/L	NE		<0.5	<0.5	<0.5	<0.5	<25	<50	<50	<0.5	<0.5	<0.5
Tetrachloroethene	µg/L	5		<0.5	<0.5	<0.5	<0.5	<25	<50	<50	<0.5	<0.5	<0.5
trans-1,2-Dichloroethene	µg/L	NE		<0.5	<0.5	<0.5	<0.5	<25	<50	<50	<0.5	<0.5	<0.5
trans-1,3-Dichloropropene	µg/L	NE		<0.5	<0.5	<0.5	<0.5	<25	<50	<50	<0.5	<0.5	<0.5
Trichloroethene	µg/L	5		<0.5	<0.5	<0.5	<0.5	<25	<50	<50	<0.5	<0.5	<0.5
Trichlorofluoromethane	µg/L	NE		<0.5	<0.5	<0.5	<0.5	<25	<50	<50	<0.5	<0.5	<0.5
Vinyl chloride	µg/L	0.2		<0.2	<0.5	<0.5	<0.5	<25	<50	<50	<0.5	<0.5	<0.5
Dissolved Lead[5]	µg/L	15		<1				<1					
Lead[6]	µg/L	15		<1	<1			<1	<1		<1		

Notes:

[1]Chemical analyses conducted by Anatek Labs, Inc. located in Spokane, Washington.

[2]Diesel and Lube Oil analyzed using Northwest Method NWTPH-Dx.

[3]Gasoline analyzed using Northwest Method NWTPH-Gx.

[4]Volatile organic compounds analyzed using by EPA Methods 8260B/8260C.

[5]Cleanup level for total xylenes is 1,000 µg/L.

[6]Lead and dissolved lead analyzed using by EPA Method 200.8. Note that laboratory reports are in units of mg/L and are converted to µg/L in this table.

[7] VOC results reported from RBCA volatiles list due to discrepancy between the RBCA volatiles list and the full 8260C list. Reported result is the higher of the two reported values.

[8](J) Flag qualifier indicates an estimated value. See Appendix B Data Quality Assessment Summary.

[9](U) - Concentrations of toluene qualified as non-detect due to trip blank contamination. Refer to Quarterly Groundwater Monitoring Report dated January 25, 2011 for additional information and discussion.

µg/L - micrograms per liter; mg/L = milligrams per liter; NE = not established; MTCA = Model Toxics Control Act

Analyte	Unit	MTCA Method A Cleanup Level	Well No. / Sample Number / Date	MW-10 MW-10-111010 11/11/10	MW-10 MW-10-021711 02/17/11	MW-10 MW-10-051111 05/11/11	MW-11 MW-11-111010 11/11/10	MW-11 MW-11-021711 02/17/11	MW-11 MW-11-050000 05/11/11	MW-12 MW-12-111010 11/11/10	MW-12 MW-12-021711 02/17/11	MW-12 MW-12-051211 05/12/11
DRPH[2]	µg/L	500										
ORPH[2]	µg/L	500										
GRPH[3]	µg/L	800		<100	<100	<100	<100	140	<100	<100	126	<100
Volatile Organic Compounds[4]												
Benzene	µg/L	5		0.50	<0.5	<0.5	0.50	<0.5	<0.5	0.50	<0.5	<0.5
Ethylbenzene	µg/L	700		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Toluene	µg/L	1,000		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
m,p-Xylene	µg/L	1,000[5]		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
o-Xylene	µg/L			<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,1,1,2-Tetrachloroethane	µg/L	NE		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,1,1-Trichloroethane	µg/L	200		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,1,2,2-Tetrachloroethane	µg/L	NE		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,1,2-Trichloroethane	µg/L	NE		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,1-Dichloroethane	µg/L	NE		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,1-Dichloroethene	µg/L	NE		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,1-Dichloropropene	µg/L	NE		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,2,3-Trichlorobenzene	µg/L	NE		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,2,3-Trichloropropane	µg/L	NE		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,2,4-Trichlorobenzene	µg/L	NE		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,2,4-Trimethylbenzene	µg/L	NE		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,2-Dibromo-3-chloropropane (DBCP)	µg/L	NE		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,2-Dibromoethane (EDB)	µg/L	0.01		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
1,2-Dichlorobenzene	µg/L	NE		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,2-Dichloroethane (EDC)	µg/L	5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,2-Dichloropropane	µg/L	NE		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,3,5-Trimethylbenzene	µg/L	NE		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,3-Dichlorobenzene	µg/L	NE		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,3-Dichloropropane	µg/L	NE		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,4-Dichlorobenzene	µg/L	NE		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,2-Dichloropropane	µg/L	NE		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-Chlorotoluene	µg/L	NE		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-Hexanone	µg/L	NE		<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5
4-Chlorotoluene	µg/L	NE		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Acetone	µg/L	NE		<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5
Acrylonitrile	µg/L	NE		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Bromobenzene	µg/L	NE		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Bromochloromethane	µg/L	NE		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Bromodichloromethane	µg/L	NE		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Bromoform	µg/L	NE		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Bromomethane	µg/L	NE		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Carbon disulfide	µg/L	NE		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Carbon Tetrachloride	µg/L	NE		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Chlorobenzene	µg/L	NE		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Chloroethane	µg/L	NE		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Chloroform	µg/L	NE		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Chloromethane	µg/L	NE		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
cis-1,2-Dichloroethene	µg/L	NE		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5

Analyte	Unit	MTCA Method A Cleanup Level	Well No. / Sample Number / Date	MW-10 MW-10-111010 11/11/10	MW-10 MW-10-021711 02/17/11	MW-10 MW-10-051111 05/11/11	MW-11 MW-11-111010 11/11/10	MW-11 MW-11-021711 02/17/11	MW-11 MW-11-050000 05/11/11	MW-12 MW-12-111010 11/11/10	MW-12 MW-12-021711 02/17/11	MW-12 MW-12-051211 05/12/11
cis-1,3-Dichloropropene	µg/L	NE		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dibromochloromethane	µg/L	NE		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dibromomethane	µg/L	NE		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dichlorodifluoromethane	µg/L	NE		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Hexachlorobutadiene	µg/L	NE		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Isopropylbenzene	µg/L	NE		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Methyl ethyl ketone (MEK)	µg/L	NE		<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5
Methyl isobutyl ketone (MIBK)	µg/L	NE		<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5
Methylene chloride	µg/L	5		<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	0.72	<2.5
Methyl tert buytl ether (MTBE)	µg/L	20		0.60	0.59	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Naphthalene	µg/L	160		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
n-Butylbenzene	µg/L	NE		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
n-Propylbenzene	µg/L	NE		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
p-Isopropyltoluene	µg/L	NE		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
sec-Butylbenzene	µg/L	NE		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Styrene	µg/L	NE		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
tert-Butylbenzene	µg/L	NE		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Tetrachloroethene	µg/L	5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
trans-1,2-Dichloroethene	µg/L	NE		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
trans-1,3-Dichloropropene	µg/L	NE		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Trichloroethene	µg/L	5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Trichlorofluoromethane	µg/L	NE		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Vinyl chloride	µg/L	0.2		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dissolved Lead[5]	µg/L	15										
Lead[6]	µg/L	15		<1			<1			<1		

Notes:

[1]Chemical analyses conducted by Anatek Labs, Inc. located in Spokane, Washington.

[2]Diesel and Lube Oil analyzed using Northwest Method NWTPH-Dx.

[3]Gasoline analyzed using Northwest Method NWTPH-Gx.

[4]Volatile organic compounds analyzed using by EPA Methods 8260B/8260C.

[5]Cleanup level for total xylenes is 1,000 µg/L.

[6]Lead and dissolved lead analyzed using by EPA Method 200.8. Note that laboratory reports are in units of mg/L and are converted to µg/L in this table.

[7] VOC results reported from RBCA volatiles list due to discrepancy between the RBCA volatiles list and the full 8260C list. Reported result is the higher of the two reported values.

[8](J) Flag qualifier indicates an estimated value. See Appendix B Data Quality Assessment Summary.

[9](U) - Concentrations of toluene qualified as non-detect due to trip blank contamination. Refer to Quarterly Groundwater Monitoring Report dated January 25, 2011 for additional information and discussion.

µg/L - micrograms per liter; mg/L = milligrams per liter; NE = not established; MTCA = Model Toxics Control Act

Analyte	Unit	MTCA Method A Cleanup Level	Well No. / Sample Number / Date	Cabin Well				Duplicate-1 (MW-4)	Duplicate-1 (MW-6)	Duplicate-1 (MW-4)	Duplicate-1 (MW-4)
				Cabin Well-080610	101209043-001	110221034-014	110513012-012	80610	10112036-013	110221034-013	110513012-011
				08/06/10	12/08/10	02/21/11	05/12/11	08/06/10	11/11/10	02/17/11	05/12/11
DRPH[2]	µg/L	500		<100				<100			
ORPH[2]	µg/L	500		<500				<500			
GRPH [3]	µg/L	800		**40,000**	**26,100**	**21,500**	**14,000**	**4,920**	**10,800**	476	467
Volatile Organic Compounds [4]											
Benzene	µg/L	5		**770**	**227**	**440**	**540**	**21.6**	**4,530**	1.98 (J)[7,8]	1.09
Ethylbenzene	µg/L	700		**877**	592	517	414	81.5	258	2.00 (J)[7,8]	1.62
Toluene	µg/L	1,000		**4,920**	**3,640**	**2,210**	982	472	430 (u)[9]	18.7 (J)[7,8]	7.97
m,p-Xylene	µg/L	1,000[5]		**2,600**	**1,930**	**1,710**	**985**	419	**1,570**	24.3 [7]	27.5
o-Xylene	µg/L			**1,390**	**1,090**	**1,080**	**687**	194	**1,650**	21.1 [7]	28.2
1,1,1,2-Tetrachloroethane	µg/L	NE		<50	<0.5	<50	<25	<5	<50	<0.5	<0.5
1,1,1-Trichloroethane	µg/L	200		<50	<0.5	<50	<25	<5	<50	<0.5	<0.5
1,1,2,2-Tetrachloroethane	µg/L	NE		<50	<0.5	<50	<25	<5	<50	<0.5	<0.5
1,1,2-Trichloroethane	µg/L	NE		<50	<0.5	<50	<25	<5	<50	<0.5	<0.5
1,1-Dichloroethane	µg/L	NE		<50	<0.5	<50	<25	<5	<50	<0.5	<0.5
1,1-Dichloroethene	µg/L	NE		<50	<0.5	<50	<25	<5	<50	<0.5	<0.5
1,1-Dichloropropene	µg/L	NE		<50	<0.5	<50	<25	<5	<50	<0.5	<0.5
1,2,3-Trichlorobenzene	µg/L	NE		<50	<0.5	<50	<25	<5	<50	<0.5	<0.5
1,2,3-Trichloropropane	µg/L	NE		<50	<0.5	<50	<25	<5	<50	<0.5	<0.5
1,2,4-Trichlorobenzene	µg/L	NE		<50	<0.5	<50	<25	<5	<50	<0.5	<0.5
1,2,4-Trimethylbenzene	µg/L	NE		369	289	216	99	148	<50	1.61	14.2
1,2-Dibromo-3-chloropropane (DBCP)	µg/L	NE		<50	<0.5	<50	<25	<5	<50	<0.5	<0.5
1,2-Dibromoethane (EDB)	µg/L	0.01		<50	<0.5	<50	<25	<5	<50	<0.5	<0.01
1,2-Dichlorobenzene	µg/L	NE		<50	<0.5	<50	<25	<5	<50	<0.5	<0.5
1,2-Dichloroethane (EDC)	µg/L	5		<50	<0.5	<50	<25	<5	**116**	<0.5	<0.5
1,2-Dichloropropane	µg/L	NE		<50	<0.5	<50	<25	<5	<50	<0.5	<0.5
1,3,5-Trimethylbenzene	µg/L	NE		199	192	159	107	65.0	72.9	8.05	8.88
1,3-Dichlorobenzene	µg/L	NE		<50	<0.5	<50	<25	<5	<50	<0.5	<0.5
1,3-Dichloropropane	µg/L	NE		<50	<0.5	<50	<25	<5	<50	<0.5	<0.5
1,4-Dichlorobenzene	µg/L	NE		<50	<0.5	<50	<25	<5	<50	<0.5	<0.5
2,2-Dichloropropane	µg/L	NE		<50	<0.5	<50	<25	<5	<50	<0.5	<0.5
2-Chlorotoluene	µg/L	NE		<50	<0.5	<50	<25	<5	<50	<0.5	<0.5
2-Hexanone	µg/L	NE		<250	<2.5	<250	<125	<2.5	<250	<2.5	<2.5
4-Chlorotoluene	µg/L	NE		<50	<0.5	<50	<25	<5	<50	<0.5	<0.5
Acetone	µg/L	NE		<250	9.7	<250	<125	34.8	<250	<2.5	<2.5
Acrylonitrile	µg/L	NE		<50	<0.5	<50	<25	<5	<50	<0.5	<0.5
Bromobenzene	µg/L	NE		<50	<0.5	<50	<25	<5	<50	<0.5	<0.5
Bromochloromethane	µg/L	NE		<50	<0.5	<50	<25	<5	<50	<0.5	<0.5
Bromodichloromethane	µg/L	NE		<50	<0.5	<50	<25	<5	<50	<0.5	<0.5
Bromoform	µg/L	NE		<50	<0.5	<50	<25	<5	<50	<0.5	<0.5
Bromomethane	µg/L	NE		<50	<0.5	<50	<25	<5	<50	<0.5	<0.5
Carbon disulfide	µg/L	NE		<50	<0.5	<50	<25	<5	<50	<0.5	<0.5
Carbon Tetrachloride	µg/L	NE		<50	<0.5	<50	<25	<5	<50	<0.5	<0.5
Chlorobenzene	µg/L	NE		<50	<0.5	<50	<25	<5	<50	<0.5	<0.5
Chloroethane	µg/L	NE		<50	<0.5	<50	<25	<5	<50	<0.5	<0.5
Chloroform	µg/L	NE		<50	<0.5	<50	<25	<5	<50	<0.5	<0.5
Chloromethane	µg/L	NE		<50	<0.5	<50	<25	<5	<50	<0.5	<0.5
cis-1,2-Dichloroethene	µg/L	NE		<50	<0.5	<50	<25	<5	<50	<0.5	<0.5

Analyte	Unit	MTCA Method A Cleanup Level	Well No. / Sample Number / Date	Cabin Well				Duplicate-1 (MW-4)	Duplicate-1 (MW-6)	Duplicate-1 (MW-4)	Duplicate-1 (MW-4)
				Cabin Well-080610	101209043-001	110221034-014	110513012-012	80610	10112036-013	110221034-013	110513012-011
				08/06/10	12/08/10	02/21/11	05/12/11	08/06/10	11/11/10	02/17/11	05/12/11
cis-1,3-Dichloropropene	µg/L	NE		<50	<0.5	<50	<25	<5	<50	<0.5	<0.5
Dibromochloromethane	µg/L	NE		<50	<0.5	<50	<25	<5	<50	<0.5	<0.5
Dibromomethane	µg/L	NE		<50	<0.5	<50	<25	<5	<50	<0.5	<0.5
Dichlorodifluoromethane	µg/L	NE		<50	<0.5	<50	<25	<5	<50	<0.5	<0.5
Hexachlorobutadiene	µg/L	NE		<50	<0.5	<50	<25	<5	<50	<0.5	<0.5
Isopropylbenzene	µg/L	NE		<50	29.9	<50	<25	6.12	<50	<0.5	<0.5
Methyl ethyl ketone (MEK)	µg/L	NE		<250	4.73	<250	<125	<2.5	<250	<2.5	<2.5
Methyl isobutyl ketone (MIBK)	µg/L	NE		<250	<2.5	<250	<125	<2.5	<250	<2.5	<2.5
Methylene chloride	µg/L	5		<250	<2.5	<250	<125	<2.5	<250	<2.5	<2.5
Methyl tert buytl ether (MTBE)	µg/L	20		<50	<0.5	<50	<25	<5	<50	<0.5	<0.5
Naphthalene	µg/L	160		147	410	92.8	92.3	7.54	50.7	1.12 (J)[7,8]	0.75
n-Butylbenzene	µg/L	NE		<50	<0.5	<50	<25	<5	<50	<0.5	<0.5
n-Propylbenzene	µg/L	NE		88.1	70	<50	43.9	14.7	<50	<0.5	<0.5
p-Isopropyltoluene	µg/L	NE		<50	2.59	<50	<25	<5	<50	<0.5	0.60
sec-Butylbenzene	µg/L	NE		<50	<0.5	<50	<25	<5	<50	<0.5	<0.5
Styrene	µg/L	NE		<50	<0.5	<50	<25	<5	<50	<0.5	<0.5
tert-Butylbenzene	µg/L	NE		<50	<0.5	<50	<25	<5	<50	<0.5	<0.5
Tetrachloroethene	µg/L	5		<50	<0.5	<50	<25	<5	<50	<0.5	<0.5
trans-1,2-Dichloroethene	µg/L	NE		<50	<0.5	<50	<25	<5	<50	<0.5	<0.5
trans-1,3-Dichloropropene	µg/L	NE		<50	<0.5	<50	<25	<5	<50	<0.5	<0.5
Trichloroethene	µg/L	5		<50	<0.5	<50	<25	<5	<50	<0.5	<0.5
Trichlorofluoromethane	µg/L	NE		<50	<0.5	<50	<25	<5	<50	<0.5	<0.5
Vinyl chloride	µg/L	0.2		<50	<0.5	<50	<25	<5	<50	<0.5	<0.5
Dissolved Lead[5]	µg/L	15		<1	<0.5			<1			
Lead[6]	µg/L	15		<1	<1			<1	<1		

Notes:

[1]Chemical analyses conducted by Anatek Labs, Inc. located in Spokane, Washington.

[2]Diesel and Lube Oil analyzed using Northwest Method NWTPH-Dx.

[3]Gasoline analyzed using Northwest Method NWTPH-Gx.

[4]Volatile organic compounds analyzed using by EPA Methods 8260B/8260C.

[5]Cleanup level for total xylenes is 1,000 µg/L.

[6]Lead and dissolved lead analyzed using by EPA Method 200.8. Note that laboratory reports are in units of mg/L and are converted to µg/L in this table.

[7] VOC results reported from RBCA volatiles list due to discrepancy between the RBCA volatiles list and the full 8260C list. Reported result is the higher of the two reported values.

[8](J) Flag qualifier indicates an estimated value. See Appendix B Data Quality Assessment Summary.

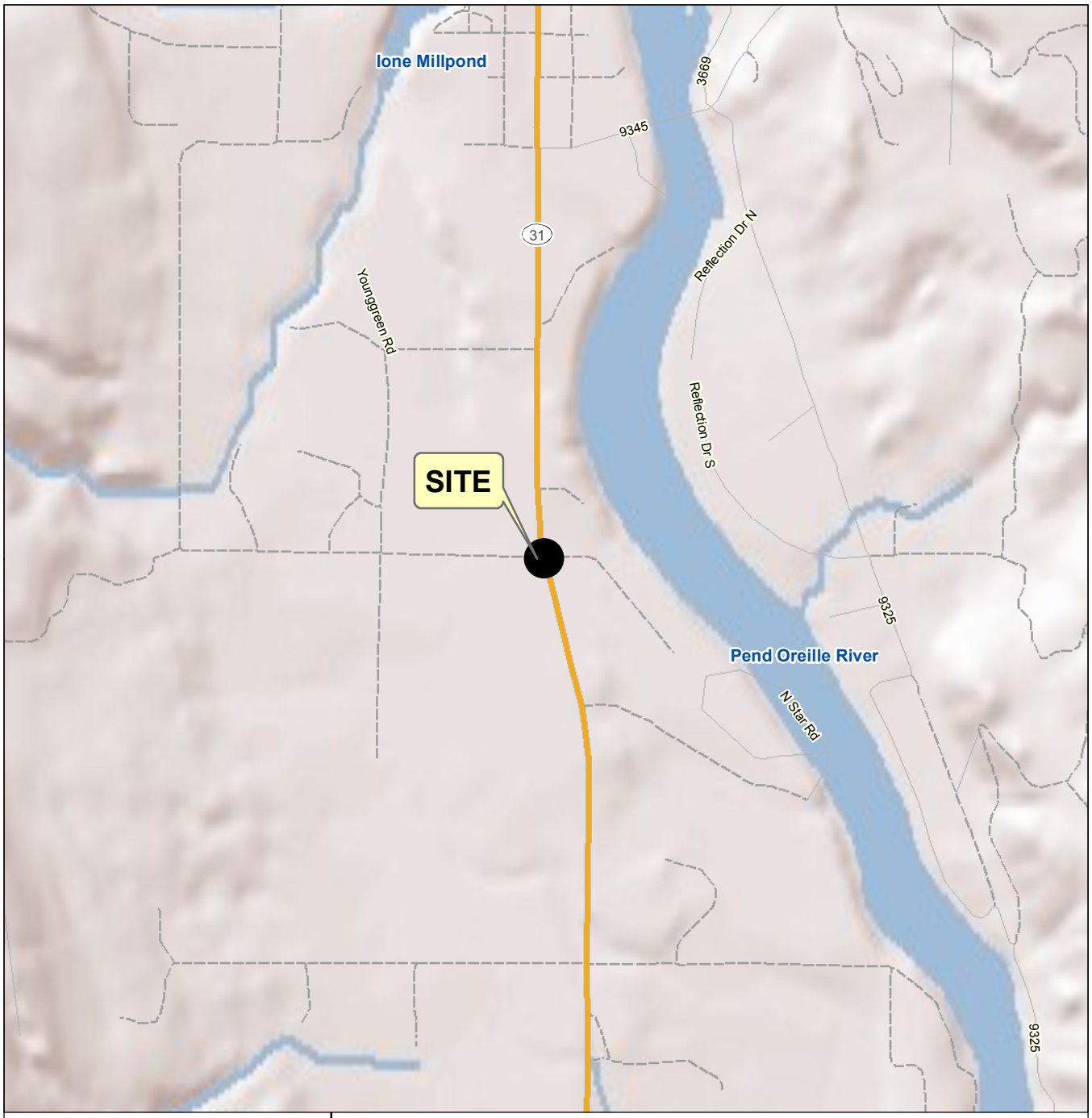
[9](U) - Concentrations of toluene qualified as non-detect due to trip blank contamination. Refer to Quarterly Groundwater Monitoring Report dated January 25, 2011 for additional information and discussion.

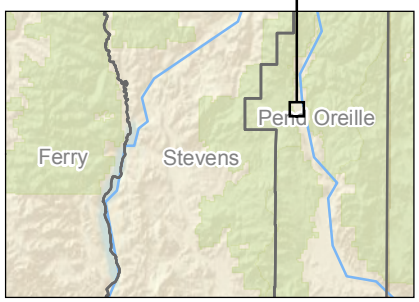
µg/L - micrograms per liter; mg/L = milligrams per liter; NE = not established; MTCA = Model Toxics Control Act

http://projects/sites/0050405800/Final/4th Qtr GW Monitoring/[Ione GW Monitoring Tables Q4.xlsx]Table 2

FIGURES

GeoEngineers





N
W E
S

2,000 0 2,000
Feet

Notes:
1. The locations of all features shown are approximate.
2. This drawing is for information purposes. It is intended to assist in showing features discussed in an attached document. GeoEngineers, Inc. cannot guarantee the accuracy and content of electronic files. The master file is stored by GeoEngineers, Inc. and will serve as the official record of this communication.
Data Sources: ESRI Data & Maps, Street Maps 2008.
Projection: NAD 1983, UTM Zone 11 North.

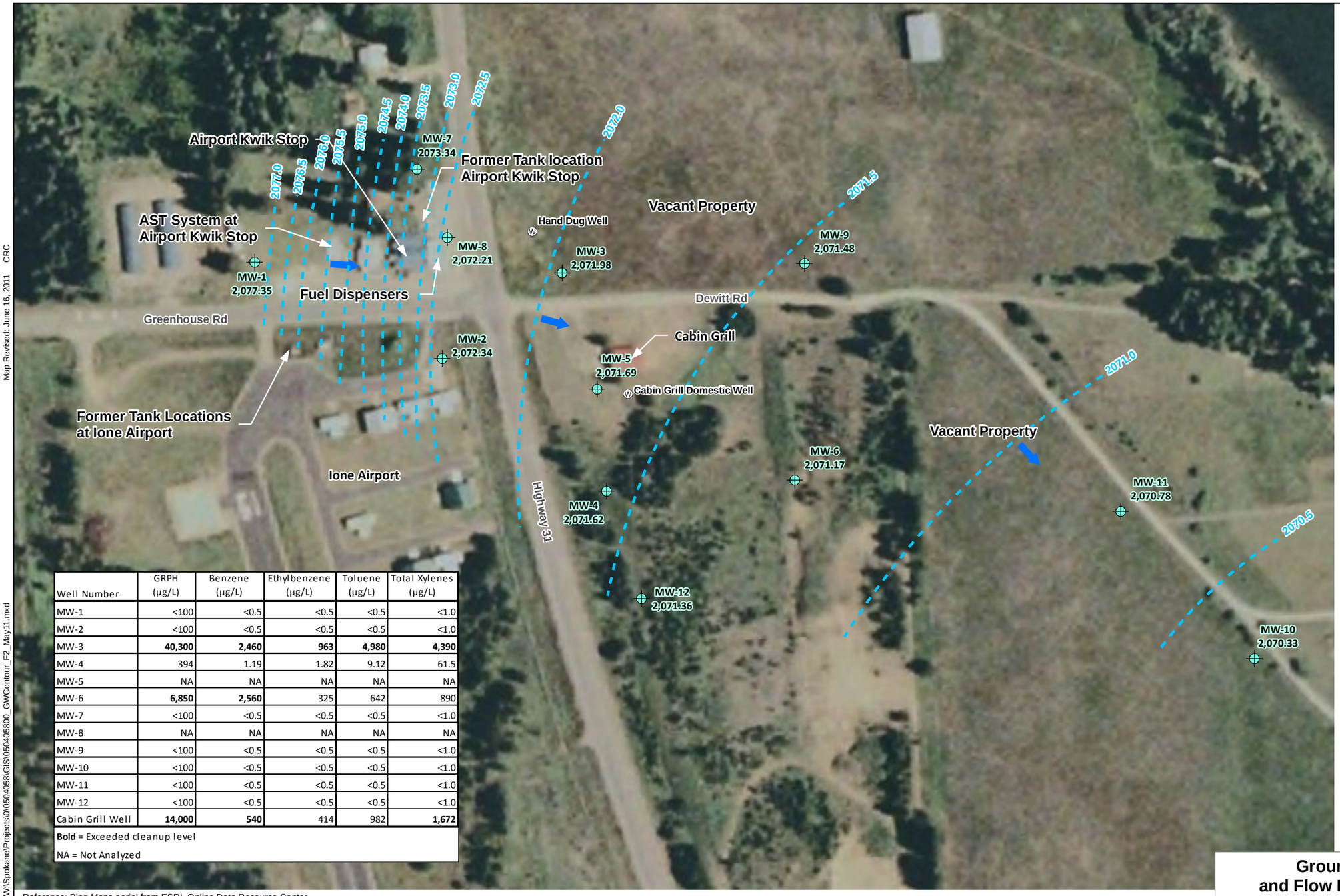
Vicinity Map

Ione Petroleum Contamination
Ione, Washington

GeoEngineers

Figure 1

Map Revised: 09/09/2010 CRC
Path:W:\Spokane\Projects\0\0504058\GIS\0504058GIS_VM_F1.mxd
Office: SPO



Well Number	GRPH (µg/L)	Benzene (µg/L)	Ethylbenzene (µg/L)	Toluene (µg/L)	Total Xylenes (µg/L)
MW-1	<100	<0.5	<0.5	<0.5	<1.0
MW-2	<100	<0.5	<0.5	<0.5	<1.0
MW-3	**40,300**	**2,460**	**963**	**4,980**	**4,390**
MW-4	394	1.19	1.82	9.12	61.5
MW-5	NA	NA	NA	NA	NA
MW-6	**6,850**	**2,560**	325	642	890
MW-7	<100	<0.5	<0.5	<0.5	<1.0
MW-8	NA	NA	NA	NA	NA
MW-9	<100	<0.5	<0.5	<0.5	<1.0
MW-10	<100	<0.5	<0.5	<0.5	<1.0
MW-11	<100	<0.5	<0.5	<0.5	<1.0
MW-12	<100	<0.5	<0.5	<0.5	<1.0
Cabin Grill Well	**14,000**	**540**	414	982	**1,672**

Bold = Exceeded cleanup level

NA = Not Analyzed

Legend

- MW-1 — Approximate Location of Monitoring Well and Groundwater Elevation on May 10, 2011
- Ⓦ — Approximate Location of Direct-Push Boring
- 2077 — Approximate Groundwater Elevation Contour (0.5-Foot Interval)
- Interpreted Groundwater Flow Direction

Reference: Bing Maps aerial from ESRI, Online Data Resource Center.
ESRI Data & Maps, Street Maps 2008

Notes:
1. The locations of all features shown are approximate.
2. This drawing is for information purposes. It is intended to assist in showing features discussed in an attached document. GeoEngineers, Inc. cannot guarantee the accuracy and content of electronic files. The master file is stored by GeoEngineers, Inc. and will serve as the official record of this communication.
3. Elevations are referenced in NAVD 88.
4. The equivalent (true) groundwater elevation at MW-5 and MW-8 as showing calculated to account for the presence of the free product using the following equation: GW = SG X T + IE; where GW = equivalent groundwater elevation SG = specific gravity of free product (0.75) for gasoline; T = thickness of product measured in well using oil/water interface probe; IE =elevation of water/product interface measured in the well.
5. NA = Not Analyzed

N W E S

100 0 100
Feet

Groundwater Elevations and Flow Direction - May 10, 2011

Ione Petroleum Contamination
Ione, Washington

GeoEngineers

Figure 2

Map Revised: June 16, 2011 CRC

Path:W:\SpokaneProjects\0105040581GIS\0504058_GWContour_F2_May11.mxd

OfficeLocation: SPO

APPENDICES

GeoEngineers

APPENDIX A
Field Methods

APPENDIX A
FIELD METHODS

General

The sampling methods used by GeoEngineers during the May 2011 sampling event generally conformed to the work plan dated April 9, 2010.

Groundwater Elevations

GeoEngineers measured depth to groundwater relative to the monitoring well casing rims on May 10, 2011 using an electric water level indicator. Product and groundwater depths at the location of monitoring well MW-5 and MW-8 were measured using an oil-water interface probe; measurement of free product thickness (if present) was also conducted using disposable bailers at the locations of wells MW-3, MW-4, MW-5, MW-6 and MW-8. The probe of the water level indicator was decontaminated between wells. Groundwater elevations were calculated by subtracting the depth to the water table from the casing rim elevations. Groundwater elevations measured on May 10, 2011 are presented in Table 1 and Figure 2. The equivalent groundwater elevation at the location of MW-5 and MW-8 was calculated using the measurements of the top of the free product and the groundwater table obtained from the interface probe and the equation presented in the Fluid Elevations section of this report. A specific gravity of 0.75 (approximate specific gravity of gasoline) was used in the calculation.

Groundwater Sampling

GeoEngineers obtained groundwater samples for chemical analysis from monitoring wells MW-1 through MW-4, MW-6, MW-7, MW-9 through MW-12 and the Cabin Grill domestic well on May 11 and 12, 2011.

Before sampling, VOCs in the well headspace were measured with a PID by first inserting the PID into the well casing and immediately after removal of the well cap. PID reading are posted in Table A-1. Measurement of free product was only performed at those well locations where PID measurements indicated the presence of VOCs greater than 10 ppm.

Groundwater purging and sampling conducted at the monitoring wells was performed consistent with the EPA's low-flow groundwater sampling procedure. A portable bladder pump was used for groundwater purging and sampling. During purging activities, water quality parameters, including pH, conductivity, temperature, turbidity, and oxidation-reduction potential, were measured using a Troll 9500 multi-parameter meter equipped with a flow-through cell. The meter was calibrated on a daily basis in a manner consistent with manufacturer procedures. Groundwater samples were collected once (1) water quality parameters were stabilized. Water quality parameter stabilization criteria include the following:

- Turbidity: ±10 percent for values greater than 5 NTU;
- Oxidation reduction potential: ±10 percent;
- Conductivity: ±3 percent;
- pH: ±0.1 unit; and

- Temperature: ±3 degrees.

Water quality parameters at the time of sampling are presented in Summary of Field Quality Parameters, Table A-1.

The groundwater samples were transferred in the field to laboratory-prepared containers and kept cool during transport to the testing laboratory. The sample containers were filled completely to eliminate headspace in the container. Chain-of-custody procedures were observed from the time of sample collection to delivery to the testing laboratory.

Quality control/quality assurance (QA/QC) samples collected during the May 2011 sampling event included a trip blank, and duplicate sample from monitoring well MW-4, labeled Duplicate-1.

Decontamination Procedures

The objective of the decontamination procedure is to minimize the potential for cross-contamination between sample locations. Sampling equipment was decontaminated in accordance with the work plan.

Table A-1

Summary of Field Quality Parameters

Ione Petroleum Contamination

Ione, Washington

Sample Number	Date Sampled	pH	Specific Conductivity (mS/m)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temperature (°C)	ORP (mV)	Well Headspace PID Readings (ppm)
MW-1	08/05/10	7.36	319.1	1.01	6.99	14.82	95	0.0
	11/10/10	7.09	54.0	4.02	9.12	8.02	363	0.0
	02/16/11	6.75	58.2	10.0	10.53	8.17	268	0.0
	05/11/11	7.40	30.46	8.5	8.39	10.09	105	0.0
MW-2	08/06/10	6.98	46.0	0.00	3.66	14.66	95	13.6
	11/10/10	6.62	67.7	0.00	4.24	9.15	373	0.0
	02/16/11	6.56	71.0	5.68	4.07	9.29	278	0.0
	05/11/11	7.01	35.52	12.09	5.54	11.67	82	0.0
MW-3	08/06/10	6.76	717.3	0.09	0.02	15.16	-107	19.8
	11/10/10	6.45	101.0	0.00	0.00	9.27	-127	0.0
	02/16/11	6.30	57.8	7.34	0.00	8.98	-149	0.0
	05/12/11	6.70	69.91	13.68	0.14	10.32	-117	10.3
MW-4	08/06/10	7.50	356.0	4.38	0.17	14.88	-72	2,100
	11/10/10	6.95	81.1	0.00	2.66	8.97	196	575
	02/17/11	6.73	99.9	3.12	0.00	8.79	273	575
	05/12/11	7.07	43.26	36.75	0.86	9.55	57	1,212
MW-5	08/06/10	6.85	606.4	0.00	NR	17.16	29	2,400
	11/10/10	6.61	92.3	0.00	0.00	9.50	108	4,800
	02/17/11	6.93	91.4	0.00	0.00	8.84	94	4,800
	05/10/11	NA	NA	NA	NA	NA	NA	1,657
MW-6	08/05/10	6.74	757.9	16.70	0.49	14.97	-27	0.3
	11/10/10	6.52	100.0	0.00	0.00	9.14	-38	0.0
	02/17/11	6.37	109.0	8.57	0.00	8.90	-75	0.0
	05/12/11	6.83	62.09	17.19	0.67	9.76	-13	37.2
MW-7	08/06/10	7.36	329.8	6.39	1.13	14.01	-57	1.2
	11/10/10	6.83	60.1	9.21	0.00	8.11	-20	0.0
	02/16/11	6.80	61.7	3.84	0.00	7.83	-14	0.0
	05/11/11	7.34	28.87	13.57	0.00	9.79	-39	0.0
MW-8	08/06/10	6.66	508.6	0.00	NR	14.96	24	2,150
	11/10/10	6.38	90.4	0.00	0.00	9.52	-8	1,280
	02/17/11	6.72	79.3	0.00	0.00	8.57	15	1,280
	05/10/11	NA	NA	NA	NA	NA	NA	1,570
MW-9	11/10/10	7.15	55.4	8.16	7.53	8.37	244	0.0

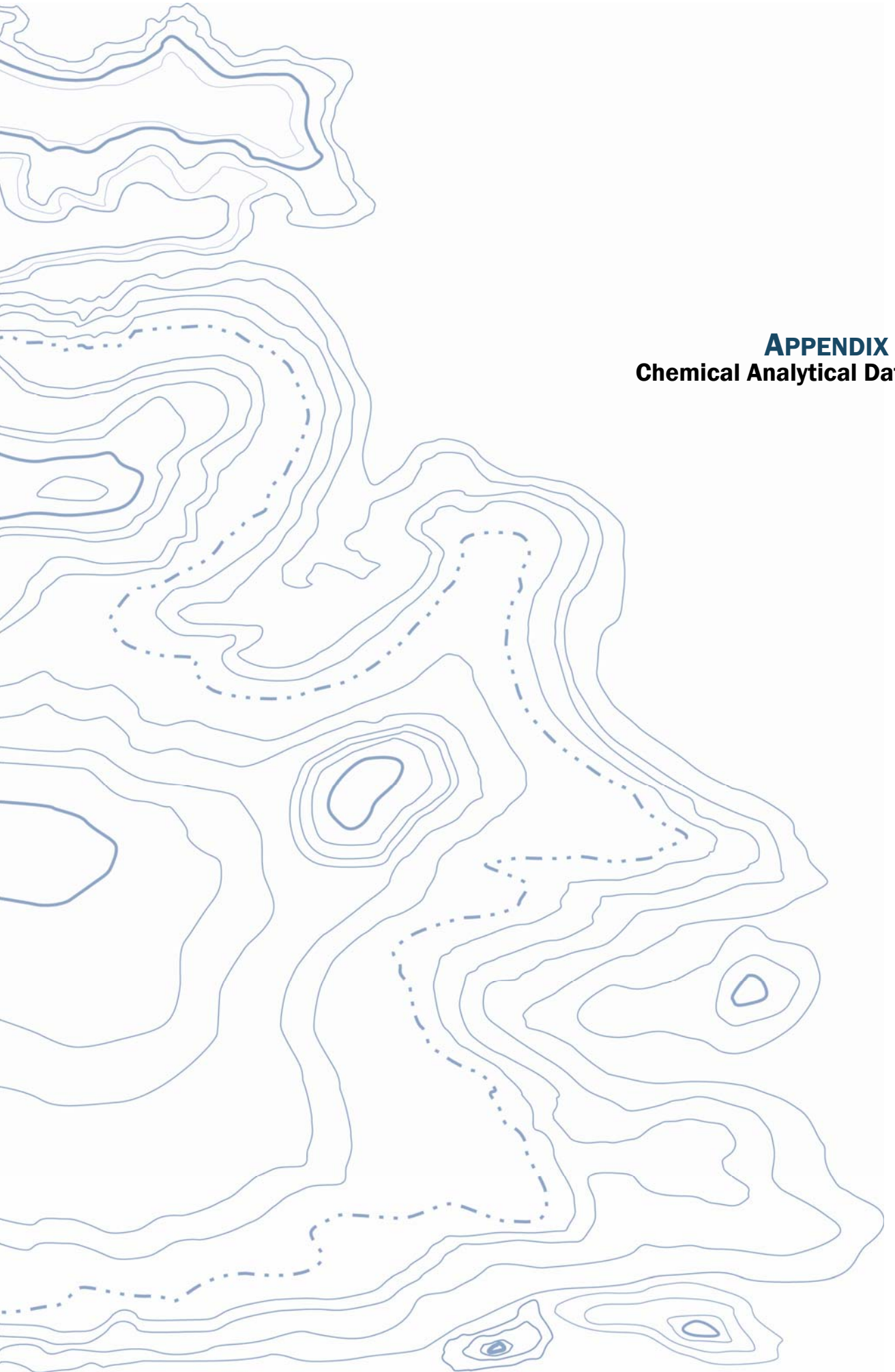
Sample Number	Date Sampled	pH	Specific Conductivity (mS/m)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temperature (°C)	ORP (mV)	Well Headspace PID Readings (ppm)
MW-9 cont.	02/16/11	6.99	57.8	11.12	9.51	8.12	251	0.0
	05/11/11	7.50	26.68	26.44	8.11	9.95	36	0.0
MW-10	11/10/10	7.08	69.9	4.12	1.44	8.95	48	0.0
	02/16/11	6.89	79.2	0.00	0.00	8.20	226	0.0
	05/11/11	7.33	23.28	12.30	8.82	8.61	35	0.0
MW-11	11/10/10	7.19	55.9	0.00	7.94	8.86	236	0.0
	02/17/11	7.00	65.2	8.34	10.72	8.73	283	0.0
	05/11/11	7.46	26.43	29.57	8.92	9.64	55	0.0
MW-12	11/10/10	7.06	76.0	0.00	8.03	8.82	242	0.9
	02/17/11	6.93	74.3	8.12	11.81	8.54	297	0.9
	5/12/2011	7.27	32.62	14.7	7.96	7.2	128	4.7

Notes:

NA= not analyzed

NR = not reported due to instrument error - readings were outside normal range and therefore not reported.

https://projects.geoengineers.com/sites/0050405800/Final/4th Qtr GW Monitoring/[Ione GW Monitoring Tables Q4.xlsx]Table A-1



APPENDIX B
Chemical Analytical Data

APPENDIX B
CHEMICAL ANALYTICAL DATA

DATA QUALITY ASSESSMENT SUMMARY

NWTPH-GX, VOLATILE ORGANIC COMPOUNDS (VOCS) BY EPA 8260C

Anatek Laboratory SDG	Samples Validated (Bold indicates the sample was qualified)
110513012 (water samples)	MW-1-051111, MW-2-051111, MW-3-051111, MW-4-051111, MW-6-051111, MW-7-051111, MW-9-051111, MW-10-051111, MW-11-051111, MW-12-051211, DUPLICATE-1-051211, CABIN GRILL WELL-051211, TRIP BLANK

This report documents the results of an EPA level 2a data validation of analytical data from the analyses of water samples and the associated laboratory and field quality control (QC) samples. The review included the following:

- Chain of Custody
- Holding Times
- Surrogates
- Method and Trip Blanks
- Laboratory Control Samples
- Matrix Spikes/Matrix Spike Duplicates
- Laboratory and Field Duplicates

I. DATA PACKAGE COMPLETENESS

Anatek Labs, Inc., located in Spokane, Washington, analyzed the samples evaluated as part of this data validation review. The laboratory provided all required deliverables for the validation according to the National Functional Guidelines. The laboratory followed adequate corrective action processes and all identified anomalies were discussed in the case narrative.

The following sections discuss the data.

OBJECTIVE

The objective of the data validation was to review laboratory analytical procedures and quality control (QC) results to evaluate whether:

- The samples were analyzed using well-defined and acceptable methods that provide detection limits below applicable regulatory criteria;

- The precision and accuracy of the data are well defined and sufficient to provide defensible data; and
- The quality assurance/quality control (QA/QC) procedures utilized by the laboratory meet acceptable industry practices and standards.

The environmental samples were analyzed by one or more of the analytical methods listed in the title of this appendix.

DATA QUALITY ASSESSMENT SUMMARY

The results for each of the QC elements are summarized below. The data assessment was performed using guidance in the USEPA Contract Laboratory Program *National Functional Guidelines for Inorganic Data Review* (USEPA 2002) and USEPA Contract Laboratory Program *National Functional Guidelines for Organic Data Review* (USEPA 2008).

Chain-of-Custody Documentation

Chain-of-custody (COC) forms were provided with the laboratory analytical reports. There were no anomalies noted on the COC forms; proper COC protocols appear to have been followed for this sampling event.

Holding Times

The holding time is defined as the time that elapses between sample collection and sample analysis. Maximum holding time criteria exist for each analysis to help ensure that the analyte concentrations found at the time of analysis reflect the concentration present at the time of sample collection.

Surrogate Recoveries

A surrogate compound is a compound that is chemically similar to the analytes of interest, but unlikely to be found in any environmental sample. Surrogates are used for organic analyses and are added to all samples, standards, and blanks to serve as an accuracy and specificity check of each analysis. The surrogates are added at a known concentration and percent recoveries are calculated following analysis. All surrogate recoveries for field samples were within the laboratory control limits.

Method and Trip Blanks

Method blanks are analyzed to ensure that laboratory procedures and reagents do not introduce measurable concentrations of the analytes of interest. Method blanks were analyzed with each batch of samples, at a frequency of one per twenty samples. For all sample batches, method blanks for all applicable methods were analyzed at the required frequency.

If a compound was found at a measurable concentration in the method blank, an “action level” for this compound was assigned to the associated batch samples by multiplying the concentration by five. This action level is then multiplied by any dilutions the sample may have gone through in the laboratory extraction process.

Trip Blanks are carried with the field sampler to and from the site, and these are analyzed to ensure that the transportation environment does not introduce measurable concentrations of the analytes of interest. Trip Blanks are usually analyzed at the frequency of one per every sample cooler.

None of the analytes of interest were detected above the reporting limits in any of the method blanks or the Trip Blank.

Matrix Spikes/Matrix Spike Duplicates (MS/MSD)

Because the actual analyte concentration in an environmental sample is not known, the accuracy of a particular analysis is usually inferred by performing a matrix spike (MS) analysis. One aliquot of sample is analyzed in the normal manner, and then a second aliquot of the sample is spiked with a known amount of analyte concentration and analyzed. From these analyses, a percent recovery (%R) is calculated. Matrix spike duplicates (MSD) analyses are generally performed for organic analyses as a precision check. For some organic analytical methods, such as NWTPH-Dx, a laboratory control sample/ laboratory control sample duplicate (LCS/LCSD) sample set is performed in lieu of a MS/MSD analysis.

For inorganics methods, the matrix spike (referred to as a "spiked sample") is typically followed by a post spike sample if any element recoveries were outside the control limits in the "spike sample".

Matrix spike analyses should be performed once per analytical batch or every twenty field samples, whichever is more frequent. The recovery criteria for matrix spikes and laboratory control samples are specified in the laboratory documents as are the relative percent difference values. The frequency requirements were met for all analyses and the %R/RPD values were within the proper control limits.

Laboratory Control Samples/ Laboratory Control Sample Duplicates (LCS/LCSD)

A laboratory control sample is essentially a blank sample that is spiked with a known amount of analyte concentration and analyzed. It is to be treated much like a matrix spike, without the possibility for matrix interference. As there is no actual sample matrix in the analysis, the analytical expectations for accuracy and precision are usually more rigorous and qualification would apply to all samples in the batch, instead of the parent sample only.

Laboratory control sample analyses should be performed once per analytical batch or every twenty field samples, whichever is more frequent. The recovery criteria for laboratory control samples are specified in the laboratory documents as are the relative percent difference values. The frequency requirements were met for all analyses, and the %R/RPD values were within the proper control limits.

Field Replicates/Duplicates

Field duplicate samples were collected and analyzed along with the reviewed sample batches. The duplicate samples were analyzed for the same parameters as the associated parent samples. As mentioned above for the laboratory duplicates the RPD is used as the criteria for assessing precision, unless one or more of the samples used has a concentration greater than five times the reporting limit for that sample, the absolute difference is used instead of the RPD.

SDG 110513012: (Volatiles) One set of field duplicates, MW-4-051111 & DUPLICATE-1-051211, was submitted with this SDG. All of the precision requirements were met for all target analytes.

OVERALL ASSESSMENT

As was determined by this data validation, the laboratory followed the specified analytical methods. Accuracy was acceptable, as demonstrated by the surrogate, LCS/LCSD, and MS/MSD %R values. Precision was acceptable, as demonstrated by the laboratory duplicate, LCS/LCSD and MS/MSD RPD and absolute difference values.

No data points were qualified for any reason.

In general, the data are acceptable for use as qualified.

Anatek Labs, Inc.

1282 Alturas Drive • Moscow, ID 83843 • (208) 883-2839 • Fax (208) 882-9246 • email moscow@anateklabs.com
504 E Sprague Ste. D • Spokane WA 99202 • (509) 838-3999 • Fax (509) 838-4433 • email spokane@anateklabs.com

Client: GEO ENGINEERS
Address: 523 E 2ND
SPOKANE, WA 99202
Attn: DAVE LAUDER

Batch #: 110513012
Project Name: IONE PETROLEUM CONTAMINATION 0504-058-00

Analytical Results Report

Sample Number 110513012-001
Client Sample ID MW-1-051111
Matrix Water
Comments

Sampling Date 5/11/2011
Sampling Time 10:59 AM
Sample Location

Date/Time Received 5/13/2011 8:22 AM
Extraction Date

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
1,1,1,2-Tetrachloroethane	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
1,1,1-Trichloroethane	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
1,1,2,2-Tetrachloroethane	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
1,1,2-Trichloroethane	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
1,1-Dichloroethane	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
1,1-Dichloroethene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
1,1-dichloropropene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
1,2,3-Trichlorobenzene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
1,2,3-Trichloropropane	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
1,2,4-Trichlorobenzene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
1,2,4-Trimethylbenzene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
1,2-Dibromo-3-chloropropane(DBCP)	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
1,2-Dibromoethane	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
1,2-Dichlorobenzene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
1,2-Dichloroethane	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
1,2-Dichloropropane	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
1,3,5-Trimethylbenzene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
1,3-Dichlorobenzene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
1,3-Dichloropropane	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
1,4-Dichlorobenzene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
2,2-Dichloropropane	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
2-Chlorotoluene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
2-hexanone	ND	ug/L	2.5	5/14/2011	WOZ	EPA 8260C	
4-Chlorotoluene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
Acetone	ND	ug/L	2.5	5/14/2011	WOZ	EPA 8260C	
Acrylonitrile	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
Benzene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
Bromobenzene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
Bromochloromethane	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
Bromodichloromethane	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
Bromoform	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
Bromomethane	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
Carbon disulfide	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
Carbon Tetrachloride	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; IN:C-ID-01; KY:90142; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; CA:Cert2632; ID:WA00169; WA:C585; MT:Cert0095

Anatek Labs, Inc.

1282 Alturas Drive • Moscow, ID 83843 • (208) 883-2839 • Fax (208) 882-9246 • email moscow@anateklabs.com
504 E Sprague Ste. D • Spokane WA 99202 • (509) 838-3999 • Fax (509) 838-4433 • email spokane@anateklabs.com

Client: GEO ENGINEERS
Address: 523 E 2ND
SPOKANE, WA 99202
Attn: DAVE LAUDER

Batch #: 110513012
Project Name: IONE PETROLEUM CONTAMINATION 0504-058-00

Analytical Results Report

Sample Number 110513012-001
Client Sample ID MW-1-051111
Matrix Water
Comments

Sampling Date 5/11/2011
Sampling Time 10:59 AM
Sample Location

Date/Time Received 5/13/2011 8:22 AM
Extraction Date

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Chlorobenzene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
Chloroethane	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
Chloroform	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
Chloromethane	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
cis-1,2-dichloroethene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
cis-1,3-Dichloropropene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
Dibromochloromethane	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
Dibromomethane	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
Dichlorodifluoromethane	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
Ethylbenzene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
Hexachlorobutadiene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
Isopropylbenzene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
m+p-Xylene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
Methyl ethyl ketone (MEK)	ND	ug/L	2.5	5/14/2011	WOZ	EPA 8260C	
Methyl isobutyl ketone (MIBK)	ND	ug/L	2.5	5/14/2011	WOZ	EPA 8260C	
Methylene chloride	ND	ug/L	2.5	5/14/2011	WOZ	EPA 8260C	
methyl-t-butyl ether (MTBE)	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
Naphthalene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
n-Butylbenzene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
n-Propylbenzene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
o-Xylene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
p-isopropyltoluene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
sec-Butylbenzene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
Styrene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
tert-Butylbenzene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
Tetrachloroethene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
Toluene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
trans-1,2-Dichloroethene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
trans-1,3-Dichloropropene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
Trichloroethene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
Trichloroflouromethane	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
Vinyl Chloride	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	

Anatek Labs, Inc.

1282 Alturas Drive • Moscow, ID 83843 • (208) 883-2839 • Fax (208) 882-9246 • email moscow@anateklabs.com
504 E Sprague Ste. D • Spokane WA 99202 • (509) 838-3999 • Fax (509) 838-4433 • email spokane@anateklabs.com

Client: GEO ENGINEERS
Address: 523 E 2ND
SPOKANE, WA 99202
Attn: DAVE LAUDER

Batch #: 110513012
Project Name: IONE PETROLEUM CONTAMINATION 0504-058-00

Analytical Results Report

Sample Number	110513012-001	**Sampling Date**	5/11/2011	**Date/Time Received**	5/13/2011 8:22 AM
Client Sample ID	MW-1-051111	**Sampling Time**	10:59 AM	**Extraction Date**	
Matrix	Water	**Sample Location**			
Comments					

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier

Surrogate Data

Sample Number 110513012-001

Surrogate Standard	Method	Percent Recovery	Control Limits
1,2-Dichlorobenzene-d4	EPA 8260C	99.2	70-130
4-Bromofluorobenzene	EPA 8260C	96.8	70-130
Toluene-d8	EPA 8260C	97.6	70-130

Anatek Labs, Inc.

1282 Alturas Drive • Moscow, ID 83843 • (208) 883-2839 • Fax (208) 882-9246 • email moscow@anateklabs.com
504 E Sprague Ste. D • Spokane WA 99202 • (509) 838-3999 • Fax (509) 838-4433 • email spokane@anateklabs.com

Client: GEO ENGINEERS
Address: 523 E 2ND
SPOKANE, WA 99202
Attn: DAVE LAUDER

Batch #: 110513012
Project Name: IONE PETROLEUM CONTAMINATION 0504-058-00

Analytical Results Report

Sample Number 110513012-002 | **Sampling Date** 5/11/2011 | **Date/Time Received** 5/13/2011 8:22 AM
Client Sample ID MW-2-051111 | **Sampling Time** 11:54 AM | **Extraction Date**
Matrix Water | **Sample Location**
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
1,1,1,2-Tetrachloroethane	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
1,1,1-Trichloroethane	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
1,1,2,2-Tetrachloroethane	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
1,1,2-Trichloroethane	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
1,1-Dichloroethane	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
1,1-Dichloroethene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
1,1-dichloropropene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
1,2,3-Trichlorobenzene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
1,2,3-Trichloropropane	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
1,2,4-Trichlorobenzene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
1,2,4-Trimethylbenzene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
1,2-Dibromo-3-chloropropane(DBCP)	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
1,2-Dibromoethane	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
1,2-Dichlorobenzene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
1,2-Dichloroethane	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
1,2-Dichloropropane	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
1,3,5-Trimethylbenzene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
1,3-Dichlorobenzene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
1,3-Dichloropropane	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
1,4-Dichlorobenzene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
2,2-Dichloropropane	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
2-Chlorotoluene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
2-hexanone	ND	ug/L	2.5	5/14/2011	WOZ	EPA 8260C	
4-Chlorotoluene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
Acetone	ND	ug/L	2.5	5/14/2011	WOZ	EPA 8260C	
Acrylonitrile	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
Benzene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
Bromobenzene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
Bromochloromethane	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
Bromodichloromethane	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
Bromoform	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
Bromomethane	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
Carbon disulfide	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
Carbon Tetrachloride	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
Chlorobenzene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	

Anatek Labs, Inc.

1282 Alturas Drive • Moscow, ID 83843 • (208) 883-2839 • Fax (208) 882-9246 • email moscow@anateklabs.com
504 E Sprague Ste. D • Spokane WA 99202 • (509) 838-3999 • Fax (509) 838-4433 • email spokane@anateklabs.com

Client: GEO ENGINEERS
Address: 523 E 2ND
SPOKANE, WA 99202
Attn: DAVE LAUDER

Batch #: 110513012
Project Name: IONE PETROLEUM CONTAMINATION 0504-058-00

Analytical Results Report

Sample Number 110513012-002
Client Sample ID MW-2-051111
Matrix Water
Comments

Sampling Date 5/11/2011
Sampling Time 11:54 AM
Sample Location

Date/Time Received 5/13/2011 8:22 AM
Extraction Date

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Chloroethane	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
Chloroform	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
Chloromethane	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
cis-1,2-dichloroethene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
cis-1,3-Dichloropropene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
Dibromochloromethane	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
Dibromomethane	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
Dichlorodifluoromethane	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
Ethylbenzene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
Hexachlorobutadiene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
Isopropylbenzene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
m+p-Xylene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
Methyl ethyl ketone (MEK)	ND	ug/L	2.5	5/14/2011	WOZ	EPA 8260C	
Methyl isobutyl ketone (MIBK)	ND	ug/L	2.5	5/14/2011	WOZ	EPA 8260C	
Methylene chloride	ND	ug/L	2.5	5/14/2011	WOZ	EPA 8260C	
methyl-t-butyl ether (MTBE)	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
Naphthalene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
n-Butylbenzene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
n-Propylbenzene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
o-Xylene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
p-isopropyltoluene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
sec-Butylbenzene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
Styrene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
tert-Butylbenzene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
Tetrachloroethene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
Toluene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
trans-1,2-Dichloroethene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
trans-1,3-Dichloropropene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
Trichloroethene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
Trichloroflouromethane	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
Vinyl Chloride	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	

Anatek Labs, Inc.

1282 Alturas Drive • Moscow, ID 83843 • (208) 883-2839 • Fax (208) 882-9246 • email moscow@anateklabs.com
504 E Sprague Ste. D • Spokane WA 99202 • (509) 838-3999 • Fax (509) 838-4433 • email spokane@anateklabs.com

Client:	GEO ENGINEERS	**Batch #:**	110513012
Address:	523 E 2ND SPOKANE, WA 99202	**Project Name:**	IONE PETROLEUM CONTAMINATION 0504-058-00
Attn:	DAVE LAUDER		

Analytical Results Report

Sample Number	110513012-002	**Sampling Date**	5/11/2011	**Date/Time Received**	5/13/2011 8:22 AM
Client Sample ID	MW-2-051111	**Sampling Time**	11:54 AM	**Extraction Date**	
Matrix	Water	**Sample Location**			
Comments					

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier

Surrogate Data

Sample Number 110513012-002

Surrogate Standard	Method	Percent Recovery	Control Limits
1,2-Dichlorobenzene-d4	EPA 8260C	102.0	70-130
4-Bromofluorobenzene	EPA 8260C	94.8	70-130
Toluene-d8	EPA 8260C	96.4	70-130

Anatek Labs, Inc.

1282 Alturas Drive • Moscow, ID 83843 • (208) 883-2839 • Fax (208) 882-9246 • email moscow@anateklabs.com
504 E Sprague Ste. D • Spokane WA 99202 • (509) 838-3999 • Fax (509) 838-4433 • email spokane@anateklabs.com

Client: GEO ENGINEERS
Address: 523 E 2ND
SPOKANE, WA 99202
Attn: DAVE LAUDER

Batch #: 110513012
Project Name: IONE PETROLEUM CONTAMINATION 0504-058-00

Analytical Results Report

Sample Number 110513012-003
Client Sample ID MW-3-051111
Matrix Water
Comments

Sampling Date 5/11/2011
Sampling Time 3:03 PM
Sample Location

Date/Time Received 5/13/2011 8:22 AM
Extraction Date

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
1,1,1,2-Tetrachloroethane	ND	ug/L	50	5/14/2011	WOZ	EPA 8260C	
1,1,1-Trichloroethane	ND	ug/L	50	5/14/2011	WOZ	EPA 8260C	
1,1,2,2-Tetrachloroethane	ND	ug/L	50	5/14/2011	WOZ	EPA 8260C	
1,1,2-Trichloroethane	ND	ug/L	50	5/14/2011	WOZ	EPA 8260C	
1,1-Dichloroethane	ND	ug/L	50	5/14/2011	WOZ	EPA 8260C	
1,1-Dichloroethene	ND	ug/L	50	5/14/2011	WOZ	EPA 8260C	
1,1-dichloropropene	ND	ug/L	50	5/14/2011	WOZ	EPA 8260C	
1,2,3-Trichlorobenzene	ND	ug/L	50	5/14/2011	WOZ	EPA 8260C	
1,2,3-Trichloropropane	ND	ug/L	50	5/14/2011	WOZ	EPA 8260C	
1,2,4-Trichlorobenzene	ND	ug/L	50	5/14/2011	WOZ	EPA 8260C	
1,2,4-Trimethylbenzene	363	ug/L	50	5/14/2011	WOZ	EPA 8260C	
1,2-Dibromo-3-chloropropane(DBCP)	ND	ug/L	50	5/14/2011	WOZ	EPA 8260C	
1,2-Dibromoethane	ND	ug/L	50	5/14/2011	WOZ	EPA 8260C	
1,2-Dichlorobenzene	ND	ug/L	50	5/14/2011	WOZ	EPA 8260C	
1,2-Dichloroethane	ND	ug/L	50	5/14/2011	WOZ	EPA 8260C	
1,2-Dichloropropane	ND	ug/L	50	5/14/2011	WOZ	EPA 8260C	
1,3,5-Trimethylbenzene	168	ug/L	50	5/14/2011	WOZ	EPA 8260C	
1,3-Dichlorobenzene	ND	ug/L	50	5/14/2011	WOZ	EPA 8260C	
1,3-Dichloropropane	ND	ug/L	50	5/14/2011	WOZ	EPA 8260C	
1,4-Dichlorobenzene	ND	ug/L	50	5/14/2011	WOZ	EPA 8260C	
2,2-Dichloropropane	ND	ug/L	50	5/14/2011	WOZ	EPA 8260C	
2-Chlorotoluene	ND	ug/L	50	5/14/2011	WOZ	EPA 8260C	
2-hexanone	ND	ug/L	250	5/14/2011	WOZ	EPA 8260C	
4-Chlorotoluene	ND	ug/L	50	5/14/2011	WOZ	EPA 8260C	
Acetone	ND	ug/L	250	5/14/2011	WOZ	EPA 8260C	
Acrylonitrile	ND	ug/L	50	5/14/2011	WOZ	EPA 8260C	
Benzene	2460	ug/L	50	5/14/2011	WOZ	EPA 8260C	
Bromobenzene	ND	ug/L	50	5/14/2011	WOZ	EPA 8260C	
Bromochloromethane	ND	ug/L	50	5/14/2011	WOZ	EPA 8260C	
Bromodichloromethane	ND	ug/L	50	5/14/2011	WOZ	EPA 8260C	
Bromoform	ND	ug/L	50	5/14/2011	WOZ	EPA 8260C	
Bromomethane	ND	ug/L	50	5/14/2011	WOZ	EPA 8260C	
Carbon disulfide	ND	ug/L	50	5/14/2011	WOZ	EPA 8260C	
Carbon Tetrachloride	ND	ug/L	50	5/14/2011	WOZ	EPA 8260C	
Chlorobenzene	ND	ug/L	50	5/14/2011	WOZ	EPA 8260C	

Anatek Labs, Inc.

1282 Alturas Drive • Moscow, ID 83843 • (208) 883-2839 • Fax (208) 882-9246 • email moscow@anateklabs.com
504 E Sprague Ste. D • Spokane WA 99202 • (509) 838-3999 • Fax (509) 838-4433 • email spokane@anateklabs.com

Client: GEO ENGINEERS
Address: 523 E 2ND
SPOKANE, WA 99202
Attn: DAVE LAUDER

Batch #: 110513012
Project Name: IONE PETROLEUM CONTAMINATION 0504-058-00

Analytical Results Report

Sample Number 110513012-003
Client Sample ID MW-3-051111
Matrix Water
Comments

Sampling Date 5/11/2011
Sampling Time 3:03 PM
Sample Location

Date/Time Received 5/13/2011 8:22 AM
Extraction Date

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Chloroethane	ND	ug/L	50	5/14/2011	WOZ	EPA 8260C	
Chloroform	ND	ug/L	50	5/14/2011	WOZ	EPA 8260C	
Chloromethane	ND	ug/L	50	5/14/2011	WOZ	EPA 8260C	
cis-1,2-dichloroethene	ND	ug/L	50	5/14/2011	WOZ	EPA 8260C	
cis-1,3-Dichloropropene	ND	ug/L	50	5/14/2011	WOZ	EPA 8260C	
Dibromochloromethane	ND	ug/L	50	5/14/2011	WOZ	EPA 8260C	
Dibromomethane	ND	ug/L	50	5/14/2011	WOZ	EPA 8260C	
Dichlorodifluoromethane	ND	ug/L	50	5/14/2011	WOZ	EPA 8260C	
Ethylbenzene	963	ug/L	50	5/14/2011	WOZ	EPA 8260C	
Hexachlorobutadiene	ND	ug/L	50	5/14/2011	WOZ	EPA 8260C	
Isopropylbenzene	ND	ug/L	50	5/14/2011	WOZ	EPA 8260C	
m+p-Xylene	3110	ug/L	50	5/14/2011	WOZ	EPA 8260C	
Methyl ethyl ketone (MEK)	ND	ug/L	250	5/14/2011	WOZ	EPA 8260C	
Methyl isobutyl ketone (MIBK)	ND	ug/L	250	5/14/2011	WOZ	EPA 8260C	
Methylene chloride	ND	ug/L	250	5/14/2011	WOZ	EPA 8260C	
methyl-t-butyl ether (MTBE)	ND	ug/L	50	5/14/2011	WOZ	EPA 8260C	
Naphthalene	109	ug/L	50	5/14/2011	WOZ	EPA 8260C	
n-Butylbenzene	ND	ug/L	50	5/14/2011	WOZ	EPA 8260C	
n-Propylbenzene	61.2	ug/L	50	5/14/2011	WOZ	EPA 8260C	
o-Xylene	1280	ug/L	50	5/14/2011	WOZ	EPA 8260C	
p-isopropyltoluene	ND	ug/L	50	5/14/2011	WOZ	EPA 8260C	
sec-Butylbenzene	ND	ug/L	50	5/14/2011	WOZ	EPA 8260C	
Styrene	ND	ug/L	50	5/14/2011	WOZ	EPA 8260C	
tert-Butylbenzene	ND	ug/L	50	5/14/2011	WOZ	EPA 8260C	
Tetrachloroethene	ND	ug/L	50	5/14/2011	WOZ	EPA 8260C	
Toluene	4980	ug/L	50	5/14/2011	WOZ	EPA 8260C	
trans-1,2-Dichloroethene	ND	ug/L	50	5/14/2011	WOZ	EPA 8260C	
trans-1,3-Dichloropropene	ND	ug/L	50	5/14/2011	WOZ	EPA 8260C	
Trichloroethene	ND	ug/L	50	5/14/2011	WOZ	EPA 8260C	
Trichloroflouromethane	ND	ug/L	50	5/14/2011	WOZ	EPA 8260C	
Vinyl Chloride	ND	ug/L	50	5/14/2011	WOZ	EPA 8260C	

Anatek Labs, Inc.

1282 Alturas Drive • Moscow, ID 83843 • (208) 883-2839 • Fax (208) 882-9246 • email moscow@anateklabs.com
504 E Sprague Ste. D • Spokane WA 99202 • (509) 838-3999 • Fax (509) 838-4433 • email spokane@anateklabs.com

Client:	GEO ENGINEERS	**Batch #:**	110513012
Address:	523 E 2ND SPOKANE, WA 99202	**Project Name:**	IONE PETROLEUM CONTAMINATION 0504-058-00
Attn:	DAVE LAUDER		

Analytical Results Report

Sample Number	110513012-003	**Sampling Date**	5/11/2011	**Date/Time Received**	5/13/2011 8:22 AM
Client Sample ID	MW-3-051111	**Sampling Time**	3:03 PM	**Extraction Date**	
Matrix	Water	**Sample Location**			
Comments					

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier

Surrogate Data

Sample Number 110513012-003

Surrogate Standard	Method	Percent Recovery	Control Limits
1,2-Dichlorobenzene-d4	EPA 8260C	98.4	70-130
4-Bromofluorobenzene	EPA 8260C	92.8	70-130
Toluene-d8	EPA 8260C	98.0	70-130

Anatek Labs, Inc.

1282 Alturas Drive • Moscow, ID 83843 • (208) 883-2839 • Fax (208) 882-9246 • email moscow@anateklabs.com
504 E Sprague Ste. D • Spokane WA 99202 • (509) 838-3999 • Fax (509) 838-4433 • email spokane@anateklabs.com

Client: GEO ENGINEERS
Address: 523 E 2ND
SPOKANE, WA 99202
Attn: DAVE LAUDER

Batch #: 110513012
Project Name: IONE PETROLEUM CONTAMINATION 0504-058-00

Analytical Results Report

Sample Number 110513012-004 | **Sampling Date** 5/11/2011 | **Date/Time Received** 5/13/2011 8:22 AM
Client Sample ID MW-4-051111 | **Sampling Time** 11:24 AM | **Extraction Date**
Matrix Water | **Sample Location**
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
1,1,1,2-Tetrachloroethane	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
1,1,1-Trichloroethane	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
1,1,2,2-Tetrachloroethane	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
1,1,2-Trichloroethane	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
1,1-Dichloroethane	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
1,1-Dichloroethene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
1,1-dichloropropene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
1,2,3-Trichlorobenzene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
1,2,3-Trichloropropane	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
1,2,4-Trichlorobenzene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
1,2,4-Trimethylbenzene	15.7	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
1,2-Dibromo-3-chloropropane(DBCP)	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
1,2-Dibromoethane	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
1,2-Dichlorobenzene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
1,2-Dichloroethane	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
1,2-Dichloropropane	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
1,3,5-Trimethylbenzene	9.57	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
1,3-Dichlorobenzene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
1,3-Dichloropropane	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
1,4-Dichlorobenzene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
2,2-Dichloropropane	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
2-Chlorotoluene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
2-hexanone	ND	ug/L	2.5	5/14/2011	WOZ	EPA 8260C	
4-Chlorotoluene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
Acetone	ND	ug/L	2.5	5/14/2011	WOZ	EPA 8260C	
Acrylonitrile	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
Benzene	1.19	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
Bromobenzene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
Bromochloromethane	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
Bromodichloromethane	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
Bromoform	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
Bromomethane	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
Carbon disulfide	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
Carbon Tetrachloride	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
Chlorobenzene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	

Anatek Labs, Inc.

1282 Alturas Drive • Moscow, ID 83843 • (208) 883-2839 • Fax (208) 882-9246 • email moscow@anateklabs.com
504 E Sprague Ste. D • Spokane WA 99202 • (509) 838-3999 • Fax (509) 838-4433 • email spokane@anateklabs.com

Client: GEO ENGINEERS
Address: 523 E 2ND
SPOKANE, WA 99202
Attn: DAVE LAUDER

Batch #: 110513012
Project Name: IONE PETROLEUM CONTAMINATION 0504-058-00

Analytical Results Report

Sample Number 110513012-004
Client Sample ID MW-4-051111
Matrix Water
Comments

Sampling Date 5/11/2011
Sampling Time 11:24 AM
Sample Location

Date/Time Received 5/13/2011 8:22 AM
Extraction Date

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Chloroethane	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
Chloroform	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
Chloromethane	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
cis-1,2-dichloroethene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
cis-1,3-Dichloropropene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
Dibromochloromethane	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
Dibromomethane	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
Dichlorodifluoromethane	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
Ethylbenzene	1.82	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
Hexachlorobutadiene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
Isopropylbenzene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
m+p-Xylene	30.4	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
Methyl ethyl ketone (MEK)	ND	ug/L	2.5	5/14/2011	WOZ	EPA 8260C	
Methyl isobutyl ketone (MIBK)	ND	ug/L	2.5	5/14/2011	WOZ	EPA 8260C	
Methylene chloride	ND	ug/L	2.5	5/14/2011	WOZ	EPA 8260C	
methyl-t-butyl ether (MTBE)	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
Naphthalene	0.75	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
n-Butylbenzene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
n-Propylbenzene	0.53	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
o-Xylene	31.1	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
p-isopropyltoluene	0.63	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
sec-Butylbenzene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
Styrene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
tert-Butylbenzene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
Tetrachloroethene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
Toluene	9.12	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
trans-1,2-Dichloroethene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
trans-1,3-Dichloropropene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
Trichloroethene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
Trichloroflouromethane	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
Vinyl Chloride	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	

Anatek Labs, Inc.

1282 Alturas Drive • Moscow, ID 83843 • (208) 883-2839 • Fax (208) 882-9246 • email moscow@anateklabs.com
504 E Sprague Ste. D • Spokane WA 99202 • (509) 838-3999 • Fax (509) 838-4433 • email spokane@anateklabs.com

Client: GEO ENGINEERS
Address: 523 E 2ND
SPOKANE, WA 99202
Attn: DAVE LAUDER

Batch #: 110513012
Project Name: IONE PETROLEUM CONTAMINATION 0504-058-00

Analytical Results Report

Sample Number	110513012-004	**Sampling Date**	5/11/2011	**Date/Time Received**	5/13/2011 8:22 AM
Client Sample ID	MW-4-051111	**Sampling Time**	11:24 AM	**Extraction Date**	
Matrix	Water	**Sample Location**			
Comments					

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier

Surrogate Data

Sample Number 110513012-004

Surrogate Standard	Method	Percent Recovery	Control Limits
1,2-Dichlorobenzene-d4	EPA 8260C	94.4	70-130
4-Bromofluorobenzene	EPA 8260C	94.4	70-130
Toluene-d8	EPA 8260C	90.8	70-130

Anatek Labs, Inc.

1282 Alturas Drive • Moscow, ID 83843 • (208) 883-2839 • Fax (208) 882-9246 • email moscow@anateklabs.com
504 E Sprague Ste. D • Spokane WA 99202 • (509) 838-3999 • Fax (509) 838-4433 • email spokane@anateklabs.com

Client: GEO ENGINEERS
Address: 523 E 2ND
SPOKANE, WA 99202
Attn: DAVE LAUDER

Batch #: 110513012
Project Name: IONE PETROLEUM CONTAMINATION 0504-058-00

Analytical Results Report

Sample Number 110513012-005 | **Sampling Date** 5/11/2011 | **Date/Time Received** 5/13/2011 8:22 AM
Client Sample ID MW-6-051111 | **Sampling Time** 1:58 PM | **Extraction Date**
Matrix Water | **Sample Location**
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
1,1,1,2-Tetrachloroethane	ND	ug/L	50	5/14/2011	WOZ	EPA 8260C	
1,1,1-Trichloroethane	ND	ug/L	50	5/14/2011	WOZ	EPA 8260C	
1,1,2,2-Tetrachloroethane	ND	ug/L	50	5/14/2011	WOZ	EPA 8260C	
1,1,2-Trichloroethane	ND	ug/L	50	5/14/2011	WOZ	EPA 8260C	
1,1-Dichloroethane	ND	ug/L	50	5/14/2011	WOZ	EPA 8260C	
1,1-Dichloroethene	ND	ug/L	50	5/14/2011	WOZ	EPA 8260C	
1,1-dichloropropene	ND	ug/L	50	5/14/2011	WOZ	EPA 8260C	
1,2,3-Trichlorobenzene	ND	ug/L	50	5/14/2011	WOZ	EPA 8260C	
1,2,3-Trichloropropane	ND	ug/L	50	5/14/2011	WOZ	EPA 8260C	
1,2,4-Trichlorobenzene	ND	ug/L	50	5/14/2011	WOZ	EPA 8260C	
1,2,4-Trimethylbenzene	62.8	ug/L	50	5/14/2011	WOZ	EPA 8260C	
1,2-Dibromo-3-chloropropane(DBCP)	ND	ug/L	50	5/14/2011	WOZ	EPA 8260C	
1,2-Dibromoethane	ND	ug/L	50	5/14/2011	WOZ	EPA 8260C	
1,2-Dichlorobenzene	ND	ug/L	50	5/14/2011	WOZ	EPA 8260C	
1,2-Dichloroethane	ND	ug/L	50	5/14/2011	WOZ	EPA 8260C	
1,2-Dichloropropane	ND	ug/L	50	5/14/2011	WOZ	EPA 8260C	
1,3,5-Trimethylbenzene	59.1	ug/L	50	5/14/2011	WOZ	EPA 8260C	
1,3-Dichlorobenzene	ND	ug/L	50	5/14/2011	WOZ	EPA 8260C	
1,3-Dichloropropane	ND	ug/L	50	5/14/2011	WOZ	EPA 8260C	
1,4-Dichlorobenzene	ND	ug/L	50	5/14/2011	WOZ	EPA 8260C	
2,2-Dichloropropane	ND	ug/L	50	5/14/2011	WOZ	EPA 8260C	
2-Chlorotoluene	ND	ug/L	50	5/14/2011	WOZ	EPA 8260C	
2-hexanone	ND	ug/L	250	5/14/2011	WOZ	EPA 8260C	
4-Chlorotoluene	ND	ug/L	50	5/14/2011	WOZ	EPA 8260C	
Acetone	ND	ug/L	250	5/14/2011	WOZ	EPA 8260C	
Acrylonitrile	ND	ug/L	50	5/14/2011	WOZ	EPA 8260C	
Benzene	2560	ug/L	50	5/14/2011	WOZ	EPA 8260C	
Bromobenzene	ND	ug/L	50	5/14/2011	WOZ	EPA 8260C	
Bromochloromethane	ND	ug/L	50	5/14/2011	WOZ	EPA 8260C	
Bromodichloromethane	ND	ug/L	50	5/14/2011	WOZ	EPA 8260C	
Bromoform	ND	ug/L	50	5/14/2011	WOZ	EPA 8260C	
Bromomethane	ND	ug/L	50	5/14/2011	WOZ	EPA 8260C	
Carbon disulfide	ND	ug/L	50	5/14/2011	WOZ	EPA 8260C	
Carbon Tetrachloride	ND	ug/L	50	5/14/2011	WOZ	EPA 8260C	
Chlorobenzene	ND	ug/L	50	5/14/2011	WOZ	EPA 8260C	

Anatek Labs, Inc.

1282 Alturas Drive • Moscow, ID 83843 • (208) 883-2839 • Fax (208) 882-9246 • email moscow@anateklabs.com
504 E Sprague Ste. D • Spokane WA 99202 • (509) 838-3999 • Fax (509) 838-4433 • email spokane@anateklabs.com

Client: GEO ENGINEERS
Address: 523 E 2ND
SPOKANE, WA 99202
Attn: DAVE LAUDER

Batch #: 110513012
Project Name: IONE PETROLEUM CONTAMINATION 0504-058-00

Analytical Results Report

Sample Number 110513012-005
Client Sample ID MW-6-051111
Matrix Water
Comments

Sampling Date 5/11/2011
Sampling Time 1:58 PM
Sample Location

Date/Time Received 5/13/2011 8:22 AM
Extraction Date

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Chloroethane	ND	ug/L	50	5/14/2011	WOZ	EPA 8260C	
Chloroform	ND	ug/L	50	5/14/2011	WOZ	EPA 8260C	
Chloromethane	ND	ug/L	50	5/14/2011	WOZ	EPA 8260C	
cis-1,2-dichloroethene	ND	ug/L	50	5/14/2011	WOZ	EPA 8260C	
cis-1,3-Dichloropropene	ND	ug/L	50	5/14/2011	WOZ	EPA 8260C	
Dibromochloromethane	ND	ug/L	50	5/14/2011	WOZ	EPA 8260C	
Dibromomethane	ND	ug/L	50	5/14/2011	WOZ	EPA 8260C	
Dichlorodifluoromethane	ND	ug/L	50	5/14/2011	WOZ	EPA 8260C	
Ethylbenzene	325	ug/L	50	5/14/2011	WOZ	EPA 8260C	
Hexachlorobutadiene	ND	ug/L	50	5/14/2011	WOZ	EPA 8260C	
Isopropylbenzene	ND	ug/L	50	5/14/2011	WOZ	EPA 8260C	
m+p-Xylene	530	ug/L	50	5/14/2011	WOZ	EPA 8260C	
Methyl ethyl ketone (MEK)	ND	ug/L	250	5/14/2011	WOZ	EPA 8260C	
Methyl isobutyl ketone (MIBK)	ND	ug/L	250	5/14/2011	WOZ	EPA 8260C	
Methylene chloride	ND	ug/L	250	5/14/2011	WOZ	EPA 8260C	
methyl-t-butyl ether (MTBE)	ND	ug/L	50	5/14/2011	WOZ	EPA 8260C	
Naphthalene	59.0	ug/L	50	5/14/2011	WOZ	EPA 8260C	
n-Butylbenzene	ND	ug/L	50	5/14/2011	WOZ	EPA 8260C	
n-Propylbenzene	ND	ug/L	50	5/14/2011	WOZ	EPA 8260C	
o-Xylene	360	ug/L	50	5/14/2011	WOZ	EPA 8260C	
p-isopropyltoluene	ND	ug/L	50	5/14/2011	WOZ	EPA 8260C	
sec-Butylbenzene	ND	ug/L	50	5/14/2011	WOZ	EPA 8260C	
Styrene	ND	ug/L	50	5/14/2011	WOZ	EPA 8260C	
tert-Butylbenzene	ND	ug/L	50	5/14/2011	WOZ	EPA 8260C	
Tetrachloroethene	ND	ug/L	50	5/14/2011	WOZ	EPA 8260C	
Toluene	642	ug/L	50	5/14/2011	WOZ	EPA 8260C	
trans-1,2-Dichloroethene	ND	ug/L	50	5/14/2011	WOZ	EPA 8260C	
trans-1,3-Dichloropropene	ND	ug/L	50	5/14/2011	WOZ	EPA 8260C	
Trichloroethene	ND	ug/L	50	5/14/2011	WOZ	EPA 8260C	
Trichloroflouromethane	ND	ug/L	50	5/14/2011	WOZ	EPA 8260C	
Vinyl Chloride	ND	ug/L	50	5/14/2011	WOZ	EPA 8260C	

Anatek Labs, Inc.

1282 Alturas Drive • Moscow, ID 83843 • (208) 883-2839 • Fax (208) 882-9246 • email moscow@anateklabs.com
504 E Sprague Ste. D • Spokane WA 99202 • (509) 838-3999 • Fax (509) 838-4433 • email spokane@anateklabs.com

Client:	GEO ENGINEERS	**Batch #:**	110513012
Address:	523 E 2ND SPOKANE, WA 99202	**Project Name:**	IONE PETROLEUM CONTAMINATION 0504-058-00
Attn:	DAVE LAUDER		

Analytical Results Report

Sample Number	110513012-005	**Sampling Date**	5/11/2011	**Date/Time Received**	5/13/2011 8:22 AM
Client Sample ID	MW-6-051111	**Sampling Time**	1:58 PM	**Extraction Date**	
Matrix	Water	**Sample Location**			
Comments					

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier

Surrogate Data

Sample Number 110513012-005

Surrogate Standard	Method	Percent Recovery	Control Limits
1,2-Dichlorobenzene-d4	EPA 8260C	102.4	70-130
4-Bromofluorobenzene	EPA 8260C	91.6	70-130
Toluene-d8	EPA 8260C	94.4	70-130

Anatek Labs, Inc.

1282 Alturas Drive • Moscow, ID 83843 • (208) 883-2839 • Fax (208) 882-9246 • email moscow@anateklabs.com
504 E Sprague Ste. D • Spokane WA 99202 • (509) 838-3999 • Fax (509) 838-4433 • email spokane@anateklabs.com

Client: GEO ENGINEERS
Address: 523 E 2ND
SPOKANE, WA 99202
Attn: DAVE LAUDER

Batch #: 110513012
Project Name: IONE PETROLEUM CONTAMINATION 0504-058-00

Analytical Results Report

Sample Number 110513012-006 | **Sampling Date** 5/11/2011 | **Date/Time Received** 5/13/2011 8:22 AM
Client Sample ID MW-7-051111 | **Sampling Time** 1:14 PM | **Extraction Date**
Matrix Water | **Sample Location**
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
1,1,1,2-Tetrachloroethane	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
1,1,1-Trichloroethane	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
1,1,2,2-Tetrachloroethane	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
1,1,2-Trichloroethane	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
1,1-Dichloroethane	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
1,1-Dichloroethene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
1,1-dichloropropene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
1,2,3-Trichlorobenzene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
1,2,3-Trichloropropane	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
1,2,4-Trichlorobenzene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
1,2,4-Trimethylbenzene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
1,2-Dibromo-3-chloropropane(DBCP)	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
1,2-Dibromoethane	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
1,2-Dichlorobenzene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
1,2-Dichloroethane	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
1,2-Dichloropropane	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
1,3,5-Trimethylbenzene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
1,3-Dichlorobenzene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
1,3-Dichloropropane	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
1,4-Dichlorobenzene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
2,2-Dichloropropane	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
2-Chlorotoluene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
2-hexanone	ND	ug/L	2.5	5/14/2011	WOZ	EPA 8260C	
4-Chlorotoluene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
Acetone	ND	ug/L	2.5	5/14/2011	WOZ	EPA 8260C	
Acrylonitrile	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
Benzene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
Bromobenzene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
Bromochloromethane	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
Bromodichloromethane	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
Bromoform	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
Bromomethane	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
Carbon disulfide	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
Carbon Tetrachloride	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
Chlorobenzene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	

Anatek Labs, Inc.

1282 Alturas Drive • Moscow, ID 83843 • (208) 883-2839 • Fax (208) 882-9246 • email moscow@anateklabs.com
504 E Sprague Ste. D • Spokane WA 99202 • (509) 838-3999 • Fax (509) 838-4433 • email spokane@anateklabs.com

Client: GEO ENGINEERS
Address: 523 E 2ND
SPOKANE, WA 99202
Attn: DAVE LAUDER

Batch #: 110513012
Project Name: IONE PETROLEUM CONTAMINATION 0504-058-00

Analytical Results Report

Sample Number 110513012-006
Client Sample ID MW-7-051111
Matrix Water
Comments

Sampling Date 5/11/2011
Sampling Time 1:14 PM
Sample Location

Date/Time Received 5/13/2011 8:22 AM
Extraction Date

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Chloroethane	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
Chloroform	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
Chloromethane	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
cis-1,2-dichloroethene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
cis-1,3-Dichloropropene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
Dibromochloromethane	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
Dibromomethane	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
Dichlorodifluoromethane	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
Ethylbenzene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
Hexachlorobutadiene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
Isopropylbenzene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
m+p-Xylene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
Methyl ethyl ketone (MEK)	ND	ug/L	2.5	5/14/2011	WOZ	EPA 8260C	
Methyl isobutyl ketone (MIBK)	ND	ug/L	2.5	5/14/2011	WOZ	EPA 8260C	
Methylene chloride	ND	ug/L	2.5	5/14/2011	WOZ	EPA 8260C	
methyl-t-butyl ether (MTBE)	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
Naphthalene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
n-Butylbenzene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
n-Propylbenzene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
o-Xylene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
p-isopropyltoluene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
sec-Butylbenzene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
Styrene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
tert-Butylbenzene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
Tetrachloroethene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
Toluene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
trans-1,2-Dichloroethene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
trans-1,3-Dichloropropene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
Trichloroethene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
Trichloroflouromethane	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
Vinyl Chloride	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	

Anatek Labs, Inc.

1282 Alturas Drive • Moscow, ID 83843 • (208) 883-2839 • Fax (208) 882-9246 • email moscow@anateklabs.com
504 E Sprague Ste. D • Spokane WA 99202 • (509) 838-3999 • Fax (509) 838-4433 • email spokane@anateklabs.com

Client:	GEO ENGINEERS	**Batch #:**	110513012
Address:	523 E 2ND SPOKANE, WA 99202	**Project Name:**	IONE PETROLEUM CONTAMINATION 0504-058-00
Attn:	DAVE LAUDER		

Analytical Results Report

Sample Number	110513012-006	**Sampling Date**	5/11/2011	**Date/Time Received**	5/13/2011 8:22 AM
Client Sample ID	MW-7-051111	**Sampling Time**	1:14 PM	**Extraction Date**	
Matrix	Water	**Sample Location**			
Comments					

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier

Surrogate Data

Sample Number 110513012-006

Surrogate Standard	Method	Percent Recovery	Control Limits
1,2-Dichlorobenzene-d4	EPA 8260C	99.6	70-130
4-Bromofluorobenzene	EPA 8260C	97.6	70-130
Toluene-d8	EPA 8260C	96.8	70-130

Anatek Labs, Inc.

1282 Alturas Drive • Moscow, ID 83843 • (208) 883-2839 • Fax (208) 882-9246 • email moscow@anateklabs.com
504 E Sprague Ste. D • Spokane WA 99202 • (509) 838-3999 • Fax (509) 838-4433 • email spokane@anateklabs.com

Client: GEO ENGINEERS
Address: 523 E 2ND
SPOKANE, WA 99202
Attn: DAVE LAUDER

Batch #: 110513012
Project Name: IONE PETROLEUM CONTAMINATION 0504-058-00

Analytical Results Report

Sample Number 110513012-007 | **Sampling Date** 5/11/2011 | **Date/Time Received** 5/13/2011 8:22 AM
Client Sample ID MW-9-051111 | **Sampling Time** 2:50 PM | **Extraction Date**
Matrix Water | **Sample Location**
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
1,1,1,2-Tetrachloroethane	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
1,1,1-Trichloroethane	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
1,1,2,2-Tetrachloroethane	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
1,1,2-Trichloroethane	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
1,1-Dichloroethane	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
1,1-Dichloroethene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
1,1-dichloropropene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
1,2,3-Trichlorobenzene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
1,2,3-Trichloropropane	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
1,2,4-Trichlorobenzene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
1,2,4-Trimethylbenzene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
1,2-Dibromo-3-chloropropane(DBCP)	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
1,2-Dibromoethane	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
1,2-Dichlorobenzene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
1,2-Dichloroethane	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
1,2-Dichloropropane	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
1,3,5-Trimethylbenzene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
1,3-Dichlorobenzene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
1,3-Dichloropropane	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
1,4-Dichlorobenzene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
2,2-Dichloropropane	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
2-Chlorotoluene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
2-hexanone	ND	ug/L	2.5	5/14/2011	WOZ	EPA 8260C	
4-Chlorotoluene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
Acetone	ND	ug/L	2.5	5/14/2011	WOZ	EPA 8260C	
Acrylonitrile	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
Benzene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
Bromobenzene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
Bromochloromethane	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
Bromodichloromethane	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
Bromoform	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
Bromomethane	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
Carbon disulfide	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
Carbon Tetrachloride	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
Chlorobenzene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; IN:C-ID-01; KY:90142; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; CA:Cert2632; ID:WA00169; WA:C585; MT:Cert0095

Anatek Labs, Inc.

1282 Alturas Drive • Moscow, ID 83843 • (208) 883-2839 • Fax (208) 882-9246 • email moscow@anateklabs.com
504 E Sprague Ste. D • Spokane WA 99202 • (509) 838-3999 • Fax (509) 838-4433 • email spokane@anateklabs.com

Client: GEO ENGINEERS
Address: 523 E 2ND
SPOKANE, WA 99202
Attn: DAVE LAUDER

Batch #: 110513012
Project Name: IONE PETROLEUM CONTAMINATION 0504-058-00

Analytical Results Report

Sample Number 110513012-007
Client Sample ID MW-9-051111
Matrix Water
Comments

Sampling Date 5/11/2011
Sampling Time 2:50 PM
Sample Location

Date/Time Received 5/13/2011 8:22 AM
Extraction Date

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Chloroethane	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
Chloroform	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
Chloromethane	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
cis-1,2-dichloroethene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
cis-1,3-Dichloropropene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
Dibromochloromethane	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
Dibromomethane	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
Dichlorodifluoromethane	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
Ethylbenzene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
Hexachlorobutadiene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
Isopropylbenzene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
m+p-Xylene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
Methyl ethyl ketone (MEK)	ND	ug/L	2.5	5/14/2011	WOZ	EPA 8260C	
Methyl isobutyl ketone (MIBK)	ND	ug/L	2.5	5/14/2011	WOZ	EPA 8260C	
Methylene chloride	ND	ug/L	2.5	5/14/2011	WOZ	EPA 8260C	
methyl-t-butyl ether (MTBE)	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
Naphthalene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
n-Butylbenzene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
n-Propylbenzene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
o-Xylene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
p-isopropyltoluene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
sec-Butylbenzene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
Styrene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
tert-Butylbenzene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
Tetrachloroethene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
Toluene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
trans-1,2-Dichloroethene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
trans-1,3-Dichloropropene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
Trichloroethene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
Trichloroflouromethane	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
Vinyl Chloride	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	

Anatek Labs, Inc.

1282 Alturas Drive • Moscow, ID 83843 • (208) 883-2839 • Fax (208) 882-9246 • email moscow@anateklabs.com
504 E Sprague Ste. D • Spokane WA 99202 • (509) 838-3999 • Fax (509) 838-4433 • email spokane@anateklabs.com

Client:	GEO ENGINEERS	**Batch #:**	110513012
Address:	523 E 2ND SPOKANE, WA 99202	**Project Name:**	IONE PETROLEUM CONTAMINATION 0504-058-00
Attn:	DAVE LAUDER		

Analytical Results Report

Sample Number	110513012-007	**Sampling Date**	5/11/2011	**Date/Time Received**	5/13/2011 8:22 AM
Client Sample ID	MW-9-051111	**Sampling Time**	2:50 PM	**Extraction Date**	
Matrix	Water	**Sample Location**			
Comments					

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier

Surrogate Data

Sample Number 110513012-007

Surrogate Standard	Method	Percent Recovery	Control Limits
1,2-Dichlorobenzene-d4	EPA 8260C	99.6	70-130
4-Bromofluorobenzene	EPA 8260C	95.6	70-130
Toluene-d8	EPA 8260C	98.0	70-130

Anatek Labs, Inc.

1282 Alturas Drive • Moscow, ID 83843 • (208) 883-2839 • Fax (208) 882-9246 • email moscow@anateklabs.com
504 E Sprague Ste. D • Spokane WA 99202 • (509) 838-3999 • Fax (509) 838-4433 • email spokane@anateklabs.com

Client: GEO ENGINEERS
Address: 523 E 2ND
SPOKANE, WA 99202
Attn: DAVE LAUDER

Batch #: 110513012
Project Name: IONE PETROLEUM CONTAMINATION 0504-058-00

Analytical Results Report

Sample Number 110513012-008 | **Sampling Date** 5/11/2011 | **Date/Time Received** 5/13/2011 8:22 AM
Client Sample ID MW-10-051111 | **Sampling Time** 3:59 PM | **Extraction Date**
Matrix Water | **Sample Location**
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
1,1,1,2-Tetrachloroethane	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
1,1,1-Trichloroethane	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
1,1,2,2-Tetrachloroethane	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
1,1,2-Trichloroethane	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
1,1-Dichloroethane	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
1,1-Dichloroethene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
1,1-dichloropropene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
1,2,3-Trichlorobenzene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
1,2,3-Trichloropropane	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
1,2,4-Trichlorobenzene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
1,2,4-Trimethylbenzene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
1,2-Dibromo-3-chloropropane(DBCP)	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
1,2-Dibromoethane	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
1,2-Dichlorobenzene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
1,2-Dichloroethane	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
1,2-Dichloropropane	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
1,3,5-Trimethylbenzene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
1,3-Dichlorobenzene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
1,3-Dichloropropane	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
1,4-Dichlorobenzene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
2,2-Dichloropropane	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
2-Chlorotoluene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
2-hexanone	ND	ug/L	2.5	5/14/2011	WOZ	EPA 8260C	
4-Chlorotoluene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
Acetone	ND	ug/L	2.5	5/14/2011	WOZ	EPA 8260C	
Acrylonitrile	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
Benzene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
Bromobenzene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
Bromochloromethane	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
Bromodichloromethane	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
Bromoform	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
Bromomethane	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
Carbon disulfide	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
Carbon Tetrachloride	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
Chlorobenzene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	

Anatek Labs, Inc.

1282 Alturas Drive • Moscow, ID 83843 • (208) 883-2839 • Fax (208) 882-9246 • email moscow@anateklabs.com
504 E Sprague Ste. D • Spokane WA 99202 • (509) 838-3999 • Fax (509) 838-4433 • email spokane@anateklabs.com

Client: GEO ENGINEERS
Address: 523 E 2ND
SPOKANE, WA 99202
Attn: DAVE LAUDER

Batch #: 110513012
Project Name: IONE PETROLEUM CONTAMINATION 0504-058-00

Analytical Results Report

Sample Number 110513012-008
Client Sample ID MW-10-051111
Matrix Water
Comments

Sampling Date 5/11/2011
Sampling Time 3:59 PM
Sample Location

Date/Time Received 5/13/2011 8:22 AM
Extraction Date

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Chloroethane	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
Chloroform	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
Chloromethane	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
cis-1,2-dichloroethene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
cis-1,3-Dichloropropene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
Dibromochloromethane	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
Dibromomethane	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
Dichlorodifluoromethane	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
Ethylbenzene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
Hexachlorobutadiene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
Isopropylbenzene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
m+p-Xylene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
Methyl ethyl ketone (MEK)	ND	ug/L	2.5	5/14/2011	WOZ	EPA 8260C	
Methyl isobutyl ketone (MIBK)	ND	ug/L	2.5	5/14/2011	WOZ	EPA 8260C	
Methylene chloride	ND	ug/L	2.5	5/14/2011	WOZ	EPA 8260C	
methyl-t-butyl ether (MTBE)	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
Naphthalene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
n-Butylbenzene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
n-Propylbenzene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
o-Xylene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
p-isopropyltoluene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
sec-Butylbenzene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
Styrene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
tert-Butylbenzene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
Tetrachloroethene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
Toluene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
trans-1,2-Dichloroethene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
trans-1,3-Dichloropropene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
Trichloroethene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
Trichloroflouromethane	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
Vinyl Chloride	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	

Anatek Labs, Inc.

1282 Alturas Drive • Moscow, ID 83843 • (208) 883-2839 • Fax (208) 882-9246 • email moscow@anateklabs.com
504 E Sprague Ste. D • Spokane WA 99202 • (509) 838-3999 • Fax (509) 838-4433 • email spokane@anateklabs.com

Client:	GEO ENGINEERS	**Batch #:**	110513012
Address:	523 E 2ND SPOKANE, WA 99202	**Project Name:**	IONE PETROLEUM CONTAMINATION 0504-058-00
Attn:	DAVE LAUDER		

Analytical Results Report

Sample Number	110513012-008	**Sampling Date**	5/11/2011	**Date/Time Received**	5/13/2011 8:22 AM
Client Sample ID	MW-10-051111	**Sampling Time**	3:59 PM	**Extraction Date**	
Matrix	Water	**Sample Location**			
Comments					

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier

Surrogate Data

Sample Number 110513012-008

Surrogate Standard	Method	Percent Recovery	Control Limits
1,2-Dichlorobenzene-d4	EPA 8260C	97.2	70-130
4-Bromofluorobenzene	EPA 8260C	95.6	70-130
Toluene-d8	EPA 8260C	97.2	70-130

Anatek Labs, Inc.

1282 Alturas Drive • Moscow, ID 83843 • (208) 883-2839 • Fax (208) 882-9246 • email moscow@anateklabs.com
504 E Sprague Ste. D • Spokane WA 99202 • (509) 838-3999 • Fax (509) 838-4433 • email spokane@anateklabs.com

Client: GEO ENGINEERS
Address: 523 E 2ND
SPOKANE, WA 99202
Attn: DAVE LAUDER

Batch #: 110513012
Project Name: IONE PETROLEUM CONTAMINATION 0504-058-00

Analytical Results Report

Sample Number	110513012-009	**Sampling Date**	5/11/2011	**Date/Time Received**	5/13/2011	8:22 AM
Client Sample ID	MW-11-051111	**Sampling Time**	5:23 PM	**Extraction Date**		
Matrix	Water	**Sample Location**				
Comments						

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
1,1,1,2-Tetrachloroethane	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
1,1,1-Trichloroethane	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
1,1,2,2-Tetrachloroethane	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
1,1,2-Trichloroethane	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
1,1-Dichloroethane	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
1,1-Dichloroethene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
1,1-dichloropropene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
1,2,3-Trichlorobenzene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
1,2,3-Trichloropropane	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
1,2,4-Trichlorobenzene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
1,2,4-Trimethylbenzene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
1,2-Dibromo-3-chloropropane(DBCP)	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
1,2-Dibromoethane	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
1,2-Dichlorobenzene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
1,2-Dichloroethane	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
1,2-Dichloropropane	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
1,3,5-Trimethylbenzene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
1,3-Dichlorobenzene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
1,3-Dichloropropane	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
1,4-Dichlorobenzene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
2,2-Dichloropropane	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
2-Chlorotoluene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
2-hexanone	ND	ug/L	2.5	5/14/2011	WOZ	EPA 8260C	
4-Chlorotoluene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
Acetone	ND	ug/L	2.5	5/14/2011	WOZ	EPA 8260C	
Acrylonitrile	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
Benzene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
Bromobenzene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
Bromochloromethane	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
Bromodichloromethane	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
Bromoform	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
Bromomethane	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
Carbon disulfide	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
Carbon Tetrachloride	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
Chlorobenzene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; IN:C-ID-01; KY:90142; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; CA:Cert2632; ID:WA00169; WA:C585; MT:Cert0095

Anatek Labs, Inc.

1282 Alturas Drive • Moscow, ID 83843 • (208) 883-2839 • Fax (208) 882-9246 • email moscow@anateklabs.com
504 E Sprague Ste. D • Spokane WA 99202 • (509) 838-3999 • Fax (509) 838-4433 • email spokane@anateklabs.com

Client: GEO ENGINEERS
Address: 523 E 2ND
SPOKANE, WA 99202
Attn: DAVE LAUDER

Batch #: 110513012
Project Name: IONE PETROLEUM CONTAMINATION 0504-058-00

Analytical Results Report

Sample Number 110513012-009 | **Sampling Date** 5/11/2011 | **Date/Time Received** 5/13/2011 8:22 AM
Client Sample ID MW-11-051111 | **Sampling Time** 5:23 PM | **Extraction Date**
Matrix Water | **Sample Location**
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Chloroethane	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
Chloroform	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
Chloromethane	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
cis-1,2-dichloroethene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
cis-1,3-Dichloropropene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
Dibromochloromethane	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
Dibromomethane	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
Dichlorodifluoromethane	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
Ethylbenzene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
Hexachlorobutadiene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
Isopropylbenzene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
m+p-Xylene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
Methyl ethyl ketone (MEK)	ND	ug/L	2.5	5/14/2011	WOZ	EPA 8260C	
Methyl isobutyl ketone (MIBK)	ND	ug/L	2.5	5/14/2011	WOZ	EPA 8260C	
Methylene chloride	ND	ug/L	2.5	5/14/2011	WOZ	EPA 8260C	
methyl-t-butyl ether (MTBE)	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
Naphthalene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
n-Butylbenzene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
n-Propylbenzene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
o-Xylene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
p-isopropyltoluene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
sec-Butylbenzene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
Styrene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
tert-Butylbenzene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
Tetrachloroethene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
Toluene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
trans-1,2-Dichloroethene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
trans-1,3-Dichloropropene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
Trichloroethene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
Trichloroflouromethane	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
Vinyl Chloride	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	

Anatek Labs, Inc.

1282 Alturas Drive • Moscow, ID 83843 • (208) 883-2839 • Fax (208) 882-9246 • email moscow@anateklabs.com
504 E Sprague Ste. D • Spokane WA 99202 • (509) 838-3999 • Fax (509) 838-4433 • email spokane@anateklabs.com

Client:	GEO ENGINEERS	**Batch #:**	110513012
Address:	523 E 2ND SPOKANE, WA 99202	**Project Name:**	IONE PETROLEUM CONTAMINATION 0504-058-00
Attn:	DAVE LAUDER		

Analytical Results Report

Sample Number	110513012-009	**Sampling Date**	5/11/2011	**Date/Time Received**	5/13/2011 8:22 AM
Client Sample ID	MW-11-051111	**Sampling Time**	5:23 PM	**Extraction Date**	
Matrix	Water	**Sample Location**			
Comments					

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier

Surrogate Data

Sample Number 110513012-009

Surrogate Standard	Method	Percent Recovery	Control Limits
1,2-Dichlorobenzene-d4	EPA 8260C	96.0	70-130
4-Bromofluorobenzene	EPA 8260C	94.0	70-130
Toluene-d8	EPA 8260C	96.4	70-130

Anatek Labs, Inc.

1282 Alturas Drive • Moscow, ID 83843 • (208) 883-2839 • Fax (208) 882-9246 • email moscow@anateklabs.com
504 E Sprague Ste. D • Spokane WA 99202 • (509) 838-3999 • Fax (509) 838-4433 • email spokane@anateklabs.com

Client: GEO ENGINEERS
Address: 523 E 2ND
SPOKANE, WA 99202
Attn: DAVE LAUDER

Batch #: 110513012
Project Name: IONE PETROLEUM CONTAMINATION 0504-058-00

Analytical Results Report

Sample Number 110513012-010 | **Sampling Date** 5/12/2011 | **Date/Time Received** 5/13/2011 8:22 AM
Client Sample ID MW-12-051211 | **Sampling Time** 9:49 AM | **Extraction Date**
Matrix Water | **Sample Location**
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
1,1,1,2-Tetrachloroethane	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
1,1,1-Trichloroethane	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
1,1,2,2-Tetrachloroethane	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
1,1,2-Trichloroethane	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
1,1-Dichloroethane	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
1,1-Dichloroethene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
1,1-dichloropropene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
1,2,3-Trichlorobenzene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
1,2,3-Trichloropropane	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
1,2,4-Trichlorobenzene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
1,2,4-Trimethylbenzene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
1,2-Dibromo-3-chloropropane(DBCP)	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
1,2-Dibromoethane	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
1,2-Dichlorobenzene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
1,2-Dichloroethane	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
1,2-Dichloropropane	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
1,3,5-Trimethylbenzene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
1,3-Dichlorobenzene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
1,3-Dichloropropane	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
1,4-Dichlorobenzene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
2,2-Dichloropropane	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
2-Chlorotoluene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
2-hexanone	ND	ug/L	2.5	5/14/2011	WOZ	EPA 8260C	
4-Chlorotoluene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
Acetone	ND	ug/L	2.5	5/14/2011	WOZ	EPA 8260C	
Acrylonitrile	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
Benzene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
Bromobenzene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
Bromochloromethane	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
Bromodichloromethane	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
Bromoform	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
Bromomethane	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
Carbon disulfide	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
Carbon Tetrachloride	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
Chlorobenzene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; IN:C-ID-01; KY:90142; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; CA:Cert2632; ID:WA00169; WA:C585; MT:Cert0095

Anatek Labs, Inc.

1282 Alturas Drive • Moscow, ID 83843 • (208) 883-2839 • Fax (208) 882-9246 • email moscow@anateklabs.com
504 E Sprague Ste. D • Spokane WA 99202 • (509) 838-3999 • Fax (509) 838-4433 • email spokane@anateklabs.com

Client: GEO ENGINEERS
Address: 523 E 2ND
SPOKANE, WA 99202
Attn: DAVE LAUDER

Batch #: 110513012
Project Name: IONE PETROLEUM CONTAMINATION 0504-058-00

Analytical Results Report

Sample Number 110513012-010
Client Sample ID MW-12-051211
Matrix Water
Comments

Sampling Date 5/12/2011
Sampling Time 9:49 AM
Sample Location

Date/Time Received 5/13/2011 8:22 AM
Extraction Date

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Chloroethane	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
Chloroform	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
Chloromethane	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
cis-1,2-dichloroethene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
cis-1,3-Dichloropropene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
Dibromochloromethane	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
Dibromomethane	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
Dichlorodifluoromethane	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
Ethylbenzene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
Hexachlorobutadiene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
Isopropylbenzene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
m+p-Xylene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
Methyl ethyl ketone (MEK)	ND	ug/L	2.5	5/14/2011	WOZ	EPA 8260C	
Methyl isobutyl ketone (MIBK)	ND	ug/L	2.5	5/14/2011	WOZ	EPA 8260C	
Methylene chloride	ND	ug/L	2.5	5/14/2011	WOZ	EPA 8260C	
methyl-t-butyl ether (MTBE)	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
Naphthalene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
n-Butylbenzene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
n-Propylbenzene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
o-Xylene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
p-isopropyltoluene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
sec-Butylbenzene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
Styrene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
tert-Butylbenzene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
Tetrachloroethene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
Toluene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
trans-1,2-Dichloroethene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
trans-1,3-Dichloropropene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
Trichloroethene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
Trichloroflouromethane	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
Vinyl Chloride	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	

Anatek Labs, Inc.

1282 Alturas Drive • Moscow, ID 83843 • (208) 883-2839 • Fax (208) 882-9246 • email moscow@anateklabs.com
504 E Sprague Ste. D • Spokane WA 99202 • (509) 838-3999 • Fax (509) 838-4433 • email spokane@anateklabs.com

Client: GEO ENGINEERS
Address: 523 E 2ND
SPOKANE, WA 99202
Attn: DAVE LAUDER

Batch #: 110513012
Project Name: IONE PETROLEUM CONTAMINATION 0504-058-00

Analytical Results Report

Sample Number	110513012-010	**Sampling Date**	5/12/2011	**Date/Time Received**	5/13/2011 8:22 AM
Client Sample ID	MW-12-051211	**Sampling Time**	9:49 AM	**Extraction Date**	
Matrix	Water	**Sample Location**			
Comments					

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier

Surrogate Data

Sample Number 110513012-010

Surrogate Standard	Method	Percent Recovery	Control Limits
1,2-Dichlorobenzene-d4	EPA 8260C	100.0	70-130
4-Bromofluorobenzene	EPA 8260C	94.0	70-130
Toluene-d8	EPA 8260C	95.6	70-130

Anatek Labs, Inc.

1282 Alturas Drive • Moscow, ID 83843 • (208) 883-2839 • Fax (208) 882-9246 • email moscow@anateklabs.com
504 E Sprague Ste. D • Spokane WA 99202 • (509) 838-3999 • Fax (509) 838-4433 • email spokane@anateklabs.com

Client: GEO ENGINEERS
Address: 523 E 2ND
SPOKANE, WA 99202
Attn: DAVE LAUDER

Batch #: 110513012
Project Name: IONE PETROLEUM CONTAMINATION 0504-058-00

Analytical Results Report

Sample Number 110513012-011 **Sampling Date** 5/12/2011 **Date/Time Received** 5/13/2011 8:22 AM
Client Sample ID DUPLICATE-1-051211 **Sampling Time** 12:34 PM **Extraction Date**
Matrix Water **Sample Location**
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
1,1,1,2-Tetrachloroethane	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
1,1,1-Trichloroethane	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
1,1,2,2-Tetrachloroethane	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
1,1,2-Trichloroethane	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
1,1-Dichloroethane	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
1,1-Dichloroethene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
1,1-dichloropropene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
1,2,3-Trichlorobenzene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
1,2,3-Trichloropropane	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
1,2,4-Trichlorobenzene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
1,2,4-Trimethylbenzene	14.2	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
1,2-Dibromo-3-chloropropane(DBCP)	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
1,2-Dibromoethane	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
1,2-Dichlorobenzene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
1,2-Dichloroethane	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
1,2-Dichloropropane	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
1,3,5-Trimethylbenzene	8.88	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
1,3-Dichlorobenzene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
1,3-Dichloropropane	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
1,4-Dichlorobenzene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
2,2-Dichloropropane	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
2-Chlorotoluene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
2-hexanone	ND	ug/L	2.5	5/14/2011	WOZ	EPA 8260C	
4-Chlorotoluene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
Acetone	ND	ug/L	2.5	5/14/2011	WOZ	EPA 8260C	
Acrylonitrile	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
Benzene	1.09	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
Bromobenzene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
Bromochloromethane	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
Bromodichloromethane	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
Bromoform	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
Bromomethane	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
Carbon disulfide	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
Carbon Tetrachloride	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
Chlorobenzene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	

Anatek Labs, Inc.

1282 Alturas Drive • Moscow, ID 83843 • (208) 883-2839 • Fax (208) 882-9246 • email moscow@anateklabs.com
504 E Sprague Ste. D • Spokane WA 99202 • (509) 838-3999 • Fax (509) 838-4433 • email spokane@anateklabs.com

Client: GEO ENGINEERS
Address: 523 E 2ND
SPOKANE, WA 99202
Attn: DAVE LAUDER

Batch #: 110513012
Project Name: IONE PETROLEUM CONTAMINATION 0504-058-00

Analytical Results Report

Sample Number	110513012-011	**Sampling Date**	5/12/2011	**Date/Time Received**	5/13/2011	8:22 AM
Client Sample ID	DUPLICATE-1-051211	**Sampling Time**	12:34 PM	**Extraction Date**		
Matrix	Water	**Sample Location**				
Comments						

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Chloroethane	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
Chloroform	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
Chloromethane	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
cis-1,2-dichloroethene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
cis-1,3-Dichloropropene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
Dibromochloromethane	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
Dibromomethane	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
Dichlorodifluoromethane	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
Ethylbenzene	1.62	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
Hexachlorobutadiene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
Isopropylbenzene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
m+p-Xylene	27.5	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
Methyl ethyl ketone (MEK)	ND	ug/L	2.5	5/14/2011	WOZ	EPA 8260C	
Methyl isobutyl ketone (MIBK)	ND	ug/L	2.5	5/14/2011	WOZ	EPA 8260C	
Methylene chloride	ND	ug/L	2.5	5/14/2011	WOZ	EPA 8260C	
methyl-t-butyl ether (MTBE)	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
Naphthalene	0.75	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
n-Butylbenzene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
n-Propylbenzene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
o-Xylene	28.2	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
p-isopropyltoluene	0.60	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
sec-Butylbenzene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
Styrene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
tert-Butylbenzene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
Tetrachloroethene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
Toluene	7.97	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
trans-1,2-Dichloroethene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
trans-1,3-Dichloropropene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
Trichloroethene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
Trichloroflouromethane	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
Vinyl Chloride	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	

Anatek Labs, Inc.

1282 Alturas Drive • Moscow, ID 83843 • (208) 883-2839 • Fax (208) 882-9246 • email moscow@anateklabs.com
504 E Sprague Ste. D • Spokane WA 99202 • (509) 838-3999 • Fax (509) 838-4433 • email spokane@anateklabs.com

Client: GEO ENGINEERS
Address: 523 E 2ND
SPOKANE, WA 99202
Attn: DAVE LAUDER

Batch #: 110513012
Project Name: IONE PETROLEUM CONTAMINATION 0504-058-00

Analytical Results Report

Sample Number	110513012-011	**Sampling Date**	5/12/2011	**Date/Time Received**	5/13/2011 8:22 AM
Client Sample ID	DUPLICATE-1-051211	**Sampling Time**	12:34 PM	**Extraction Date**	
Matrix	Water	**Sample Location**			
Comments					

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier

Surrogate Data

Sample Number 110513012-011

Surrogate Standard	Method	Percent Recovery	Control Limits
1,2-Dichlorobenzene-d4	EPA 8260C	98.0	70-130
4-Bromofluorobenzene	EPA 8260C	98.0	70-130
Toluene-d8	EPA 8260C	96.8	70-130

Anatek Labs, Inc.

1282 Alturas Drive • Moscow, ID 83843 • (208) 883-2839 • Fax (208) 882-9246 • email moscow@anateklabs.com
504 E Sprague Ste. D • Spokane WA 99202 • (509) 838-3999 • Fax (509) 838-4433 • email spokane@anateklabs.com

Client: GEO ENGINEERS
Address: 523 E 2ND
SPOKANE, WA 99202
Attn: DAVE LAUDER

Batch #: 110513012
Project Name: IONE PETROLEUM CONTAMINATION 0504-058-00

Analytical Results Report

Sample Number 110513012-012 | **Sampling Date** 5/12/2011 | **Date/Time Received** 5/13/2011 8:22 AM
Client Sample ID CABIN GRILL WELL-051211 | **Sampling Time** 3:29 PM | **Extraction Date**
Matrix Water | **Sample Location**
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
1,1,1,2-Tetrachloroethane	ND	ug/L	25	5/15/2011	WOZ	EPA 8260C	
1,1,1-Trichloroethane	ND	ug/L	25	5/15/2011	WOZ	EPA 8260C	
1,1,2,2-Tetrachloroethane	ND	ug/L	25	5/15/2011	WOZ	EPA 8260C	
1,1,2-Trichloroethane	ND	ug/L	25	5/15/2011	WOZ	EPA 8260C	
1,1-Dichloroethane	ND	ug/L	25	5/15/2011	WOZ	EPA 8260C	
1,1-Dichloroethene	ND	ug/L	25	5/15/2011	WOZ	EPA 8260C	
1,1-dichloropropene	ND	ug/L	25	5/15/2011	WOZ	EPA 8260C	
1,2,3-Trichlorobenzene	ND	ug/L	25	5/15/2011	WOZ	EPA 8260C	
1,2,3-Trichloropropane	ND	ug/L	25	5/15/2011	WOZ	EPA 8260C	
1,2,4-Trichlorobenzene	ND	ug/L	25	5/15/2011	WOZ	EPA 8260C	
1,2,4-Trimethylbenzene	99.0	ug/L	25	5/15/2011	WOZ	EPA 8260C	
1,2-Dibromo-3-chloropropane(DBCP)	ND	ug/L	25	5/15/2011	WOZ	EPA 8260C	
1,2-Dibromoethane	ND	ug/L	25	5/15/2011	WOZ	EPA 8260C	
1,2-Dichlorobenzene	ND	ug/L	25	5/15/2011	WOZ	EPA 8260C	
1,2-Dichloroethane	ND	ug/L	25	5/15/2011	WOZ	EPA 8260C	
1,2-Dichloropropane	ND	ug/L	25	5/15/2011	WOZ	EPA 8260C	
1,3,5-Trimethylbenzene	107	ug/L	25	5/15/2011	WOZ	EPA 8260C	
1,3-Dichlorobenzene	ND	ug/L	25	5/15/2011	WOZ	EPA 8260C	
1,3-Dichloropropane	ND	ug/L	25	5/15/2011	WOZ	EPA 8260C	
1,4-Dichlorobenzene	ND	ug/L	25	5/15/2011	WOZ	EPA 8260C	
2,2-Dichloropropane	ND	ug/L	25	5/15/2011	WOZ	EPA 8260C	
2-Chlorotoluene	ND	ug/L	25	5/15/2011	WOZ	EPA 8260C	
2-hexanone	ND	ug/L	125	5/15/2011	WOZ	EPA 8260C	
4-Chlorotoluene	ND	ug/L	25	5/15/2011	WOZ	EPA 8260C	
Acetone	ND	ug/L	125	5/15/2011	WOZ	EPA 8260C	
Acrylonitrile	ND	ug/L	25	5/15/2011	WOZ	EPA 8260C	
Benzene	540	ug/L	25	5/15/2011	WOZ	EPA 8260C	
Bromobenzene	ND	ug/L	25	5/15/2011	WOZ	EPA 8260C	
Bromochloromethane	ND	ug/L	25	5/15/2011	WOZ	EPA 8260C	
Bromodichloromethane	ND	ug/L	25	5/15/2011	WOZ	EPA 8260C	
Bromoform	ND	ug/L	25	5/15/2011	WOZ	EPA 8260C	
Bromomethane	ND	ug/L	25	5/15/2011	WOZ	EPA 8260C	
Carbon disulfide	ND	ug/L	25	5/15/2011	WOZ	EPA 8260C	
Carbon Tetrachloride	ND	ug/L	25	5/15/2011	WOZ	EPA 8260C	
Chlorobenzene	ND	ug/L	25	5/15/2011	WOZ	EPA 8260C	

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; IN:C-ID-01; KY:90142; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; CA:Cert2632; ID:WA00169; WA:C585; MT:Cert0095

Anatek Labs, Inc.

1282 Alturas Drive • Moscow, ID 83843 • (208) 883-2839 • Fax (208) 882-9246 • email moscow@anateklabs.com
504 E Sprague Ste. D • Spokane WA 99202 • (509) 838-3999 • Fax (509) 838-4433 • email spokane@anateklabs.com

Client: GEO ENGINEERS
Address: 523 E 2ND
SPOKANE, WA 99202
Attn: DAVE LAUDER

Batch #: 110513012
Project Name: IONE PETROLEUM CONTAMINATION 0504-058-00

Analytical Results Report

Sample Number	110513012-012	**Sampling Date**	5/12/2011	**Date/Time Received**	5/13/2011	8:22 AM
Client Sample ID	CABIN GRILL WELL-051211	**Sampling Time**	3:29 PM	**Extraction Date**		
Matrix	Water	**Sample Location**				
Comments						

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Chloroethane	ND	ug/L	25	5/15/2011	WOZ	EPA 8260C	
Chloroform	ND	ug/L	25	5/15/2011	WOZ	EPA 8260C	
Chloromethane	ND	ug/L	25	5/15/2011	WOZ	EPA 8260C	
cis-1,2-dichloroethene	ND	ug/L	25	5/15/2011	WOZ	EPA 8260C	
cis-1,3-Dichloropropene	ND	ug/L	25	5/15/2011	WOZ	EPA 8260C	
Dibromochloromethane	ND	ug/L	25	5/15/2011	WOZ	EPA 8260C	
Dibromomethane	ND	ug/L	25	5/15/2011	WOZ	EPA 8260C	
Dichlorodifluoromethane	ND	ug/L	25	5/15/2011	WOZ	EPA 8260C	
Ethylbenzene	414	ug/L	25	5/15/2011	WOZ	EPA 8260C	
Hexachlorobutadiene	ND	ug/L	25	5/15/2011	WOZ	EPA 8260C	
Isopropylbenzene	ND	ug/L	25	5/15/2011	WOZ	EPA 8260C	
m+p-Xylene	985	ug/L	25	5/15/2011	WOZ	EPA 8260C	
Methyl ethyl ketone (MEK)	ND	ug/L	125	5/15/2011	WOZ	EPA 8260C	
Methyl isobutyl ketone (MIBK)	ND	ug/L	125	5/15/2011	WOZ	EPA 8260C	
Methylene chloride	ND	ug/L	125	5/15/2011	WOZ	EPA 8260C	
methyl-t-butyl ether (MTBE)	ND	ug/L	25	5/15/2011	WOZ	EPA 8260C	
Naphthalene	92.3	ug/L	25	5/15/2011	WOZ	EPA 8260C	
n-Butylbenzene	ND	ug/L	25	5/15/2011	WOZ	EPA 8260C	
n-Propylbenzene	43.9	ug/L	25	5/15/2011	WOZ	EPA 8260C	
o-Xylene	687	ug/L	25	5/15/2011	WOZ	EPA 8260C	
p-isopropyltoluene	ND	ug/L	25	5/15/2011	WOZ	EPA 8260C	
sec-Butylbenzene	ND	ug/L	25	5/15/2011	WOZ	EPA 8260C	
Styrene	ND	ug/L	25	5/15/2011	WOZ	EPA 8260C	
tert-Butylbenzene	ND	ug/L	25	5/15/2011	WOZ	EPA 8260C	
Tetrachloroethene	ND	ug/L	25	5/15/2011	WOZ	EPA 8260C	
Toluene	982	ug/L	25	5/15/2011	WOZ	EPA 8260C	
trans-1,2-Dichloroethene	ND	ug/L	25	5/15/2011	WOZ	EPA 8260C	
trans-1,3-Dichloropropene	ND	ug/L	25	5/15/2011	WOZ	EPA 8260C	
Trichloroethene	ND	ug/L	25	5/15/2011	WOZ	EPA 8260C	
Trichloroflouromethane	ND	ug/L	25	5/15/2011	WOZ	EPA 8260C	
Vinyl Chloride	ND	ug/L	25	5/15/2011	WOZ	EPA 8260C	

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; IN:C-ID-01; KY:90142; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; CA:Cert2632; ID:WA00169; WA:C585; MT:Cert0095

Anatek Labs, Inc.

1282 Alturas Drive • Moscow, ID 83843 • (208) 883-2839 • Fax (208) 882-9246 • email moscow@anateklabs.com
504 E Sprague Ste. D • Spokane WA 99202 • (509) 838-3999 • Fax (509) 838-4433 • email spokane@anateklabs.com

Client:	GEO ENGINEERS	**Batch #:**	110513012
Address:	523 E 2ND SPOKANE, WA 99202	**Project Name:**	IONE PETROLEUM CONTAMINATION 0504-058-00
Attn:	DAVE LAUDER		

Analytical Results Report

Sample Number	110513012-012	**Sampling Date**	5/12/2011	**Date/Time Received**	5/13/2011 8:22 AM
Client Sample ID	CABIN GRILL WELL-051211	**Sampling Time**	3:29 PM	**Extraction Date**	
Matrix	Water	**Sample Location**			
Comments					

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier

Surrogate Data

Sample Number 110513012-012

Surrogate Standard	Method	Percent Recovery	Control Limits
1,2-Dichlorobenzene-d4	EPA 8260C	98.0	70-130
4-Bromofluorobenzene	EPA 8260C	93.2	70-130
Toluene-d8	EPA 8260C	94.8	70-130

Anatek Labs, Inc.

1282 Alturas Drive • Moscow, ID 83843 • (208) 883-2839 • Fax (208) 882-9246 • email moscow@anateklabs.com
504 E Sprague Ste. D • Spokane WA 99202 • (509) 838-3999 • Fax (509) 838-4433 • email spokane@anateklabs.com

Client: GEO ENGINEERS
Address: 523 E 2ND
SPOKANE, WA 99202
Attn: DAVE LAUDER

Batch #: 110513012
Project Name: IONE PETROLEUM CONTAMINATION 0504-058-00

Analytical Results Report

Sample Number 110513012-013 | **Sampling Date** 5/11/2011 | **Date/Time Received** 5/13/2011 8:22 AM
Client Sample ID TRIP BLANK | **Sampling Time** | **Extraction Date**
Matrix Water | **Sample Location**
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
1,1,1,2-Tetrachloroethane	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
1,1,1-Trichloroethane	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
1,1,2,2-Tetrachloroethane	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
1,1,2-Trichloroethane	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
1,1-Dichloroethane	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
1,1-Dichloroethene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
1,1-dichloropropene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
1,2,3-Trichlorobenzene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
1,2,3-Trichloropropane	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
1,2,4-Trichlorobenzene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
1,2,4-Trimethylbenzene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
1,2-Dibromo-3-chloropropane(DBCP)	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
1,2-Dibromoethane	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
1,2-Dichlorobenzene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
1,2-Dichloroethane	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
1,2-Dichloropropane	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
1,3,5-Trimethylbenzene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
1,3-Dichlorobenzene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
1,3-Dichloropropane	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
1,4-Dichlorobenzene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
2,2-Dichloropropane	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
2-Chlorotoluene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
2-hexanone	ND	ug/L	2.5	5/14/2011	WOZ	EPA 8260C	
4-Chlorotoluene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
Acetone	ND	ug/L	2.5	5/14/2011	WOZ	EPA 8260C	
Acrylonitrile	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
Benzene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
Bromobenzene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
Bromochloromethane	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
Bromodichloromethane	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
Bromoform	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
Bromomethane	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
Carbon disulfide	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
Carbon Tetrachloride	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
Chlorobenzene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; IN:C-ID-01; KY:90142; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; CA:Cert2632; ID:WA00169; WA:C585; MT:Cert0095

Anatek Labs, Inc.

1282 Alturas Drive • Moscow, ID 83843 • (208) 883-2839 • Fax (208) 882-9246 • email moscow@anateklabs.com
504 E Sprague Ste. D • Spokane WA 99202 • (509) 838-3999 • Fax (509) 838-4433 • email spokane@anateklabs.com

Client: GEO ENGINEERS
Address: 523 E 2ND
SPOKANE, WA 99202
Attn: DAVE LAUDER

Batch #: 110513012
Project Name: IONE PETROLEUM CONTAMINATION 0504-058-00

Analytical Results Report

Sample Number 110513012-013
Client Sample ID TRIP BLANK
Matrix Water
Comments

Sampling Date 5/11/2011
Sampling Time
Sample Location

Date/Time Received 5/13/2011 8:22 AM
Extraction Date

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Chloroethane	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
Chloroform	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
Chloromethane	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
cis-1,2-dichloroethene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
cis-1,3-Dichloropropene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
Dibromochloromethane	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
Dibromomethane	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
Dichlorodifluoromethane	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
Ethylbenzene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
Hexachlorobutadiene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
Isopropylbenzene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
m+p-Xylene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
Methyl ethyl ketone (MEK)	ND	ug/L	2.5	5/14/2011	WOZ	EPA 8260C	
Methyl isobutyl ketone (MIBK)	ND	ug/L	2.5	5/14/2011	WOZ	EPA 8260C	
Methylene chloride	ND	ug/L	2.5	5/14/2011	WOZ	EPA 8260C	
methyl-t-butyl ether (MTBE)	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
Naphthalene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
n-Butylbenzene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
n-Propylbenzene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
o-Xylene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
p-isopropyltoluene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
sec-Butylbenzene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
Styrene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
tert-Butylbenzene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
Tetrachloroethene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
Toluene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
trans-1,2-Dichloroethene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
trans-1,3-Dichloropropene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
Trichloroethene	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
Trichloroflouromethane	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	
Vinyl Chloride	ND	ug/L	0.5	5/14/2011	WOZ	EPA 8260C	

Anatek Labs, Inc.

1282 Alturas Drive • Moscow, ID 83843 • (208) 883-2839 • Fax (208) 882-9246 • email moscow@anateklabs.com
504 E Sprague Ste. D • Spokane WA 99202 • (509) 838-3999 • Fax (509) 838-4433 • email spokane@anateklabs.com

Client: GEO ENGINEERS
Address: 523 E 2ND
SPOKANE, WA 99202
Attn: DAVE LAUDER

Batch #: 110513012
Project Name: IONE PETROLEUM CONTAMINATION 0504-058-00

Analytical Results Report

Sample Number	110513012-013	**Sampling Date**	5/11/2011	**Date/Time Received**	5/13/2011	8:22 AM	
Client Sample ID	TRIP BLANK	**Sampling Time**		**Extraction Date**			
Matrix	Water	**Sample Location**					
Comments							

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier

Surrogate Data

Sample Number 110513012-013

Surrogate Standard	Method	Percent Recovery	Control Limits
1,2-Dichlorobenzene-d4	EPA 8260C	100.4	70-130
4-Bromofluorobenzene	EPA 8260C	94.4	70-130
Toluene-d8	EPA 8260C	96.0	70-130

Authorized Signature

Kathleen A. Sattler

Kathy Sattler, Lab Manager

MCL EPA's Maximum Contaminant Level
ND Not Detected
PQL Practical Quantitation Limit

The results reported relate only to the samples indicated.
Soil/solid results are reported on a dry-weight basis unless otherwise noted.

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; IN:C-ID-01; KY:90142; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; CA:Cert2632; ID:WA00169; WA:C585; MT:Cert0095

Anatek Labs, Inc.

1282 Alturas Drive • Moscow, ID 83843 • (208) 883-2839 • Fax (208) 882-9246 • email moscow@anateklabs.com
504 E Sprague Ste. D • Spokane WA 99202 • (509) 838-3999 • Fax (509) 838-4433 • email spokane@anateklabs.com

Client: GEO ENGINEERS
Address: 523 E 2ND
SPOKANE, WA 99202
Attn: DAVE LAUDER

Batch #: 110513012
Project Name: IONE PETROLEUM CONTAMINATION 0504-058-00

Analytical Results Report

Sample Number 110513012-001 **Sampling Date** 5/11/2011 **Date/Time Received** 5/13/2011 8:22 AM
Client Sample ID MW-1-051111 **Sampling Time** 10:59 AM **Extraction Date**
Matrix Water **Sample Location**
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Gasoline	ND	ug/L	100	5/13/2011	WOZ	NWTPHG	

Surrogate Data

Sample Number 110513012-001

Surrogate Standard	Method	Percent Recovery	Control Limits
4-Bromofluorobenzene	NWTPHG	96.8	70-130

Sample Number 110513012-002 **Sampling Date** 5/11/2011 **Date/Time Received** 5/13/2011 8:22 AM
Client Sample ID MW-2-051111 **Sampling Time** 11:54 AM **Extraction Date**
Matrix Water **Sample Location**
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Gasoline	ND	ug/L	100	5/13/2011	WOZ	NWTPHG	

Surrogate Data

Sample Number 110513012-002

Surrogate Standard	Method	Percent Recovery	Control Limits
4-Bromofluorobenzene	NWTPHG	98.4	70-130

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; IN:C-ID-01; KY:90142; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; CA:Cert2632; ID:WA00169; WA:C585; MT:Cert0095

Anatek Labs, Inc.

1282 Alturas Drive • Moscow, ID 83843 • (208) 883-2839 • Fax (208) 882-9246 • email moscow@anateklabs.com
504 E Sprague Ste. D • Spokane WA 99202 • (509) 838-3999 • Fax (509) 838-4433 • email spokane@anateklabs.com

Client: GEO ENGINEERS
Address: 523 E 2ND
SPOKANE, WA 99202
Attn: DAVE LAUDER

Batch #: 110513012
Project Name: IONE PETROLEUM CONTAMINATION 0504-058-00

Analytical Results Report

Sample Number	110513012-003	**Sampling Date**	5/11/2011	**Date/Time Received**	5/13/2011	8:22 AM	
Client Sample ID	MW-3-051111	**Sampling Time**	3:03 PM	**Extraction Date**			
Matrix	Water	**Sample Location**					
Comments							

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Gasoline	40300	ug/L	2000	5/18/2011	WOZ	NWTPHG	

Surrogate Data

Sample Number 110513012-003

Surrogate Standard	Method	Percent Recovery	Control Limits
4-Bromofluorobenzene	NWTPHG	98.8	70-130

Sample Number	110513012-004	**Sampling Date**	5/11/2011	**Date/Time Received**	5/13/2011	8:22 AM	
Client Sample ID	MW-4-051111	**Sampling Time**	11:24 AM	**Extraction Date**			
Matrix	Water	**Sample Location**					
Comments							

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Gasoline	394	ug/L	100	5/18/2011	WOZ	NWTPHG	

Surrogate Data

Sample Number 110513012-004

Surrogate Standard	Method	Percent Recovery	Control Limits
4-Bromofluorobenzene	NWTPHG	98.7	70-130

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; IN:C-ID-01; KY:90142; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; CA:Cert2632; ID:WA00169; WA:C585; MT:Cert0095

Anatek Labs, Inc.

1282 Alturas Drive • Moscow, ID 83843 • (208) 883-2839 • Fax (208) 882-9246 • email moscow@anateklabs.com
504 E Sprague Ste. D • Spokane WA 99202 • (509) 838-3999 • Fax (509) 838-4433 • email spokane@anateklabs.com

Client: GEO ENGINEERS
Address: 523 E 2ND
SPOKANE, WA 99202
Attn: DAVE LAUDER

Batch #: 110513012
Project Name: IONE PETROLEUM CONTAMINATION 0504-058-00

Analytical Results Report

Sample Number	110513012-005	**Sampling Date**	5/11/2011	**Date/Time Received**	5/13/2011	8:22 AM	
Client Sample ID	MW-6-051111	**Sampling Time**	1:58 PM	**Extraction Date**			
Matrix	Water	**Sample Location**					
Comments							

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Gasoline	6850	ug/L	100	5/13/2011	WOZ	NWTPHG	

Surrogate Data

Sample Number 110513012-005

Surrogate Standard	Method	Percent Recovery	Control Limits
4-Bromofluorobenzene	NWTPHG	84.8	70-130

Sample Number	110513012-006	**Sampling Date**	5/11/2011	**Date/Time Received**	5/13/2011	8:22 AM	
Client Sample ID	MW-7-051111	**Sampling Time**	1:14 PM	**Extraction Date**			
Matrix	Water	**Sample Location**					
Comments							

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Gasoline	ND	ug/L	100	5/13/2011	WOZ	NWTPHG	

Surrogate Data

Sample Number 110513012-006

Surrogate Standard	Method	Percent Recovery	Control Limits
4-Bromofluorobenzene	NWTPHG	97.7	70-130

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; IN:C-ID-01; KY:90142; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; CA:Cert2632; ID:WA00169; WA:C585; MT:Cert0095

Anatek Labs, Inc.

1282 Alturas Drive • Moscow, ID 83843 • (208) 883-2839 • Fax (208) 882-9246 • email moscow@anateklabs.com
504 E Sprague Ste. D • Spokane WA 99202 • (509) 838-3999 • Fax (509) 838-4433 • email spokane@anateklabs.com

Client: GEO ENGINEERS
Address: 523 E 2ND
SPOKANE, WA 99202
Attn: DAVE LAUDER

Batch #: 110513012
Project Name: IONE PETROLEUM CONTAMINATION 0504-058-00

Analytical Results Report

Sample Number	110513012-007	**Sampling Date**	5/11/2011	**Date/Time Received**	5/13/2011	8:22 AM	
Client Sample ID	MW-9-051111	**Sampling Time**	2:50 PM	**Extraction Date**			
Matrix	Water	**Sample Location**					
Comments							

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Gasoline	ND	ug/L	100	5/13/2011	WOZ	NWTPHG	

Surrogate Data

Sample Number 110513012-007

Surrogate Standard	Method	Percent Recovery	Control Limits
4-Bromofluorobenzene	NWTPHG	97.0	70-130

Sample Number	110513012-008	**Sampling Date**	5/11/2011	**Date/Time Received**	5/13/2011	8:22 AM	
Client Sample ID	MW-10-051111	**Sampling Time**	3:59 PM	**Extraction Date**			
Matrix	Water	**Sample Location**					
Comments							

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Gasoline	ND	ug/L	100	5/13/2011	WOZ	NWTPHG	

Surrogate Data

Sample Number 110513012-008

Surrogate Standard	Method	Percent Recovery	Control Limits
4-Bromofluorobenzene	NWTPHG	98.4	70-130

Anatek Labs, Inc.

1282 Alturas Drive • Moscow, ID 83843 • (208) 883-2839 • Fax (208) 882-9246 • email moscow@anateklabs.com
504 E Sprague Ste. D • Spokane WA 99202 • (509) 838-3999 • Fax (509) 838-4433 • email spokane@anateklabs.com

Client: GEO ENGINEERS
Address: 523 E 2ND
SPOKANE, WA 99202
Attn: DAVE LAUDER

Batch #: 110513012
Project Name: IONE PETROLEUM CONTAMINATION 0504-058-00

Analytical Results Report

Sample Number	110513012-009	**Sampling Date**	5/11/2011	**Date/Time Received**	5/13/2011	8:22 AM	
Client Sample ID	MW-11-051111	**Sampling Time**	5:23 PM	**Extraction Date**			
Matrix	Water	**Sample Location**					
Comments							

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Gasoline	ND	ug/L	100	5/13/2011	WOZ	NWTPHG	

Surrogate Data

Sample Number 110513012-009

Surrogate Standard	Method	Percent Recovery	Control Limits
4-Bromofluorobenzene	NWTPHG	104.5	70-130

Sample Number	110513012-010	**Sampling Date**	5/12/2011	**Date/Time Received**	5/13/2011	8:22 AM	
Client Sample ID	MW-12-051211	**Sampling Time**	9:49 AM	**Extraction Date**			
Matrix	Water	**Sample Location**					
Comments							

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Gasoline	ND	ug/L	100	5/13/2011	WOZ	NWTPHG	

Surrogate Data

Sample Number 110513012-010

Surrogate Standard	Method	Percent Recovery	Control Limits
4-Bromofluorobenzene	NWTPHG	102.2	70-130

Anatek Labs, Inc.

1282 Alturas Drive • Moscow, ID 83843 • (208) 883-2839 • Fax (208) 882-9246 • email moscow@anateklabs.com
504 E Sprague Ste. D • Spokane WA 99202 • (509) 838-3999 • Fax (509) 838-4433 • email spokane@anateklabs.com

Client: GEO ENGINEERS
Address: 523 E 2ND
SPOKANE, WA 99202
Attn: DAVE LAUDER

Batch #: 110513012
Project Name: IONE PETROLEUM CONTAMINATION 0504-058-00

Analytical Results Report

Sample Number	110513012-011	**Sampling Date**	5/12/2011	**Date/Time Received**	5/13/2011	8:22 AM	
Client Sample ID	DUPLICATE-1-051211	**Sampling Time**	12:34 PM	**Extraction Date**			
Matrix	Water	**Sample Location**					
Comments							

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Gasoline	467	ug/L	100	5/13/2011	WOZ	NWTPHG	

Surrogate Data

Sample Number 110513012-011

Surrogate Standard	Method	Percent Recovery	Control Limits
4-Bromofluorobenzene	NWTPHG	106.0	70-130

Sample Number	110513012-012	**Sampling Date**	5/12/2011	**Date/Time Received**	5/13/2011	8:22 AM	
Client Sample ID	CABIN GRILL WELL-051211	**Sampling Time**	3:29 PM	**Extraction Date**			
Matrix	Water	**Sample Location**					
Comments							

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Gasoline	14000	ug/L	1000	5/18/2011	WOZ	NWTPHG	

Surrogate Data

Sample Number 110513012-012

Surrogate Standard	Method	Percent Recovery	Control Limits
4-Bromofluorobenzene	NWTPHG	98.9	70-130

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; IN:C-ID-01; KY:90142; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; CA:Cert2632; ID:WA00169; WA:C585; MT:Cert0095

Anatek Labs, Inc.

1282 Alturas Drive • Moscow, ID 83843 • (208) 883-2839 • Fax (208) 882-9246 • email moscow@anateklabs.com
504 E Sprague Ste. D • Spokane WA 99202 • (509) 838-3999 • Fax (509) 838-4433 • email spokane@anateklabs.com

Client:	GEO ENGINEERS	**Batch #:**	110513012
Address:	523 E 2ND SPOKANE, WA 99202	**Project Name:**	IONE PETROLEUM CONTAMINATION 0504-058-00
Attn:	DAVE LAUDER		

Analytical Results Report

Authorized Signature

Kathy Sattler, Lab Manager

MCL	EPA's Maximum Contaminant Level
ND	Not Detected
PQL	Practical Quantitation Limit

This report shall not be reproduced except in full, without the written approval of the laboratory.
The results reported relate only to the samples indicated.
Soil/solid results are reported on a dry-weight basis unless otherwise noted.

Anatek Labs, Inc.

1282 Alturas Drive • Moscow, ID 83843 • (208) 883-2839 • Fax (208) 882-9246 • email moscow@anateklabs.com
504 E Sprague Ste. D • Spokane WA 99202 • (509) 838-3999 • Fax (509) 838-4433 • email spokane@anateklabs.com

Client: GEO ENGINEERS
Address: 523 E 2ND
SPOKANE, WA 99202
Attn: DAVE LAUDER

Batch #: 110513012
Project Name: IONE PETROLEUM CONTAMINATION 0504-058-00

Analytical Results Report (RBCA)

Sample Number	110513012-001	**Sampling Date**	5/11/2011	**Date/Time Received**	5/13/2011 8:22 AM
Client Sample ID	MW-1-051111	**Sampling Time**	10:59 AM	**Extraction Date**	
Matrix	Water	**Sample Location**			
Comments					

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
1,2-Dibromoethane	ND	ug/L	0.01	5/18/2011	WOZ	EPA 8260C	
1,2-Dichloroethane	ND	ug/L	0.5	5/18/2011	WOZ	EPA 8260C	
Benzene	ND	ug/L	0.5	5/18/2011	WOZ	EPA 8260C	
Ethylbenzene	ND	ug/L	0.5	5/18/2011	WOZ	EPA 8260C	
m+p-Xylene	ND	ug/L	1	5/18/2011	WOZ	EPA 8260C	
methyl-t-butyl ether (MTBE)	ND	ug/L	0.5	5/18/2011	WOZ	EPA 8260C	
Naphthalene	ND	ug/L	0.5	5/18/2011	WOZ	EPA 8260C	
o-Xylene	ND	ug/L	0.5	5/18/2011	WOZ	EPA 8260C	
Toluene	ND	ug/L	0.5	5/18/2011	WOZ	EPA 8260C	

Surrogate Data

Sample Number 110513012-001

Surrogate Standard	Method	Percent Recovery	Control Limits
1,2-Dichlorobenzene-d4	EPA 8260C	98.8	70-130
4-Bromofluorobenzene	EPA 8260C	97.6	70-130
Toluene-d8	EPA 8260C	99.2	70-130

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; IN:C-ID-01; KY:90142; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; CA:Cert2632; ID:WA00169; WA:C585; MT:Cert0095

Anatek Labs, Inc.

1282 Alturas Drive • Moscow, ID 83843 • (208) 883-2839 • Fax (208) 882-9246 • email moscow@anateklabs.com
504 E Sprague Ste. D • Spokane WA 99202 • (509) 838-3999 • Fax (509) 838-4433 • email spokane@anateklabs.com

Client: GEO ENGINEERS
Address: 523 E 2ND
SPOKANE, WA 99202
Attn: DAVE LAUDER

Batch #: 110513012
Project Name: IONE PETROLEUM CONTAMINATION 0504-058-00

Analytical Results Report (RBCA)

Sample Number	110513012-002	**Sampling Date**	5/11/2011	**Date/Time Received**	5/13/2011	8:22 AM	
Client Sample ID	MW-2-051111	**Sampling Time**	11:54 AM	**Extraction Date**			
Matrix	Water	**Sample Location**					
Comments							

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
1,2-Dibromoethane	ND	ug/L	0.01	5/18/2011	WOZ	EPA 8260C	
1,2-Dichloroethane	ND	ug/L	0.5	5/18/2011	WOZ	EPA 8260C	
Benzene	ND	ug/L	0.5	5/18/2011	WOZ	EPA 8260C	
Ethylbenzene	ND	ug/L	0.5	5/18/2011	WOZ	EPA 8260C	
m+p-Xylene	ND	ug/L	1	5/18/2011	WOZ	EPA 8260C	
methyl-t-butyl ether (MTBE)	ND	ug/L	0.5	5/18/2011	WOZ	EPA 8260C	
Naphthalene	ND	ug/L	0.5	5/18/2011	WOZ	EPA 8260C	
o-Xylene	ND	ug/L	0.5	5/18/2011	WOZ	EPA 8260C	
Toluene	ND	ug/L	0.5	5/18/2011	WOZ	EPA 8260C	

Surrogate Data

Sample Number 110513012-002

Surrogate Standard	Method	Percent Recovery	Control Limits
1,2-Dichlorobenzene-d4	EPA 8260C	98.0	70-130
4-Bromofluorobenzene	EPA 8260C	98.0	70-130
Toluene-d8	EPA 8260C	100.4	70-130

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; IN:C-ID-01; KY:90142; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; CA:Cert2632; ID:WA00169; WA:C585; MT:Cert0095

Anatek Labs, Inc.

1282 Alturas Drive • Moscow, ID 83843 • (208) 883-2839 • Fax (208) 882-9246 • email moscow@anateklabs.com
504 E Sprague Ste. D • Spokane WA 99202 • (509) 838-3999 • Fax (509) 838-4433 • email spokane@anateklabs.com

Client: GEO ENGINEERS
Address: 523 E 2ND
SPOKANE, WA 99202
Attn: DAVE LAUDER

Batch #: 110513012
Project Name: IONE PETROLEUM CONTAMINATION 0504-058-00

Analytical Results Report (RBCA)

Sample Number	110513012-004	**Sampling Date**	5/11/2011	**Date/Time Received**	5/13/2011	8:22 AM	
Client Sample ID	MW-4-051111	**Sampling Time**	11:24 AM	**Extraction Date**			
Matrix	Water	**Sample Location**					
Comments							

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
1,2-Dibromoethane	ND	ug/L	0.01	5/18/2011	WOZ	EPA 8260C	
1,2-Dichloroethane	ND	ug/L	0.5	5/18/2011	WOZ	EPA 8260C	
Benzene	1.27	ug/L	0.5	5/18/2011	WOZ	EPA 8260C	
Ethylbenzene	1.93	ug/L	0.5	5/18/2011	WOZ	EPA 8260C	
m+p-Xylene	23.5	ug/L	10	5/18/2011	WOZ	EPA 8260C	
methyl-t-butyl ether (MTBE)	ND	ug/L	0.5	5/18/2011	WOZ	EPA 8260C	
Naphthalene	0.61	ug/L	0.5	5/18/2011	WOZ	EPA 8260C	
o-Xylene	25.4	ug/L	5	5/18/2011	WOZ	EPA 8260C	
Toluene	7.46	ug/L	5	5/18/2011	WOZ	EPA 8260C	

Surrogate Data

Sample Number 110513012-004

Surrogate Standard	Method	Percent Recovery	Control Limits
1,2-Dichlorobenzene-d4	EPA 8260C	93.2	70-130
4-Bromofluorobenzene	EPA 8260C	100.8	70-130
Toluene-d8	EPA 8260C	100.4	70-130

Anatek Labs, Inc.

1282 Alturas Drive • Moscow, ID 83843 • (208) 883-2839 • Fax (208) 882-9246 • email moscow@anateklabs.com
504 E Sprague Ste. D • Spokane WA 99202 • (509) 838-3999 • Fax (509) 838-4433 • email spokane@anateklabs.com

Client: GEO ENGINEERS
Address: 523 E 2ND
SPOKANE, WA 99202
Attn: DAVE LAUDER

Batch #: 110513012
Project Name: IONE PETROLEUM CONTAMINATION 0504-058-00

Analytical Results Report (RBCA)

Sample Number	110513012-006	**Sampling Date**	5/11/2011	**Date/Time Received**	5/13/2011 8:22 AM
Client Sample ID	MW-7-051111	**Sampling Time**	1:14 PM	**Extraction Date**	
Matrix	Water	**Sample Location**			
Comments					

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
1,2-Dibromoethane	ND	ug/L	0.01	5/18/2011	WOZ	EPA 8260C	
1,2-Dichloroethane	ND	ug/L	0.5	5/18/2011	WOZ	EPA 8260C	
Benzene	ND	ug/L	0.5	5/18/2011	WOZ	EPA 8260C	
Ethylbenzene	ND	ug/L	0.5	5/18/2011	WOZ	EPA 8260C	
m+p-Xylene	ND	ug/L	1	5/18/2011	WOZ	EPA 8260C	
methyl-t-butyl ether (MTBE)	ND	ug/L	0.5	5/18/2011	WOZ	EPA 8260C	
Naphthalene	ND	ug/L	0.5	5/18/2011	WOZ	EPA 8260C	
o-Xylene	ND	ug/L	0.5	5/18/2011	WOZ	EPA 8260C	
Toluene	ND	ug/L	0.5	5/18/2011	WOZ	EPA 8260C	

Surrogate Data

Sample Number 110513012-006

Surrogate Standard	Method	Percent Recovery	Control Limits
1,2-Dichlorobenzene-d4	EPA 8260C	96.8	70-130
4-Bromofluorobenzene	EPA 8260C	94.8	70-130
Toluene-d8	EPA 8260C	100.4	70-130

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; IN:C-ID-01; KY:90142; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; CA:Cert2632; ID:WA00169; WA:C585; MT:Cert0095

Anatek Labs, Inc.

1282 Alturas Drive • Moscow, ID 83843 • (208) 883-2839 • Fax (208) 882-9246 • email moscow@anateklabs.com
504 E Sprague Ste. D • Spokane WA 99202 • (509) 838-3999 • Fax (509) 838-4433 • email spokane@anateklabs.com

Client: GEO ENGINEERS
Address: 523 E 2ND
SPOKANE, WA 99202
Attn: DAVE LAUDER

Batch #: 110513012
Project Name: IONE PETROLEUM CONTAMINATION 0504-058-00

Analytical Results Report (RBCA)

Sample Number	110513012-007	**Sampling Date**	5/11/2011	**Date/Time Received**	5/13/2011	8:22 AM
Client Sample ID	MW-9-051111	**Sampling Time**	2:50 PM	**Extraction Date**		
Matrix	Water	**Sample Location**				
Comments						

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
1,2-Dibromoethane	ND	ug/L	0.01	5/18/2011	WOZ	EPA 8260C	
1,2-Dichloroethane	ND	ug/L	0.5	5/18/2011	WOZ	EPA 8260C	
Benzene	ND	ug/L	0.5	5/18/2011	WOZ	EPA 8260C	
Ethylbenzene	ND	ug/L	0.5	5/18/2011	WOZ	EPA 8260C	
m+p-Xylene	ND	ug/L	1	5/18/2011	WOZ	EPA 8260C	
methyl-t-butyl ether (MTBE)	ND	ug/L	0.5	5/18/2011	WOZ	EPA 8260C	
Naphthalene	ND	ug/L	0.5	5/18/2011	WOZ	EPA 8260C	
o-Xylene	ND	ug/L	0.5	5/18/2011	WOZ	EPA 8260C	
Toluene	ND	ug/L	0.5	5/18/2011	WOZ	EPA 8260C	

Surrogate Data

Sample Number 110513012-007

Surrogate Standard	Method	Percent Recovery	Control Limits
1,2-Dichlorobenzene-d4	EPA 8260C	96.8	70-130
4-Bromofluorobenzene	EPA 8260C	97.2	70-130
Toluene-d8	EPA 8260C	99.2	70-130

Anatek Labs, Inc.

1282 Alturas Drive • Moscow, ID 83843 • (208) 883-2839 • Fax (208) 882-9246 • email moscow@anateklabs.com
504 E Sprague Ste. D • Spokane WA 99202 • (509) 838-3999 • Fax (509) 838-4433 • email spokane@anateklabs.com

Client: GEO ENGINEERS
Address: 523 E 2ND
SPOKANE, WA 99202
Attn: DAVE LAUDER

Batch #: 110513012
Project Name: IONE PETROLEUM CONTAMINATION 0504-058-00

Analytical Results Report (RBCA)

Sample Number	110513012-008	**Sampling Date**	5/11/2011	**Date/Time Received**	5/13/2011	8:22 AM	
Client Sample ID	MW-10-051111	**Sampling Time**	3:59 PM	**Extraction Date**			
Matrix	Water	**Sample Location**					
Comments							

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
1,2-Dibromoethane	ND	ug/L	0.01	5/19/2011	WOZ	EPA 8260C	
1,2-Dichloroethane	ND	ug/L	0.5	5/19/2011	WOZ	EPA 8260C	
Benzene	ND	ug/L	0.5	5/19/2011	WOZ	EPA 8260C	
Ethylbenzene	ND	ug/L	0.5	5/19/2011	WOZ	EPA 8260C	
m+p-Xylene	ND	ug/L	1	5/19/2011	WOZ	EPA 8260C	
methyl-t-butyl ether (MTBE)	ND	ug/L	0.5	5/19/2011	WOZ	EPA 8260C	
Naphthalene	ND	ug/L	0.5	5/19/2011	WOZ	EPA 8260C	
o-Xylene	ND	ug/L	0.5	5/19/2011	WOZ	EPA 8260C	
Toluene	ND	ug/L	0.5	5/19/2011	WOZ	EPA 8260C	

Surrogate Data

Sample Number 110513012-008

Surrogate Standard	Method	Percent Recovery	Control Limits
1,2-Dichlorobenzene-d4	EPA 8260C	97.6	70-130
4-Bromofluorobenzene	EPA 8260C	97.2	70-130
Toluene-d8	EPA 8260C	100.4	70-130

Anatek Labs, Inc.

1282 Alturas Drive • Moscow, ID 83843 • (208) 883-2839 • Fax (208) 882-9246 • email moscow@anateklabs.com
504 E Sprague Ste. D • Spokane WA 99202 • (509) 838-3999 • Fax (509) 838-4433 • email spokane@anateklabs.com

Client: GEO ENGINEERS
Address: 523 E 2ND
SPOKANE, WA 99202
Attn: DAVE LAUDER

Batch #: 110513012
Project Name: IONE PETROLEUM CONTAMINATION 0504-058-00

Analytical Results Report (RBCA)

Sample Number	110513012-009	**Sampling Date**	5/11/2011	**Date/Time Received**	5/13/2011 8:22 AM
Client Sample ID	MW-11-051111	**Sampling Time**	5:23 PM	**Extraction Date**	
Matrix	Water	**Sample Location**			
Comments					

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
1,2-Dibromoethane	ND	ug/L	0.01	5/19/2011	WOZ	EPA 8260C	
1,2-Dichloroethane	ND	ug/L	0.5	5/19/2011	WOZ	EPA 8260C	
Benzene	ND	ug/L	0.5	5/19/2011	WOZ	EPA 8260C	
Ethylbenzene	ND	ug/L	0.5	5/19/2011	WOZ	EPA 8260C	
m+p-Xylene	ND	ug/L	1	5/19/2011	WOZ	EPA 8260C	
methyl-t-butyl ether (MTBE)	ND	ug/L	0.5	5/19/2011	WOZ	EPA 8260C	
Naphthalene	ND	ug/L	0.5	5/19/2011	WOZ	EPA 8260C	
o-Xylene	ND	ug/L	0.5	5/19/2011	WOZ	EPA 8260C	
Toluene	ND	ug/L	0.5	5/19/2011	WOZ	EPA 8260C	

Surrogate Data

Sample Number 110513012-009

Surrogate Standard	Method	Percent Recovery	Control Limits
1,2-Dichlorobenzene-d4	EPA 8260C	95.6	70-130
4-Bromofluorobenzene	EPA 8260C	97.2	70-130
Toluene-d8	EPA 8260C	100.4	70-130

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; IN:C-ID-01; KY:90142; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; CA:Cert2632; ID:WA00169; WA:C585; MT:Cert0095

Anatek Labs, Inc.

1282 Alturas Drive • Moscow, ID 83843 • (208) 883-2839 • Fax (208) 882-9246 • email moscow@anateklabs.com
504 E Sprague Ste. D • Spokane WA 99202 • (509) 838-3999 • Fax (509) 838-4433 • email spokane@anateklabs.com

Client: GEO ENGINEERS
Address: 523 E 2ND
SPOKANE, WA 99202
Attn: DAVE LAUDER

Batch #: 110513012
Project Name: IONE PETROLEUM CONTAMINATION 0504-058-00

Analytical Results Report (RBCA)

Sample Number	110513012-010	**Sampling Date**	5/12/2011	**Date/Time Received**	5/13/2011 8:22 AM
Client Sample ID	MW-12-051211	**Sampling Time**	9:49 AM	**Extraction Date**	
Matrix	Water	**Sample Location**			
Comments					

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
1,2-Dibromoethane	ND	ug/L	0.01	5/19/2011	WOZ	EPA 8260C	
1,2-Dichloroethane	ND	ug/L	0.5	5/19/2011	WOZ	EPA 8260C	
Benzene	ND	ug/L	0.5	5/19/2011	WOZ	EPA 8260C	
Ethylbenzene	ND	ug/L	0.5	5/19/2011	WOZ	EPA 8260C	
m+p-Xylene	ND	ug/L	1	5/19/2011	WOZ	EPA 8260C	
methyl-t-butyl ether (MTBE)	ND	ug/L	0.5	5/19/2011	WOZ	EPA 8260C	
Naphthalene	ND	ug/L	0.5	5/19/2011	WOZ	EPA 8260C	
o-Xylene	ND	ug/L	0.5	5/19/2011	WOZ	EPA 8260C	
Toluene	ND	ug/L	0.5	5/19/2011	WOZ	EPA 8260C	

Surrogate Data

Sample Number 110513012-010

Surrogate Standard	Method	Percent Recovery	Control Limits
1,2-Dichlorobenzene-d4	EPA 8260C	96.8	70-130
4-Bromofluorobenzene	EPA 8260C	95.6	70-130
Toluene-d8	EPA 8260C	100.4	70-130

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; IN:C-ID-01; KY:90142; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; CA:Cert2632; ID:WA00169; WA:C585; MT:Cert0095

Anatek Labs, Inc.

1282 Alturas Drive • Moscow, ID 83843 • (208) 883-2839 • Fax (208) 882-9246 • email moscow@anateklabs.com
504 E Sprague Ste. D • Spokane WA 99202 • (509) 838-3999 • Fax (509) 838-4433 • email spokane@anateklabs.com

Client: GEO ENGINEERS
Address: 523 E 2ND
SPOKANE, WA 99202
Attn: DAVE LAUDER

Batch #: 110513012
Project Name: IONE PETROLEUM CONTAMINATION 0504-058-00

Analytical Results Report (RBCA)

Sample Number	110513012-011	**Sampling Date**	5/12/2011	**Date/Time Received**	5/13/2011 8:22 AM
Client Sample ID	DUPLICATE-1-051211	**Sampling Time**	12:34 PM	**Extraction Date**	
Matrix	Water	**Sample Location**			
Comments					

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
1,2-Dibromoethane	ND	ug/L	0.01	5/19/2011	WOZ	EPA 8260C	
1,2-Dichloroethane	ND	ug/L	0.5	5/19/2011	WOZ	EPA 8260C	
Benzene	1.33	ug/L	0.5	5/19/2011	WOZ	EPA 8260C	
Ethylbenzene	2.13	ug/L	0.5	5/19/2011	WOZ	EPA 8260C	
m+p-Xylene	25.7	ug/L	10	5/19/2011	WOZ	EPA 8260C	
methyl-t-butyl ether (MTBE)	ND	ug/L	0.5	5/19/2011	WOZ	EPA 8260C	
Naphthalene	0.59	ug/L	0.5	5/19/2011	WOZ	EPA 8260C	
o-Xylene	27.7	ug/L	5	5/19/2011	WOZ	EPA 8260C	
Toluene	8.42	ug/L	5	5/19/2011	WOZ	EPA 8260C	

Surrogate Data

Sample Number 110513012-011

Surrogate Standard	Method	Percent Recovery	Control Limits
1,2-Dichlorobenzene-d4	EPA 8260C	93.2	70-130
4-Bromofluorobenzene	EPA 8260C	96.0	70-130
Toluene-d8	EPA 8260C	102.8	70-130

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; IN:C-ID-01; KY:90142; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; CA:Cert2632; ID:WA00169; WA:C585; MT:Cert0095

Anatek Labs, Inc.

1282 Alturas Drive • Moscow, ID 83843 • (208) 883-2839 • Fax (208) 882-9246 • email moscow@anateklabs.com
504 E Sprague Ste. D • Spokane WA 99202 • (509) 838-3999 • Fax (509) 838-4433 • email spokane@anateklabs.com

Client: GEO ENGINEERS
Address: 523 E 2ND
SPOKANE, WA 99202
Attn: DAVE LAUDER

Batch #: 110513012
Project Name: IONE PETROLEUM CONTAMINATION 0504-058-00

Analytical Results Report (RBCA)

Sample Number	110513012-013	**Sampling Date**	5/11/2011	**Date/Time Received**	5/13/2011	8:22 AM	
Client Sample ID	TRIP BLANK	**Sampling Time**		**Extraction Date**			
Matrix	Water	**Sample Location**					
Comments							

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
1,2-Dibromoethane	ND	ug/L	0.01	5/19/2011	WOZ	EPA 8260C	
1,2-Dichloroethane	ND	ug/L	0.5	5/19/2011	WOZ	EPA 8260C	
Benzene	ND	ug/L	0.5	5/19/2011	WOZ	EPA 8260C	
Ethylbenzene	ND	ug/L	0.5	5/19/2011	WOZ	EPA 8260C	
m+p-Xylene	ND	ug/L	1	5/19/2011	WOZ	EPA 8260C	
methyl-t-butyl ether (MTBE)	ND	ug/L	0.5	5/19/2011	WOZ	EPA 8260C	
Naphthalene	ND	ug/L	0.5	5/19/2011	WOZ	EPA 8260C	
o-Xylene	ND	ug/L	0.5	5/19/2011	WOZ	EPA 8260C	
Toluene	ND	ug/L	0.5	5/19/2011	WOZ	EPA 8260C	

Surrogate Data

Sample Number 110513012-013

Surrogate Standard	Method	Percent Recovery	Control Limits
1,2-Dichlorobenzene-d4	EPA 8260C	99.2	70-130
4-Bromofluorobenzene	EPA 8260C	93.2	70-130
Toluene-d8	EPA 8260C	101.2	70-130

Authorized Signature

Kathleen A. Sattler

Kathy Sattler, Lab Manager

MCL EPA's Maximum Contaminant Level
ND Not Detected
PQL Practical Quantitation Limit

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; IN:C-ID-01; KY:90142; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; CA:Cert2632; ID:WA00169; WA:C585; MT:Cert0095

Anatek Labs, Inc.

1282 Alturas Drive • Moscow, ID 83843 • (208) 883-2839 • Fax (208) 882-9246 • email moscow@anateklabs.com
504 E Sprague Ste. D • Spokane WA 99202 • (509) 838-3999 • Fax (509) 838-4433 • email spokane@anateklabs.com

Client: GEO ENGINEERS
Address: 523 E 2ND
SPOKANE, WA 99202
Attn: DAVE LAUDER

Batch #: 110513012
Project Name: IONE PETROLEUM CONTAMINATION 0504-058-00

Analytical Results Report

Quality Control Data

Lab Control Sample

Parameter	LCS Result	Units	LCS Spike	%Rec	AR %Rec	Prep Date	Analysis Date
1,1-Dichloroethene	5.03	ug/L	5	100.6	70-130	5/14/2011	5/14/2011
Trichloroethene	5.30	ug/L	5	106.0	70-130	5/14/2011	5/14/2011
Toluene	5.11	ug/L	5	102.2	70-130	5/14/2011	5/14/2011
Tetrachloroethene	4.91	ug/L	5	98.2	70-130	5/14/2011	5/14/2011
o-Xylene	5.46	ug/L	5	109.2	70-130	5/14/2011	5/14/2011
Ethylbenzene	5.12	ug/L	5	102.4	70-130	5/14/2011	5/14/2011
Chlorobenzene	5.43	ug/L	5	108.6	70-130	5/14/2011	5/14/2011
Benzene	5.24	ug/L	5	104.8	70-130	5/14/2011	5/14/2011

Lab Control Sample Duplicate

Parameter	LCSD Result	Units	LCSD Spike	%Rec	%RPD	AR %RPD	Prep Date	Analysis Date
Trichloroethene	5.19	ug/L	5	103.8	2.1	0-20	5/14/2011	5/14/2011
Toluene	5.01	ug/L	5	100.2	2.0	0-20	5/14/2011	5/14/2011
Tetrachloroethene	4.82	ug/L	5	96.4	1.8	0-20	5/14/2011	5/14/2011
o-Xylene	5.31	ug/L	5	106.2	2.8	0-20	5/14/2011	5/14/2011
Ethylbenzene	5.02	ug/L	5	100.4	2.0	0-20	5/14/2011	5/14/2011
Chlorobenzene	5.39	ug/L	5	107.8	0.7	0-20	5/14/2011	5/14/2011
Benzene	5.13	ug/L	5	102.6	2.1	0-20	5/14/2011	5/14/2011
1,1-Dichloroethene	4.84	ug/L	5	96.8	3.9	0-20	5/14/2011	5/14/2011

Method Blank

Parameter	Result	Units	PQL	Prep Date	Analysis Date
1,1,1,2-Tetrachloroethane	ND	ug/L	0.5	5/14/2011	5/14/2011
1,1,1-Trichloroethane	ND	ug/L	0.5	5/14/2011	5/14/2011
1,1,2,2-Tetrachloroethane	ND	ug/L	0.5	5/14/2011	5/14/2011
1,1,2-Trichloroethane	ND	ug/L	0.5	5/14/2011	5/14/2011
1,1-Dichloroethane	ND	ug/L	0.5	5/14/2011	5/14/2011
1,1-Dichloroethene	ND	ug/L	0.5	5/14/2011	5/14/2011
1,1-dichloropropene	ND	ug/L	0.5	5/14/2011	5/14/2011
1,2,3-Trichlorobenzene	ND	ug/L	0.5	5/14/2011	5/14/2011
1,2,3-Trichloropropane	ND	ug/L	0.5	5/14/2011	5/14/2011
1,2,4-Trichlorobenzene	ND	ug/L	0.5	5/14/2011	5/14/2011

Comments:

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; IN:C-ID-01; KY:90142; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; CA:Cert2632; ID:WA00169; WA:C585; MT:Cert0095

Anatek Labs, Inc.

1282 Alturas Drive • Moscow, ID 83843 • (208) 883-2839 • Fax (208) 882-9246 • email moscow@anateklabs.com
504 E Sprague Ste. D • Spokane WA 99202 • (509) 838-3999 • Fax (509) 838-4433 • email spokane@anateklabs.com

Client: GEO ENGINEERS
Address: 523 E 2ND
SPOKANE, WA 99202
Attn: DAVE LAUDER

Batch #: 110513012
Project Name: IONE PETROLEUM CONTAMINATION 0504-058-00

Analytical Results Report

Quality Control Data

Method Blank

Parameter	Result	Units	PQL	Prep Date	Analysis Date
1,2,4-Trimethylbenzene	ND	ug/L	0.5	5/14/2011	5/14/2011
1,2-Dibromo-3-chloropropane(DBCP)	ND	ug/L	0.5	5/14/2011	5/14/2011
1,2-Dibromoethane	ND	ug/L	0.5	5/14/2011	5/14/2011
1,2-Dichlorobenzene	ND	ug/L	0.5	5/14/2011	5/14/2011
1,2-Dichloroethane	ND	ug/L	0.5	5/14/2011	5/14/2011
1,2-Dichloropropane	ND	ug/L	0.5	5/14/2011	5/14/2011
1,3,5-Trimethylbenzene	ND	ug/L	0.5	5/14/2011	5/14/2011
1,3-Dichlorobenzene	ND	ug/L	0.5	5/14/2011	5/14/2011
1,3-Dichloropropane	ND	ug/L	0.5	5/14/2011	5/14/2011
1,4-Dichlorobenzene	ND	ug/L	0.5	5/14/2011	5/14/2011
2,2-Dichloropropane	ND	ug/L	0.5	5/14/2011	5/14/2011
2-Chlorotoluene	ND	ug/L	0.5	5/14/2011	5/14/2011
2-hexanone	ND	ug/L	2.5	5/14/2011	5/14/2011
4-Chlorotoluene	ND	ug/L	0.5	5/14/2011	5/14/2011
Acetone	ND	ug/L	2.5	5/14/2011	5/14/2011
Acrylonitrile	ND	ug/L	0.5	5/14/2011	5/14/2011
Benzene	ND	ug/L	0.5	5/14/2011	5/14/2011
Bromobenzene	ND	ug/L	0.5	5/14/2011	5/14/2011
Bromochloromethane	ND	ug/L	0.5	5/14/2011	5/14/2011
Bromodichloromethane	ND	ug/L	0.5	5/14/2011	5/14/2011
Bromoform	ND	ug/L	0.5	5/14/2011	5/14/2011
Bromomethane	ND	ug/L	0.5	5/14/2011	5/14/2011
Carbon disulfide	ND	ug/L	0.5	5/14/2011	5/14/2011
Carbon Tetrachloride	ND	ug/L	0.5	5/14/2011	5/14/2011
Chlorobenzene	ND	ug/L	0.5	5/14/2011	5/14/2011
Chloroethane	ND	ug/L	0.5	5/14/2011	5/14/2011
Chloroform	ND	ug/L	0.5	5/14/2011	5/14/2011
Chloromethane	ND	ug/L	0.5	5/14/2011	5/14/2011
cis-1,2-dichloroethene	ND	ug/L	0.5	5/14/2011	5/14/2011
cis-1,3-Dichloropropene	ND	ug/L	0.5	5/14/2011	5/14/2011
Dibromochloromethane	ND	ug/L	0.5	5/14/2011	5/14/2011
Dibromomethane	ND	ug/L	0.5	5/14/2011	5/14/2011
Dichlorodifluoromethane	ND	ug/L	0.5	5/14/2011	5/14/2011
Ethylbenzene	ND	ug/L	0.5	5/14/2011	5/14/2011
Hexachlorobutadiene	ND	ug/L	0.5	5/14/2011	5/14/2011
Isopropylbenzene	ND	ug/L	0.5	5/14/2011	5/14/2011
m+p-Xylene	ND	ug/L	0.5	5/14/2011	5/14/2011

Comments:

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; IN:C-ID-01; KY:90142; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; CA:Cert2632; ID:WA00169; WA:C585; MT:Cert0095

Anatek Labs, Inc.

1282 Alturas Drive • Moscow, ID 83843 • (208) 883-2839 • Fax (208) 882-9246 • email moscow@anateklabs.com
504 E Sprague Ste. D • Spokane WA 99202 • (509) 838-3999 • Fax (509) 838-4433 • email spokane@anateklabs.com

Client: GEO ENGINEERS
Address: 523 E 2ND
SPOKANE, WA 99202
Attn: DAVE LAUDER

Batch #: 110513012
Project Name: IONE PETROLEUM CONTAMINATION 0504-058-00

Analytical Results Report

Quality Control Data

Method Blank

Parameter	Result	Units	PQL	Prep Date	Analysis Date
Methyl ethyl ketone (MEK)	ND	ug/L	2.5	5/14/2011	5/14/2011
Methyl isobutyl ketone (MIBK)	ND	ug/L	2.5	5/14/2011	5/14/2011
Methylene chloride	ND	ug/L	2.5	5/14/2011	5/14/2011
methyl-t-butyl ether (MTBE)	ND	ug/L	0.5	5/14/2011	5/14/2011
Naphthalene	ND	ug/L	0.5	5/14/2011	5/14/2011
n-Butylbenzene	ND	ug/L	0.5	5/14/2011	5/14/2011
n-Propylbenzene	ND	ug/L	0.5	5/14/2011	5/14/2011
o-Xylene	ND	ug/L	0.5	5/14/2011	5/14/2011
p-isopropyltoluene	ND	ug/L	0.5	5/14/2011	5/14/2011
sec-Butylbenzene	ND	ug/L	0.5	5/14/2011	5/14/2011
Styrene	ND	ug/L	0.5	5/14/2011	5/14/2011
tert-Butylbenzene	ND	ug/L	0.5	5/14/2011	5/14/2011
Tetrachloroethene	ND	ug/L	0.5	5/14/2011	5/14/2011
Toluene	ND	ug/L	0.5	5/14/2011	5/14/2011
trans-1,2-Dichloroethene	ND	ug/L	0.5	5/14/2011	5/14/2011
trans-1,3-Dichloropropene	ND	ug/L	0.5	5/14/2011	5/14/2011
Trichloroethene	ND	ug/L	0.5	5/14/2011	5/14/2011
Trichloroflouromethane	ND	ug/L	0.5	5/14/2011	5/14/2011
Vinyl Chloride	ND	ug/L	0.5	5/14/2011	5/14/2011

AR	Acceptable Range
ND	Not Detected
PQL	Practical Quantitation Limit
RPD	Relative Percentage Difference

Comments:

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; IN:C-ID-01; KY:90142; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; CA:Cert2632; ID:WA00169; WA:C585; MT:Cert0095

Anatek Labs, Inc.

1282 Alturas Drive • Moscow, ID 83843 • (208) 883-2839 • Fax (208) 882-9246 • email moscow@anateklabs.com
504 E Sprague Ste. D • Spokane WA 99202 • (509) 838-3999 • Fax (509) 838-4433 • email spokane@anateklabs.com

Client: GEO ENGINEERS
Address: 523 E 2ND
SPOKANE, WA 99202
Attn: DAVE LAUDER

Batch #: 110513012
Project Name: IONE PETROLEUM CONTAMINATION 0504-058-00

Analytical Results Report

Quality Control Data

Lab Control Sample

Parameter	LCS Result	Units	LCS Spike	%Rec	AR %Rec	Prep Date	Analysis Date
Toluene	0.86	ug/L	1	86.0	70-130	5/18/2011	5/18/2011
o-Xylene	0.96	ug/L	1	96.0	70-130	5/18/2011	5/18/2011
Ethylbenzene	0.89	ug/L	1	89.0	70-130	5/18/2011	5/18/2011
Benzene	0.92	ug/L	1	92.0	70-130	5/18/2011	5/18/2011

Lab Control Sample Duplicate

Parameter	LCSD Result	Units	LCSD Spike	%Rec	%RPD	AR %RPD	Prep Date	Analysis Date
Toluene	0.81	ug/L	1	81.0	6.0	0-20	5/18/2011	5/18/2011
o-Xylene	0.89	ug/L	1	89.0	7.6	0-20	5/18/2011	5/18/2011
Ethylbenzene	0.83	ug/L	1	83.0	7.0	0-20	5/18/2011	5/18/2011
Benzene	0.87	ug/L	1	87.0	5.6	0-20	5/18/2011	5/18/2011

Method Blank

Parameter	Result	Units	PQL	Prep Date	Analysis Date
1,2-Dibromoethane	ND	ug/L	0.01	5/18/2011	5/18/2011
1,2-Dichloroethane	ND	ug/L	0.5	5/18/2011	5/18/2011
Benzene	ND	ug/L	0.5	5/18/2011	5/18/2011
Ethylbenzene	ND	ug/L	0.5	5/18/2011	5/18/2011
m+p-Xylene	ND	ug/L	1	5/18/2011	5/18/2011
methyl-t-butyl ether (MTBE)	ND	ug/L	0.5	5/18/2011	5/18/2011
Naphthalene	ND	ug/L	0.5	5/18/2011	5/18/2011
o-Xylene	ND	ug/L	0.5	5/18/2011	5/18/2011
Toluene	ND	ug/L	0.5	5/18/2011	5/18/2011

AR	Acceptable Range
ND	Not Detected
PQL	Practical Quantitation Limit
RPD	Relative Percentage Difference

Comments:

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; IN:C-ID-01; KY:90142; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; CA:Cert2632; ID:WA00169; WA:C585; MT:Cert0095

Anatek Labs, Inc.

1282 Alturas Drive • Moscow, ID 83843 • (208) 883-2839 • Fax (208) 882-9246 • email moscow@anateklabs.com
504 E Sprague Ste. D • Spokane WA 99202 • (509) 838-3999 • Fax (509) 838-4433 • email spokane@anateklabs.com

Client: GEO ENGINEERS
Address: 523 E 2ND
SPOKANE, WA 99202
Attn: DAVE LAUDER

Batch #: 110513012
Project Name: IONE PETROLEUM CONTAMINATION 0504-058-00

Analytical Results Report

Quality Control Data

Lab Control Sample

Parameter	LCS Result	Units	LCS Spike	%Rec	AR %Rec	Prep Date	Analysis Date
Gasoline	1050	ug/L	1100	95.5	70-130	5/18/2011	5/18/2011
Gasoline	1010	ug/L	1100	91.8	70-130	5/13/2011	5/13/2011

Matrix Spike

Sample Number	Parameter	Sample Result	MS Result	Units	MS Spike	%Rec	AR %Rec	Prep Date	Analysis Date
110513012-004	Gasoline	394	1520	ug/L	1100	102.4	70-130	5/18/2011	5/18/2011
110513012-002	Gasoline	ND	1210	ug/L	1100	110.0	70-130	5/13/2011	5/13/2011

Matrix Spike Duplicate

Parameter	MSD Result	Units	MSD Spike	%Rec	%RPD	AR %RPD	Prep Date	Analysis Date
Gasoline	1460	ug/L	1100	96.9	5.5	0-20	5/18/2011	5/18/2011
Gasoline	1180	ug/L	1100	107.3	2.5	0-20	5/13/2011	5/13/2011

Method Blank

Parameter	Result	Units	PQL	Prep Date	Analysis Date
Gasoline	ND	ug/L	0.1	5/18/2011	5/18/2011
Gasoline	ND	ug/L	0.1	5/13/2011	5/13/2011

AR	Acceptable Range
ND	Not Detected
PQL	Practical Quantitation Limit
RPD	Relative Percentage Difference

Comments:

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; IN:C-ID-01; KY:90142; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; CA:Cert2632; ID:WA00169; WA:C585; MT:Cert0095

Anatek Labs, Inc.

1282 Alturas Drive • Moscow, ID 83843 • (208) 883-2839 • Fax (208) 882-9246 • email moscow@anateklabs.com
504 E Sprague Ste. D • Spokane WA 99202 • (509) 838-3999 • Fax (509) 838-4433 • email spokane@anateklabs.com

Login Report

Customer Name: GEO ENGINEERS
523 E 2ND
SPOKANE WA 99202

Order ID: 110513012
Order Date: 5/13/2011

Contact Name: DAVE LAUDER
Comment:

Project Name: IONE PETROLEUM CONTAMINATION 0504-058-00

Sample #: 110513012-001 **Customer Sample #:** MW-1-051111

Recv'd: ☑ **Collector:** K RANDALL **Date Collected:** 5/11/2011
Quantity: 1 **Matrix:** Water **Date Received:** 5/13/2011 8:22:00 A
Comment:

Test	Lab	Method	Due Date	Priority
RBCA COCS FOR GAS	S	EPA 8260B	5/25/2011	***Normal (6-10 Days)***
TPHG-NW-SPO	S	NWTPHG	5/25/2011	***Normal (6-10 Days)***
VOLATILES 8260	S	EPA 8260B	5/25/2011	***Normal (6-10 Days)***

Sample #: 110513012-002 **Customer Sample #:** MW-2-051111

Recv'd: ☑ **Collector:** K RANDALL **Date Collected:** 5/11/2011
Quantity: 1 **Matrix:** Water **Date Received:** 5/13/2011 8:22:00 A
Comment:

Test	Lab	Method	Due Date	Priority
RBCA COCS FOR GAS	S	EPA 8260B	5/25/2011	***Normal (6-10 Days)***
TPHG-NW-SPO	S	NWTPHG	5/25/2011	***Normal (6-10 Days)***
VOLATILES 8260	S	EPA 8260B	5/25/2011	***Normal (6-10 Days)***

Sample #: 110513012-003 **Customer Sample #:** MW-3-051111

Recv'd: ☑ **Collector:** K RANDALL **Date Collected:** 5/11/2011
Quantity: 1 **Matrix:** Water **Date Received:** 5/13/2011 8:22:00 A
Comment:

Test	Lab	Method	Due Date	Priority
RBCA COCS FOR GAS	S	EPA 8260B	5/25/2011	***Normal (6-10 Days)***
TPHG-NW-SPO	S	NWTPHG	5/25/2011	***Normal (6-10 Days)***
VOLATILES 8260	S	EPA 8260B	5/25/2011	***Normal (6-10 Days)***

Customer Name: GEO ENGINEERS
523 E 2ND
SPOKANE WA 99202

Order ID: 110513012
Order Date: 5/13/2011

Contact Name: DAVE LAUDER

Project Name: IONE PETROLEUM CONTAMINATION 0504-058-00

Comment:

Sample #: 110513012-004 **Customer Sample #:** MW-4-051111

Recv'd: ☑ **Collector:** K RANDALL **Date Collected:** 5/11/2011
Quantity: 1 **Matrix:** Water **Date Received:** 5/13/2011 8:22:00 A
Comment:

Test	Lab	Method	Due Date	Priority
RBCA COCS FOR GAS	S	EPA 8260B	5/25/2011	***Normal (6-10 Days)***
TPHG-NW-SPO	S	NWTPHG	5/25/2011	***Normal (6-10 Days)***
VOLATILES 8260	S	EPA 8260B	5/25/2011	***Normal (6-10 Days)***

Sample #: 110513012-005 **Customer Sample #:** MW-6-051111

Recv'd: ☑ **Collector:** K RANDALL **Date Collected:** 5/11/2011
Quantity: 1 **Matrix:** Water **Date Received:** 5/13/2011 8:22:00 A
Comment:

Test	Lab	Method	Due Date	Priority
RBCA COCS FOR GAS	S	EPA 8260B	5/25/2011	***Normal (6-10 Days)***
TPHG-NW-SPO	S	NWTPHG	5/25/2011	***Normal (6-10 Days)***
VOLATILES 8260	S	EPA 8260B	5/25/2011	***Normal (6-10 Days)***

Sample #: 110513012-006 **Customer Sample #:** MW-7-051111

Recv'd: ☑ **Collector:** K RANDALL **Date Collected:** 5/11/2011
Quantity: 1 **Matrix:** Water **Date Received:** 5/13/2011 8:22:00 A
Comment:

Test	Lab	Method	Due Date	Priority
RBCA COCS FOR GAS	S	EPA 8260B	5/25/2011	***Normal (6-10 Days)***
TPHG-NW-SPO	S	NWTPHG	5/25/2011	***Normal (6-10 Days)***
VOLATILES 8260	S	EPA 8260B	5/25/2011	***Normal (6-10 Days)***

Sample #: 110513012-007 **Customer Sample #:** MW-9-051111

Recv'd: ☑ **Collector:** K RANDALL **Date Collected:** 5/11/2011
Quantity: 1 **Matrix:** Water **Date Received:** 5/13/2011 8:22:00 A
Comment:

Test	Lab	Method	Due Date	Priority
RBCA COCS FOR GAS	S	EPA 8260B	5/25/2011	***Normal (6-10 Days)***

Customer Name: GEO ENGINEERS
523 E 2ND
SPOKANE WA 99202

Order ID: 110513012
Order Date: 5/13/2011

Contact Name: DAVE LAUDER

Project Name: IONE PETROLEUM CONTAMINATION 0504-058-00

Comment:

TPHG-NW-SPO	S	NWTPHG	5/25/2011	***Normal (6-10 Days)***
VOLATILES 8260	S	EPA 8260B	5/25/2011	***Normal (6-10 Days)***

Sample #: 110513012-008 **Customer Sample #:** MW-10-051111

Recv'd: ☑ **Collector:** K RANDALL **Date Collected:** 5/11/2011
Quantity: 1 **Matrix:** Water **Date Received:** 5/13/2011 8:22:00 A
Comment:

Test	Lab	Method	Due Date	Priority
RBCA COCS FOR GAS	S	EPA 8260B	5/25/2011	***Normal (6-10 Days)***
TPHG-NW-SPO	S	NWTPHG	5/25/2011	***Normal (6-10 Days)***
VOLATILES 8260	S	EPA 8260B	5/25/2011	***Normal (6-10 Days)***

Sample #: 110513012-009 **Customer Sample #:** MW-11-051111

Recv'd: ☑ **Collector:** K RANDALL **Date Collected:** 5/11/2011
Quantity: 1 **Matrix:** Water **Date Received:** 5/13/2011 8:22:00 A
Comment:

Test	Lab	Method	Due Date	Priority
RBCA COCS FOR GAS	S	EPA 8260B	5/25/2011	***Normal (6-10 Days)***
TPHG-NW-SPO	S	NWTPHG	5/25/2011	***Normal (6-10 Days)***
VOLATILES 8260	S	EPA 8260B	5/25/2011	***Normal (6-10 Days)***

Sample #: 110513012-010 **Customer Sample #:** MW-12-051211

Recv'd: ☑ **Collector:** K RANDALL **Date Collected:** 5/12/2011
Quantity: 1 **Matrix:** Water **Date Received:** 5/13/2011 8:22:00 A
Comment:

Test	Lab	Method	Due Date	Priority
RBCA COCS FOR GAS	S	EPA 8260B	5/25/2011	***Normal (6-10 Days)***
TPHG-NW-SPO	S	NWTPHG	5/25/2011	***Normal (6-10 Days)***
VOLATILES 8260	S	EPA 8260B	5/25/2011	***Normal (6-10 Days)***

Customer Name: GEO ENGINEERS
523 E 2ND
SPOKANE WA 99202

Order ID: 110513012
Order Date: 5/13/2011

Contact Name: DAVE LAUDER

Project Name: IONE PETROLEUM CONTAMINATION 0504-058-00

Comment:

Sample #: 110513012-011 **Customer Sample #:** DUPLICATE-1-051211

Recv'd: ☑ **Collector:** K RANDALL **Date Collected:** 5/12/2011
Quantity: 1 **Matrix:** Water **Date Received:** 5/13/2011 8:22:00 A
Comment:

Test	Lab	Method	Due Date	Priority
RBCA COCS FOR GAS	S	EPA 8260B	5/25/2011	***Normal (6-10 Days)***
TPHG-NW-SPO	S	NWTPHG	5/25/2011	***Normal (6-10 Days)***
VOLATILES 8260	S	EPA 8260B	5/25/2011	***Normal (6-10 Days)***

Sample #: 110513012-012 **Customer Sample #:** CABIN GRILL WELL-051211

Recv'd: ☑ **Collector:** K RANDALL **Date Collected:** 5/12/2011
Quantity: 1 **Matrix:** Water **Date Received:** 5/13/2011 8:22:00 A
Comment:

Test	Lab	Method	Due Date	Priority
RBCA COCS FOR GAS	S	EPA 8260B	5/25/2011	***Normal (6-10 Days)***
TPHG-NW-SPO	S	NWTPHG	5/25/2011	***Normal (6-10 Days)***
VOLATILES 8260	S	EPA 8260B	5/25/2011	***Normal (6-10 Days)***

Sample #: 110513012-013 **Customer Sample #:** TRIP BLANK

Recv'd: ☑ **Collector:** K RANDALL **Date Collected:** 5/11/2011
Quantity: 1 **Matrix:** Water **Date Received:** 5/13/2011 8:22:00 A
Comment:

Test	Lab	Method	Due Date	Priority
RBCA COCS FOR GAS	S	EPA 8260B	5/25/2011	***Normal (6-10 Days)***
TPHG-NW-SPO	S	NWTPHG	5/25/2011	***Normal (6-10 Days)***
VOLATILES 8260	S	EPA 8260B	5/25/2011	***Normal (6-10 Days)***

Customer Name:	GEO ENGINEERS			**Order ID:**	110513012
	523 E 2ND			**Order Date:**	5/13/2011
	SPOKANE	WA	99202		
Contact Name:	DAVE LAUDER			**Project Name:**	IONE PETROLEUM CONTAMINATION 0504-058-00
Comment:					

SAMPLE CONDITION RECORD

Samples received in a cooler?	Yes
Samples received intact?	Yes
What is the temperature inside the cooler?	3.6
Samples received with a COC?	Yes
Samples received within holding time?	Yes
Are all sample bottles properly preserved?	Yes
Are VOC samples free of headspace?	Yes
Is there a trip blank to accompany VOC samples?	Yes
Labels and chain agree?	Yes

Anatek Labs, Inc.

Chain of Custody Record

1282 Alturas Drive, Moscow ID 83843 (208) 883-2839 FAX 882-9246
504 E Sprague Ste D, Spokane WA 99202 (509) 838-3999 FAX 838-4433

110513 012 GEOE Last Due 5/25/2011
1st SAMP 5/11/2011 1st RCVD 5/13/2011
ONE PETROLEUM
CONTAMINATION 0504-058-00

Company Name: GeoEngineers Inc.	Project Manager: Dave Lauder
Address: 523 E 2nd Ave	Project Name & #: Lone Petroleum Contamination 0504-058-00
City: Spokane State: WA Zip: 99202	Email Address: DLauder@geoengineers.com
Phone: 509-363-3125	Purchase Order #:
Fax: 363-3126	Sampler Name & phone: Kevin Randall 435-764-7169

Please refer to our normal turn around times at: http://www.anateklabs.com/services/guidelines/reporting.asp

X Normal __Next Day* __2nd Day* __Other*_____ *All rush order requests must be prior approved. __Phone __Mail __Fax __Email

Provide Sample Description

List Analyses Requested

Preservative:

Lab ID	Sample Identification	Sampling Date/Time	Matrix	# of Containers	Sample Volume	NWTPH-Gx	* VOCs
1	MW-1-051111	5/11/11 1059	W	4		X	X
2	MW-2-051111	5/11/11 1154				X	X
3	MW-3-051211	5/12/11 1503				X	X
4	MW-4-051211	5/12/11 1124				X	X
5	MW-6-051211	5/12/11 1358				X	X
6	MW-7-051111	5/11/11 1314				X	X
7	MW-9-051111	5/11/11 1450				X	X
8	MW-10-051111	5/11/11 1559				X	X
9	MW-11-051111	5/11/11 1723				X	X
10	MW-12-051211	5/12/11 0949				X	X
11	#Duplicate-1-051211	5/12/11 1234				X	X
12	CabinGroundWell-051211	5/12/11 1529	↓	↓		X	X
13	Trip Blank					X	X

Note Special Instructions/Comments

* VOC's (full, long list of VOC's) including:
- BTEX, EDC, MTBE, Naphthalene by EPA 8260 or Method 524.2
- EDB by EPA 8011

SIMS
all sp

	Printed Name	Signature	Company	Date	Time
Relinquished by	Kevin Randall	Kevin Randall	GEI	5/12/11	0700
Received by	Brent Rendall	Brent Rendall	GEI	5-13-11	0700
Relinquished by	Brent Randall	Brent Randall	GEI	5-13-11	0822
Received by	Kathy Sattler	Kathy Sattler	Anatek labs	5-13-11	0822
Relinquished by					
Received by					

Inspection Checklist

Received Intact? (Y) N
Labels & Chains Agree? (Y) N
Containers Sealed? (Y) N
VOC Head Space? Y (N)
ICE / Cooler
Hand delivered
Temperature (°C): 3.6
Preservative: HCl
Date & Time: 5-13-11 / 0822
Inspected By: KAS

Have we delivered World Class Client Service?
Please let us know by visiting **www. geoengineers.com/feedback**.

GeoEngineers